

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

Attn: Christopher O'Neil
Groundwater Sciences Corporation
2550 Interstate Drive
Suite 303
Harrisburg PA 17110

Generated 2/28/2023 11:20 PM

JOB DESCRIPTION

fYNOP Monthly Surface Water

JOB NUMBER

410-116393-1

Job Notes

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

Authorization



Generated
2/28/2023 11:20 PM

Authorized for release by
Marrison Williams, Project Manager
Marrison.Williams@et.eurofinsus.com
Designee for
Marrison C Williams, Project Manager
Marrison.Williams@et.eurofinsus.com
717 556-7246

Table of Contents

Cover 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	33
Chronicle	34
Certification Summary	37
Method Summary	38
Sample Summary	39
Manual Integration Summary	40
Reagent Traceability	47
COAs	61
Organic Sample Data	139
GC/MS VOA	139
Method 8260D Low Level	139
Method 8260D Low Level QC Summary	140
Method 8260D Low Level Sample Data	158
Standards Data	339
Method 8260D Low Level ICAL Data	339
Method 8260D Low Level CCAL Data	506
Raw QC Data	534
Method 8260D Low Level Tune Data	534
Method 8260D Low Level Blank Data	550
Method 8260D Low Level LCS/LCSD Data	568
Method 8260D Low Level MS/MSD Data	590
Method 8260D Low Level Run Logs	604
Method 8260D Low Level Prep Data	608
Shipping and Receiving Documents	617
Client Chain of Custody	618
Sample Receipt Checklist	620

Definitions/Glossary

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

Job ID: 410-116393-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
^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.
S1+	Surrogate recovery exceeds control limits, high biased.

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
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
410-116393-1

Receipt

The samples were received on 2/22/2023 10:57 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.1°C

GC/MS VOA

Method 8260D_LL: The continuing calibration verification (CCV) associated with batch 410-348233 recovered outside acceptance criteria, low biased, for 1,1,2,2-Tetrachloroethane. 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.

Method 8260D_LL: Surrogate recovery was outside acceptance limits for the following matrix (MS) sample: HD-COD-SW-15-0/1-0 MS (410-116393-6[MS]). The parent sample's surrogate recovery was within limits. The MS sample has been qualified and reported.

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: 410-116393-1

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

Lab Sample ID: 410-116393-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.3	J	5.0	1.0	ug/L	1		8260D	Total/NA
Toluene	0.083	J	0.50	0.080	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-116393-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.8	J	5.0	1.0	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.16	J	0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	0.21	J	0.50	0.080	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-116393-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.8	J	5.0	1.0	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.20	J	0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.52	J	0.50	0.20	ug/L	1		8260D	Total/NA
Toluene	0.15	J	0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	0.28	J	0.50	0.080	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-116393-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.8	J	5.0	1.0	ug/L	1		8260D	Total/NA
Chloroform	0.092	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.17	J	0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.22	J	0.50	0.20	ug/L	1		8260D	Total/NA
Toluene	0.11	J	0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	0.19	J	0.50	0.080	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-116393-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.23	J	0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.66	J	0.50	0.20	ug/L	1		8260D	Total/NA
Toluene	0.12	J	0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	0.26	J	0.50	0.080	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-116393-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.48	J FH	0.50	0.080	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	0.15	J	0.50	0.10	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.20	J	0.50	0.10	ug/L	1		8260D	Total/NA
Chloroform	0.31	J FH	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	2.3	FH	0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene	7.0	J	0.50	0.20	ug/L	1		8260D	Total/NA
Trichloroethene	2.1	J	0.50	0.080	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-116393-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.8	J	5.0	1.0	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.25	J	0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.67	J	0.50	0.20	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: 410-116393-1

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

Lab Sample ID: 410-116393-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.15	J	0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	0.29	J	0.50	0.080	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-116393-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	7.7		0.50	0.080	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	1.4		0.50	0.10	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.65		0.50	0.10	ug/L	1		8260D	Total/NA
Chloroform	0.29	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	3.4		0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	4.3		0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene - DL	84		5.0	2.0	ug/L	10		8260D	Total/NA

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

Lab Sample ID: 410-116393-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.16	J	0.50	0.10	ug/L	1		8260D	Total/NA
Chloroform	0.50		0.50	0.090	ug/L	1		8260D	Total/NA
Tetrachloroethene	4.1		0.50	0.20	ug/L	1		8260D	Total/NA
Toluene	0.11	J	0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	0.18	J	0.50	0.080	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-116393-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.0	J	5.0	1.0	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.21	J	0.50	0.080	ug/L	1		8260D	Total/NA
Toluene	0.10	J	0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	0.25	J	0.50	0.080	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-116393-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.7	J	5.0	1.0	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.17	J	0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.21	J	0.50	0.20	ug/L	1		8260D	Total/NA
Toluene	0.14	J	0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	0.20	J	0.50	0.080	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-116393-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.3	J	5.0	1.0	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.27	J	0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.33	J	0.50	0.20	ug/L	1		8260D	Total/NA
Toluene	0.10	J	0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	0.31	J	0.50	0.080	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-116393-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	7.6		0.50	0.080	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	1.4		0.50	0.10	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: 410-116393-1

Client Sample ID: HD-QC1-0/1-1 (Continued)

Lab Sample ID: 410-116393-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.63		0.50	0.10	ug/L	1		8260D	Total/NA
Chloroform	0.29	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	3.5		0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	4.4		0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene - DL	81		5.0	2.0	ug/L	10		8260D	Total/NA

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

Lab Sample ID: 410-116393-14

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: 410-116393-1

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

Lab Sample ID: 410-116393-1

Date Collected: 02/21/23 10:15

Matrix: Water

Date Received: 02/22/23 10:57

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			02/27/23 14:56	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 14:56	1
1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10	ug/L			02/27/23 14:56	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 14:56	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			02/27/23 14:56	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 14:56	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			02/27/23 14:56	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			02/27/23 14:56	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			02/27/23 14:56	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			02/27/23 14:56	1
2-Hexanone	ND		5.0	0.10	ug/L			02/27/23 14:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			02/27/23 14:56	1
Acetone	1.3	J	5.0	1.0	ug/L			02/27/23 14:56	1
Benzene	ND		0.50	0.10	ug/L			02/27/23 14:56	1
Bromochloromethane	ND		0.50	0.080	ug/L			02/27/23 14:56	1
Bromodichloromethane	ND		0.50	0.080	ug/L			02/27/23 14:56	1
Bromoform	ND		1.0	0.30	ug/L			02/27/23 14:56	1
Bromomethane	ND		0.50	0.10	ug/L			02/27/23 14:56	1
Carbon disulfide	ND		1.0	0.10	ug/L			02/27/23 14:56	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			02/27/23 14:56	1
Chlorobenzene	ND		0.50	0.070	ug/L			02/27/23 14:56	1
Chloroethane	ND		0.50	0.10	ug/L			02/27/23 14:56	1
Chloroform	ND		0.50	0.090	ug/L			02/27/23 14:56	1
Chloromethane	ND		0.50	0.10	ug/L			02/27/23 14:56	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			02/27/23 14:56	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			02/27/23 14:56	1
Dibromochloromethane	ND		0.50	0.080	ug/L			02/27/23 14:56	1
Ethylbenzene	ND		0.50	0.080	ug/L			02/27/23 14:56	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			02/27/23 14:56	1
Methylene Chloride	ND		0.50	0.10	ug/L			02/27/23 14:56	1
Styrene	ND		0.50	0.070	ug/L			02/27/23 14:56	1
Tetrachloroethene	ND		0.50	0.20	ug/L			02/27/23 14:56	1
Toluene	0.083	J	0.50	0.080	ug/L			02/27/23 14:56	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 14:56	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			02/27/23 14:56	1
Trichloroethene	ND		0.50	0.080	ug/L			02/27/23 14:56	1
Vinyl chloride	ND		0.50	0.10	ug/L			02/27/23 14:56	1
Xylenes, Total	ND		1.0	0.070	ug/L			02/27/23 14:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		80 - 120		02/27/23 14:56	1
4-Bromofluorobenzene (Surr)	94		80 - 120		02/27/23 14:56	1
Dibromofluoromethane (Surr)	114		80 - 120		02/27/23 14:56	1
Toluene-d8 (Surr)	95		80 - 120		02/27/23 14:56	1

Client Sample Results

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

Job ID: 410-116393-1

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

Lab Sample ID: 410-116393-2

Date Collected: 02/21/23 10:50

Matrix: Water

Date Received: 02/22/23 10:57

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			02/27/23 15:17	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 15:17	1
1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10	ug/L			02/27/23 15:17	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 15:17	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			02/27/23 15:17	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 15:17	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			02/27/23 15:17	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			02/27/23 15:17	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			02/27/23 15:17	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			02/27/23 15:17	1
2-Hexanone	ND		5.0	0.10	ug/L			02/27/23 15:17	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			02/27/23 15:17	1
Acetone	1.8	J	5.0	1.0	ug/L			02/27/23 15:17	1
Benzene	ND		0.50	0.10	ug/L			02/27/23 15:17	1
Bromochloromethane	ND		0.50	0.080	ug/L			02/27/23 15:17	1
Bromodichloromethane	ND		0.50	0.080	ug/L			02/27/23 15:17	1
Bromoform	ND		1.0	0.30	ug/L			02/27/23 15:17	1
Bromomethane	ND		0.50	0.10	ug/L			02/27/23 15:17	1
Carbon disulfide	ND		1.0	0.10	ug/L			02/27/23 15:17	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			02/27/23 15:17	1
Chlorobenzene	ND		0.50	0.070	ug/L			02/27/23 15:17	1
Chloroethane	ND		0.50	0.10	ug/L			02/27/23 15:17	1
Chloroform	ND		0.50	0.090	ug/L			02/27/23 15:17	1
Chloromethane	ND		0.50	0.10	ug/L			02/27/23 15:17	1
cis-1,2-Dichloroethene	0.16	J	0.50	0.080	ug/L			02/27/23 15:17	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			02/27/23 15:17	1
Dibromochloromethane	ND		0.50	0.080	ug/L			02/27/23 15:17	1
Ethylbenzene	ND		0.50	0.080	ug/L			02/27/23 15:17	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			02/27/23 15:17	1
Methylene Chloride	ND		0.50	0.10	ug/L			02/27/23 15:17	1
Styrene	ND		0.50	0.070	ug/L			02/27/23 15:17	1
Tetrachloroethene	ND		0.50	0.20	ug/L			02/27/23 15:17	1
Toluene	ND		0.50	0.080	ug/L			02/27/23 15:17	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 15:17	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			02/27/23 15:17	1
Trichloroethene	0.21	J	0.50	0.080	ug/L			02/27/23 15:17	1
Vinyl chloride	ND		0.50	0.10	ug/L			02/27/23 15:17	1
Xylenes, Total	ND		1.0	0.070	ug/L			02/27/23 15:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		02/27/23 15:17	1
4-Bromofluorobenzene (Surr)	94		80 - 120		02/27/23 15:17	1
Dibromofluoromethane (Surr)	109		80 - 120		02/27/23 15:17	1
Toluene-d8 (Surr)	95		80 - 120		02/27/23 15:17	1

Client Sample Results

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

Job ID: 410-116393-1

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

Lab Sample ID: 410-116393-3

Date Collected: 02/21/23 09:00

Matrix: Water

Date Received: 02/22/23 10:57

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			02/27/23 15:37	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 15:37	1
1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10	ug/L			02/27/23 15:37	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 15:37	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			02/27/23 15:37	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 15:37	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			02/27/23 15:37	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			02/27/23 15:37	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			02/27/23 15:37	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			02/27/23 15:37	1
2-Hexanone	ND		5.0	0.10	ug/L			02/27/23 15:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			02/27/23 15:37	1
Acetone	1.8	J	5.0	1.0	ug/L			02/27/23 15:37	1
Benzene	ND		0.50	0.10	ug/L			02/27/23 15:37	1
Bromochloromethane	ND		0.50	0.080	ug/L			02/27/23 15:37	1
Bromodichloromethane	ND		0.50	0.080	ug/L			02/27/23 15:37	1
Bromoform	ND		1.0	0.30	ug/L			02/27/23 15:37	1
Bromomethane	ND		0.50	0.10	ug/L			02/27/23 15:37	1
Carbon disulfide	ND		1.0	0.10	ug/L			02/27/23 15:37	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			02/27/23 15:37	1
Chlorobenzene	ND		0.50	0.070	ug/L			02/27/23 15:37	1
Chloroethane	ND		0.50	0.10	ug/L			02/27/23 15:37	1
Chloroform	ND		0.50	0.090	ug/L			02/27/23 15:37	1
Chloromethane	ND		0.50	0.10	ug/L			02/27/23 15:37	1
cis-1,2-Dichloroethene	0.20	J	0.50	0.080	ug/L			02/27/23 15:37	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			02/27/23 15:37	1
Dibromochloromethane	ND		0.50	0.080	ug/L			02/27/23 15:37	1
Ethylbenzene	ND		0.50	0.080	ug/L			02/27/23 15:37	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			02/27/23 15:37	1
Methylene Chloride	ND		0.50	0.10	ug/L			02/27/23 15:37	1
Styrene	ND		0.50	0.070	ug/L			02/27/23 15:37	1
Tetrachloroethene	0.52		0.50	0.20	ug/L			02/27/23 15:37	1
Toluene	0.15	J	0.50	0.080	ug/L			02/27/23 15:37	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 15:37	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			02/27/23 15:37	1
Trichloroethene	0.28	J	0.50	0.080	ug/L			02/27/23 15:37	1
Vinyl chloride	ND		0.50	0.10	ug/L			02/27/23 15:37	1
Xylenes, Total	ND		1.0	0.070	ug/L			02/27/23 15:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		02/27/23 15:37	1
4-Bromofluorobenzene (Surr)	96		80 - 120		02/27/23 15:37	1
Dibromofluoromethane (Surr)	108		80 - 120		02/27/23 15:37	1
Toluene-d8 (Surr)	94		80 - 120		02/27/23 15:37	1

Client Sample Results

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

Job ID: 410-116393-1

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

Lab Sample ID: 410-116393-4

Date Collected: 02/21/23 12:10

Matrix: Water

Date Received: 02/22/23 10:57

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			02/27/23 15:58	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 15:58	1
1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10	ug/L			02/27/23 15:58	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 15:58	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			02/27/23 15:58	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 15:58	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			02/27/23 15:58	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			02/27/23 15:58	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			02/27/23 15:58	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			02/27/23 15:58	1
2-Hexanone	ND		5.0	0.10	ug/L			02/27/23 15:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			02/27/23 15:58	1
Acetone	1.8	J	5.0	1.0	ug/L			02/27/23 15:58	1
Benzene	ND		0.50	0.10	ug/L			02/27/23 15:58	1
Bromochloromethane	ND		0.50	0.080	ug/L			02/27/23 15:58	1
Bromodichloromethane	ND		0.50	0.080	ug/L			02/27/23 15:58	1
Bromoform	ND		1.0	0.30	ug/L			02/27/23 15:58	1
Bromomethane	ND		0.50	0.10	ug/L			02/27/23 15:58	1
Carbon disulfide	ND		1.0	0.10	ug/L			02/27/23 15:58	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			02/27/23 15:58	1
Chlorobenzene	ND		0.50	0.070	ug/L			02/27/23 15:58	1
Chloroethane	ND		0.50	0.10	ug/L			02/27/23 15:58	1
Chloroform	0.092	J	0.50	0.090	ug/L			02/27/23 15:58	1
Chloromethane	ND		0.50	0.10	ug/L			02/27/23 15:58	1
cis-1,2-Dichloroethene	0.17	J	0.50	0.080	ug/L			02/27/23 15:58	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			02/27/23 15:58	1
Dibromochloromethane	ND		0.50	0.080	ug/L			02/27/23 15:58	1
Ethylbenzene	ND		0.50	0.080	ug/L			02/27/23 15:58	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			02/27/23 15:58	1
Methylene Chloride	ND		0.50	0.10	ug/L			02/27/23 15:58	1
Styrene	ND		0.50	0.070	ug/L			02/27/23 15:58	1
Tetrachloroethene	0.22	J	0.50	0.20	ug/L			02/27/23 15:58	1
Toluene	0.11	J	0.50	0.080	ug/L			02/27/23 15:58	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 15:58	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			02/27/23 15:58	1
Trichloroethene	0.19	J	0.50	0.080	ug/L			02/27/23 15:58	1
Vinyl chloride	ND		0.50	0.10	ug/L			02/27/23 15:58	1
Xylenes, Total	ND		1.0	0.070	ug/L			02/27/23 15:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		02/27/23 15:58	1
4-Bromofluorobenzene (Surr)	97		80 - 120		02/27/23 15:58	1
Dibromofluoromethane (Surr)	106		80 - 120		02/27/23 15:58	1
Toluene-d8 (Surr)	84		80 - 120		02/27/23 15:58	1

Client Sample Results

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

Job ID: 410-116393-1

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

Lab Sample ID: 410-116393-5

Date Collected: 02/21/23 09:15

Matrix: Water

Date Received: 02/22/23 10:57

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			02/27/23 16:19	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 16:19	1
1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10	ug/L			02/27/23 16:19	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 16:19	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			02/27/23 16:19	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 16:19	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			02/27/23 16:19	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			02/27/23 16:19	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			02/27/23 16:19	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			02/27/23 16:19	1
2-Hexanone	ND		5.0	0.10	ug/L			02/27/23 16:19	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			02/27/23 16:19	1
Acetone	ND		5.0	1.0	ug/L			02/27/23 16:19	1
Benzene	ND		0.50	0.10	ug/L			02/27/23 16:19	1
Bromochloromethane	ND		0.50	0.080	ug/L			02/27/23 16:19	1
Bromodichloromethane	ND		0.50	0.080	ug/L			02/27/23 16:19	1
Bromoform	ND		1.0	0.30	ug/L			02/27/23 16:19	1
Bromomethane	ND		0.50	0.10	ug/L			02/27/23 16:19	1
Carbon disulfide	ND		1.0	0.10	ug/L			02/27/23 16:19	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			02/27/23 16:19	1
Chlorobenzene	ND		0.50	0.070	ug/L			02/27/23 16:19	1
Chloroethane	ND		0.50	0.10	ug/L			02/27/23 16:19	1
Chloroform	ND		0.50	0.090	ug/L			02/27/23 16:19	1
Chloromethane	ND		0.50	0.10	ug/L			02/27/23 16:19	1
cis-1,2-Dichloroethene	0.23	J	0.50	0.080	ug/L			02/27/23 16:19	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			02/27/23 16:19	1
Dibromochloromethane	ND		0.50	0.080	ug/L			02/27/23 16:19	1
Ethylbenzene	ND		0.50	0.080	ug/L			02/27/23 16:19	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			02/27/23 16:19	1
Methylene Chloride	ND		0.50	0.10	ug/L			02/27/23 16:19	1
Styrene	ND		0.50	0.070	ug/L			02/27/23 16:19	1
Tetrachloroethene	0.66		0.50	0.20	ug/L			02/27/23 16:19	1
Toluene	0.12	J	0.50	0.080	ug/L			02/27/23 16:19	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 16:19	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			02/27/23 16:19	1
Trichloroethene	0.26	J	0.50	0.080	ug/L			02/27/23 16:19	1
Vinyl chloride	ND		0.50	0.10	ug/L			02/27/23 16:19	1
Xylenes, Total	ND		1.0	0.070	ug/L			02/27/23 16:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		02/27/23 16:19	1
4-Bromofluorobenzene (Surr)	93		80 - 120		02/27/23 16:19	1
Dibromofluoromethane (Surr)	103		80 - 120		02/27/23 16:19	1
Toluene-d8 (Surr)	95		80 - 120		02/27/23 16:19	1

Client Sample Results

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

Job ID: 410-116393-1

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

Lab Sample ID: 410-116393-6

Date Collected: 02/21/23 11:08

Matrix: Water

Date Received: 02/22/23 10:57

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			02/27/23 16:39	1
1,1,1-Trichloroethane	0.48	J FH	0.50	0.080	ug/L			02/27/23 16:39	1
1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10	ug/L			02/27/23 16:39	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 16:39	1
1,1-Dichloroethane	0.15	J	0.50	0.10	ug/L			02/27/23 16:39	1
1,1-Dichloroethene	0.20	J	0.50	0.10	ug/L			02/27/23 16:39	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			02/27/23 16:39	1
1,2-Dichloroethane	ND	FH	0.50	0.070	ug/L			02/27/23 16:39	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			02/27/23 16:39	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			02/27/23 16:39	1
2-Hexanone	ND		5.0	0.10	ug/L			02/27/23 16:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			02/27/23 16:39	1
Acetone	ND		5.0	1.0	ug/L			02/27/23 16:39	1
Benzene	ND		0.50	0.10	ug/L			02/27/23 16:39	1
Bromochloromethane	ND	FH	0.50	0.080	ug/L			02/27/23 16:39	1
Bromodichloromethane	ND		0.50	0.080	ug/L			02/27/23 16:39	1
Bromoform	ND		1.0	0.30	ug/L			02/27/23 16:39	1
Bromomethane	ND		0.50	0.10	ug/L			02/27/23 16:39	1
Carbon disulfide	ND	FH	1.0	0.10	ug/L			02/27/23 16:39	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			02/27/23 16:39	1
Chlorobenzene	ND		0.50	0.070	ug/L			02/27/23 16:39	1
Chloroethane	ND	FH	0.50	0.10	ug/L			02/27/23 16:39	1
Chloroform	0.31	J FH	0.50	0.090	ug/L			02/27/23 16:39	1
Chloromethane	ND	FH	0.50	0.10	ug/L			02/27/23 16:39	1
cis-1,2-Dichloroethene	2.3	FH	0.50	0.080	ug/L			02/27/23 16:39	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			02/27/23 16:39	1
Dibromochloromethane	ND		0.50	0.080	ug/L			02/27/23 16:39	1
Ethylbenzene	ND		0.50	0.080	ug/L			02/27/23 16:39	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			02/27/23 16:39	1
Methylene Chloride	ND		0.50	0.10	ug/L			02/27/23 16:39	1
Styrene	ND		0.50	0.070	ug/L			02/27/23 16:39	1
Tetrachloroethene	7.0		0.50	0.20	ug/L			02/27/23 16:39	1
Toluene	ND		0.50	0.080	ug/L			02/27/23 16:39	1
trans-1,2-Dichloroethene	ND	FH	0.50	0.10	ug/L			02/27/23 16:39	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			02/27/23 16:39	1
Trichloroethene	2.1		0.50	0.080	ug/L			02/27/23 16:39	1
Vinyl chloride	ND	FH	0.50	0.10	ug/L			02/27/23 16:39	1
Xylenes, Total	ND		1.0	0.070	ug/L			02/27/23 16:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		02/27/23 16:39	1
4-Bromofluorobenzene (Surr)	91		80 - 120		02/27/23 16:39	1
Dibromofluoromethane (Surr)	108		80 - 120		02/27/23 16:39	1
Toluene-d8 (Surr)	95		80 - 120		02/27/23 16:39	1

Client Sample Results

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

Job ID: 410-116393-1

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

Lab Sample ID: 410-116393-7

Date Collected: 02/21/23 09:47

Matrix: Water

Date Received: 02/22/23 10:57

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			02/27/23 17:41	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 17:41	1
1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10	ug/L			02/27/23 17:41	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 17:41	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			02/27/23 17:41	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 17:41	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			02/27/23 17:41	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			02/27/23 17:41	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			02/27/23 17:41	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			02/27/23 17:41	1
2-Hexanone	ND		5.0	0.10	ug/L			02/27/23 17:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			02/27/23 17:41	1
Acetone	3.8	J	5.0	1.0	ug/L			02/27/23 17:41	1
Benzene	ND		0.50	0.10	ug/L			02/27/23 17:41	1
Bromochloromethane	ND		0.50	0.080	ug/L			02/27/23 17:41	1
Bromodichloromethane	ND		0.50	0.080	ug/L			02/27/23 17:41	1
Bromoform	ND		1.0	0.30	ug/L			02/27/23 17:41	1
Bromomethane	ND		0.50	0.10	ug/L			02/27/23 17:41	1
Carbon disulfide	ND		1.0	0.10	ug/L			02/27/23 17:41	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			02/27/23 17:41	1
Chlorobenzene	ND		0.50	0.070	ug/L			02/27/23 17:41	1
Chloroethane	ND		0.50	0.10	ug/L			02/27/23 17:41	1
Chloroform	ND		0.50	0.090	ug/L			02/27/23 17:41	1
Chloromethane	ND		0.50	0.10	ug/L			02/27/23 17:41	1
cis-1,2-Dichloroethene	0.25	J	0.50	0.080	ug/L			02/27/23 17:41	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			02/27/23 17:41	1
Dibromochloromethane	ND		0.50	0.080	ug/L			02/27/23 17:41	1
Ethylbenzene	ND		0.50	0.080	ug/L			02/27/23 17:41	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			02/27/23 17:41	1
Methylene Chloride	ND		0.50	0.10	ug/L			02/27/23 17:41	1
Styrene	ND		0.50	0.070	ug/L			02/27/23 17:41	1
Tetrachloroethene	0.67		0.50	0.20	ug/L			02/27/23 17:41	1
Toluene	0.15	J	0.50	0.080	ug/L			02/27/23 17:41	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 17:41	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			02/27/23 17:41	1
Trichloroethene	0.29	J	0.50	0.080	ug/L			02/27/23 17:41	1
Vinyl chloride	ND		0.50	0.10	ug/L			02/27/23 17:41	1
Xylenes, Total	ND		1.0	0.070	ug/L			02/27/23 17:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		80 - 120		02/27/23 17:41	1
4-Bromofluorobenzene (Surr)	94		80 - 120		02/27/23 17:41	1
Dibromofluoromethane (Surr)	107		80 - 120		02/27/23 17:41	1
Toluene-d8 (Surr)	96		80 - 120		02/27/23 17:41	1

Client Sample Results

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

Job ID: 410-116393-1

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

Lab Sample ID: 410-116393-8

Date Collected: 02/21/23 09:55

Matrix: Water

Date Received: 02/22/23 10:57

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			02/27/23 18:02	1
1,1,1-Trichloroethane	7.7		0.50	0.080	ug/L			02/27/23 18:02	1
1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10	ug/L			02/27/23 18:02	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 18:02	1
1,1-Dichloroethane	1.4		0.50	0.10	ug/L			02/27/23 18:02	1
1,1-Dichloroethene	0.65		0.50	0.10	ug/L			02/27/23 18:02	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			02/27/23 18:02	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			02/27/23 18:02	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			02/27/23 18:02	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			02/27/23 18:02	1
2-Hexanone	ND		5.0	0.10	ug/L			02/27/23 18:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			02/27/23 18:02	1
Acetone	ND		5.0	1.0	ug/L			02/27/23 18:02	1
Benzene	ND		0.50	0.10	ug/L			02/27/23 18:02	1
Bromochloromethane	ND		0.50	0.080	ug/L			02/27/23 18:02	1
Bromodichloromethane	ND		0.50	0.080	ug/L			02/27/23 18:02	1
Bromoform	ND		1.0	0.30	ug/L			02/27/23 18:02	1
Bromomethane	ND		0.50	0.10	ug/L			02/27/23 18:02	1
Carbon disulfide	ND		1.0	0.10	ug/L			02/27/23 18:02	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			02/27/23 18:02	1
Chlorobenzene	ND		0.50	0.070	ug/L			02/27/23 18:02	1
Chloroethane	ND		0.50	0.10	ug/L			02/27/23 18:02	1
Chloroform	0.29	J	0.50	0.090	ug/L			02/27/23 18:02	1
Chloromethane	ND		0.50	0.10	ug/L			02/27/23 18:02	1
cis-1,2-Dichloroethene	3.4		0.50	0.080	ug/L			02/27/23 18:02	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			02/27/23 18:02	1
Dibromochloromethane	ND		0.50	0.080	ug/L			02/27/23 18:02	1
Ethylbenzene	ND		0.50	0.080	ug/L			02/27/23 18:02	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			02/27/23 18:02	1
Methylene Chloride	ND		0.50	0.10	ug/L			02/27/23 18:02	1
Styrene	ND		0.50	0.070	ug/L			02/27/23 18:02	1
Toluene	ND		0.50	0.080	ug/L			02/27/23 18:02	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 18:02	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			02/27/23 18:02	1
Trichloroethene	4.3		0.50	0.080	ug/L			02/27/23 18:02	1
Vinyl chloride	ND		0.50	0.10	ug/L			02/27/23 18:02	1
Xylenes, Total	ND		1.0	0.070	ug/L			02/27/23 18:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		80 - 120		02/27/23 18:02	1
4-Bromofluorobenzene (Surr)	93		80 - 120		02/27/23 18:02	1
Dibromofluoromethane (Surr)	107		80 - 120		02/27/23 18:02	1
Toluene-d8 (Surr)	94		80 - 120		02/27/23 18:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	84		5.0	2.0	ug/L			02/28/23 18:56	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		80 - 120		02/28/23 18:56	10

Client Sample Results

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

Job ID: 410-116393-1

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

Lab Sample ID: 410-116393-8

Date Collected: 02/21/23 09:55

Matrix: Water

Date Received: 02/22/23 10:57

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		80 - 120		02/28/23 18:56	10
Dibromofluoromethane (Surr)	113		80 - 120		02/28/23 18:56	10
Toluene-d8 (Surr)	92		80 - 120		02/28/23 18:56	10

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

Lab Sample ID: 410-116393-9

Date Collected: 02/21/23 10:33

Matrix: Water

Date Received: 02/22/23 10:57

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			02/27/23 18:23	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 18:23	1
1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10	ug/L			02/27/23 18:23	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 18:23	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			02/27/23 18:23	1
1,1-Dichloroethene	0.16	J	0.50	0.10	ug/L			02/27/23 18:23	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			02/27/23 18:23	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			02/27/23 18:23	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			02/27/23 18:23	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			02/27/23 18:23	1
2-Hexanone	ND		5.0	0.10	ug/L			02/27/23 18:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			02/27/23 18:23	1
Acetone	ND		5.0	1.0	ug/L			02/27/23 18:23	1
Benzene	ND		0.50	0.10	ug/L			02/27/23 18:23	1
Bromochloromethane	ND		0.50	0.080	ug/L			02/27/23 18:23	1
Bromodichloromethane	ND		0.50	0.080	ug/L			02/27/23 18:23	1
Bromoform	ND		1.0	0.30	ug/L			02/27/23 18:23	1
Bromomethane	ND		0.50	0.10	ug/L			02/27/23 18:23	1
Carbon disulfide	ND		1.0	0.10	ug/L			02/27/23 18:23	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			02/27/23 18:23	1
Chlorobenzene	ND		0.50	0.070	ug/L			02/27/23 18:23	1
Chloroethane	ND		0.50	0.10	ug/L			02/27/23 18:23	1
Chloroform	0.50		0.50	0.090	ug/L			02/27/23 18:23	1
Chloromethane	ND		0.50	0.10	ug/L			02/27/23 18:23	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			02/27/23 18:23	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			02/27/23 18:23	1
Dibromochloromethane	ND		0.50	0.080	ug/L			02/27/23 18:23	1
Ethylbenzene	ND		0.50	0.080	ug/L			02/27/23 18:23	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			02/27/23 18:23	1
Methylene Chloride	ND		0.50	0.10	ug/L			02/27/23 18:23	1
Styrene	ND		0.50	0.070	ug/L			02/27/23 18:23	1
Tetrachloroethene	4.1		0.50	0.20	ug/L			02/27/23 18:23	1
Toluene	0.11	J	0.50	0.080	ug/L			02/27/23 18:23	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 18:23	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			02/27/23 18:23	1
Trichloroethene	0.18	J	0.50	0.080	ug/L			02/27/23 18:23	1
Vinyl chloride	ND		0.50	0.10	ug/L			02/27/23 18:23	1
Xylenes, Total	ND		1.0	0.070	ug/L			02/27/23 18:23	1

Client Sample Results

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

Job ID: 410-116393-1

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

Lab Sample ID: 410-116393-9

Date Collected: 02/21/23 10:33

Matrix: Water

Date Received: 02/22/23 10:57

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		80 - 120		02/27/23 18:23	1
4-Bromofluorobenzene (Surr)	94		80 - 120		02/27/23 18:23	1
Dibromofluoromethane (Surr)	109		80 - 120		02/27/23 18:23	1
Toluene-d8 (Surr)	95		80 - 120		02/27/23 18:23	1

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

Lab Sample ID: 410-116393-10

Date Collected: 02/21/23 11:05

Matrix: Water

Date Received: 02/22/23 10:57

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			02/27/23 18:43	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 18:43	1
1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10	ug/L			02/27/23 18:43	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 18:43	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			02/27/23 18:43	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 18:43	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			02/27/23 18:43	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			02/27/23 18:43	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			02/27/23 18:43	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			02/27/23 18:43	1
2-Hexanone	ND		5.0	0.10	ug/L			02/27/23 18:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			02/27/23 18:43	1
Acetone	2.0	J	5.0	1.0	ug/L			02/27/23 18:43	1
Benzene	ND		0.50	0.10	ug/L			02/27/23 18:43	1
Bromochloromethane	ND		0.50	0.080	ug/L			02/27/23 18:43	1
Bromodichloromethane	ND		0.50	0.080	ug/L			02/27/23 18:43	1
Bromoform	ND		1.0	0.30	ug/L			02/27/23 18:43	1
Bromomethane	ND		0.50	0.10	ug/L			02/27/23 18:43	1
Carbon disulfide	ND		1.0	0.10	ug/L			02/27/23 18:43	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			02/27/23 18:43	1
Chlorobenzene	ND		0.50	0.070	ug/L			02/27/23 18:43	1
Chloroethane	ND		0.50	0.10	ug/L			02/27/23 18:43	1
Chloroform	ND		0.50	0.090	ug/L			02/27/23 18:43	1
Chloromethane	ND		0.50	0.10	ug/L			02/27/23 18:43	1
cis-1,2-Dichloroethene	0.21	J	0.50	0.080	ug/L			02/27/23 18:43	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			02/27/23 18:43	1
Dibromochloromethane	ND		0.50	0.080	ug/L			02/27/23 18:43	1
Ethylbenzene	ND		0.50	0.080	ug/L			02/27/23 18:43	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			02/27/23 18:43	1
Methylene Chloride	ND		0.50	0.10	ug/L			02/27/23 18:43	1
Styrene	ND		0.50	0.070	ug/L			02/27/23 18:43	1
Tetrachloroethene	ND		0.50	0.20	ug/L			02/27/23 18:43	1
Toluene	0.10	J	0.50	0.080	ug/L			02/27/23 18:43	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 18:43	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			02/27/23 18:43	1
Trichloroethene	0.25	J	0.50	0.080	ug/L			02/27/23 18:43	1
Vinyl chloride	ND		0.50	0.10	ug/L			02/27/23 18:43	1
Xylenes, Total	ND		1.0	0.070	ug/L			02/27/23 18:43	1

Client Sample Results

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

Job ID: 410-116393-1

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

Lab Sample ID: 410-116393-10

Date Collected: 02/21/23 11:05

Matrix: Water

Date Received: 02/22/23 10:57

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		80 - 120		02/27/23 18:43	1
4-Bromofluorobenzene (Surr)	93		80 - 120		02/27/23 18:43	1
Dibromofluoromethane (Surr)	109		80 - 120		02/27/23 18:43	1
Toluene-d8 (Surr)	95		80 - 120		02/27/23 18:43	1

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

Lab Sample ID: 410-116393-11

Date Collected: 02/21/23 12:30

Matrix: Water

Date Received: 02/22/23 10:57

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			02/27/23 19:04	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 19:04	1
1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10	ug/L			02/27/23 19:04	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 19:04	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			02/27/23 19:04	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 19:04	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			02/27/23 19:04	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			02/27/23 19:04	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			02/27/23 19:04	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			02/27/23 19:04	1
2-Hexanone	ND		5.0	0.10	ug/L			02/27/23 19:04	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			02/27/23 19:04	1
Acetone	1.7	J	5.0	1.0	ug/L			02/27/23 19:04	1
Benzene	ND		0.50	0.10	ug/L			02/27/23 19:04	1
Bromochloromethane	ND		0.50	0.080	ug/L			02/27/23 19:04	1
Bromodichloromethane	ND		0.50	0.080	ug/L			02/27/23 19:04	1
Bromoform	ND		1.0	0.30	ug/L			02/27/23 19:04	1
Bromomethane	ND		0.50	0.10	ug/L			02/27/23 19:04	1
Carbon disulfide	ND		1.0	0.10	ug/L			02/27/23 19:04	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			02/27/23 19:04	1
Chlorobenzene	ND		0.50	0.070	ug/L			02/27/23 19:04	1
Chloroethane	ND		0.50	0.10	ug/L			02/27/23 19:04	1
Chloroform	ND		0.50	0.090	ug/L			02/27/23 19:04	1
Chloromethane	ND		0.50	0.10	ug/L			02/27/23 19:04	1
cis-1,2-Dichloroethene	0.17	J	0.50	0.080	ug/L			02/27/23 19:04	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			02/27/23 19:04	1
Dibromochloromethane	ND		0.50	0.080	ug/L			02/27/23 19:04	1
Ethylbenzene	ND		0.50	0.080	ug/L			02/27/23 19:04	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			02/27/23 19:04	1
Methylene Chloride	ND		0.50	0.10	ug/L			02/27/23 19:04	1
Styrene	ND		0.50	0.070	ug/L			02/27/23 19:04	1
Tetrachloroethene	0.21	J	0.50	0.20	ug/L			02/27/23 19:04	1
Toluene	0.14	J	0.50	0.080	ug/L			02/27/23 19:04	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 19:04	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			02/27/23 19:04	1
Trichloroethene	0.20	J	0.50	0.080	ug/L			02/27/23 19:04	1
Vinyl chloride	ND		0.50	0.10	ug/L			02/27/23 19:04	1
Xylenes, Total	ND		1.0	0.070	ug/L			02/27/23 19:04	1

Client Sample Results

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

Job ID: 410-116393-1

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

Lab Sample ID: 410-116393-11

Date Collected: 02/21/23 12:30

Matrix: Water

Date Received: 02/22/23 10:57

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		80 - 120		02/27/23 19:04	1
4-Bromofluorobenzene (Surr)	93		80 - 120		02/27/23 19:04	1
Dibromofluoromethane (Surr)	107		80 - 120		02/27/23 19:04	1
Toluene-d8 (Surr)	94		80 - 120		02/27/23 19:04	1

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

Lab Sample ID: 410-116393-12

Date Collected: 02/21/23 08:45

Matrix: Water

Date Received: 02/22/23 10:57

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			02/27/23 19:25	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 19:25	1
1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10	ug/L			02/27/23 19:25	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 19:25	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			02/27/23 19:25	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 19:25	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			02/27/23 19:25	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			02/27/23 19:25	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			02/27/23 19:25	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			02/27/23 19:25	1
2-Hexanone	ND		5.0	0.10	ug/L			02/27/23 19:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			02/27/23 19:25	1
Acetone	2.3	J	5.0	1.0	ug/L			02/27/23 19:25	1
Benzene	ND		0.50	0.10	ug/L			02/27/23 19:25	1
Bromochloromethane	ND		0.50	0.080	ug/L			02/27/23 19:25	1
Bromodichloromethane	ND		0.50	0.080	ug/L			02/27/23 19:25	1
Bromoform	ND		1.0	0.30	ug/L			02/27/23 19:25	1
Bromomethane	ND		0.50	0.10	ug/L			02/27/23 19:25	1
Carbon disulfide	ND		1.0	0.10	ug/L			02/27/23 19:25	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			02/27/23 19:25	1
Chlorobenzene	ND		0.50	0.070	ug/L			02/27/23 19:25	1
Chloroethane	ND		0.50	0.10	ug/L			02/27/23 19:25	1
Chloroform	ND		0.50	0.090	ug/L			02/27/23 19:25	1
Chloromethane	ND		0.50	0.10	ug/L			02/27/23 19:25	1
cis-1,2-Dichloroethene	0.27	J	0.50	0.080	ug/L			02/27/23 19:25	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			02/27/23 19:25	1
Dibromochloromethane	ND		0.50	0.080	ug/L			02/27/23 19:25	1
Ethylbenzene	ND		0.50	0.080	ug/L			02/27/23 19:25	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			02/27/23 19:25	1
Methylene Chloride	ND		0.50	0.10	ug/L			02/27/23 19:25	1
Styrene	ND		0.50	0.070	ug/L			02/27/23 19:25	1
Tetrachloroethene	0.33	J	0.50	0.20	ug/L			02/27/23 19:25	1
Toluene	0.10	J	0.50	0.080	ug/L			02/27/23 19:25	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 19:25	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			02/27/23 19:25	1
Trichloroethene	0.31	J	0.50	0.080	ug/L			02/27/23 19:25	1
Vinyl chloride	ND		0.50	0.10	ug/L			02/27/23 19:25	1
Xylenes, Total	ND		1.0	0.070	ug/L			02/27/23 19:25	1

Client Sample Results

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

Job ID: 410-116393-1

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

Lab Sample ID: 410-116393-12

Date Collected: 02/21/23 08:45

Matrix: Water

Date Received: 02/22/23 10:57

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		80 - 120		02/27/23 19:25	1
4-Bromofluorobenzene (Surr)	93		80 - 120		02/27/23 19:25	1
Dibromofluoromethane (Surr)	110		80 - 120		02/27/23 19:25	1
Toluene-d8 (Surr)	96		80 - 120		02/27/23 19:25	1

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

Lab Sample ID: 410-116393-13

Date Collected: 02/21/23 12:00

Matrix: Water

Date Received: 02/22/23 10:57

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			02/27/23 19:46	1
1,1,1-Trichloroethane	7.6		0.50	0.080	ug/L			02/27/23 19:46	1
1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10	ug/L			02/27/23 19:46	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 19:46	1
1,1-Dichloroethane	1.4		0.50	0.10	ug/L			02/27/23 19:46	1
1,1-Dichloroethene	0.63		0.50	0.10	ug/L			02/27/23 19:46	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			02/27/23 19:46	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			02/27/23 19:46	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			02/27/23 19:46	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			02/27/23 19:46	1
2-Hexanone	ND		5.0	0.10	ug/L			02/27/23 19:46	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			02/27/23 19:46	1
Acetone	ND		5.0	1.0	ug/L			02/27/23 19:46	1
Benzene	ND		0.50	0.10	ug/L			02/27/23 19:46	1
Bromochloromethane	ND		0.50	0.080	ug/L			02/27/23 19:46	1
Bromodichloromethane	ND		0.50	0.080	ug/L			02/27/23 19:46	1
Bromoform	ND		1.0	0.30	ug/L			02/27/23 19:46	1
Bromomethane	ND		0.50	0.10	ug/L			02/27/23 19:46	1
Carbon disulfide	ND		1.0	0.10	ug/L			02/27/23 19:46	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			02/27/23 19:46	1
Chlorobenzene	ND		0.50	0.070	ug/L			02/27/23 19:46	1
Chloroethane	ND		0.50	0.10	ug/L			02/27/23 19:46	1
Chloroform	0.29	J	0.50	0.090	ug/L			02/27/23 19:46	1
Chloromethane	ND		0.50	0.10	ug/L			02/27/23 19:46	1
cis-1,2-Dichloroethene	3.5		0.50	0.080	ug/L			02/27/23 19:46	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			02/27/23 19:46	1
Dibromochloromethane	ND		0.50	0.080	ug/L			02/27/23 19:46	1
Ethylbenzene	ND		0.50	0.080	ug/L			02/27/23 19:46	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			02/27/23 19:46	1
Methylene Chloride	ND		0.50	0.10	ug/L			02/27/23 19:46	1
Styrene	ND		0.50	0.070	ug/L			02/27/23 19:46	1
Toluene	ND		0.50	0.080	ug/L			02/27/23 19:46	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 19:46	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			02/27/23 19:46	1
Trichloroethene	4.4		0.50	0.080	ug/L			02/27/23 19:46	1
Vinyl chloride	ND		0.50	0.10	ug/L			02/27/23 19:46	1
Xylenes, Total	ND		1.0	0.070	ug/L			02/27/23 19:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		80 - 120		02/27/23 19:46	1

Client Sample Results

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

Job ID: 410-116393-1

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

Lab Sample ID: 410-116393-13

Date Collected: 02/21/23 12:00

Matrix: Water

Date Received: 02/22/23 10:57

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		80 - 120		02/27/23 19:46	1
Dibromofluoromethane (Surr)	108		80 - 120		02/27/23 19:46	1
Toluene-d8 (Surr)	95		80 - 120		02/27/23 19:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	81		5.0	2.0	ug/L			02/28/23 19:17	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		80 - 120		02/28/23 19:17	10
4-Bromofluorobenzene (Surr)	93		80 - 120		02/28/23 19:17	10
Dibromofluoromethane (Surr)	114		80 - 120		02/28/23 19:17	10
Toluene-d8 (Surr)	92		80 - 120		02/28/23 19:17	10

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

Lab Sample ID: 410-116393-14

Date Collected: 02/21/23 00:00

Matrix: Water

Date Received: 02/22/23 10:57

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			02/27/23 14:35	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 14:35	1
1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10	ug/L			02/27/23 14:35	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 14:35	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			02/27/23 14:35	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 14:35	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			02/27/23 14:35	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			02/27/23 14:35	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			02/27/23 14:35	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			02/27/23 14:35	1
2-Hexanone	ND		5.0	0.10	ug/L			02/27/23 14:35	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			02/27/23 14:35	1
Acetone	ND		5.0	1.0	ug/L			02/27/23 14:35	1
Benzene	ND		0.50	0.10	ug/L			02/27/23 14:35	1
Bromochloromethane	ND		0.50	0.080	ug/L			02/27/23 14:35	1
Bromodichloromethane	ND		0.50	0.080	ug/L			02/27/23 14:35	1
Bromoform	ND		1.0	0.30	ug/L			02/27/23 14:35	1
Bromomethane	ND		0.50	0.10	ug/L			02/27/23 14:35	1
Carbon disulfide	ND		1.0	0.10	ug/L			02/27/23 14:35	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			02/27/23 14:35	1
Chlorobenzene	ND		0.50	0.070	ug/L			02/27/23 14:35	1
Chloroethane	ND		0.50	0.10	ug/L			02/27/23 14:35	1
Chloroform	ND		0.50	0.090	ug/L			02/27/23 14:35	1
Chloromethane	ND		0.50	0.10	ug/L			02/27/23 14:35	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			02/27/23 14:35	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			02/27/23 14:35	1
Dibromochloromethane	ND		0.50	0.080	ug/L			02/27/23 14:35	1
Ethylbenzene	ND		0.50	0.080	ug/L			02/27/23 14:35	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			02/27/23 14:35	1
Methylene Chloride	ND		0.50	0.10	ug/L			02/27/23 14:35	1

Client Sample Results

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

Job ID: 410-116393-1

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

Lab Sample ID: 410-116393-14

Date Collected: 02/21/23 00:00

Matrix: Water

Date Received: 02/22/23 10:57

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		0.50	0.070	ug/L			02/27/23 14:35	1
Tetrachloroethene	ND		0.50	0.20	ug/L			02/27/23 14:35	1
Toluene	ND		0.50	0.080	ug/L			02/27/23 14:35	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 14:35	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			02/27/23 14:35	1
Trichloroethene	ND		0.50	0.080	ug/L			02/27/23 14:35	1
Vinyl chloride	ND		0.50	0.10	ug/L			02/27/23 14:35	1
Xylenes, Total	ND		1.0	0.070	ug/L			02/27/23 14:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		02/27/23 14:35	1
4-Bromofluorobenzene (Surr)	100		80 - 120		02/27/23 14:35	1
Dibromofluoromethane (Surr)	107		80 - 120		02/27/23 14:35	1
Toluene-d8 (Surr)	95		80 - 120		02/27/23 14:35	1

Default Detection Limits

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

Job ID: 410-116393-1

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

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

Surrogate Summary

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

Job ID: 410-116393-1

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)
410-116393-1	HD-COD-SW-6-0/1-0	106	94	114	95
410-116393-2	HD-COD-SW-7-0/1-0	104	94	109	95
410-116393-3	HD-COD-SW-8-0/1-0	102	96	108	94
410-116393-4	HD-COD-SW-9-0/1-0	100	97	106	84
410-116393-5	HD-COD-SW-13-0/1-0	103	93	103	95
410-116393-6	HD-COD-SW-15-0/1-0	104	91	108	95
410-116393-6 MS	HD-COD-SW-15-0/1-0 MS	103 cn	97 cn	121 S1+ cn	96 cn
410-116393-6 MSD	HD-COD-SW-15-0/1-0 MSD	101	97	106	97
410-116393-7	HD-COD-SW-16-0/1-0	107	94	107	96
410-116393-8	HD-COD-SW-17-0/1-0	106	93	107	94
410-116393-8 - DL	HD-COD-SW-17-0/1-0	110	94	113	92
410-116393-9	HD-COD-SW-26-0/1-0	106	94	109	95
410-116393-10	HD-COD-SW-27-0/1-0	106	93	109	95
410-116393-11	HD-COD-SW-28-0/1-0	106	93	107	94
410-116393-12	HD-COD-SW-29-0/1-0	109	93	110	96
410-116393-13	HD-QC1-0/1-1	108	92	108	95
410-116393-13 - DL	HD-QC1-0/1-1	110	93	114	92
410-116393-14	HD-QC1-0/1-2	103	100	107	95
LCS 410-348233/4	Lab Control Sample	104	92	107	97
LCS 410-348577/8	Lab Control Sample	103	98	107	97
LCSD 410-348577/9	Lab Control Sample Dup	103	97	106	97
MB 410-348233/6	Method Blank	101	95	105	95
MB 410-348577/13	Method Blank	108	94	109	94

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: 410-116393-1

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

Lab Sample ID: MB 410-348233/6
 Matrix: Water
 Analysis Batch: 348233

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			02/27/23 13:19	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 13:19	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			02/27/23 13:19	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			02/27/23 13:19	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			02/27/23 13:19	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 13:19	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			02/27/23 13:19	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			02/27/23 13:19	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			02/27/23 13:19	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			02/27/23 13:19	1
2-Hexanone	ND		5.0	0.10	ug/L			02/27/23 13:19	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			02/27/23 13:19	1
Acetone	ND		5.0	1.0	ug/L			02/27/23 13:19	1
Benzene	ND		0.50	0.10	ug/L			02/27/23 13:19	1
Bromochloromethane	ND		0.50	0.080	ug/L			02/27/23 13:19	1
Bromodichloromethane	ND		0.50	0.080	ug/L			02/27/23 13:19	1
Bromoform	ND		1.0	0.30	ug/L			02/27/23 13:19	1
Bromomethane	ND		0.50	0.10	ug/L			02/27/23 13:19	1
Carbon disulfide	ND		1.0	0.10	ug/L			02/27/23 13:19	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			02/27/23 13:19	1
Chlorobenzene	ND		0.50	0.070	ug/L			02/27/23 13:19	1
Chloroethane	ND		0.50	0.10	ug/L			02/27/23 13:19	1
Chloroform	ND		0.50	0.090	ug/L			02/27/23 13:19	1
Chloromethane	ND		0.50	0.10	ug/L			02/27/23 13:19	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			02/27/23 13:19	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			02/27/23 13:19	1
Dibromochloromethane	ND		0.50	0.080	ug/L			02/27/23 13:19	1
Ethylbenzene	ND		0.50	0.080	ug/L			02/27/23 13:19	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			02/27/23 13:19	1
Methylene Chloride	ND		0.50	0.10	ug/L			02/27/23 13:19	1
Styrene	ND		0.50	0.070	ug/L			02/27/23 13:19	1
Tetrachloroethene	ND		0.50	0.20	ug/L			02/27/23 13:19	1
Toluene	ND		0.50	0.080	ug/L			02/27/23 13:19	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			02/27/23 13:19	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			02/27/23 13:19	1
Trichloroethene	ND		0.50	0.080	ug/L			02/27/23 13:19	1
Vinyl chloride	ND		0.50	0.10	ug/L			02/27/23 13:19	1
Xylenes, Total	ND		1.0	0.070	ug/L			02/27/23 13:19	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		02/27/23 13:19	1
4-Bromofluorobenzene (Surr)	95		80 - 120		02/27/23 13:19	1
Dibromofluoromethane (Surr)	105		80 - 120		02/27/23 13:19	1
Toluene-d8 (Surr)	95		80 - 120		02/27/23 13:19	1

QC Sample Results

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

Job ID: 410-116393-1

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

Lab Sample ID: LCS 410-348233/4
Matrix: Water
Analysis Batch: 348233

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier			Limits	
1,1,1,2-Tetrachloroethane	5.00	4.99		ug/L		100	71 - 134
1,1,1-Trichloroethane	5.00	5.58		ug/L		112	78 - 126
1,1,2,2-Tetrachloroethane	5.00	4.13		ug/L		83	75 - 123
1,1,2-Trichloroethane	5.00	4.63		ug/L		93	80 - 120
1,1-Dichloroethane	5.00	5.11		ug/L		102	74 - 120
1,1-Dichloroethene	5.00	5.23		ug/L		105	80 - 131
1,2-Dibromoethane (EDB)	5.00	4.71		ug/L		94	80 - 120
1,2-Dichloroethane	5.00	5.52		ug/L		110	69 - 122
1,2-Dichloropropane	5.00	4.69		ug/L		94	80 - 120
2-Butanone (MEK)	62.5	60.4		ug/L		97	59 - 141
2-Hexanone	62.5	75.6		ug/L		121	52 - 140
4-Methyl-2-pentanone (MIBK)	62.5	65.4		ug/L		105	55 - 140
Acetone	62.5	55.2		ug/L		88	60 - 146
Benzene	5.00	5.04		ug/L		101	80 - 120
Bromochloromethane	5.00	5.53		ug/L		111	80 - 120
Bromodichloromethane	5.00	5.32		ug/L		106	73 - 124
Bromoform	5.00	4.87		ug/L		97	49 - 144
Bromomethane	5.00	5.17		ug/L		103	60 - 136
Carbon disulfide	5.00	5.90		ug/L		118	67 - 130
Carbon tetrachloride	5.00	5.65		ug/L		113	64 - 141
Chlorobenzene	5.00	4.87		ug/L		97	80 - 120
Chloroethane	5.00	5.16		ug/L		103	63 - 120
Chloroform	5.00	5.32		ug/L		106	80 - 120
Chloromethane	5.00	5.28		ug/L		106	56 - 124
cis-1,2-Dichloroethene	5.00	5.31		ug/L		106	80 - 122
cis-1,3-Dichloropropene	5.00	5.13		ug/L		103	67 - 121
Dibromochloromethane	5.00	5.02		ug/L		100	64 - 138
Ethylbenzene	5.00	4.56		ug/L		91	80 - 120
Methyl tert-butyl ether	5.00	5.15		ug/L		103	69 - 120
Methylene Chloride	5.00	5.06		ug/L		101	80 - 120
Styrene	5.00	4.57		ug/L		91	80 - 120
Tetrachloroethene	5.00	5.05		ug/L		101	80 - 120
Toluene	5.00	4.73		ug/L		95	80 - 120
trans-1,2-Dichloroethene	5.00	5.49		ug/L		110	80 - 122
trans-1,3-Dichloropropene	5.00	4.93		ug/L		99	61 - 129
Trichloroethene	5.00	5.13		ug/L		103	80 - 120
Vinyl chloride	5.00	5.38		ug/L		108	60 - 125
Xylenes, Total	15.0	14.6		ug/L		98	80 - 120

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	104		80 - 120
4-Bromofluorobenzene (Surr)	92		80 - 120
Dibromofluoromethane (Surr)	107		80 - 120
Toluene-d8 (Surr)	97		80 - 120

QC Sample Results

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

Job ID: 410-116393-1

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

Lab Sample ID: 410-116393-6 MS

Matrix: Water

Analysis Batch: 348233

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

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier			Limits	
1,1,1,2-Tetrachloroethane	ND		5.00	5.60	cn	ug/L		112	71 - 134
1,1,1-Trichloroethane	0.48	J FH	5.00	7.54	FH cn	ug/L		141	78 - 126
1,1,2,2-Tetrachloroethane	ND	^c cn	5.00	4.26	cn	ug/L		85	75 - 123
1,1,2-Trichloroethane	ND		5.00	4.95	cn	ug/L		99	80 - 120
1,1-Dichloroethane	0.15	J	5.00	5.69	cn	ug/L		111	74 - 120
1,1-Dichloroethene	0.20	J	5.00	6.40	cn	ug/L		124	80 - 131
1,2-Dibromoethane (EDB)	ND		5.00	4.90	cn	ug/L		98	80 - 120
1,2-Dichloroethane	ND	FH	5.00	6.09	cn	ug/L		122	69 - 122
1,2-Dichloropropane	ND		5.00	5.18	cn	ug/L		103	80 - 120
2-Butanone (MEK)	ND		62.6	80.9	cn	ug/L		129	59 - 141
2-Hexanone	ND		62.6	81.0	cn	ug/L		130	52 - 140
4-Methyl-2-pentanone (MIBK)	ND		62.6	81.9	cn	ug/L		131	55 - 140
Acetone	ND		62.6	57.6	cn	ug/L		92	60 - 146
Benzene	ND		5.00	5.49	cn	ug/L		110	80 - 120
Bromochloromethane	ND	FH	5.00	6.92	FH cn	ug/L		138	80 - 120
Bromodichloromethane	ND		5.00	5.79	cn	ug/L		116	73 - 124
Bromoform	ND		5.00	5.31	cn	ug/L		106	49 - 144
Bromomethane	ND		5.00	5.85	cn	ug/L		117	60 - 136
Carbon disulfide	ND	FH	5.00	6.70	FH cn	ug/L		134	67 - 130
Carbon tetrachloride	ND		5.00	6.92	cn	ug/L		138	64 - 141
Chlorobenzene	ND		5.00	5.37	cn	ug/L		107	80 - 120
Chloroethane	ND	FH	5.00	5.62	cn	ug/L		112	63 - 120
Chloroform	0.31	J FH	5.00	7.20	FH cn	ug/L		138	80 - 120
Chloromethane	ND	FH	5.00	5.53	cn	ug/L		110	80 - 120
cis-1,2-Dichloroethene	2.3	FH	5.00	8.50	FH cn	ug/L		124	80 - 122
cis-1,3-Dichloropropene	ND		5.00	5.18	cn	ug/L		104	67 - 121
Dibromochloromethane	ND		5.00	5.47	cn	ug/L		109	64 - 138
Ethylbenzene	ND		5.00	5.05	cn	ug/L		101	80 - 120
Methyl tert-butyl ether	ND		5.00	5.20	cn	ug/L		104	69 - 120
Methylene Chloride	ND		5.00	5.60	cn	ug/L		112	80 - 120
Styrene	ND		5.00	5.02	cn	ug/L		100	80 - 120
Tetrachloroethene	7.0		5.00	12.4	cn	ug/L		108	80 - 120
Toluene	ND		5.00	5.09	cn	ug/L		102	80 - 120
trans-1,2-Dichloroethene	ND	FH	5.00	5.95	cn	ug/L		119	80 - 122
trans-1,3-Dichloropropene	ND		5.00	5.21	cn	ug/L		104	61 - 129
Trichloroethene	2.1		5.00	7.70	cn	ug/L		113	80 - 120
Vinyl chloride	ND	FH	5.00	5.81	cn	ug/L		116	60 - 125
Xylenes, Total	ND		15.0	16.2	cn	ug/L		108	80 - 120

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	103	cn	80 - 120
4-Bromofluorobenzene (Surr)	97	cn	80 - 120
Dibromofluoromethane (Surr)	121	S1+ cn	80 - 120
Toluene-d8 (Surr)	96	cn	80 - 120

QC Sample Results

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

Job ID: 410-116393-1

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

Lab Sample ID: 410-116393-6 MSD

Matrix: Water

Analysis Batch: 348233

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	5.68		ug/L		113	71 - 134	1	30
1,1,1-Trichloroethane	0.48	J FH	5.00	6.86	FH	ug/L		127	78 - 126	9	30
1,1,2,2-Tetrachloroethane	ND	^c cn	5.00	4.55		ug/L		91	75 - 123	7	30
1,1,2-Trichloroethane	ND		5.00	5.12		ug/L		102	80 - 120	3	30
1,1-Dichloroethane	0.15	J	5.00	5.90		ug/L		115	74 - 120	4	30
1,1-Dichloroethene	0.20	J	5.00	6.74		ug/L		131	80 - 131	5	30
1,2-Dibromoethane (EDB)	ND		5.00	5.24		ug/L		105	80 - 120	7	30
1,2-Dichloroethane	ND	FH	5.00	6.27	FH	ug/L		125	69 - 122	3	30
1,2-Dichloropropane	ND		5.00	5.66		ug/L		113	80 - 120	9	30
2-Butanone (MEK)	ND		62.6	67.0		ug/L		107	59 - 141	19	30
2-Hexanone	ND		62.6	74.2		ug/L		119	52 - 140	9	30
4-Methyl-2-pentanone (MIBK)	ND		62.6	72.8		ug/L		116	55 - 140	12	30
Acetone	ND		62.6	56.5		ug/L		90	60 - 146	2	30
Benzene	ND		5.00	5.87		ug/L		117	80 - 120	7	30
Bromochloromethane	ND	FH	5.00	6.01		ug/L		120	80 - 120	14	30
Bromodichloromethane	ND		5.00	5.95		ug/L		119	73 - 124	3	30
Bromoform	ND		5.00	5.38		ug/L		108	49 - 144	1	30
Bromomethane	ND		5.00	6.28		ug/L		125	60 - 136	7	30
Carbon disulfide	ND	FH	5.00	7.07	FH	ug/L		141	67 - 130	5	30
Carbon tetrachloride	ND		5.00	6.73		ug/L		134	64 - 141	3	30
Chlorobenzene	ND		5.00	5.58		ug/L		112	80 - 120	4	30
Chloroethane	ND	FH	5.00	6.38	FH	ug/L		128	63 - 120	13	30
Chloroform	0.31	J FH	5.00	6.41	FH	ug/L		122	80 - 120	12	30
Chloromethane	ND	FH	5.00	6.73	FH	ug/L		134	80 - 120	20	30
cis-1,2-Dichloroethene	2.3	FH	5.00	8.43	FH	ug/L		123	80 - 122	1	30
cis-1,3-Dichloropropene	ND		5.00	5.60		ug/L		112	67 - 121	8	30
Dibromochloromethane	ND		5.00	5.48		ug/L		110	64 - 138	0	30
Ethylbenzene	ND		5.00	5.24		ug/L		105	80 - 120	4	30
Methyl tert-butyl ether	ND		5.00	5.39		ug/L		108	69 - 120	4	30
Methylene Chloride	ND		5.00	5.97		ug/L		119	80 - 120	6	30
Styrene	ND		5.00	5.17		ug/L		103	80 - 120	3	30
Tetrachloroethene	7.0		5.00	12.8		ug/L		115	80 - 120	2	30
Toluene	ND		5.00	5.27		ug/L		105	80 - 120	3	30
trans-1,2-Dichloroethene	ND	FH	5.00	6.15	FH	ug/L		123	80 - 122	3	30
trans-1,3-Dichloropropene	ND		5.00	5.38		ug/L		107	61 - 129	3	30
Trichloroethene	2.1		5.00	7.90		ug/L		117	80 - 120	3	30
Vinyl chloride	ND	FH	5.00	7.09	FH	ug/L		142	60 - 125	20	30
Xylenes, Total	ND		15.0	16.5		ug/L		110	80 - 120	2	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		80 - 120
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	106		80 - 120
Toluene-d8 (Surr)	97		80 - 120

QC Sample Results

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

Job ID: 410-116393-1

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

Lab Sample ID: MB 410-348577/13
 Matrix: Water
 Analysis Batch: 348577

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			02/28/23 14:07	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			02/28/23 14:07	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			02/28/23 14:07	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			02/28/23 14:07	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			02/28/23 14:07	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			02/28/23 14:07	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			02/28/23 14:07	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			02/28/23 14:07	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			02/28/23 14:07	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			02/28/23 14:07	1
2-Hexanone	ND		5.0	0.10	ug/L			02/28/23 14:07	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			02/28/23 14:07	1
Acetone	ND		5.0	1.0	ug/L			02/28/23 14:07	1
Benzene	ND		0.50	0.10	ug/L			02/28/23 14:07	1
Bromochloromethane	ND		0.50	0.080	ug/L			02/28/23 14:07	1
Bromodichloromethane	ND		0.50	0.080	ug/L			02/28/23 14:07	1
Bromoform	ND		1.0	0.30	ug/L			02/28/23 14:07	1
Bromomethane	ND		0.50	0.10	ug/L			02/28/23 14:07	1
Carbon disulfide	0.150	J	1.0	0.10	ug/L			02/28/23 14:07	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			02/28/23 14:07	1
Chlorobenzene	ND		0.50	0.070	ug/L			02/28/23 14:07	1
Chloroethane	ND		0.50	0.10	ug/L			02/28/23 14:07	1
Chloroform	ND		0.50	0.090	ug/L			02/28/23 14:07	1
Chloromethane	ND		0.50	0.10	ug/L			02/28/23 14:07	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			02/28/23 14:07	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			02/28/23 14:07	1
Dibromochloromethane	ND		0.50	0.080	ug/L			02/28/23 14:07	1
Ethylbenzene	ND		0.50	0.080	ug/L			02/28/23 14:07	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			02/28/23 14:07	1
Methylene Chloride	ND		0.50	0.10	ug/L			02/28/23 14:07	1
Styrene	ND		0.50	0.070	ug/L			02/28/23 14:07	1
Tetrachloroethene	ND		0.50	0.20	ug/L			02/28/23 14:07	1
Toluene	ND		0.50	0.080	ug/L			02/28/23 14:07	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			02/28/23 14:07	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			02/28/23 14:07	1
Trichloroethene	ND		0.50	0.080	ug/L			02/28/23 14:07	1
Vinyl chloride	ND		0.50	0.10	ug/L			02/28/23 14:07	1
Xylenes, Total	ND		1.0	0.070	ug/L			02/28/23 14:07	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	108		80 - 120		02/28/23 14:07	1
4-Bromofluorobenzene (Surr)	94		80 - 120		02/28/23 14:07	1
Dibromofluoromethane (Surr)	109		80 - 120		02/28/23 14:07	1
Toluene-d8 (Surr)	94		80 - 120		02/28/23 14:07	1

QC Sample Results

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

Job ID: 410-116393-1

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

Lab Sample ID: LCS 410-348577/8

Matrix: Water

Analysis Batch: 348577

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier			Limits	
1,1,1,2-Tetrachloroethane	5.00	5.32		ug/L		106	71 - 134
1,1,1-Trichloroethane	5.00	5.75		ug/L		115	78 - 126
1,1,2,2-Tetrachloroethane	5.00	4.60		ug/L		92	75 - 123
1,1,2-Trichloroethane	5.00	4.91		ug/L		98	80 - 120
1,1-Dichloroethane	5.00	5.47		ug/L		109	74 - 120
1,1-Dichloroethene	5.00	5.42		ug/L		108	80 - 131
1,2-Dibromoethane (EDB)	5.00	5.12		ug/L		102	80 - 120
1,2-Dichloroethane	5.00	6.10		ug/L		122	69 - 122
1,2-Dichloropropane	5.00	5.32		ug/L		106	80 - 120
2-Butanone (MEK)	62.5	63.1		ug/L		101	59 - 141
2-Hexanone	62.5	64.7		ug/L		103	52 - 140
4-Methyl-2-pentanone (MIBK)	62.5	62.9		ug/L		101	55 - 140
Acetone	62.5	57.4		ug/L		92	60 - 146
Benzene	5.00	5.48		ug/L		110	80 - 120
Bromochloromethane	5.00	5.86		ug/L		117	80 - 120
Bromodichloromethane	5.00	5.70		ug/L		114	73 - 124
Bromoform	5.00	5.15		ug/L		103	49 - 144
Bromomethane	5.00	5.28		ug/L		106	60 - 136
Carbon disulfide	5.00	6.00		ug/L		120	67 - 130
Carbon tetrachloride	5.00	5.78		ug/L		116	64 - 141
Chlorobenzene	5.00	5.29		ug/L		106	80 - 120
Chloroethane	5.00	5.25		ug/L		105	63 - 120
Chloroform	5.00	5.65		ug/L		113	80 - 120
Chloromethane	5.00	5.87		ug/L		117	56 - 124
cis-1,2-Dichloroethene	5.00	5.68		ug/L		114	80 - 122
cis-1,3-Dichloropropene	5.00	5.26		ug/L		105	67 - 121
Dibromochloromethane	5.00	5.37		ug/L		107	64 - 138
Ethylbenzene	5.00	4.87		ug/L		97	80 - 120
Methyl tert-butyl ether	5.00	5.29		ug/L		106	69 - 120
Methylene Chloride	5.00	5.53		ug/L		111	80 - 120
Styrene	5.00	5.01		ug/L		100	80 - 120
Tetrachloroethene	5.00	5.18		ug/L		104	80 - 120
Toluene	5.00	4.92		ug/L		98	80 - 120
trans-1,2-Dichloroethene	5.00	5.44		ug/L		109	80 - 122
trans-1,3-Dichloropropene	5.00	5.14		ug/L		103	61 - 129
Trichloroethene	5.00	5.43		ug/L		109	80 - 120
Vinyl chloride	5.00	5.42		ug/L		108	60 - 125
Xylenes, Total	15.0	15.5		ug/L		104	80 - 120

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	107		80 - 120
Toluene-d8 (Surr)	97		80 - 120

QC Sample Results

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

Job ID: 410-116393-1

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

Lab Sample ID: LCSD 410-348577/9
Matrix: Water
Analysis Batch: 348577

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	RPD
	Added	Result	Qualifier				Limits		Limit
1,1,1,2-Tetrachloroethane	5.00	5.20		ug/L		104	71 - 134	2	30
1,1,1-Trichloroethane	5.00	5.49		ug/L		110	78 - 126	5	30
1,1,2,2-Tetrachloroethane	5.00	4.52		ug/L		90	75 - 123	2	30
1,1,2-Trichloroethane	5.00	4.92		ug/L		98	80 - 120	0	30
1,1-Dichloroethane	5.00	5.32		ug/L		106	74 - 120	3	30
1,1-Dichloroethene	5.00	5.13		ug/L		103	80 - 131	5	30
1,2-Dibromoethane (EDB)	5.00	5.01		ug/L		100	80 - 120	2	30
1,2-Dichloroethane	5.00	5.85		ug/L		117	69 - 122	4	30
1,2-Dichloropropane	5.00	5.29		ug/L		106	80 - 120	1	30
2-Butanone (MEK)	62.5	58.2		ug/L		93	59 - 141	8	30
2-Hexanone	62.5	59.2		ug/L		95	52 - 140	9	30
4-Methyl-2-pentanone (MIBK)	62.5	57.1		ug/L		91	55 - 140	10	30
Acetone	62.5	55.6		ug/L		89	60 - 146	3	30
Benzene	5.00	5.26		ug/L		105	80 - 120	4	30
Bromochloromethane	5.00	5.65		ug/L		113	80 - 120	4	30
Bromodichloromethane	5.00	5.53		ug/L		111	73 - 124	3	30
Bromoform	5.00	5.03		ug/L		101	49 - 144	2	30
Bromomethane	5.00	5.18		ug/L		104	60 - 136	2	30
Carbon disulfide	5.00	5.79		ug/L		116	67 - 130	3	30
Carbon tetrachloride	5.00	5.53		ug/L		111	64 - 141	4	30
Chlorobenzene	5.00	5.14		ug/L		103	80 - 120	3	30
Chloroethane	5.00	5.23		ug/L		105	63 - 120	0	30
Chloroform	5.00	5.50		ug/L		110	80 - 120	3	30
Chloromethane	5.00	5.78		ug/L		116	56 - 124	1	30
cis-1,2-Dichloroethene	5.00	5.43		ug/L		109	80 - 122	5	30
cis-1,3-Dichloropropene	5.00	5.20		ug/L		104	67 - 121	1	30
Dibromochloromethane	5.00	5.25		ug/L		105	64 - 138	2	30
Ethylbenzene	5.00	4.78		ug/L		96	80 - 120	2	30
Methyl tert-butyl ether	5.00	5.14		ug/L		103	69 - 120	3	30
Methylene Chloride	5.00	5.29		ug/L		106	80 - 120	4	30
Styrene	5.00	4.86		ug/L		97	80 - 120	3	30
Tetrachloroethene	5.00	5.07		ug/L		101	80 - 120	2	30
Toluene	5.00	4.77		ug/L		95	80 - 120	3	30
trans-1,2-Dichloroethene	5.00	5.24		ug/L		105	80 - 122	4	30
trans-1,3-Dichloropropene	5.00	5.08		ug/L		102	61 - 129	1	30
Trichloroethene	5.00	5.17		ug/L		103	80 - 120	5	30
Vinyl chloride	5.00	5.48		ug/L		110	60 - 125	1	30
Xylenes, Total	15.0	15.2		ug/L		101	80 - 120	2	30

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	106		80 - 120
Toluene-d8 (Surr)	97		80 - 120

QC Association Summary

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

Job ID: 410-116393-1

GC/MS VOA

Analysis Batch: 348233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-116393-1	HD-COD-SW-6-0/1-0	Total/NA	Water	8260D	
410-116393-2	HD-COD-SW-7-0/1-0	Total/NA	Water	8260D	
410-116393-3	HD-COD-SW-8-0/1-0	Total/NA	Water	8260D	
410-116393-4	HD-COD-SW-9-0/1-0	Total/NA	Water	8260D	
410-116393-5	HD-COD-SW-13-0/1-0	Total/NA	Water	8260D	
410-116393-6	HD-COD-SW-15-0/1-0	Total/NA	Water	8260D	
410-116393-7	HD-COD-SW-16-0/1-0	Total/NA	Water	8260D	
410-116393-8	HD-COD-SW-17-0/1-0	Total/NA	Water	8260D	
410-116393-9	HD-COD-SW-26-0/1-0	Total/NA	Water	8260D	
410-116393-10	HD-COD-SW-27-0/1-0	Total/NA	Water	8260D	
410-116393-11	HD-COD-SW-28-0/1-0	Total/NA	Water	8260D	
410-116393-12	HD-COD-SW-29-0/1-0	Total/NA	Water	8260D	
410-116393-13	HD-QC1-0/1-1	Total/NA	Water	8260D	
410-116393-14	HD-QC1-0/1-2	Total/NA	Water	8260D	
MB 410-348233/6	Method Blank	Total/NA	Water	8260D	
LCS 410-348233/4	Lab Control Sample	Total/NA	Water	8260D	
410-116393-6 MS	HD-COD-SW-15-0/1-0 MS	Total/NA	Water	8260D	
410-116393-6 MSD	HD-COD-SW-15-0/1-0 MSD	Total/NA	Water	8260D	

Analysis Batch: 348577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-116393-8 - DL	HD-COD-SW-17-0/1-0	Total/NA	Water	8260D	
410-116393-13 - DL	HD-QC1-0/1-1	Total/NA	Water	8260D	
MB 410-348577/13	Method Blank	Total/NA	Water	8260D	
LCS 410-348577/8	Lab Control Sample	Total/NA	Water	8260D	
LCS 410-348577/9	Lab Control Sample Dup	Total/NA	Water	8260D	

Lab Chronicle

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

Job ID: 410-116393-1

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

Lab Sample ID: 410-116393-1

Date Collected: 02/21/23 10:15

Matrix: Water

Date Received: 02/22/23 10:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	348233	DVW2	ELLE	02/27/23 14:56

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

Lab Sample ID: 410-116393-2

Date Collected: 02/21/23 10:50

Matrix: Water

Date Received: 02/22/23 10:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	348233	DVW2	ELLE	02/27/23 15:17

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

Lab Sample ID: 410-116393-3

Date Collected: 02/21/23 09:00

Matrix: Water

Date Received: 02/22/23 10:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	348233	DVW2	ELLE	02/27/23 15:37

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

Lab Sample ID: 410-116393-4

Date Collected: 02/21/23 12:10

Matrix: Water

Date Received: 02/22/23 10:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	348233	DVW2	ELLE	02/27/23 15:58

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

Lab Sample ID: 410-116393-5

Date Collected: 02/21/23 09:15

Matrix: Water

Date Received: 02/22/23 10:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	348233	DVW2	ELLE	02/27/23 16:19

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

Lab Sample ID: 410-116393-6

Date Collected: 02/21/23 11:08

Matrix: Water

Date Received: 02/22/23 10:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	348233	DVW2	ELLE	02/27/23 16:39

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

Lab Sample ID: 410-116393-7

Date Collected: 02/21/23 09:47

Matrix: Water

Date Received: 02/22/23 10:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	348233	DVW2	ELLE	02/27/23 17:41

Lab Chronicle

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

Job ID: 410-116393-1

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

Lab Sample ID: 410-116393-8

Date Collected: 02/21/23 09:55

Matrix: Water

Date Received: 02/22/23 10:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	348233	DVW2	ELLE	02/27/23 18:02
Total/NA	Analysis	8260D	DL	10	348577	DVW2	ELLE	02/28/23 18:56

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

Lab Sample ID: 410-116393-9

Date Collected: 02/21/23 10:33

Matrix: Water

Date Received: 02/22/23 10:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	348233	DVW2	ELLE	02/27/23 18:23

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

Lab Sample ID: 410-116393-10

Date Collected: 02/21/23 11:05

Matrix: Water

Date Received: 02/22/23 10:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	348233	DVW2	ELLE	02/27/23 18:43

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

Lab Sample ID: 410-116393-11

Date Collected: 02/21/23 12:30

Matrix: Water

Date Received: 02/22/23 10:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	348233	DVW2	ELLE	02/27/23 19:04

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

Lab Sample ID: 410-116393-12

Date Collected: 02/21/23 08:45

Matrix: Water

Date Received: 02/22/23 10:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	348233	DVW2	ELLE	02/27/23 19:25

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

Lab Sample ID: 410-116393-13

Date Collected: 02/21/23 12:00

Matrix: Water

Date Received: 02/22/23 10:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	348233	DVW2	ELLE	02/27/23 19:46
Total/NA	Analysis	8260D	DL	10	348577	DVW2	ELLE	02/28/23 19:17

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

Lab Sample ID: 410-116393-14

Date Collected: 02/21/23 00:00

Matrix: Water

Date Received: 02/22/23 10:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	348233	DVW2	ELLE	02/27/23 14:35

Lab Chronicle

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

Job ID: 410-116393-1

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: 410-116393-1

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	01-31-24

Method Summary

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

Job ID: 410-116393-1

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: 410-116393-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-116393-1	HD-COD-SW-6-0/1-0	Water	02/21/23 10:15	02/22/23 10:57
410-116393-2	HD-COD-SW-7-0/1-0	Water	02/21/23 10:50	02/22/23 10:57
410-116393-3	HD-COD-SW-8-0/1-0	Water	02/21/23 09:00	02/22/23 10:57
410-116393-4	HD-COD-SW-9-0/1-0	Water	02/21/23 12:10	02/22/23 10:57
410-116393-5	HD-COD-SW-13-0/1-0	Water	02/21/23 09:15	02/22/23 10:57
410-116393-6	HD-COD-SW-15-0/1-0	Water	02/21/23 11:08	02/22/23 10:57
410-116393-7	HD-COD-SW-16-0/1-0	Water	02/21/23 09:47	02/22/23 10:57
410-116393-8	HD-COD-SW-17-0/1-0	Water	02/21/23 09:55	02/22/23 10:57
410-116393-9	HD-COD-SW-26-0/1-0	Water	02/21/23 10:33	02/22/23 10:57
410-116393-10	HD-COD-SW-27-0/1-0	Water	02/21/23 11:05	02/22/23 10:57
410-116393-11	HD-COD-SW-28-0/1-0	Water	02/21/23 12:30	02/22/23 10:57
410-116393-12	HD-COD-SW-29-0/1-0	Water	02/21/23 08:45	02/22/23 10:57
410-116393-13	HD-QC1-0/1-1	Water	02/21/23 12:00	02/22/23 10:57
410-116393-14	HD-QC1-0/1-2	Water	02/21/23 00:00	02/22/23 10:57

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-116393-1

SDG No.: _____

Instrument ID: 19094 Analysis Batch Number: 274149Lab Sample ID: IC 410-274149/12 Client Sample ID: _____Date Analyzed: 07/11/22 16:51 Lab File ID: HL11X12.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

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

Lab Sample ID: ICIS 410-274149/13 Client Sample ID: _____Date Analyzed: 07/11/22 17:11 Lab File ID: HL11X13.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

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

Lab Sample ID: IC 410-274149/14 Client Sample ID: _____Date Analyzed: 07/11/22 17:31 Lab File ID: HL11X14.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

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

Lab Sample ID: IC 410-274149/15 Client Sample ID: _____Date Analyzed: 07/11/22 17:51 Lab File ID: HL11X15.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

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

Lab Sample ID: IC 410-274149/16 Client Sample ID: _____Date Analyzed: 07/11/22 18:11 Lab File ID: HL11X16.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

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

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-116393-1

SDG No.: _____

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

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

Lab Sample ID: IC 410-274149/18 Client Sample ID: _____Date Analyzed: 07/11/22 18:52 Lab File ID: Copy_HL11X18.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

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

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-116393-1

SDG No.: _____

Instrument ID: 19094 Analysis Batch Number: 275687Lab Sample ID: ICV 410-275687/4 Client Sample ID: _____Date Analyzed: 07/14/22 20:04 Lab File ID: copy_HL14X03.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

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

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-116393-1

SDG No.: _____

Instrument ID: 19094 Analysis Batch Number: 348233Lab Sample ID: 410-116393-1 Client Sample ID: HD-COD-SW-6-0/1-0Date Analyzed: 02/27/23 14:56 Lab File ID: HF27X08.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichloroethene	8.13	Incomplete Integration	kaewrungr ueangp	02/28/23 10:51

Lab Sample ID: 410-116393-2 Client Sample ID: HD-COD-SW-7-0/1-0Date Analyzed: 02/27/23 15:17 Lab File ID: HF27X09.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,2-Trichloroethane		Invalid Compound ID	kaewrungr ueangp	02/28/23 10:53
Tetrachloroethene	10.29	Incomplete Integration	kaewrungr ueangp	02/28/23 10:53

Lab Sample ID: 410-116393-3 Client Sample ID: HD-COD-SW-8-0/1-0Date Analyzed: 02/27/23 15:37 Lab File ID: HF27X10.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1-Trichloroethane		Invalid Compound ID	kaewrungr ueangp	02/28/23 10:58
Chloromethane		Invalid Compound ID	kaewrungr ueangp	02/28/23 10:58

Lab Sample ID: 410-116393-4 Client Sample ID: HD-COD-SW-9-0/1-0Date Analyzed: 02/27/23 15:58 Lab File ID: HF27X11.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane		Invalid Compound ID	kaewrungr ueangp	02/28/23 11:01

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-116393-1

SDG No.: _____

Instrument ID: 19094 Analysis Batch Number: 348233

Lab Sample ID: 410-116393-5 Client Sample ID: HD-COD-SW-13-0/1-0

Date Analyzed: 02/27/23 16:19 Lab File ID: HF27X12.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1-Trichloroethane		Invalid Compound ID	kaewrungr ueangp	02/28/23 11:02
Acetone		Invalid Compound ID	kaewrungr ueangp	02/28/23 11:01
Chloromethane		Invalid Compound ID	kaewrungr ueangp	02/28/23 11:01

Lab Sample ID: 410-116393-6 Client Sample ID: HD-COD-SW-15-0/1-0

Date Analyzed: 02/27/23 16:39 Lab File ID: HF27X13.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane		Invalid Compound ID	kaewrungr ueangp	02/28/23 11:12

Lab Sample ID: 410-116393-7 Client Sample ID: HD-COD-SW-16-0/1-0

Date Analyzed: 02/27/23 17:41 Lab File ID: HF27X16.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane-d4 (Surr)	7.20	Incomplete Integration	kaewrungr ueangp	02/28/23 11:15
1,1,1-Trichloroethane		Invalid Compound ID	kaewrungr ueangp	02/28/23 11:16

Lab Sample ID: 410-116393-8 Client Sample ID: HD-COD-SW-17-0/1-0

Date Analyzed: 02/27/23 18:02 Lab File ID: HF27X17.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,2-Trichloroethane	10.21	Invalid Compound ID	kaewrungr ueangp	02/28/23 11:17

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-116393-1

SDG No.: _____

Instrument ID: 19094 Analysis Batch Number: 348233

Lab Sample ID: 410-116393-9 Client Sample ID: HD-COD-SW-26-0/1-0

Date Analyzed: 02/27/23 18:23 Lab File ID: HF27X18.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	6.07	Incomplete Integration	kaewrungr ueangp	02/28/23 11:17
Trichloroethene	8.13	Incomplete Integration	kaewrungr ueangp	02/28/23 11:17

Lab Sample ID: 410-116393-10 Client Sample ID: HD-COD-SW-27-0/1-0

Date Analyzed: 02/27/23 18:43 Lab File ID: HF27X19.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.81	Incomplete Integration	kaewrungr ueangp	02/28/23 11:18
Trichloroethene	8.13	Incomplete Integration	kaewrungr ueangp	02/28/23 11:18

Lab Sample ID: 410-116393-13 Client Sample ID: HD-QC1-0/1-1

Date Analyzed: 02/27/23 19:46 Lab File ID: HF27X22.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,2-Trichloroethane		Invalid Compound ID	kaewrungr ueangp	02/28/23 11:24

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-116393-1

SDG No.: _____

Instrument ID: 19094 Analysis Batch Number: 348577Lab Sample ID: CCVIS 410-348577/6 Client Sample ID: _____Date Analyzed: 02/28/23 11:42 Lab File ID: HF28X05.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.95	Incomplete Integration	DVW2	02/28/23 12:06
1,2-Dichloroethane-d4 (Surr)	7.21	Incomplete Integration	DVW2	02/28/23 12:06

Lab Sample ID: MB 410-348577/13 Client Sample ID: _____Date Analyzed: 02/28/23 14:07 Lab File ID: HF28X12.D GC Column: R-624SilMS 30m ID: 0.25 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane-d4 (Surr)	7.21	Incomplete Integration	DVW2	02/28/23 14:30

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-116393-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MSV_LCS_VOC#1_00063	08/09/22	07/10/22	Methanol, Lot EB679	25 mL	MSV_M_MIX1SEC_00076	1 mL	1,1,1,2-Tetrachloroethane	40 ug/mL
							1,1,1-Trichloroethane	40 ug/mL
							1,1,2,2-Tetrachloroethane	40 ug/mL
							1,1,2-Trichloroethane	40 ug/mL
							1,1-Dichloroethane	40 ug/mL
							1,1-Dichloroethene	40 ug/mL
							1,2-Dibromoethane (EDB)	40 ug/mL
							1,2-Dichloroethane	40 ug/mL
							1,2-Dichloropropane	40 ug/mL
							Benzene	40 ug/mL
							Bromochloromethane	40 ug/mL
							Bromodichloromethane	40 ug/mL
							Bromoform	40 ug/mL
							Carbon tetrachloride	40 ug/mL
							Chlorobenzene	40 ug/mL
							Chloroform	40 ug/mL
							cis-1,2-Dichloroethene	40 ug/mL
							cis-1,3-Dichloropropene	40 ug/mL
							Dibromochloromethane	40 ug/mL
							Ethylbenzene	40 ug/mL
					Methylene Chloride	40 ug/mL		
					Styrene	40 ug/mL		
					Tetrachloroethene	40 ug/mL		
					Toluene	40 ug/mL		
					trans-1,2-Dichloroethene	40 ug/mL		
					trans-1,3-Dichloropropene	40 ug/mL		
Trichloroethene	40 ug/mL							
MSV_M_MIX2SEC_00073	1 mL	Carbon disulfide	40 ug/mL					
		Methyl tert-butyl ether	40 ug/mL					
MSV_Q_Ketones_00075	1 mL	2-Butanone (MEK)	500 ug/mL					
		2-Hexanone	500 ug/mL					
		4-Methyl-2-pentanone (MIBK)	500 ug/mL					
		Acetone	500 ug/mL					
.MSV_M_MIX1SEC_00076	04/30/24		Restek, Lot A0171815		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							Benzene	1000 ug/mL
							Bromochloromethane	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-116393-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobenzene	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Methylene Chloride	1000 ug/mL
							Styrene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
.MSV_M_MIX2SEC_00073	04/30/24		Restek, Lot A0171837		(Purchased Reagent)		Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
.MSV_Q_Ketones_00075	01/31/24		Restek, Lot A0178490		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
MSV_LCS_VOC#1_00097	03/25/23	02/23/23	Methanol, Lot EB679	25 mL	MSV_M_MIX1SEC_00121	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_00117	1 mL	Carbon disulfide	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-116393-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl tert-butyl ether	40 ug/mL
					MSV_Q_Ketones_00117	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_00121	04/30/25		Restek, Lot A0184354		(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_00117	04/30/25		Restek, Lot A0184412		(Purchased Reagent)		Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
.MSV_Q_Ketones_00117	01/31/24		Restek, Lot A0184721		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
MSV_LL_#1_826_00049	07/23/22	07/11/22	Methanol, Lot EB679	1 mL	MSV_CCV_VOC#1_00078	50 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-116393-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-116393-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-116393-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2,4-Trimethylbenzene	1000 ug/mL
							1,2-Dibromo-3-Chloropropane	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							1,3,5-Trimethylbenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dichloropropane	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,2-Dichloropropane	1000 ug/mL
							2-Chlorotoluene	1000 ug/mL
							4-Chlorotoluene	1000 ug/mL
							4-Isopropyltoluene	1000 ug/mL
							Benzene	1000 ug/mL
							Bromobenzene	1000 ug/mL
							Bromochloromethane	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Dibromomethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Isopropylbenzene	1000 ug/mL
							m-Xylene & p-Xylene	2000 ug/mL
							Methylene Chloride	1000 ug/mL
							n-Butylbenzene	1000 ug/mL
							N-Propylbenzene	1000 ug/mL
							Naphthalene	1000 ug/mL
							o-Xylene	1000 ug/mL
							sec-Butylbenzene	1000 ug/mL
							Styrene	1000 ug/mL
							tert-Butylbenzene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
					MSV_MegaMix#2_00076	1 mL	1,1,2-Trichloro-1,2,2-trifluoroethane	1000 ug/mL
							1,2,3-Trimethylbenzene	1000 ug/mL
							1,3,5-Trichlorobenzene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-116393-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-116393-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-116393-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Iodomethane	5000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropyl ether	5000 ug/mL
							Methacrylonitrile	12500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
							Methylcyclohexane	5000 ug/mL
							n-Butanol	62500 ug/mL
							n-Heptane	5000 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	5000 ug/mL
							Tert-butyl ethyl ether	5000 ug/mL
							Tetrahydrofuran	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL
.MSV_CCV_VOC#3_00078	07/23/22	07/10/22	Methanol, Lot EB679	5 mL	MSV_CCV_ACR_00004	0.5 mL	Acrolein	12500 ug/mL
					MSV_V_Ketones_00074	1 mL	2-Butanone (MEK)	2500 ug/mL
							2-Hexanone	2500 ug/mL
							4-Methyl-2-pentanone (MIBK)	2500 ug/mL
							Acetone	2500 ug/mL
..MSV_CCV_ACR_00004	07/23/22	05/24/22	Methanol, Lot EB679	10 mL	MSV_VACR_STK_00026	9.17 mL	Acrolein	125000 ug/mL
...MSV_VACR_STK_00026	07/23/22	05/24/22	Methanol, Lot EB679	10 mL	MSV_ACROLEIN_00019	1.4626 g	Acrolein	136314 ug/mL
...MSV_ACROLEIN_00019	02/28/23		Chem Service, Lot 12926800				Acrolein	0.932 g/g
..MSV_V_Ketones_00074	01/31/24		Restek, Lot A0174287				2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MSV_V_VOA2_00148	08/09/22	07/10/22	Methanol, Lot EB679	5 mL	MSV_V#2B_00277	1 mL	1,4-Dioxane	12500 ug/mL
							2-Methyl-2-propanol	5000 ug/mL
							Isobutyl alcohol	12500 ug/mL
							Methacrylonitrile	2500 ug/mL
							n-Butanol	25000 ug/mL
							Propionitrile	5000 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
..MSV_V#2B_00277	04/30/24		Restek, Lot A0184378				1,4-Dioxane	62500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Methacrylonitrile	12500 ug/mL
							n-Butanol	125000 ug/mL
							Propionitrile	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL
MSV_LL_#1_826_00067	03/14/23	02/13/23	Methanol, Lot EB679	1 mL	MSV_CCV_VOC#1_00110	50 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-116393-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dibromoethane (EDB)	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Methylene Chloride	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
Trichloroethene	50 ug/mL							
Carbon disulfide	50 ug/mL							
Methyl tert-butyl ether	50 ug/mL							
					MSV_CCV_VOC#3_00111	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_00110	03/14/23	02/12/23	Methanol, Lot EB679	5 mL	MSV_MegaMIX#1_00111	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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-116393-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00107	1 mL	Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
..MSV_MegaMIX#1_00111	03/14/23		Restek, Lot A0184527		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	5000 ug/mL
							1,1,1-Trichloroethane	5000 ug/mL
							1,1,2,2-Tetrachloroethane	5000 ug/mL
							1,1,2-Trichloroethane	5000 ug/mL
							1,1-Dichloroethane	5000 ug/mL
							1,1-Dichloroethene	5000 ug/mL
							1,2-Dibromoethane (EDB)	5000 ug/mL
							1,2-Dichloroethane	5000 ug/mL
							1,2-Dichloropropane	5000 ug/mL
							Benzene	5000 ug/mL
							Bromochloromethane	5000 ug/mL
							Bromodichloromethane	5000 ug/mL
							Bromoform	5000 ug/mL
							Carbon tetrachloride	5000 ug/mL
							Chlorobenzene	5000 ug/mL
							Chloroform	5000 ug/mL
							cis-1,2-Dichloroethene	5000 ug/mL
							cis-1,3-Dichloropropene	5000 ug/mL
							Dibromochloromethane	5000 ug/mL
							Ethylbenzene	5000 ug/mL
							Methylene Chloride	5000 ug/mL
							Styrene	5000 ug/mL
							Tetrachloroethene	5000 ug/mL
							Toluene	5000 ug/mL
							trans-1,2-Dichloroethene	5000 ug/mL
							trans-1,3-Dichloropropene	5000 ug/mL
							Trichloroethene	5000 ug/mL
..MSV_MegaMix#2_00107	03/14/23		Restek, Lot A0186885		(Purchased Reagent)		Carbon disulfide	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
..MSV_CCv_VOC#3_00111	03/14/23	02/12/23	Methanol, Lot EB679	5 mL	MSV_V_Ketones_00104	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_00104	01/31/25		Restek, Lot A0180742		(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_00053	08/09/22	07/11/22	Methanol, Lot EB679	1 mL	MSV_CCv_EE_00003	50 uL	Ethyl ether	50.0143 ug/mL
					MSV_V_PentaCL_00019	10 uL	Pentachloroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-116393-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration					
					Reagent ID	Volume Added							
.MSV_CCV_EE_00003	11/20/22	05/20/22	Methanol, Lot EB679	100 mL	MSV_EE_MISCSK_00010	1.73 mL	Ethyl ether	1000.29 ug/mL					
..MSV_EE_MISCSK_00010	11/20/22	05/20/22	Methanol, Lot EB679	10 mL	MSV_EE_Neat_00007	0.5782 g	Ethyl ether	57820 ug/mL					
...MSV_EE_Neat_00007	12/31/25		Chem Service, Lot 12123300		(Purchased Reagent)		Ethyl ether	1 g/g					
.MSV_V_PentaCL_00019	08/09/22		Restek, Lot A0171341		(Purchased Reagent)		Pentachloroethane	5000 ug/mL					
MSV_LL_GAS826_00101	07/18/22	07/11/22	Methanol, Lot EB679	1 mL	MSV_CCV_GASES_00221	25 uL	1,2-Dichloro-1,1,2-trifluoroethane	50 ug/mL					
							Bromomethane	50 ug/mL					
							Butadiene	50 ug/mL					
							Chloroethane	50 ug/mL					
							Chloromethane	50 ug/mL					
							Dichlorodifluoromethane	50 ug/mL					
							Dichlorofluoromethane	50 ug/mL					
							Trichlorofluoromethane	50 ug/mL					
.MSV_CCV_GASES_00221	07/18/22		Restek, Lot A0172364		(Purchased Reagent)		1,2-Dichloro-1,1,2-trifluoroethane	2000 ug/mL					
							Bromomethane	2000 ug/mL					
							Butadiene	2000 ug/mL					
							Chloroethane	2000 ug/mL					
							Chloromethane	2000 ug/mL					
							Dichlorodifluoromethane	2000 ug/mL					
							Dichlorofluoromethane	2000 ug/mL					
							Trichlorofluoromethane	2000 ug/mL					
							Vinyl chloride	2000 ug/mL					
							MSV_LL_GAS826_00138	03/06/23	02/27/23	Methanol, Lot EB679	1 mL	MSV_CCV_GASES_00403	25 uL
Chloroethane	50 ug/mL												
Chloromethane	50 ug/mL												
Vinyl chloride	50 ug/mL												
.MSV_CCV_GASES_00403	03/06/23		Restek, Lot A0184815		(Purchased Reagent)								
							Chloroethane	2000 ug/mL					
							Chloromethane	2000 ug/mL					
							Vinyl chloride	2000 ug/mL					
							MSV_LLcentISS_00005	11/30/22	05/30/22	Methanol, Lot EB679	50 mL	MSV_8260_SS_00668	1 mL
4-Bromofluorobenzene (Surr)	50 ug/mL												
Dibromofluoromethane (Surr)	50 ug/mL												
Toluene-d8 (Surr)	50 ug/mL												
MSV_Cus826_IS_00451						1 mL						1,4-Dichlorobenzene-d4	50 ug/mL
												Chlorobenzene-d5 (IS)	50 ug/mL
												Fluorobenzene (IS)	50 ug/mL
												t-Butyl alcohol-d10 (IS)	250 ug/mL
.MSV_8260_SS_00668	11/30/22		Restek, Lot A0183565		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL					
							4-Bromofluorobenzene (Surr)	2500 ug/mL					
							Dibromofluoromethane (Surr)	2500 ug/mL					
							Toluene-d8 (Surr)	2500 ug/mL					
							.MSV_Cus826_IS_00451	11/30/22		Restek, Lot A0179696		(Purchased Reagent)	
Chlorobenzene-d5 (IS)	2500 ug/mL												
Fluorobenzene (IS)	2500 ug/mL												

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-116393-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_LLcentISS_00006	04/27/23	10/27/22	Methanol, Lot EB679	50 mL	MSV_Cus826_IS_00505	1 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5 (IS)	50 ug/mL
							Fluorobenzene (IS)	50 ug/mL
.MSV_Cus826_IS_00505	04/30/25		Restek, Lot A0184225		(Purchased Reagent)		t-Butyl alcohol-d10 (IS)	250 ug/mL
							1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5 (IS)	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_LLcentISS_00006	04/27/23	10/27/22	Methanol, Lot EB679	50 mL	MSV_8260_SS_00779	1 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.MSV_8260_SS_00779	03/31/25		Restek, Lot A0183565		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
MSV_QC_Gas826_00089	07/17/22	07/11/22	Methanol, Lot EB679	1 mL	MSV_QC_2K_GAS_00096	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_QC_2K_GAS_00096	07/17/22		Restek, Lot A0172021		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_QC_Gas826_00128	03/02/23	02/27/23	Methanol, Lot EB679	1 mL	MSV_QC_2K_GAS_00186	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_QC_2K_GAS_00186	03/02/23		Restek, Lot A0184924		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_V_BFB_00008							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Xylenes, Total	
					MSV_VBFB_STK_00008	0.128 mL	BFB	49.8125 ug/mL
.MSV_VBFB_STK_00008	12/27/22	06/27/22	Methanol, Lot EB679	10 mL	MSV_4BFB_NEAT_00008	0.9729 g	BFB	97290 ug/mL
..MSV_4BFB_NEAT_00008	02/28/25		Chem Service, Lot 13233000		(Purchased Reagent)		BFB	1 g/g
MSV_V_BFB_00011							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Xylenes, Total	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envir Job No.: 410-116393-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MSV_VBFB_STK_00009	06/18/23	12/18/22	Methanol, Lot EB679	10 mL	MSV_VBFB_STK_00009	0.127 mL	BFB	50.1498 ug/mL
..MSV_4BFB_NEAT_00007	02/28/25		Chem Service, Lot 13233000		MSV_4BFB_NEAT_00007	0.9872 g	BFB	98720 ug/mL
					(Purchased Reagent)		BFB	1 g/g

Reagent

MSV_4BFB_NEAT_00007

CERTIFICATE OF ANALYSIS

4-Bromofluorobenzene

CATALOG NUMBER N-10809-1G
LOT NUMBER 13233000
DATE CERTIFIED 05/12/22
EXPIRATION DATE 05/31/25
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.

<u>Analytical Test</u>	<u>Value</u>
FT-IR SPECTROSCOPY	CONFORMS TO STRUCTURE
% PURITY (GC/FID)	99.5
GC/MS SPECTRA ID	MATCHES NIST LIBRARY

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
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: 05/16/22

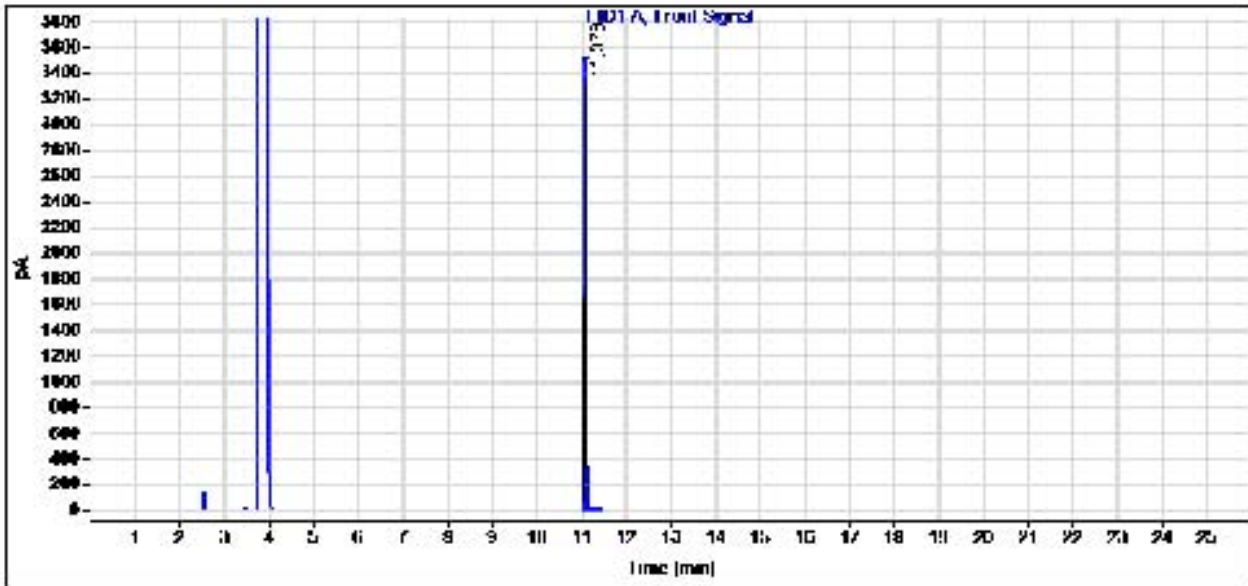
Page 62 of 621

03/01/2023

CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\CHEM32\1\DATA\2022 DATA\0522\FID010815.D
Sample name: N-10809
Instrument: GC 1
Injection date: 5/12/2022 11:36:15 AM
Acq. method: MIX1.M
Column name: DB-624 (30m x 0.53mm x 3.0um)
Sample type: Sample
Location: Vial 43
Injection volume: 1.0uL



Signal: FID1 A, Front Signal

RT [min]	Type	Width [min]	Area	Height	Area%
11.078	BB	0.0355	7895.3311	3478.6162	100.0000
Sum			7895.3311		

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



Reagent

MSV_8260_SS_00779



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.:** A0183565

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

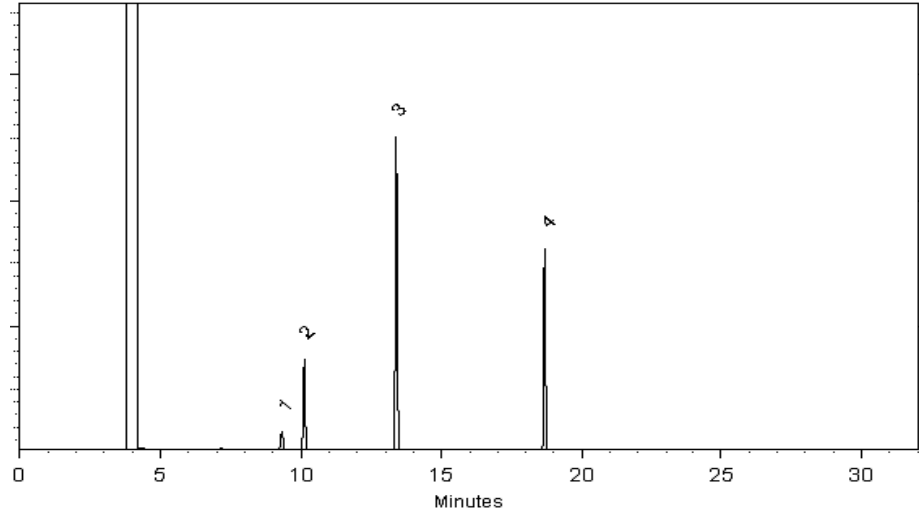
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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


Inj. Temp:
200°C

Det. Temp:
250°C


Det. Type:
FID



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


Russ Bookhamer - Operations Technician I

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


Fang-Yun Lo - QC Analyst

Date Passed: 04-Apr-2022

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us 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_00019

CERTIFICATE OF ANALYSIS

Acrolein

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

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

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



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

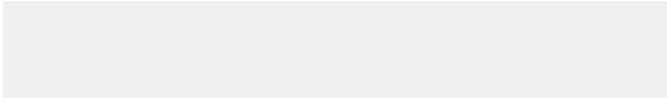
Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

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

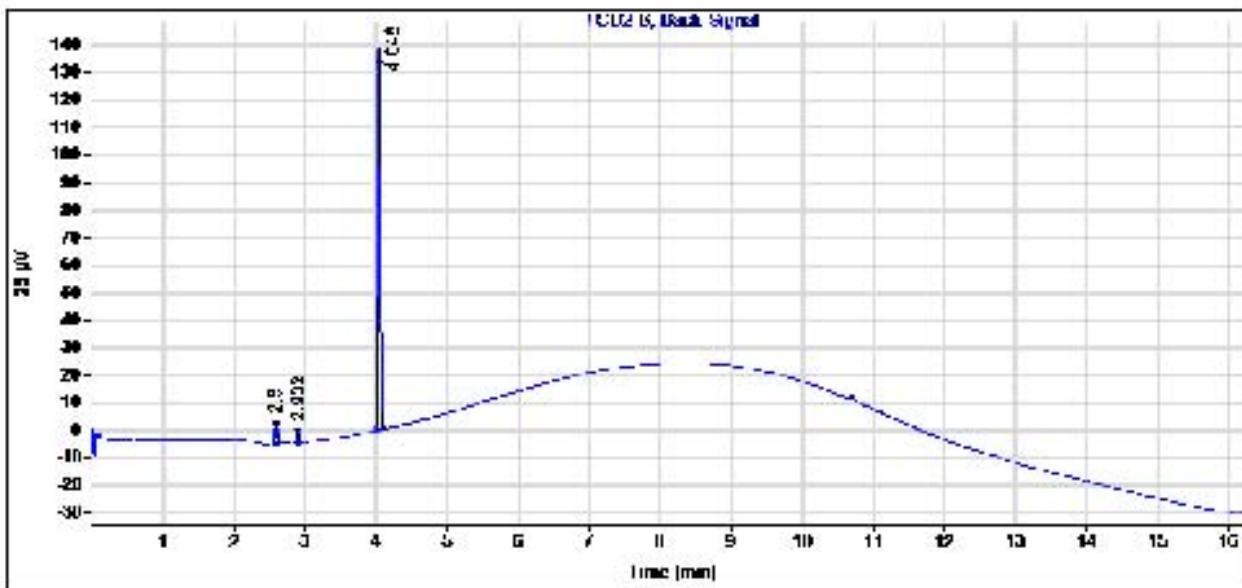




CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

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



Signal: TCD2 B, Back Signal

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

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



Reagent

MSV_CCV_GASES_00221



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 577488 Lot No.: A0172364

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

Container Size : 2 mL Pkg Amt: > 1 mL

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

Tech Tips:

Raw material may contain trace amounts of tert-Butanol.

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

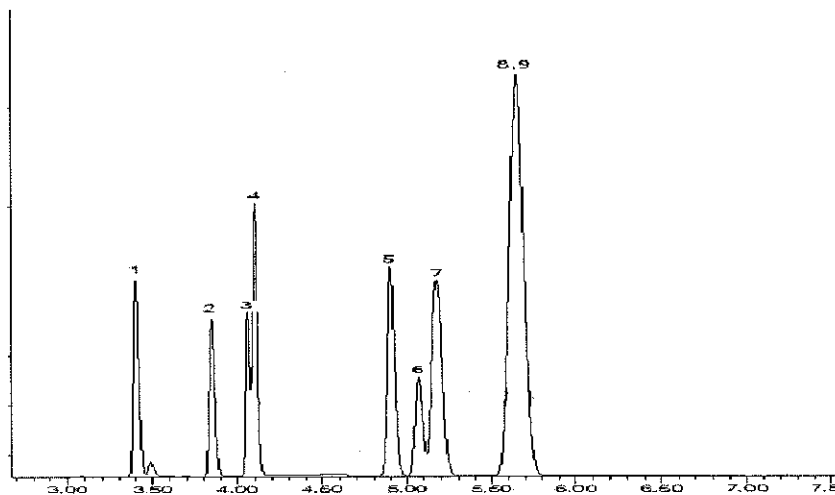
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

[Signature]
Tom Suckal - Mix Technician

Date Mixed: 13-May-2021 Balance: B251644995

[Signature]
Alexis Shelow - Operations Tech I

Date Passed: 17-May-2021

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ 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_00451



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

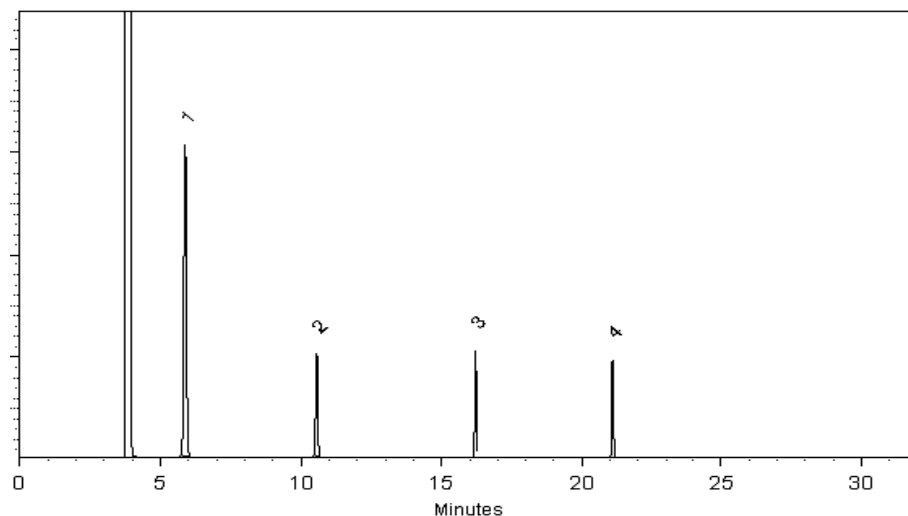
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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_00007

CERTIFICATE OF ANALYSIS

Ethyl ether

CATALOG NUMBER N-11897-1G
LOT NUMBER 12123300
DATE CERTIFIED 12/04/20
EXPIRATION DATE 12/31/25
CAS NUMBER 60-29-7
MOLECULAR FORMULA 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

COA Form
Revision 3 (3/2015)



Print Date: 07/26/21

Page 81 of 621

03/01/2023

CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

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



Signal: TCD2 B, Back Signal

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



Reagent

MSV_M_MIX1SEC_00076



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	1,1-Dichloroethene	1,003.8 µg/mL	+/-	7.1628	µg/mL	Gravimetric
	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	1,1,1,2,2-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)

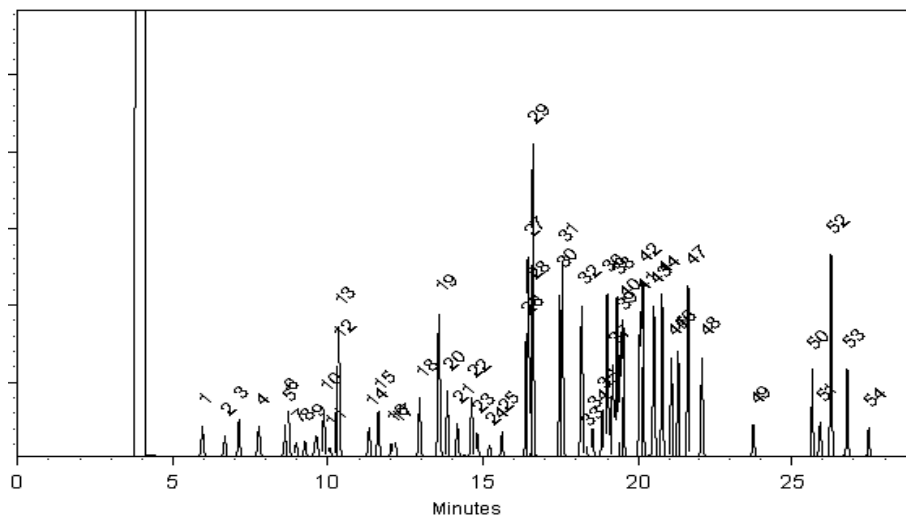
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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_00073



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

8	Carbon disulfide 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)

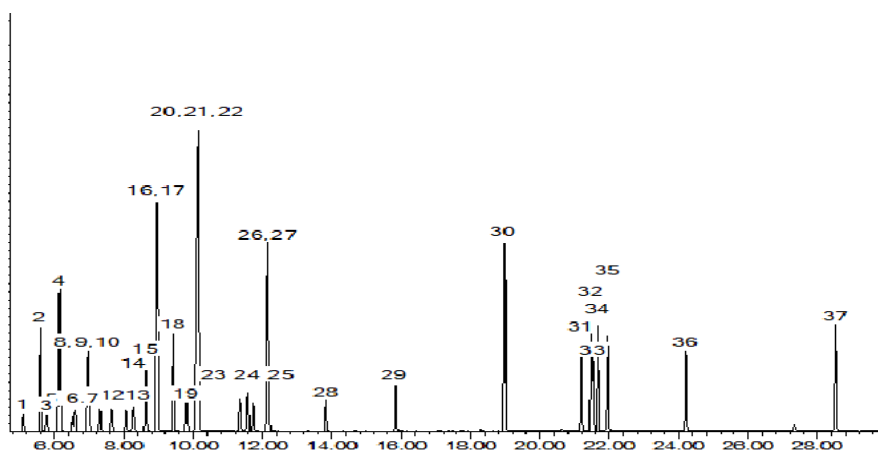
Carrier Gas:
helium-constant pressure 30 psi

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_00076



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

8	Bromochloromethane 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	1,1,1,2,2-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)

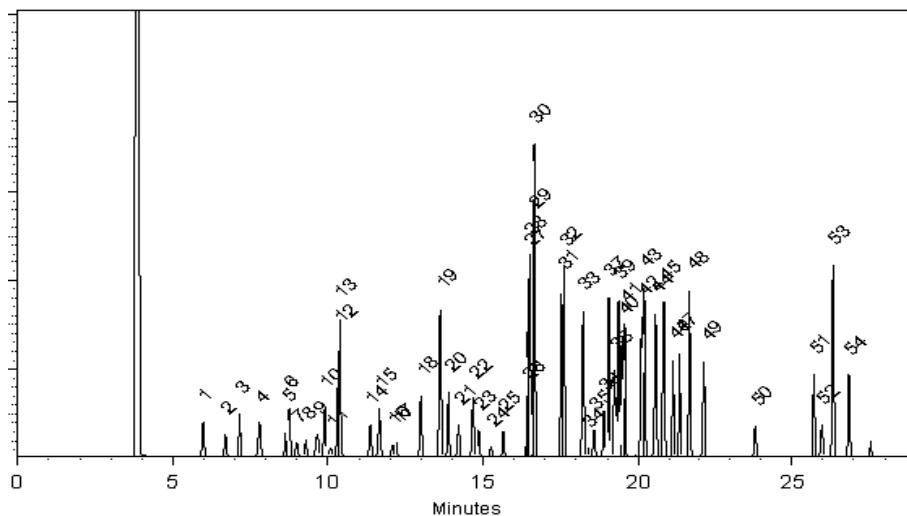
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

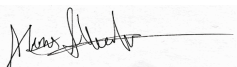
Det. Type:
FID



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_00076



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

8	Carbon disulfide 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)

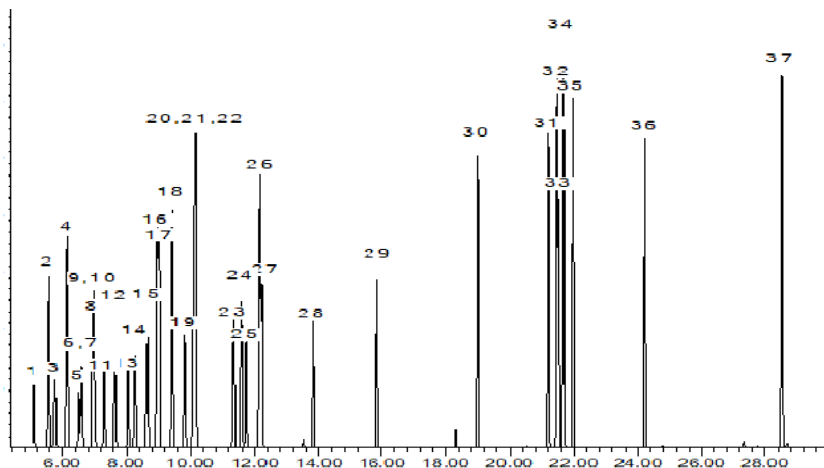
Carrier Gas:
helium-constant pressure 30 psi

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_00107



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.:** A0186885

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, 2025 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	n-Pentane (C5)	5,031.0 µg/mL	+/-	35.9016	µg/mL	Gravimetric
	CAS # 109-66-0 (Lot SHBN6009)		+/-	249.7418	µg/mL	Unstressed
	Purity 99%		+/-	255.9092	µg/mL	Stressed
2	2-Propanol (isopropanol)	25,031.0 µg/mL	+/-	146.5620	µg/mL	Gravimetric
	CAS # 67-63-0 (Lot SHBN6065)		+/-	1,238.3511	µg/mL	Unstressed
	Purity 99%		+/-	1,269.1379	µg/mL	Stressed
3	1,1,2-Trichlorotrifluoroethane (CFC-113)	5,009.5 µg/mL	+/-	35.7482	µg/mL	Gravimetric
	CAS # 76-13-1 (Lot 00016133)		+/-	248.6745	µg/mL	Unstressed
	Purity 99%		+/-	254.8156	µg/mL	Stressed
4	tert-Butanol (TBA)	25,112.0 µg/mL	+/-	147.0363	µg/mL	Gravimetric
	CAS # 75-65-0 (Lot 101619K21F-1)		+/-	1,242.3584	µg/mL	Unstressed
	Purity 99%		+/-	1,273.2448	µg/mL	Stressed
5	Methyl acetate	5,011.0 µg/mL	+/-	35.7589	µg/mL	Gravimetric
	CAS # 79-20-9 (Lot SHBM1320)		+/-	248.7490	µg/mL	Unstressed
	Purity 99%		+/-	254.8919	µg/mL	Stressed
6	Iodomethane (methyl iodide)	5,012.0 µg/mL	+/-	35.7660	µg/mL	Gravimetric
	CAS # 74-88-4 (Lot RD220125)		+/-	248.7986	µg/mL	Unstressed
	Purity 99%		+/-	254.9428	µg/mL	Stressed
7	Allyl chloride (3-chloropropene)	5,021.7 µg/mL	+/-	35.8350	µg/mL	Gravimetric
	CAS # 107-05-1 (Lot RP220405A)		+/-	249.2785	µg/mL	Unstressed
	Purity 99%		+/-	255.4345	µg/mL	Stressed

8	Carbon disulfide CAS # 75-15-0 Purity 99%	(Lot N28F701)	5,017.2	µg/mL	+/- +/- +/-	35.8029 249.0551 255.2056	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Acrylonitrile CAS # 107-13-1 Purity 99%	(Lot SHBK4954)	12,534.0	µg/mL	+/- +/- +/-	73.3893 620.0908 635.5069	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	Methyl-tert-butyl ether (MTBE) CAS # 1634-04-4 Purity 99%	(Lot SHBN6497)	5,014.5	µg/mL	+/- +/- +/-	35.7839 248.9227 255.0699	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	n-Hexane (C6) CAS # 110-54-3 Purity 99%	(Lot STBG6381)	5,014.7	µg/mL	+/- +/- +/-	35.7850 248.9310 255.0784	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Diisopropyl ether (DIPE) CAS # 108-20-3 Purity 99%	(Lot STBK3450)	5,021.0	µg/mL	+/- +/- +/-	35.8302 249.2454 255.4006	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	Chloroprene (2-chloro-1,3-butadiene) CAS # 126-99-8 Purity 99%	(Lot 220304JEAN)	5,026.3	µg/mL	+/- +/- +/-	35.8683 249.5101 255.6718	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	Ethyl-tert-butyl ether (ETBE) CAS # 637-92-3 Purity 99%	(Lot MKCN9957)	5,009.2	µg/mL	+/- +/- +/-	35.7458 248.6580 254.7986	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Propionitrile CAS # 107-12-0 Purity 99%	(Lot BCCF4167)	25,070.0	µg/mL	+/- +/- +/-	146.7904 1,240.2806 1,271.1153	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Methacrylonitrile CAS # 126-98-7 Purity 99%	(Lot 1012014)	12,539.0	µg/mL	+/- +/- +/-	73.4186 620.3382 635.7604	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Isobutanol (2-Methyl-1-propanol) CAS # 78-83-1 Purity 99%	(Lot SHBM4836)	62,525.0	µg/mL	+/- +/- +/-	366.0976 3,093.2805 3,170.1827	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Tetrahydrofuran CAS # 109-99-9 Purity 99%	(Lot SHBP0039)	25,065.0	µg/mL	+/- +/- +/-	146.7611 1,240.0332 1,270.8617	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	Cyclohexane CAS # 110-82-7 Purity 99%	(Lot EA003-US)	5,008.5	µg/mL	+/- +/- +/-	35.7410 248.6249 254.7647	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	1-Butanol CAS # 71-36-3 Purity 99%	(Lot SHBN6854)	62,524.0	µg/mL	+/- +/- +/-	366.0918 3,093.2311 3,170.1320	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	tert-Amyl methyl ether (TAME) CAS # 994-05-8 Purity 99%	(Lot HMBG7745V)	5,009.2	µg/mL	+/- +/- +/-	35.7458 248.6580 254.7986	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	n-Heptane (C7) CAS # 142-82-5 Purity 99%	(Lot SGBL9221)	5,016.7	µg/mL	+/- +/- +/-	35.7993 249.0303 255.1801	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	tert-Amyl ethyl ether (TAEE) CAS # 919-94-8 Purity 99%	(Lot 76U3A)	5,010.8	µg/mL	+/- +/- +/-	35.7577 248.7407 254.8834	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Methylcyclohexane CAS # 108-87-2 Purity 99%	(Lot SHBL0078)	5,022.3	µg/mL	+/-	35.8398 249.3116 255.4684	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	Methyl methacrylate CAS # 80-62-6 Purity 99%	(Lot MKCQ2755)	5,011.5	µg/mL	+/-	35.7625 248.7738 254.9173	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,4-Dioxane CAS # 123-91-1 Purity 99%	(Lot SHBN5929)	62,598.0	µg/mL	+/-	366.5251 3,096.8920 3,173.8840	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	2-Nitropropane CAS # 79-46-9 Purity 97%	(Lot BCCB9352)	25,086.1	µg/mL	+/-	146.8849 1,241.0791 1,271.9336	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Ethyl methacrylate CAS # 97-63-2 Purity 99%	(Lot MKCL0907)	5,017.7	µg/mL	+/-	35.8065 249.0799 255.2310	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	1-Chlorohexane CAS # 544-10-5 Purity 98%	(Lot BCBS3368V)	5,022.3	µg/mL	+/-	35.8398 249.3117 255.4685	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	trans-1,4-dichloro-2-butene CAS # 110-57-6 Purity 95%	(Lot RD220405A)	12,586.6	µg/mL	+/-	73.6970 622.6906 638.1714	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	1,2,3-Trimethylbenzene CAS # 526-73-8 Purity 98%	(Lot 8776.10-36)	5,012.4	µg/mL	+/-	35.7687 248.8172 254.9617	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	1,3-Diethylbenzene CAS # 141-93-5 Purity 98%	(Lot BCBT8967)	5,012.0	µg/mL	+/-	35.7664 248.8009 254.9451	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Benzyl chloride CAS # 100-44-7 Purity 99%	(Lot SHBH2102V)	5,020.8	µg/mL	+/-	35.8291 249.2371 255.3921	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	1,4-Diethylbenzene CAS # 105-05-5 Purity 99%	(Lot 1135.72-1)	5,011.7	µg/mL	+/-	35.7636 248.7821 254.9258	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,2-Diethylbenzene CAS # 135-01-3 Purity 99%	(Lot ECH2970181)	5,011.3	µg/mL	+/-	35.7613 248.7655 254.9088	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	1,3,5-Trichlorobenzene CAS # 108-70-3 Purity 99%	(Lot 11319AS)	5,013.2	µg/mL	+/-	35.7743 248.8565 255.0021	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	2-Methylnaphthalene CAS # 91-57-6 Purity 96%	(Lot STBK0259)	5,013.1	µg/mL	+/-	35.7740 248.8542 254.9997	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)

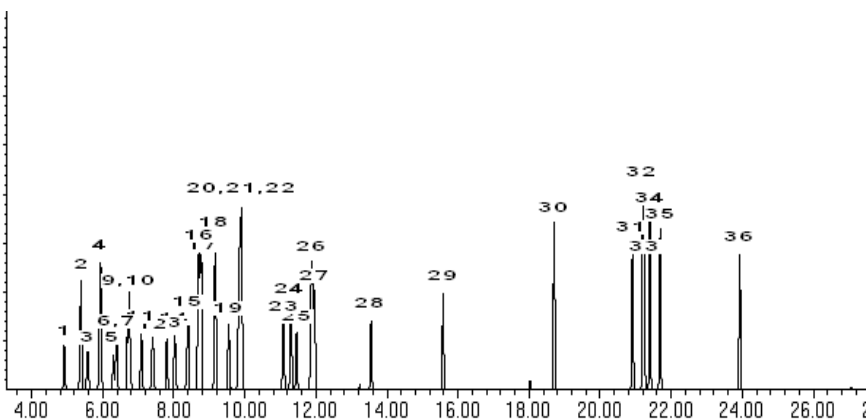
Carrier Gas:
helium-constant pressure 30 psi

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.

Miranda Kline

Miranda Kline - Operations Technician I

Date Mixed: 30-Jun-2022

Balance: B707717271

Christie Mills

Christie Mills - Operations Tech II - ARM QC

Date Passed: 07-Jul-2022

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us 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_00075



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Acetone	12,504.0 µg/mL	+/-	73.2137	µg/mL	Gravimetric
	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)

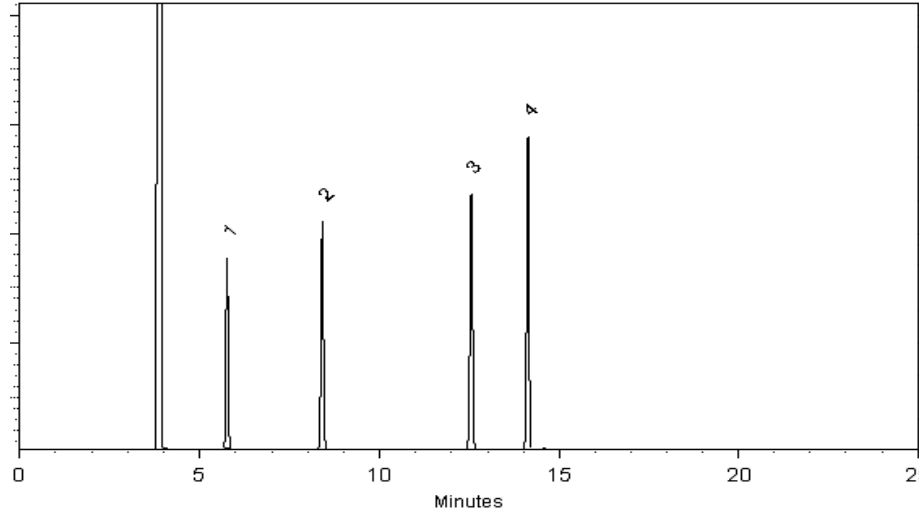
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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 Windle - Operations Technician I

Date Passed: 16-Nov-2021

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us 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_00096



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

CERTIFIED VALUES

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

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

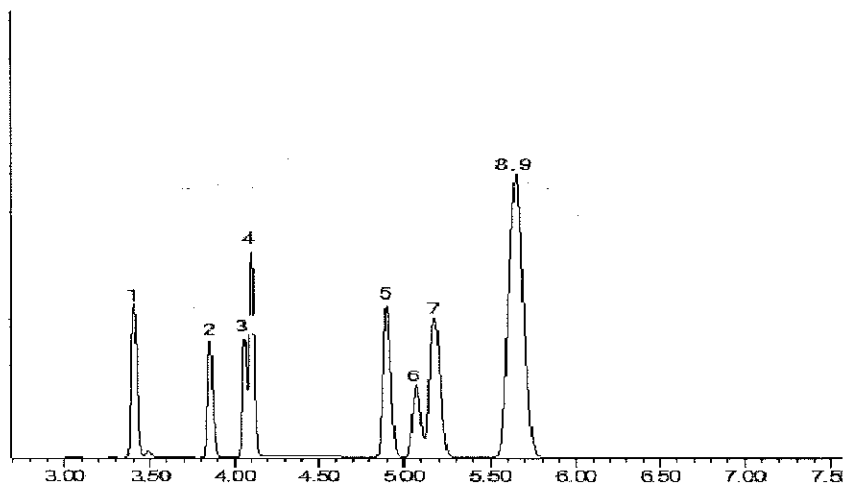
200°C

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_00277



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

www.restek.com

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

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

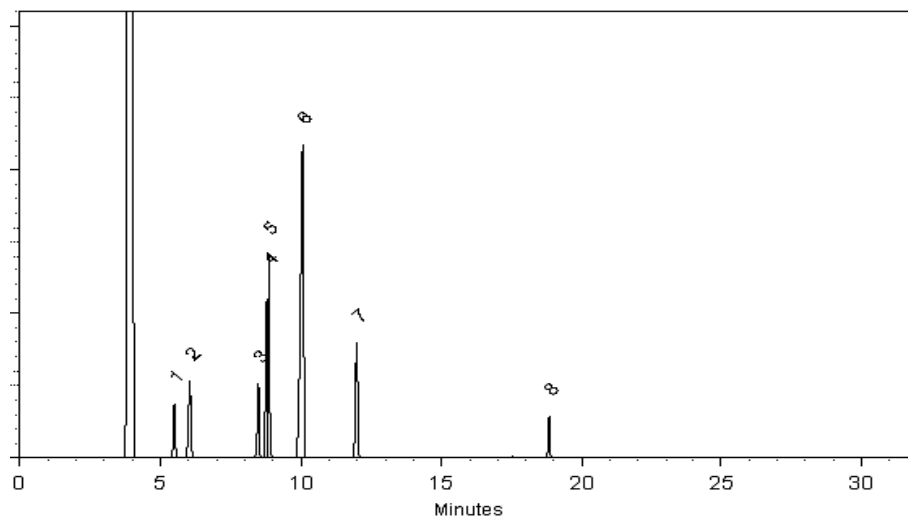
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Josh McCloskey - Operations Technician I

Date Mixed: 21-Apr-2022

Balance: B707717271

Christie Mills - Operations Technician II

Date Passed: 27-Apr-2022

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

General Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the RM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ 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_00074



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569721 **Lot No.:** A0174287

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

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Acetone	12,526.4 µg/mL	+/-	73.3448	µg/mL	Gravimetric
	CAS # 67-64-1 (Lot SHBN3661)		+/-	755.8230	µg/mL	Unstressed
	Purity 99%		+/-	757.6173	µg/mL	Stressed
2	2-Butanone (MEK)	12,543.6 µg/mL	+/-	73.4455	µg/mL	Gravimetric
	CAS # 78-93-3 (Lot SHBL5543)		+/-	756.8609	µg/mL	Unstressed
	Purity 99%		+/-	758.6575	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,534.8 µg/mL	+/-	73.3940	µg/mL	Gravimetric
	CAS # 108-10-1 (Lot SHBM7956)		+/-	756.3299	µg/mL	Unstressed
	Purity 99%		+/-	758.1253	µg/mL	Stressed
4	2-Hexanone	12,617.6 µg/mL	+/-	73.8788	µg/mL	Gravimetric
	CAS # 591-78-6 (Lot MKCL1599)		+/-	761.3259	µg/mL	Unstressed
	Purity 99%		+/-	763.1332	µg/mL	Stressed

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

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

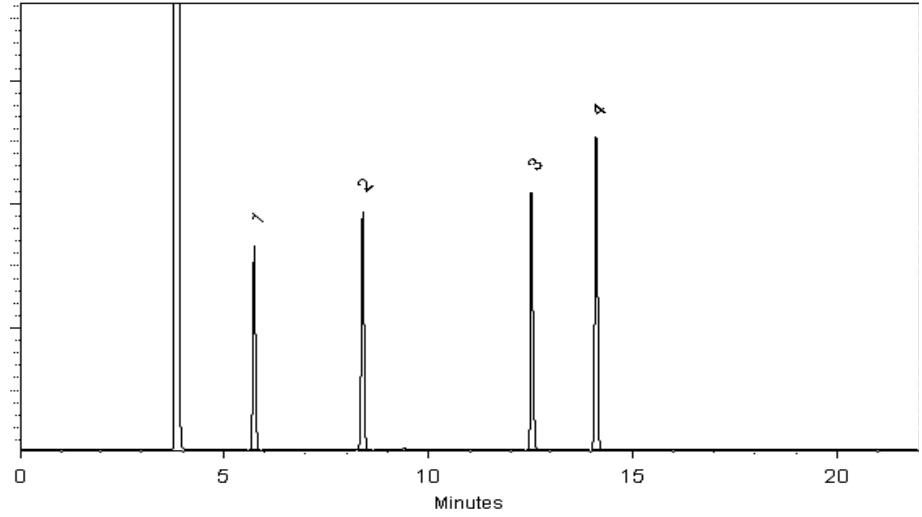
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Sam Moodler
Sam Moodler - Operations Tech I

Date Mixed: 11-Jul-2021 **Balance:** B707717271

Marlina Cowan
Marlina Cowan - Operations Tech I

Date Passed: 13-Jul-2021

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us 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_00104



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.:** A0180742

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, 2025 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	Acetone	12,524.0 µg/mL	+/-	73.3308	µg/mL	Gravimetric
	CAS # 67-64-1 (Lot MKCP0755)		+/-	755.6782	µg/mL	Unstressed
	Purity 99%		+/-	757.4721	µg/mL	Stressed
2	2-Butanone (MEK)	12,529.5 µg/mL	+/-	73.3630	µg/mL	Gravimetric
	CAS # 78-93-3 (Lot SHBN2844)		+/-	756.0101	µg/mL	Unstressed
	Purity 99%		+/-	757.8048	µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,541.5 µg/mL	+/-	73.4332	µg/mL	Gravimetric
	CAS # 108-10-1 (Lot SHBN3601)		+/-	756.7342	µg/mL	Unstressed
	Purity 99%		+/-	758.5305	µg/mL	Stressed
4	2-Hexanone	12,548.0 µg/mL	+/-	73.4713	µg/mL	Gravimetric
	CAS # 591-78-6 (Lot MKCL1599)		+/-	757.1264	µg/mL	Unstressed
	Purity 99%		+/-	758.9237	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)

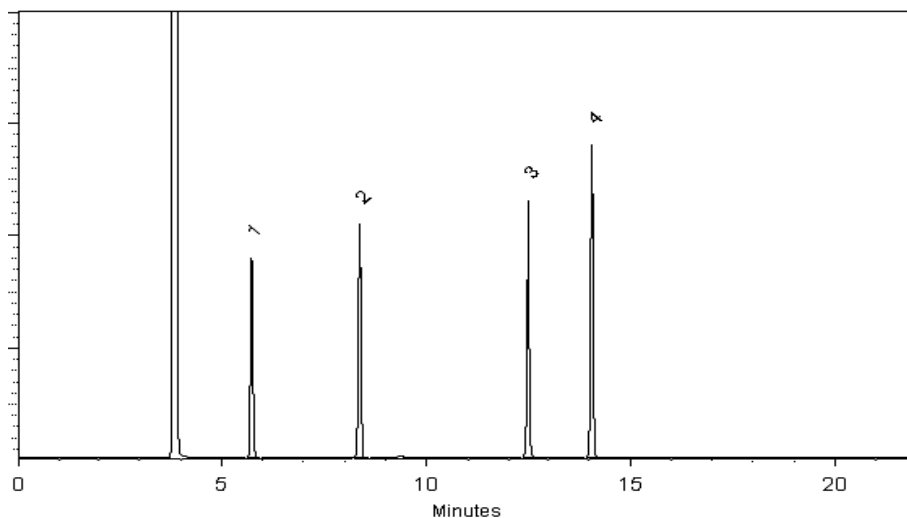
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Penelope Riglin - Operations Tech I

Date Mixed: 18-Jan-2022

Balance: B707717271

Marlina Cowan - Operations Tech I

Date Passed: 20-Jan-2022

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us 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_00019



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 577491 **Lot No.:** A0171341

Description : Custom Pentachloroethane Standard
Custom Pentachloroethane Standard 5,000µg/mL, P&T Methanol,
1mL/ampul

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

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

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Pentachloroethane CAS # 76-01-7 Purity 99% (Lot 10518800)	5,006.0 µg/mL	+/- 29.3780	µg/mL	Gravimetric
			+/- 280.7099	µg/mL	Unstressed
			+/- 287.2768	µg/mL	Stressed

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

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

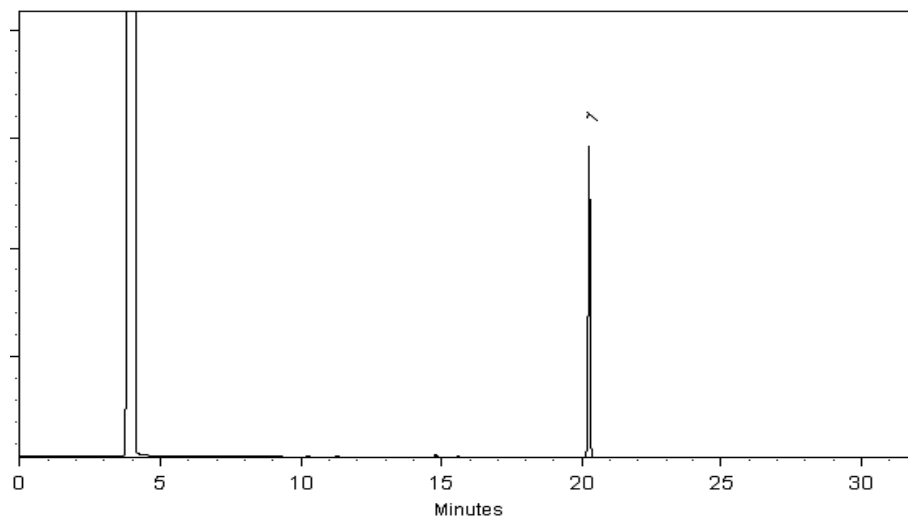
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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


Jeremy Warefield - Operations Tech I

Date Mixed: 14-Apr-2021 **Balance:** 1127510105


Alexis Shelow - Operations Tech I

Date Passed: 19-Apr-2021

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

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

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us 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 En Job No.: 410-116393-1

SDG No.: _____

Matrix: Water Level: Low

GC Column (1): R-624SilMS 3 ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
HD-COD-SW-6-0/1-0	410-116393-1	114	106	95	94
HD-COD-SW-7-0/1-0	410-116393-2	109	104	95	94
HD-COD-SW-8-0/1-0	410-116393-3	108	102	94	96
HD-COD-SW-9-0/1-0	410-116393-4	106	100	84	97
HD-COD-SW-13-0/1-0	410-116393-5	103	103	95	93
HD-COD-SW-15-0/1-0	410-116393-6	108	104	95	91
HD-COD-SW-16-0/1-0	410-116393-7	107	107	96	94
HD-COD-SW-17-0/1-0	410-116393-8	107	106	94	93
HD-COD-SW-17-0/1-0 DL	410-116393-8 DL	113	110	92	94
HD-COD-SW-26-0/1-0	410-116393-9	109	106	95	94
HD-COD-SW-27-0/1-0	410-116393-10	109	106	95	93
HD-COD-SW-28-0/1-0	410-116393-11	107	106	94	93
HD-COD-SW-29-0/1-0	410-116393-12	110	109	96	93
HD-QC1-0/1-1	410-116393-13	108	108	95	92
HD-QC1-0/1-1 DL	410-116393-13 DL	114	110	92	93
HD-QC1-0/1-2	410-116393-14	107	103	95	100
	MB 410-348233/6	105	101	95	95
	MB 410-348577/13	109	108	94	94
	LCS 410-348233/4	107	104	97	92
	LCS 410-348577/8	107	103	97	98
	LCSD 410-348577/9	106	103	97	97
HD-COD-SW-15-0/1-0 MS MS	410-116393-6 MS	121 S1+ cn	103 cn	96 cn	97 cn
HD-COD-SW-15-0/1-0 MSD MSD	410-116393-6 MSD	106	101	97	97

QC LIMITS

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 II 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

Matrix: Water

Level: Low

Lab File ID: HF27X03.D

Lab ID: LCS 410-348233/4

Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	4.99	100	71-134	
1,1,1-Trichloroethane	5.00	5.58	112	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.13	83	75-123	
1,1,2-Trichloroethane	5.00	4.63	93	80-120	
1,1-Dichloroethane	5.00	5.11	102	74-120	
1,1-Dichloroethene	5.00	5.23	105	80-131	
1,2-Dibromoethane (EDB)	5.00	4.71	94	80-120	
1,2-Dichloroethane	5.00	5.52	110	69-122	
1,2-Dichloropropane	5.00	4.69	94	80-120	
2-Butanone (MEK)	62.5	60.4	97	59-141	
2-Hexanone	62.5	75.6	121	52-140	
4-Methyl-2-pentanone (MIBK)	62.5	65.4	105	55-140	
Acetone	62.5	55.2	88	60-146	
Benzene	5.00	5.04	101	80-120	
Bromochloromethane	5.00	5.53	111	80-120	
Bromodichloromethane	5.00	5.32	106	73-124	
Bromoform	5.00	4.87	97	49-144	
Bromomethane	5.00	5.17	103	60-136	
Carbon disulfide	5.00	5.90	118	67-130	
Carbon tetrachloride	5.00	5.65	113	64-141	
Chlorobenzene	5.00	4.87	97	80-120	
Chloroethane	5.00	5.16	103	63-120	
Chloroform	5.00	5.32	106	80-120	
Chloromethane	5.00	5.28	106	56-124	
cis-1,2-Dichloroethene	5.00	5.31	106	80-122	
cis-1,3-Dichloropropene	5.00	5.13	103	67-121	
Dibromochloromethane	5.00	5.02	100	64-138	
Ethylbenzene	5.00	4.56	91	80-120	
Methyl tert-butyl ether	5.00	5.15	103	69-120	
Methylene Chloride	5.00	5.06	101	80-120	
Styrene	5.00	4.57	91	80-120	
Tetrachloroethene	5.00	5.05	101	80-120	
Toluene	5.00	4.73	95	80-120	
trans-1,2-Dichloroethene	5.00	5.49	110	80-122	
trans-1,3-Dichloropropene	5.00	4.93	99	61-129	
Trichloroethene	5.00	5.13	103	80-120	
Vinyl chloride	5.00	5.38	108	60-125	
Xylenes, Total	15.0	14.6	98	80-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

Matrix: Water

Level: Low

Lab File ID: HF28X07.D

Lab ID: LCS 410-348577/8

Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	5.32	106	71-134	
1,1,1-Trichloroethane	5.00	5.75	115	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.60	92	75-123	
1,1,2-Trichloroethane	5.00	4.91	98	80-120	
1,1-Dichloroethane	5.00	5.47	109	74-120	
1,1-Dichloroethene	5.00	5.42	108	80-131	
1,2-Dibromoethane (EDB)	5.00	5.12	102	80-120	
1,2-Dichloroethane	5.00	6.10	122	69-122	
1,2-Dichloropropane	5.00	5.32	106	80-120	
2-Butanone (MEK)	62.5	63.1	101	59-141	
2-Hexanone	62.5	64.7	103	52-140	
4-Methyl-2-pentanone (MIBK)	62.5	62.9	101	55-140	
Acetone	62.5	57.4	92	60-146	
Benzene	5.00	5.48	110	80-120	
Bromochloromethane	5.00	5.86	117	80-120	
Bromodichloromethane	5.00	5.70	114	73-124	
Bromoform	5.00	5.15	103	49-144	
Bromomethane	5.00	5.28	106	60-136	
Carbon disulfide	5.00	6.00	120	67-130	
Carbon tetrachloride	5.00	5.78	116	64-141	
Chlorobenzene	5.00	5.29	106	80-120	
Chloroethane	5.00	5.25	105	63-120	
Chloroform	5.00	5.65	113	80-120	
Chloromethane	5.00	5.87	117	56-124	
cis-1,2-Dichloroethene	5.00	5.68	114	80-122	
cis-1,3-Dichloropropene	5.00	5.26	105	67-121	
Dibromochloromethane	5.00	5.37	107	64-138	
Ethylbenzene	5.00	4.87	97	80-120	
Methyl tert-butyl ether	5.00	5.29	106	69-120	
Methylene Chloride	5.00	5.53	111	80-120	
Styrene	5.00	5.01	100	80-120	
Tetrachloroethene	5.00	5.18	104	80-120	
Toluene	5.00	4.92	98	80-120	
trans-1,2-Dichloroethene	5.00	5.44	109	80-122	
trans-1,3-Dichloropropene	5.00	5.14	103	61-129	
Trichloroethene	5.00	5.43	109	80-120	
Vinyl chloride	5.00	5.42	108	60-125	
Xylenes, Total	15.0	15.5	104	80-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

Matrix: Water Level: Low

Lab File ID: HF28X08.D

Lab ID: LCSD 410-348577/9

Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,1,2-Tetrachloroethane	5.00	5.20	104	2	30	71-134	
1,1,1-Trichloroethane	5.00	5.49	110	5	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.52	90	2	30	75-123	
1,1,2-Trichloroethane	5.00	4.92	98	0	30	80-120	
1,1-Dichloroethane	5.00	5.32	106	3	30	74-120	
1,1-Dichloroethene	5.00	5.13	103	5	30	80-131	
1,2-Dibromoethane (EDB)	5.00	5.01	100	2	30	80-120	
1,2-Dichloroethane	5.00	5.85	117	4	30	69-122	
1,2-Dichloropropane	5.00	5.29	106	1	30	80-120	
2-Butanone (MEK)	62.5	58.2	93	8	30	59-141	
2-Hexanone	62.5	59.2	95	9	30	52-140	
4-Methyl-2-pentanone (MIBK)	62.5	57.1	91	10	30	55-140	
Acetone	62.5	55.6	89	3	30	60-146	
Benzene	5.00	5.26	105	4	30	80-120	
Bromochloromethane	5.00	5.65	113	4	30	80-120	
Bromodichloromethane	5.00	5.53	111	3	30	73-124	
Bromoform	5.00	5.03	101	2	30	49-144	
Bromomethane	5.00	5.18	104	2	30	60-136	
Carbon disulfide	5.00	5.79	116	3	30	67-130	
Carbon tetrachloride	5.00	5.53	111	4	30	64-141	
Chlorobenzene	5.00	5.14	103	3	30	80-120	
Chloroethane	5.00	5.23	105	0	30	63-120	
Chloroform	5.00	5.50	110	3	30	80-120	
Chloromethane	5.00	5.78	116	1	30	56-124	
cis-1,2-Dichloroethene	5.00	5.43	109	5	30	80-122	
cis-1,3-Dichloropropene	5.00	5.20	104	1	30	67-121	
Dibromochloromethane	5.00	5.25	105	2	30	64-138	
Ethylbenzene	5.00	4.78	96	2	30	80-120	
Methyl tert-butyl ether	5.00	5.14	103	3	30	69-120	
Methylene Chloride	5.00	5.29	106	4	30	80-120	
Styrene	5.00	4.86	97	3	30	80-120	
Tetrachloroethene	5.00	5.07	101	2	30	80-120	
Toluene	5.00	4.77	95	3	30	80-120	
trans-1,2-Dichloroethene	5.00	5.24	105	4	30	80-122	
trans-1,3-Dichloropropene	5.00	5.08	102	1	30	61-129	
Trichloroethene	5.00	5.17	103	5	30	80-120	
Vinyl chloride	5.00	5.48	110	1	30	60-125	
Xylenes, Total	15.0	15.2	101	2	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.: 410-116393-1

SDG No.:

Matrix: Water

Level: Low

Lab File ID: HF27X14.D

Lab ID: 410-116393-6 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	5.60	112	71-134	cn
1,1,1-Trichloroethane	5.00	0.48 J	7.54	141	78-126	FH cn
1,1,2,2-Tetrachloroethane	5.00	ND	4.26	85	75-123	cn
1,1,2-Trichloroethane	5.00	ND	4.95	99	80-120	cn
1,1-Dichloroethane	5.00	0.15 J	5.69	111	74-120	cn
1,1-Dichloroethene	5.00	0.20 J	6.40	124	80-131	cn
1,2-Dibromoethane (EDB)	5.00	ND	4.90	98	80-120	cn
1,2-Dichloroethane	5.00	ND	6.09	122	69-122	cn
1,2-Dichloropropane	5.00	ND	5.18	103	80-120	cn
2-Butanone (MEK)	62.6	ND	80.9	129	59-141	cn
2-Hexanone	62.6	ND	81.0	130	52-140	cn
4-Methyl-2-pentanone (MIBK)	62.6	ND	81.9	131	55-140	cn
Acetone	62.6	ND	57.6	92	60-146	cn
Benzene	5.00	ND	5.49	110	80-120	cn
Bromochloromethane	5.00	ND	6.92	138	80-120	FH cn
Bromodichloromethane	5.00	ND	5.79	116	73-124	cn
Bromoform	5.00	ND	5.31	106	49-144	cn
Bromomethane	5.00	ND	5.85	117	60-136	cn
Carbon disulfide	5.00	ND	6.70	134	67-130	FH cn
Carbon tetrachloride	5.00	ND	6.92	138	64-141	cn
Chlorobenzene	5.00	ND	5.37	107	80-120	cn
Chloroethane	5.00	ND	5.62	112	63-120	cn
Chloroform	5.00	0.31 J	7.20	138	80-120	FH cn
Chloromethane	5.00	ND	5.53	110	80-120	cn
cis-1,2-Dichloroethene	5.00	2.3	8.50	124	80-122	FH cn
cis-1,3-Dichloropropene	5.00	ND	5.18	104	67-121	cn
Dibromochloromethane	5.00	ND	5.47	109	64-138	cn
Ethylbenzene	5.00	ND	5.05	101	80-120	cn
Methyl tert-butyl ether	5.00	ND	5.20	104	69-120	cn
Methylene Chloride	5.00	ND	5.60	112	80-120	cn
Styrene	5.00	ND	5.02	100	80-120	cn
Tetrachloroethene	5.00	7.0	12.4	108	80-120	cn
Toluene	5.00	ND	5.09	102	80-120	cn
trans-1,2-Dichloroethene	5.00	ND	5.95	119	80-122	cn
trans-1,3-Dichloropropene	5.00	ND	5.21	104	61-129	cn
Trichloroethene	5.00	2.1	7.70	113	80-120	cn
Vinyl chloride	5.00	ND	5.81	116	60-125	cn
Xylenes, Total	15.0	ND	16.2	108	80-120	cn

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

Matrix: Water Level: Low

Lab File ID: HF27X15.D

Lab ID: 410-116393-6 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	5.68	113	1	30	71-134	
1,1,1-Trichloroethane	5.00	6.86	127	9	30	78-126	FH
1,1,2,2-Tetrachloroethane	5.00	4.55	91	7	30	75-123	
1,1,2-Trichloroethane	5.00	5.12	102	3	30	80-120	
1,1-Dichloroethane	5.00	5.90	115	4	30	74-120	
1,1-Dichloroethene	5.00	6.74	131	5	30	80-131	
1,2-Dibromoethane (EDB)	5.00	5.24	105	7	30	80-120	
1,2-Dichloroethane	5.00	6.27	125	3	30	69-122	FH
1,2-Dichloropropane	5.00	5.66	113	9	30	80-120	
2-Butanone (MEK)	62.6	67.0	107	19	30	59-141	
2-Hexanone	62.6	74.2	119	9	30	52-140	
4-Methyl-2-pentanone (MIBK)	62.6	72.8	116	12	30	55-140	
Acetone	62.6	56.5	90	2	30	60-146	
Benzene	5.00	5.87	117	7	30	80-120	
Bromochloromethane	5.00	6.01	120	14	30	80-120	
Bromodichloromethane	5.00	5.95	119	3	30	73-124	
Bromoform	5.00	5.38	108	1	30	49-144	
Bromomethane	5.00	6.28	125	7	30	60-136	
Carbon disulfide	5.00	7.07	141	5	30	67-130	FH
Carbon tetrachloride	5.00	6.73	134	3	30	64-141	
Chlorobenzene	5.00	5.58	112	4	30	80-120	
Chloroethane	5.00	6.38	128	13	30	63-120	FH
Chloroform	5.00	6.41	122	12	30	80-120	FH
Chloromethane	5.00	6.73	134	20	30	80-120	FH
cis-1,2-Dichloroethene	5.00	8.43	123	1	30	80-122	FH
cis-1,3-Dichloropropene	5.00	5.60	112	8	30	67-121	
Dibromochloromethane	5.00	5.48	110	0	30	64-138	
Ethylbenzene	5.00	5.24	105	4	30	80-120	
Methyl tert-butyl ether	5.00	5.39	108	4	30	69-120	
Methylene Chloride	5.00	5.97	119	6	30	80-120	
Styrene	5.00	5.17	103	3	30	80-120	
Tetrachloroethene	5.00	12.8	115	2	30	80-120	
Toluene	5.00	5.27	105	3	30	80-120	
trans-1,2-Dichloroethene	5.00	6.15	123	3	30	80-122	FH
trans-1,3-Dichloropropene	5.00	5.38	107	3	30	61-129	
Trichloroethene	5.00	7.90	117	3	30	80-120	
Vinyl chloride	5.00	7.09	142	20	30	60-125	FH
Xylenes, Total	15.0	16.5	110	2	30	80-120	

Column to be used to flag recovery and RPD values

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1
Environment Testing, LLC

SDG No.: _____

Lab File ID: HF27X05.D Lab Sample ID: MB 410-348233/6

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

Instrument ID: 19094 Date Analyzed: 02/27/2023 13:19

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 410-348233/4	HF27X03.D	02/27/2023 12:38
HD-QC1-0/1-2	410-116393-14	HF27X07.D	02/27/2023 14:35
HD-COD-SW-6-0/1-0	410-116393-1	HF27X08.D	02/27/2023 14:56
HD-COD-SW-7-0/1-0	410-116393-2	HF27X09.D	02/27/2023 15:17
HD-COD-SW-8-0/1-0	410-116393-3	HF27X10.D	02/27/2023 15:37
HD-COD-SW-9-0/1-0	410-116393-4	HF27X11.D	02/27/2023 15:58
HD-COD-SW-13-0/1-0	410-116393-5	HF27X12.D	02/27/2023 16:19
HD-COD-SW-15-0/1-0	410-116393-6	HF27X13.D	02/27/2023 16:39
HD-COD-SW-15-0/1-0 MS MS	410-116393-6 MS	HF27X14.D	02/27/2023 17:00
HD-COD-SW-15-0/1-0 MSD MSD	410-116393-6 MSD	HF27X15.D	02/27/2023 17:21
HD-COD-SW-16-0/1-0	410-116393-7	HF27X16.D	02/27/2023 17:41
HD-COD-SW-17-0/1-0	410-116393-8	HF27X17.D	02/27/2023 18:02
HD-COD-SW-26-0/1-0	410-116393-9	HF27X18.D	02/27/2023 18:23
HD-COD-SW-27-0/1-0	410-116393-10	HF27X19.D	02/27/2023 18:43
HD-COD-SW-28-0/1-0	410-116393-11	HF27X20.D	02/27/2023 19:04
HD-COD-SW-29-0/1-0	410-116393-12	HF27X21.D	02/27/2023 19:25
HD-QC1-0/1-1	410-116393-13	HF27X22.D	02/27/2023 19:46

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1
Environment Testing, LLC

SDG No.: _____

Lab File ID: HF28X12.D Lab Sample ID: MB 410-348577/13

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

Instrument ID: 19094 Date Analyzed: 02/28/2023 14:07

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 410-348577/8	HF28X07.D	02/28/2023 12:24
	LCSD 410-348577/9	HF28X08.D	02/28/2023 12:45
HD-COD-SW-17-0/1-0 DL	410-116393-8 DL	HF28X26.D	02/28/2023 18:56
HD-QC1-0/1-1 DL	410-116393-13 DL	HF28X27.D	02/28/2023 19:17

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

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

Lab File ID: HL11T03.D

BFB Injection Date: 07/11/2022

Instrument ID: 19094

BFB Injection Time: 13:17

Analysis Batch No.: 274149

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.2	
75	30.0 - 60.0 % of mass 95	45.5	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	1.0	(1.2) 1
174	Greater than 50% of mass 95	86.4	
175	5.0 - 9.0 % of mass 174	6.4	(7.4) 1
176	95.0 - 101.0 % of mass 174	83.6	(96.8) 1
177	5.0 - 9.0 % of mass 176	5.9	(7.0) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 410-274149/12	HL11X12.D	07/11/2022	16:51
	ICIS 410-274149/13	HL11X13.D	07/11/2022	17:11
	IC 410-274149/14	HL11X14.D	07/11/2022	17:31
	IC 410-274149/15	HL11X15.D	07/11/2022	17:51
	IC 410-274149/16	HL11X16.D	07/11/2022	18:11
	IC 410-274149/17	HL11X17.D	07/11/2022	18:32
	IC 410-274149/18	Copy_HL11X18.D	07/11/2022	18:52

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

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

Lab File ID: copy_HL14T01.D

BFB Injection Date: 07/14/2022

Instrument ID: 19094

BFB Injection Time: 19:09

Analysis Batch No.: 275687

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.2	
75	30.0 - 60.0 % of mass 95	45.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	1.0	(1.3) 1
174	Greater than 50% of mass 95	80.0	
175	5.0 - 9.0 % of mass 174	6.3	(7.9) 1
176	95.0 - 101.0 % of mass 174	78.2	(97.7) 1
177	5.0 - 9.0 % of mass 176	4.9	(6.2) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICV 410-275687/4	copy_HL14X03.D	07/14/2022	20:04

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

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

Lab File ID: HF27T01.D

BFB Injection Date: 02/27/2023

Instrument ID: 19094

BFB Injection Time: 11:40

Analysis Batch No.: 348233

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.5	
75	30.0 - 60.0 % of mass 95	45.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.1	
173	Less than 2.0 % of mass 174	0.8	(0.8) 1
174	Greater than 50% of mass 95	91.5	
175	5.0 - 9.0 % of mass 174	7.0	(7.7) 1
176	95.0 - 101.0 % of mass 174	89.2	(97.5) 1
177	5.0 - 9.0 % of mass 176	5.4	(6.1) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-348233/3	HF27X02.D	02/27/2023	12:18
	LCS 410-348233/4	HF27X03.D	02/27/2023	12:38
	MB 410-348233/6	HF27X05.D	02/27/2023	13:19
HD-QC1-0/1-2	410-116393-14	HF27X07.D	02/27/2023	14:35
HD-COD-SW-6-0/1-0	410-116393-1	HF27X08.D	02/27/2023	14:56
HD-COD-SW-7-0/1-0	410-116393-2	HF27X09.D	02/27/2023	15:17
HD-COD-SW-8-0/1-0	410-116393-3	HF27X10.D	02/27/2023	15:37
HD-COD-SW-9-0/1-0	410-116393-4	HF27X11.D	02/27/2023	15:58
HD-COD-SW-13-0/1-0	410-116393-5	HF27X12.D	02/27/2023	16:19
HD-COD-SW-15-0/1-0	410-116393-6	HF27X13.D	02/27/2023	16:39
HD-COD-SW-15-0/1-0 MS MS	410-116393-6 MS	HF27X14.D	02/27/2023	17:00
HD-COD-SW-15-0/1-0 MSD MSD	410-116393-6 MSD	HF27X15.D	02/27/2023	17:21
HD-COD-SW-16-0/1-0	410-116393-7	HF27X16.D	02/27/2023	17:41
HD-COD-SW-17-0/1-0	410-116393-8	HF27X17.D	02/27/2023	18:02
HD-COD-SW-26-0/1-0	410-116393-9	HF27X18.D	02/27/2023	18:23
HD-COD-SW-27-0/1-0	410-116393-10	HF27X19.D	02/27/2023	18:43
HD-COD-SW-28-0/1-0	410-116393-11	HF27X20.D	02/27/2023	19:04
HD-COD-SW-29-0/1-0	410-116393-12	HF27X21.D	02/27/2023	19:25
HD-QC1-0/1-1	410-116393-13	HF27X22.D	02/27/2023	19:46

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

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

Lab File ID: HF28T01.D

BFB Injection Date: 02/28/2023

Instrument ID: 19094

BFB Injection Time: 10:06

Analysis Batch No.: 348577

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.7	
75	30.0 - 60.0 % of mass 95	45.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.8	
173	Less than 2.0 % of mass 174	0.5	(0.6) 1
174	Greater than 50% of mass 95	88.1	
175	5.0 - 9.0 % of mass 174	7.3	(8.3) 1
176	95.0 - 101.0 % of mass 174	85.3	(96.8) 1
177	5.0 - 9.0 % of mass 176	5.5	(6.4) 2

1-Value is % mass 174

2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-348577/6	HF28X05.D	02/28/2023	11:42
	LCS 410-348577/8	HF28X07.D	02/28/2023	12:24
	LCSD 410-348577/9	HF28X08.D	02/28/2023	12:45
	MB 410-348577/13	HF28X12.D	02/28/2023	14:07
HD-COD-SW-17-0/1-0 DL	410-116393-8 DL	HF28X26.D	02/28/2023	18:56
HD-QC1-0/1-1 DL	410-116393-13 DL	HF28X27.D	02/28/2023	19:17

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

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

Sample No.: ICIS 410-274149/13

Date Analyzed: 07/11/2022 17:11

Instrument ID: 19094

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Lab File ID (Standard): HL11X13.D

Heated Purge: (Y/N) N

Calibration ID: 40553

	TBA _d 10		FB		CBZ _d 5	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	101370	4.12	2081655	7.63	1866823	11.13
UPPER LIMIT	202740	4.62	4163310	8.13	3733646	11.63
LOWER LIMIT	50685	3.62	1040828	7.13	933412	10.63
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 410-275687/4	96858	4.13	2450189	7.63	1821571	11.13
CCVIS 410-348233/3	70345	4.17	1736306	7.65	1759727	11.13
CCVIS 410-348577/6	87644	4.15	1907761	7.66	1853167	11.13

TBA_d10 = t-Butyl alcohol-d₁₀ (IS)

FB = Fluorobenzene (IS)

CBZ_d5 = 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 Job No.: 410-116393-1
Environment Testing, LLC

SDG No.: _____

Sample No.: ICIS 410-274149/13 Date Analyzed: 07/11/2022 17:11

Instrument ID: 19094 GC Column: R-624SilMS 30m ID: 0.25 (mm)

Lab File ID (Standard): HL11X13.D Heated Purge: (Y/N) N

Calibration ID: 40553

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		1051287	13.02				
UPPER LIMIT		2102574	13.52				
LOWER LIMIT		525644	12.52				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-275687/4		981185	13.02				
CCVIS 410-348233/3		1062784	13.00				
CCVIS 410-348577/6		1148352	13.00				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area

RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

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

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1
 Environment Testing, LLC

SDG No.: _____

Sample No.: CCVIS 410-348233/3 Date Analyzed: 02/27/2023 12:18

Instrument ID: 19094 GC Column: R-624SilMS 30m ID: 0.25 (mm)

Lab File ID (Standard): HF27X02.D Heated Purge: (Y/N) N

Calibration ID: 40553

	TBA _d 10		FB		CBZ _d 5			
	AREA #	RT #	AREA #	RT #	AREA #	RT #		
12/24 HOUR STD	70345	4.17	1736306	7.65	1759727	11.13		
UPPER LIMIT	140690	4.67	3472612	8.15	3519454	11.63		
LOWER LIMIT	35173	3.67	868153	7.15	879864	10.63		
LAB SAMPLE ID	CLIENT SAMPLE ID							
LCS 410-348233/4			72831	4.13	1740341	7.65	1910678	11.13
MB 410-348233/6			63511	4.17	1654932	7.65	1624822	11.13
410-116393-14		HD-QC1-0/1-2	67038	4.17	1602575	7.65	1560563	11.12
410-116393-1		HD-COD-SW-6-0/1-0	59589	4.13	1610575	7.65	1574981	11.13
410-116393-2		HD-COD-SW-7-0/1-0	67419	4.15	1826578	7.65	1550277	11.13
410-116393-3		HD-COD-SW-8-0/1-0	60981	4.15	1526028	7.65	1505361	11.13
410-116393-4		HD-COD-SW-9-0/1-0	58001	4.16	1532036	7.65	1666095	11.13
410-116393-5		HD-COD-SW-13-0/1-0	58291	4.14	1537526	7.65	1452206	11.13
410-116393-6		HD-COD-SW-15-0/1-0	51114	4.18	1463725	7.65	1427406	11.13
410-116393-6 MS		HD-COD-SW-15-0/1-0 MS MS	50892	4.19	1572115	7.65	1532352	11.13
410-116393-6 MSD		HD-COD-SW-15-0/1-0 MSD MSD	75011	4.14	1824203	7.66	1768447	11.13
410-116393-7		HD-COD-SW-16-0/1-0	78071	4.16	1818603	7.65	1758633	11.13
410-116393-8		HD-COD-SW-17-0/1-0	84952	4.16	1787971	7.65	1769724	11.13
410-116393-9		HD-COD-SW-26-0/1-0	82485	4.15	1783237	7.65	1751432	11.13
410-116393-10		HD-COD-SW-27-0/1-0	89334	4.15	1730301	7.65	1721347	11.13
410-116393-11		HD-COD-SW-28-0/1-0	87128	4.17	1843820	7.65	1820338	11.13
410-116393-12		HD-COD-SW-29-0/1-0	81736	4.17	1677140	7.65	1637750	11.13
410-116393-13		HD-QC1-0/1-1	84813	4.17	1801979	7.65	1801081	11.13

TBA_d10 = t-Butyl alcohol-d₁₀ (IS)
 TBA_d10 = t-Butyl alcohol-d₁₀ (IS)
 FB = Fluorobenzene (IS)
 CBZ_d5 = Chlorobenzene-d₅ (IS)
 Area Limit = 50%-200% of internal standard area
 CBZ_d5 = Chlorobenzene-d₅ (IS)
 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 Job No.: 410-116393-1
 Environment Testing, LLC

 SDG No.: _____
 Sample No.: CCVIS 410-348233/3 Date Analyzed: 02/27/2023 12:18
 Instrument ID: 19094 GC Column: R-624SilMS 30m ID: 0.25 (mm)
 Lab File ID (Standard): HF27X02.D Heated Purge: (Y/N) N
 Calibration ID: 40553

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		1062784	13.00				
UPPER LIMIT		2125568	13.50				
LOWER LIMIT		531392	12.50				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-348233/4		1042176	13.00				
MB 410-348233/6		973274	13.00				
410-116393-14	HD-QC1-0/1-2	1006131	13.00				
410-116393-1	HD-COD-SW-6-0/1-0	942640	13.00				
410-116393-2	HD-COD-SW-7-0/1-0	943203	13.00				
410-116393-3	HD-COD-SW-8-0/1-0	929564	13.00				
410-116393-4	HD-COD-SW-9-0/1-0	967579	13.01				
410-116393-5	HD-COD-SW-13-0/1-0	859177	13.00				
410-116393-6	HD-COD-SW-15-0/1-0	843422	13.00				
410-116393-6 MS	HD-COD-SW-15-0/1-0 MS MS	944310	13.00				
410-116393-6 MSD	HD-COD-SW-15-0/1-0 MSD MSD	1086390	13.00				
410-116393-7	HD-COD-SW-16-0/1-0	1043265	13.00				
410-116393-8	HD-COD-SW-17-0/1-0	1021009	13.00				
410-116393-9	HD-COD-SW-26-0/1-0	1016835	13.00				
410-116393-10	HD-COD-SW-27-0/1-0	1000552	13.00				
410-116393-11	HD-COD-SW-28-0/1-0	1053934	13.00				
410-116393-12	HD-COD-SW-29-0/1-0	953263	13.01				
410-116393-13	HD-QC1-0/1-1	1006477	13.00				

DCBd4 = 1,4-Dichlorobenzene-d4
 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 Job No.: 410-116393-1
Environment Testing, LLC

SDG No.: _____

Sample No.: CCVIS 410-348577/6 Date Analyzed: 02/28/2023 11:42

Instrument ID: 19094 GC Column: R-624SilMS 30m ID: 0.25 (mm)

Lab File ID (Standard): HF28X05.D Heated Purge: (Y/N) N

Calibration ID: 40553

	TBA _d 10		FB		CBZ _d 5		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	87644	4.15	1907761	7.66	1853167	11.13	
UPPER LIMIT	175288	4.65	3815522	8.16	3706334	11.63	
LOWER LIMIT	43822	3.65	953881	7.16	926584	10.63	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-348577/8	94442	4.17	1908330	7.65	1851890	11.13	
LCSD 410-348577/9	106948	4.15	1982228	7.65	1915044	11.13	
MB 410-348577/13	104698	4.16	1773499	7.65	1749269	11.13	
410-116393-8 DL	HD-COD-SW-17-0/1-0 DL	84734	4.15	1724364	7.65	1794350	11.13
410-116393-13 DL	HD-QC1-0/1-1 DL	94189	4.16	1760434	7.65	1825593	11.13

TBA_d10 = t-Butyl alcohol-d₁₀ (IS)
 TBA_d10 = t-Butyl alcohol-d₁₀ (IS)
 FB = Fluorobenzene (IS)
 CBZ_d5 = Chlorobenzene-d₅ (IS)
 Area Limit = 50%-200% of internal standard area
 CBZ_d5 = Chlorobenzene-d₅ (IS)
 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
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

Sample No.: CCVIS 410-348577/6

Date Analyzed: 02/28/2023 11:42

Instrument ID: 19094

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Lab File ID (Standard): HF28X05.D

Heated Purge: (Y/N) N

Calibration ID: 40553

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		1148352	13.00				
UPPER LIMIT		2296704	13.50				
LOWER LIMIT		574176	12.50				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-348577/8		1117546	13.00				
LCSD 410-348577/9		1169726	13.00				
MB 410-348577/13		1019735	13.00				
410-116393-8 DL	HD-COD-SW-17-0/1-0 DL	1035121	13.00				
410-116393-13 DL	HD-QC1-0/1-1 DL	1058332	13.00				

DCBd4 = 1,4-Dichlorobenzene-d4
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.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-1

Matrix: Water

Lab File ID: HF27X08.D

Analysis Method: 8260D

Date Collected: 02/21/2023 10:15

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 14:56

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	1.3	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	0.083	J	0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-1

Matrix: Water

Lab File ID: HF27X08.D

Analysis Method: 8260D

Date Collected: 02/21/2023 10:15

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 14:56

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	ND		0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	114		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X08.D
 Lims ID: 410-116393-A-1
 Client ID: HD-COD-SW-6-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 14:56:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-009
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 10:51:56 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp

Date: 28-Feb-2023 10:51:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.130				ND	7
7 Vinyl chloride	62		2.245				ND	
9 Bromomethane	94		2.568				ND	
10 Chloroethane	64		2.648				ND	
18 1,1-Dichloroethene	96		3.507				ND	
19 Acetone	43	3.580	3.532	0.048	65	4851	1.27	
24 Carbon disulfide	76		3.806				ND	7
28 Methylene Chloride	84		4.160				ND	
* 29 t-Butyl alcohol-d10 (IS)	65	4.129	4.166	-0.037	1	59589	50.0	
33 Methyl tert-butyl ether	73		4.556				ND	
34 trans-1,2-Dichloroethene	96		4.580				ND	
37 1,1-Dichloroethane	63		5.233				ND	
42 2-Butanone (MEK)	43		6.013				ND	
43 cis-1,2-Dichloroethene	96	6.074	6.068	0.006	73	3328	0.0651	
49 Chlorobromomethane	128		6.397				ND	
52 Chloroform	83	6.537	6.543	-0.006	15	4009	0.0489	
\$ 53 Dibromofluoromethane (Surr)	113	6.763	6.763	0.000	94	466313	11.4	
54 1,1,1-Trichloroethane	97		6.769				ND	
57 Carbon tetrachloride	117		6.988				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.214	7.220	-0.006	52	78759	10.6	
60 Benzene	78	7.244	7.250	-0.006	42	5166	0.0257	
62 1,2-Dichloroethane	62		7.324				ND	
* 65 Fluorobenzene (IS)	96	7.653	7.653	0.000	99	1610575	10.0	
69 Trichloroethene	95	8.134	8.134	0.000	90	3476	0.0656	M
71 1,2-Dichloropropane	63		8.464				ND	
77 Dichlorobromomethane	83		8.805				ND	7
81 cis-1,3-Dichloropropene	75		9.360				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.524				ND	7
\$ 84 Toluene-d8 (Surr)	98	9.665	9.665	0.000	93	1832769	9.51	
85 Toluene	92	9.744	9.744	0.000	95	11833	0.0827	
86 trans-1,3-Dichloropropene	75		10.000				ND	
106 1,1,2-Trichloroethane	97		10.207				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166		10.293				ND	7
109 2-Hexanone	43		10.414				ND	
111 Chlorodibromomethane	129		10.585				ND	
112 Ethylene Dibromide	107		10.695				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	84	1574981	10.0	
115 Chlorobenzene	112		11.152				ND	
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91		11.237				ND	7
S 117 Xylenes, Total	106		11.245				ND	7
119 m-Xylene & p-Xylene	106	11.347	11.353	-0.006	97	5633	0.0528	
120 o-Xylene	106		11.676				ND	7
121 Styrene	104		11.695				ND	7
122 Bromoform	173		11.853				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	95	734875	9.39	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	942640	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSV_LLcentISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X08.D

Injection Date: 27-Feb-2023 14:56:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: 410-116393-A-1

Lab Sample ID: 410-116393-1

Worklist Smp#: 9

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

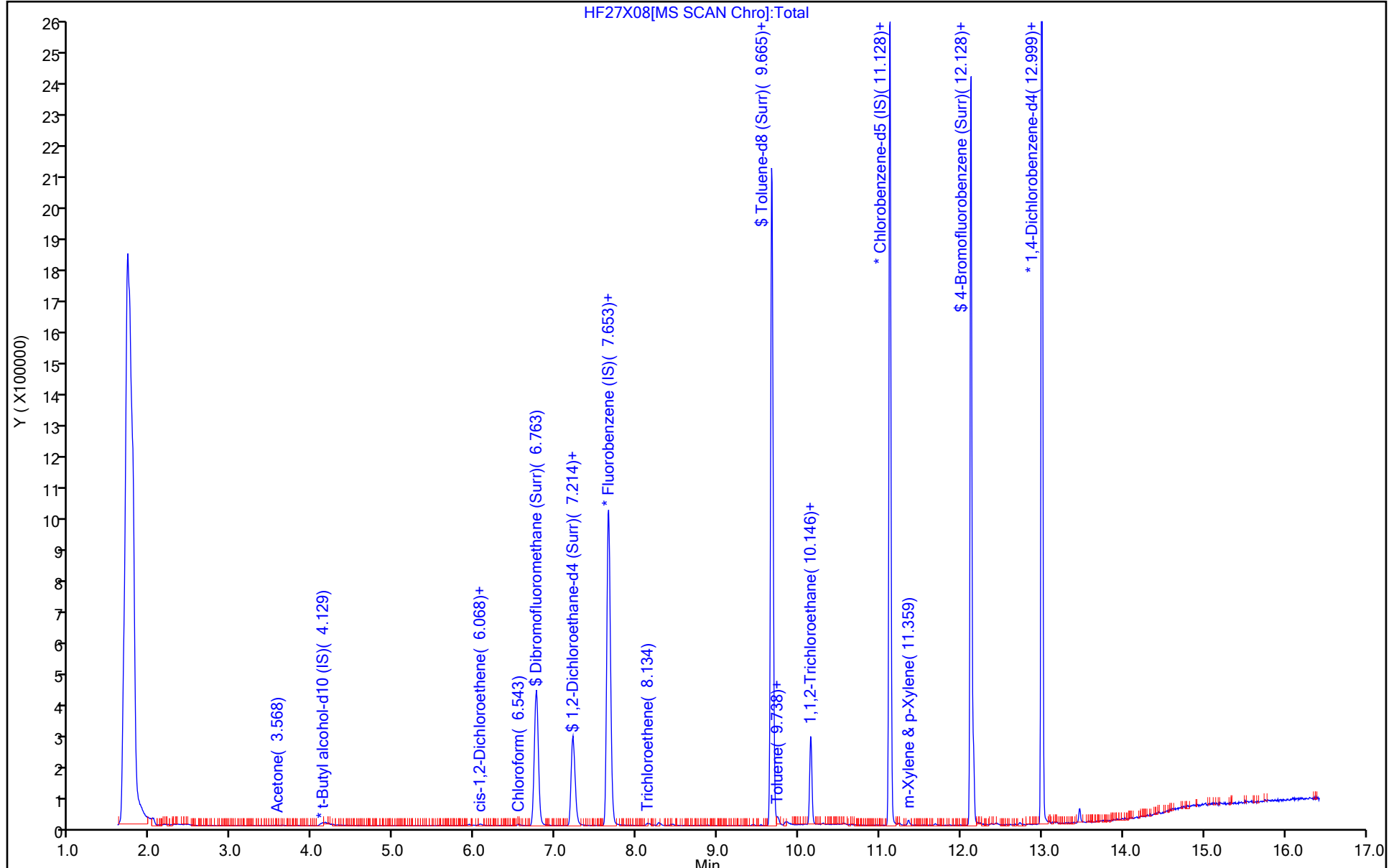
ALS Bottle#: 8

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X08.D
 Lims ID: 410-116393-A-1
 Client ID: HD-COD-SW-6-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 14:56:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-009
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 10:51:56 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp Date: 28-Feb-2023 10:51:56

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	11.4	114.39
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.6	105.88
\$ 84 Toluene-d8 (Surr)	10.0	9.51	95.12
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.39	93.95

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X08.D

Injection Date: 27-Feb-2023 14:56:30

Instrument ID: 19094

Lims ID: 410-116393-A-1

Lab Sample ID: 410-116393-1

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

Operator ID: knk41612

ALS Bottle#: 8

Worklist Smp#: 9

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

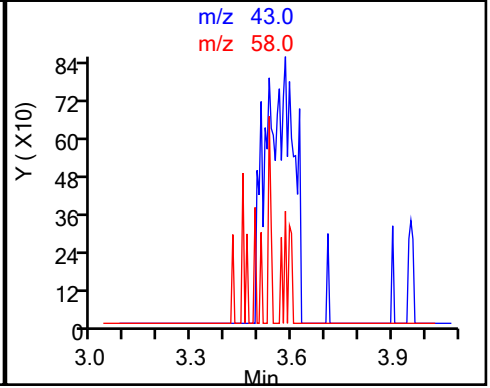
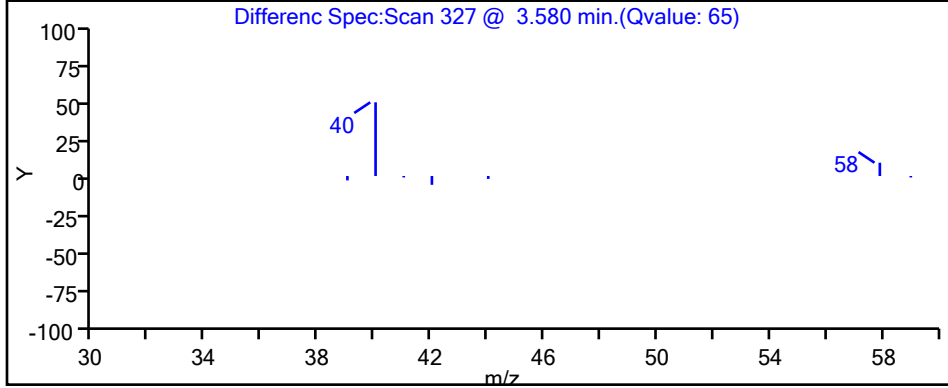
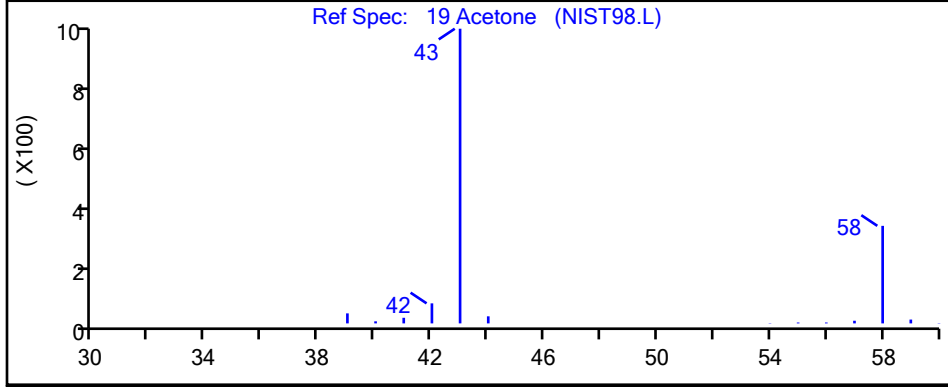
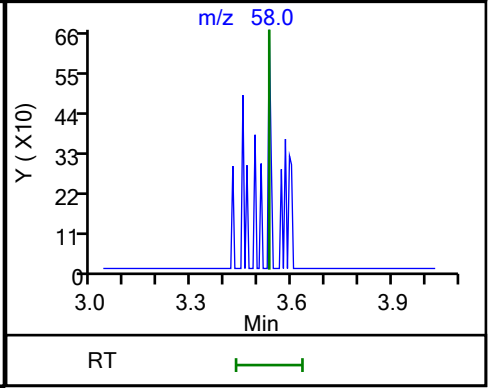
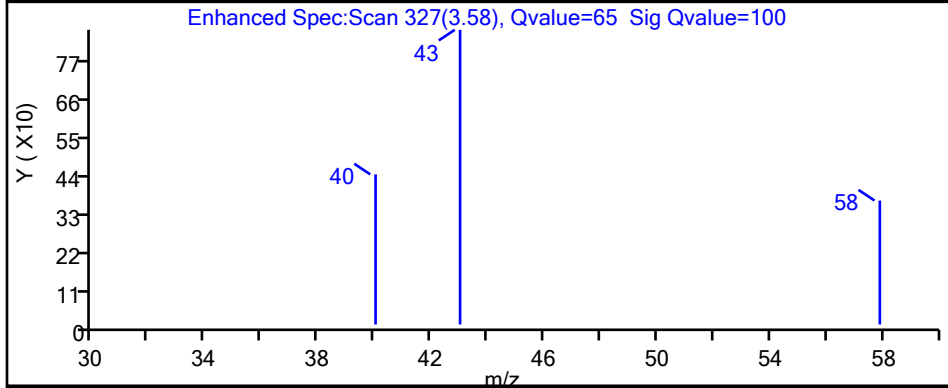
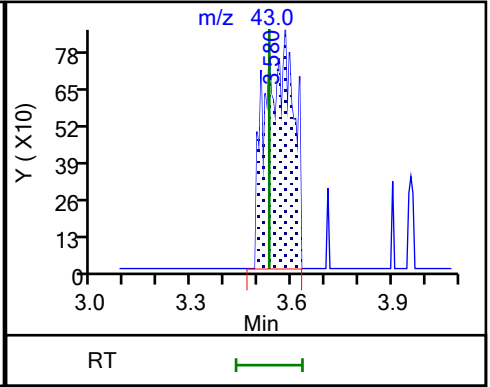
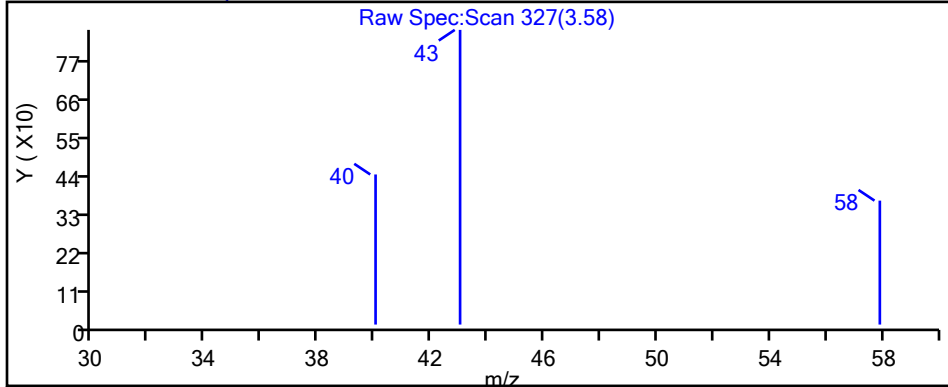
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

19 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X08.D

Injection Date: 27-Feb-2023 14:56:30

Instrument ID: 19094

Lims ID: 410-116393-A-1

Lab Sample ID: 410-116393-1

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

Operator ID: knk41612

ALS Bottle#: 8

Worklist Smp#: 9

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

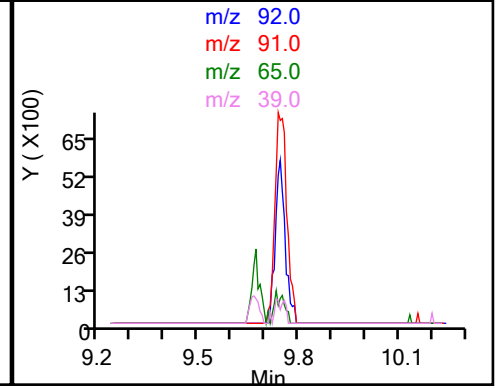
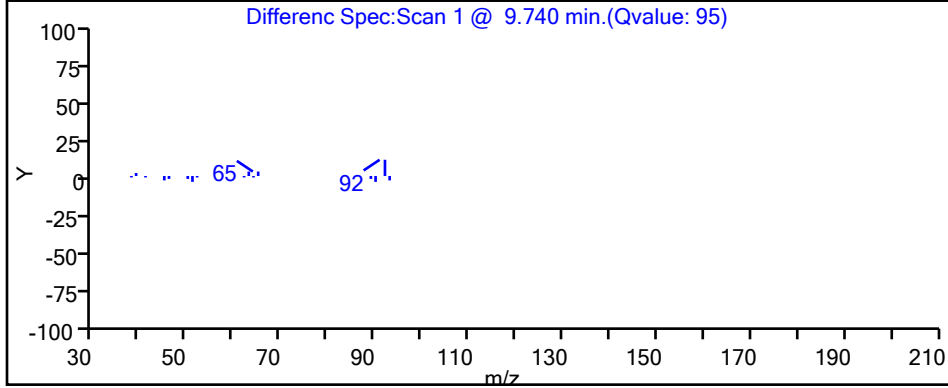
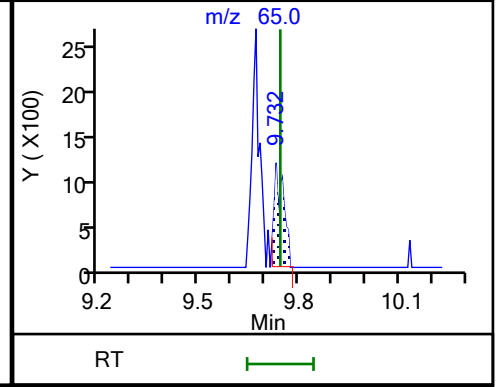
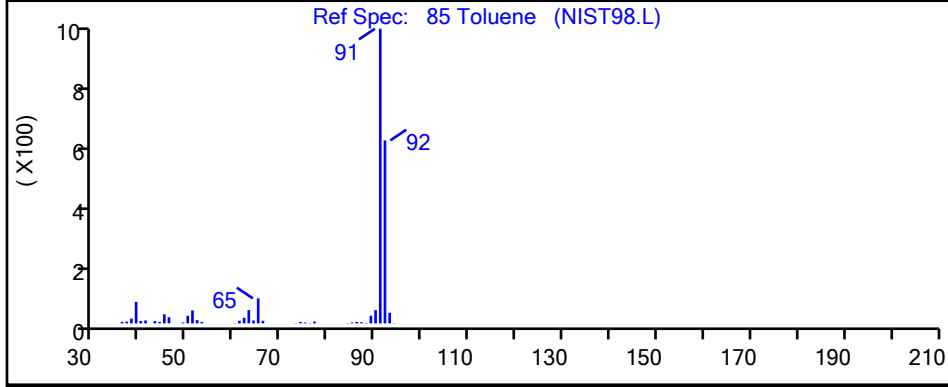
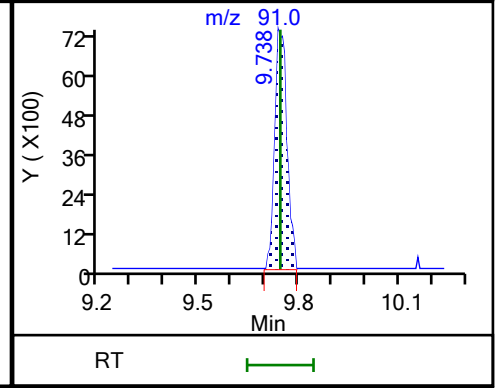
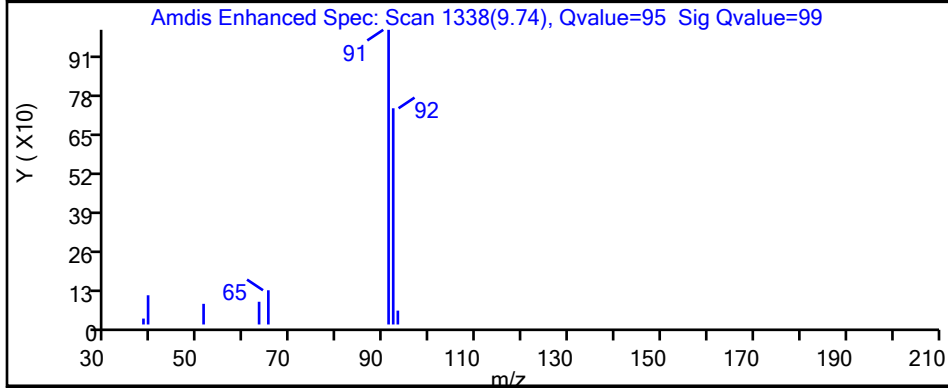
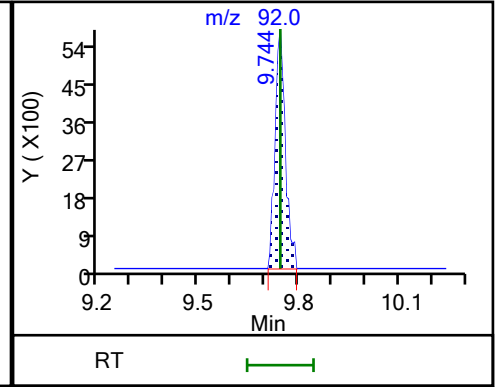
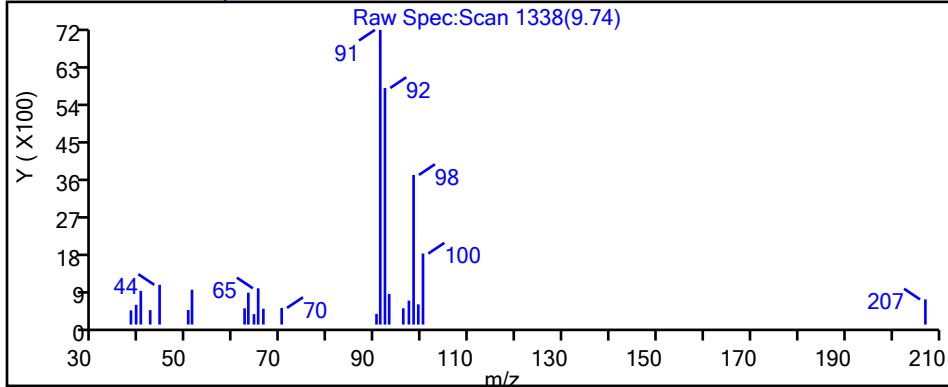
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

85 Toluene, CAS: 108-88-3



Eurofins Lancaster Laboratories Environment Testing, LLC

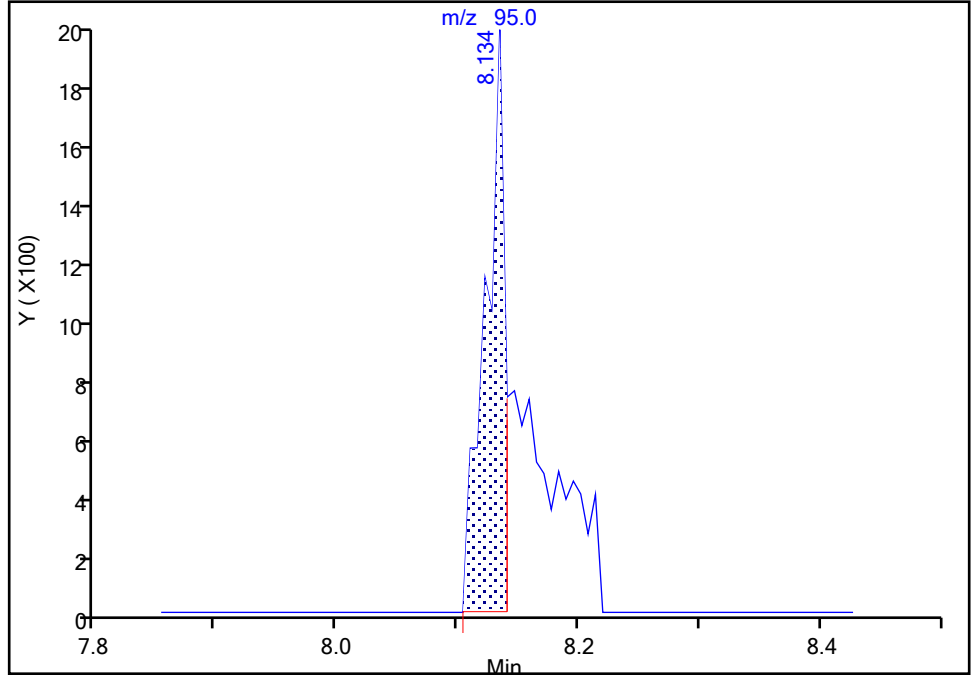
Data File:	\\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X08.D		
Injection Date:	27-Feb-2023 14:56:30	Instrument ID:	19094
Lims ID:	410-116393-A-1	Lab Sample ID:	410-116393-1
Client ID:	HD-COD-SW-6-0/1-0		
Operator ID:	knk41612	ALS Bottle#:	8
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	9

69 Trichloroethene, CAS: 79-01-6

Signal: 1

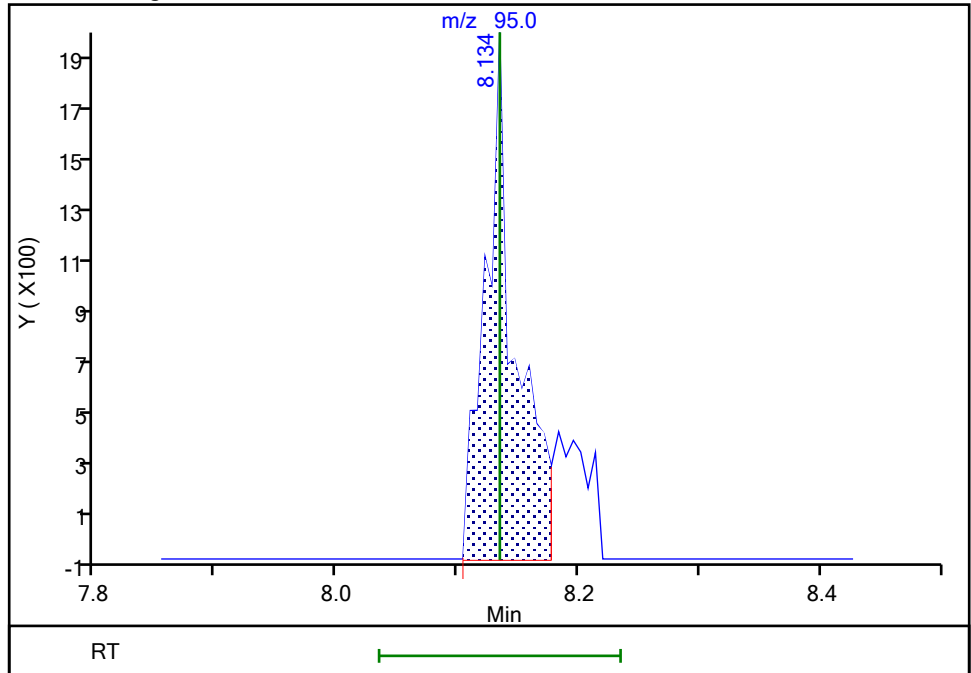
RT: 8.13
 Area: 2203
 Amount: 0.041554
 Amount Units: ug/l

Processing Integration Results



RT: 8.13
 Area: 3476
 Amount: 0.065565
 Amount Units: ug/l

Manual Integration Results



Reviewer: kaewrungrueangp, 28-Feb-2023 10:51:38
 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.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-2

Matrix: Water

Lab File ID: HF27X09.D

Analysis Method: 8260D

Date Collected: 02/21/2023 10:50

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 15:17

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.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	1.8	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.16	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-2

Matrix: Water

Lab File ID: HF27X09.D

Analysis Method: 8260D

Date Collected: 02/21/2023 10:50

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 15:17

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.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.21	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	109		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X09.D
 Lims ID: 410-116393-A-2
 Client ID: HD-COD-SW-7-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 15:17:30 ALS Bottle#: 9 Worklist Smp#: 10
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-010
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 10:53:42 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp

Date: 28-Feb-2023 10:53:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.130				ND	7
7 Vinyl chloride	62		2.245				ND	
9 Bromomethane	94		2.568				ND	
10 Chloroethane	64		2.648				ND	
18 1,1-Dichloroethene	96		3.507				ND	
19 Acetone	43	3.568	3.532	0.036	67	7877	1.83	
24 Carbon disulfide	76	3.818	3.806	0.012	54	6349	0.0499	
28 Methylene Chloride	84		4.160				ND	
* 29 t-Butyl alcohol-d10 (IS)	65	4.147	4.166	-0.019	19	67419	50.0	
33 Methyl tert-butyl ether	73		4.556				ND	
34 trans-1,2-Dichloroethene	96		4.580				ND	
37 1,1-Dichloroethane	63		5.233				ND	
42 2-Butanone (MEK)	43		6.013				ND	7
43 cis-1,2-Dichloroethene	96	6.080	6.068	0.012	75	9149	0.1578	
49 Chlorobromomethane	128		6.397				ND	
52 Chloroform	83	6.555	6.543	0.012	86	8310	0.0893	
\$ 53 Dibromofluoromethane (Surr)	113	6.763	6.763	0.000	94	504639	10.9	
54 1,1,1-Trichloroethane	97		6.769				ND	
57 Carbon tetrachloride	117		6.988				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.214	7.220	-0.006	52	87451	10.4	
60 Benzene	78	7.256	7.250	0.006	41	6991	0.0306	
62 1,2-Dichloroethane	62		7.324				ND	
* 65 Fluorobenzene (IS)	96	7.653	7.653	0.000	99	1826578	10.0	
69 Trichloroethene	95	8.140	8.134	0.006	96	12771	0.2124	
71 1,2-Dichloropropane	63		8.464				ND	
77 Dichlorobromomethane	83		8.805				ND	7
81 cis-1,3-Dichloropropene	75		9.360				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.524				ND	7
\$ 84 Toluene-d8 (Surr)	98	9.671	9.665	0.006	93	1799492	9.49	
85 Toluene	92	9.750	9.744	0.006	98	9839	0.0698	
86 trans-1,3-Dichloropropene	75		10.000				ND	
106 1,1,2-Trichloroethane	97		10.207				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.292	10.293	-0.001	91	3826	0.0588	M
109 2-Hexanone	43		10.414				ND	
111 Chlorodibromomethane	129		10.585				ND	
112 Ethylene Dibromide	107		10.695				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	84	1550277	10.0	
115 Chlorobenzene	112		11.152				ND	
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91		11.237				ND	7
S 117 Xylenes, Total	106		11.245				ND	7
119 m-Xylene & p-Xylene	106		11.353				ND	7
120 o-Xylene	106		11.676				ND	7
121 Styrene	104		11.695				ND	
122 Bromoform	173		11.853				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	96	720776	9.36	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	93	943203	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

MSV_LLcentISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X09.D

Injection Date: 27-Feb-2023 15:17:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: 410-116393-A-2

Lab Sample ID: 410-116393-2

Worklist Smp#: 10

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

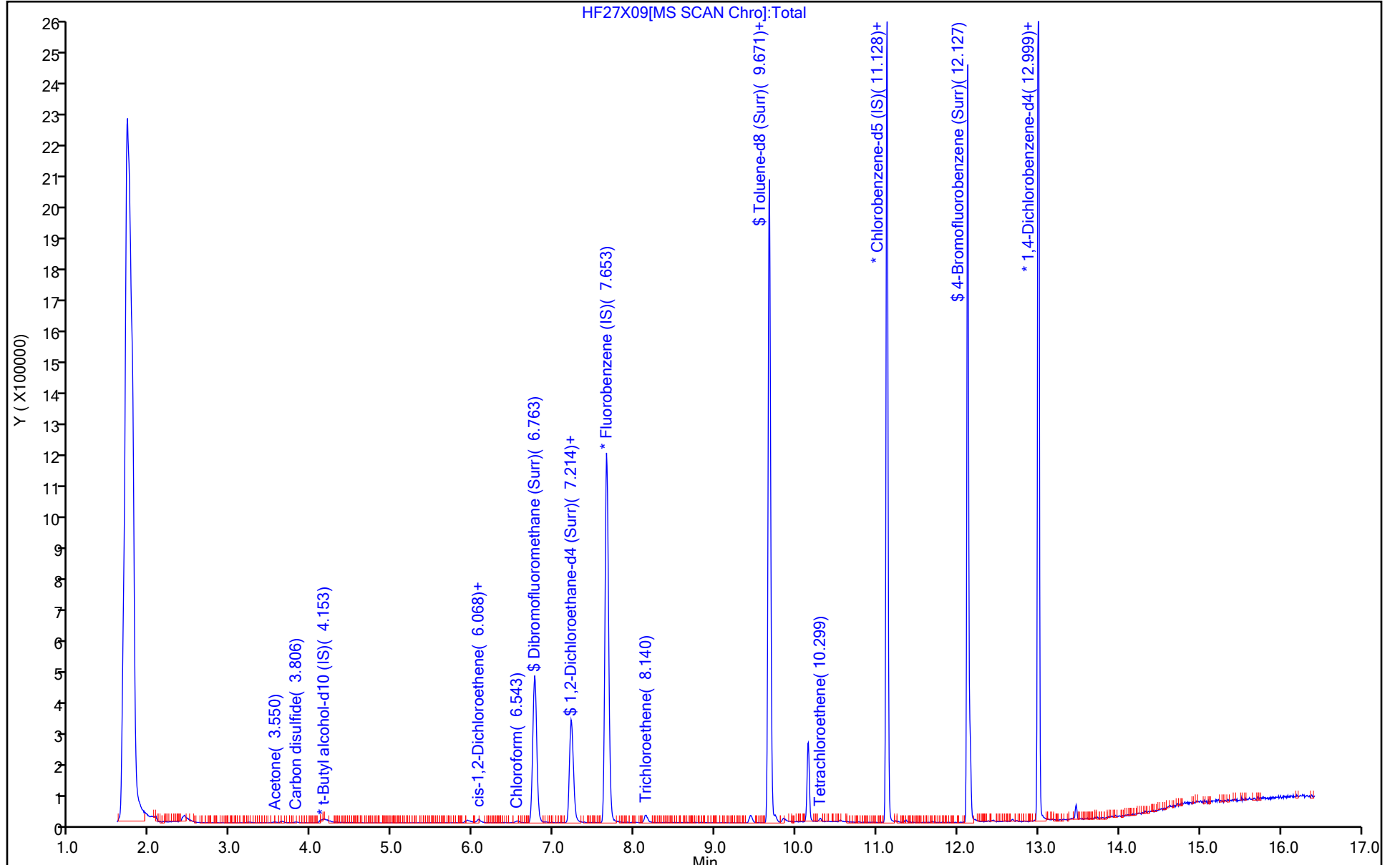
ALS Bottle#: 9

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X09.D
 Lims ID: 410-116393-A-2
 Client ID: HD-COD-SW-7-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 15:17:30 ALS Bottle#: 9 Worklist Smp#: 10
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-010
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 10:53:42 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp

Date: 28-Feb-2023 10:53:42

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.9	109.15
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	103.66
\$ 84 Toluene-d8 (Surr)	10.0	9.49	94.88
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.36	93.62

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X09.D

Injection Date: 27-Feb-2023 15:17:30

Instrument ID: 19094

Lims ID: 410-116393-A-2

Lab Sample ID: 410-116393-2

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

Operator ID: knk41612

ALS Bottle#: 9

Worklist Smp#: 10

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

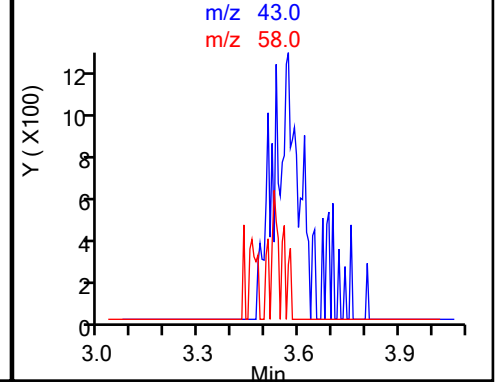
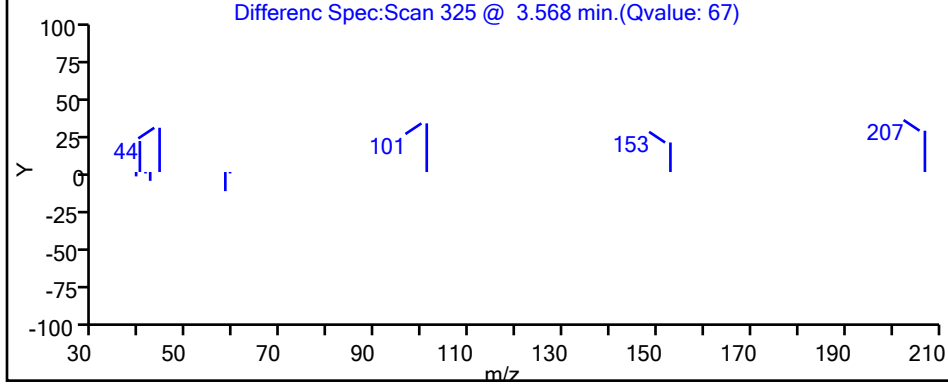
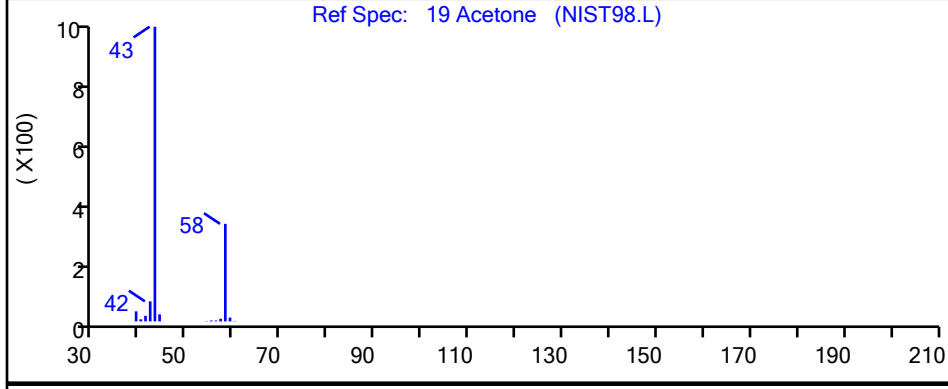
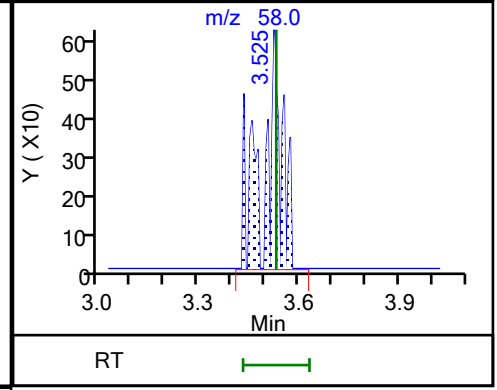
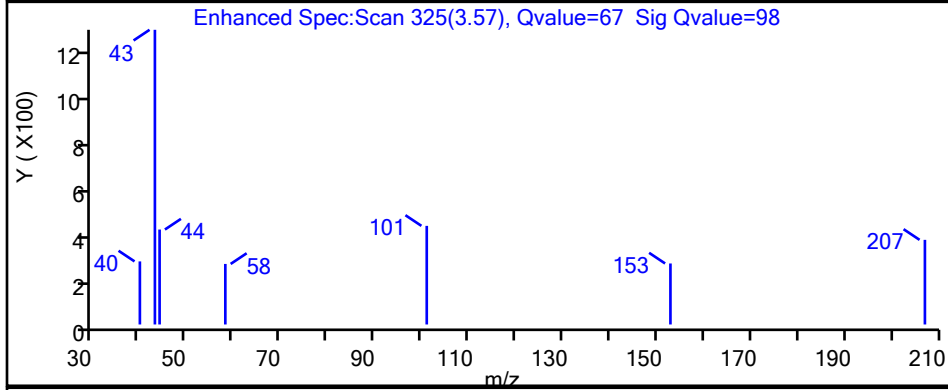
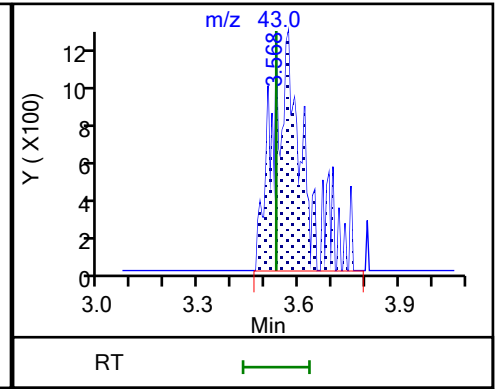
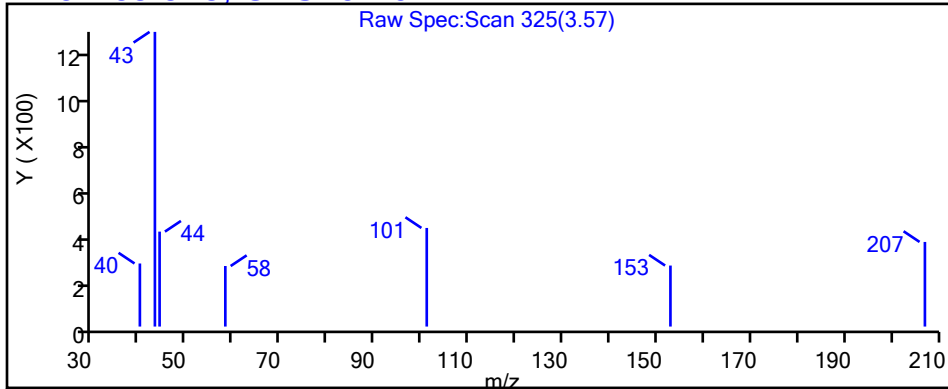
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

19 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X09.D

Injection Date: 27-Feb-2023 15:17:30

Instrument ID: 19094

Lims ID: 410-116393-A-2

Lab Sample ID: 410-116393-2

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

Operator ID: knk41612

ALS Bottle#: 9

Worklist Smp#: 10

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

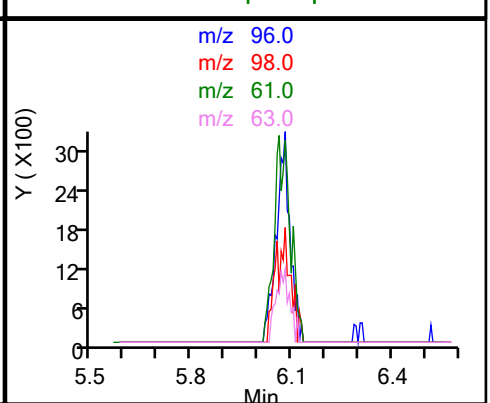
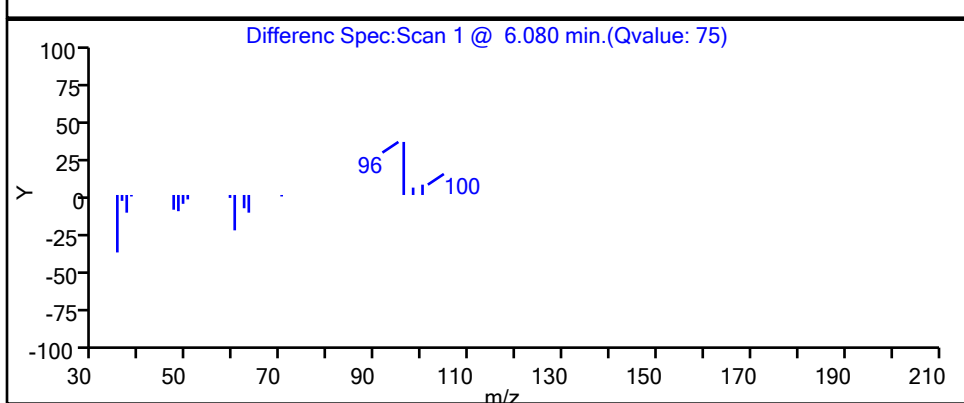
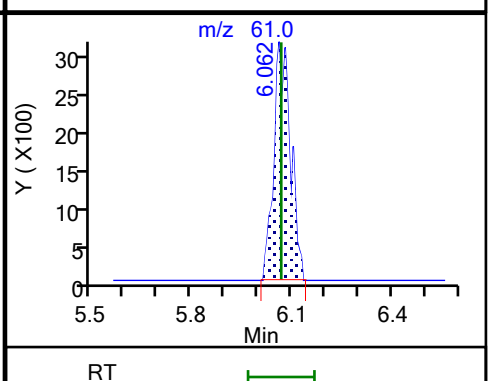
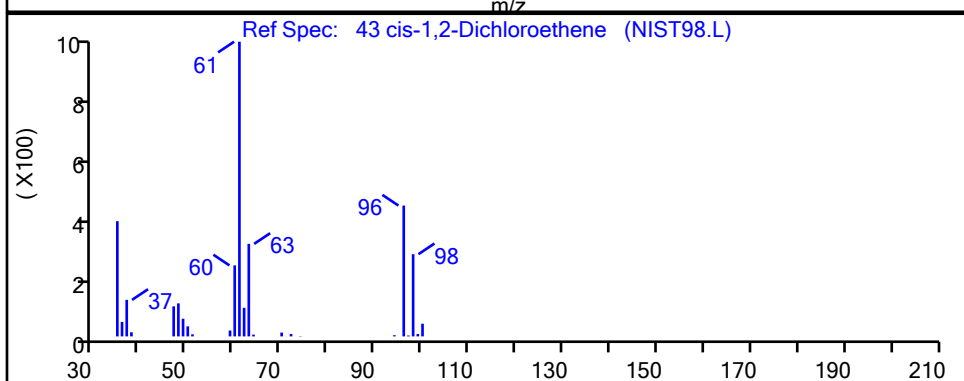
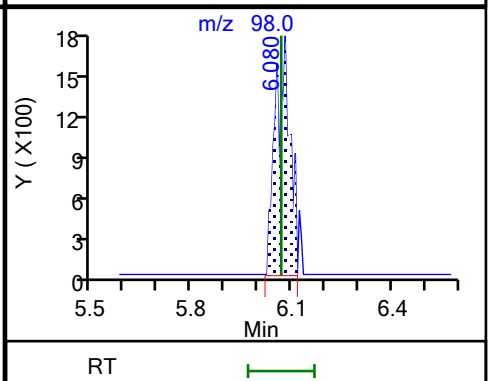
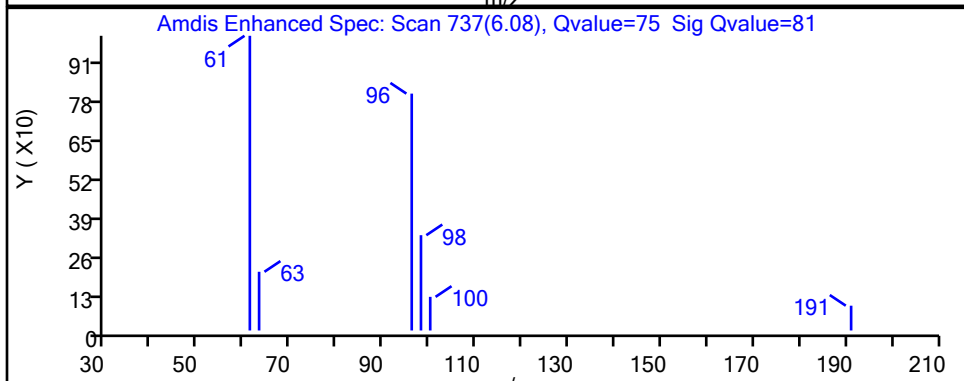
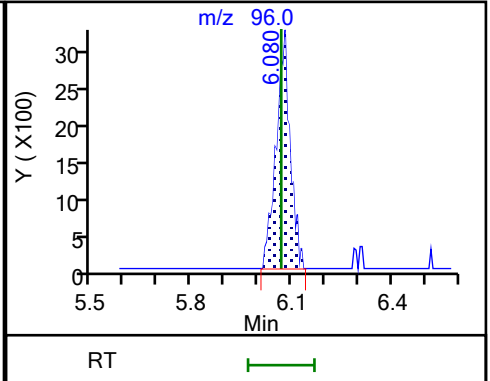
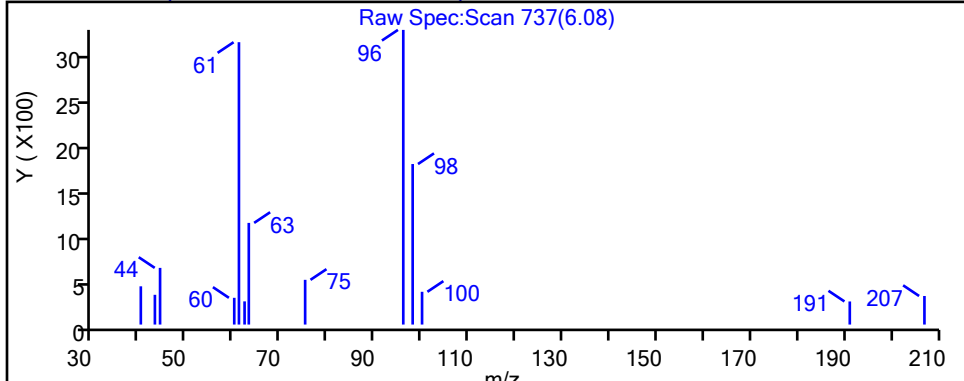
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X09.D

Injection Date: 27-Feb-2023 15:17:30

Instrument ID: 19094

Lims ID: 410-116393-A-2

Lab Sample ID: 410-116393-2

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

Operator ID: knk41612

ALS Bottle#: 9

Worklist Smp#: 10

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

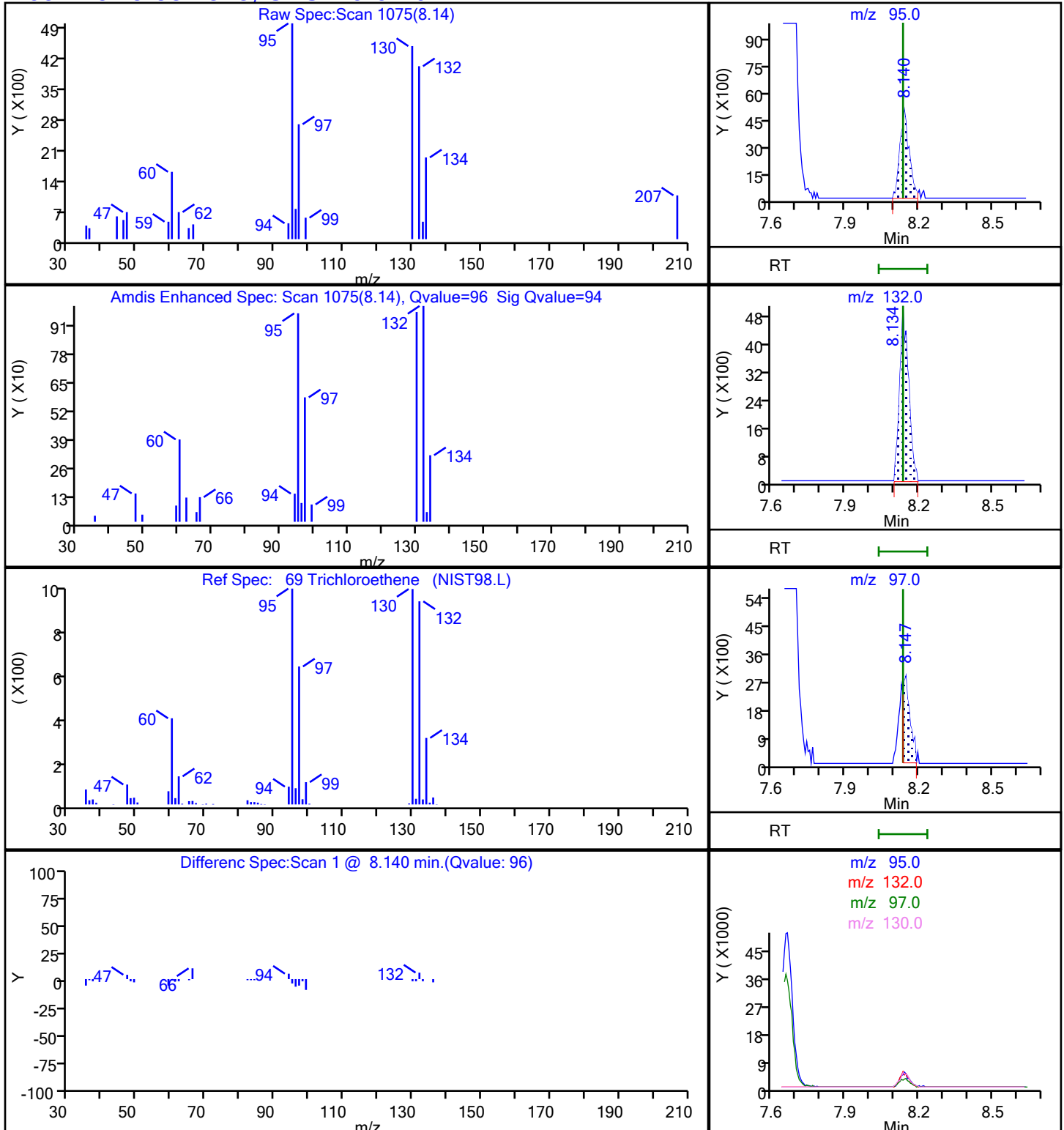
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

69 Trichloroethene, CAS: 79-01-6

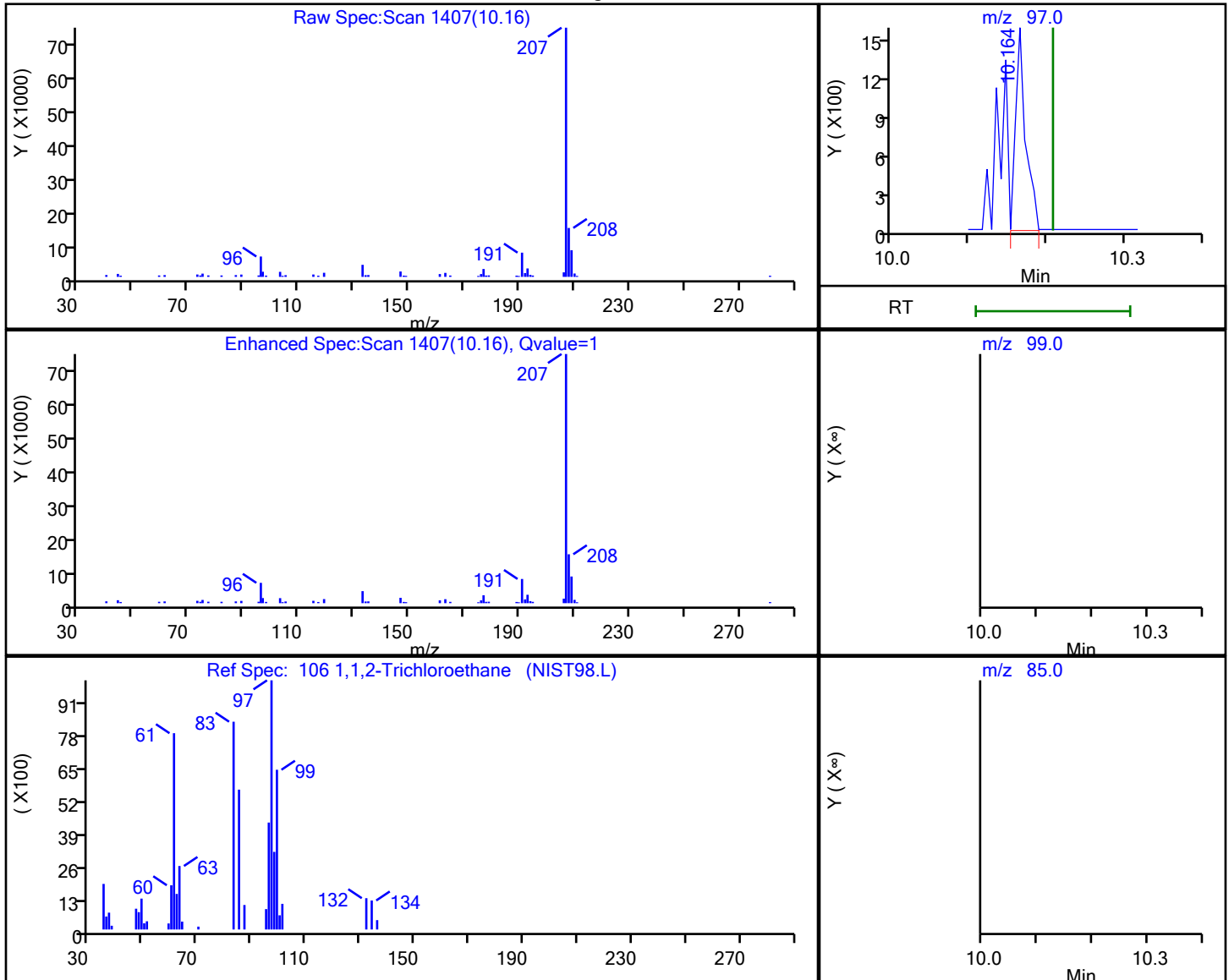


Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X09.D
 Injection Date: 27-Feb-2023 15:17:30 Instrument ID: 19094
 Lims ID: 410-116393-A-2 Lab Sample ID: 410-116393-2
 Client ID: HD-COD-SW-7-0/1-0
 Operator ID: knk41612 ALS Bottle#: 9 Worklist Smp#: 10
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

106 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
10.16	97.00	1379	0.041315
10.21	99.00	0	
10.21	85.00	0	
10.21	83.00	0	

Reviewer: kaewrungrueangp, 28-Feb-2023 10:53:27

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC

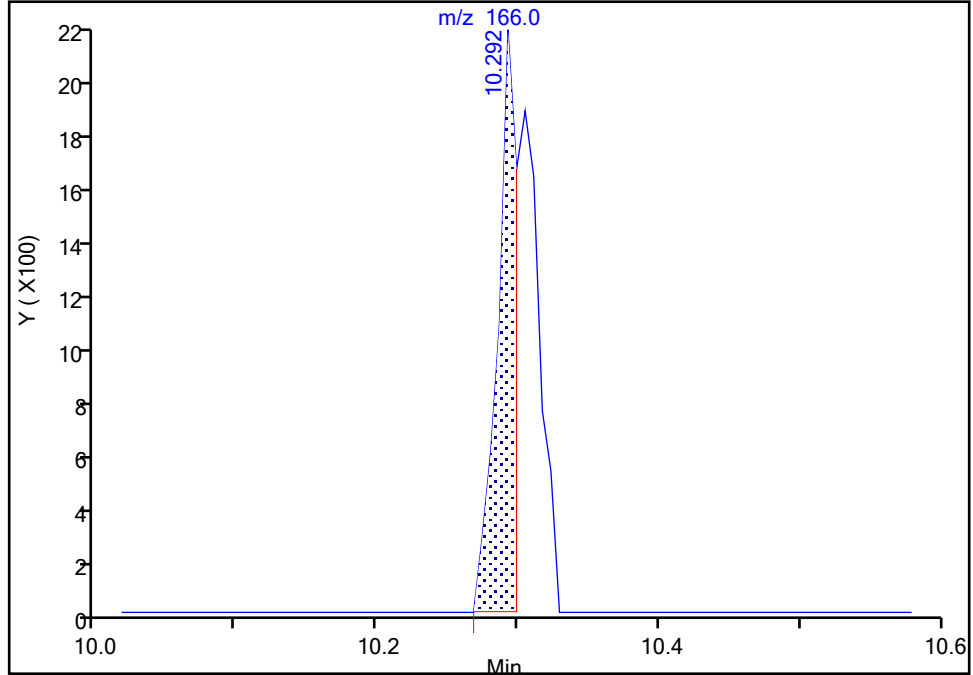
Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X09.D
Injection Date: 27-Feb-2023 15:17:30 Instrument ID: 19094
Lims ID: 410-116393-A-2 Lab Sample ID: 410-116393-2
Client ID: HD-COD-SW-7-0/1-0
Operator ID: knk41612 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

107 Tetrachloroethene, CAS: 127-18-4

Signal: 1

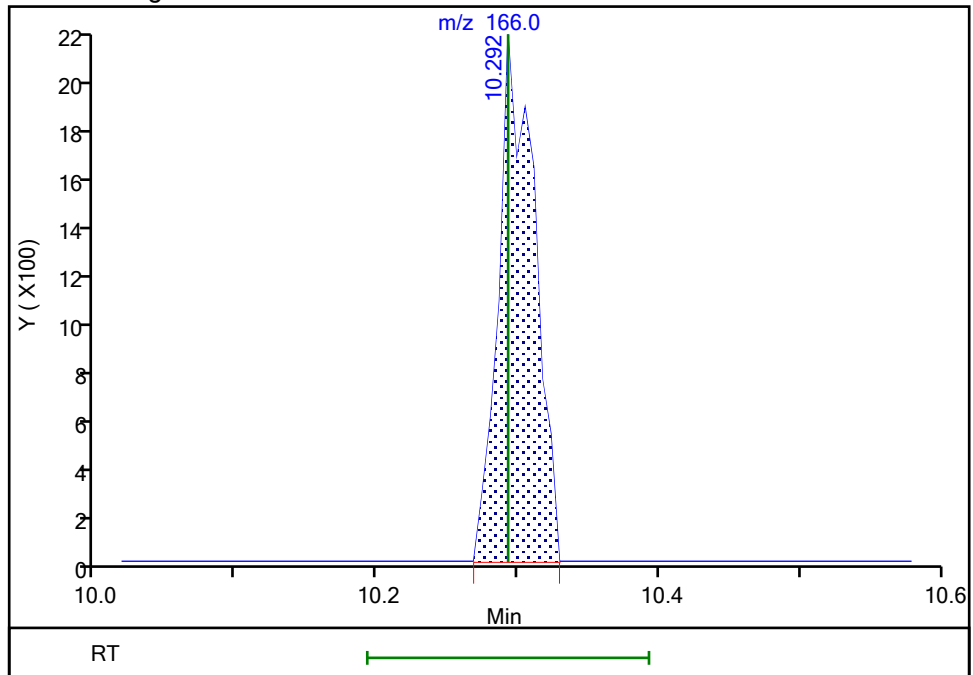
RT: 10.29
Area: 2096
Amount: 0.032217
Amount Units: ug/l

Processing Integration Results



RT: 10.29
Area: 3826
Amount: 0.058809
Amount Units: ug/l

Manual Integration Results



Reviewer: kaewrungrueangp, 28-Feb-2023 10:53:35
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.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-3

Matrix: Water

Lab File ID: HF27X10.D

Analysis Method: 8260D

Date Collected: 02/21/2023 09:00

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 15:37

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.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	1.8	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.20	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	0.52		0.50	0.20
108-88-3	Toluene	0.15	J	0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-3

Matrix: Water

Lab File ID: HF27X10.D

Analysis Method: 8260D

Date Collected: 02/21/2023 09:00

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 15:37

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.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.28	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	108		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X10.D
 Lims ID: 410-116393-A-3
 Client ID: HD-COD-SW-8-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 15:37:30 ALS Bottle#: 10 Worklist Smp#: 11
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-011
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 10:59:13 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp

Date: 28-Feb-2023 10:59:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.130				ND	U
7 Vinyl chloride	62		2.245				ND	7
9 Bromomethane	94		2.568				ND	
10 Chloroethane	64		2.648				ND	
18 1,1-Dichloroethene	96		3.507				ND	
19 Acetone	43	3.562	3.532	0.030	66	7105	1.82	
24 Carbon disulfide	76		3.806				ND	7
28 Methylene Chloride	84		4.160				ND	
* 29 t-Butyl alcohol-d10 (IS)	65	4.147	4.166	-0.019	1	60981	50.0	
33 Methyl tert-butyl ether	73		4.556				ND	
34 trans-1,2-Dichloroethene	96		4.580				ND	
37 1,1-Dichloroethane	63		5.233				ND	
42 2-Butanone (MEK)	43		6.013				ND	7
43 cis-1,2-Dichloroethene	96	6.068	6.068	0.000	78	9846	0.2033	
49 Chlorobromomethane	128		6.397				ND	
52 Chloroform	83	6.543	6.543	0.000	14	5816	0.0748	
\$ 53 Dibromofluoromethane (Surr)	113	6.756	6.763	-0.007	94	415531	10.8	
54 1,1,1-Trichloroethane	97		6.769				ND	U
57 Carbon tetrachloride	117		6.988				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.214	7.220	-0.006	52	71608	10.2	
60 Benzene	78	7.238	7.250	-0.012	41	8130	0.0426	
62 1,2-Dichloroethane	62		7.324				ND	7
* 65 Fluorobenzene (IS)	96	7.653	7.653	0.000	99	1526028	10.0	
69 Trichloroethene	95	8.134	8.134	0.000	94	14093	0.2806	
71 1,2-Dichloropropane	63		8.464				ND	
77 Dichlorobromomethane	83		8.805				ND	7
81 cis-1,3-Dichloropropene	75		9.360				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.524				ND	7
\$ 84 Toluene-d8 (Surr)	98	9.664	9.665	-0.001	93	1730027	9.39	
85 Toluene	92	9.744	9.744	0.000	97	19867	0.1452	
86 trans-1,3-Dichloropropene	75		10.000				ND	
106 1,1,2-Trichloroethane	97		10.207				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.298	10.293	0.005	95	32954	0.5216	
109 2-Hexanone	43		10.414				ND	
111 Chlorodibromomethane	129		10.585				ND	
112 Ethylene Dibromide	107		10.695				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	85	1505361	10.0	
115 Chlorobenzene	112		11.152				ND	
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91		11.237				ND	7
S 117 Xylenes, Total	106		11.245				ND	7
119 m-Xylene & p-Xylene	106		11.353				ND	7
120 o-Xylene	106		11.676				ND	7
121 Styrene	104		11.695				ND	
122 Bromoform	173		11.853				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	95	716106	9.58	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	929564	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_LLcentISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X10.D

Injection Date: 27-Feb-2023 15:37:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: 410-116393-A-3

Lab Sample ID: 410-116393-3

Worklist Smp#: 11

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

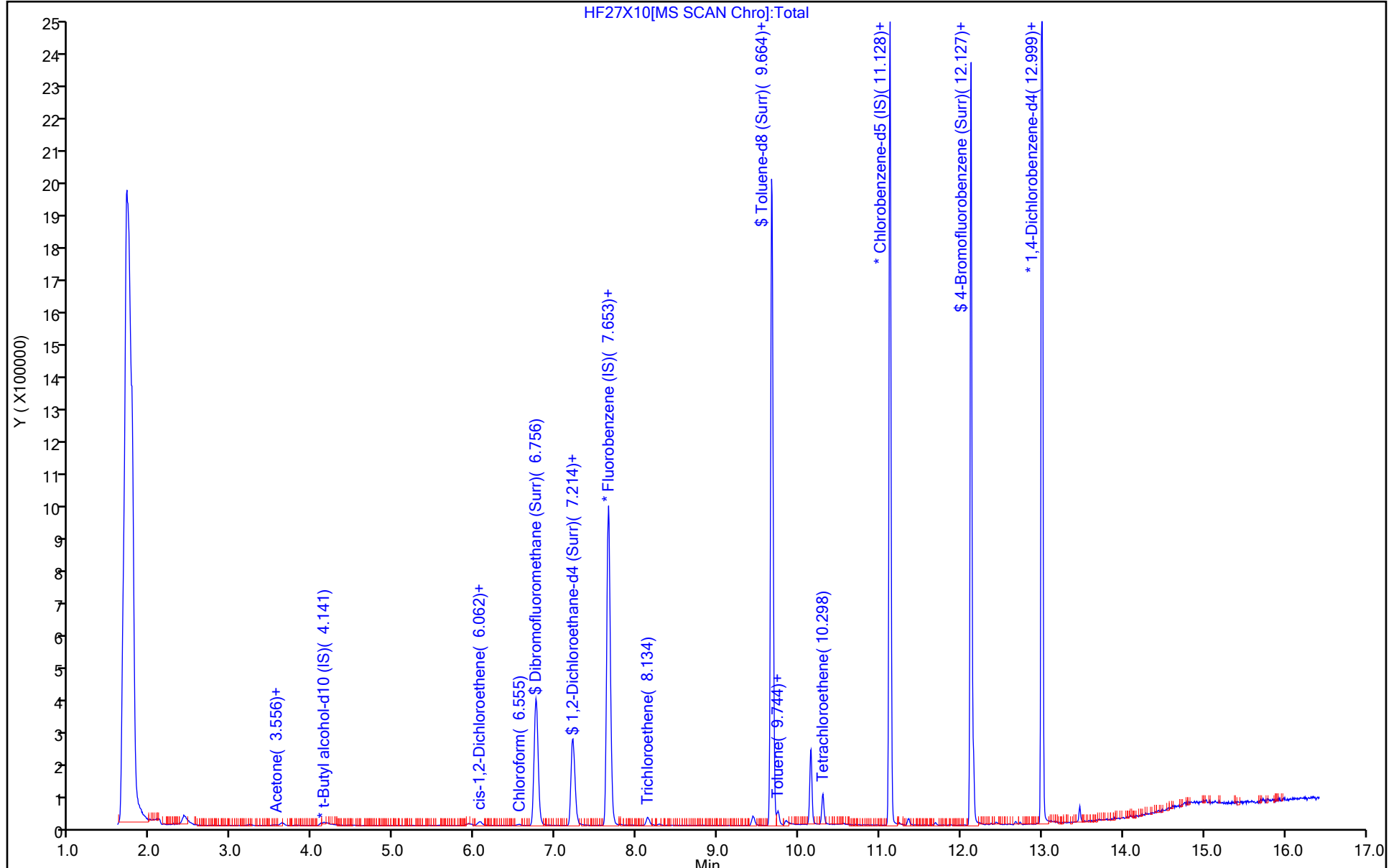
ALS Bottle#: 10

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X10.D
 Lims ID: 410-116393-A-3
 Client ID: HD-COD-SW-8-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 15:37:30 ALS Bottle#: 10 Worklist Smp#: 11
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-011
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 10:59:13 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp

Date: 28-Feb-2023 10:59:13

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.8	107.58
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.60
\$ 84 Toluene-d8 (Surr)	10.0	9.39	93.94
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.58	95.78

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X10.D

Injection Date: 27-Feb-2023 15:37:30

Instrument ID: 19094

Lims ID: 410-116393-A-3

Lab Sample ID: 410-116393-3

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

Operator ID: knk41612

ALS Bottle#: 10

Worklist Smp#: 11

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

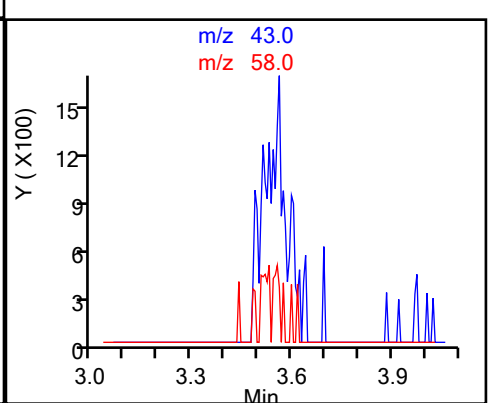
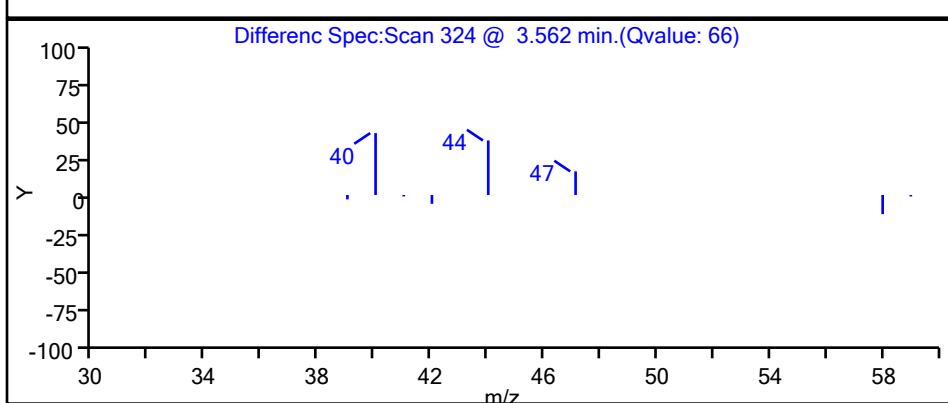
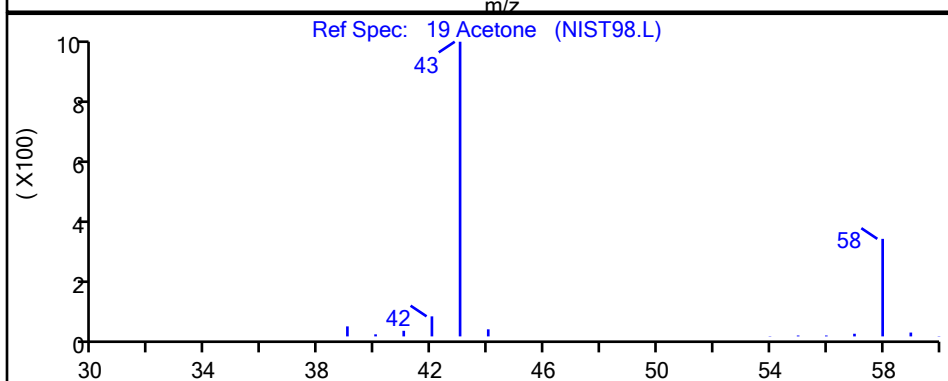
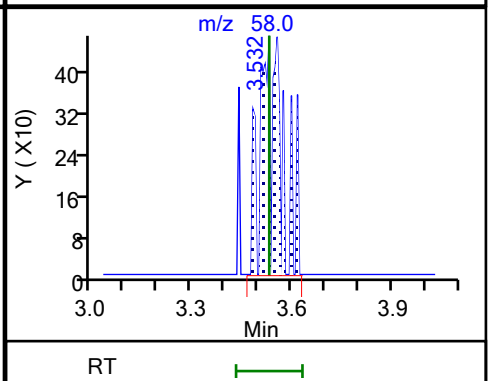
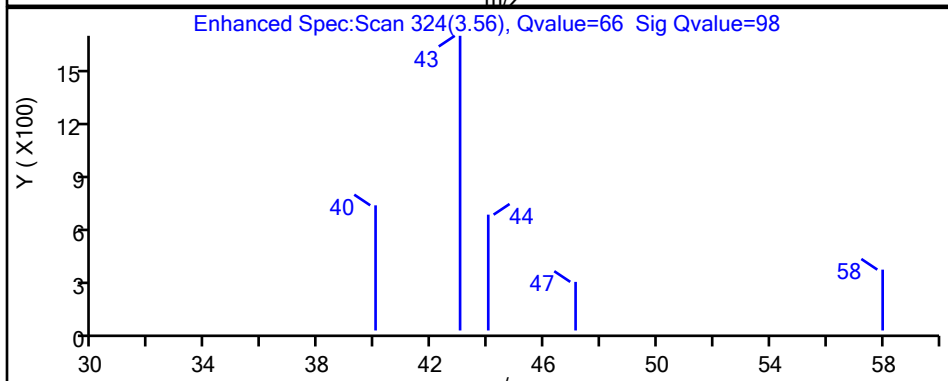
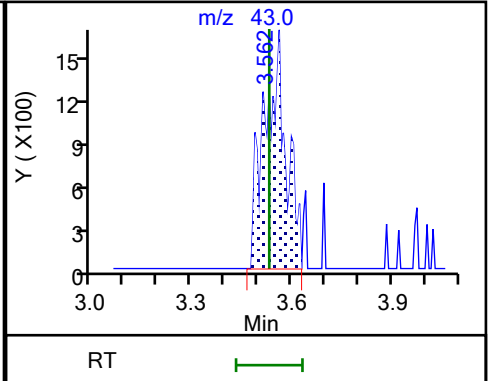
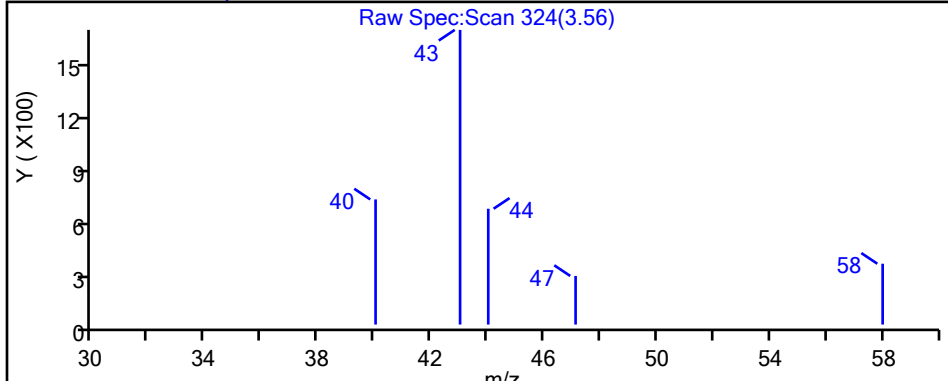
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

19 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X10.D

Injection Date: 27-Feb-2023 15:37:30

Instrument ID: 19094

Lims ID: 410-116393-A-3

Lab Sample ID: 410-116393-3

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

Operator ID: knk41612

ALS Bottle#: 10

Worklist Smp#: 11

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

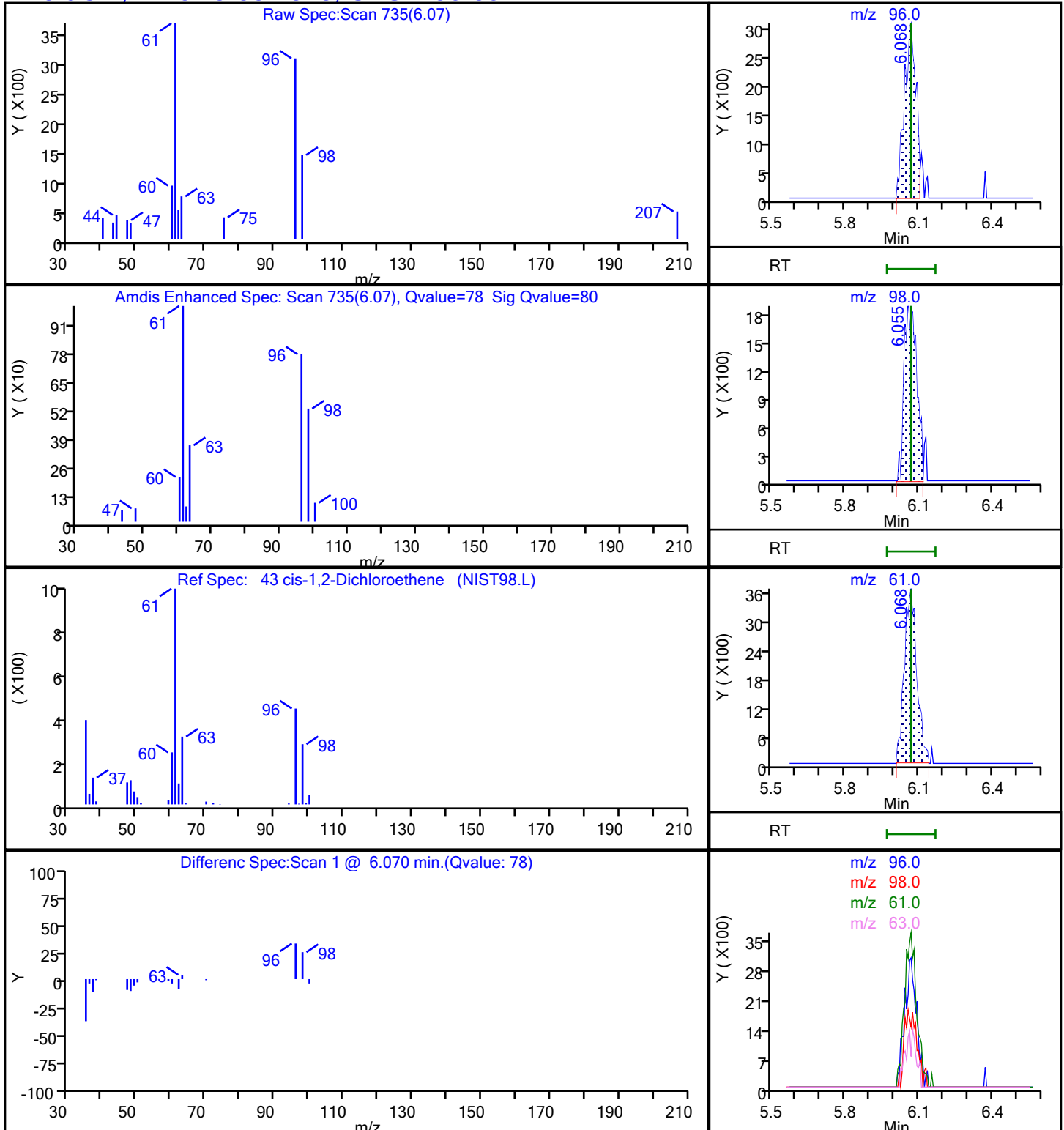
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X10.D

Injection Date: 27-Feb-2023 15:37:30

Instrument ID: 19094

Lims ID: 410-116393-A-3

Lab Sample ID: 410-116393-3

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

Operator ID: knk41612

ALS Bottle#: 10

Worklist Smp#: 11

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

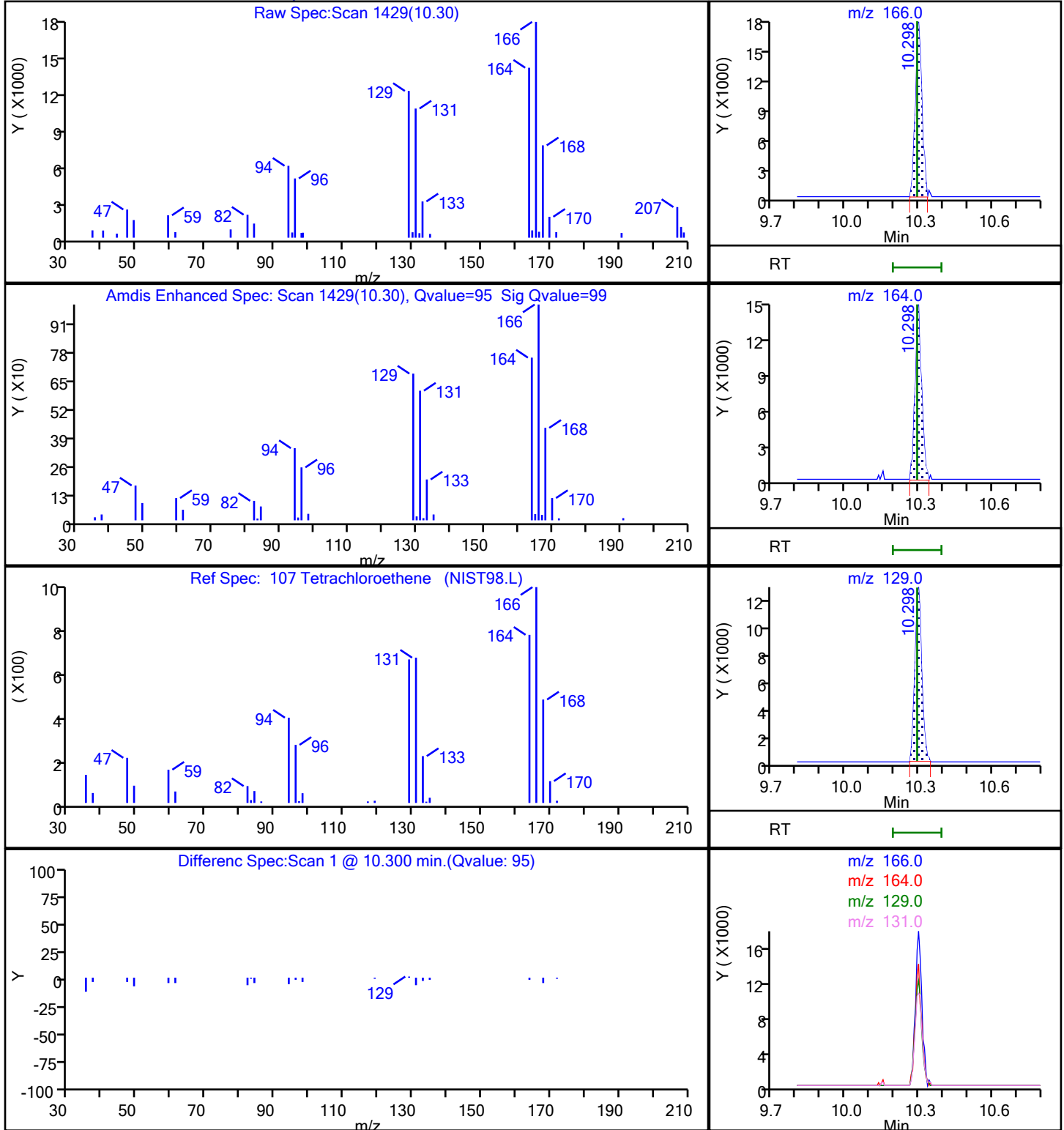
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

107 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X10.D

Injection Date: 27-Feb-2023 15:37:30

Instrument ID: 19094

Lims ID: 410-116393-A-3

Lab Sample ID: 410-116393-3

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

Operator ID: knk41612

ALS Bottle#: 10

Worklist Smp#: 11

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

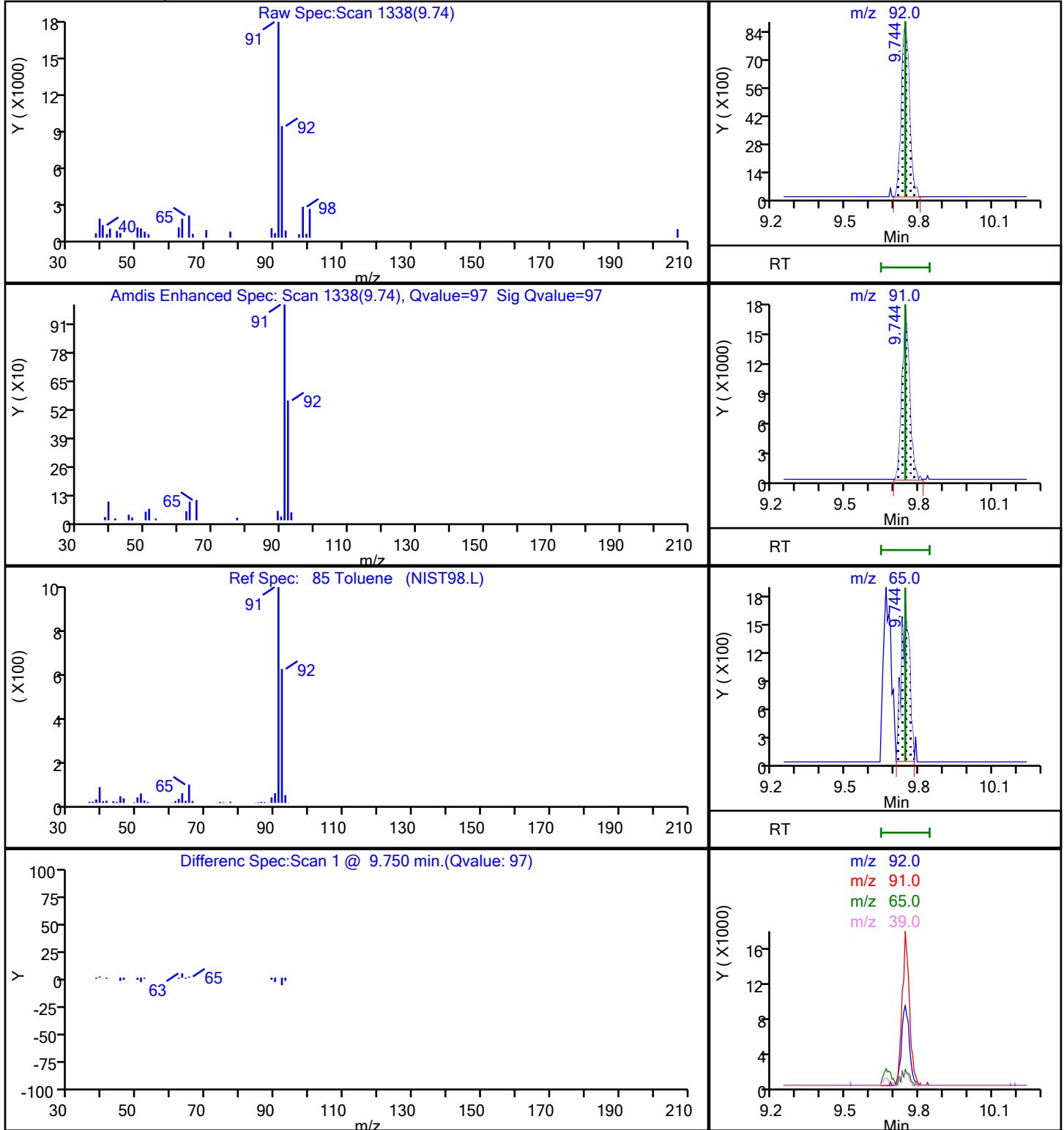
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

85 Toluene, CAS: 108-88-3



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X10.D

Injection Date: 27-Feb-2023 15:37:30

Instrument ID: 19094

Lims ID: 410-116393-A-3

Lab Sample ID: 410-116393-3

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

Operator ID: knk41612

ALS Bottle#: 10

Worklist Smp#: 11

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

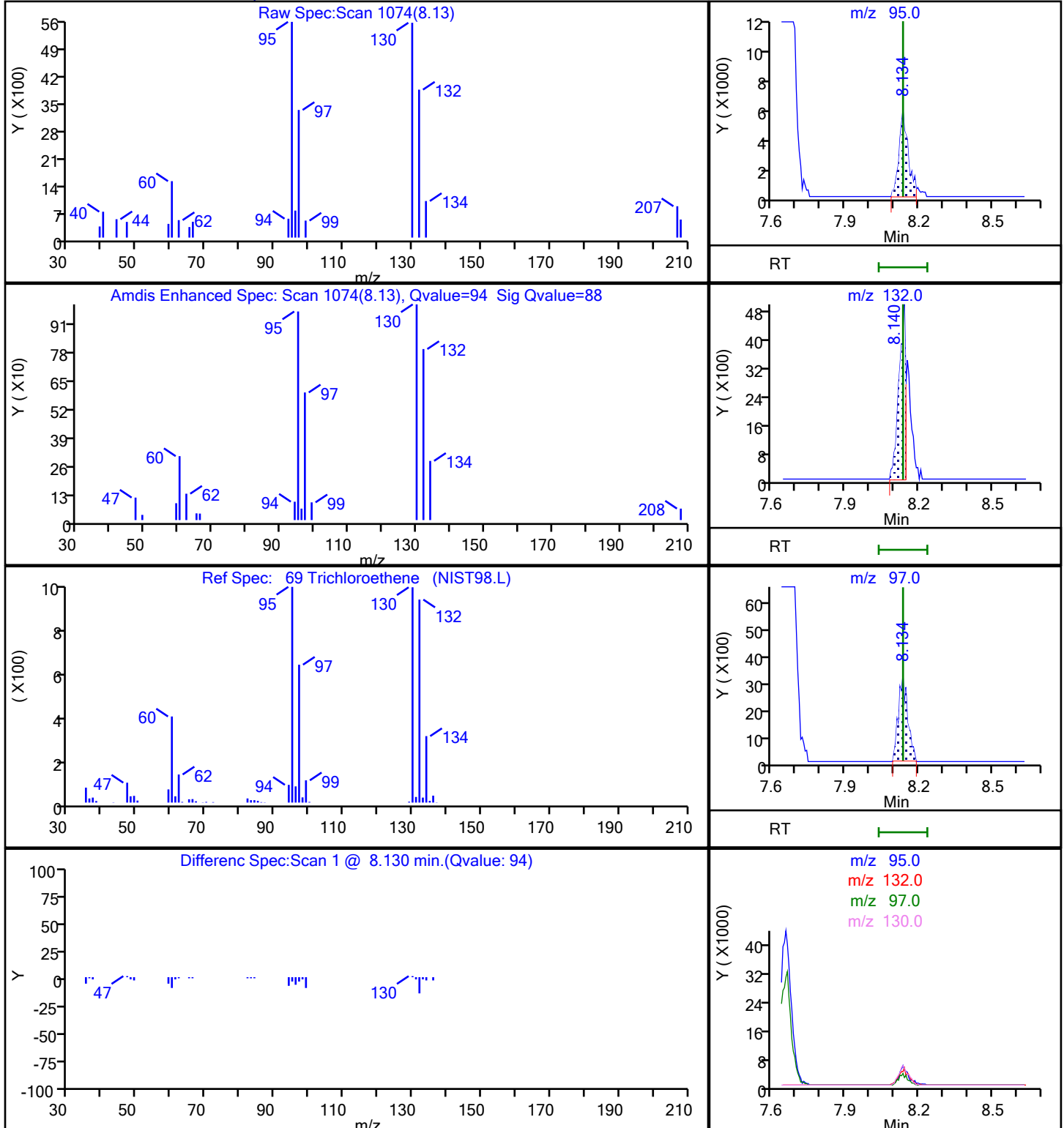
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

69 Trichloroethene, CAS: 79-01-6

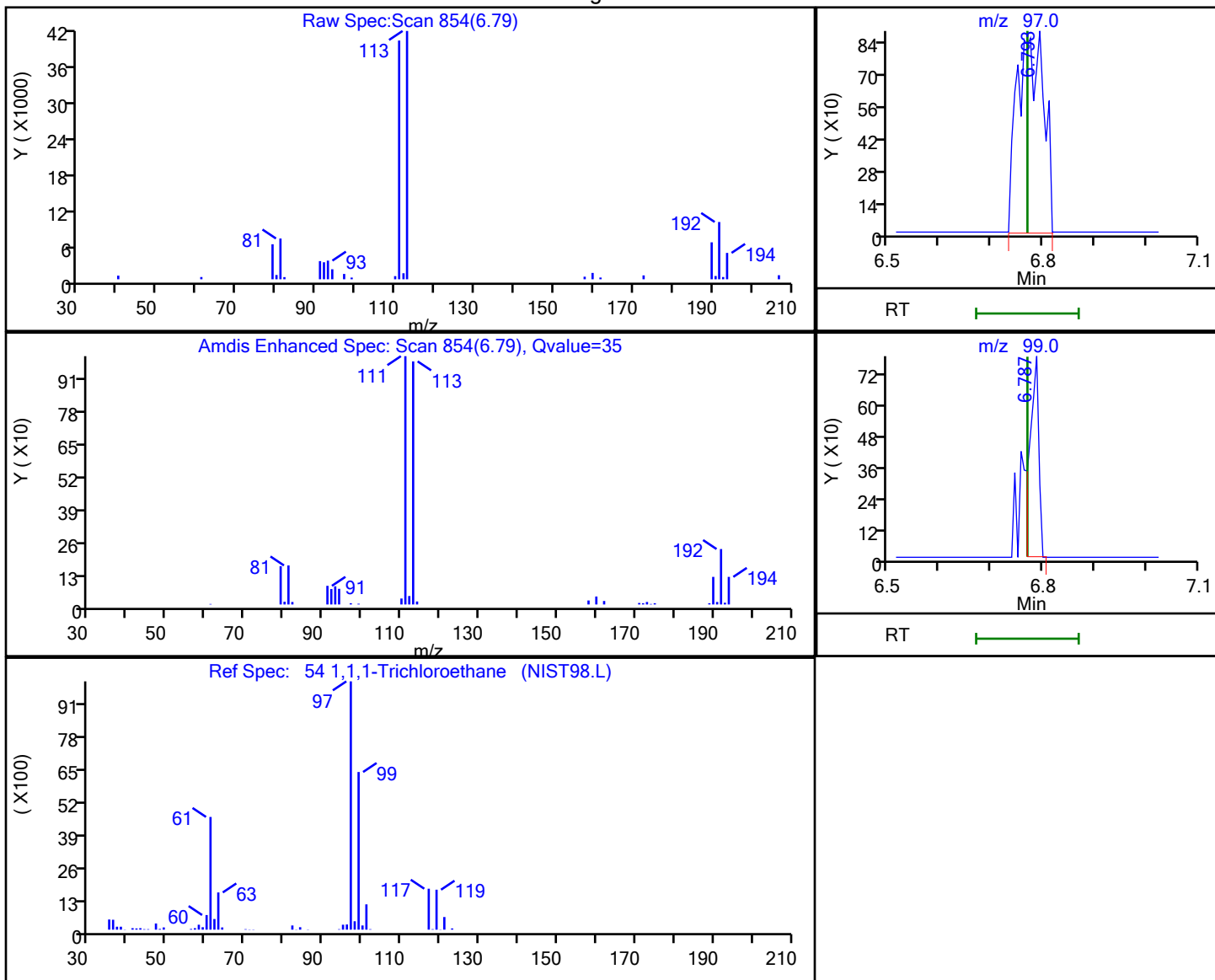


Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X10.D
 Injection Date: 27-Feb-2023 15:37:30 Instrument ID: 19094
 Lims ID: 410-116393-A-3 Lab Sample ID: 410-116393-3
 Client ID: HD-COD-SW-8-0/1-0
 Operator ID: knk41612 ALS Bottle#: 10 Worklist Smp#: 11
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

54 1,1,1-Trichloroethane, CAS: 71-55-6

Processing Results



RT	Mass	Response	Amount
6.79	97.00	3138	0.043365
6.79	99.00	917	

Reviewer: kaewrungrueangp, 28-Feb-2023 10:58:57

Audit Action: Marked Compound Undetected

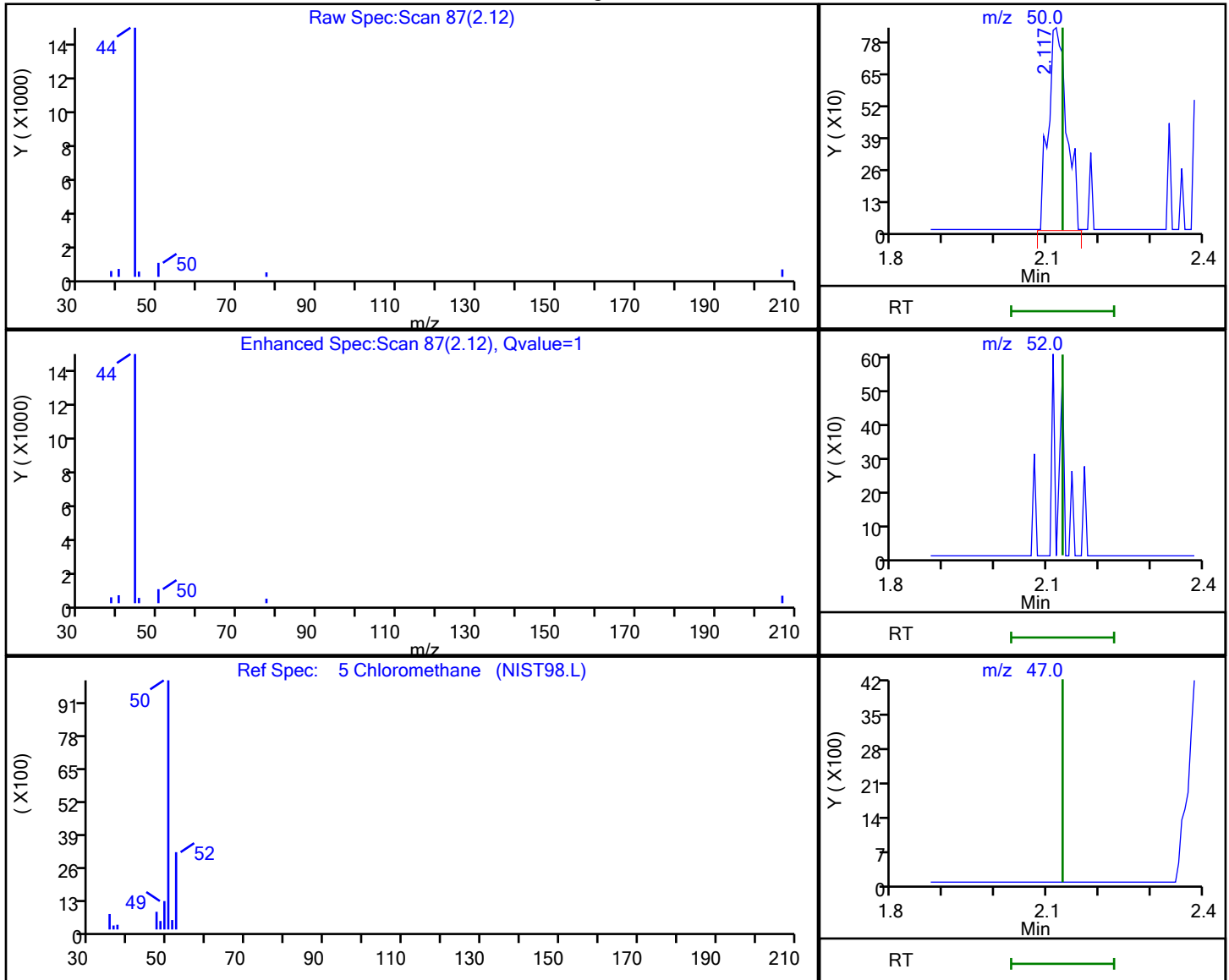
Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X10.D
 Injection Date: 27-Feb-2023 15:37:30 Instrument ID: 19094
 Lims ID: 410-116393-A-3 Lab Sample ID: 410-116393-3
 Client ID: HD-COD-SW-8-0/1-0
 Operator ID: knk41612 ALS Bottle#: 10 Worklist Smp#: 11
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

5 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
2.12	50.00	2069	0.035330
2.13	52.00	0	
2.13	47.00	0	

Reviewer: kaewrungrueangp, 28-Feb-2023 10:58:45

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.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-4

Matrix: Water

Lab File ID: HF27X11.D

Analysis Method: 8260D

Date Collected: 02/21/2023 12:10

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 15:58

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	1.8	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	0.092	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.17	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	0.22	J	0.50	0.20
108-88-3	Toluene	0.11	J	0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-4

Matrix: Water

Lab File ID: HF27X11.D

Analysis Method: 8260D

Date Collected: 02/21/2023 12:10

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 15:58

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.19	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	106		80-120
2037-26-5	Toluene-d8 (Surr)	84		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X11.D
 Lims ID: 410-116393-A-4
 Client ID: HD-COD-SW-9-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 15:58:30 ALS Bottle#: 11 Worklist Smp#: 12
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-012
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:01:31 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp Date: 28-Feb-2023 11:01:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.130				ND	U
7 Vinyl chloride	62		2.245				ND	
9 Bromomethane	94		2.568				ND	
10 Chloroethane	64		2.648				ND	
18 1,1-Dichloroethene	96		3.507				ND	
19 Acetone	43	3.550	3.532	0.018	66	6840	1.84	
24 Carbon disulfide	76	3.806	3.806	0.000	94	5478	0.0514	
28 Methylene Chloride	84	4.147	4.160	-0.013	1	1371	0.0332	
* 29 t-Butyl alcohol-d10 (IS)	65	4.159	4.166	-0.007	1	58001	50.0	
33 Methyl tert-butyl ether	73		4.556				ND	
34 trans-1,2-Dichloroethene	96		4.580				ND	
37 1,1-Dichloroethane	63		5.233				ND	
42 2-Butanone (MEK)	43		6.013				ND	
43 cis-1,2-Dichloroethene	96	6.061	6.068	-0.007	80	8468	0.1742	
49 Chlorobromomethane	128		6.397				ND	
52 Chloroform	83	6.555	6.543	0.012	70	7155	0.0917	
\$ 53 Dibromofluoromethane (Surr)	113	6.762	6.763	-0.001	94	412177	10.6	
54 1,1,1-Trichloroethane	97		6.769				ND	7
57 Carbon tetrachloride	117		6.988				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.207	7.220	-0.013	52	70576	9.97	
60 Benzene	78	7.238	7.250	-0.012	41	5121	0.0268	
62 1,2-Dichloroethane	62		7.324				ND	7
* 65 Fluorobenzene (IS)	96	7.653	7.653	0.000	99	1532036	10.0	
69 Trichloroethene	95	8.134	8.134	0.000	94	9515	0.1887	
71 1,2-Dichloropropane	63		8.464				ND	
77 Dichlorobromomethane	83		8.805				ND	7
81 cis-1,3-Dichloropropene	75		9.360				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.524				ND	7
\$ 84 Toluene-d8 (Surr)	98	9.670	9.665	0.005	93	1715291	8.42	
85 Toluene	92	9.744	9.744	0.000	98	17003	0.1123	
86 trans-1,3-Dichloropropene	75		10.000				ND	
106 1,1,2-Trichloroethane	97		10.207				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.292	10.293	-0.001	95	15526	0.2221	
109 2-Hexanone	43		10.414				ND	
111 Chlorodibromomethane	129		10.585				ND	
112 Ethylene Dibromide	107		10.695				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.127	11.128	-0.001	85	1666095	10.0	
115 Chlorobenzene	112		11.152				ND	
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91		11.237				ND	7
S 117 Xylenes, Total	106				0		0.1020	
119 m-Xylene & p-Xylene	106	11.353	11.353	0.000	97	7988	0.0708	
120 o-Xylene	106	11.688	11.676	0.012	94	3395	0.0311	
121 Styrene	104		11.695				ND	7
122 Bromoform	173		11.853				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	96	805075	9.73	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
* 141 1,4-Dichlorobenzene-d4	152	13.005	12.999	0.006	93	967579	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_LLcentISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X11.D

Injection Date: 27-Feb-2023 15:58:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: 410-116393-A-4

Lab Sample ID: 410-116393-4

Worklist Smp#: 12

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

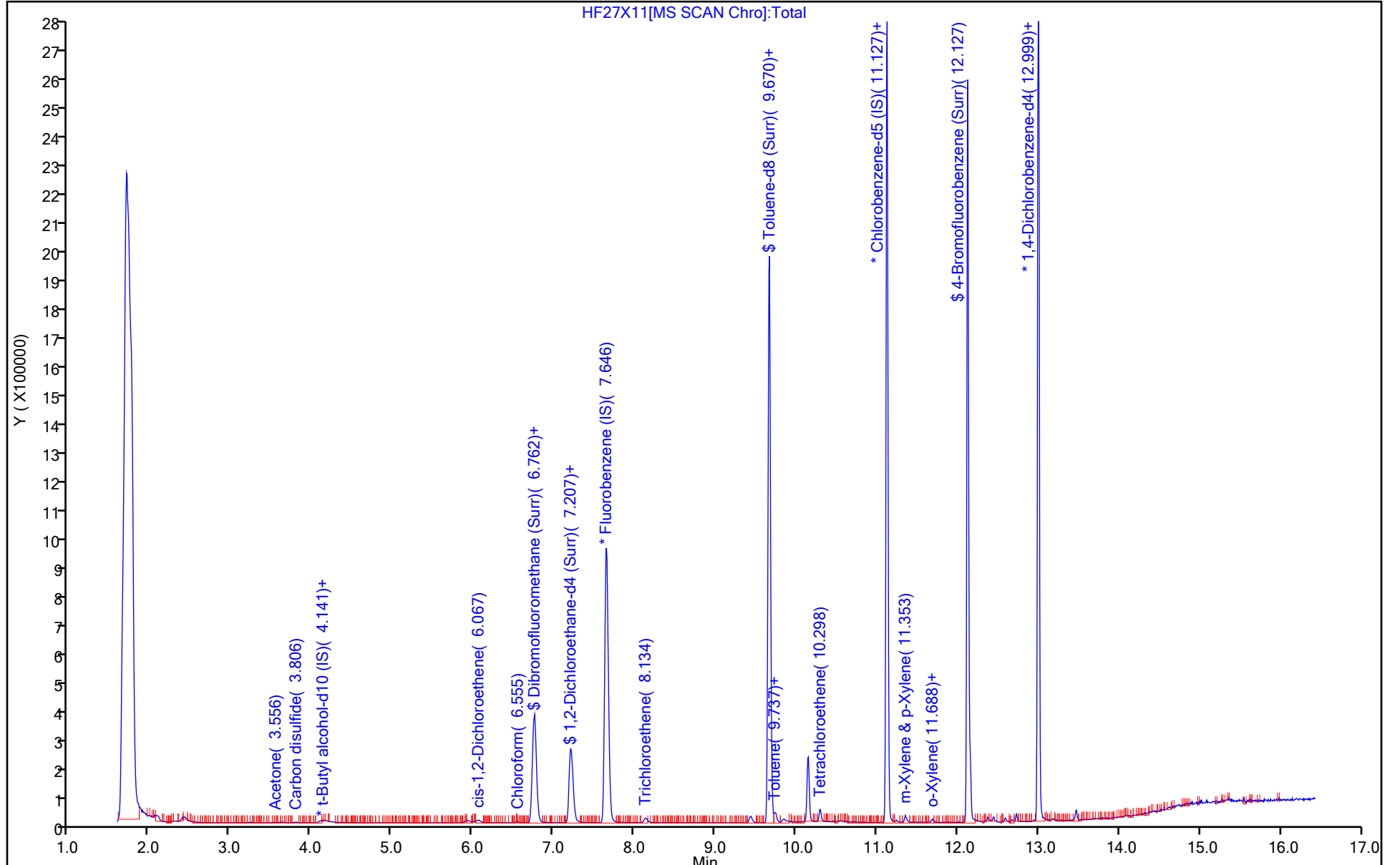
ALS Bottle#: 11

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X11.D
 Lims ID: 410-116393-A-4
 Client ID: HD-COD-SW-9-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 15:58:30 ALS Bottle#: 11 Worklist Smp#: 12
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-012
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:01:31 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp

Date: 28-Feb-2023 11:01:31

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.6	106.29
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.97	99.74
\$ 84 Toluene-d8 (Surr)	10.0	8.42	84.15
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.73	97.30

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X11.D

Injection Date: 27-Feb-2023 15:58:30

Instrument ID: 19094

Lims ID: 410-116393-A-4

Lab Sample ID: 410-116393-4

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

Operator ID: knk41612

ALS Bottle#: 11

Worklist Smp#: 12

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

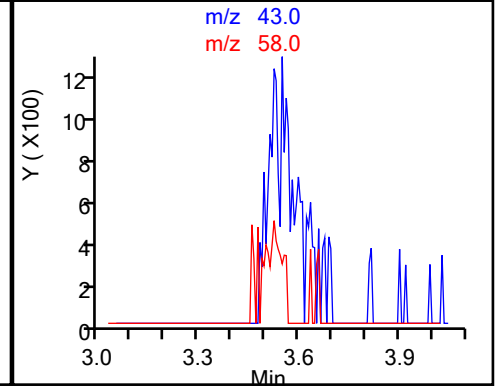
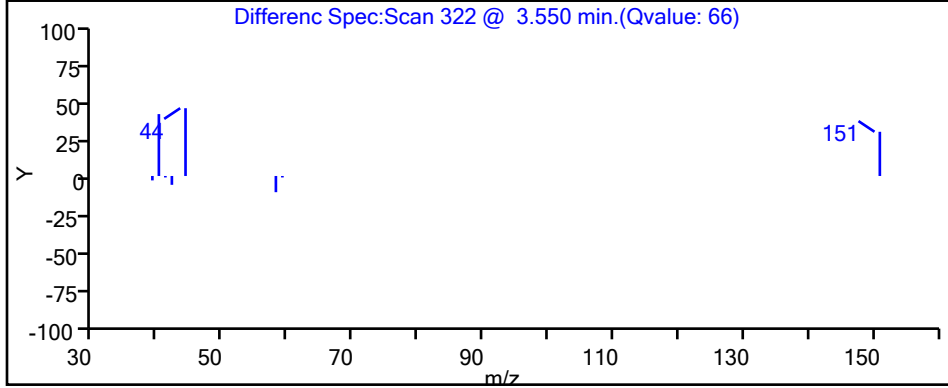
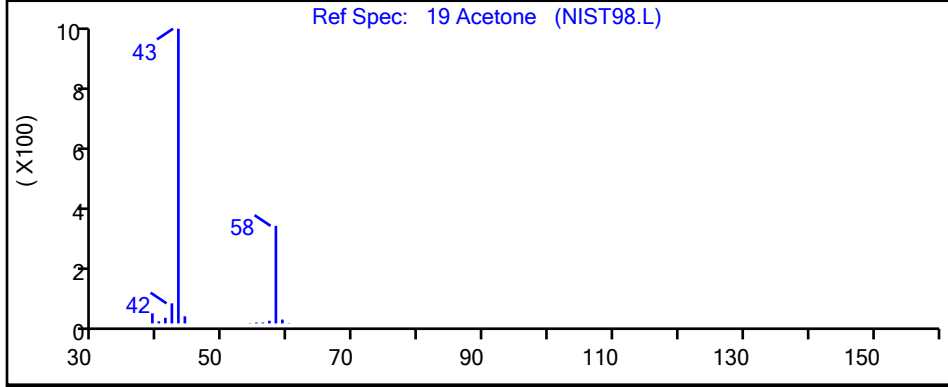
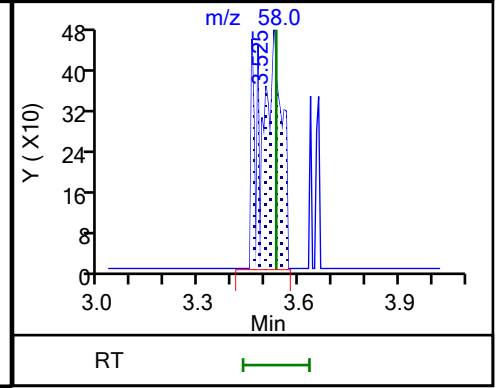
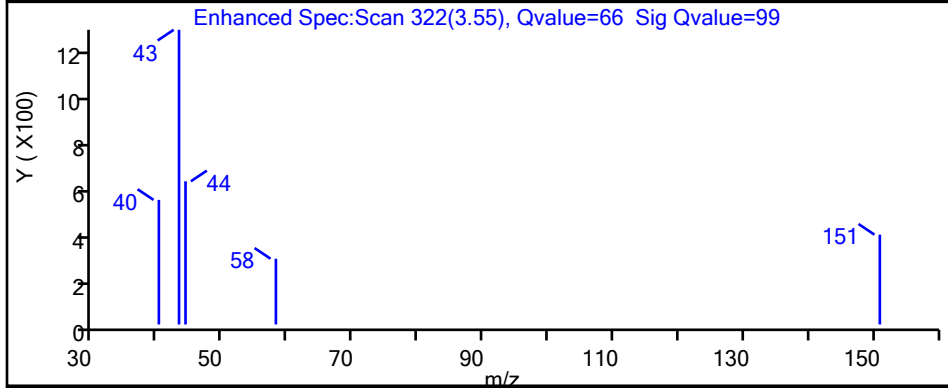
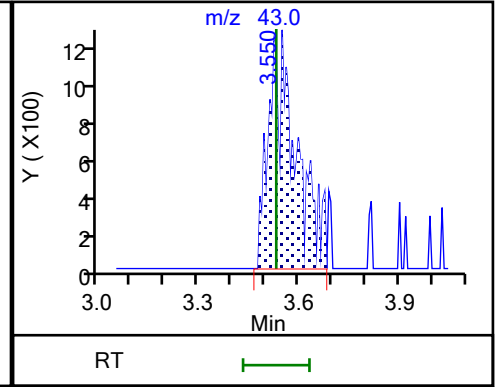
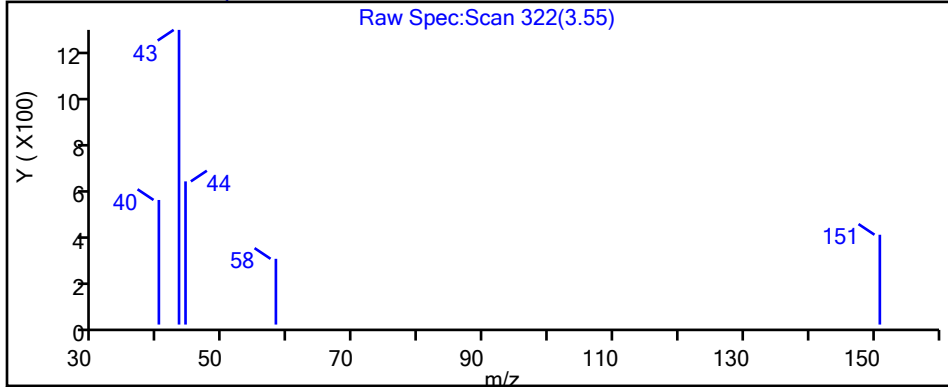
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

19 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X11.D

Injection Date: 27-Feb-2023 15:58:30

Instrument ID: 19094

Lims ID: 410-116393-A-4

Lab Sample ID: 410-116393-4

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

Operator ID: knk41612

ALS Bottle#: 11

Worklist Smp#: 12

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

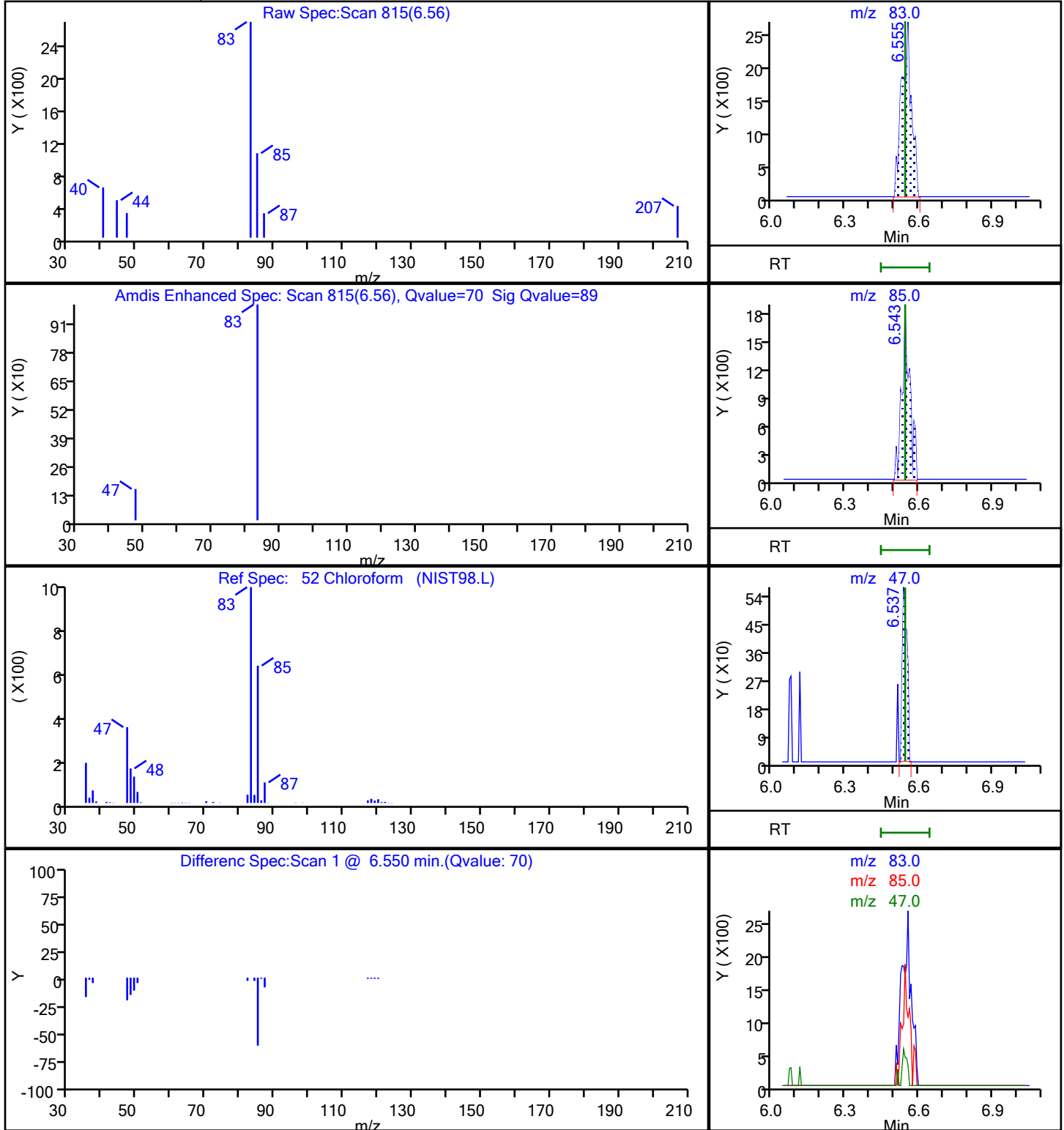
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

52 Chloroform, CAS: 67-66-3



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X11.D

Injection Date: 27-Feb-2023 15:58:30

Instrument ID: 19094

Lims ID: 410-116393-A-4

Lab Sample ID: 410-116393-4

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

Operator ID: knk41612

ALS Bottle#: 11

Worklist Smp#: 12

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

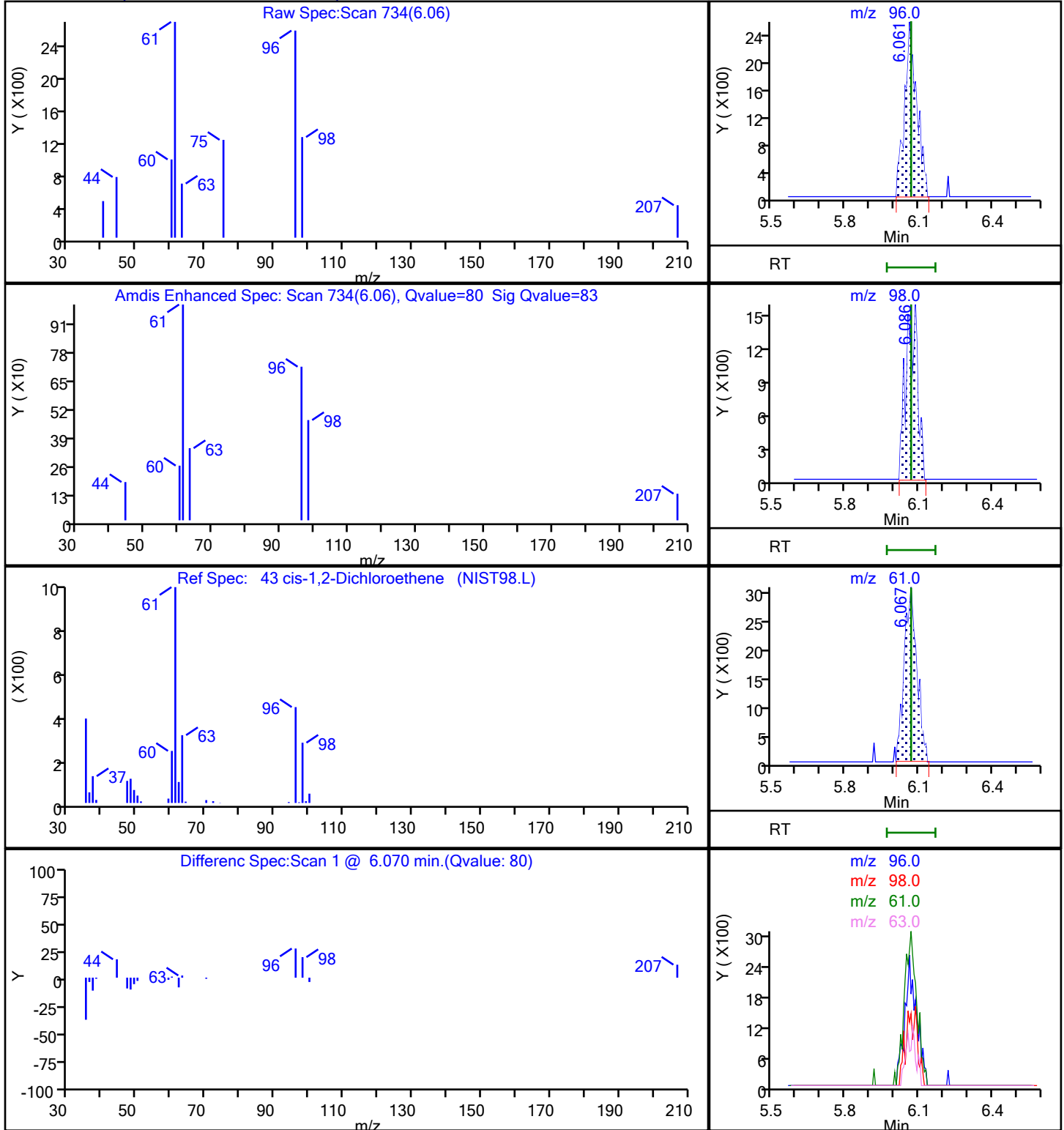
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X11.D

Injection Date: 27-Feb-2023 15:58:30

Instrument ID: 19094

Lims ID: 410-116393-A-4

Lab Sample ID: 410-116393-4

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

Operator ID: knk41612

ALS Bottle#: 11

Worklist Smp#: 12

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

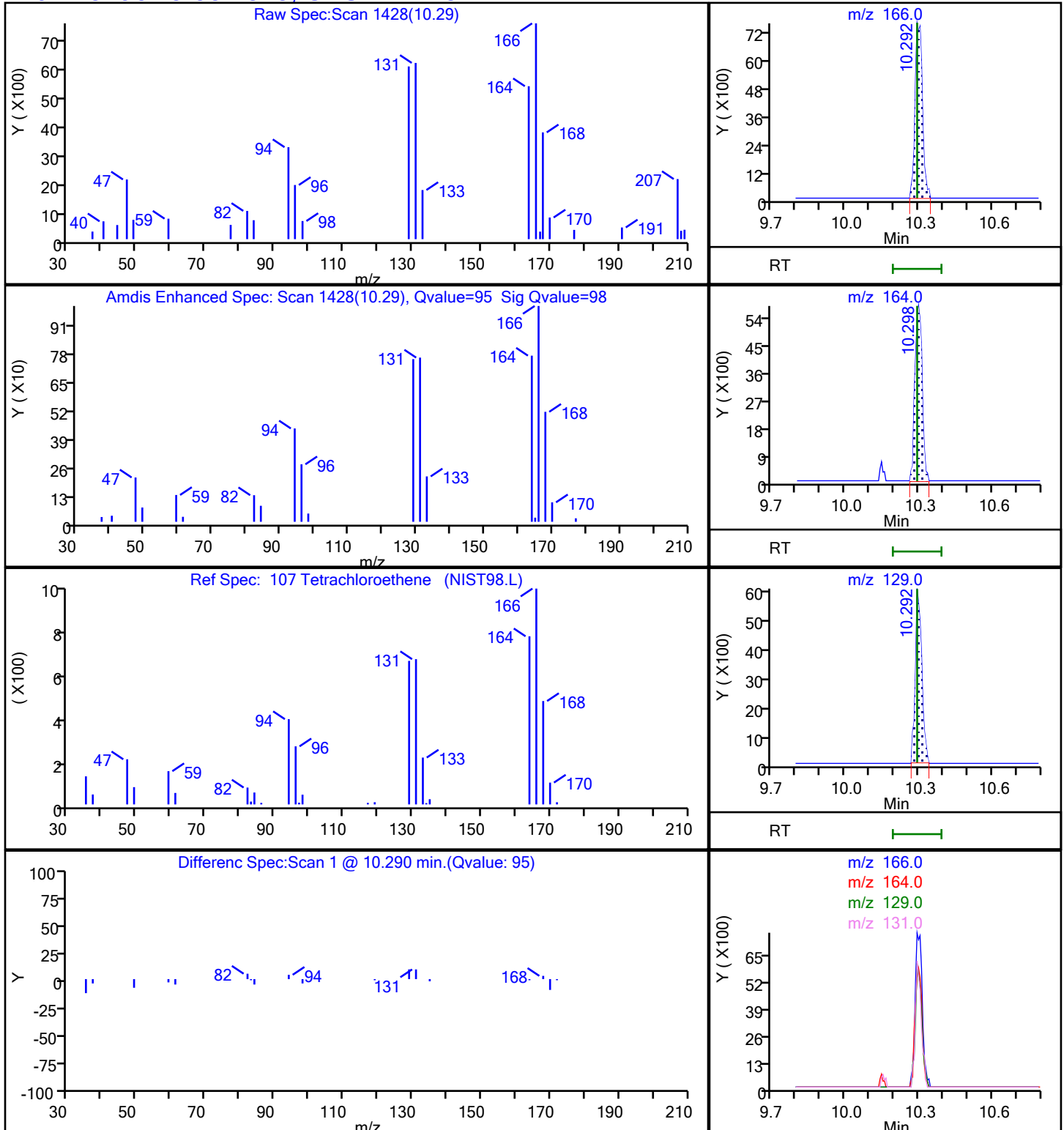
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

107 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X11.D

Injection Date: 27-Feb-2023 15:58:30

Instrument ID: 19094

Lims ID: 410-116393-A-4

Lab Sample ID: 410-116393-4

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

Operator ID: knk41612

ALS Bottle#: 11

Worklist Smp#: 12

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

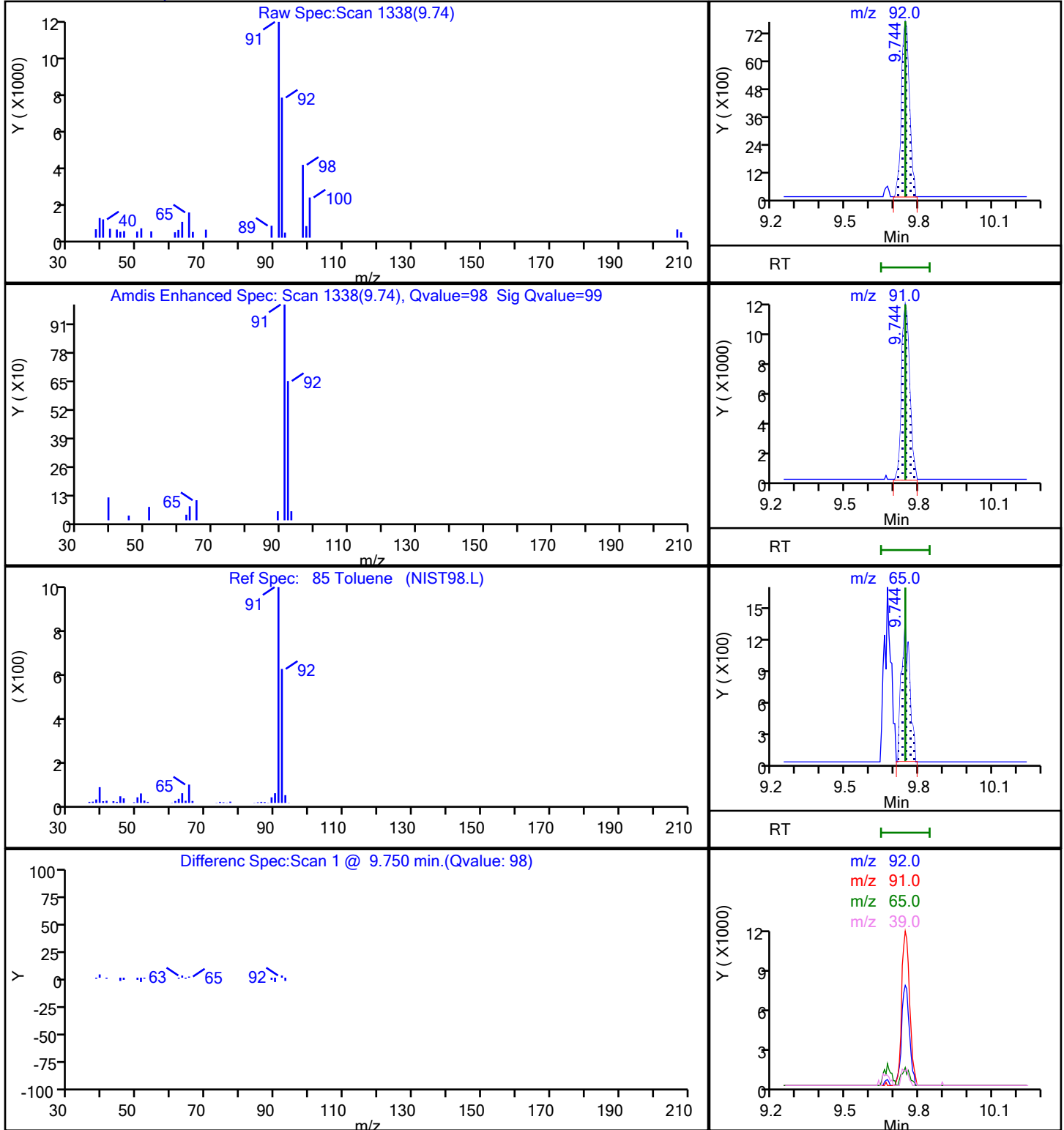
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

85 Toluene, CAS: 108-88-3



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X11.D

Injection Date: 27-Feb-2023 15:58:30

Instrument ID: 19094

Lims ID: 410-116393-A-4

Lab Sample ID: 410-116393-4

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

Operator ID: knk41612

ALS Bottle#: 11

Worklist Smp#: 12

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

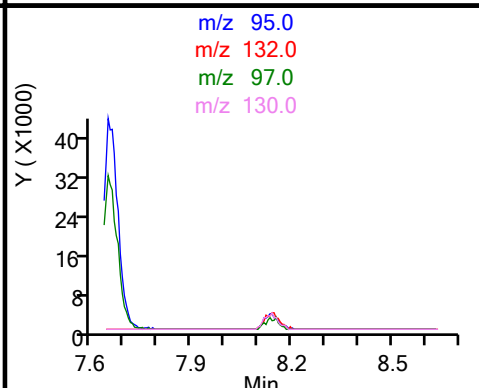
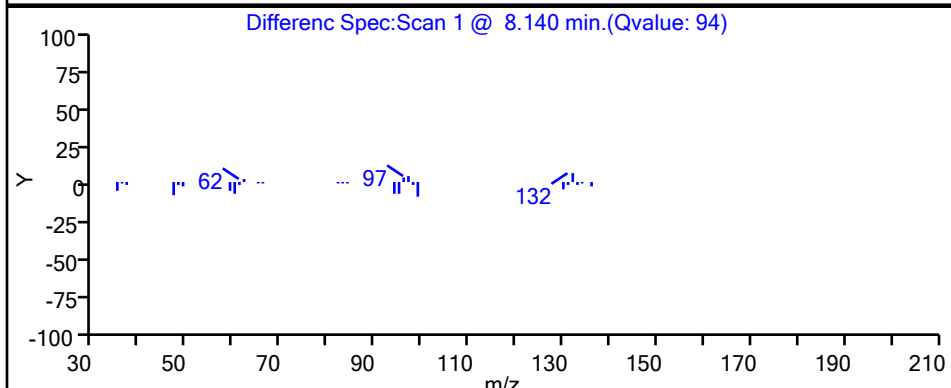
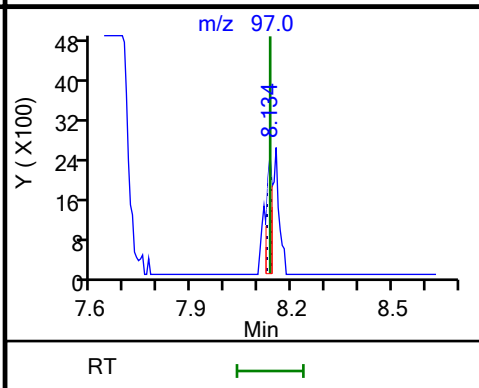
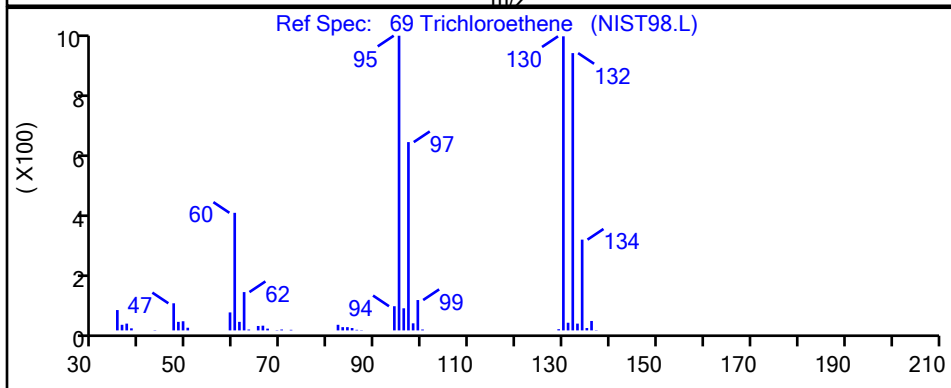
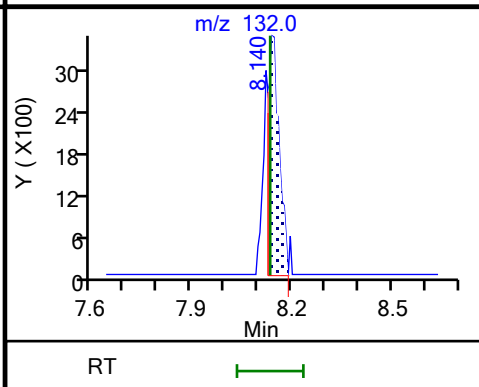
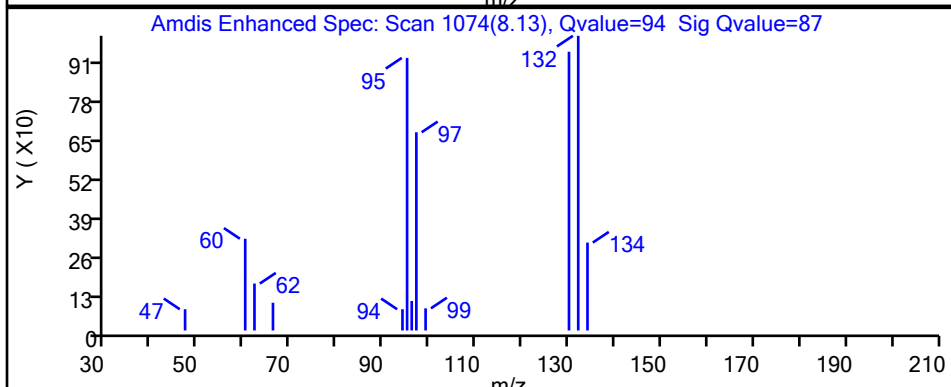
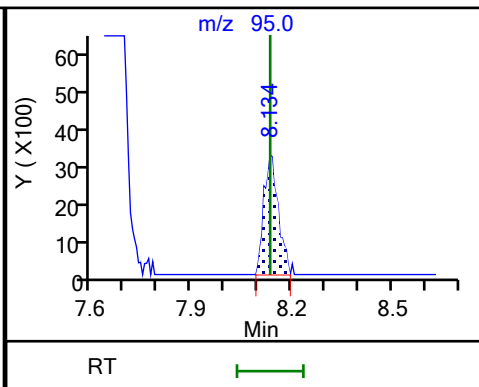
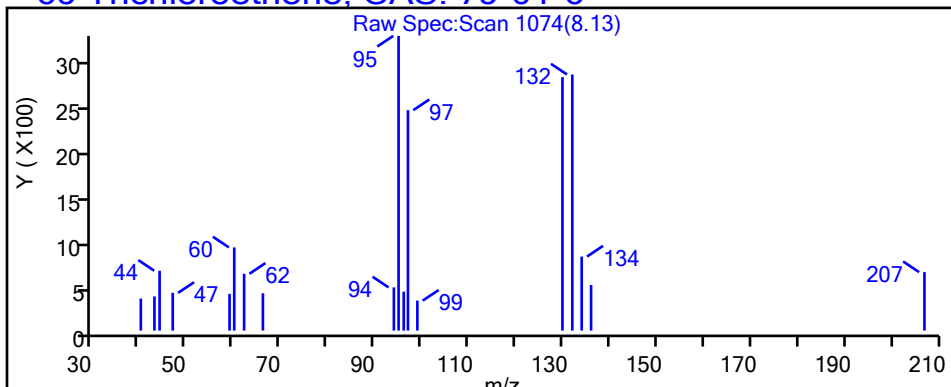
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

69 Trichloroethene, CAS: 79-01-6

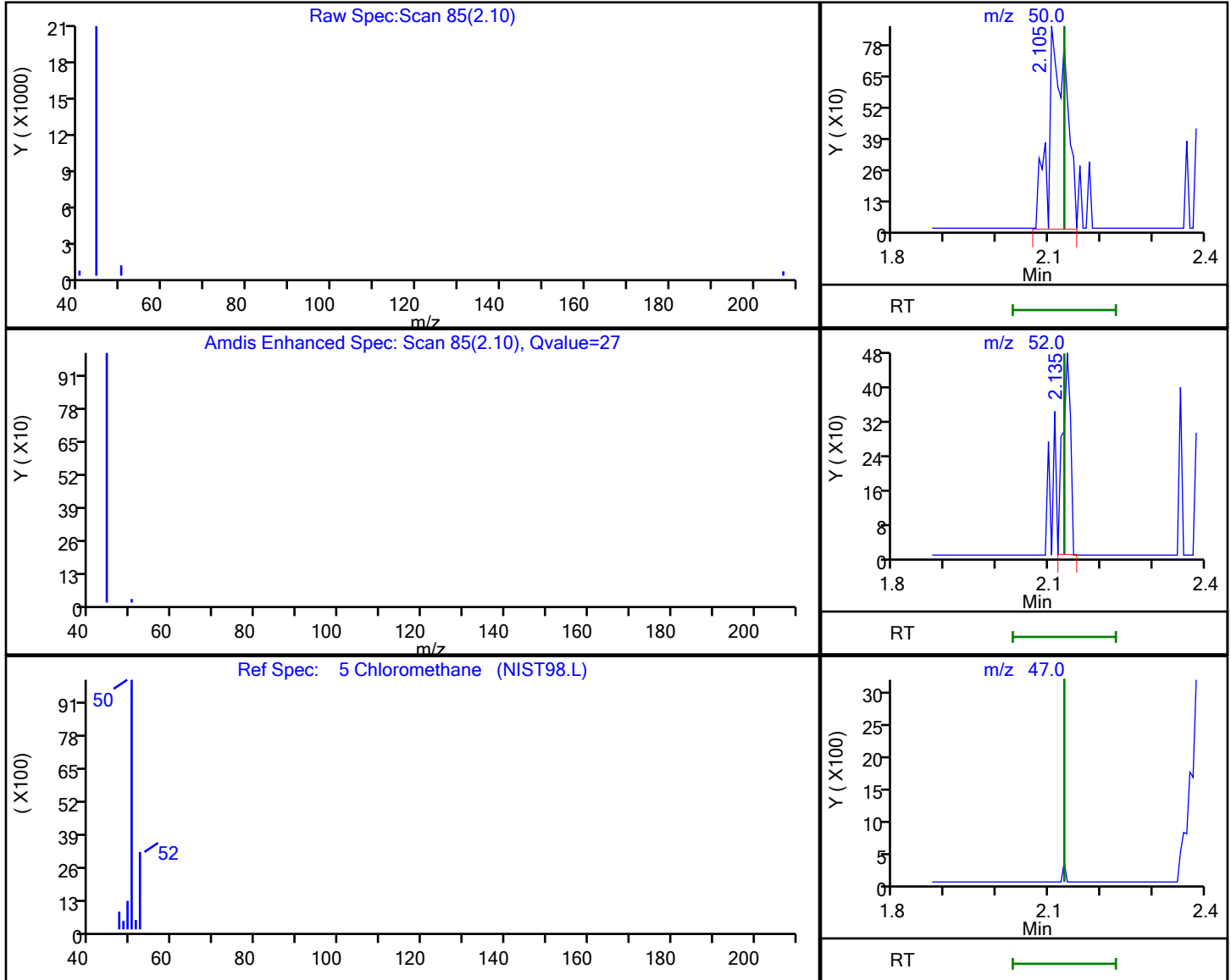


Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X11.D
 Injection Date: 27-Feb-2023 15:58:30 Instrument ID: 19094
 Lims ID: 410-116393-A-4 Lab Sample ID: 410-116393-4
 Client ID: HD-COD-SW-9-0/1-0
 Operator ID: knk41612 ALS Bottle#: 11 Worklist Smp#: 12
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

5 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
2.10	50.00	2058	0.035004
2.14	52.00	498	
2.13	47.00	0	

Reviewer: kaewrungrueangp, 28-Feb-2023 11:01:04

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.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-5

Matrix: Water

Lab File ID: HF27X12.D

Analysis Method: 8260D

Date Collected: 02/21/2023 09:15

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 16:19

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	ND		5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.23	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	0.66		0.50	0.20
108-88-3	Toluene	0.12	J	0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1
 Environment Testing, LLC

SDG No.:

Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 410-116393-5

Matrix: Water Lab File ID: HF27X12.D

Analysis Method: 8260D Date Collected: 02/21/2023 09:15

Sample wt/vol: 25 (mL) Date Analyzed: 02/27/2023 16:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL) Heated Purge: (Y/N) N pH:

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

Analysis Batch No.: 348233 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.26	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X12.D
 Lims ID: 410-116393-A-5
 Client ID: HD-COD-SW-13-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 16:19:30 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-013
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:03:16 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp Date: 28-Feb-2023 11:03:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.130				ND	U
7 Vinyl chloride	62		2.245				ND	
9 Bromomethane	94		2.568				ND	
10 Chloroethane	64		2.648				ND	
18 1,1-Dichloroethene	96		3.507				ND	
19 Acetone	43		3.532				ND	U
24 Carbon disulfide	76		3.806				ND	7
28 Methylene Chloride	84		4.160				ND	
* 29 t-Butyl alcohol-d10 (IS)	65	4.135	4.166	-0.031	19	58291	50.0	
33 Methyl tert-butyl ether	73		4.556				ND	
34 trans-1,2-Dichloroethene	96		4.580				ND	
37 1,1-Dichloroethane	63		5.233				ND	7
42 2-Butanone (MEK)	43		6.013				ND	7
43 cis-1,2-Dichloroethene	96	6.074	6.068	0.006	78	11431	0.2343	
49 Chlorobromomethane	128		6.397				ND	
52 Chloroform	83	6.543	6.543	0.000	86	5918	0.0756	
\$ 53 Dibromofluoromethane (Surr)	113	6.756	6.763	-0.007	94	400176	10.3	
54 1,1,1-Trichloroethane	97		6.769				ND	U
57 Carbon tetrachloride	117		6.988				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.220	7.220	0.000	67	73012	10.3	
60 Benzene	78	7.250	7.250	0.000	84	7477	0.0389	
62 1,2-Dichloroethane	62		7.324				ND	
* 65 Fluorobenzene (IS)	96	7.653	7.653	0.000	99	1537526	10.0	
69 Trichloroethene	95	8.128	8.134	-0.006	94	13074	0.2583	
71 1,2-Dichloropropane	63		8.464				ND	
77 Dichlorobromomethane	83		8.805				ND	7
81 cis-1,3-Dichloropropene	75		9.360				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.524				ND	7
\$ 84 Toluene-d8 (Surr)	98	9.664	9.665	-0.001	93	1679756	9.45	
85 Toluene	92	9.744	9.744	0.000	98	15413	0.1168	
86 trans-1,3-Dichloropropene	75		10.000				ND	
106 1,1,2-Trichloroethane	97		10.207				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.298	10.293	0.005	96	40465	0.6640	
109 2-Hexanone	43		10.414				ND	
111 Chlorodibromomethane	129		10.585				ND	
112 Ethylene Dibromide	107		10.695				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	84	1452206	10.0	
115 Chlorobenzene	112		11.152				ND	
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91		11.237				ND	7
S 117 Xylenes, Total	106		11.245				ND	7
119 m-Xylene & p-Xylene	106	11.353	11.353	0.000	97	5083	0.0517	
120 o-Xylene	106		11.676				ND	7
121 Styrene	104		11.695				ND	
122 Bromoform	173		11.853				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	95	674006	9.35	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	859177	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_LLcentISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X12.D

Injection Date: 27-Feb-2023 16:19:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: 410-116393-A-5

Lab Sample ID: 410-116393-5

Worklist Smp#: 13

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

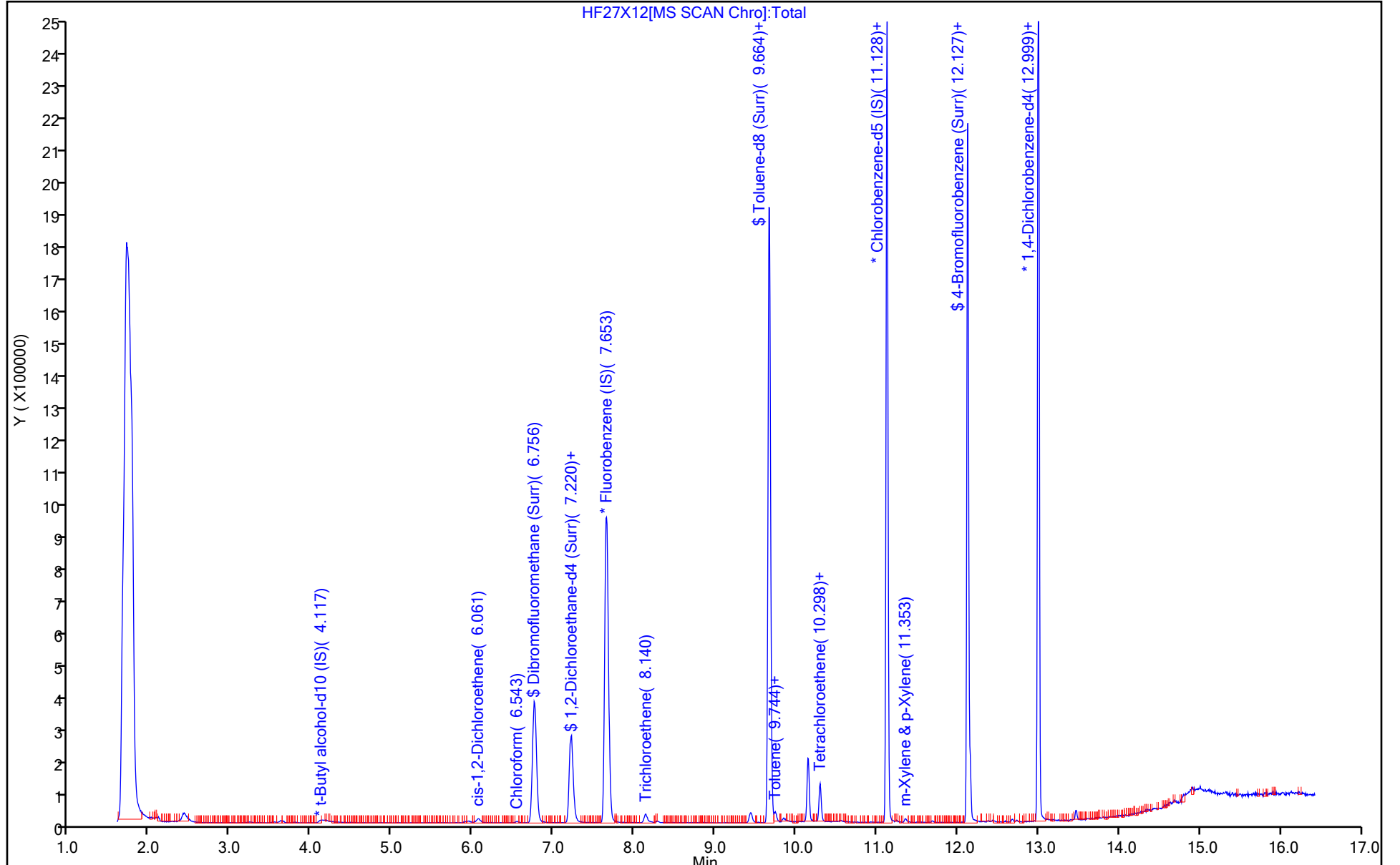
ALS Bottle#: 12

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X12.D
 Lims ID: 410-116393-A-5
 Client ID: HD-COD-SW-13-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 16:19:30 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-013
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:03:16 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp Date: 28-Feb-2023 11:03:16

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.3	102.83
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	102.82
\$ 84 Toluene-d8 (Surr)	10.0	9.45	94.55
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.35	93.45

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X12.D

Injection Date: 27-Feb-2023 16:19:30

Instrument ID: 19094

Lims ID: 410-116393-A-5

Lab Sample ID: 410-116393-5

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

Operator ID: knk41612

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

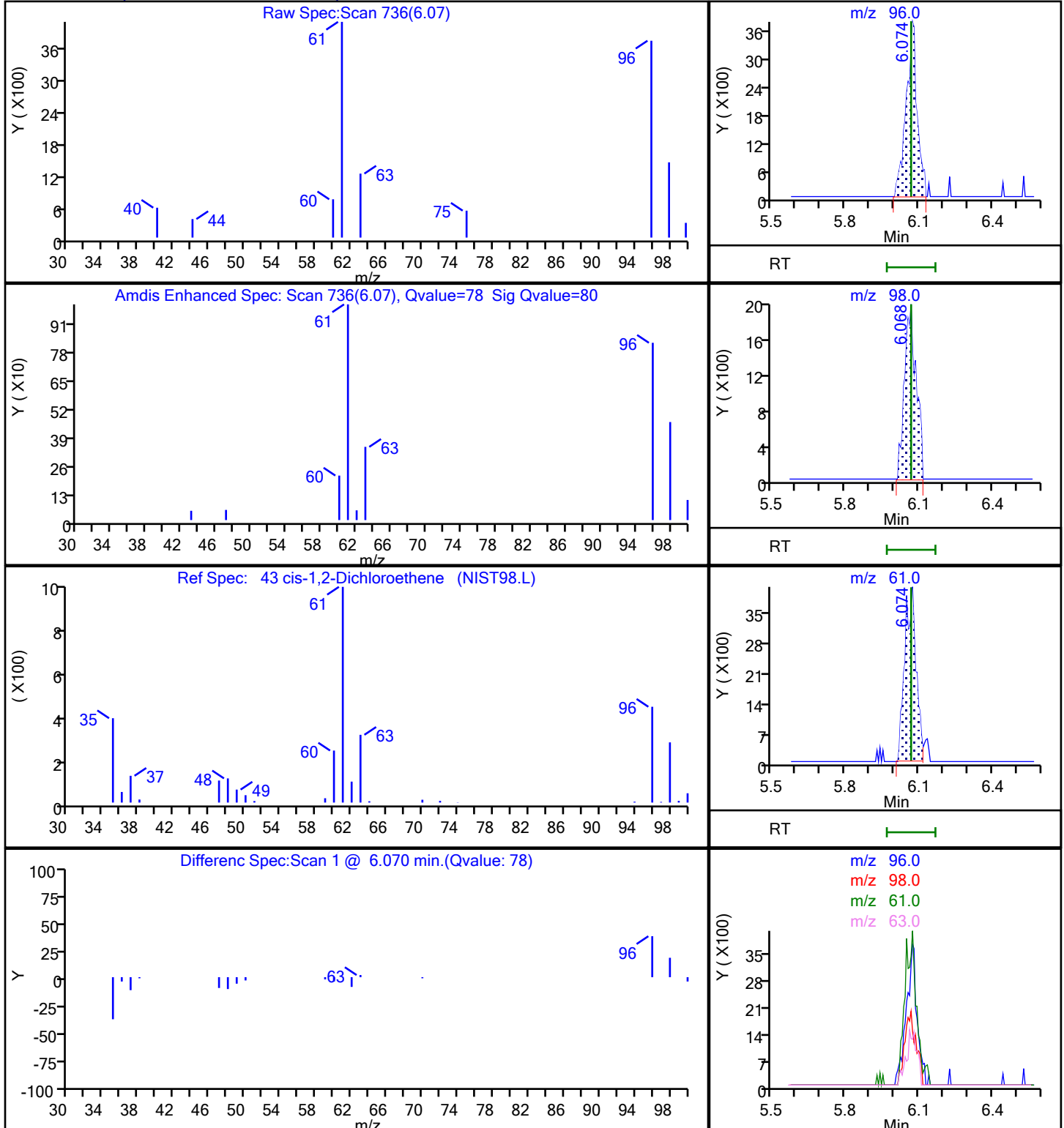
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X12.D

Injection Date: 27-Feb-2023 16:19:30

Instrument ID: 19094

Lims ID: 410-116393-A-5

Lab Sample ID: 410-116393-5

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

Operator ID: knk41612

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

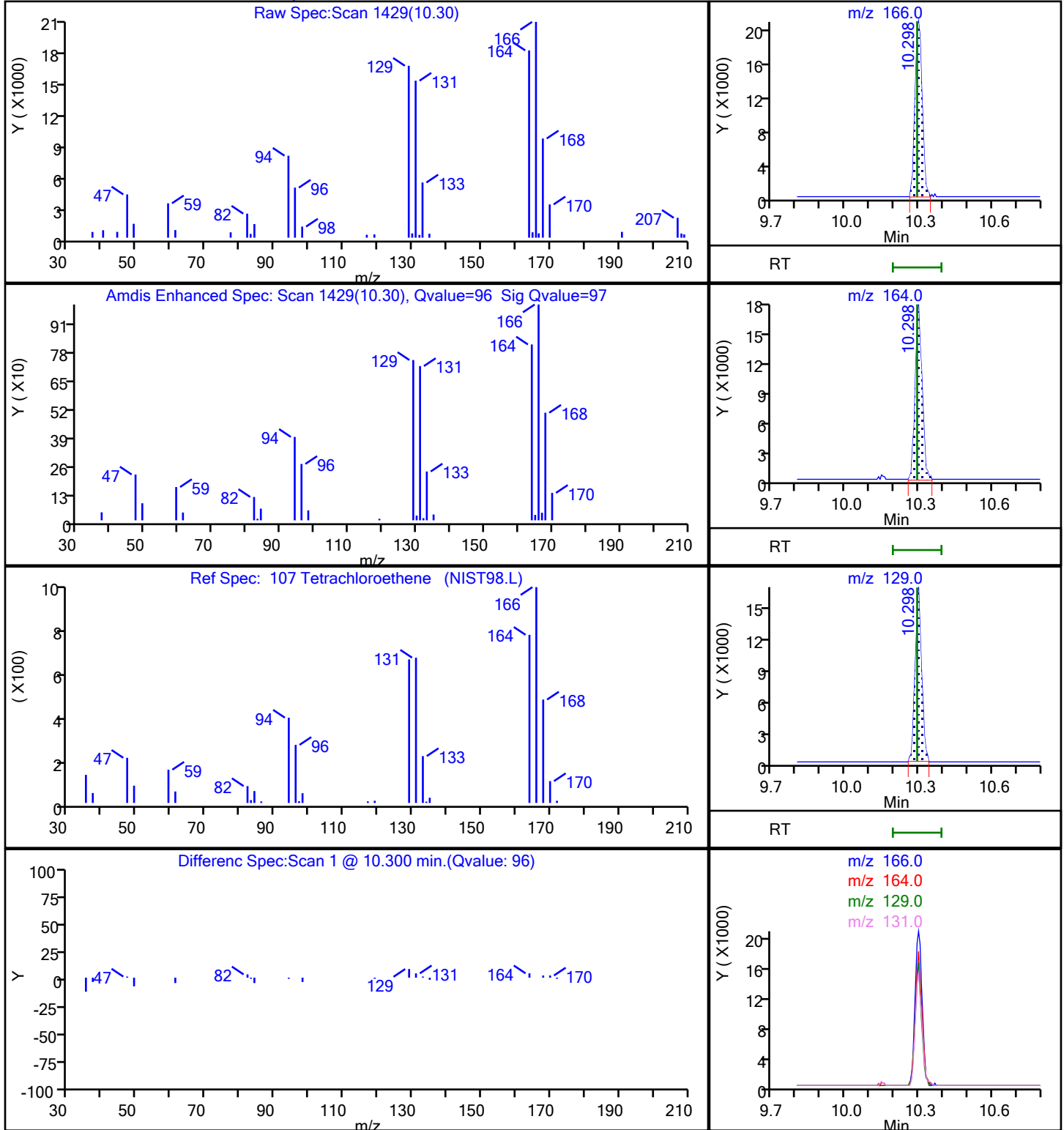
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

107 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X12.D

Injection Date: 27-Feb-2023 16:19:30

Instrument ID: 19094

Lims ID: 410-116393-A-5

Lab Sample ID: 410-116393-5

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

Operator ID: knk41612

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

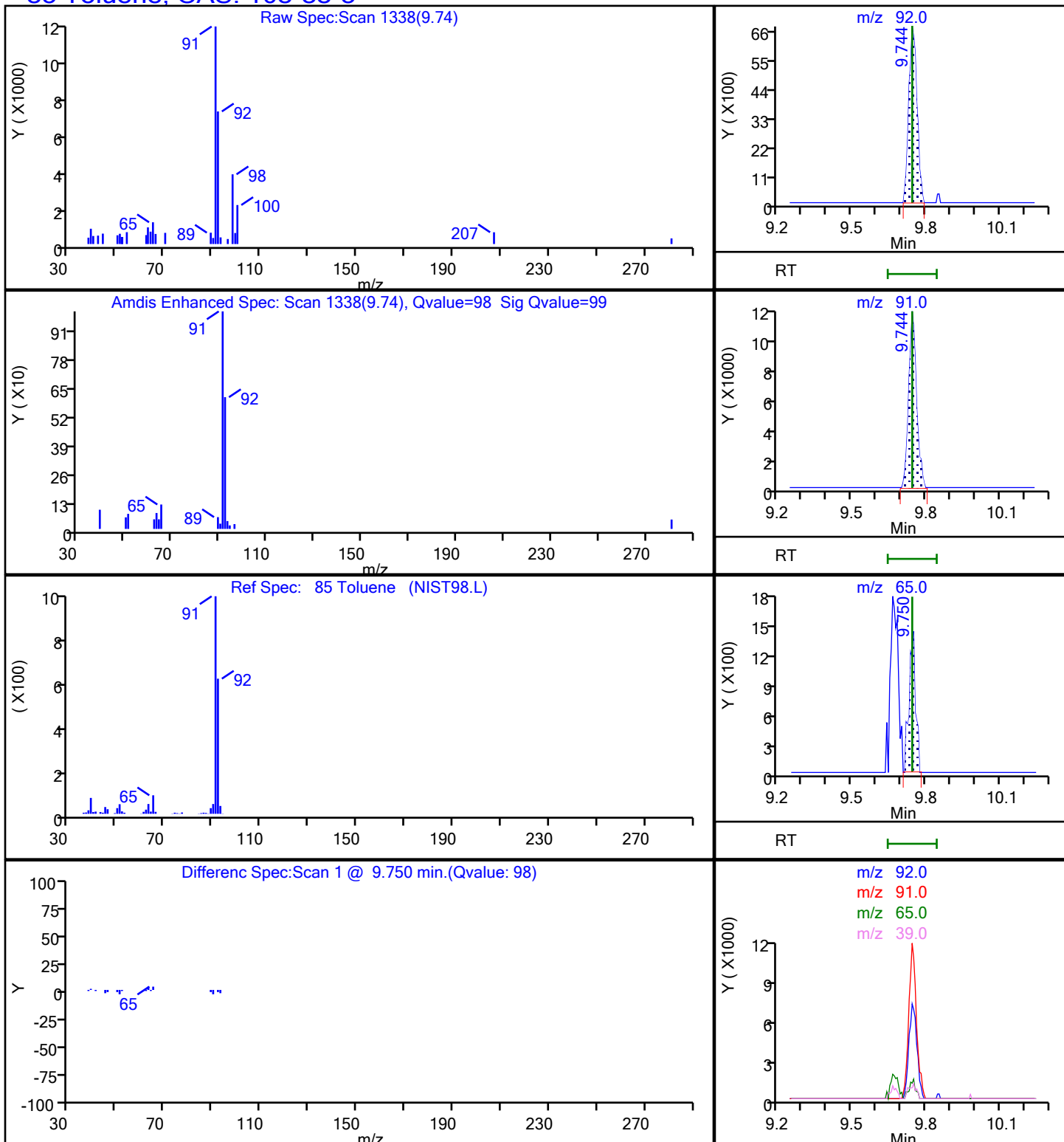
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

85 Toluene, CAS: 108-88-3



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X12.D

Injection Date: 27-Feb-2023 16:19:30

Instrument ID: 19094

Lims ID: 410-116393-A-5

Lab Sample ID: 410-116393-5

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

Operator ID: knk41612

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

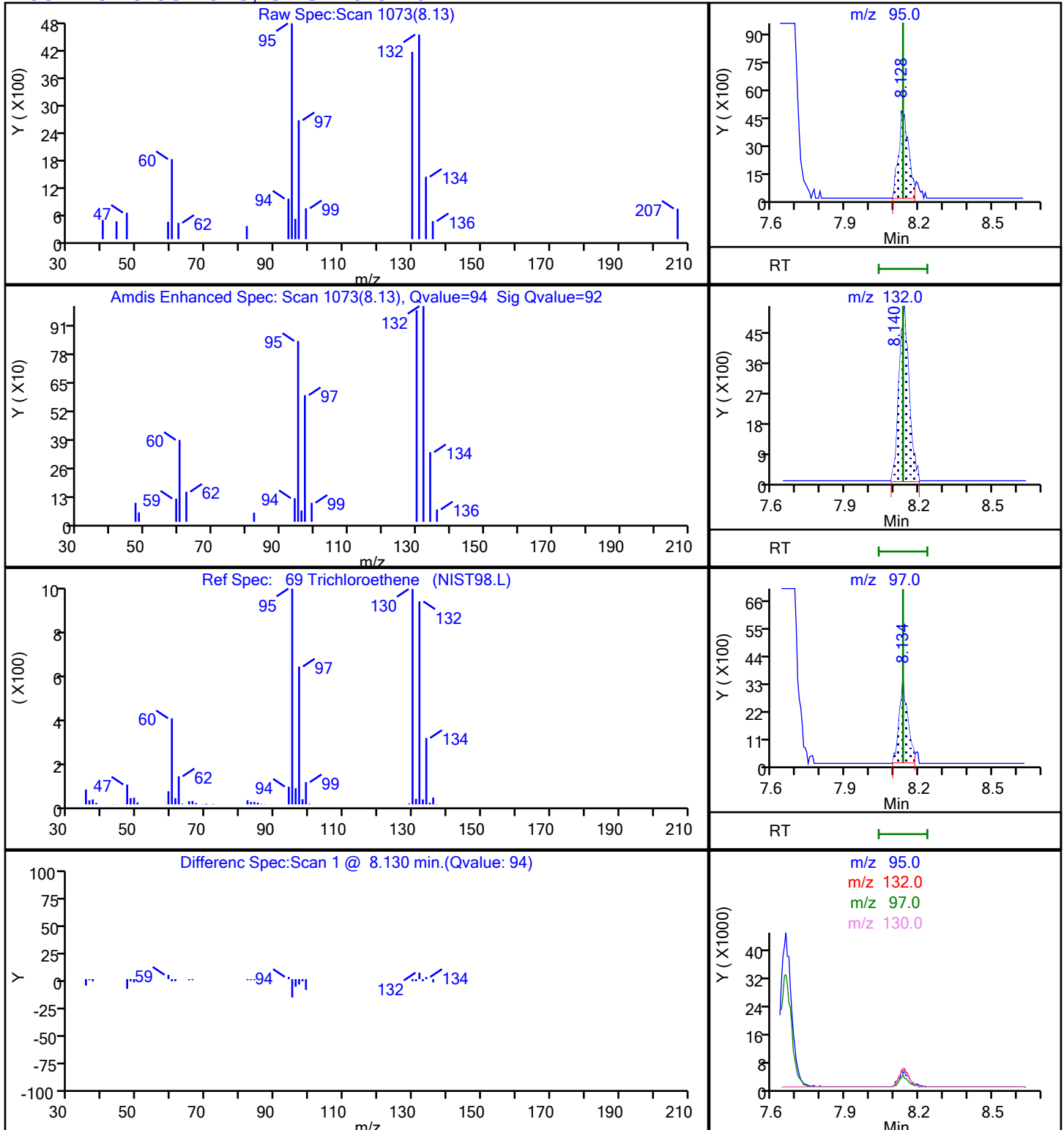
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

69 Trichloroethene, CAS: 79-01-6

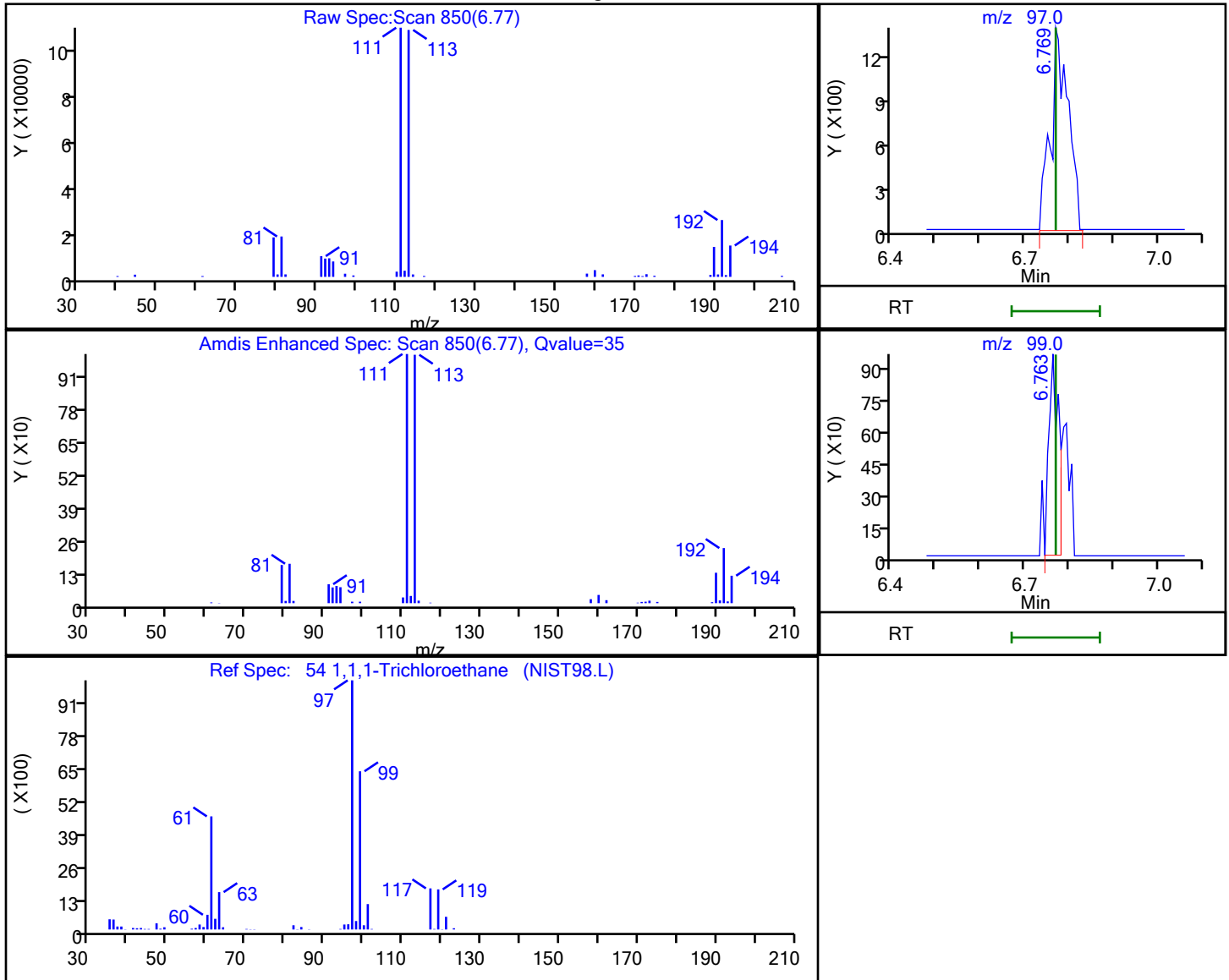


Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X12.D
 Injection Date: 27-Feb-2023 16:19:30 Instrument ID: 19094
 Lims ID: 410-116393-A-5 Lab Sample ID: 410-116393-5
 Client ID: HD-COD-SW-13-0/1-0
 Operator ID: knk41612 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

54 1,1,1-Trichloroethane, CAS: 71-55-6

Processing Results



RT	Mass	Response	Amount
6.77	97.00	3663	0.050241
6.76	99.00	1474	

Reviewer: kaewrungrueangp, 28-Feb-2023 11:02:59

Audit Action: Marked Compound Undetected

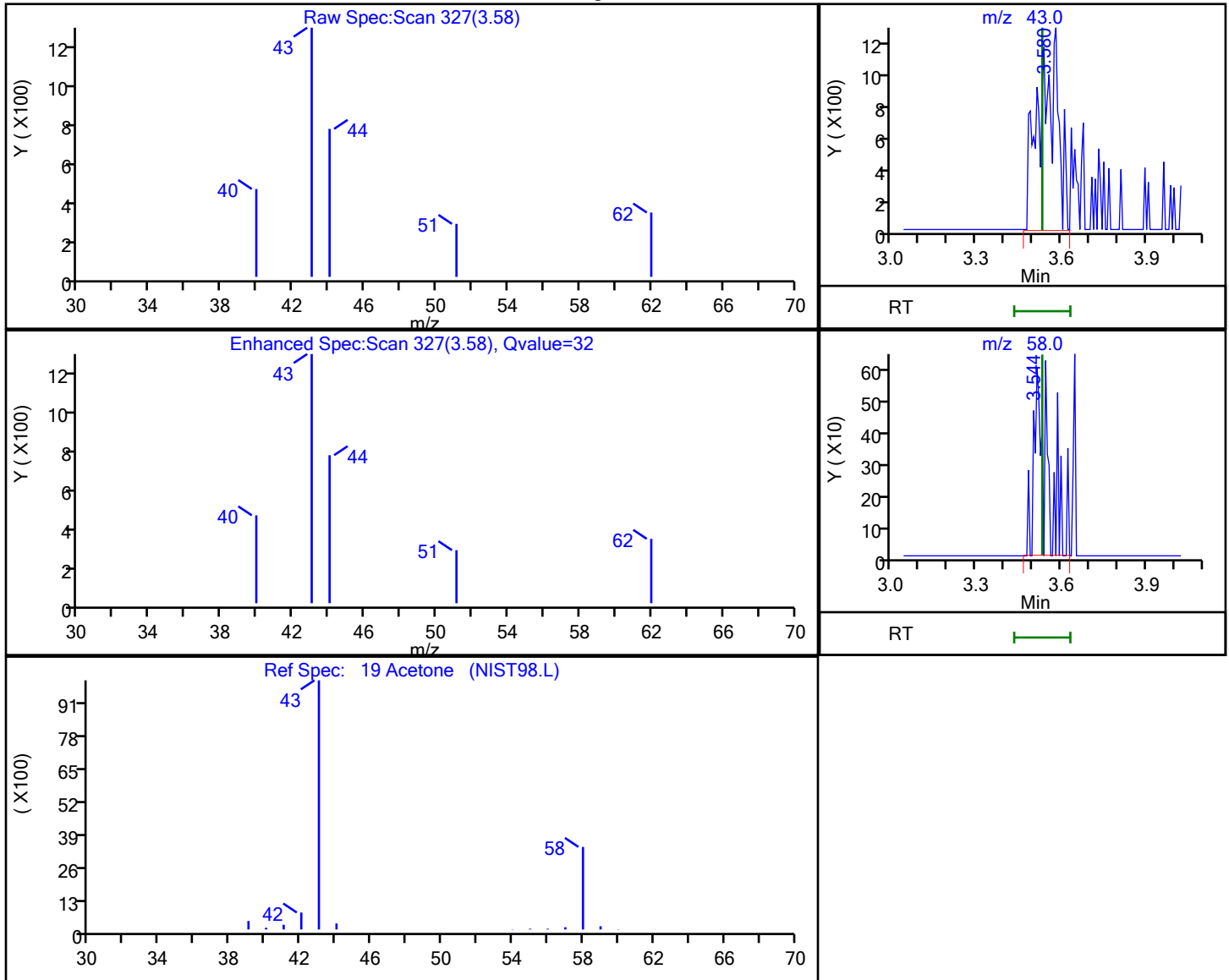
Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfms\Lancaster\ChromData\19094\20230227-77854.b\HF27X12.D
 Injection Date: 27-Feb-2023 16:19:30 Instrument ID: 19094
 Lims ID: 410-116393-A-5 Lab Sample ID: 410-116393-5
 Client ID: HD-COD-SW-13-0/1-0
 Operator ID: knk41612 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm i.d.) Detector: MS Quad

19 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
3.58	43.00	5812	1.558497
3.54	58.00	2059	

Reviewer: kaewrungrueangp, 28-Feb-2023 11:01:49

Audit Action: Marked Compound Undetected

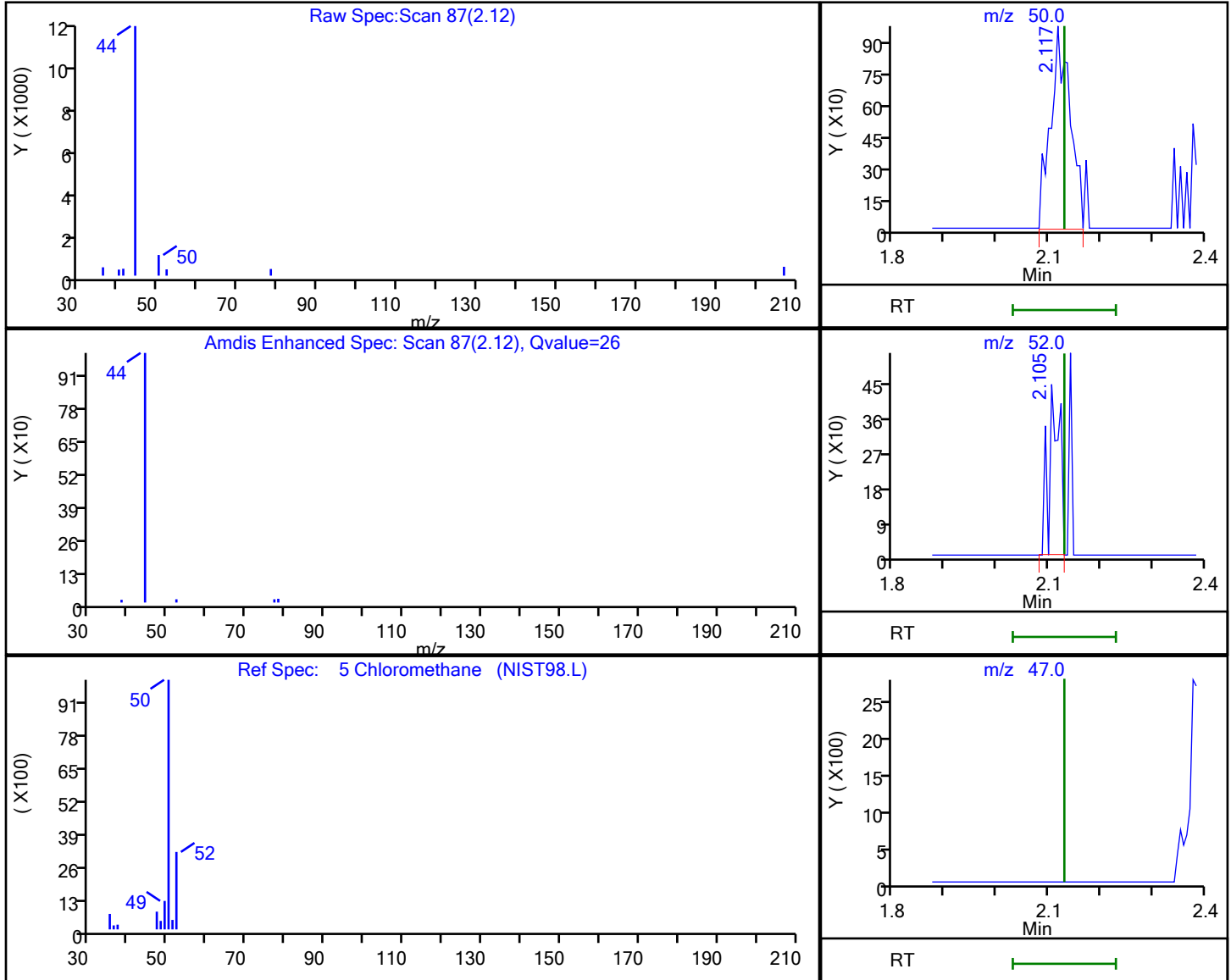
Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X12.D
 Injection Date: 27-Feb-2023 16:19:30 Instrument ID: 19094
 Lims ID: 410-116393-A-5 Lab Sample ID: 410-116393-5
 Client ID: HD-COD-SW-13-0/1-0
 Operator ID: knk41612 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

5 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
2.12	50.00	2573	0.043608
2.10	52.00	642	
2.13	47.00	0	

Reviewer: kaewrungrueangp, 28-Feb-2023 11:01:46

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-6

Matrix: Water

Lab File ID: HF27X13.D

Analysis Method: 8260D

Date Collected: 02/21/2023 11:08

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 16:39

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 348233

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	0.48	J FH	0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	0.15	J	0.50	0.10
75-35-4	1,1-Dichloroethene	0.20	J	0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND	FH	0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	ND		5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND	FH	0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND	FH	1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND	FH	0.50	0.10
67-66-3	Chloroform	0.31	J FH	0.50	0.090
74-87-3	Chloromethane	ND	FH	0.50	0.10
156-59-2	cis-1,2-Dichloroethene	2.3	FH	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	7.0		0.50	0.20
108-88-3	Toluene	ND		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-6

Matrix: Water

Lab File ID: HF27X13.D

Analysis Method: 8260D

Date Collected: 02/21/2023 11:08

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 16:39

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND	FH	0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	2.1		0.50	0.080
75-01-4	Vinyl chloride	ND	FH	0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		80-120
460-00-4	4-Bromofluorobenzene (Surr)	91		80-120
1868-53-7	Dibromofluoromethane (Surr)	108		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X13.D
 Lims ID: 410-116393-A-6
 Client ID: HD-COD-SW-15-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 16:39:30 ALS Bottle#: 13 Worklist Smp#: 14
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-014
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:13:33 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp Date: 28-Feb-2023 11:13:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.886				ND	
3 Chlorodifluoromethane	51		1.934				ND	7
2 Dichlorodifluoromethane	85		1.941				ND	
4 Dimethyl ether	45		2.001				ND	
5 Chloromethane	50		2.130				ND	U
6 Butadiene	39		2.239				ND	7
7 Vinyl chloride	62		2.245				ND	
8 2-Chloro-1,1,1-Trifluoroethane	118		2.312				ND	
9 Bromomethane	94		2.568				ND	
10 Chloroethane	64		2.648				ND	
11 Dichlorofluoromethane	67		2.873				ND	7
12 Trichlorofluoromethane	101		2.959				ND	
13 Ethanol	45		3.111				ND	
14 Ethyl ether	59		3.202				ND	
15 1,2-Dichloro-1,1,2-trifluoroethane	67		3.276				ND	
16 Acrolein	56		3.367				ND	
T 17 Ethanol TIC	45		3.440				ND	7
18 1,1-Dichloroethene	96	3.507	3.507	0.000	96	7691	0.2021	
19 Acetone	43		3.532				ND	
20 1,1,2-Trichloro-1,2,2-trifluoroethane	101		3.544				ND	
21 Isopropyl alcohol	45		3.684				ND	
22 Iodomethane	142		3.702				ND	
23 Ethyl bromide	108		3.727				ND	
24 Carbon disulfide	76		3.806				ND	7
26 Acetonitrile	41		3.897				ND	
25 Methyl acetate	43		3.940				ND	
27 3-Chloro-1-propene	41		3.977				ND	
28 Methylene Chloride	84		4.160				ND	
* 29 t-Butyl alcohol-d10 (IS)	65	4.178	4.166	0.012	1	51114	50.0	
T 30 Acetonitrile TIC	41		4.214				ND	
31 2-Methyl-2-propanol	59		4.275				ND	
32 Acrylonitrile	53		4.483				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
33 Methyl tert-butyl ether	73	4.531	4.556	-0.025	0	3496	0.0411	
34 trans-1,2-Dichloroethene	96		4.580				ND	7
35 Hexane	57		5.013				ND	
36 Vinyl acetate	43		5.214				ND	
37 1,1-Dichloroethane	63	5.251	5.233	0.018	1	11521	0.1458	
38 Isopropyl ether	45		5.294				ND	
39 2-Chloro-1,3-butadiene	53		5.348				ND	
T 40 Vinyl acetate (TIC)	43		5.537				ND	
41 Tert-butyl ethyl ether	59		5.824				ND	7
42 2-Butanone (MEK)	43		6.013				ND	7
43 cis-1,2-Dichloroethene	96	6.068	6.068	0.000	82	106160	2.29	
44 2,2-Dichloropropane	77		6.074				ND	
46 Ethyl acetate	43		6.098				ND	
45 Propionitrile	54		6.104				ND	
S 47 1,2-Dichloroethene, Total	100				0		2.29	
48 Methacrylonitrile	67		6.318				ND	
49 Chlorobromomethane	128		6.397				ND	
50 Tetrahydrofuran	71		6.409				ND	
51 Methyl acrylate	55		6.482				ND	
52 Chloroform	83	6.549	6.543	0.006	90	22947	0.3077	
\$ 53 Dibromofluoromethane (Surr)	113	6.763	6.763	0.000	94	399866	10.8	
54 1,1,1-Trichloroethane	97	6.775	6.769	0.006	96	33488	0.4825	
55 Cyclohexane	56		6.879				ND	
56 1,1-Dichloropropene	75		6.988				ND	
57 Carbon tetrachloride	117	6.994	6.988	0.006	24	2512	0.0419	
58 Isobutyl alcohol	41		7.116				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.214	7.220	-0.006	52	69979	10.4	
61 1-Chlorobutane	56		7.250				ND	
60 Benzene	78		7.250				ND	7
62 1,2-Dichloroethane	62		7.324				ND	
63 Isopropyl acetate	43		7.324				ND	
64 Tert-amyl methyl ether	73		7.439				ND	
* 65 Fluorobenzene (IS)	96	7.653	7.653	0.000	99	1463725	10.0	
66 n-Heptane	43		7.671				ND	
67 t-Amyl alcohol	73		7.842				ND	
68 n-Butanol	56		8.006				ND	
69 Trichloroethene	95	8.134	8.134	0.000	97	99292	2.06	
70 Methylcyclohexane	83		8.445				ND	
71 1,2-Dichloropropane	63		8.464				ND	
72 2-ethoxy-2-methyl butane	87		8.470				ND	
74 Methyl methacrylate	69		8.543				ND	
73 1,4-Dioxane	88		8.555				ND	
75 Dibromomethane	93		8.579				ND	
76 n-Propyl acetate	61		8.622				ND	
77 Dichlorobromomethane	83		8.805				ND	
78 2-Nitropropane	41		9.067				ND	
79 2-Chloroethyl vinyl ether	63		9.171				ND	
80 1-Bromo-2-chloroethane	63		9.195				ND	
81 cis-1,3-Dichloropropene	75		9.360				ND	
82 Chloroacetonitrile	75		9.427				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.524				ND	
\$ 84 Toluene-d8 (Surr)	98	9.664	9.665	-0.001	93	1650353	9.45	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
85 Toluene	92	9.750	9.744	0.006	95	5612	0.0433	
86 trans-1,3-Dichloropropene	75		10.000				ND	
T 90 Decamethylcyclotrasiloxane TIC	75	10.146	10.000	0.146	1	1221	0.008342	7
T 93 2,3-Dibromo-1-propanol TIC	57		10.000				ND	
T 97 2-Bromo-3-chloropropene TIC	75	10.140	10.000	0.140	1	1608	0.0110	7
T 91 Epibromohydrin TIC	57	9.664	10.000	-0.336	1	834	0.005698	7
T 98 3-Chloro-1,2-propanediol TIC	44	9.829	10.000	-0.171	1	826	0.005643	7
T 89 Octamethylcyclotetrasiloxane TIC	75	12.158	10.000	2.158	86	101718	0.6949	
T 88 Nitrobenzene TIC	77	10.018	10.000	0.018	1	389	0.002658	7
T 87 Hexachloroethane TIC	117	10.128	10.000	0.128	1	338	0.002309	7
T 95 2-Chloroethanol TIC	44	9.829	10.000	-0.171	1	826	0.005643	7
T 96 Chloroacetaldehyde TIC	50	9.945	10.000	-0.055	1	339	0.002316	7
T 94 2,3-Dibromopropene TIC	119	10.152	10.000	0.152	1	5109	0.0349	7
T 208 Methyl acrylate TIC	55	9.671	10.000	-0.329	13	5214	0.0356	
T 92 Monochloroacetic acid TIC	50	9.945	10.000	-0.055	1	339	0.002316	7
T 99 Isopropyl alcohol TIC	45	10.000	10.000	0.000	1	289	0.001974	7
T 100 Ethylene oxide TIC	44	9.829	10.000	-0.171	1	826	0.005643	7
T 101 Vinyl bromide TIC	106	11.250	10.000	1.250	1	284	0.001940	7
T 102 Epichlorohydrin TIC	57	9.664	10.000	-0.336	29	834	0.005698	7
T 103 2-Bromoethanol TIC	45	10.000	10.000	0.000	1	289	0.001974	7
S 104 1,3-Dichloropropene, Total	100		10.060				ND	7
105 Ethyl methacrylate	69		10.061				ND	
106 1,1,2-Trichloroethane	97		10.207				ND	7
107 Tetrachloroethene	166	10.298	10.293	0.005	97	420240	7.02	
108 1,3-Dichloropropane	76		10.366				ND	
109 2-Hexanone	43		10.414				ND	
110 n-Butyl acetate	43		10.530				ND	U
111 Chlorodibromomethane	129		10.585				ND	
112 Ethylene Dibromide	107		10.695				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	85	1427406	10.0	
114 1-Chlorohexane	91		11.134				ND	7
115 Chlorobenzene	112		11.152				ND	7
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91		11.237				ND	7
S 117 Xylenes, Total	106		11.245				ND	7
119 m-Xylene & p-Xylene	106		11.353				ND	7
120 o-Xylene	106		11.676				ND	7
121 Styrene	104		11.695				ND	
122 Bromoform	173		11.853				ND	
123 Isopropylbenzene	105		11.981				ND	
124 cis-1,4-Dichloro-2-butene	88		12.012				ND	
125 Cyclohexanone	55		12.042				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	95	647960	9.14	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
128 Bromobenzene	156		12.237				ND	
129 trans-1,4-Dichloro-2-butene	53		12.243				ND	
130 1,2,3-Trichloropropane	110		12.268				ND	
131 N-Propylbenzene	91		12.304				ND	
132 2-Chlorotoluene	126		12.384				ND	
133 1,3,5-Trimethylbenzene	105		12.445				ND	7
134 4-Chlorotoluene	126		12.475				ND	
135 tert-Butylbenzene	134		12.682				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
136 Pentachloroethane	167		12.713				ND	
137 1,2,4-Trimethylbenzene	105		12.725				ND	7
138 sec-Butylbenzene	105		12.847				ND	
139 1,3-Dichlorobenzene	146		12.944				ND	7
140 4-Isopropyltoluene	119		12.951				ND	7
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	843422	10.0	
142 1,4-Dichlorobenzene	146		13.018				ND	7
143 1,2,3-Trimethylbenzene	120		13.030				ND	7
144 Benzyl chloride	126		13.091				ND	
145 p-Diethylbenzene	119		13.152				ND	U
146 n-Butylbenzene	92		13.243				ND	
147 1,2-Dichlorobenzene	146		13.274				ND	7
148 Hexachloroethane	201		13.682				ND	
149 1,2-Dibromo-3-Chloropropane	155		13.816				ND	
150 1,3,5-Trichlorobenzene	180		13.938				ND	
151 1,2,4-Trichlorobenzene	180		14.359				ND	
152 Hexachlorobutadiene	225		14.444				ND	
153 Naphthalene	128		14.542				ND	7
154 1,2,3-Trichlorobenzene	180		14.682				ND	7
155 2-Methylnaphthalene	142		15.298				ND	
156 tert-Butyl Formate	1		0.000				ND	
157 Dodecane	57		0.000				ND	
158 Pentane	43		0.000				ND	
159 1,1-Dichloroacetone	1		0.000				ND	
160 n-Decane	57		0.000				ND	
161 1-Bromo-3-Chloropropane	1		0.000				ND	
162 1-Chloropropane	1		0.000				ND	
163 Propene oxide	1		0.000				ND	
164 1,1-Dichloro-1-fluoroethane	1		0.000				ND	
165 Methylal	1		0.000				ND	
166 2-Bromo-1-chloropropane	1		0.000				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_LLcentISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X13.D

Injection Date: 27-Feb-2023 16:39:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: 410-116393-A-6

Lab Sample ID: 410-116393-6

Worklist Smp#: 14

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

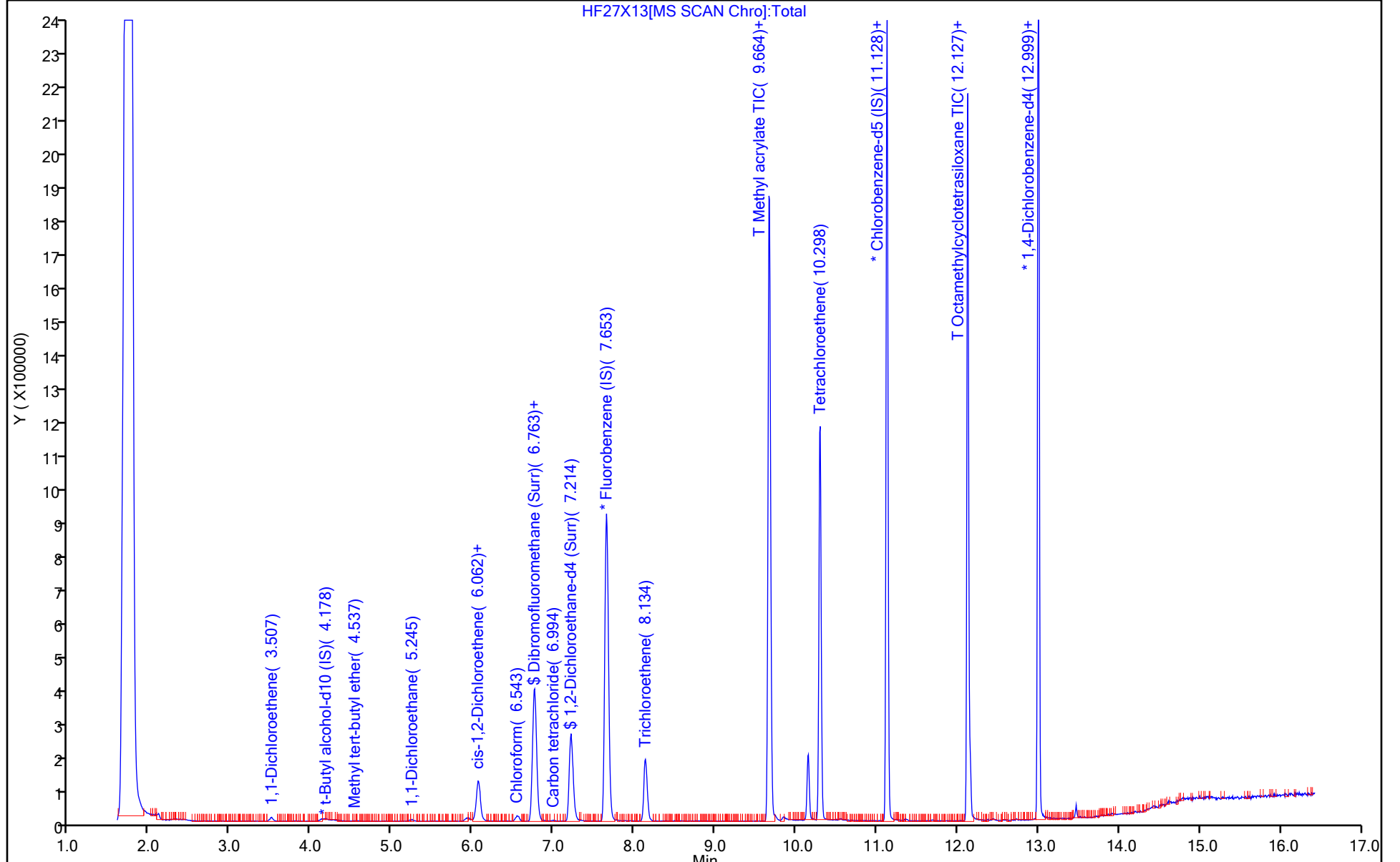
ALS Bottle#: 13

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X13.D
 Lims ID: 410-116393-A-6
 Client ID: HD-COD-SW-15-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 16:39:30 ALS Bottle#: 13 Worklist Smp#: 14
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-014
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:13:33 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp

Date: 28-Feb-2023 11:13:33

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.8	107.93
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	103.51
\$ 84 Toluene-d8 (Surr)	10.0	9.45	94.51
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.14	91.40

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X13.D

Injection Date: 27-Feb-2023 16:39:30

Instrument ID: 19094

Lims ID: 410-116393-A-6

Lab Sample ID: 410-116393-6

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

Operator ID: knk41612

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

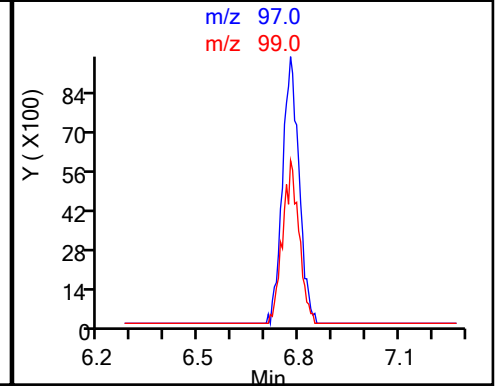
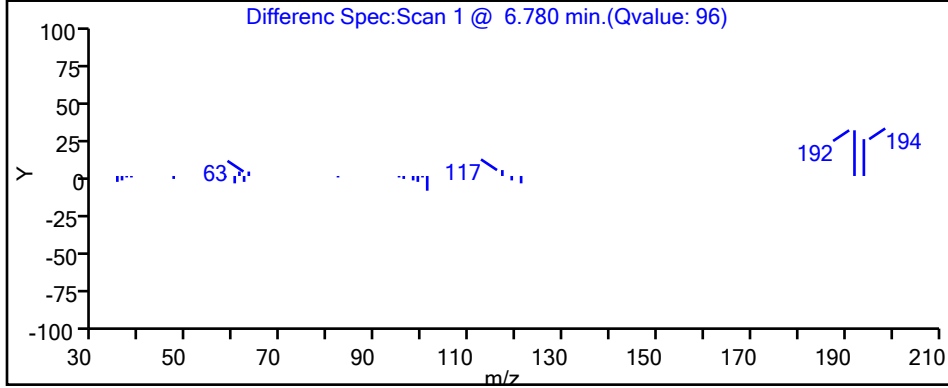
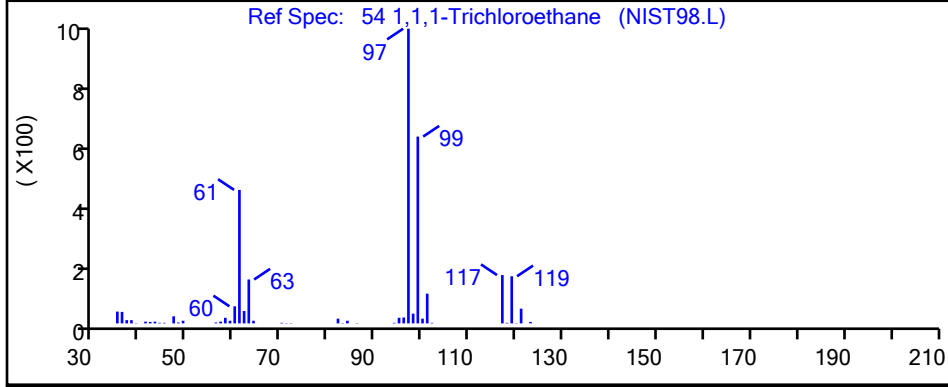
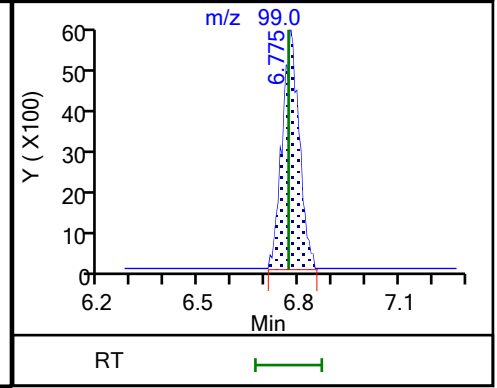
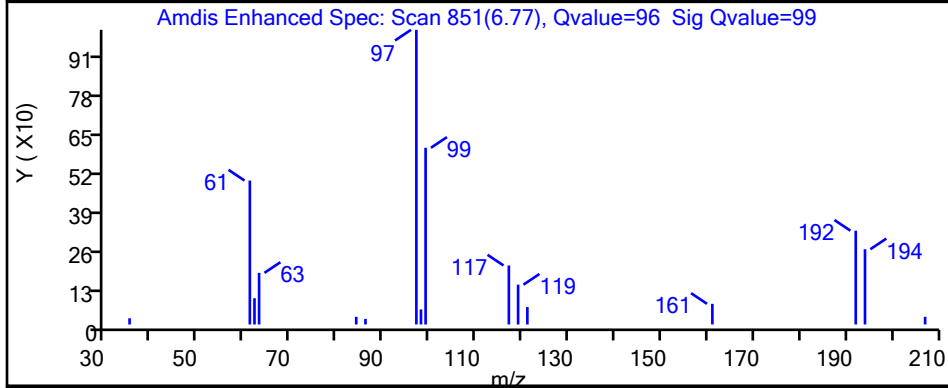
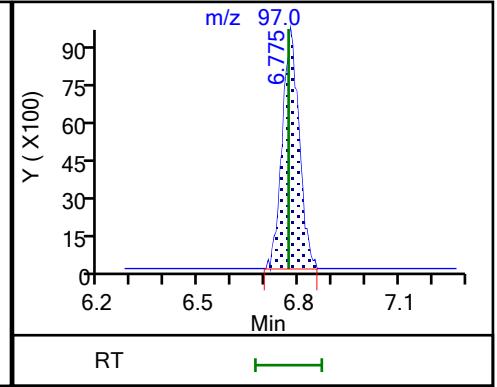
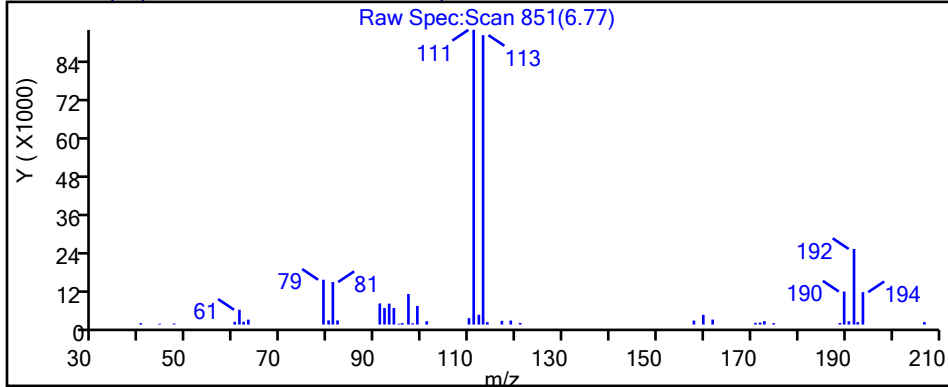
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

54 1,1,1-Trichloroethane, CAS: 71-55-6



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X13.D

Injection Date: 27-Feb-2023 16:39:30

Instrument ID: 19094

Lims ID: 410-116393-A-6

Lab Sample ID: 410-116393-6

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

Operator ID: knk41612

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

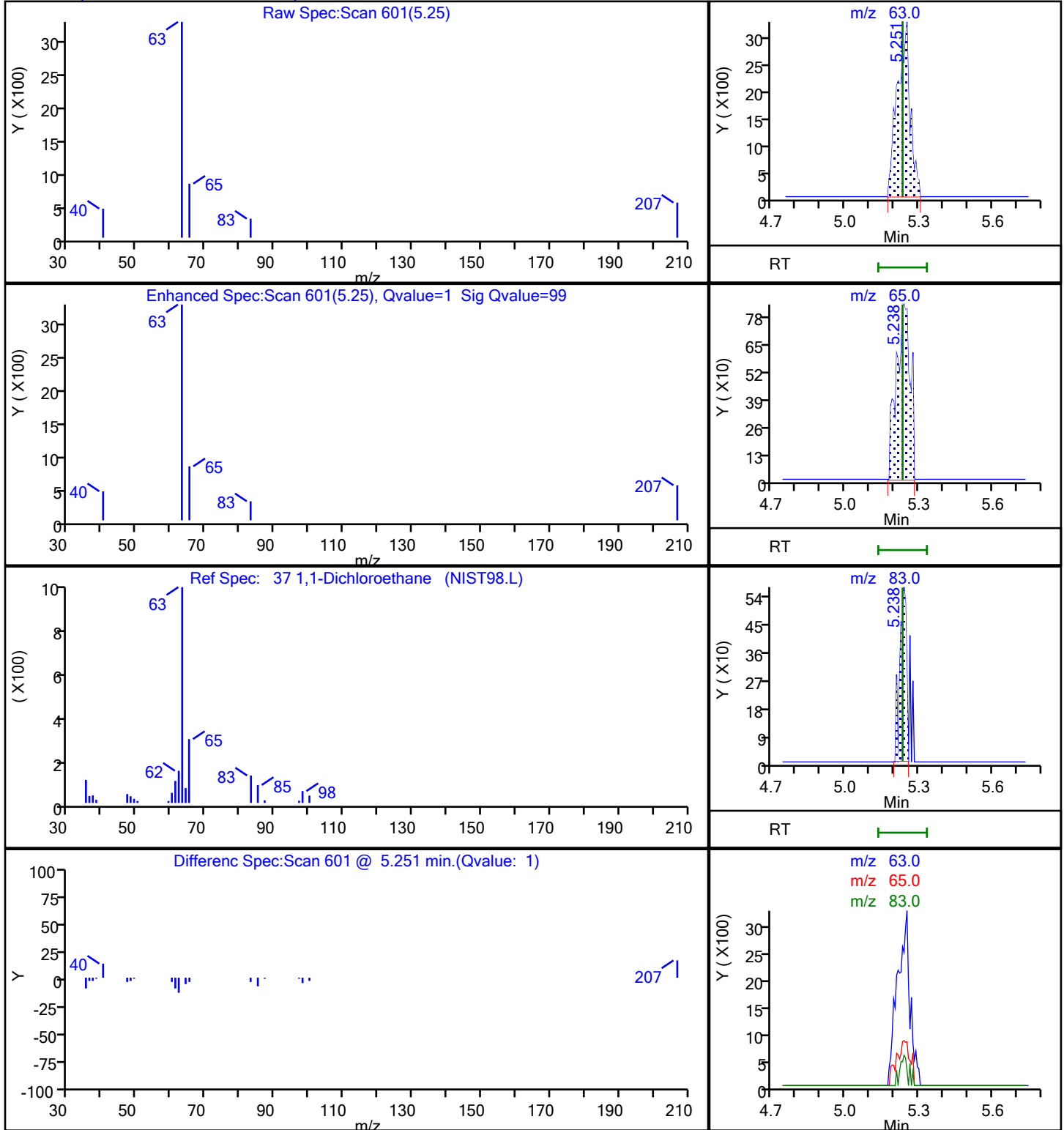
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X13.D

Injection Date: 27-Feb-2023 16:39:30

Instrument ID: 19094

Lims ID: 410-116393-A-6

Lab Sample ID: 410-116393-6

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

Operator ID: knk41612

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

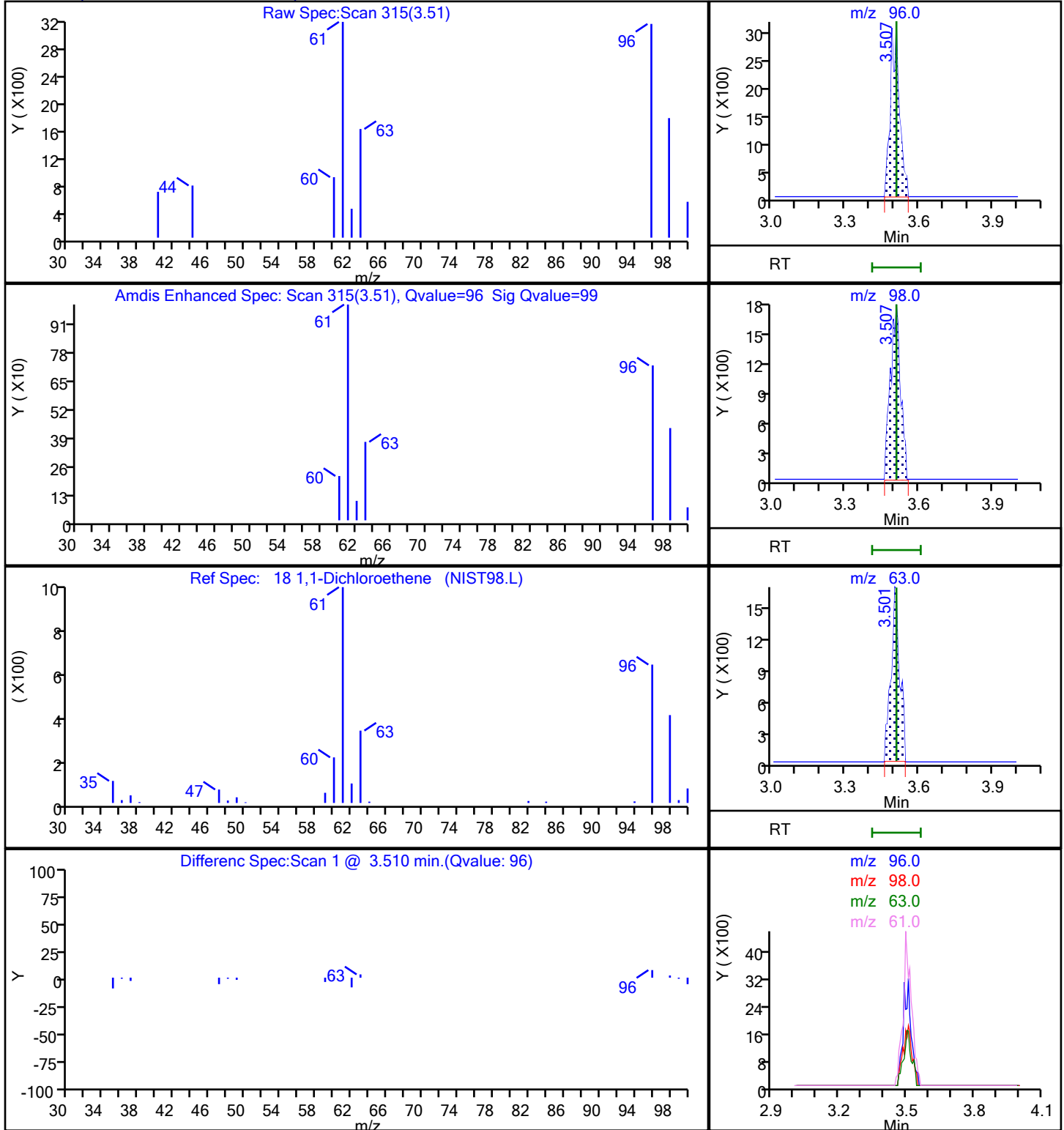
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

18 1,1-Dichloroethene, CAS: 75-35-4



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X13.D

Injection Date: 27-Feb-2023 16:39:30

Instrument ID: 19094

Lims ID: 410-116393-A-6

Lab Sample ID: 410-116393-6

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

Operator ID: knk41612

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

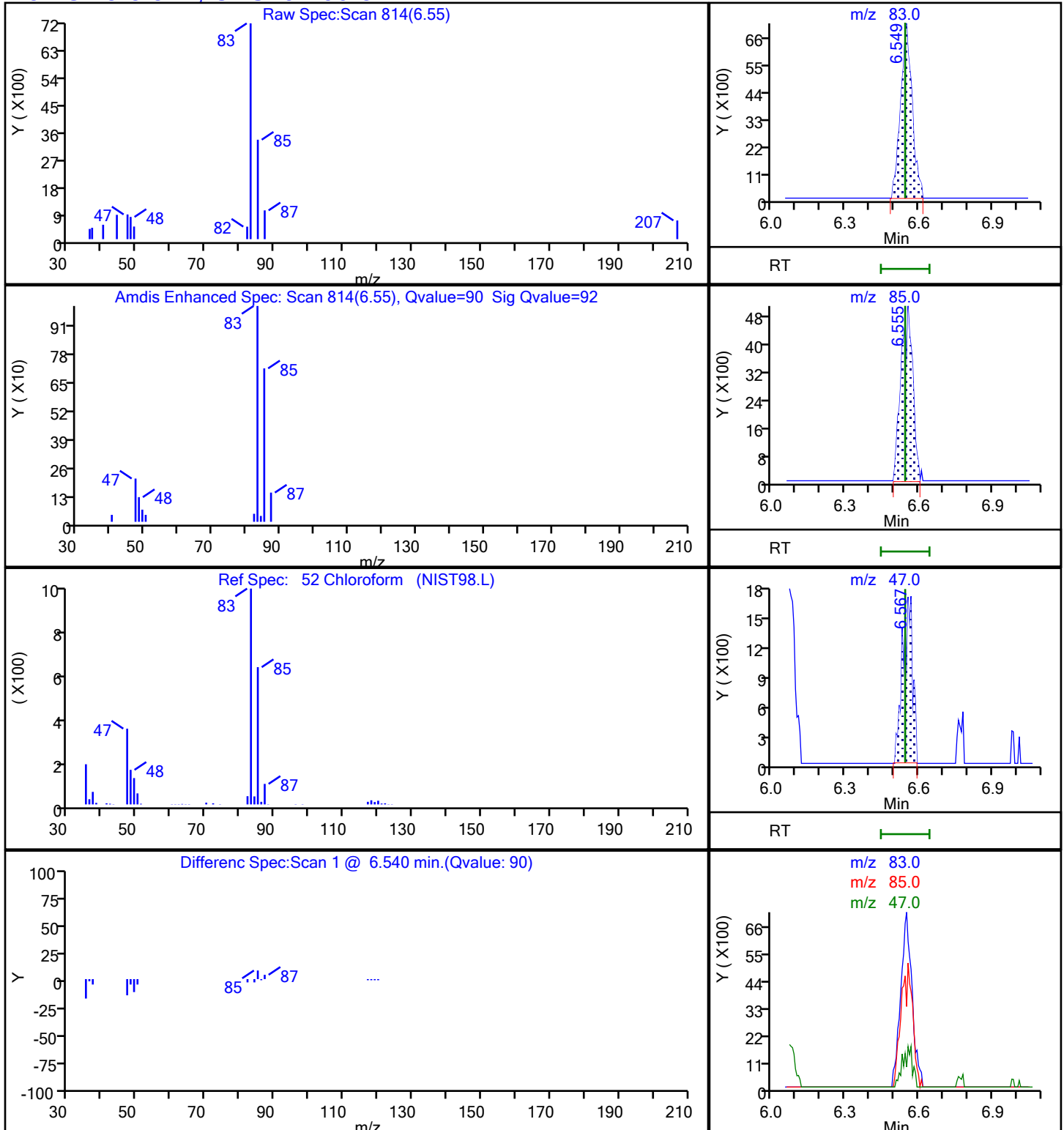
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

52 Chloroform, CAS: 67-66-3



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X13.D

Injection Date: 27-Feb-2023 16:39:30

Instrument ID: 19094

Lims ID: 410-116393-A-6

Lab Sample ID: 410-116393-6

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

Operator ID: knk41612

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

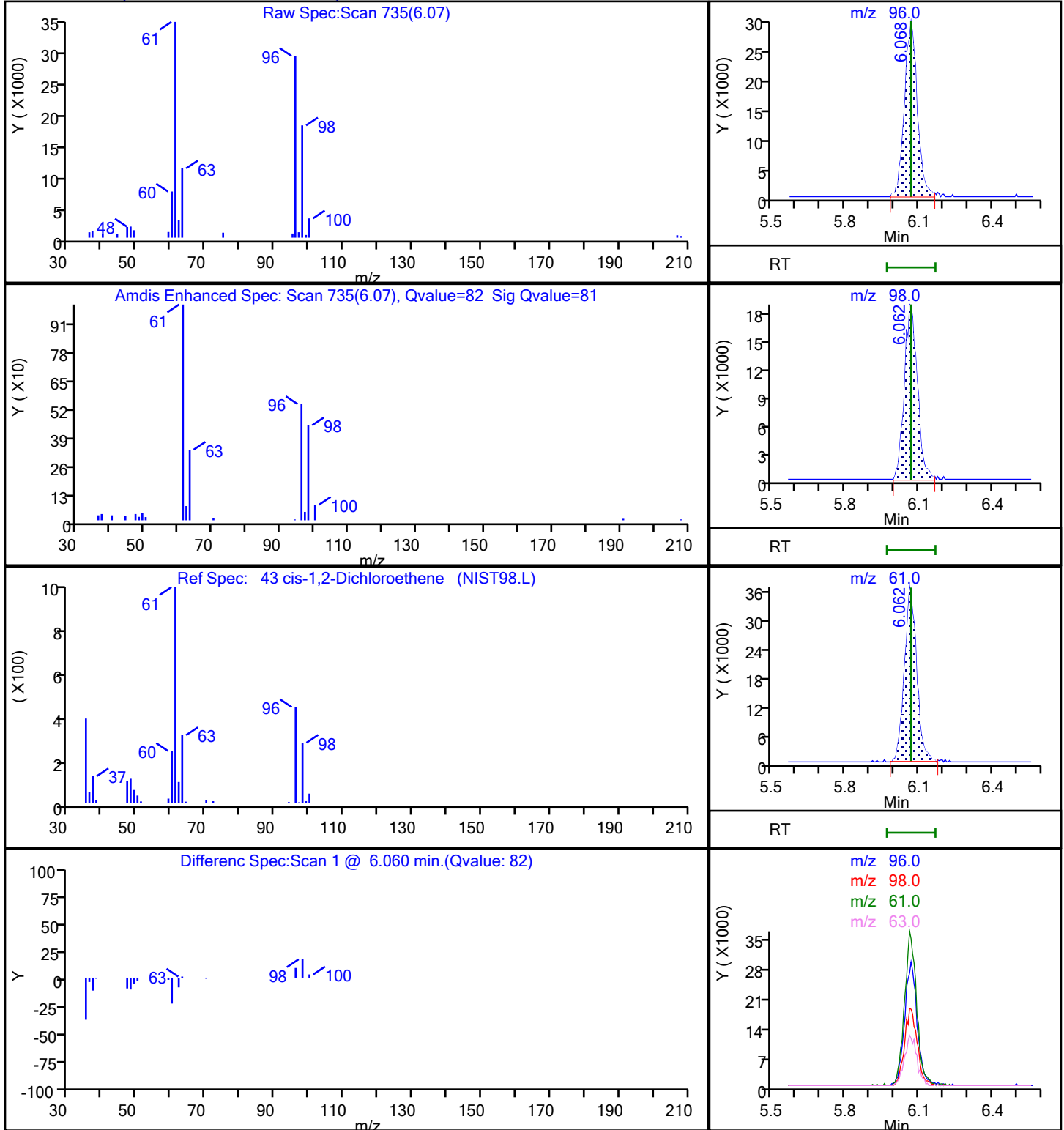
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X13.D

Injection Date: 27-Feb-2023 16:39:30

Instrument ID: 19094

Lims ID: 410-116393-A-6

Lab Sample ID: 410-116393-6

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

Operator ID: knk41612

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

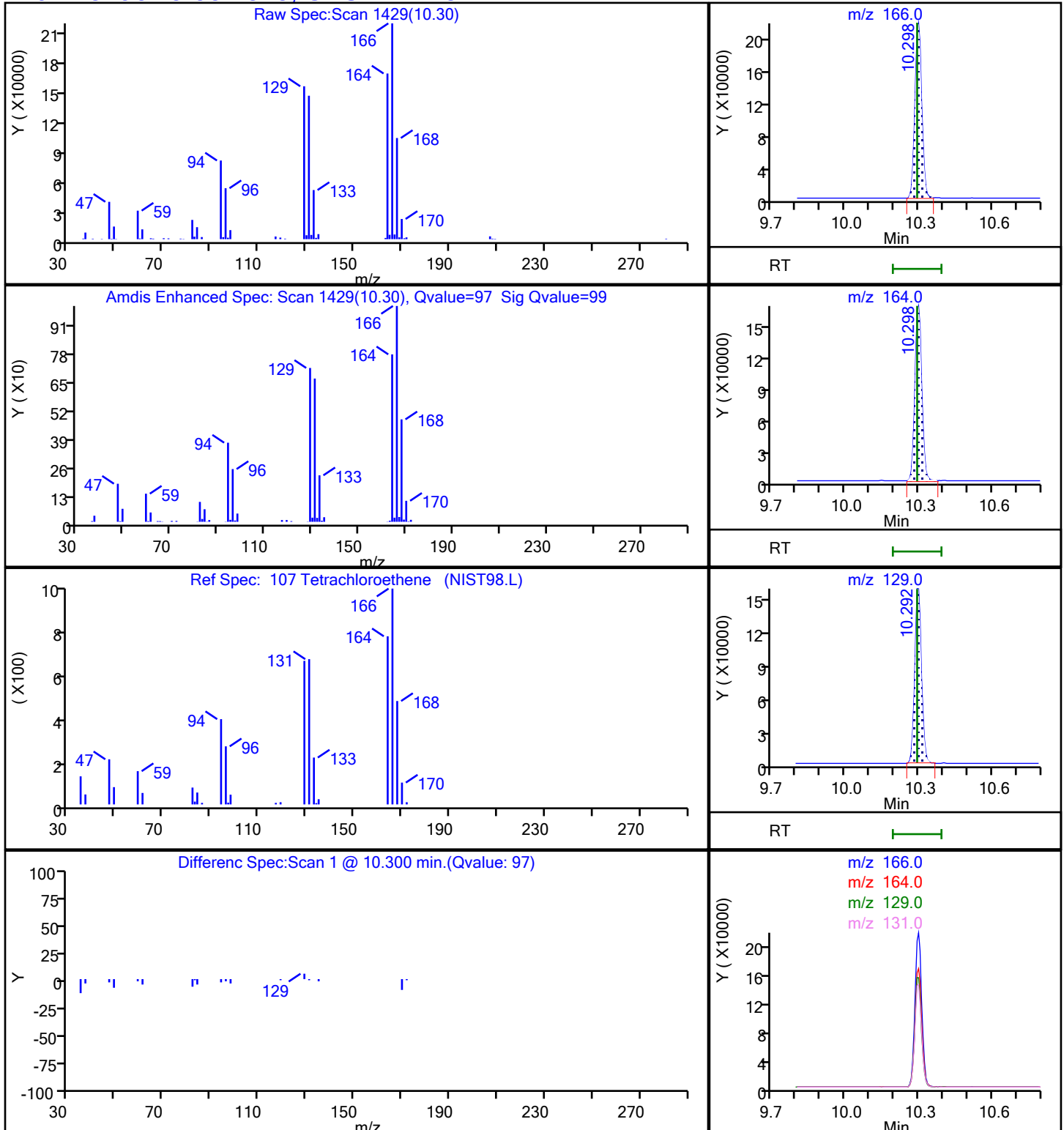
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

107 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X13.D

Injection Date: 27-Feb-2023 16:39:30

Instrument ID: 19094

Lims ID: 410-116393-A-6

Lab Sample ID: 410-116393-6

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

Operator ID: knk41612

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

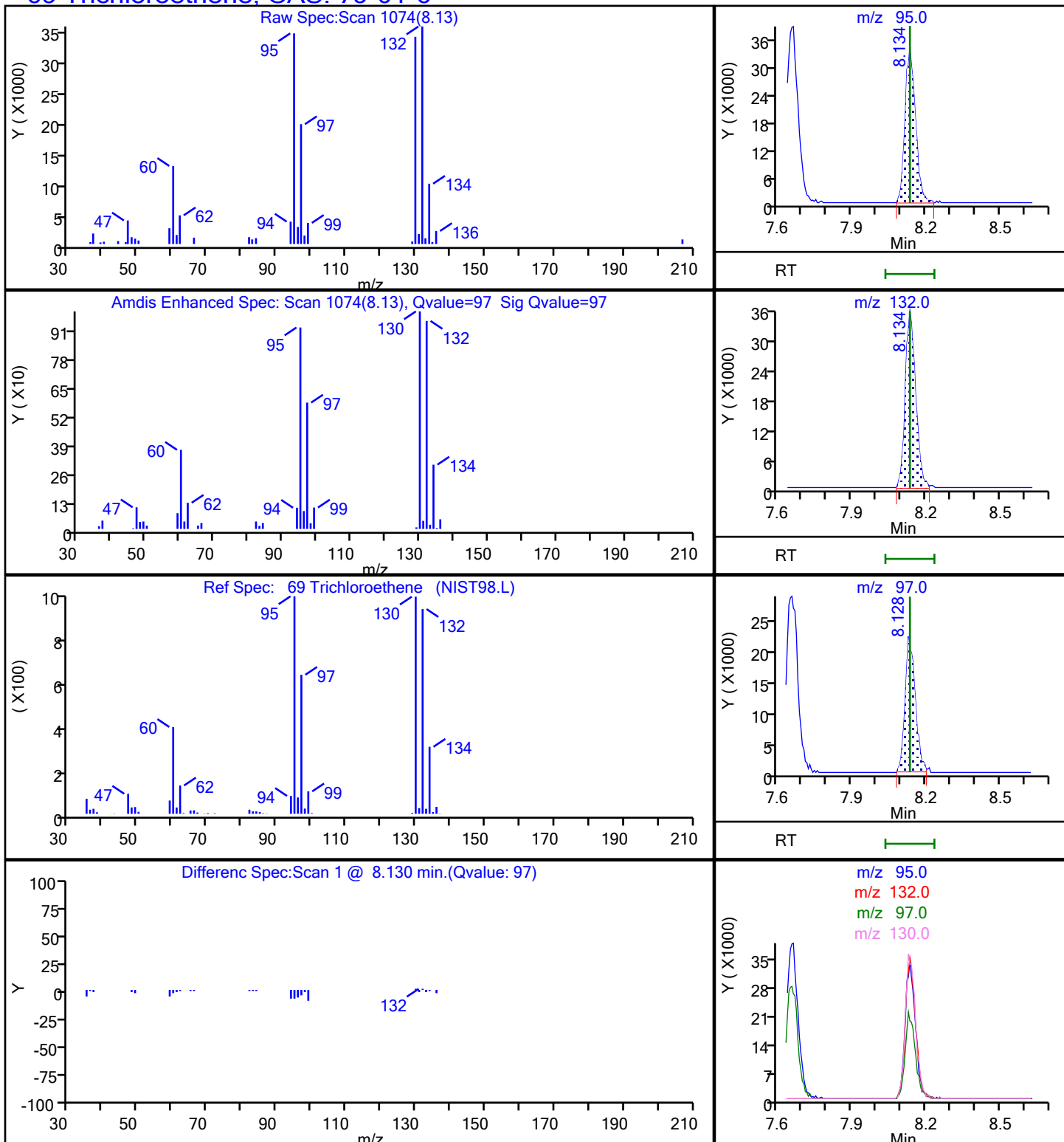
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

69 Trichloroethene, CAS: 79-01-6

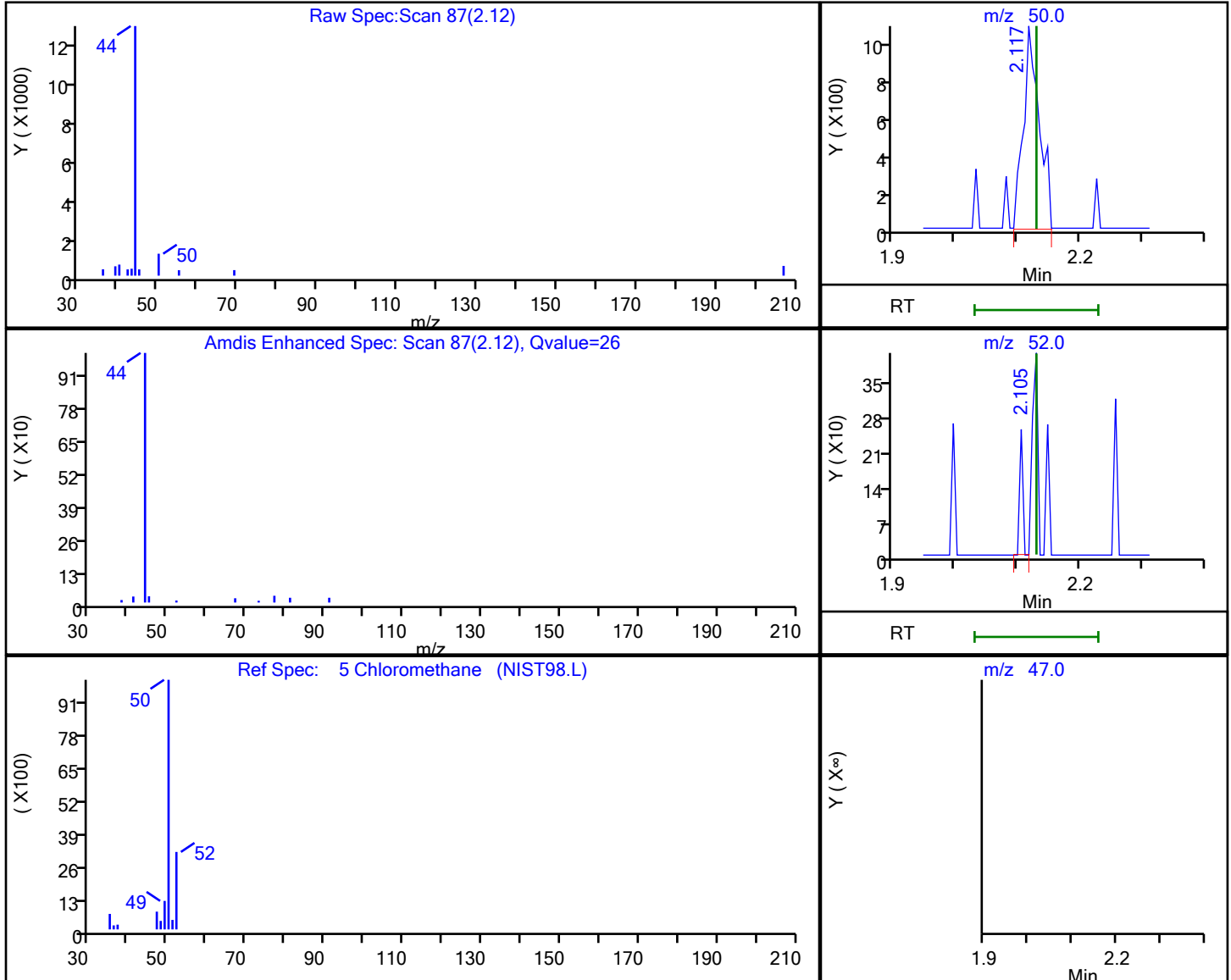


Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X13.D
 Injection Date: 27-Feb-2023 16:39:30 Instrument ID: 19094
 Lims ID: 410-116393-A-6 Lab Sample ID: 410-116393-6
 Client ID: HD-COD-SW-15-0/1-0
 Operator ID: knk41612 ALS Bottle#: 13 Worklist Smp#: 14
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

5 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
2.12	50.00	1890	0.033647
2.10	52.00	93	
2.13	47.00	0	

Reviewer: kaewrungrueangp, 28-Feb-2023 11:12:37

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.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-7

Matrix: Water

Lab File ID: HF27X16.D

Analysis Method: 8260D

Date Collected: 02/21/2023 09:47

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 17:41

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	3.8	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.25	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	0.67		0.50	0.20
108-88-3	Toluene	0.15	J	0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-7

Matrix: Water

Lab File ID: HF27X16.D

Analysis Method: 8260D

Date Collected: 02/21/2023 09:47

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 17:41

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.29	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	107		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X16.D
 Lims ID: 410-116393-A-7
 Client ID: HD-COD-SW-16-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 17:41:30 ALS Bottle#: 16 Worklist Smp#: 17
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-017
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:16:30 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp

Date: 28-Feb-2023 11:16:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	2.123	2.130	-0.007	26	3907	0.0560	
7 Vinyl chloride	62		2.245				ND	7
9 Bromomethane	94		2.568				ND	
10 Chloroethane	64		2.648				ND	
18 1,1-Dichloroethene	96		3.507				ND	
19 Acetone	43	3.568	3.532	0.036	71	19082	3.82	
24 Carbon disulfide	76	3.806	3.806	0.000	76	8167	0.0645	
28 Methylene Chloride	84		4.160				ND	
* 29 t-Butyl alcohol-d10 (IS)	65	4.160	4.166	-0.006	19	78071	50.0	
33 Methyl tert-butyl ether	73		4.556				ND	
34 trans-1,2-Dichloroethene	96		4.580				ND	7
37 1,1-Dichloroethane	63		5.233				ND	
42 2-Butanone (MEK)	43		6.013				ND	7
43 cis-1,2-Dichloroethene	96	6.086	6.068	0.018	81	14373	0.2491	
49 Chlorobromomethane	128		6.397				ND	
52 Chloroform	83	6.543	6.543	0.000	26	6296	0.0680	
\$ 53 Dibromofluoromethane (Surr)	113	6.757	6.763	-0.006	94	493521	10.7	
54 1,1,1-Trichloroethane	97		6.769				ND	U
57 Carbon tetrachloride	117		6.988				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.202	7.220	-0.018	52	89603	10.7	M
60 Benzene	78	7.244	7.250	-0.006	41	10843	0.0477	
62 1,2-Dichloroethane	62		7.324				ND	7
* 65 Fluorobenzene (IS)	96	7.647	7.653	-0.006	99	1818603	10.0	
69 Trichloroethene	95	8.134	8.134	0.000	93	17575	0.2936	
71 1,2-Dichloropropane	63		8.464				ND	
77 Dichlorobromomethane	83		8.805				ND	7
81 cis-1,3-Dichloropropene	75		9.360				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.524				ND	7
\$ 84 Toluene-d8 (Surr)	98	9.671	9.665	0.006	93	2063650	9.59	
85 Toluene	92	9.744	9.744	0.000	98	24332	0.1522	
86 trans-1,3-Dichloropropene	75		10.000				ND	7
106 1,1,2-Trichloroethane	97		10.207				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.299	10.293	0.006	96	49684	0.6732	
109 2-Hexanone	43		10.414				ND	7
111 Chlorodibromomethane	129		10.585				ND	
112 Ethylene Dibromide	107		10.695				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	85	1758633	10.0	
115 Chlorobenzene	112		11.152				ND	7
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91		11.237				ND	7
S 117 Xylenes, Total	106				0		0.0957	
119 m-Xylene & p-Xylene	106	11.359	11.353	0.006	97	7896	0.0663	
120 o-Xylene	106	11.682	11.676	0.006	93	3374	0.0293	
121 Styrene	104		11.695				ND	7
122 Bromoform	173		11.853				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.128	12.121	0.007	95	822143	9.41	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1043265	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

MSV_LLcentISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X16.D

Injection Date: 27-Feb-2023 17:41:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: 410-116393-A-7

Lab Sample ID: 410-116393-7

Worklist Smp#: 17

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

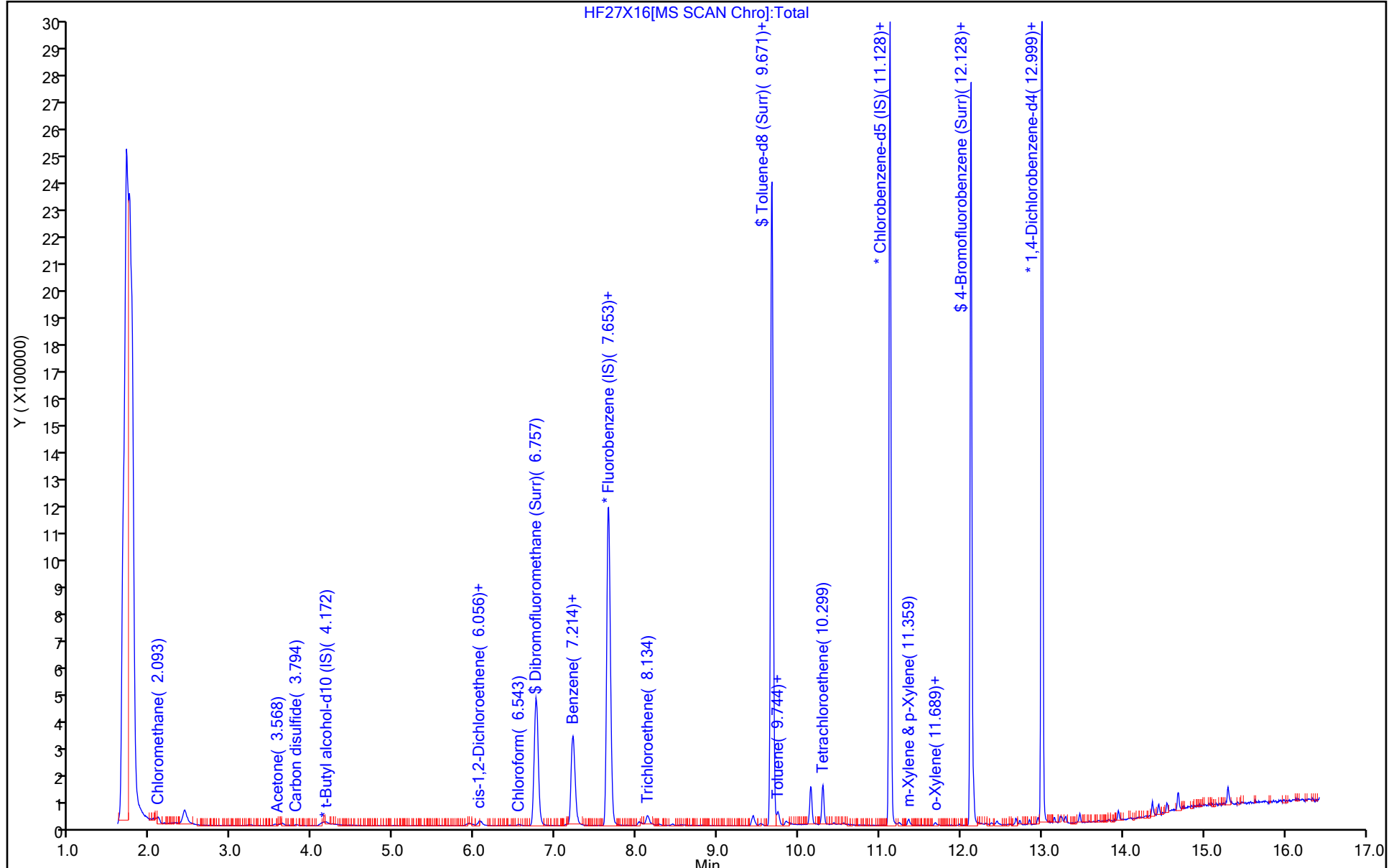
ALS Bottle#: 16

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X16.D
 Lims ID: 410-116393-A-7
 Client ID: HD-COD-SW-16-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 17:41:30 ALS Bottle#: 16 Worklist Smp#: 17
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-017
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:16:30 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp

Date: 28-Feb-2023 11:16:30

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.7	107.22
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.7	106.68
\$ 84 Toluene-d8 (Surr)	10.0	9.59	95.92
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.41	94.13

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X16.D

Injection Date: 27-Feb-2023 17:41:30

Instrument ID: 19094

Lims ID: 410-116393-A-7

Lab Sample ID: 410-116393-7

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

Operator ID: knk41612

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

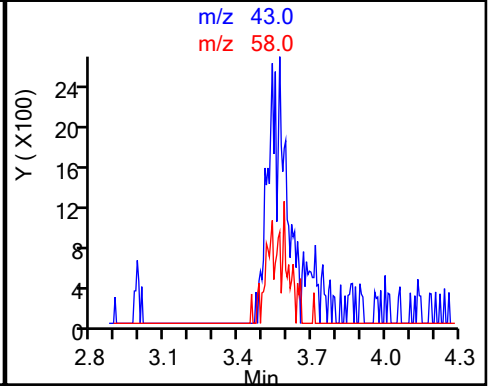
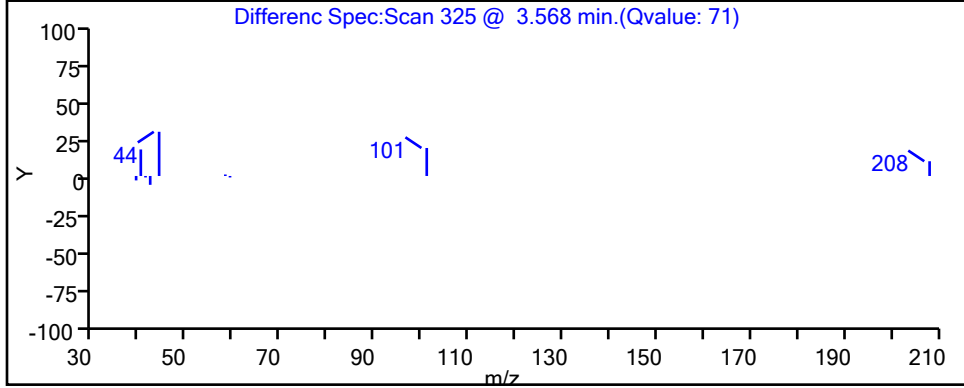
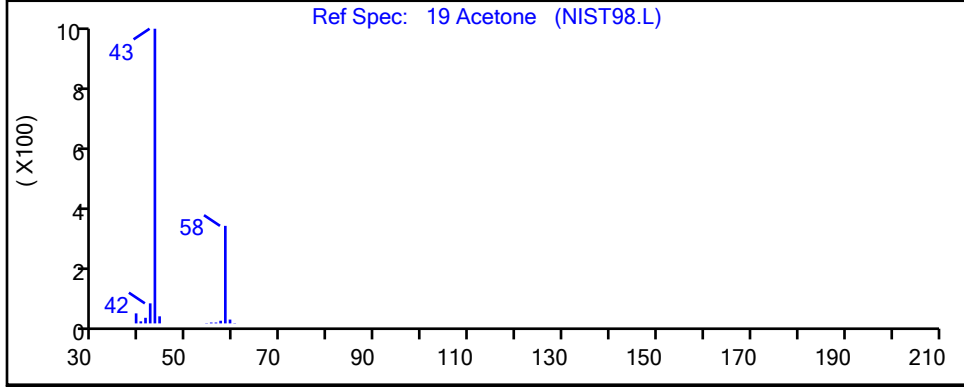
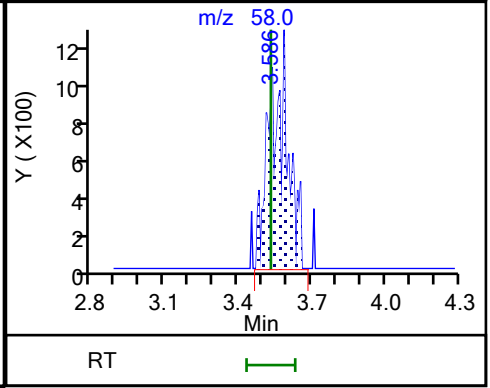
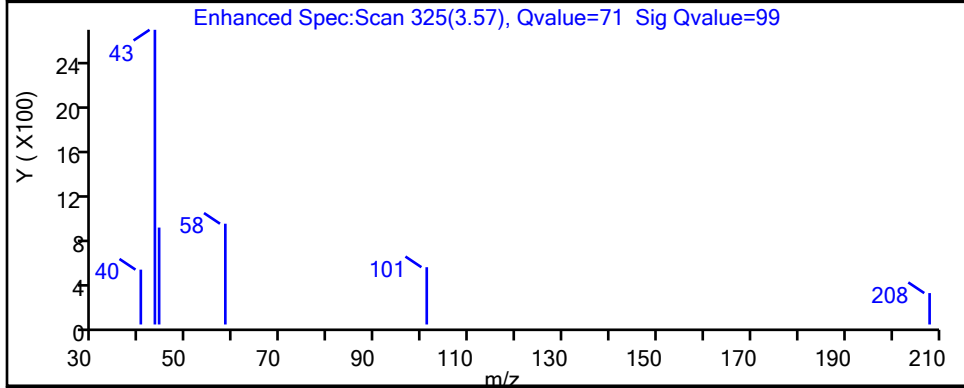
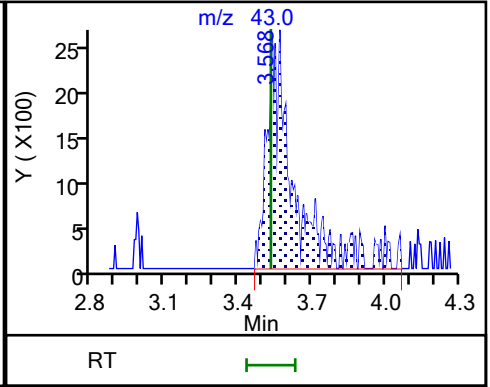
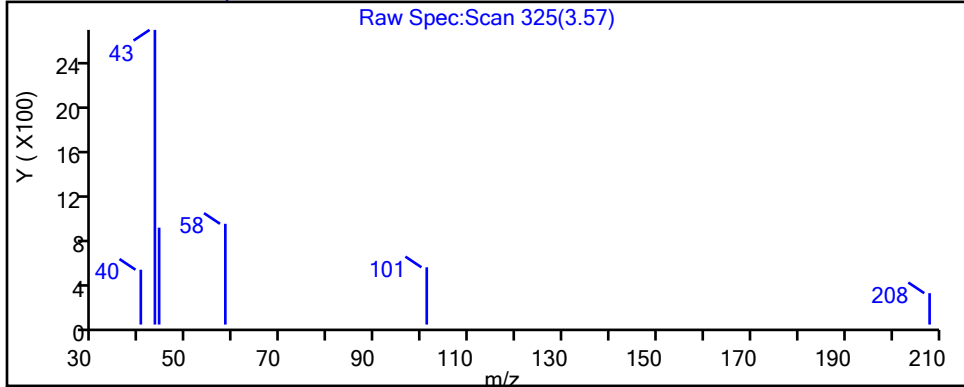
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

19 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X16.D

Injection Date: 27-Feb-2023 17:41:30

Instrument ID: 19094

Lims ID: 410-116393-A-7

Lab Sample ID: 410-116393-7

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

Operator ID: knk41612

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

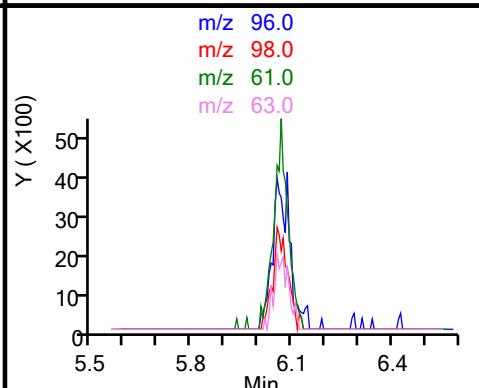
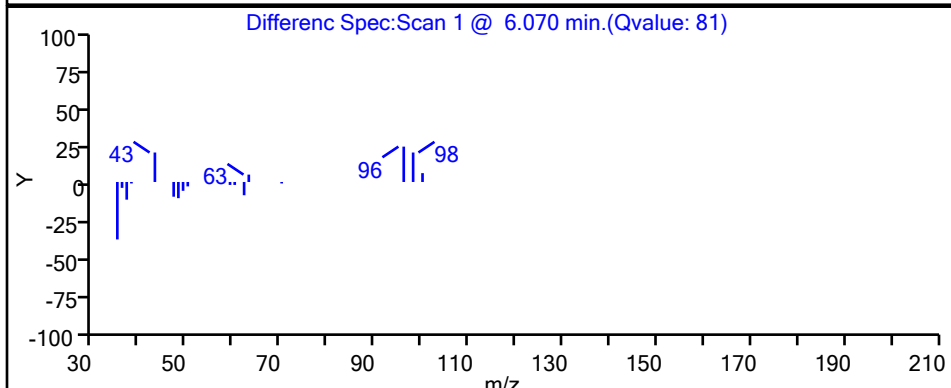
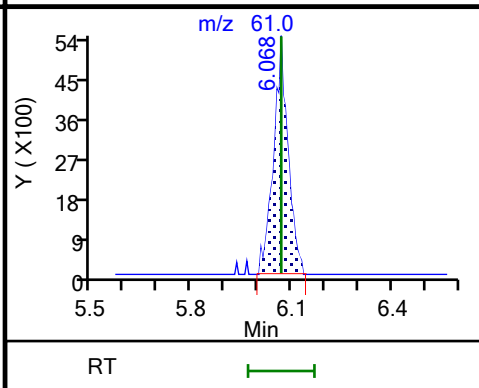
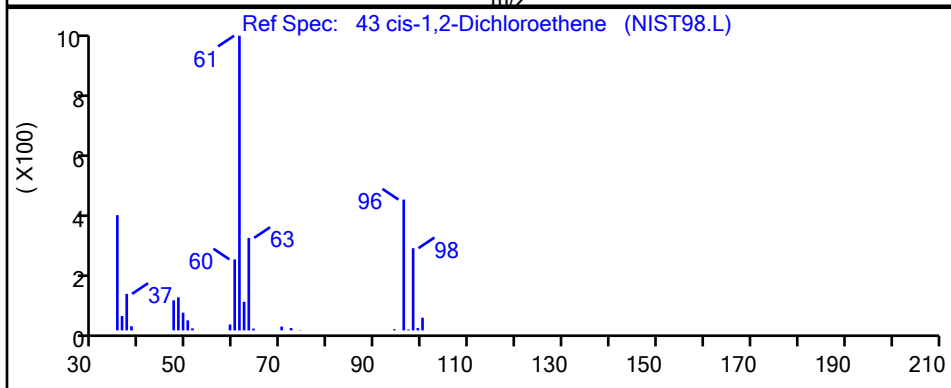
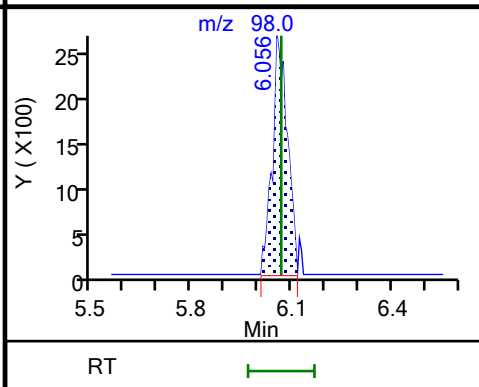
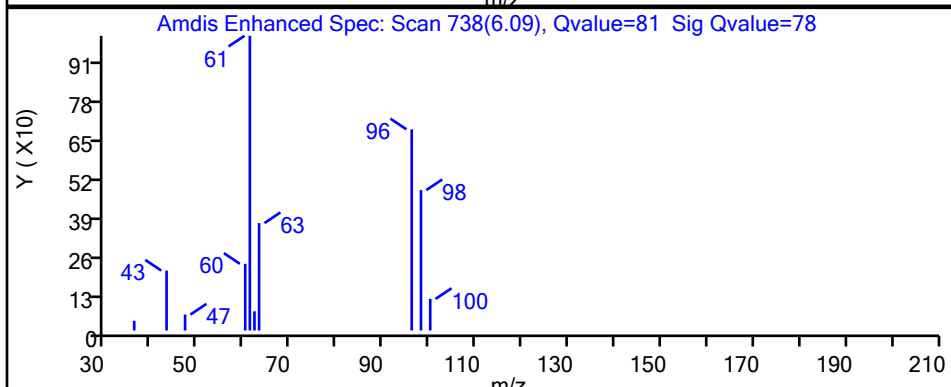
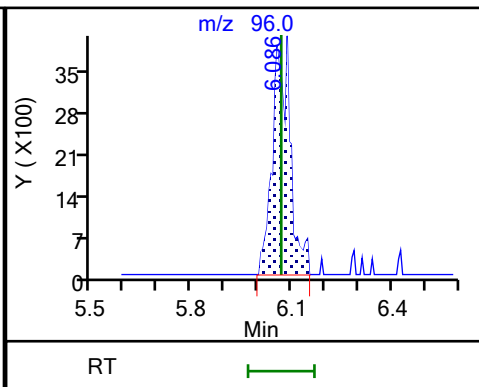
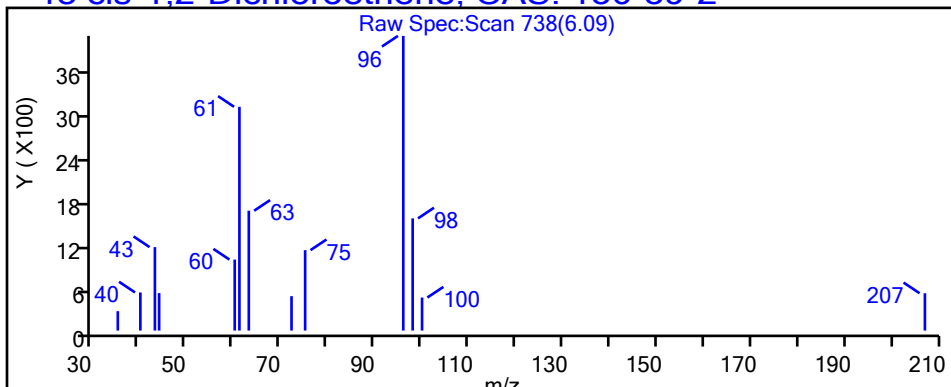
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X16.D

Injection Date: 27-Feb-2023 17:41:30

Instrument ID: 19094

Lims ID: 410-116393-A-7

Lab Sample ID: 410-116393-7

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

Operator ID: knk41612

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

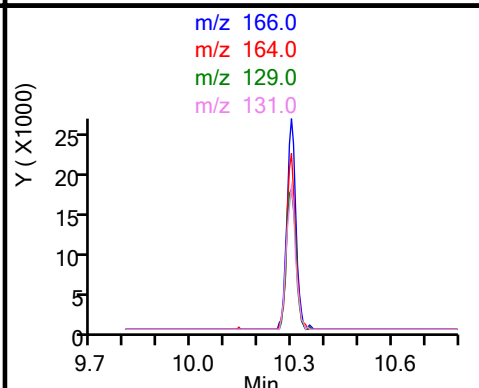
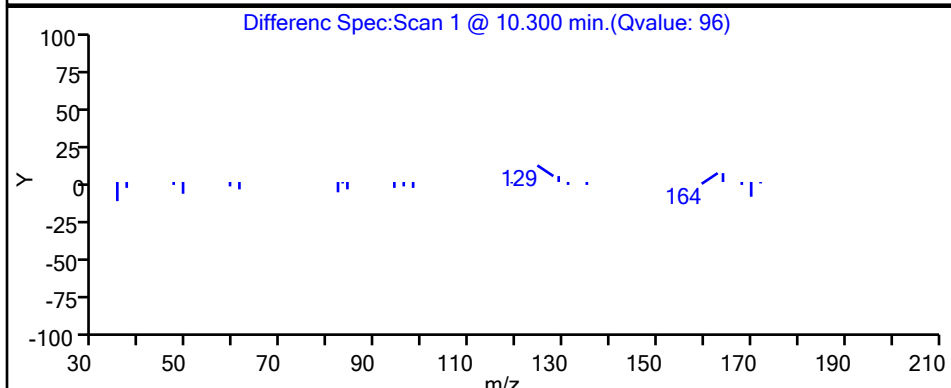
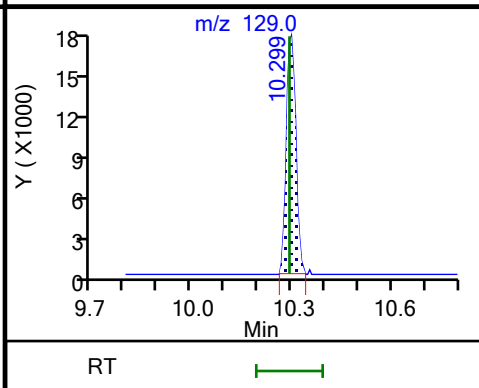
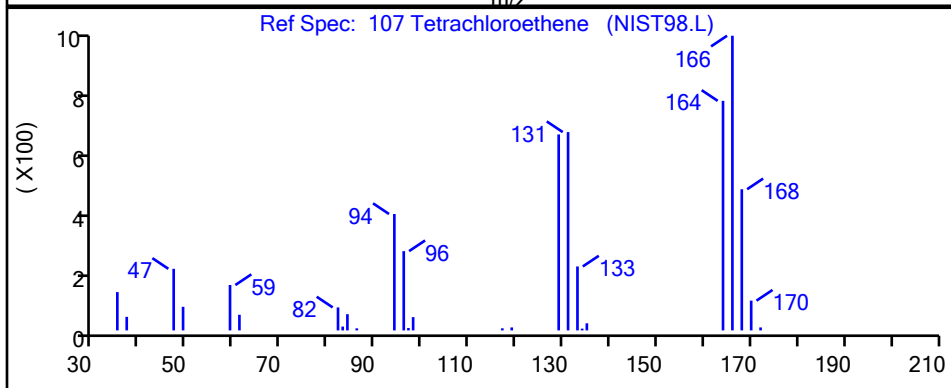
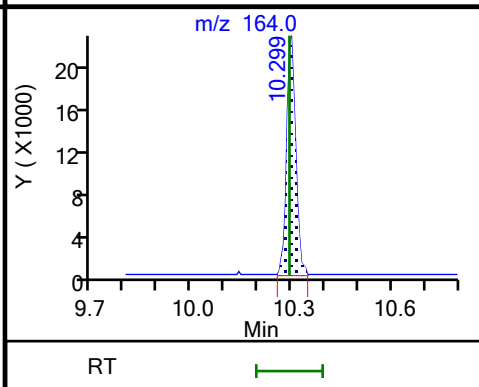
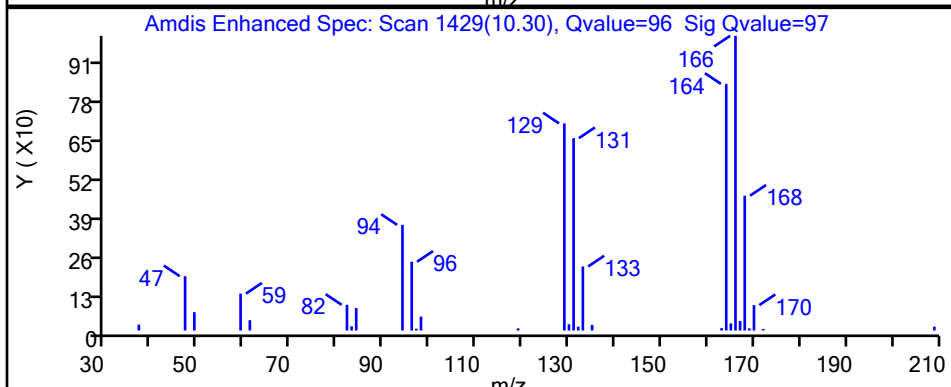
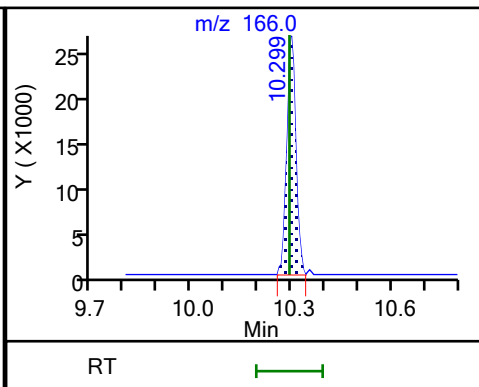
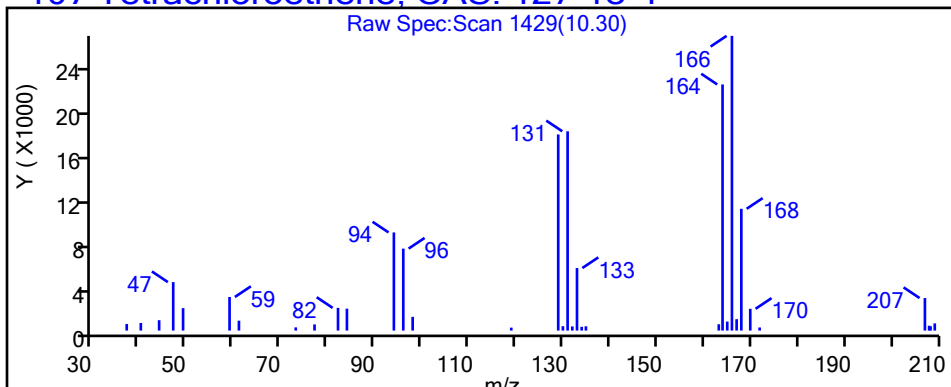
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

107 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X16.D

Injection Date: 27-Feb-2023 17:41:30

Instrument ID: 19094

Lims ID: 410-116393-A-7

Lab Sample ID: 410-116393-7

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

Operator ID: knk41612

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

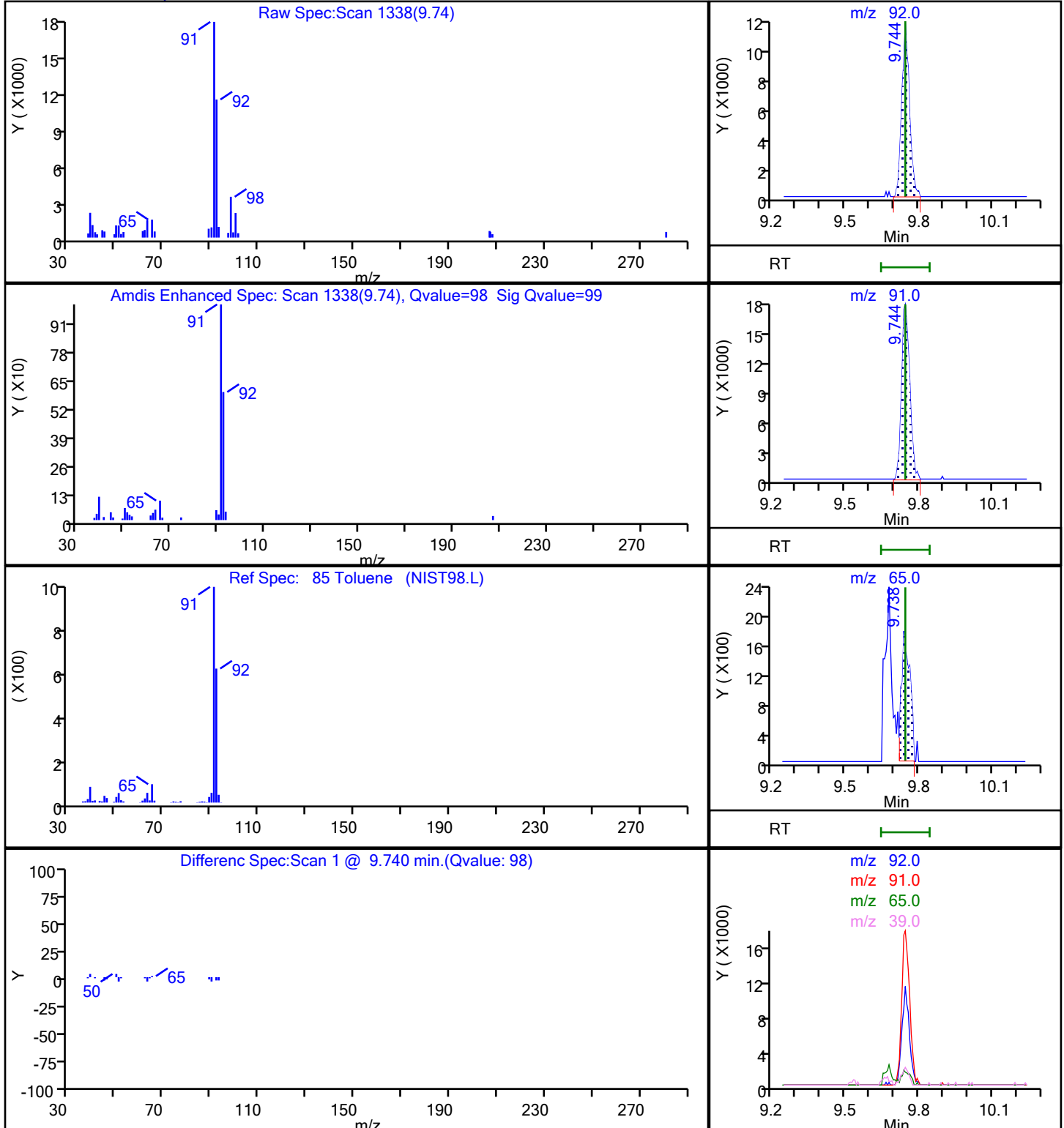
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

85 Toluene, CAS: 108-88-3



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X16.D

Injection Date: 27-Feb-2023 17:41:30

Instrument ID: 19094

Lims ID: 410-116393-A-7

Lab Sample ID: 410-116393-7

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

Operator ID: knk41612

ALS Bottle#: 16

Worklist Smp#: 17

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

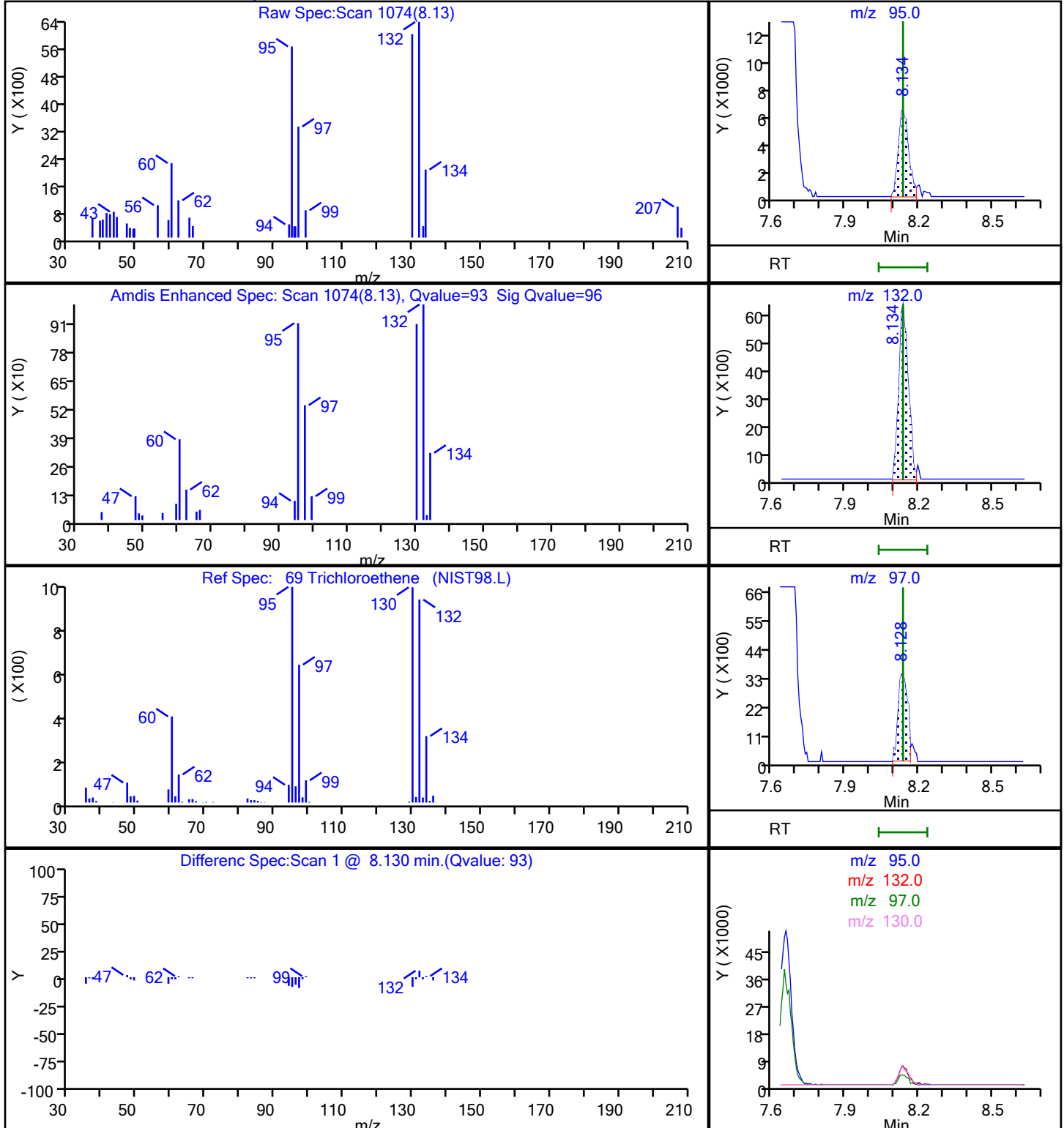
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

69 Trichloroethene, CAS: 79-01-6

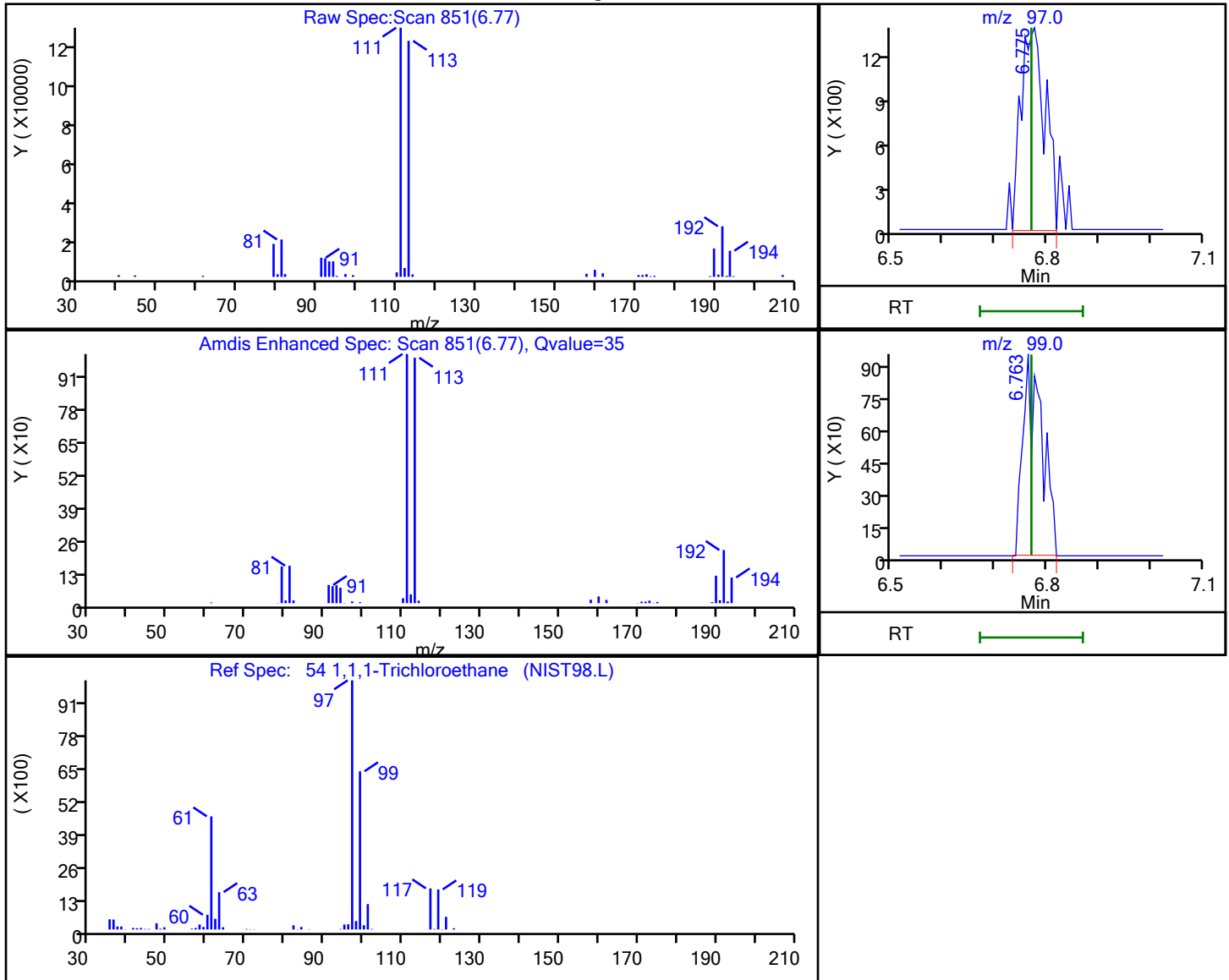


Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X16.D
 Injection Date: 27-Feb-2023 17:41:30 Instrument ID: 19094
 Lims ID: 410-116393-A-7 Lab Sample ID: 410-116393-7
 Client ID: HD-COD-SW-16-0/1-0
 Operator ID: knk41612 ALS Bottle#: 16 Worklist Smp#: 17
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

54 1,1,1-Trichloroethane, CAS: 71-55-6

Processing Results



RT	Mass	Response	Amount
6.77	97.00	4474	0.051881
6.76	99.00	2446	

Reviewer: kaewrungrueangp, 28-Feb-2023 11:16:11

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC

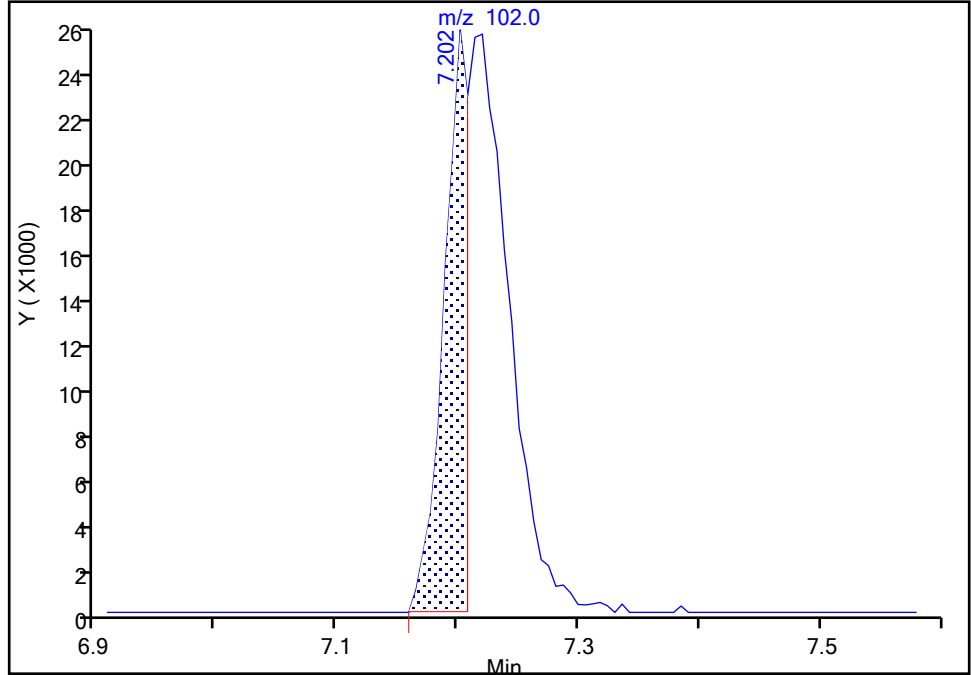
Data File:	\\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X16.D		
Injection Date:	27-Feb-2023 17:41:30	Instrument ID:	19094
Lims ID:	410-116393-A-7	Lab Sample ID:	410-116393-7
Client ID:	HD-COD-SW-16-0/1-0		
Operator ID:	knk41612	ALS Bottle#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	17

\$ 59 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

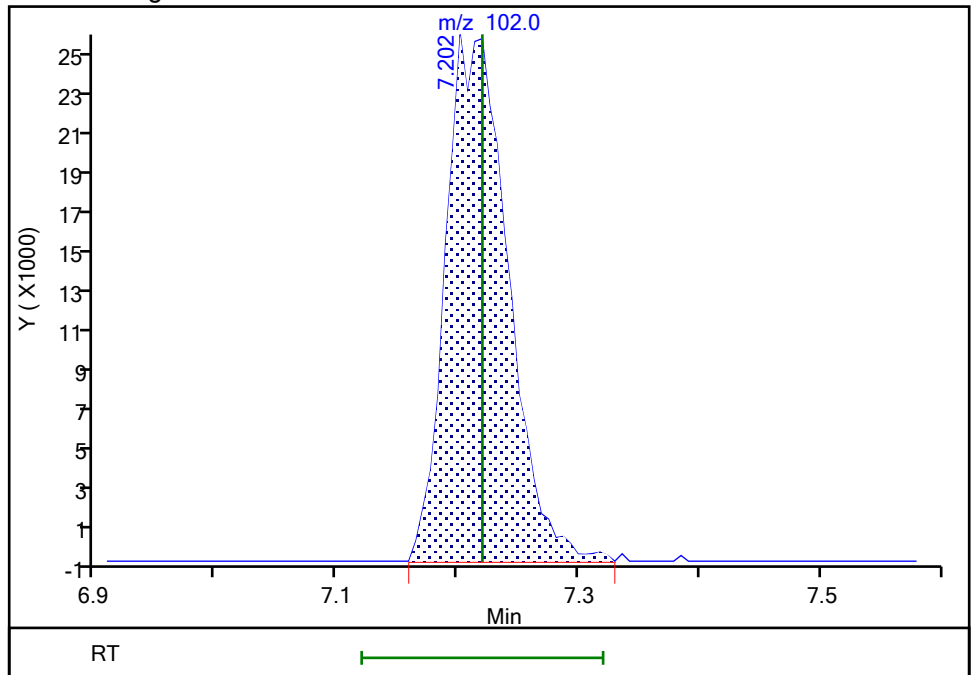
RT: 7.20
 Area: 35915
 Amount: 4.275936
 Amount Units: ug/l

Processing Integration Results



RT: 7.20
 Area: 89603
 Amount: 10.667875
 Amount Units: ug/l

Manual Integration Results



Reviewer: kaewrungrueangp, 28-Feb-2023 11:15:51
 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.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-8

Matrix: Water

Lab File ID: HF27X17.D

Analysis Method: 8260D

Date Collected: 02/21/2023 09:55

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 18:02

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.: 348233

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	7.7		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	1.4		0.50	0.10
75-35-4	1,1-Dichloroethene	0.65		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	ND		5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	0.29	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	3.4		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
108-88-3	Toluene	ND		0.50	0.080
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-8

Matrix: Water

Lab File ID: HF27X17.D

Analysis Method: 8260D

Date Collected: 02/21/2023 09:55

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 18:02

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.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	4.3		0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	107		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X17.D
 Lims ID: 410-116393-A-8
 Client ID: HD-COD-SW-17-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 18:02:30 ALS Bottle#: 17 Worklist Smp#: 18
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-018
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:17:13 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp

Date: 28-Feb-2023 11:17:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.130				ND	7
7 Vinyl chloride	62		2.245				ND	7
9 Bromomethane	94		2.568				ND	
10 Chloroethane	64		2.648				ND	
18 1,1-Dichloroethene	96	3.495	3.507	-0.012	97	30001	0.6452	
19 Acetone	43		3.532				ND	
24 Carbon disulfide	76		3.806				ND	7
28 Methylene Chloride	84		4.160				ND	
* 29 t-Butyl alcohol-d10 (IS)	65	4.160	4.166	-0.006	20	84952	50.0	
33 Methyl tert-butyl ether	73	4.556	4.556	0.000	1	3602	0.0347	
34 trans-1,2-Dichloroethene	96	4.586	4.580	0.006	5	2126	0.0412	
37 1,1-Dichloroethane	63	5.220	5.233	-0.013	96	138303	1.43	
42 2-Butanone (MEK)	43		6.013				ND	
43 cis-1,2-Dichloroethene	96	6.062	6.068	-0.006	79	194215	3.42	
49 Chlorobromomethane	128		6.397				ND	
52 Chloroform	83	6.543	6.543	0.000	92	26837	0.2946	
\$ 53 Dibromofluoromethane (Surr)	113	6.757	6.763	-0.006	94	486228	10.7	
54 1,1,1-Trichloroethane	97	6.769	6.769	0.000	98	653599	7.71	
57 Carbon tetrachloride	117	6.982	6.988	-0.006	21	3050	0.0416	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.214	7.220	-0.006	52	87883	10.6	
60 Benzene	78		7.250				ND	7
62 1,2-Dichloroethane	62		7.324				ND	
* 65 Fluorobenzene (IS)	96	7.653	7.653	0.000	99	1787971	10.0	
69 Trichloroethene	95	8.134	8.134	0.000	97	253659	4.31	
71 1,2-Dichloropropane	63		8.464				ND	
77 Dichlorobromomethane	83		8.805				ND	
81 cis-1,3-Dichloropropene	75		9.360				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.524				ND	
\$ 84 Toluene-d8 (Surr)	98	9.665	9.665	0.000	93	2030998	9.38	
85 Toluene	92	9.750	9.744	0.006	97	10140	0.0630	
86 trans-1,3-Dichloropropene	75		10.000				ND	
106 1,1,2-Trichloroethane	97	10.213	10.207	0.006	1	954	0.0250	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.299	10.293	0.006	98	7383163	99.4	E
109 2-Hexanone	43		10.414				ND	
111 Chlorodibromomethane	129		10.585				ND	7
112 Ethylene Dibromide	107		10.695				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	85	1769724	10.0	
115 Chlorobenzene	112		11.152				ND	7
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91		11.237				ND	7
S 117 Xylenes, Total	106		11.245				ND	7
119 m-Xylene & p-Xylene	106		11.353				ND	7
120 o-Xylene	106		11.676				ND	7
121 Styrene	104		11.695				ND	
122 Bromoform	173		11.853				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.128	12.121	0.007	94	815714	9.28	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1021009	10.0	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

7 - Failed Limit of Detection

Reagents:

MSV_LLcentISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X17.D

Injection Date: 27-Feb-2023 18:02:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: 410-116393-A-8

Lab Sample ID: 410-116393-8

Worklist Smp#: 18

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

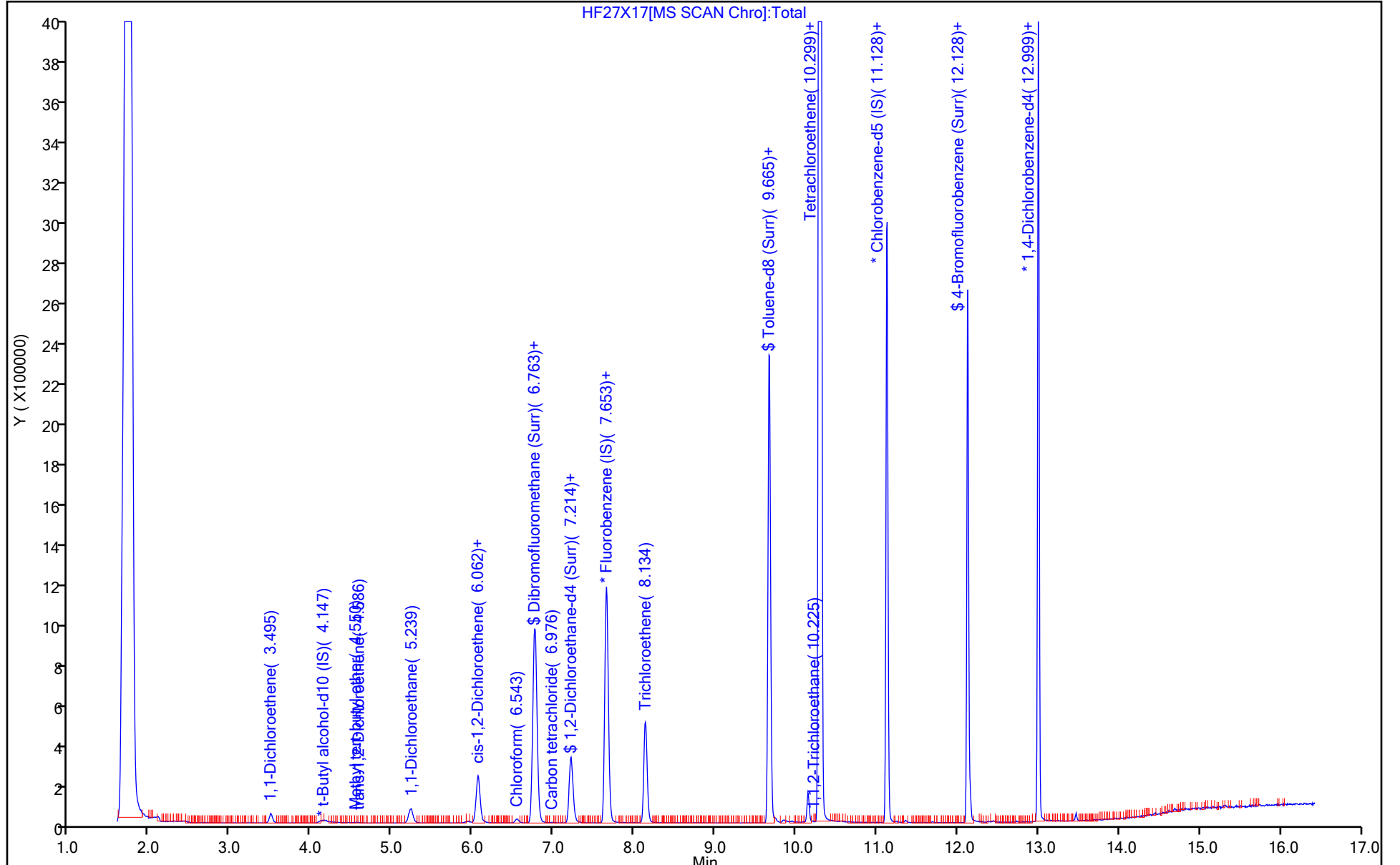
ALS Bottle#: 17

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X17.D
 Lims ID: 410-116393-A-8
 Client ID: HD-COD-SW-17-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 18:02:30 ALS Bottle#: 17 Worklist Smp#: 18
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-018
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:17:13 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp Date: 28-Feb-2023 11:17:13

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.7	107.44
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.6	106.42
\$ 84 Toluene-d8 (Surr)	10.0	9.38	93.81
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.28	92.81

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X17.D

Injection Date: 27-Feb-2023 18:02:30

Instrument ID: 19094

Lims ID: 410-116393-A-8

Lab Sample ID: 410-116393-8

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

Operator ID: knk41612

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

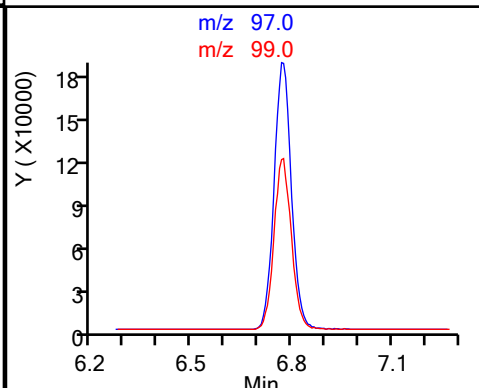
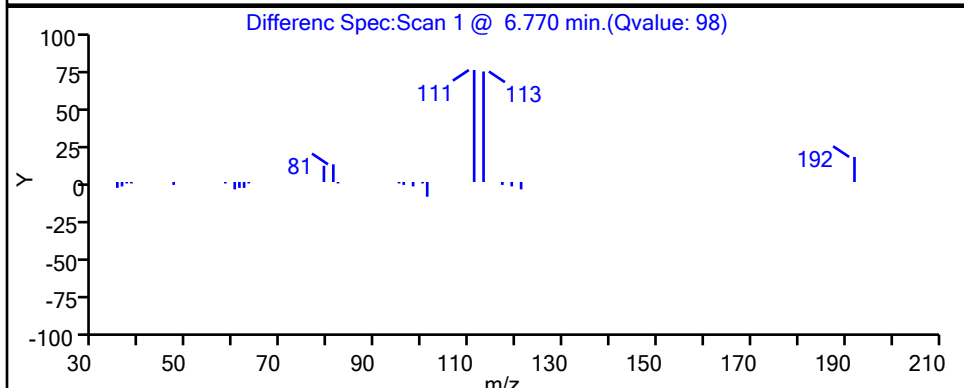
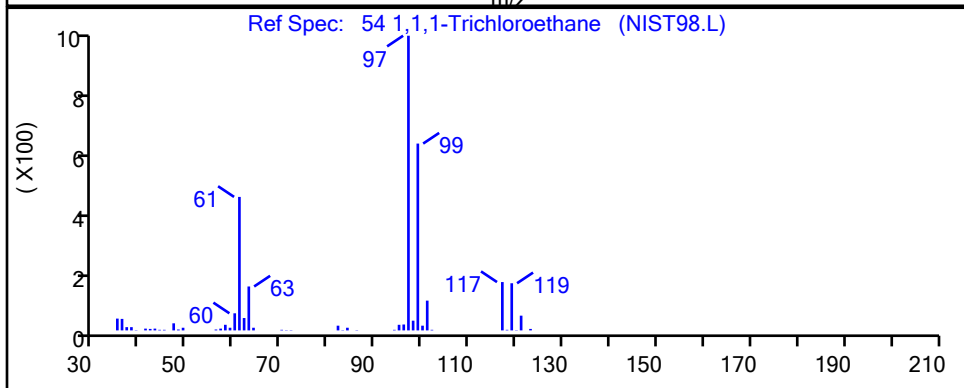
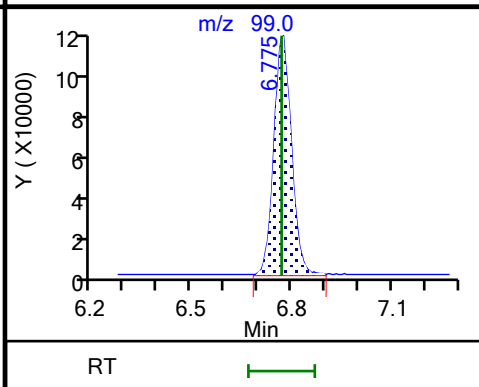
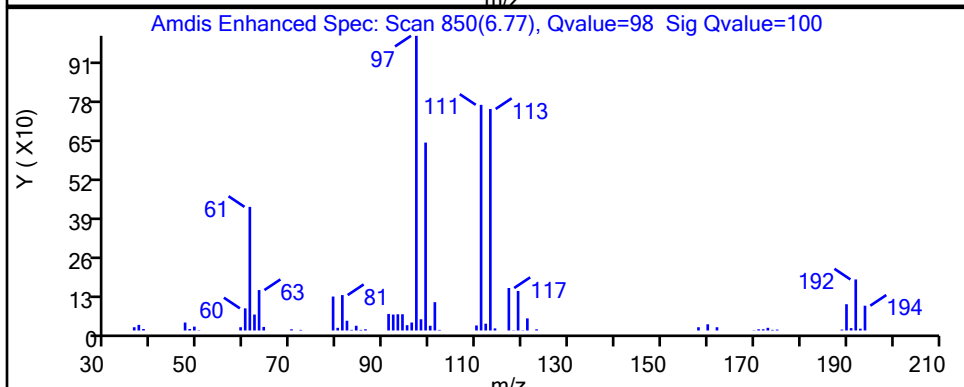
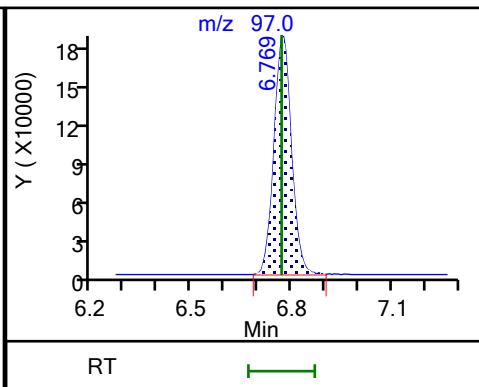
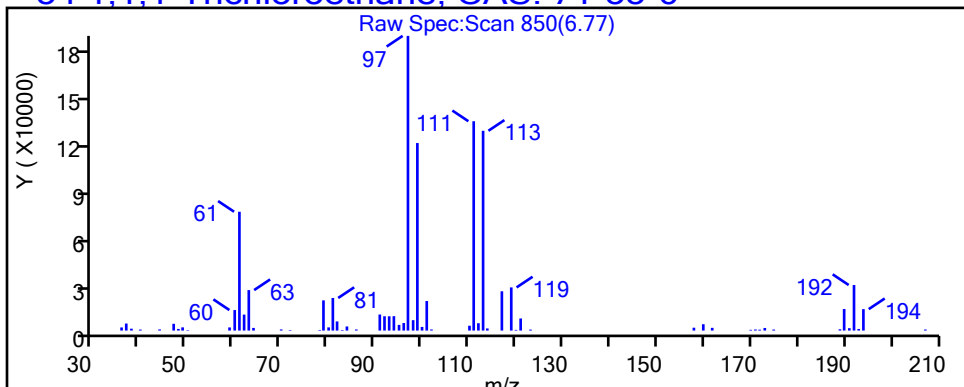
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

54 1,1,1-Trichloroethane, CAS: 71-55-6



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X17.D

Injection Date: 27-Feb-2023 18:02:30

Instrument ID: 19094

Lims ID: 410-116393-A-8

Lab Sample ID: 410-116393-8

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

Operator ID: knk41612

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

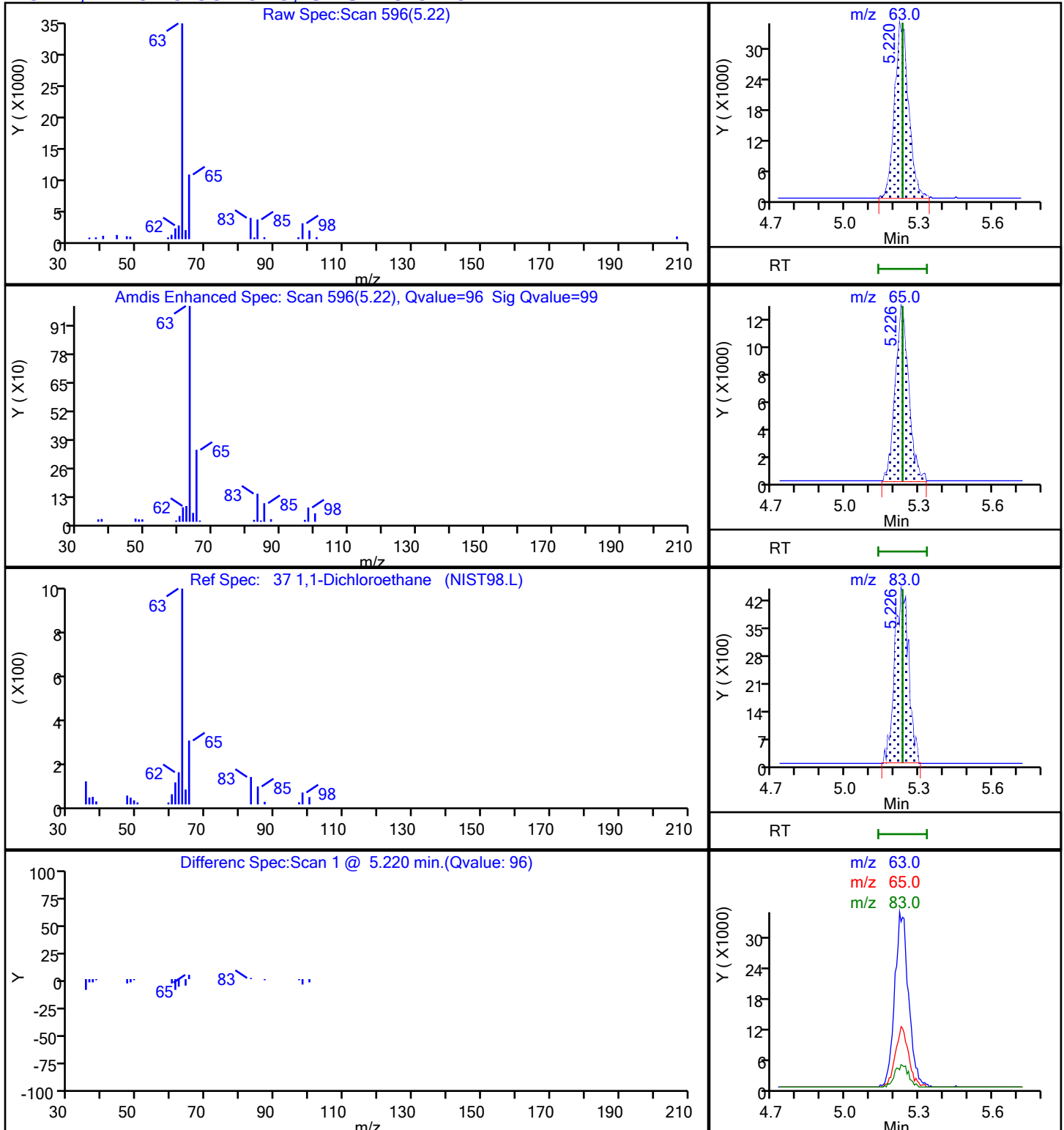
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X17.D

Injection Date: 27-Feb-2023 18:02:30

Instrument ID: 19094

Lims ID: 410-116393-A-8

Lab Sample ID: 410-116393-8

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

Operator ID: knk41612

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

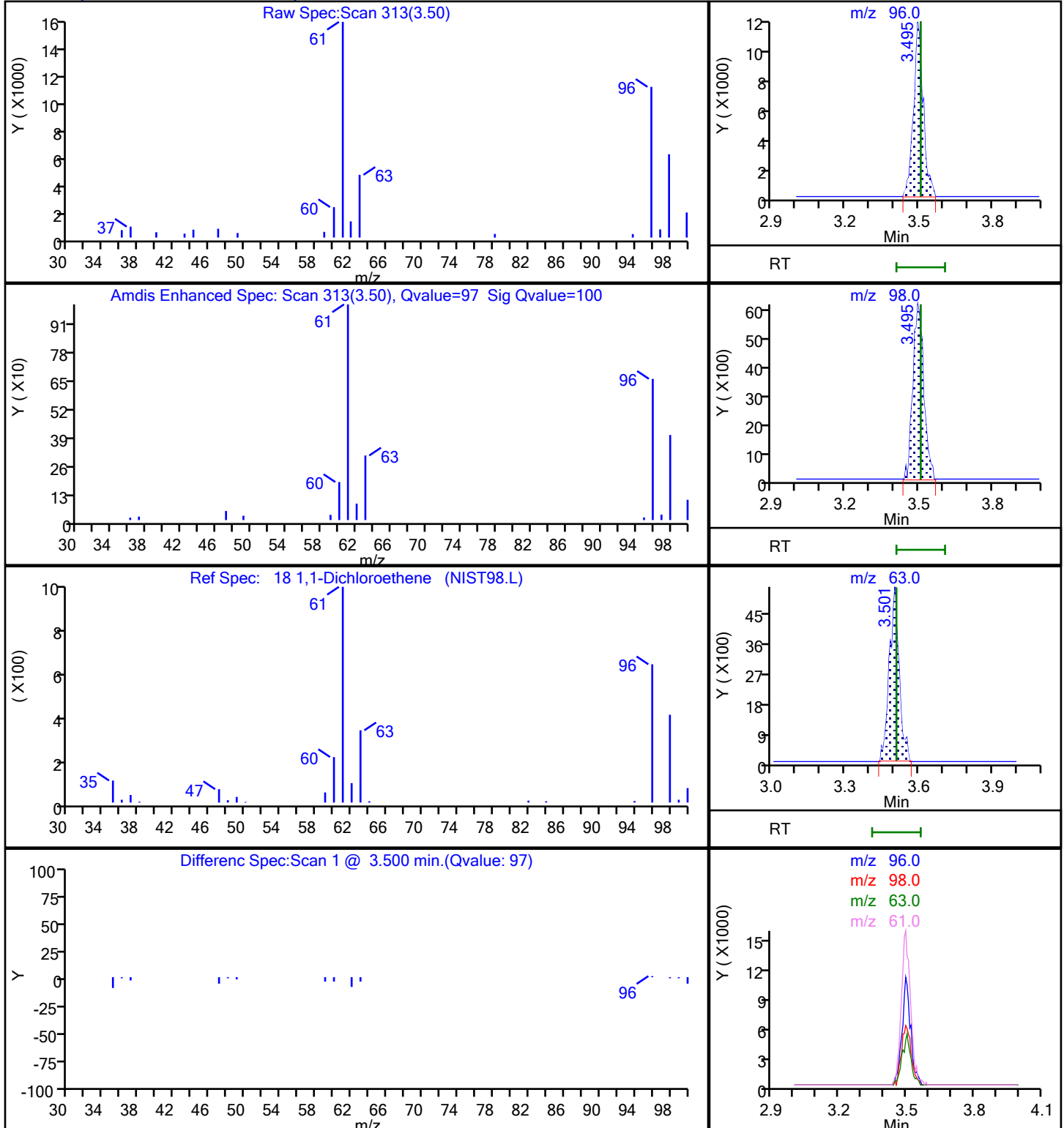
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

18 1,1-Dichloroethene, CAS: 75-35-4



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X17.D

Injection Date: 27-Feb-2023 18:02:30

Instrument ID: 19094

Lims ID: 410-116393-A-8

Lab Sample ID: 410-116393-8

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

Operator ID: knk41612

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

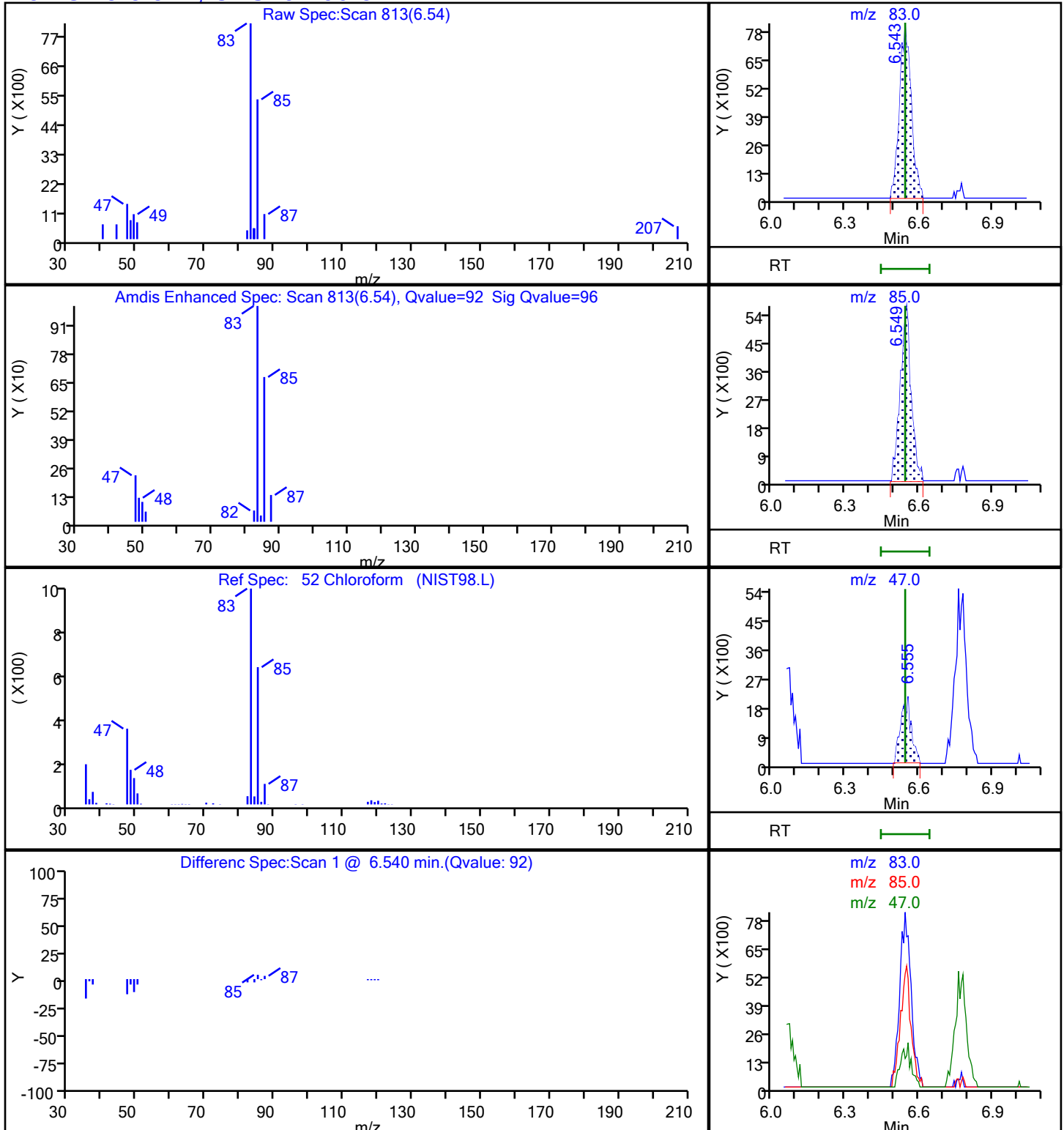
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

52 Chloroform, CAS: 67-66-3



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X17.D

Injection Date: 27-Feb-2023 18:02:30

Instrument ID: 19094

Lims ID: 410-116393-A-8

Lab Sample ID: 410-116393-8

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

Operator ID: knk41612

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

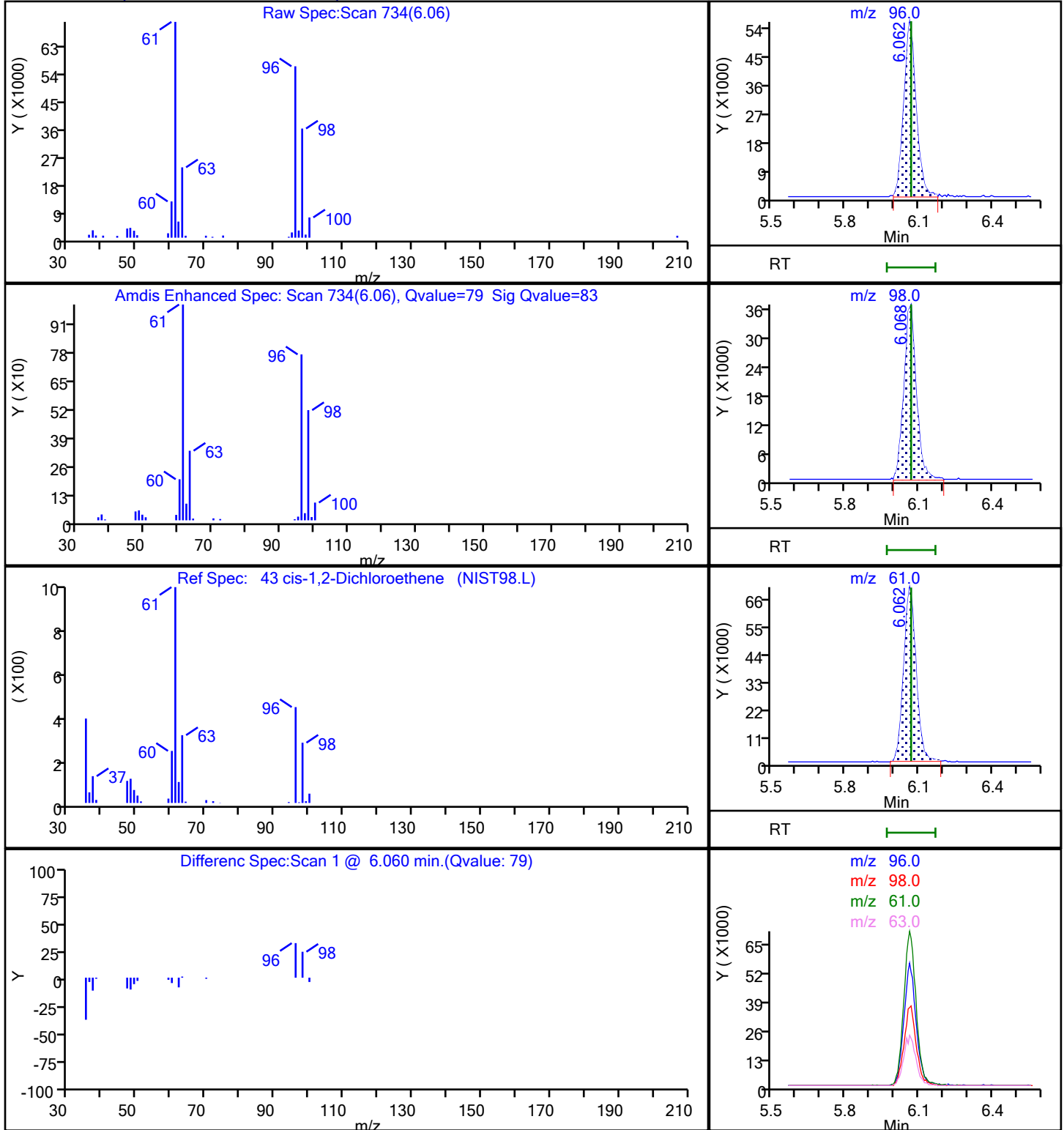
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X17.D

Injection Date: 27-Feb-2023 18:02:30

Instrument ID: 19094

Lims ID: 410-116393-A-8

Lab Sample ID: 410-116393-8

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

Operator ID: knk41612

ALS Bottle#: 17

Worklist Smp#: 18

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

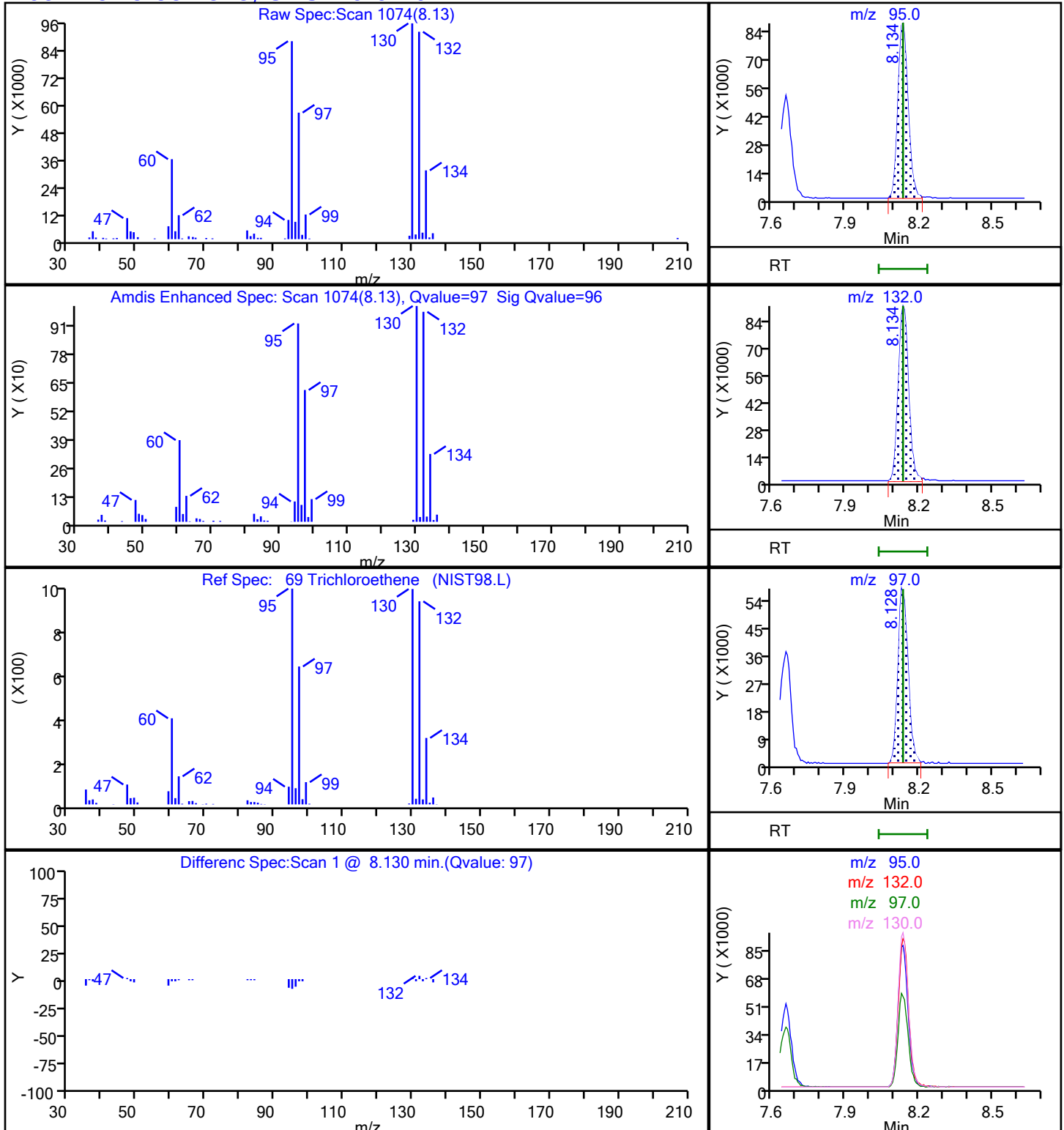
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

69 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Environment Testing, LLC

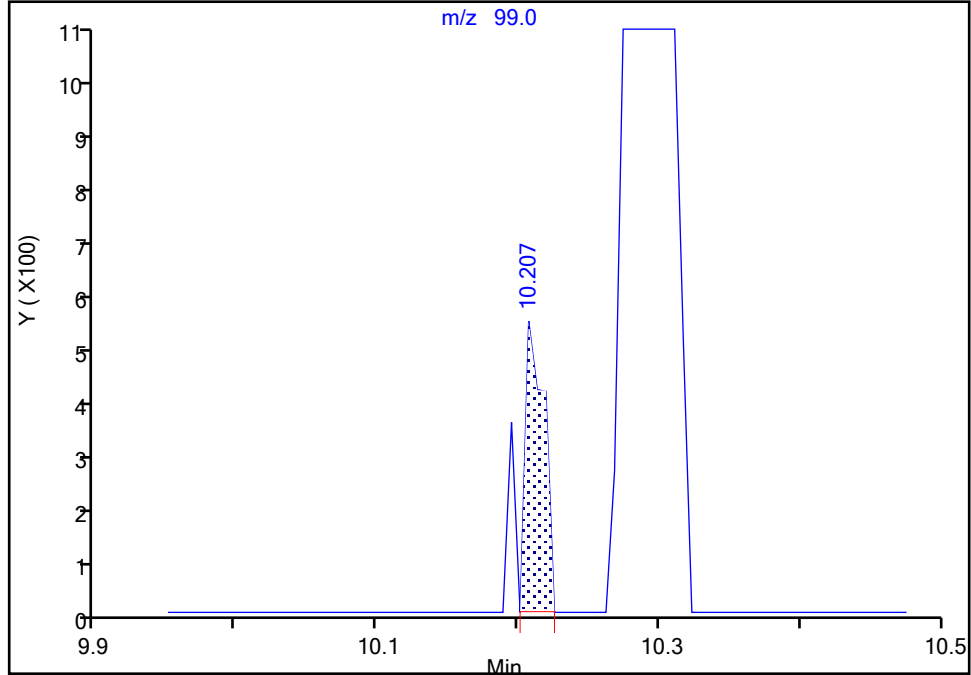
Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X17.D
Injection Date: 27-Feb-2023 18:02:30 Instrument ID: 19094
Lims ID: 410-116393-A-8 Lab Sample ID: 410-116393-8
Client ID: HD-COD-SW-17-0/1-0
Operator ID: knk41612 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

106 1,1,2-Trichloroethane, CAS: 79-00-5

Signal: 2

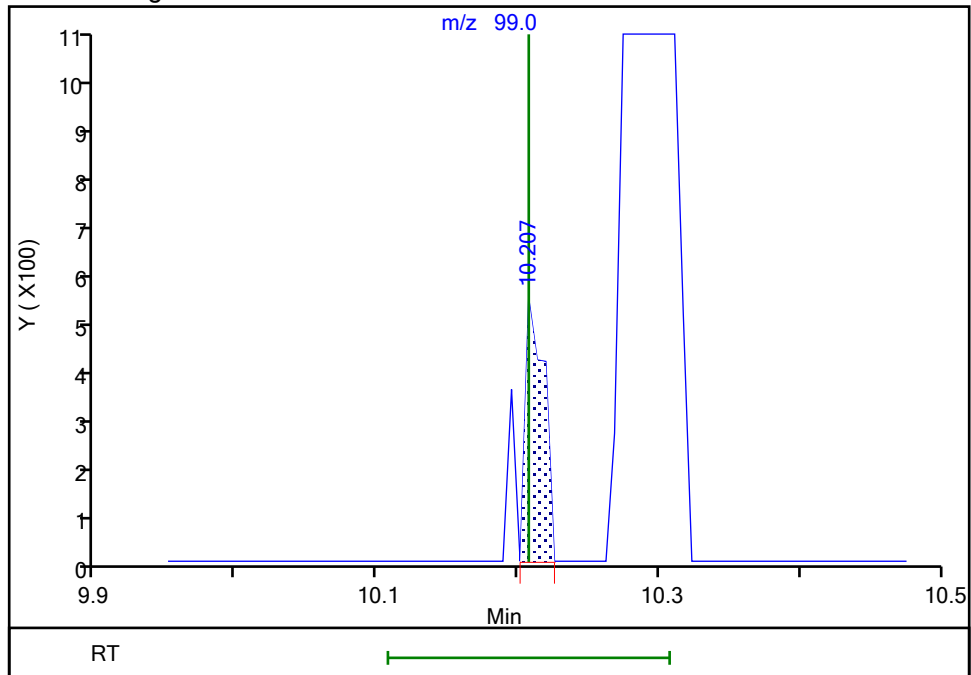
RT: 10.21
Area: 478
Amount: 0.025038
Amount Units: ug/l

Processing Integration Results



RT: 10.21
Area: 478
Amount: 0.025038
Amount Units: ug/l

Manual Integration Results



Reviewer: kaewrungrueangp, 28-Feb-2023 11:17:01

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC

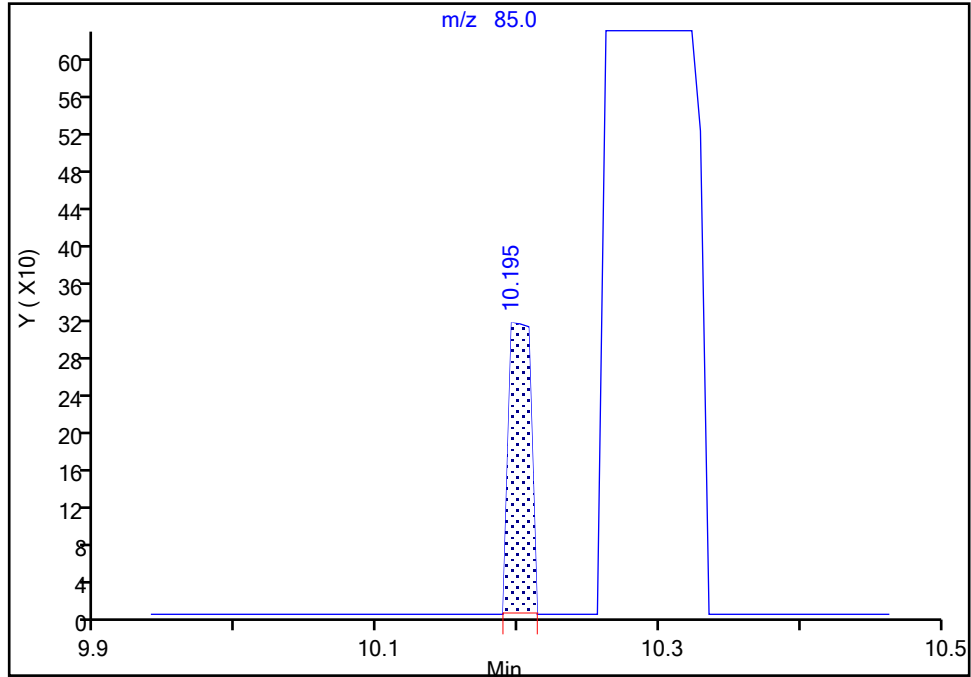
Data File:	\\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X17.D		
Injection Date:	27-Feb-2023 18:02:30	Instrument ID:	19094
Lims ID:	410-116393-A-8	Lab Sample ID:	410-116393-8
Client ID:	HD-COD-SW-17-0/1-0		
Operator ID:	knk41612	ALS Bottle#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	18

106 1,1,2-Trichloroethane, CAS: 79-00-5

Signal: 3

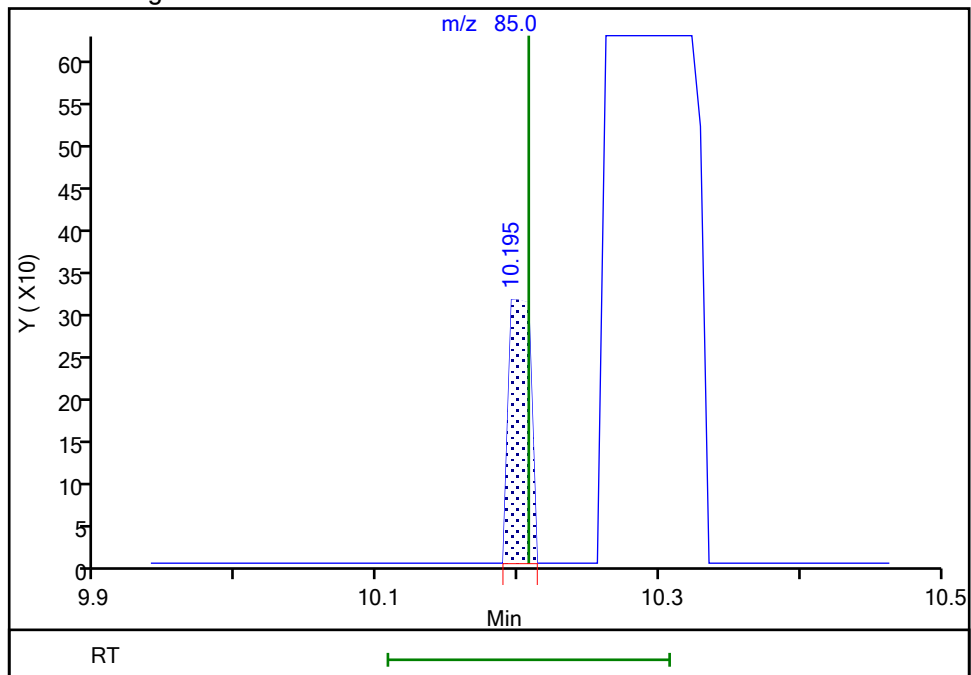
RT: 10.19
 Area: 339
 Amount: 0.025038
 Amount Units: ug/l

Processing Integration Results



RT: 10.19
 Area: 339
 Amount: 0.025038
 Amount Units: ug/l

Manual Integration Results



Reviewer: kaewrungrueangp, 28-Feb-2023 11:17:01

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins Lancaster Laboratories Environment Testing, LLC

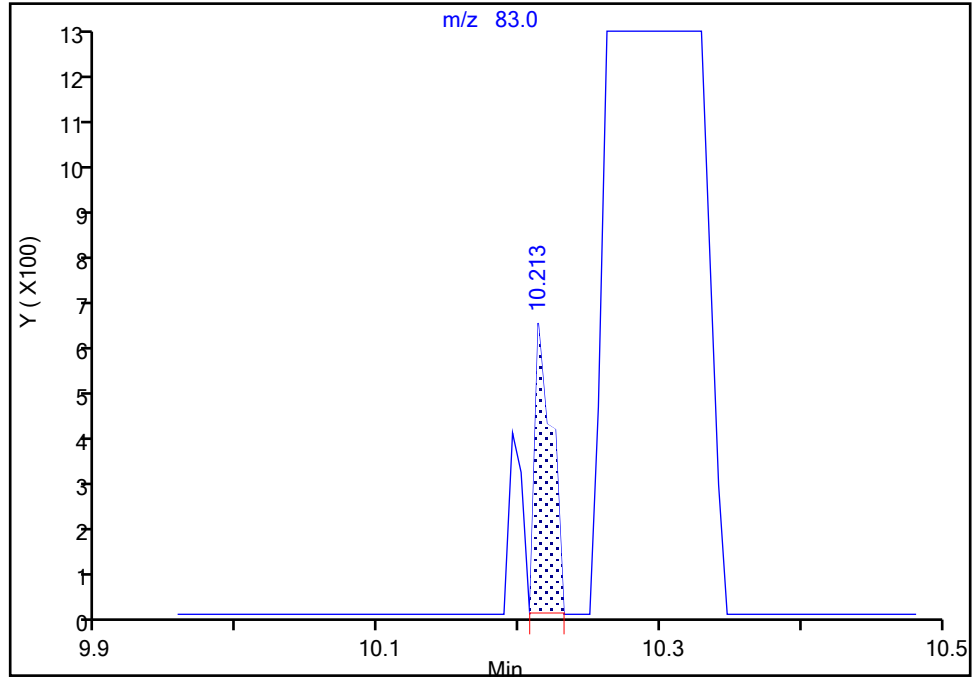
Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X17.D
Injection Date: 27-Feb-2023 18:02:30 Instrument ID: 19094
Lims ID: 410-116393-A-8 Lab Sample ID: 410-116393-8
Client ID: HD-COD-SW-17-0/1-0
Operator ID: knk41612 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

106 1,1,2-Trichloroethane, CAS: 79-00-5

Signal: 4

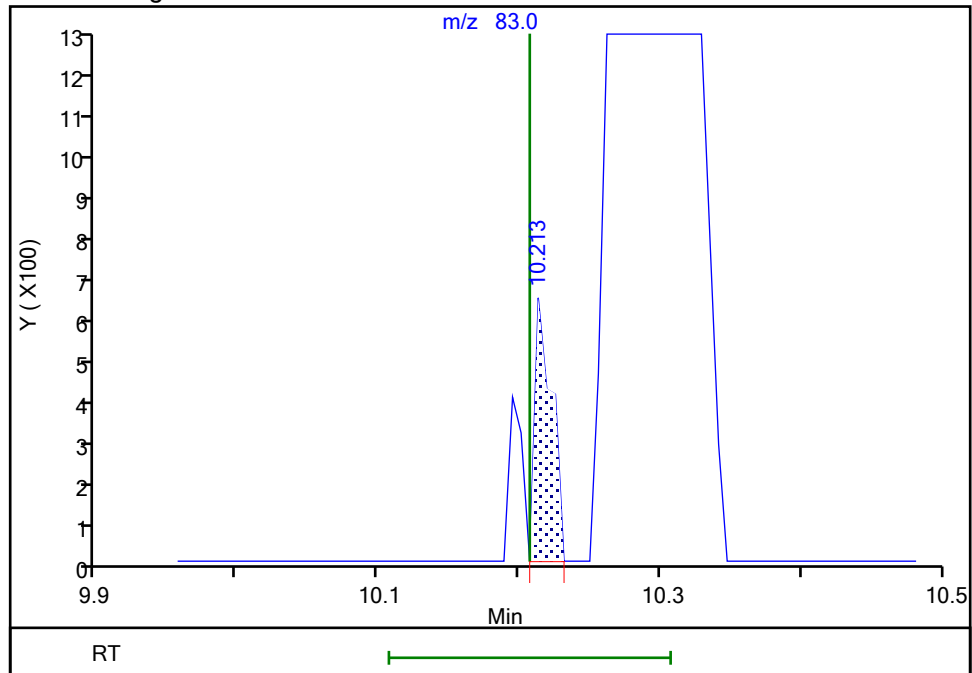
RT: 10.21
Area: 525
Amount: 0.025038
Amount Units: ug/l

Processing Integration Results



RT: 10.21
Area: 525
Amount: 0.025038
Amount Units: ug/l

Manual Integration Results



Reviewer: kaewrungrueangp, 28-Feb-2023 11:17:01

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1
 Environment Testing, LLC

SDG No.: _____

Client Sample ID: HD-COD-SW-17-0/1-0 DL Lab Sample ID: 410-116393-8 DL

Matrix: Water Lab File ID: HF28X26.D

Analysis Method: 8260D Date Collected: 02/21/2023 09:55

Sample wt/vol: 25 (mL) Date Analyzed: 02/28/2023 18:56

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.: 348577 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	84		5.0	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	113		80-120
2037-26-5	Toluene-d8 (Surr)	92		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X26.D
 Lims ID: 410-116393-B-8 DL
 Client ID: HD-COD-SW-17-0/1-0
 Sample Type: Client
 Inject. Date: 28-Feb-2023 18:56:30 ALS Bottle#: 26 Worklist Smp#: 27
 Purge Vol: 25.000 mL Dil. Factor: 10.0000
 Sample Info: 410-0077923-027
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 18:22:04 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1603

First Level Reviewer: kaewrungrueangp Date: 01-Mar-2023 08:41:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.129				ND	
7 Vinyl chloride	62		2.245				ND	
9 Bromomethane	94		2.568				ND	
10 Chloroethane	64		2.648				ND	
18 1,1-Dichloroethene	96	3.519	3.507	0.012	21	2665	0.0594	
19 Acetone	43		3.532				ND	U
24 Carbon disulfide	76	3.812	3.806	0.006	94	10095	0.0841	M
* 29 t-Butyl alcohol-d10 (IS)	65	4.153	4.153	0.000	19	84734	50.0	
28 Methylene Chloride	84		4.160				ND	
33 Methyl tert-butyl ether	73		4.562				ND	
34 trans-1,2-Dichloroethene	96		4.586				ND	
37 1,1-Dichloroethane	63	5.245	5.239	0.006	94	12404	0.1332	
42 2-Butanone (MEK)	43		6.019				ND	7
43 cis-1,2-Dichloroethene	96	6.080	6.068	0.012	78	17681	0.3231	
49 Chlorobromomethane	128		6.397				ND	
52 Chloroform	83	6.549	6.549	0.000	89	2421	0.0276	
\$ 53 Dibromofluoromethane (Surr)	113	6.763	6.763	0.000	94	494160	11.3	
54 1,1,1-Trichloroethane	97	6.787	6.781	0.006	88	55441	0.6780	
57 Carbon tetrachloride	117		6.994				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.220	7.208	0.012	52	87602	11.0	
60 Benzene	78		7.250				ND	7
62 1,2-Dichloroethane	62		7.317				ND	7
* 65 Fluorobenzene (IS)	96	7.653	7.659	-0.006	99	1724364	10.0	
69 Trichloroethene	95	8.140	8.134	0.006	95	22418	0.3950	
71 1,2-Dichloropropane	63		8.464				ND	
77 Dichlorobromomethane	83		8.811				ND	
81 cis-1,3-Dichloropropene	75		9.360				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.524				ND	
\$ 84 Toluene-d8 (Surr)	98	9.671	9.671	0.000	93	2016253	9.18	
85 Toluene	92		9.744				ND	7
86 trans-1,3-Dichloropropene	75		10.006				ND	
106 1,1,2-Trichloroethane	97		10.207				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.299	10.299	0.000	98	631629	8.39	
109 2-Hexanone	43		10.421				ND	
111 Chlorodibromomethane	129		10.585				ND	
112 Ethylene Dibromide	107		10.695				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	85	1794350	10.0	
115 Chlorobenzene	112		11.152				ND	
116 1,1,1,2-Tetrachloroethane	131		11.237				ND	
118 Ethylbenzene	91		11.237				ND	
S 117 Xylenes, Total	106		11.245				ND	7
119 m-Xylene & p-Xylene	106		11.353				ND	
120 o-Xylene	106		11.682				ND	
121 Styrene	104		11.695				ND	
122 Bromoform	173		11.853				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.127	12.127	0.000	93	838399	9.41	
127 1,1,2,2-Tetrachloroethane	83		12.225				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1035121	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

MSV_LLcentISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X26.D

Injection Date: 28-Feb-2023 18:56:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: 410-116393-B-8 DL

Lab Sample ID: 410-116393-8

Worklist Smp#: 27

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

Purge Vol: 25.000 mL

Dil. Factor: 10.0000

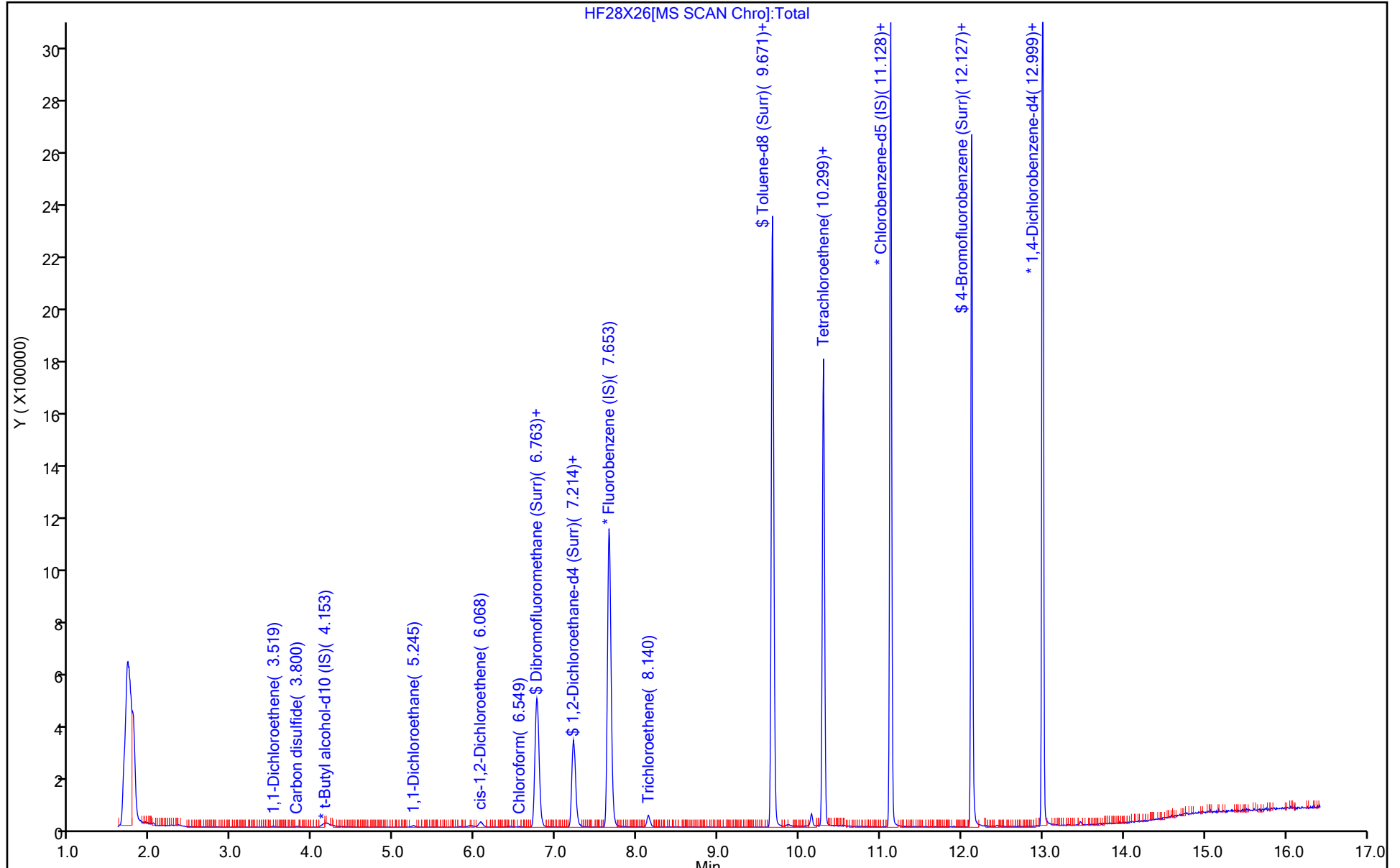
ALS Bottle#: 26

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X26.D
 Lims ID: 410-116393-B-8 DL
 Client ID: HD-COD-SW-17-0/1-0
 Sample Type: Client
 Inject. Date: 28-Feb-2023 18:56:30 ALS Bottle#: 26 Worklist Smp#: 27
 Purge Vol: 25.000 mL Dil. Factor: 10.0000
 Sample Info: 410-0077923-027
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 18:22:04 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1603

First Level Reviewer: kaewrungrueangp

Date: 01-Mar-2023 08:41:24

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	11.3	113.22
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	11.0	110.00
\$ 84 Toluene-d8 (Surr)	10.0	9.18	91.85
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.41	94.08

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X26.D

Injection Date: 28-Feb-2023 18:56:30

Instrument ID: 19094

Lims ID: 410-116393-B-8 DL

Lab Sample ID: 410-116393-8

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

Operator ID: knk41612

ALS Bottle#: 26

Worklist Smp#: 27

Purge Vol: 25.000 mL

Dil. Factor: 10.0000

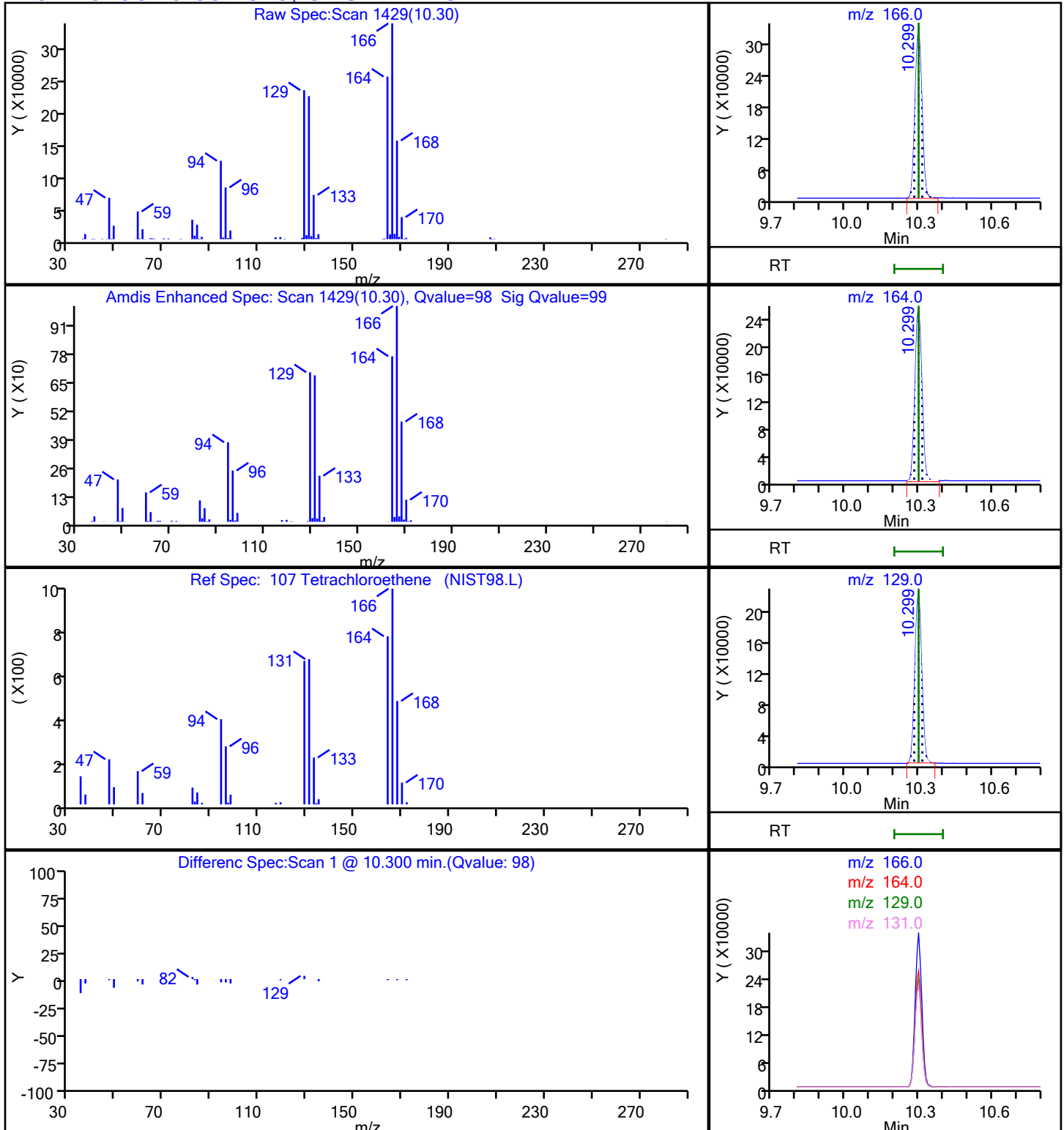
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

107 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-9

Matrix: Water

Lab File ID: HF27X18.D

Analysis Method: 8260D

Date Collected: 02/21/2023 10:33

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 18:23

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.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	0.16	J	0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	ND		5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	0.50		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	4.1		0.50	0.20
108-88-3	Toluene	0.11	J	0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-9

Matrix: Water

Lab File ID: HF27X18.D

Analysis Method: 8260D

Date Collected: 02/21/2023 10:33

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 18:23

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.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.18	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	109		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X18.D
 Lims ID: 410-116393-A-9
 Client ID: HD-COD-SW-26-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 18:23:30 ALS Bottle#: 18 Worklist Smp#: 19
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-019
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:18:03 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp Date: 28-Feb-2023 11:18:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.130				ND	7
7 Vinyl chloride	62		2.245				ND	
9 Bromomethane	94		2.568				ND	
10 Chloroethane	64		2.648				ND	
18 1,1-Dichloroethene	96	3.501	3.507	-0.006	96	7578	0.1634	
19 Acetone	43		3.532				ND	7
24 Carbon disulfide	76		3.806				ND	7
28 Methylene Chloride	84		4.160				ND	
* 29 t-Butyl alcohol-d10 (IS)	65	4.147	4.166	-0.019	19	82485	50.0	
33 Methyl tert-butyl ether	73		4.556				ND	
34 trans-1,2-Dichloroethene	96		4.580				ND	
37 1,1-Dichloroethane	63		5.233				ND	7
42 2-Butanone (MEK)	43		6.013				ND	
43 cis-1,2-Dichloroethene	96	6.074	6.068	0.006	1	3598	0.0636	M
49 Chlorobromomethane	128		6.397				ND	
52 Chloroform	83	6.543	6.543	0.000	93	45491	0.5007	
\$ 53 Dibromofluoromethane (Surr)	113	6.763	6.763	0.000	93	491982	10.9	
54 1,1,1-Trichloroethane	97		6.769				ND	7
57 Carbon tetrachloride	117		6.988				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.214	7.220	-0.006	67	87412	10.6	
60 Benzene	78	7.269	7.250	0.019	81	7540	0.0338	
62 1,2-Dichloroethane	62		7.324				ND	7
* 65 Fluorobenzene (IS)	96	7.653	7.653	0.000	99	1783237	10.0	
69 Trichloroethene	95	8.134	8.134	0.000	89	10422	0.1775	M
71 1,2-Dichloropropane	63		8.464				ND	
77 Dichlorobromomethane	83		8.805				ND	7
81 cis-1,3-Dichloropropene	75		9.360				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.524				ND	
\$ 84 Toluene-d8 (Surr)	98	9.671	9.665	0.005	93	2036203	9.50	
85 Toluene	92	9.744	9.744	0.000	96	17432	0.1095	
86 trans-1,3-Dichloropropene	75		10.000				ND	
106 1,1,2-Trichloroethane	97		10.207				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.298	10.293	0.005	98	301613	4.10	
109 2-Hexanone	43		10.414				ND	
111 Chlorodibromomethane	129		10.585				ND	
112 Ethylene Dibromide	107		10.695				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	85	1751432	10.0	
115 Chlorobenzene	112		11.152				ND	
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91		11.237				ND	7
S 117 Xylenes, Total	106		11.245				ND	7
119 m-Xylene & p-Xylene	106	11.359	11.353	0.006	98	5999	0.0506	
120 o-Xylene	106		11.676				ND	7
121 Styrene	104		11.695				ND	7
122 Bromoform	173		11.853				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	94	814568	9.36	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1016835	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSV_LLcentISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X18.D

Injection Date: 27-Feb-2023 18:23:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: 410-116393-A-9

Lab Sample ID: 410-116393-9

Worklist Smp#: 19

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

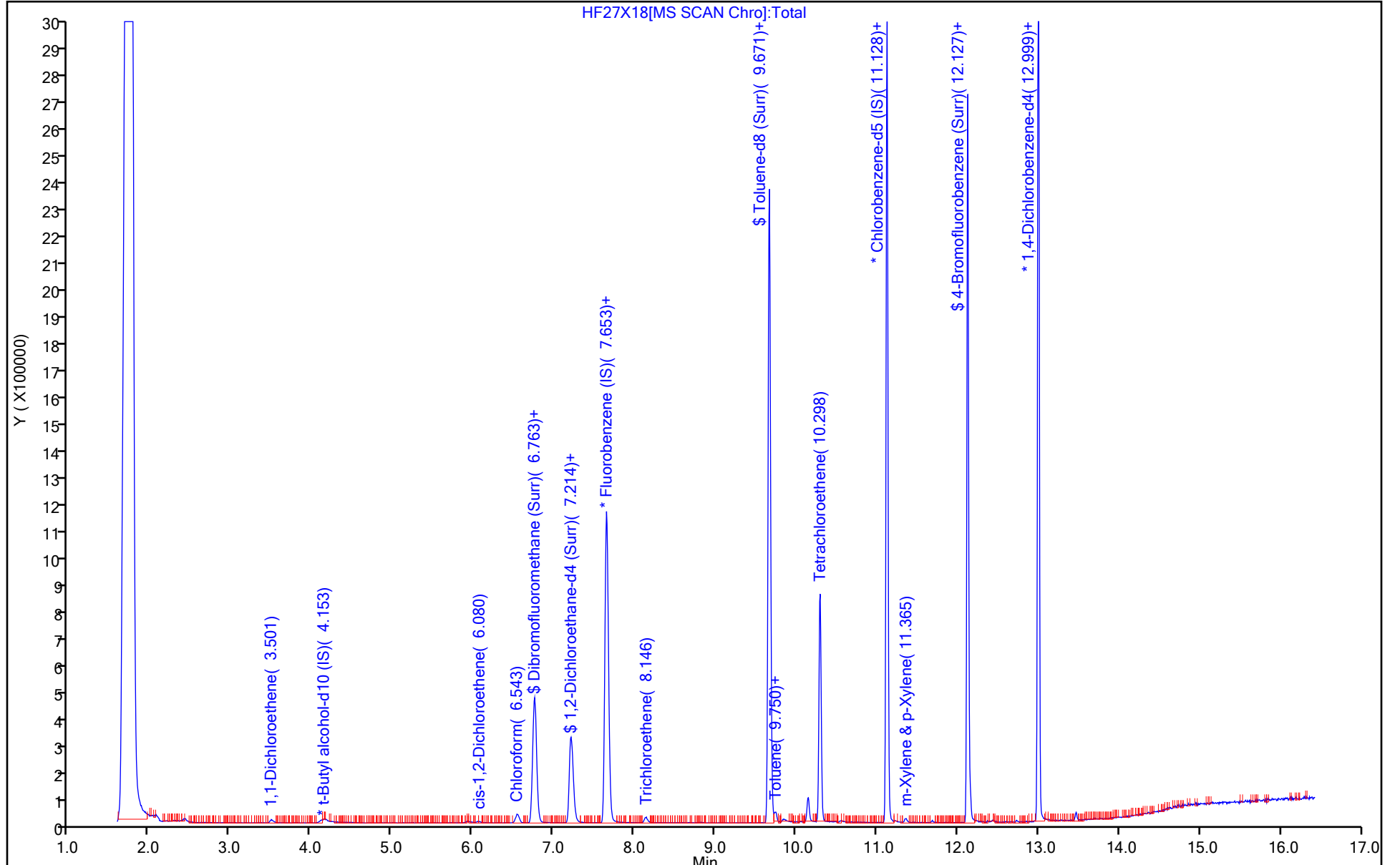
ALS Bottle#: 18

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X18.D
 Lims ID: 410-116393-A-9
 Client ID: HD-COD-SW-26-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 18:23:30 ALS Bottle#: 18 Worklist Smp#: 19
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-019
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:18:03 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp

Date: 28-Feb-2023 11:18:03

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.9	109.00
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.6	106.13
\$ 84 Toluene-d8 (Surr)	10.0	9.50	95.03
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.36	93.65

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X18.D

Injection Date: 27-Feb-2023 18:23:30

Instrument ID: 19094

Lims ID: 410-116393-A-9

Lab Sample ID: 410-116393-9

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

Operator ID: knk41612

ALS Bottle#: 18

Worklist Smp#: 19

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

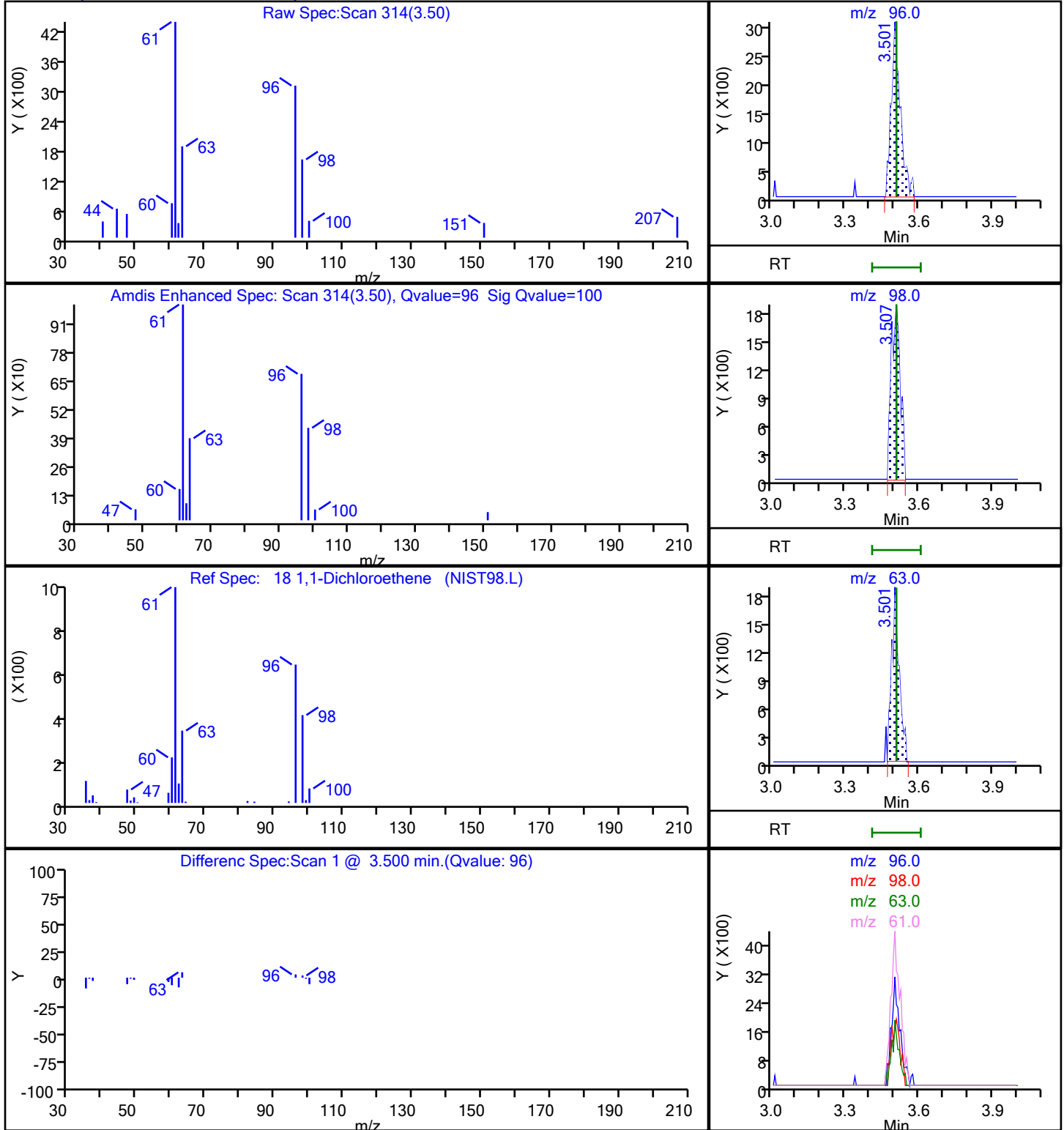
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

18 1,1-Dichloroethene, CAS: 75-35-4



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X18.D

Injection Date: 27-Feb-2023 18:23:30

Instrument ID: 19094

Lims ID: 410-116393-A-9

Lab Sample ID: 410-116393-9

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

Operator ID: knk41612

ALS Bottle#: 18

Worklist Smp#: 19

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

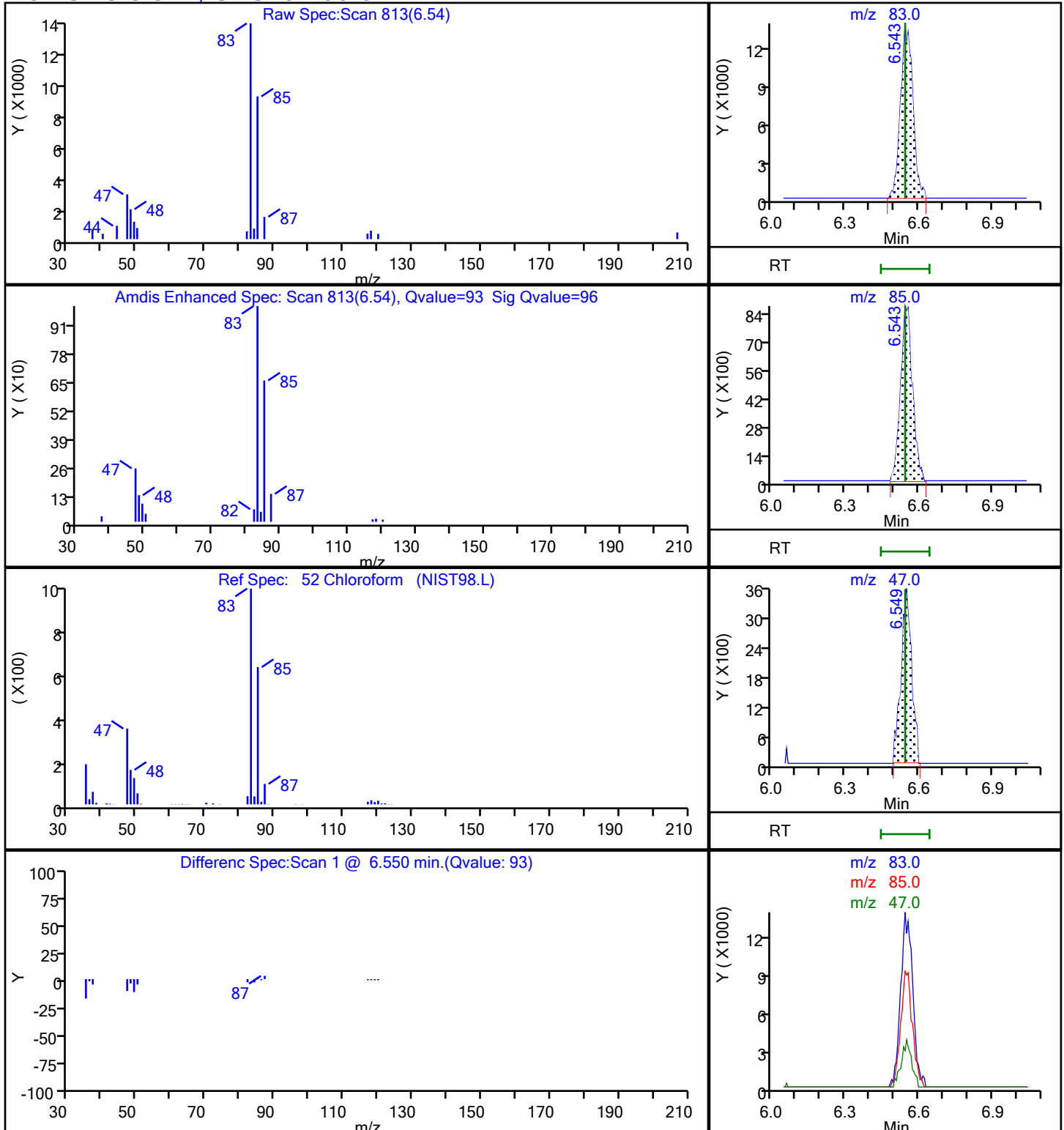
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

52 Chloroform, CAS: 67-66-3



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X18.D

Injection Date: 27-Feb-2023 18:23:30

Instrument ID: 19094

Lims ID: 410-116393-A-9

Lab Sample ID: 410-116393-9

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

Operator ID: knk41612

ALS Bottle#: 18

Worklist Smp#: 19

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

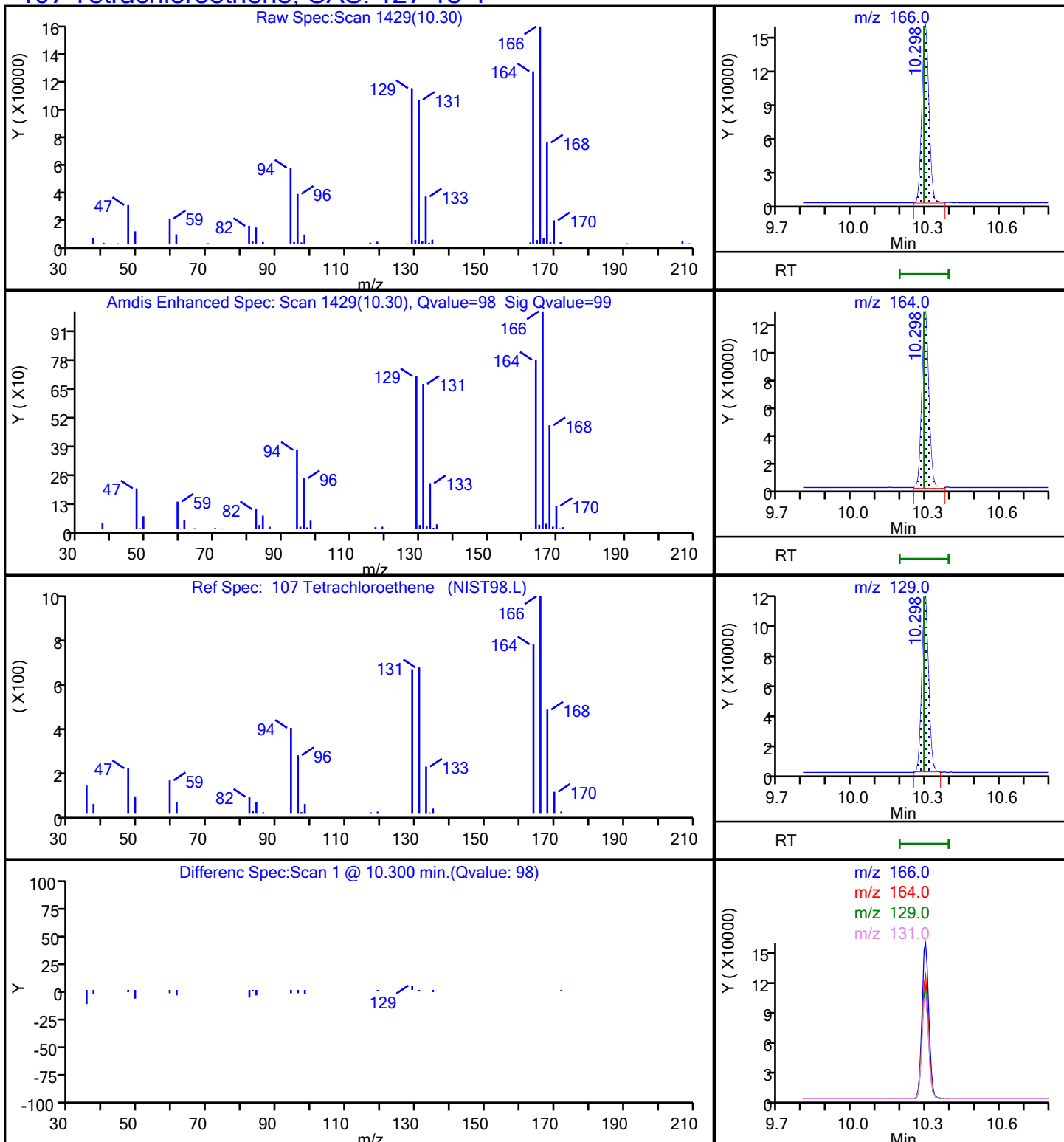
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

107 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X18.D

Injection Date: 27-Feb-2023 18:23:30

Instrument ID: 19094

Lims ID: 410-116393-A-9

Lab Sample ID: 410-116393-9

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

Operator ID: knk41612

ALS Bottle#: 18

Worklist Smp#: 19

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

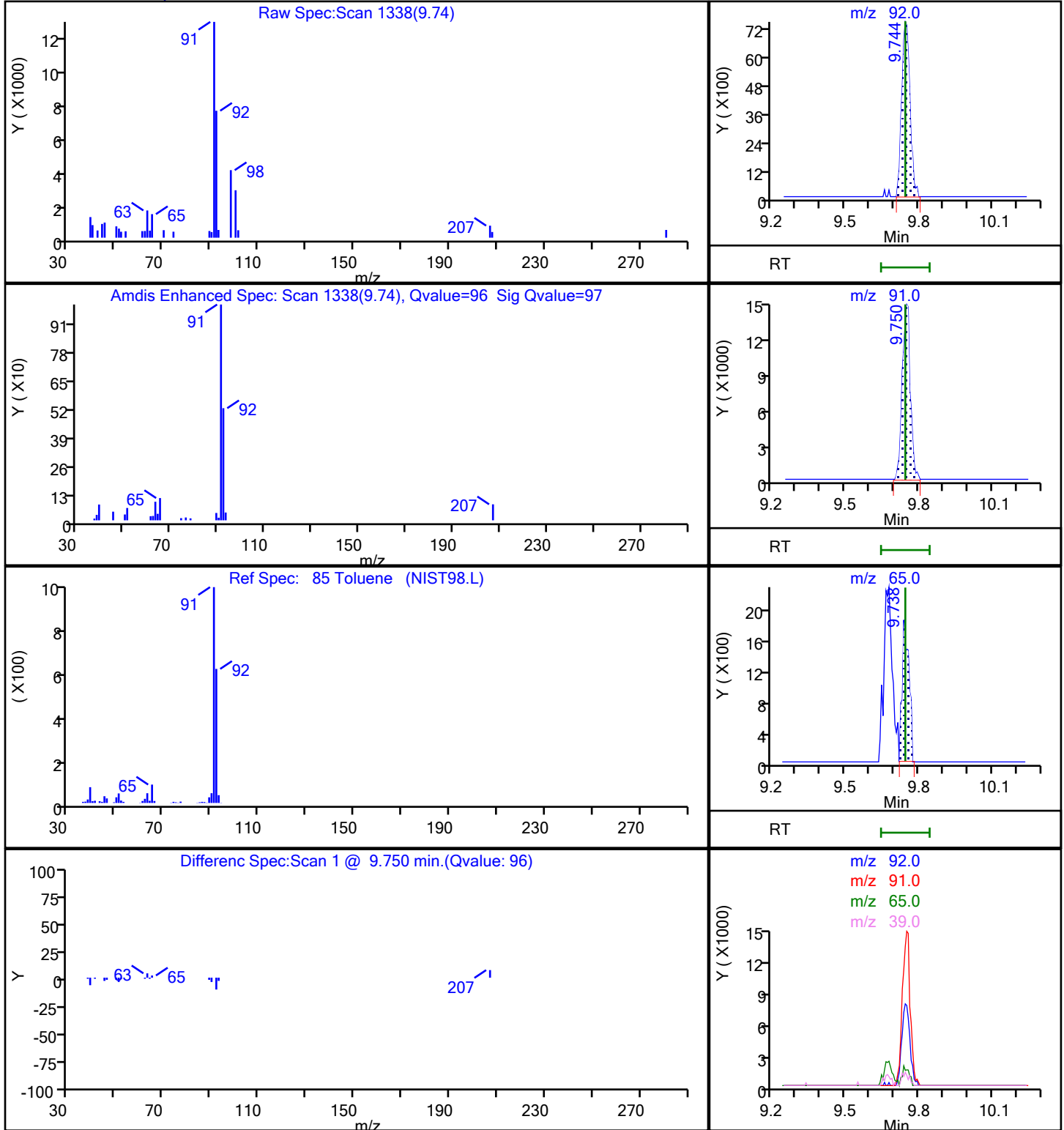
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

85 Toluene, CAS: 108-88-3



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X18.D

Injection Date: 27-Feb-2023 18:23:30

Instrument ID: 19094

Lims ID: 410-116393-A-9

Lab Sample ID: 410-116393-9

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

Operator ID: knk41612

ALS Bottle#: 18

Worklist Smp#: 19

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

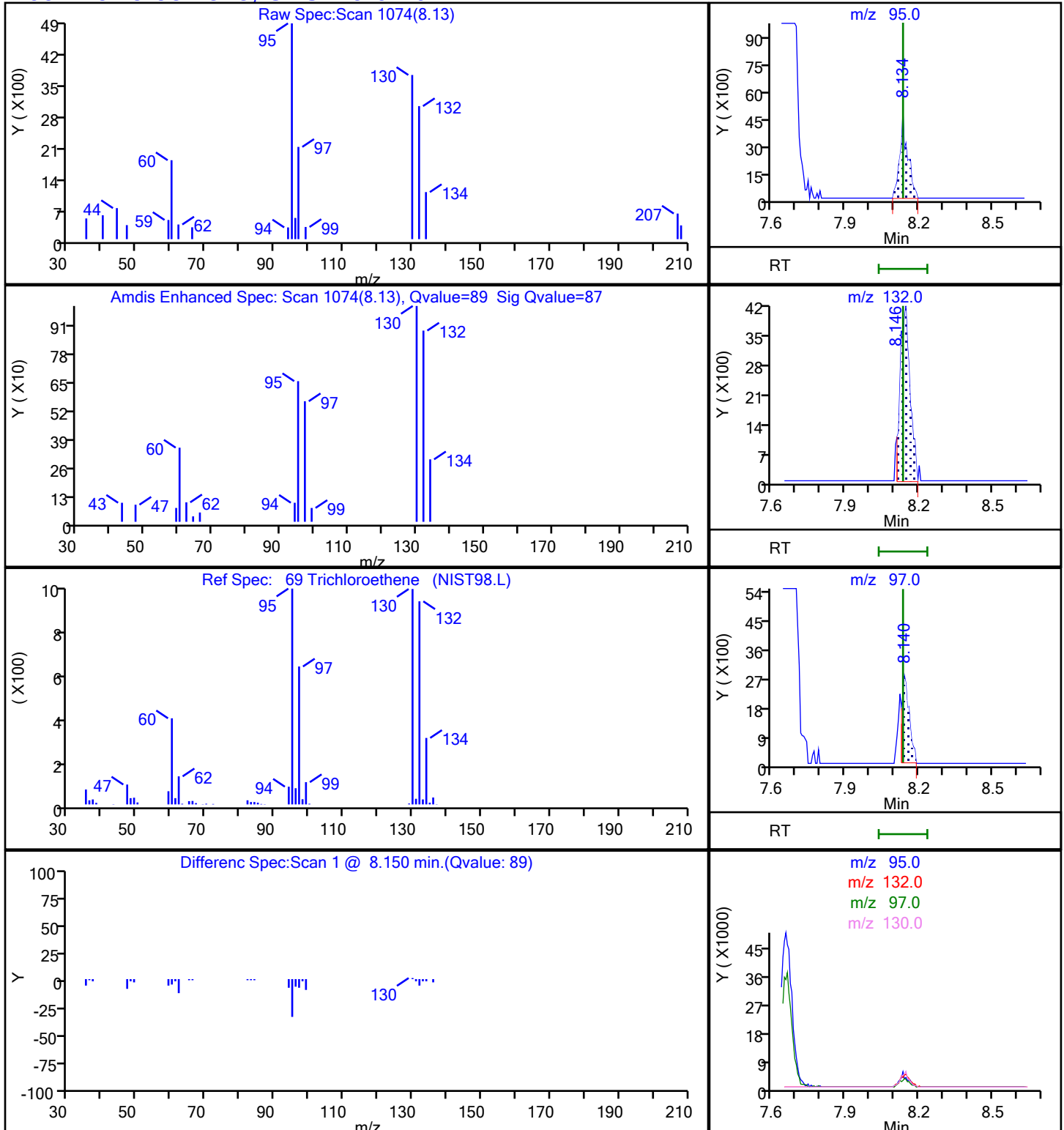
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

69 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Environment Testing, LLC

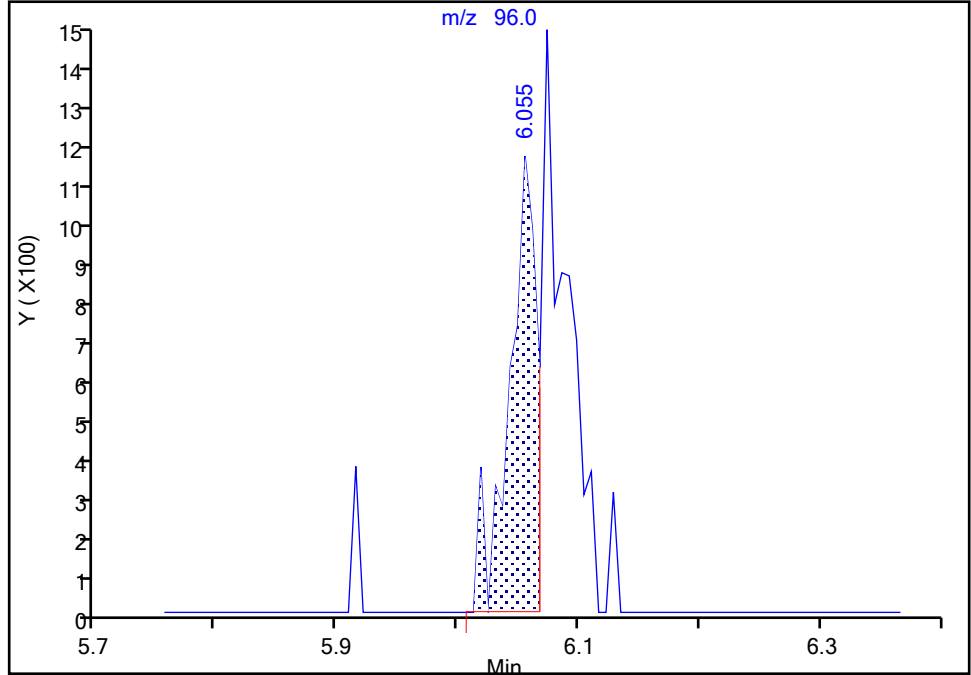
Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X18.D
Injection Date: 27-Feb-2023 18:23:30 Instrument ID: 19094
Lims ID: 410-116393-A-9 Lab Sample ID: 410-116393-9
Client ID: HD-COD-SW-26-0/1-0
Operator ID: knk41612 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

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

Signal: 1

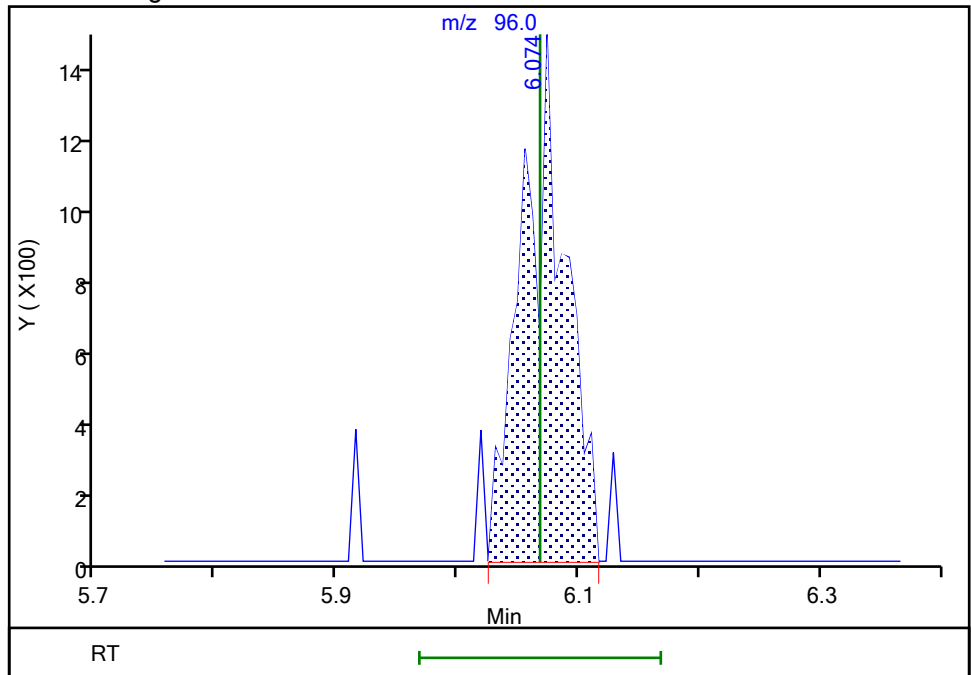
RT: 6.06
Area: 1817
Amount: 0.032111
Amount Units: ug/l

Processing Integration Results



RT: 6.07
Area: 3598
Amount: 0.063585
Amount Units: ug/l

Manual Integration Results



Reviewer: kaewrungrueangp, 28-Feb-2023 11:17:35
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

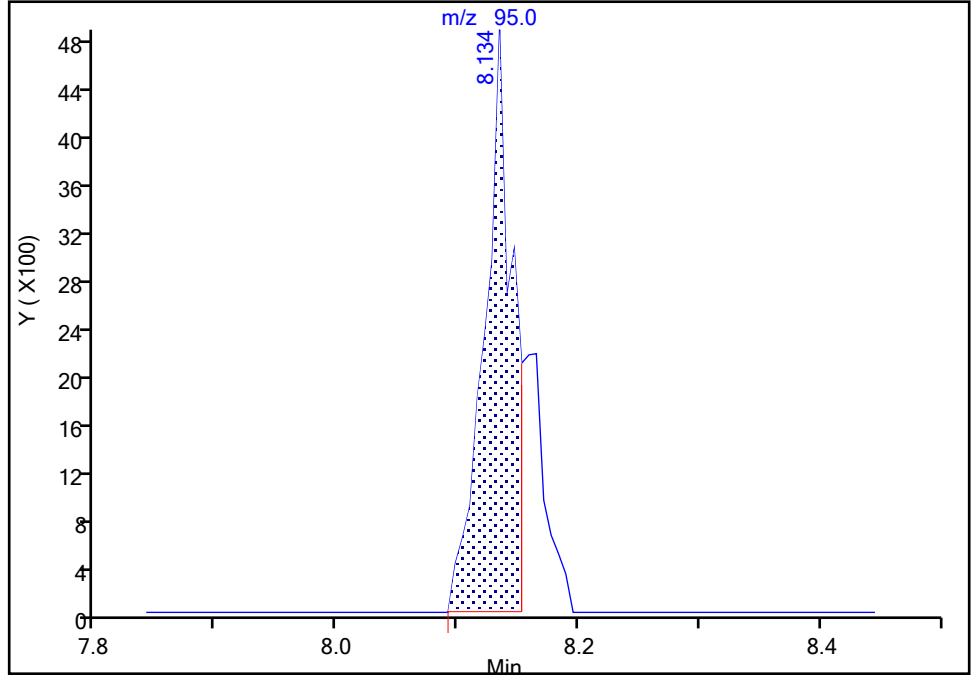
Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X18.D
Injection Date: 27-Feb-2023 18:23:30 Instrument ID: 19094
Lims ID: 410-116393-A-9 Lab Sample ID: 410-116393-9
Client ID: HD-COD-SW-26-0/1-0
Operator ID: knk41612 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

69 Trichloroethene, CAS: 79-01-6

Signal: 1

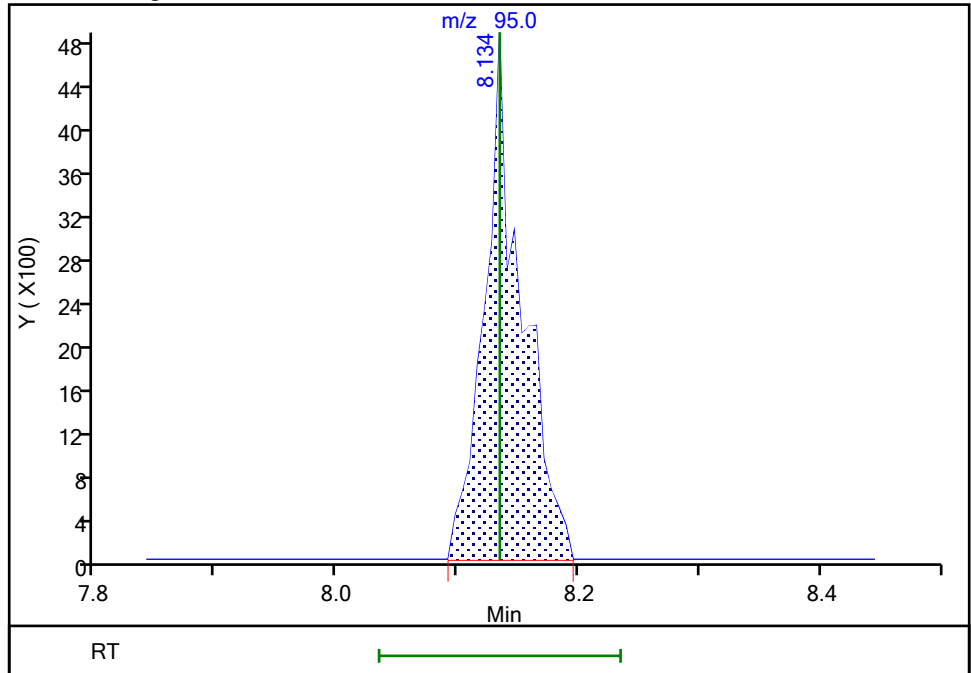
RT: 8.13
Area: 7956
Amount: 0.135538
Amount Units: ug/l

Processing Integration Results



RT: 8.13
Area: 10422
Amount: 0.177549
Amount Units: ug/l

Manual Integration Results



Reviewer: kaewrungrueangp, 28-Feb-2023 11:17:49
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.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-10

Matrix: Water

Lab File ID: HF27X19.D

Analysis Method: 8260D

Date Collected: 02/21/2023 11:05

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 18:43

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.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	2.0	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.21	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	0.10	J	0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-10

Matrix: Water

Lab File ID: HF27X19.D

Analysis Method: 8260D

Date Collected: 02/21/2023 11:05

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 18:43

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.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.25	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	109		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X19.D
 Lims ID: 410-116393-A-10
 Client ID: HD-COD-SW-27-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 18:43:30 ALS Bottle#: 19 Worklist Smp#: 20
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-020
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:18:54 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp

Date: 28-Feb-2023 11:18:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	2.123	2.130	-0.007	1	3557	0.0536	
7 Vinyl chloride	62		2.245				ND	7
9 Bromomethane	94		2.568				ND	
10 Chloroethane	64		2.648				ND	
18 1,1-Dichloroethene	96		3.507				ND	
19 Acetone	43	3.544	3.532	0.012	68	11495	2.01	
24 Carbon disulfide	76	3.812	3.806	0.006	99	10623	0.0882	M
28 Methylene Chloride	84		4.160				ND	
* 29 t-Butyl alcohol-d10 (IS)	65	4.153	4.166	-0.013	20	89334	50.0	
33 Methyl tert-butyl ether	73		4.556				ND	
34 trans-1,2-Dichloroethene	96		4.580				ND	7
37 1,1-Dichloroethane	63		5.233				ND	
42 2-Butanone (MEK)	43		6.013				ND	7
43 cis-1,2-Dichloroethene	96	6.074	6.068	0.006	79	11636	0.2119	
49 Chlorobromomethane	128		6.397				ND	
52 Chloroform	83	6.549	6.543	0.006	84	7485	0.0849	
\$ 53 Dibromofluoromethane (Surr)	113	6.769	6.763	0.006	94	475371	10.9	
54 1,1,1-Trichloroethane	97		6.769				ND	
57 Carbon tetrachloride	117		6.988				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.214	7.220	-0.006	52	84628	10.6	
60 Benzene	78	7.244	7.250	-0.006	41	7692	0.0356	
62 1,2-Dichloroethane	62		7.324				ND	7
* 65 Fluorobenzene (IS)	96	7.653	7.653	0.000	99	1730301	10.0	
69 Trichloroethene	95	8.134	8.134	0.000	91	14517	0.2549	M
71 1,2-Dichloropropane	63		8.464				ND	
77 Dichlorobromomethane	83		8.805				ND	7
81 cis-1,3-Dichloropropene	75		9.360				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.524				ND	7
\$ 84 Toluene-d8 (Surr)	98	9.671	9.665	0.006	93	1995188	9.47	
85 Toluene	92	9.750	9.744	0.006	99	15951	0.1019	
86 trans-1,3-Dichloropropene	75		10.000				ND	
106 1,1,2-Trichloroethane	97		10.207				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.298	10.293	0.005	93	5519	0.0764	
109 2-Hexanone	43		10.414				ND	
111 Chlorodibromomethane	129		10.585				ND	
112 Ethylene Dibromide	107		10.695				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	84	1721347	10.0	
115 Chlorobenzene	112		11.152				ND	
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91		11.237				ND	7
S 117 Xylenes, Total	106		11.245				ND	7
119 m-Xylene & p-Xylene	106		11.353				ND	7
120 o-Xylene	106		11.676				ND	7
121 Styrene	104		11.695				ND	7
122 Bromoform	173		11.853				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	95	796332	9.31	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1000552	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSV_LLcentISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X19.D

Injection Date: 27-Feb-2023 18:43:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: 410-116393-A-10

Lab Sample ID: 410-116393-10

Worklist Smp#: 20

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

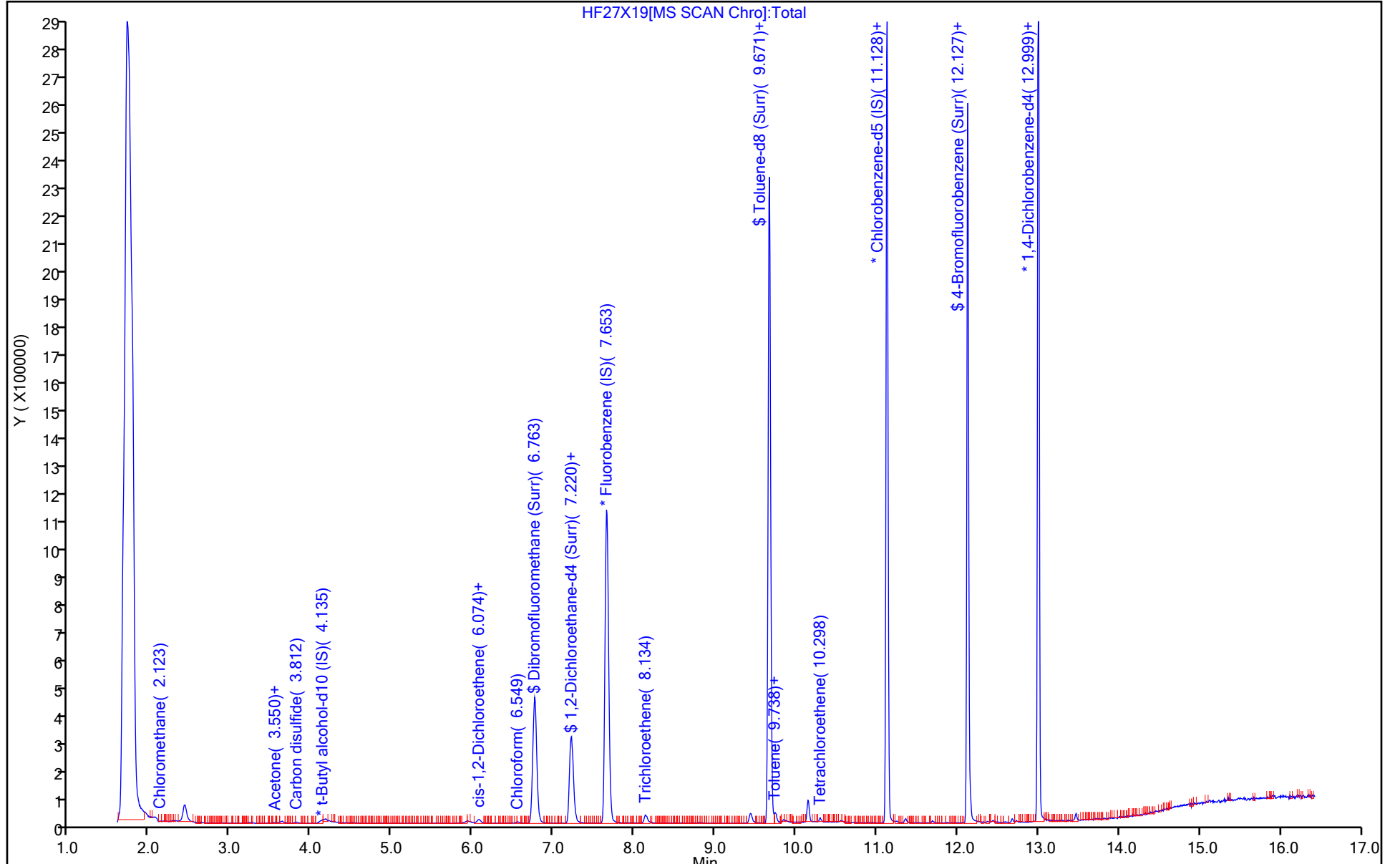
ALS Bottle#: 19

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X19.D
 Lims ID: 410-116393-A-10
 Client ID: HD-COD-SW-27-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 18:43:30 ALS Bottle#: 19 Worklist Smp#: 20
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-020
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:18:54 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp

Date: 28-Feb-2023 11:18:54

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.9	108.54
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.6	105.90
\$ 84 Toluene-d8 (Surr)	10.0	9.47	94.75
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.31	93.15

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X19.D

Injection Date: 27-Feb-2023 18:43:30

Instrument ID: 19094

Lims ID: 410-116393-A-10

Lab Sample ID: 410-116393-10

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

Operator ID: knk41612

ALS Bottle#: 19

Worklist Smp#: 20

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

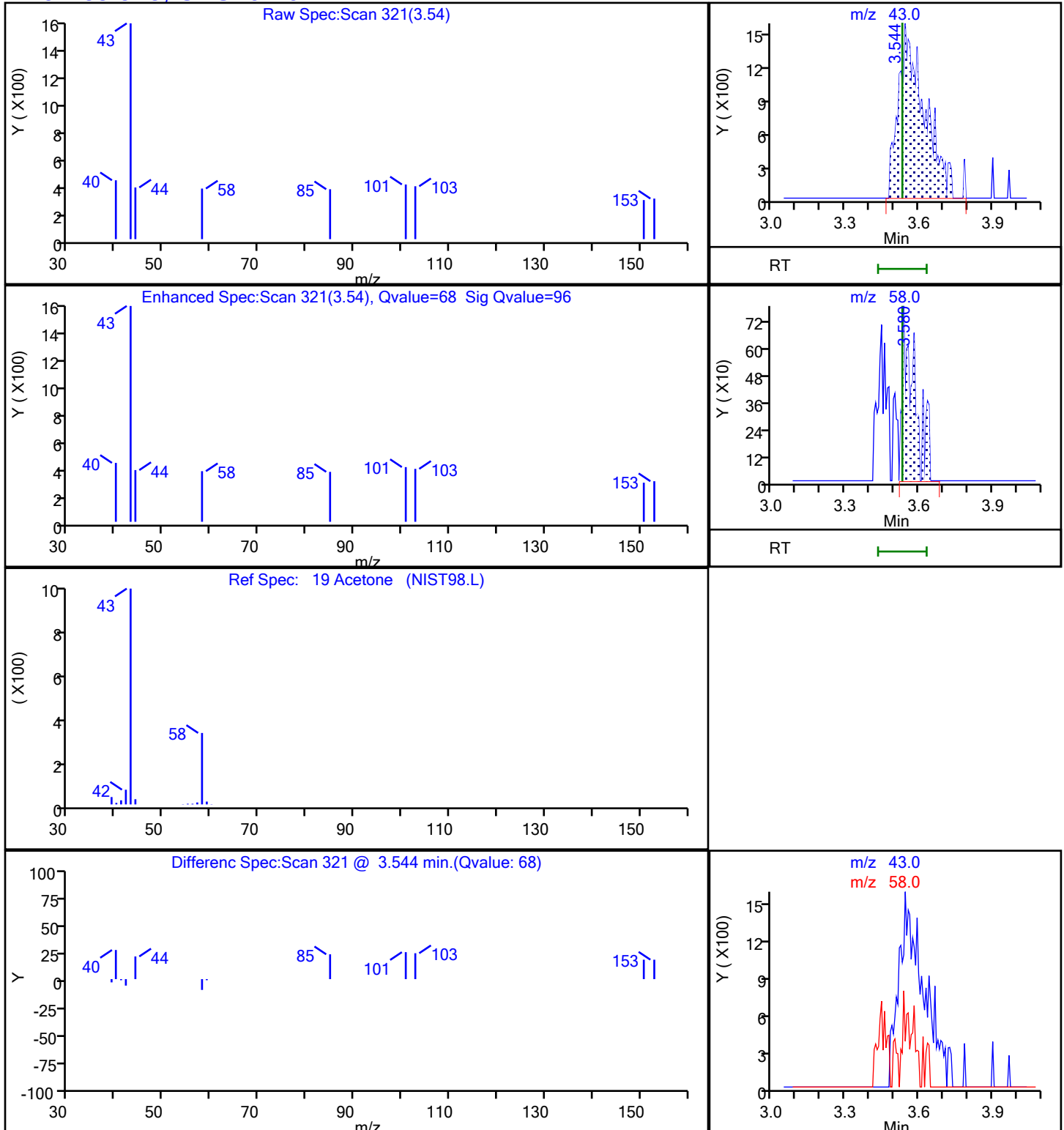
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

19 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X19.D

Injection Date: 27-Feb-2023 18:43:30

Instrument ID: 19094

Lims ID: 410-116393-A-10

Lab Sample ID: 410-116393-10

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

Operator ID: knk41612

ALS Bottle#: 19

Worklist Smp#: 20

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

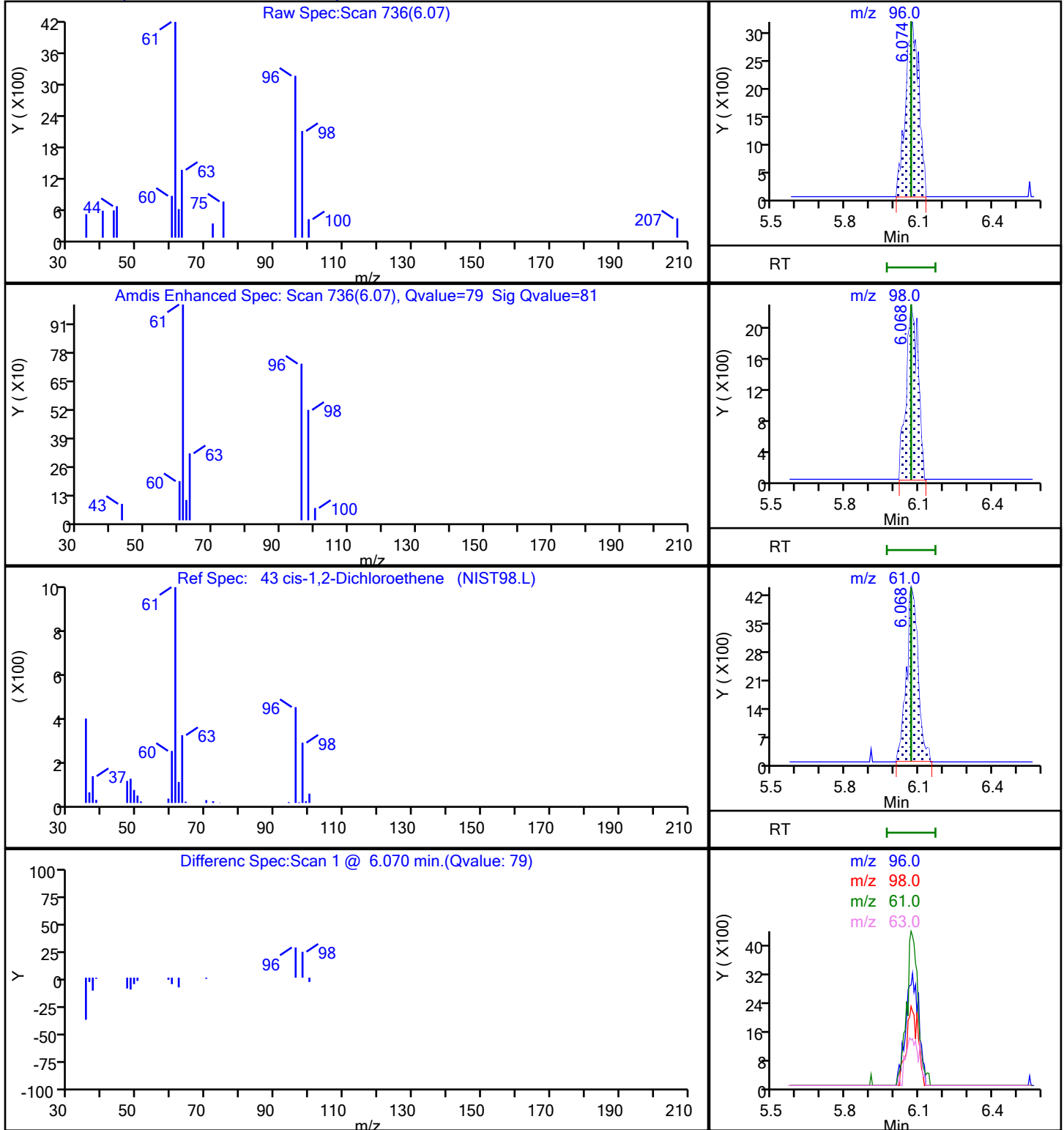
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X19.D

Injection Date: 27-Feb-2023 18:43:30

Instrument ID: 19094

Lims ID: 410-116393-A-10

Lab Sample ID: 410-116393-10

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

Operator ID: knk41612

ALS Bottle#: 19

Worklist Smp#: 20

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

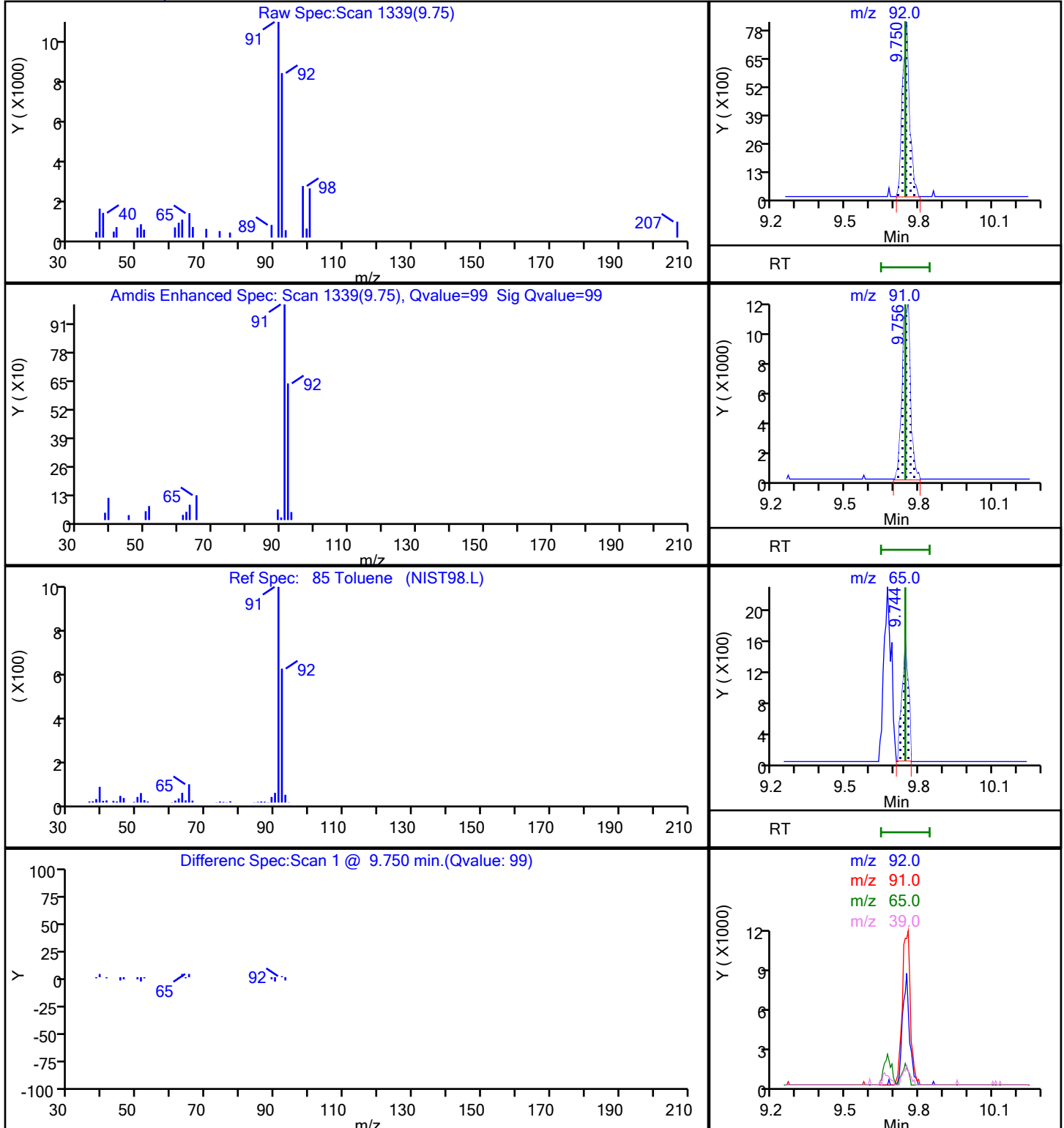
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

85 Toluene, CAS: 108-88-3



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X19.D

Injection Date: 27-Feb-2023 18:43:30

Instrument ID: 19094

Lims ID: 410-116393-A-10

Lab Sample ID: 410-116393-10

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

Operator ID: knk41612

ALS Bottle#: 19

Worklist Smp#: 20

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

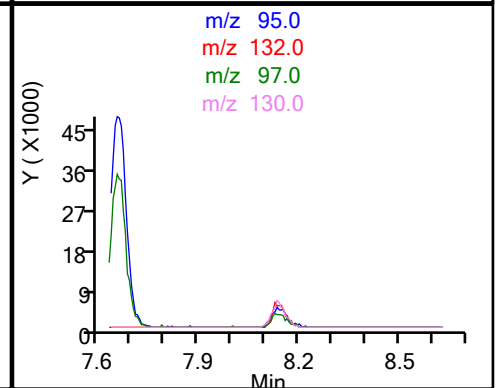
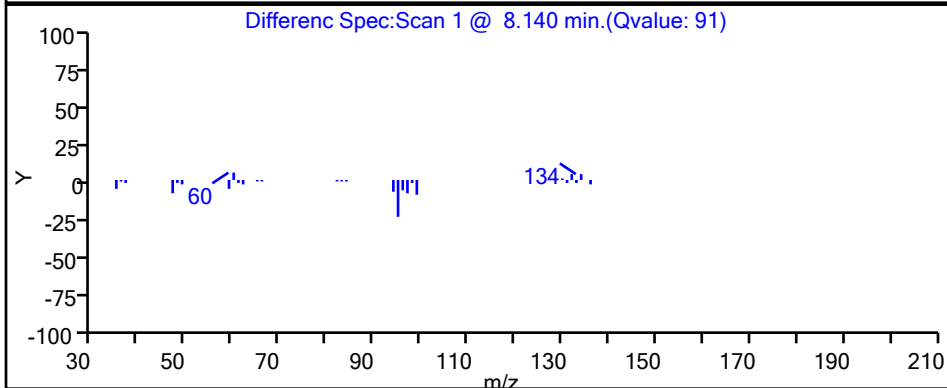
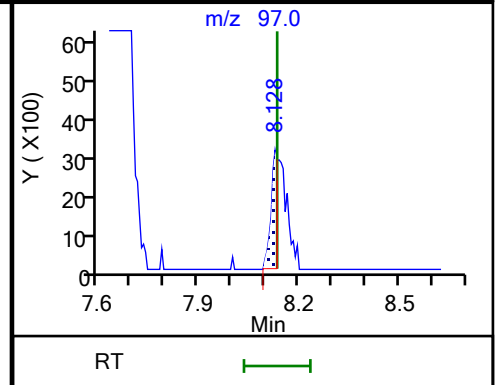
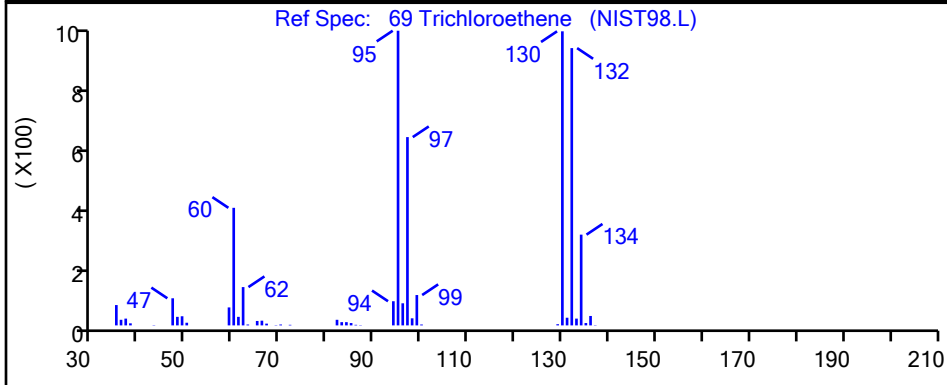
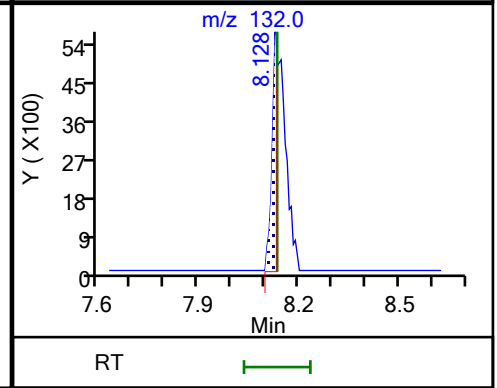
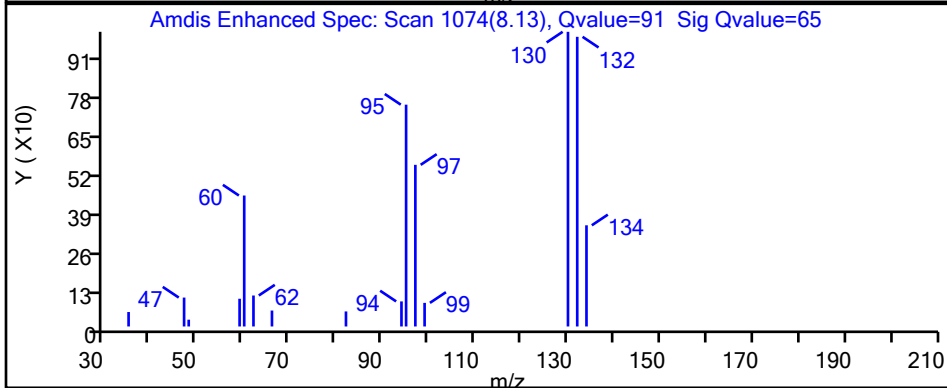
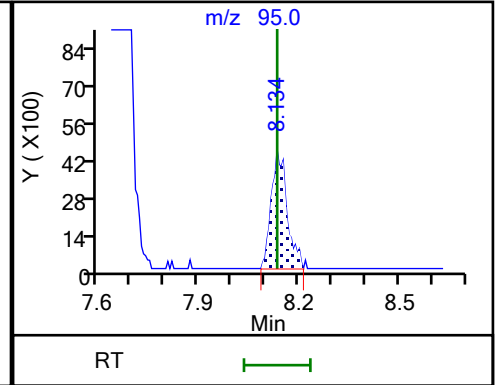
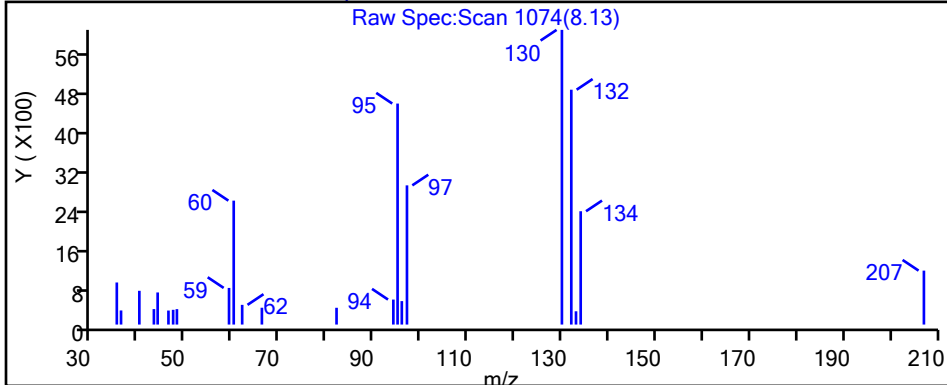
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

69 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Environment Testing, LLC

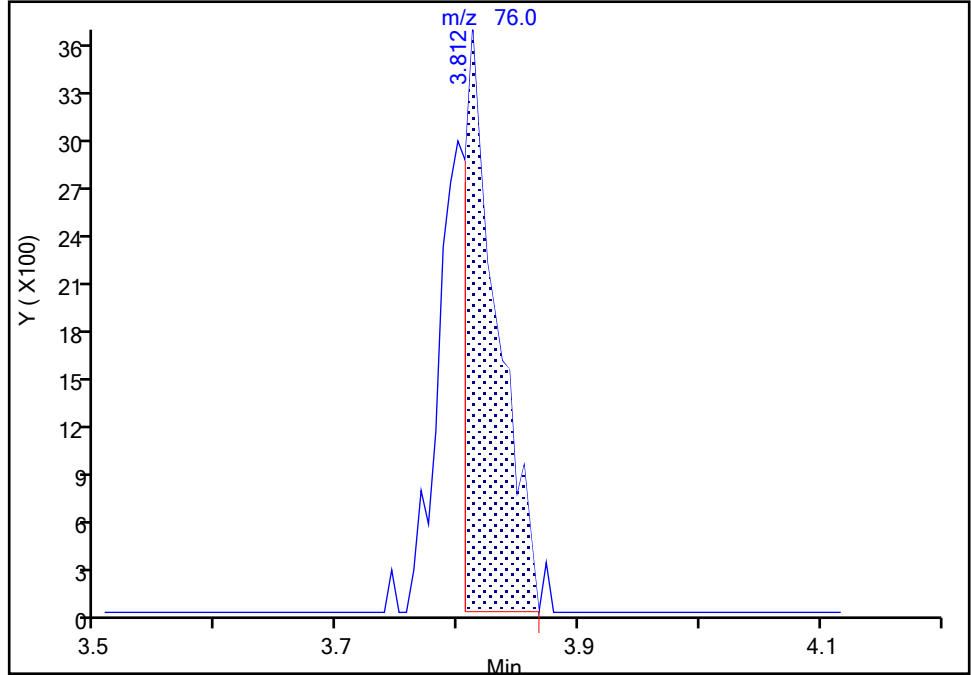
Data File:	\\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X19.D		
Injection Date:	27-Feb-2023 18:43:30	Instrument ID:	19094
Lims ID:	410-116393-A-10	Lab Sample ID:	410-116393-10
Client ID:	HD-COD-SW-27-0/1-0		
Operator ID:	knk41612	ALS Bottle#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	20

24 Carbon disulfide, CAS: 75-15-0

Signal: 1

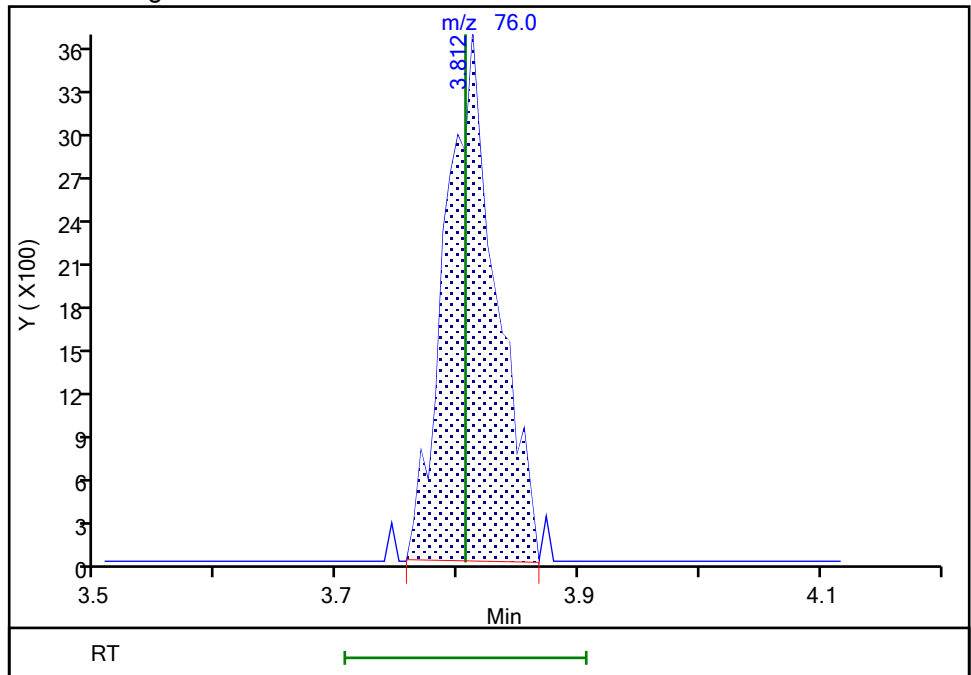
RT: 3.81
 Area: 6764
 Amount: 0.056152
 Amount Units: ug/l

Processing Integration Results



RT: 3.81
 Area: 10623
 Amount: 0.088187
 Amount Units: ug/l

Manual Integration Results



Reviewer: kaewrungrueangp, 28-Feb-2023 11:18:23
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

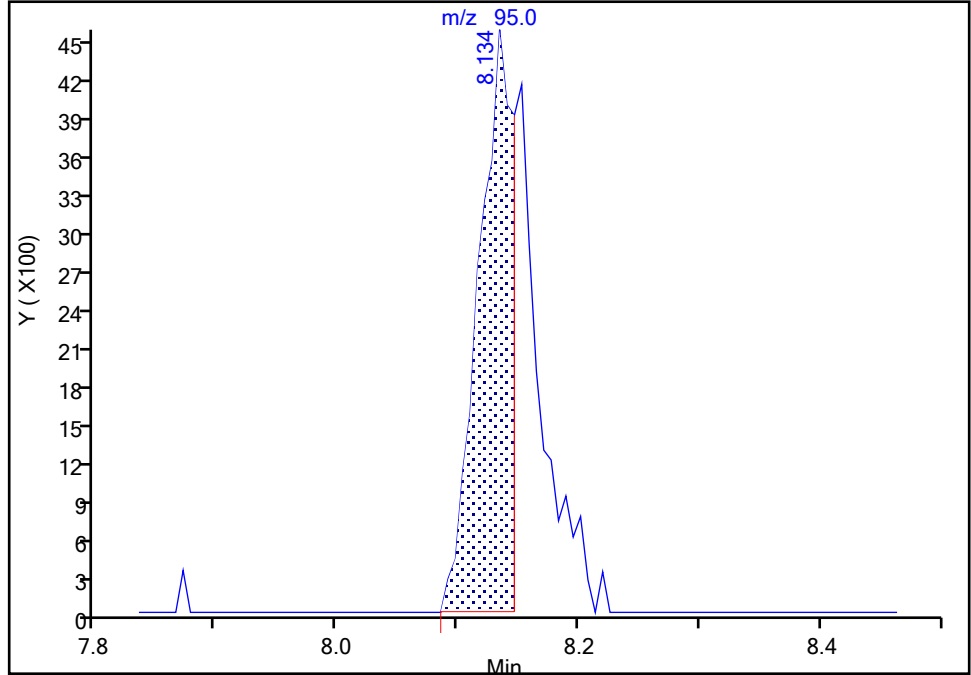
Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X19.D
Injection Date: 27-Feb-2023 18:43:30 Instrument ID: 19094
Lims ID: 410-116393-A-10 Lab Sample ID: 410-116393-10
Client ID: HD-COD-SW-27-0/1-0
Operator ID: knk41612 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

69 Trichloroethene, CAS: 79-01-6

Signal: 1

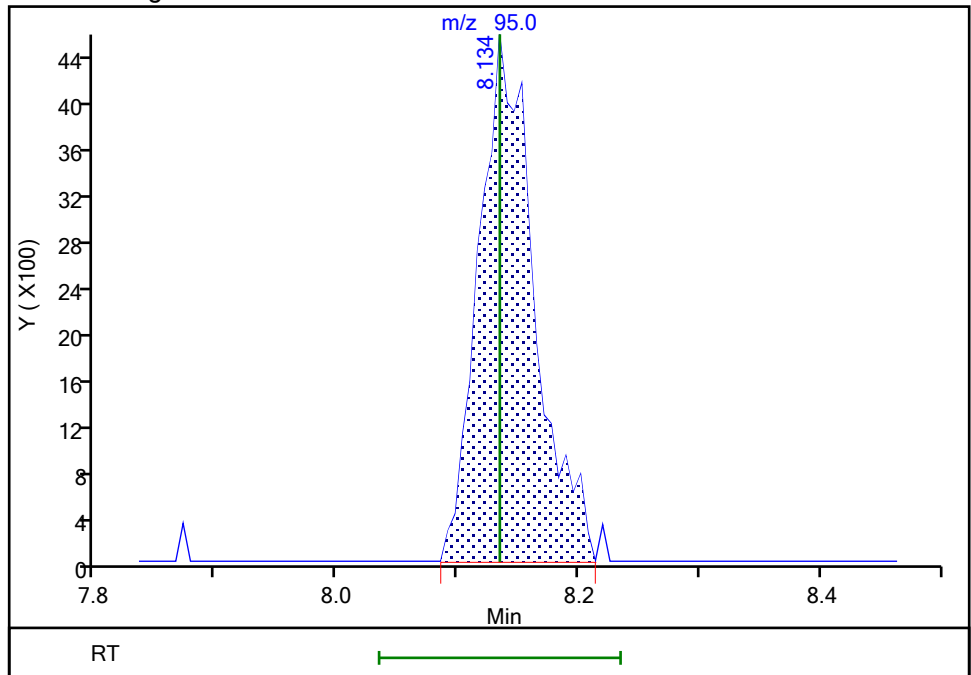
RT: 8.13
Area: 9197
Amount: 0.161473
Amount Units: ug/l

Processing Integration Results



RT: 8.13
Area: 14517
Amount: 0.254877
Amount Units: ug/l

Manual Integration Results



Reviewer: kaewrungrueangp, 28-Feb-2023 11:18:39
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.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-11

Matrix: Water

Lab File ID: HF27X20.D

Analysis Method: 8260D

Date Collected: 02/21/2023 12:30

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 19:04

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.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	1.7	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.17	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	0.21	J	0.50	0.20
108-88-3	Toluene	0.14	J	0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1
 Environment Testing, LLC

SDG No.:

Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 410-116393-11

Matrix: Water Lab File ID: HF27X20.D

Analysis Method: 8260D Date Collected: 02/21/2023 12:30

Sample wt/vol: 25 (mL) Date Analyzed: 02/27/2023 19:04

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.: 348233 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.20	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	107		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X20.D
 Lims ID: 410-116393-A-11
 Client ID: HD-COD-SW-28-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 19:04:30 ALS Bottle#: 20 Worklist Smp#: 21
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-021
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:18:54 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp Date: 28-Feb-2023 11:19:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	2.117	2.130	-0.013	26	3783	0.0535	
7 Vinyl chloride	62		2.245				ND	
9 Bromomethane	94		2.568				ND	
10 Chloroethane	64		2.648				ND	
18 1,1-Dichloroethene	96		3.507				ND	
19 Acetone	43	3.538	3.532	0.006	67	9321	1.67	
24 Carbon disulfide	76	3.800	3.806	-0.006	59	6168	0.0481	
28 Methylene Chloride	84		4.160				ND	7
* 29 t-Butyl alcohol-d10 (IS)	65	4.166	4.166	0.000	26	87128	50.0	
33 Methyl tert-butyl ether	73		4.556				ND	
34 trans-1,2-Dichloroethene	96		4.580				ND	
37 1,1-Dichloroethane	63		5.233				ND	
42 2-Butanone (MEK)	43		6.013				ND	7
43 cis-1,2-Dichloroethene	96	6.074	6.068	0.006	76	9823	0.1679	
49 Chlorobromomethane	128		6.397				ND	
52 Chloroform	83	6.561	6.543	0.018	44	7352	0.0783	
\$ 53 Dibromofluoromethane (Surr)	113	6.763	6.763	0.000	93	500742	10.7	
54 1,1,1-Trichloroethane	97		6.769				ND	7
57 Carbon tetrachloride	117		6.988				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.214	7.220	-0.006	52	90172	10.6	
60 Benzene	78	7.256	7.250	0.006	41	7593	0.0330	
62 1,2-Dichloroethane	62		7.324				ND	7
* 65 Fluorobenzene (IS)	96	7.653	7.653	0.000	99	1843820	10.0	
69 Trichloroethene	95	8.140	8.134	0.006	97	12026	0.1981	
71 1,2-Dichloropropane	63		8.464				ND	
77 Dichlorobromomethane	83		8.805				ND	7
81 cis-1,3-Dichloropropene	75		9.360				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.524				ND	7
\$ 84 Toluene-d8 (Surr)	98	9.665	9.665	0.000	93	2102320	9.44	
85 Toluene	92	9.750	9.744	0.006	99	23910	0.1445	
86 trans-1,3-Dichloropropene	75		10.000				ND	
106 1,1,2-Trichloroethane	97		10.207				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.299	10.293	0.006	96	15855	0.2076	
109 2-Hexanone	43		10.414				ND	
111 Chlorodibromomethane	129		10.585				ND	
112 Ethylene Dibromide	107		10.695				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	85	1820338	10.0	
115 Chlorobenzene	112		11.152				ND	7
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91		11.237				ND	7
S 117 Xylenes, Total	106				0		0.1160	
119 m-Xylene & p-Xylene	106	11.359	11.353	0.006	97	10344	0.0840	
120 o-Xylene	106	11.689	11.676	0.013	94	3810	0.0320	
121 Styrene	104		11.695				ND	7
122 Bromoform	173		11.853				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	94	838886	9.28	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1053934	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_LLcentISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X20.D

Injection Date: 27-Feb-2023 19:04:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: 410-116393-A-11

Lab Sample ID: 410-116393-11

Worklist Smp#: 21

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

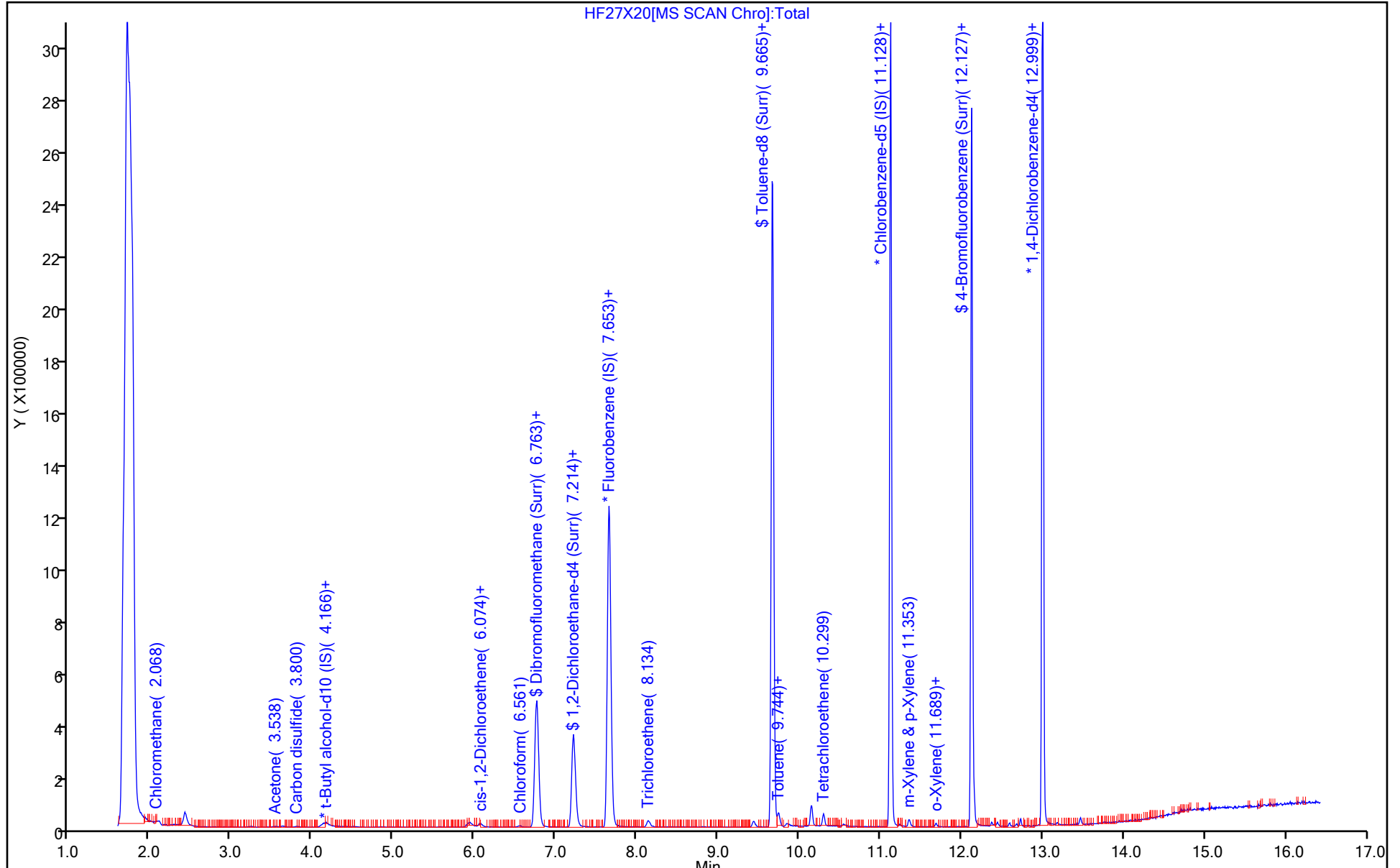
ALS Bottle#: 20

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X20.D
 Lims ID: 410-116393-A-11
 Client ID: HD-COD-SW-28-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 19:04:30 ALS Bottle#: 20 Worklist Smp#: 21
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-021
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:18:54 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp Date: 28-Feb-2023 11:19:34

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.7	107.30
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.6	105.89
\$ 84 Toluene-d8 (Surr)	10.0	9.44	94.40
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.28	92.79

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X20.D

Injection Date: 27-Feb-2023 19:04:30

Instrument ID: 19094

Lims ID: 410-116393-A-11

Lab Sample ID: 410-116393-11

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

Operator ID: knk41612

ALS Bottle#: 20

Worklist Smp#: 21

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

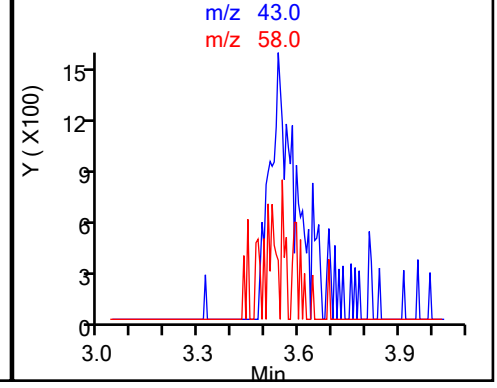
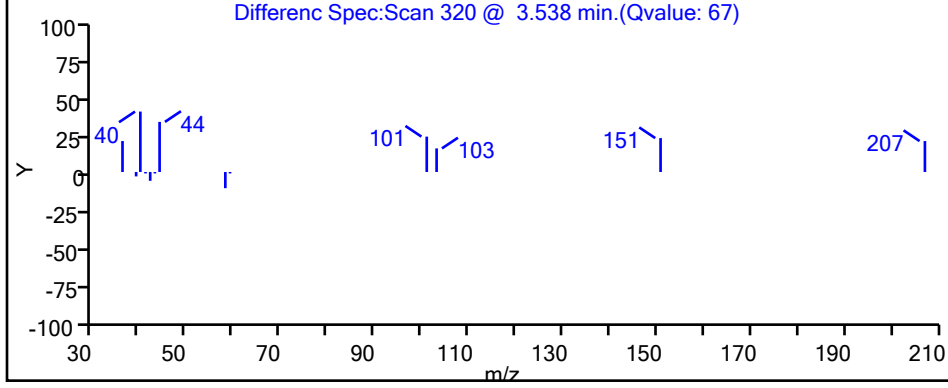
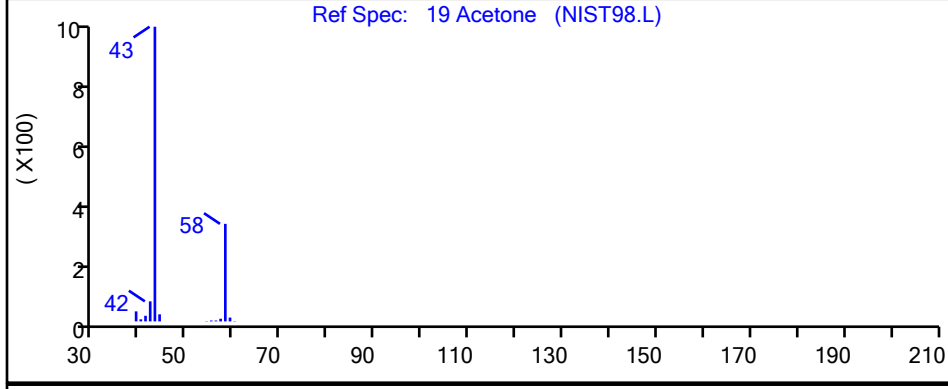
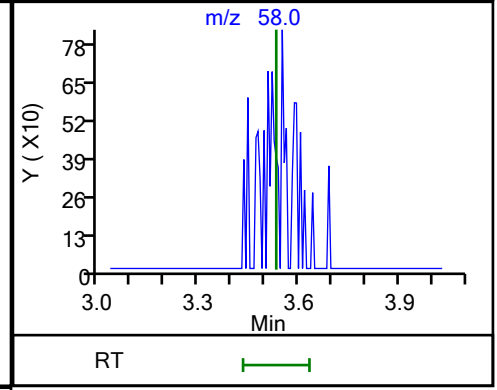
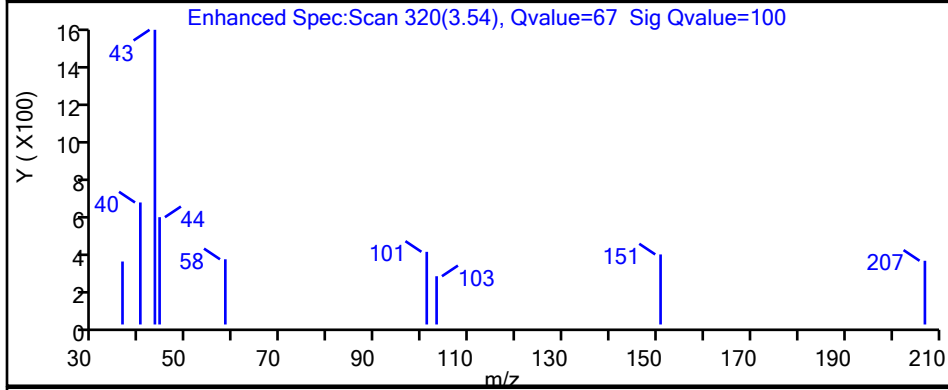
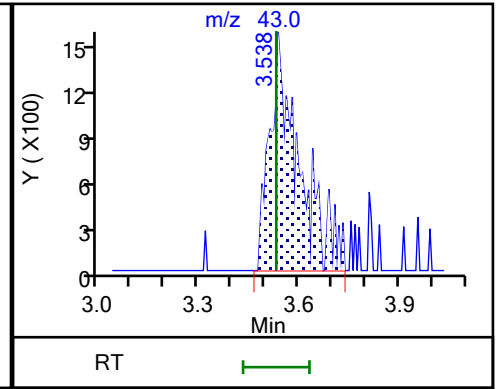
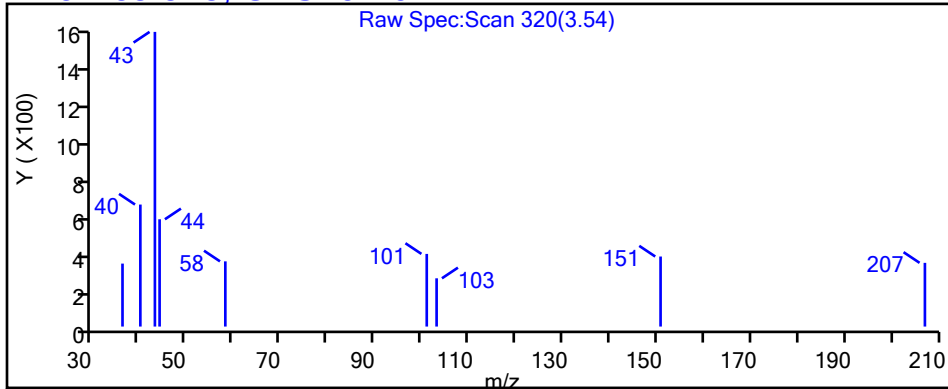
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

19 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X20.D

Injection Date: 27-Feb-2023 19:04:30

Instrument ID: 19094

Lims ID: 410-116393-A-11

Lab Sample ID: 410-116393-11

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

Operator ID: knk41612

ALS Bottle#: 20

Worklist Smp#: 21

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

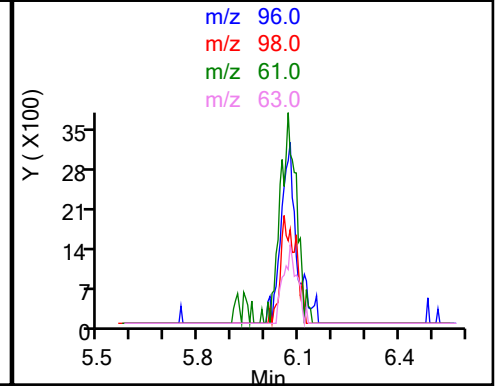
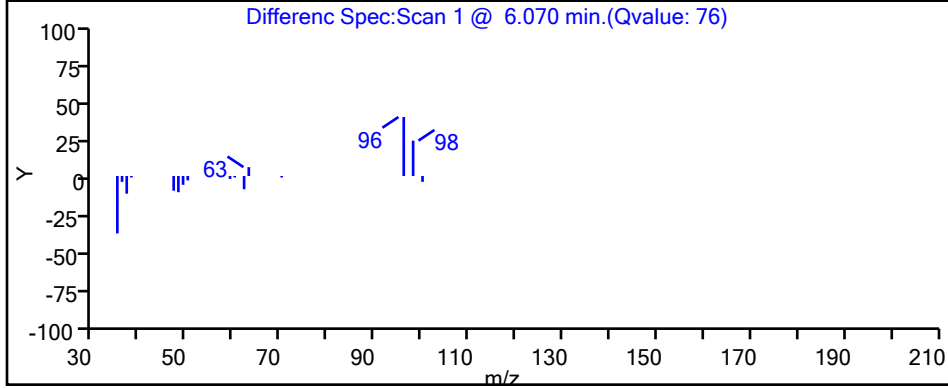
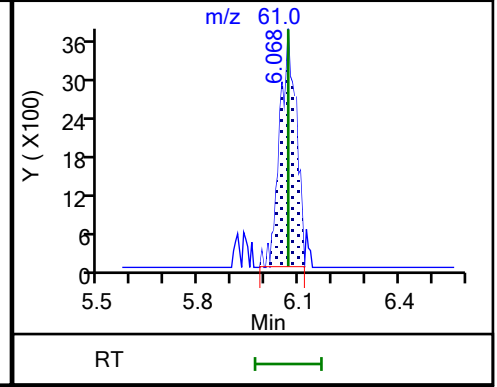
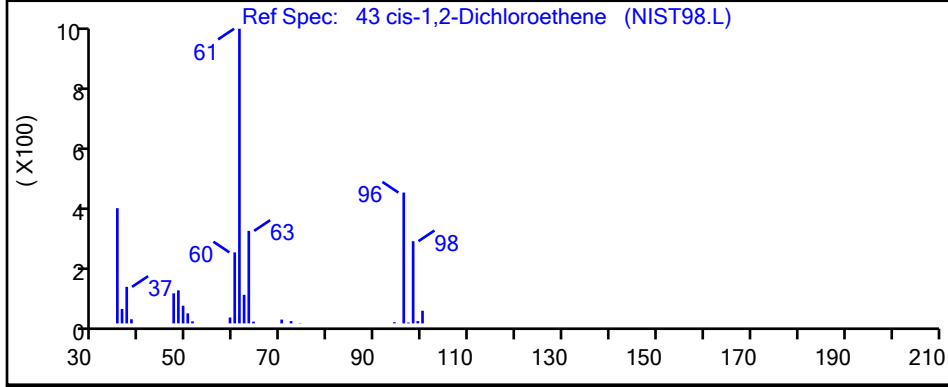
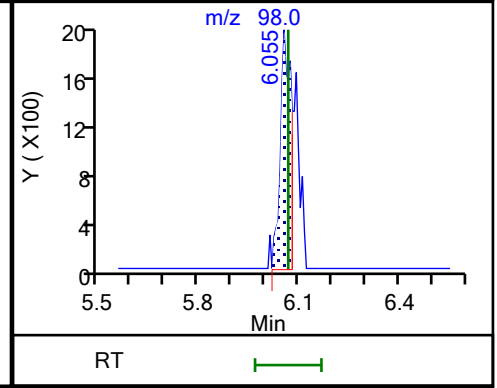
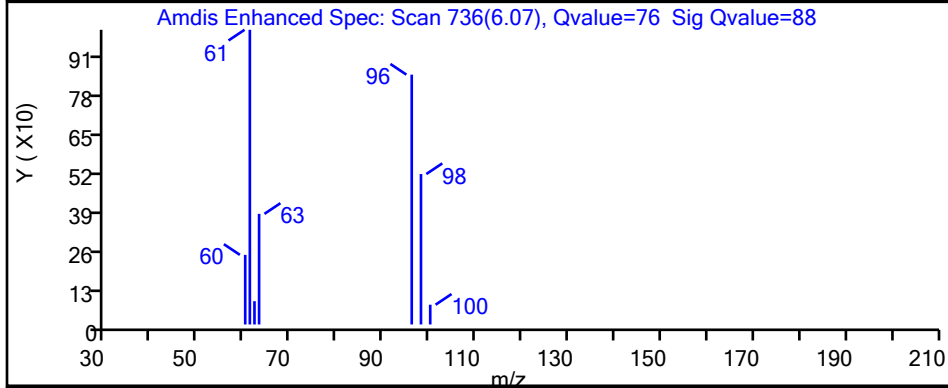
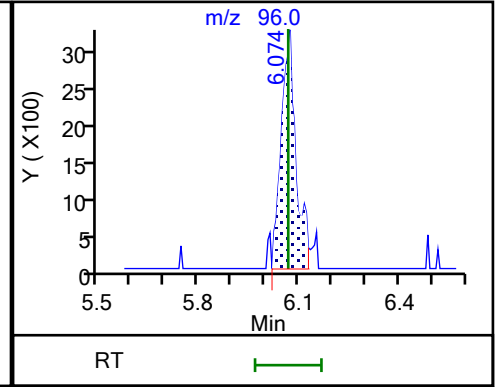
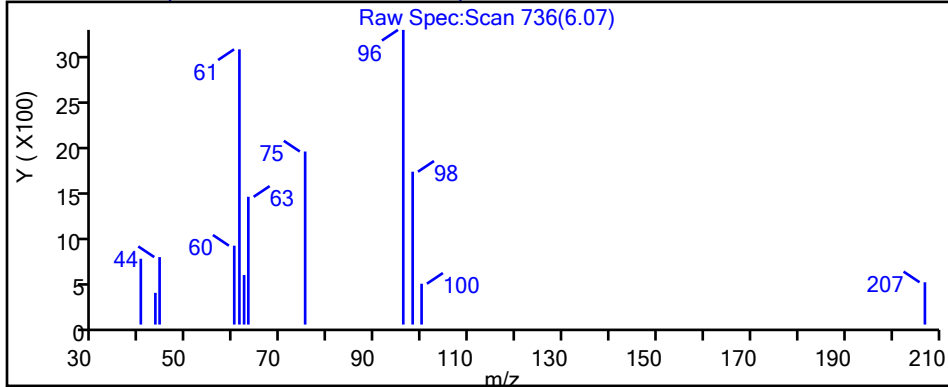
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X20.D

Injection Date: 27-Feb-2023 19:04:30

Instrument ID: 19094

Lims ID: 410-116393-A-11

Lab Sample ID: 410-116393-11

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

Operator ID: knk41612

ALS Bottle#: 20

Worklist Smp#: 21

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

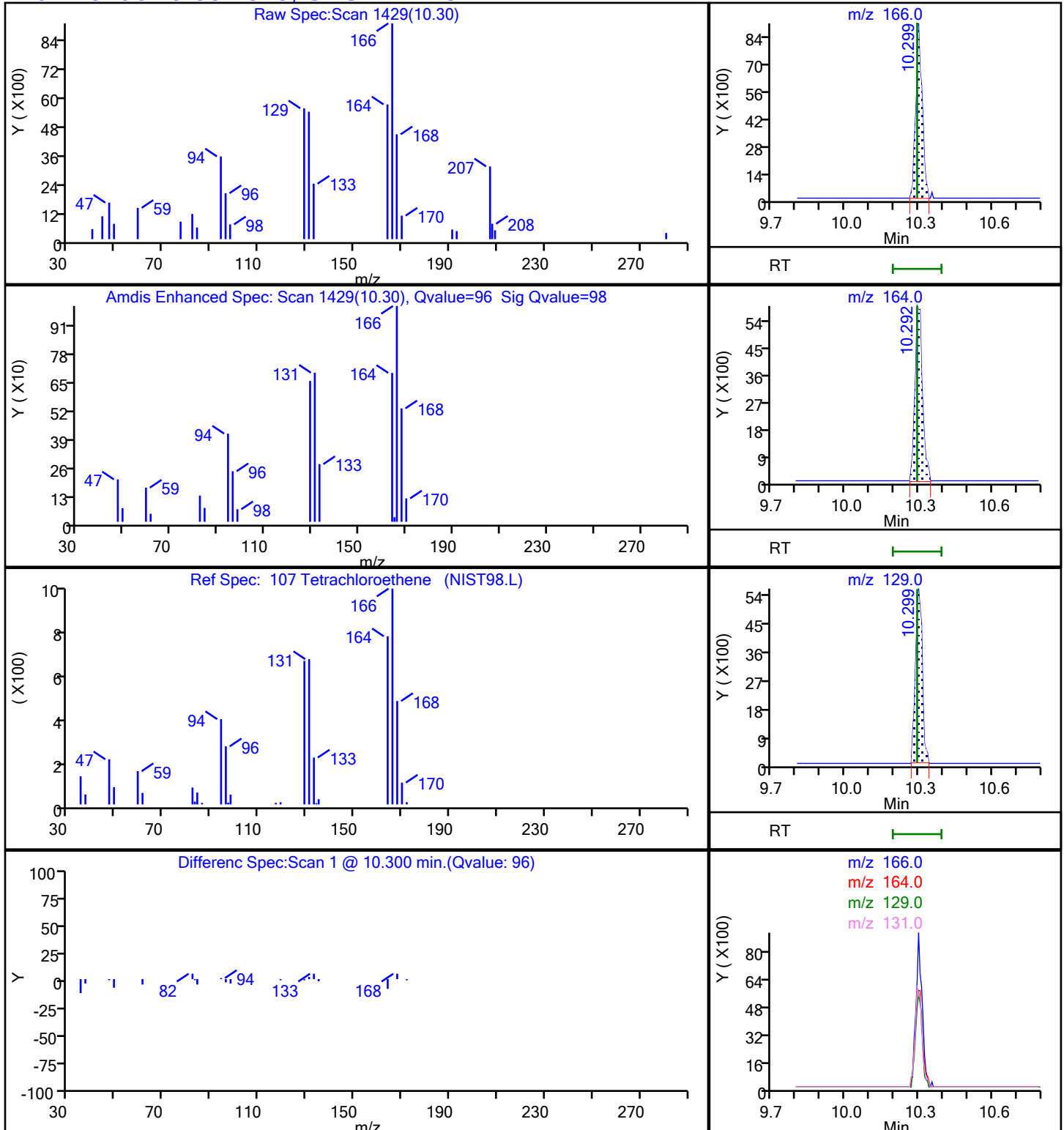
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

107 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X20.D

Injection Date: 27-Feb-2023 19:04:30

Instrument ID: 19094

Lims ID: 410-116393-A-11

Lab Sample ID: 410-116393-11

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

Operator ID: knk41612

ALS Bottle#: 20

Worklist Smp#: 21

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

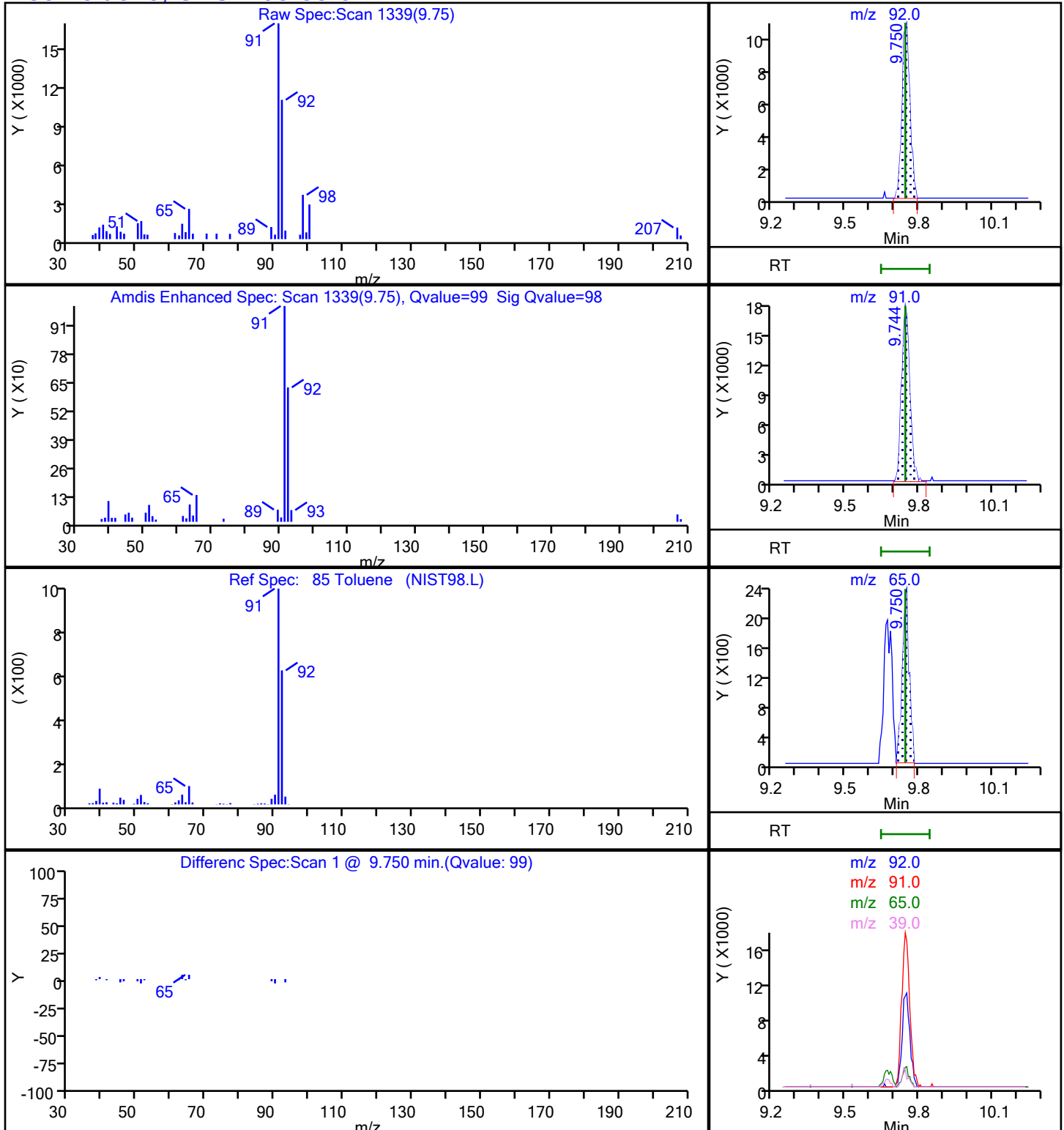
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

85 Toluene, CAS: 108-88-3



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X20.D

Injection Date: 27-Feb-2023 19:04:30

Instrument ID: 19094

Lims ID: 410-116393-A-11

Lab Sample ID: 410-116393-11

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

Operator ID: knk41612

ALS Bottle#: 20

Worklist Smp#: 21

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

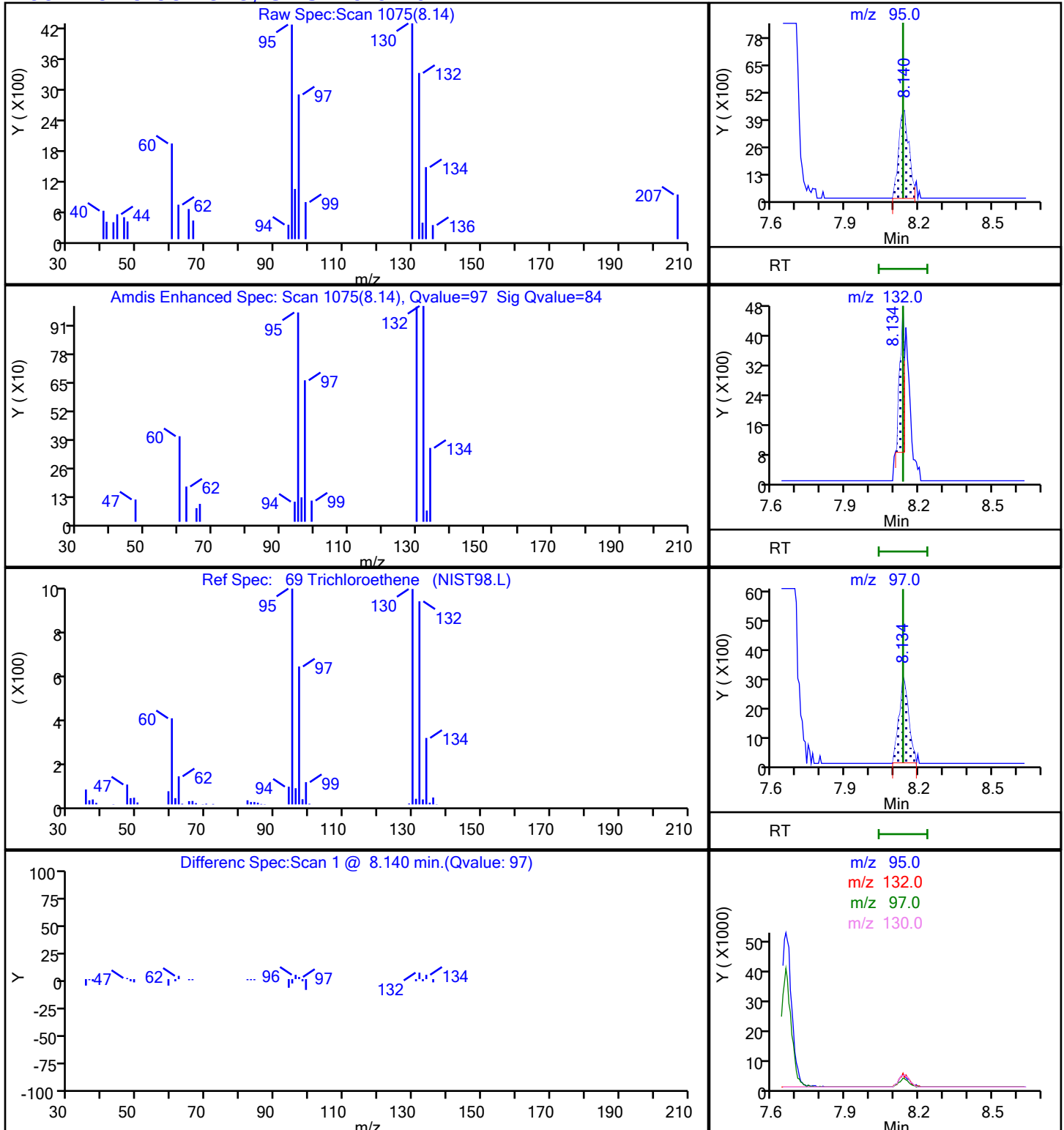
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

69 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-12

Matrix: Water

Lab File ID: HF27X21.D

Analysis Method: 8260D

Date Collected: 02/21/2023 08:45

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 19:25

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	2.3	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.27	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	0.33	J	0.50	0.20
108-88-3	Toluene	0.10	J	0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1
 Environment Testing, LLC

SDG No.:

Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 410-116393-12

Matrix: Water Lab File ID: HF27X21.D

Analysis Method: 8260D Date Collected: 02/21/2023 08:45

Sample wt/vol: 25 (mL) Date Analyzed: 02/27/2023 19:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL) Heated Purge: (Y/N) N pH:

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

Analysis Batch No.: 348233 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.31	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	110		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X21.D
 Lims ID: 410-116393-A-12
 Client ID: HD-COD-SW-29-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 19:25:30 ALS Bottle#: 21 Worklist Smp#: 22
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-022
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:18:54 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp

Date: 28-Feb-2023 11:21:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	2.117	2.130	-0.013	20	4296	0.0667	
7 Vinyl chloride	62		2.245				ND	7
9 Bromomethane	94		2.568				ND	
10 Chloroethane	64		2.648				ND	
18 1,1-Dichloroethene	96		3.507				ND	
19 Acetone	43	3.574	3.532	0.042	67	12259	2.34	
24 Carbon disulfide	76	3.800	3.806	-0.006	52	5430	0.0465	
28 Methylene Chloride	84		4.160				ND	
* 29 t-Butyl alcohol-d10 (IS)	65	4.166	4.166	0.000	21	81736	50.0	
33 Methyl tert-butyl ether	73		4.556				ND	
34 trans-1,2-Dichloroethene	96		4.580				ND	
37 1,1-Dichloroethane	63		5.233				ND	
42 2-Butanone (MEK)	43		6.013				ND	7
43 cis-1,2-Dichloroethene	96	6.074	6.068	0.006	76	14133	0.2656	
49 Chlorobromomethane	128		6.397				ND	
52 Chloroform	83	6.555	6.543	0.012	92	6916	0.0809	
\$ 53 Dibromofluoromethane (Surr)	113	6.763	6.763	0.000	93	468607	11.0	
54 1,1,1-Trichloroethane	97		6.769				ND	7
57 Carbon tetrachloride	117		6.988				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.220	7.220	0.000	52	84754	10.9	
60 Benzene	78	7.263	7.250	0.013	14	6686	0.0319	
62 1,2-Dichloroethane	62		7.324				ND	
* 65 Fluorobenzene (IS)	96	7.653	7.653	0.000	99	1677140	10.0	
69 Trichloroethene	95	8.134	8.134	0.000	97	17119	0.3101	
71 1,2-Dichloropropane	63		8.464				ND	
77 Dichlorobromomethane	83		8.805				ND	7
81 cis-1,3-Dichloropropene	75		9.360				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.524				ND	7
\$ 84 Toluene-d8 (Surr)	98	9.671	9.665	0.006	93	1919832	9.58	
85 Toluene	92	9.744	9.744	0.000	97	15048	0.1011	
86 trans-1,3-Dichloropropene	75		10.000				ND	
106 1,1,2-Trichloroethane	97		10.207				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.299	10.293	0.006	97	22372	0.3255	
109 2-Hexanone	43		10.414				ND	
111 Chlorodibromomethane	129		10.585				ND	
112 Ethylene Dibromide	107		10.695				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	85	1637750	10.0	
115 Chlorobenzene	112		11.152				ND	
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91		11.237				ND	7
S 117 Xylenes, Total	106		11.245				ND	7
119 m-Xylene & p-Xylene	106	11.359	11.353	0.006	93	4498	0.0406	
120 o-Xylene	106		11.676				ND	7
121 Styrene	104		11.695				ND	7
122 Bromoform	173		11.853				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	95	759672	9.34	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
* 141 1,4-Dichlorobenzene-d4	152	13.005	12.999	0.006	94	953263	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_LLcentISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X21.D

Injection Date: 27-Feb-2023 19:25:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: 410-116393-A-12

Lab Sample ID: 410-116393-12

Worklist Smp#: 22

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

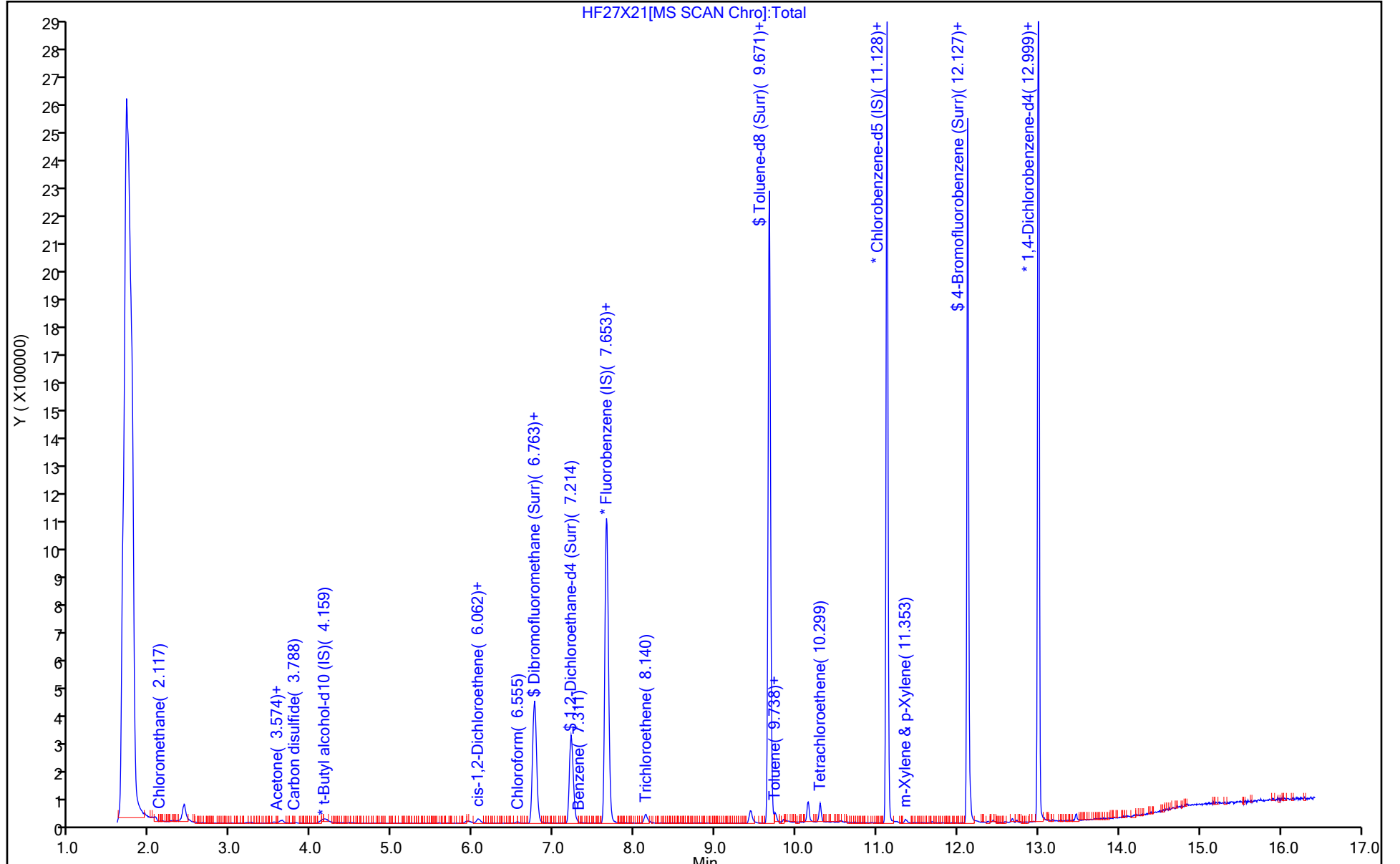
ALS Bottle#: 21

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X21.D
 Lims ID: 410-116393-A-12
 Client ID: HD-COD-SW-29-0/1-0
 Sample Type: Client
 Inject. Date: 27-Feb-2023 19:25:30 ALS Bottle#: 21 Worklist Smp#: 22
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-022
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:18:54 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp Date: 28-Feb-2023 11:21:02

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	11.0	110.39
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.9	109.42
\$ 84 Toluene-d8 (Surr)	10.0	9.58	95.82
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.34	93.40

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X21.D

Injection Date: 27-Feb-2023 19:25:30

Instrument ID: 19094

Lims ID: 410-116393-A-12

Lab Sample ID: 410-116393-12

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

Operator ID: knk41612

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

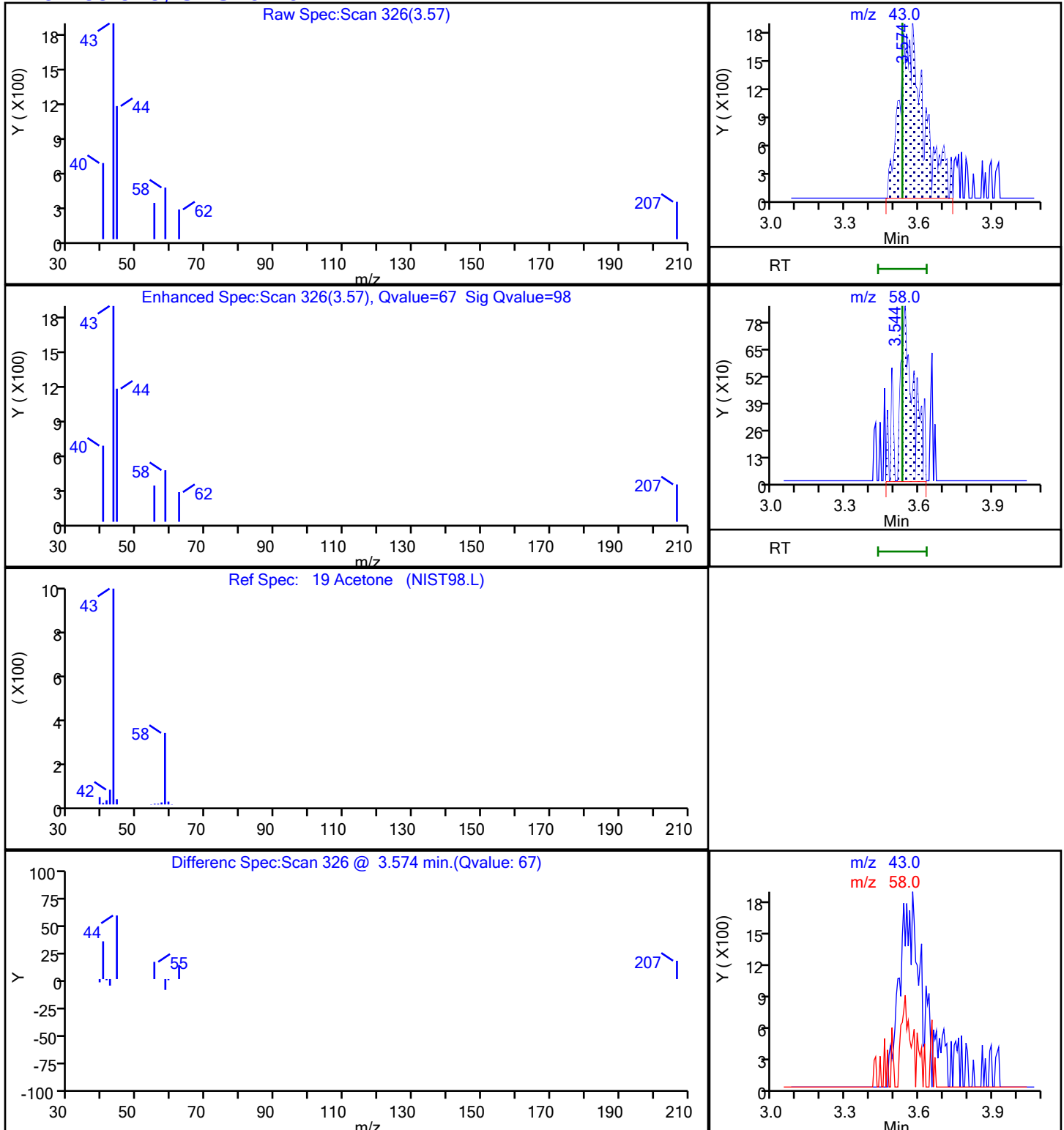
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

19 Acetone, CAS: 67-64-1



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X21.D

Injection Date: 27-Feb-2023 19:25:30

Instrument ID: 19094

Lims ID: 410-116393-A-12

Lab Sample ID: 410-116393-12

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

Operator ID: knk41612

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

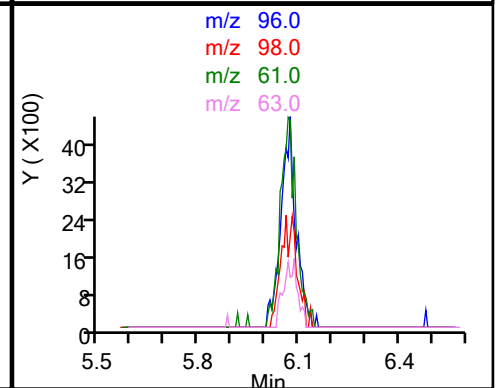
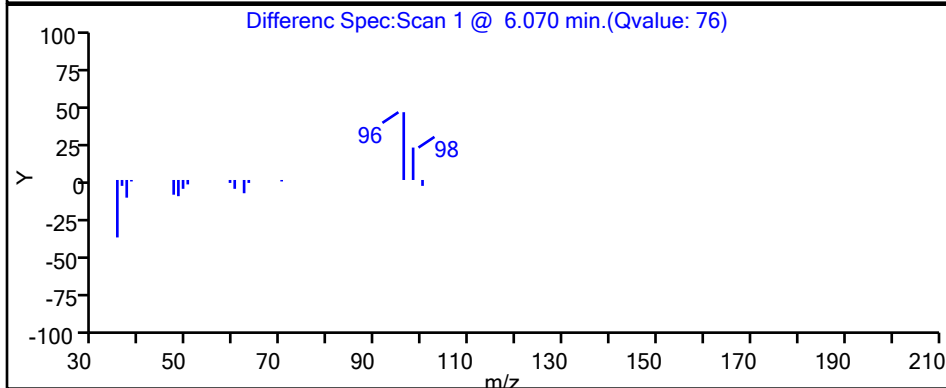
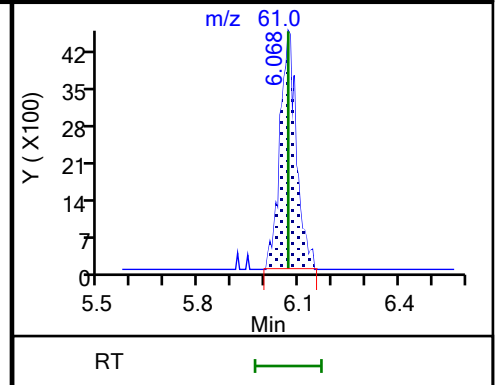
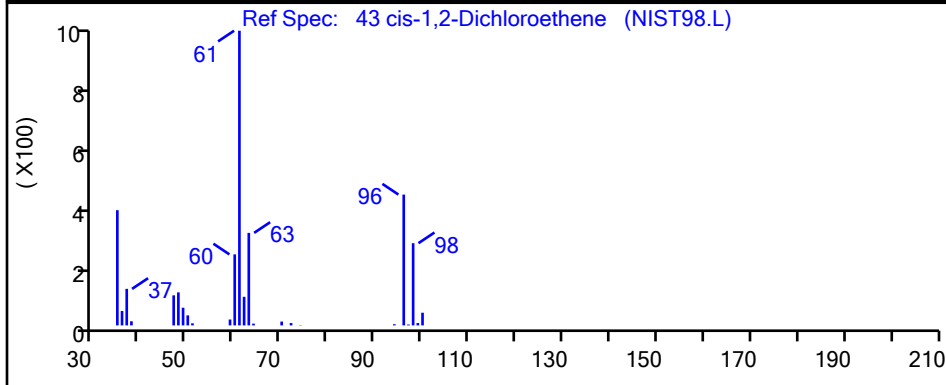
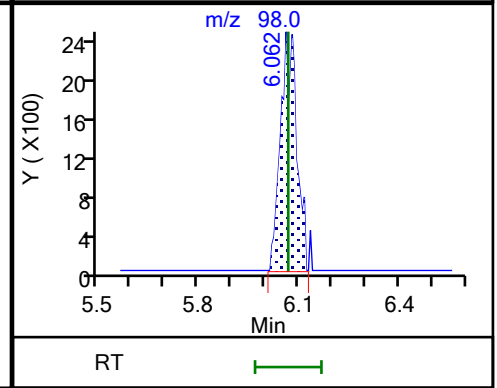
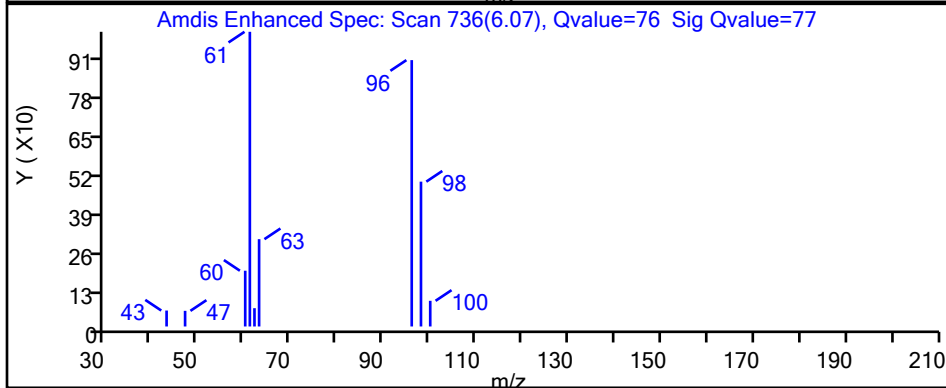
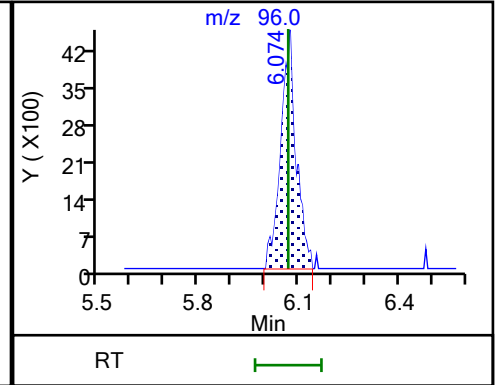
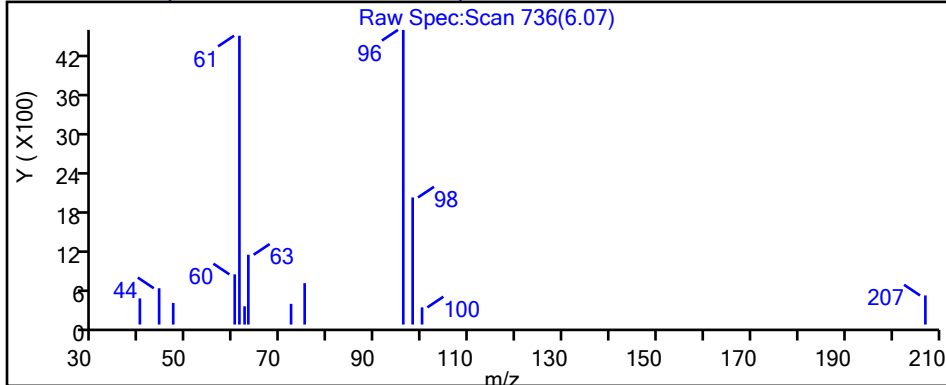
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X21.D

Injection Date: 27-Feb-2023 19:25:30

Instrument ID: 19094

Lims ID: 410-116393-A-12

Lab Sample ID: 410-116393-12

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

Operator ID: knk41612

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

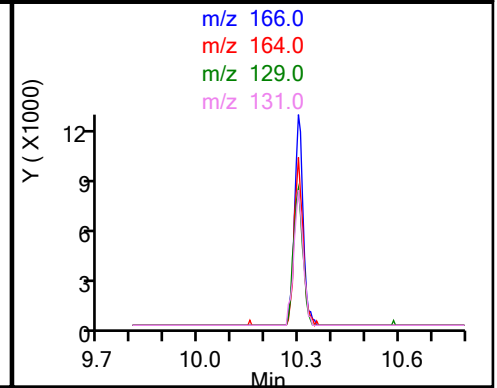
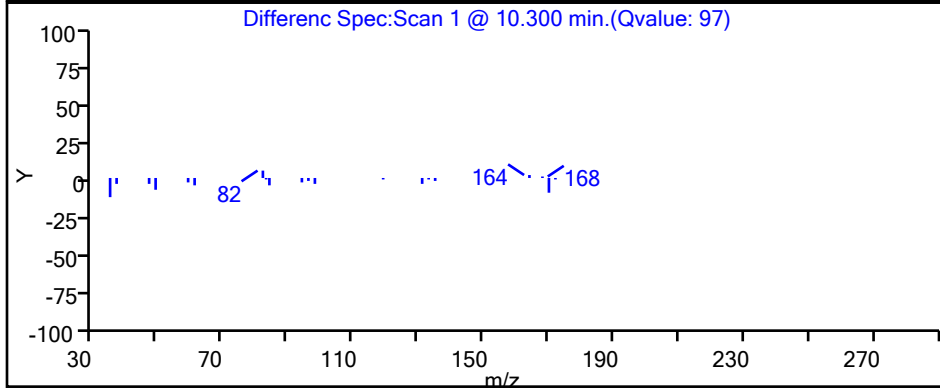
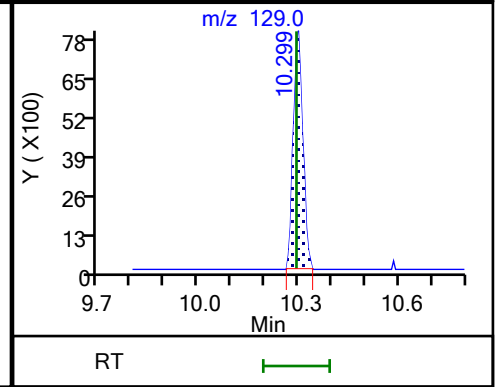
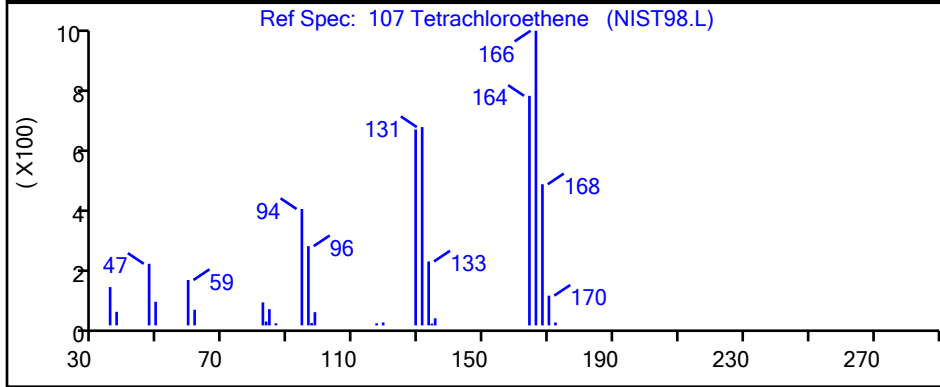
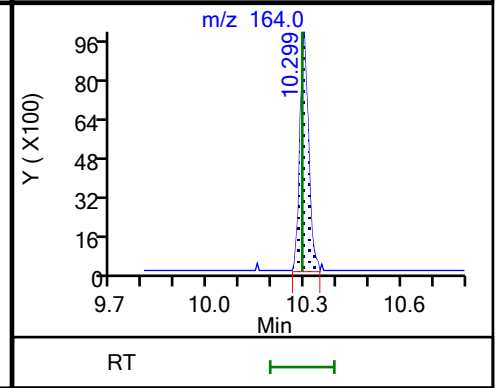
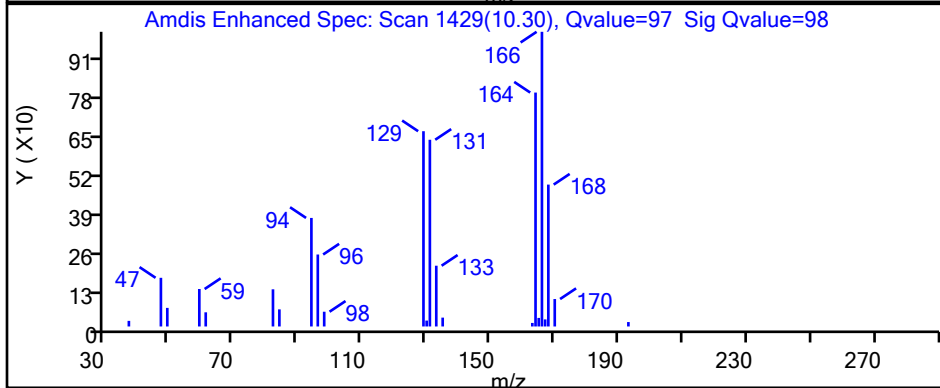
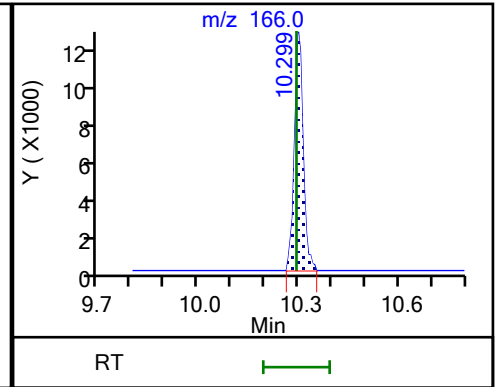
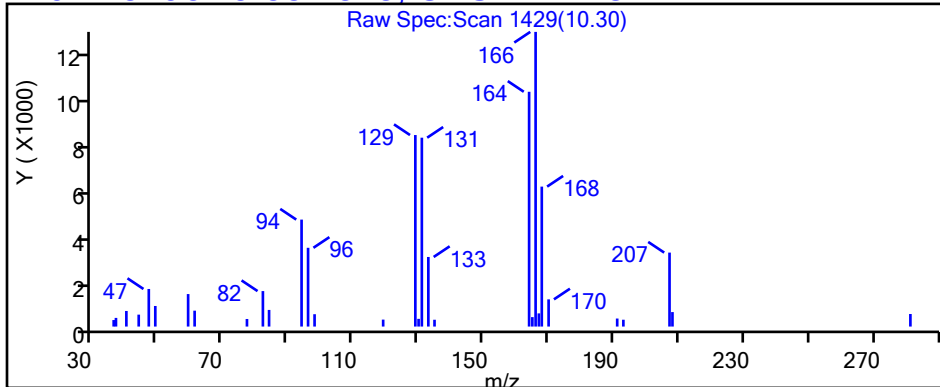
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

107 Tetrachloroethene, CAS: 127-18-4



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X21.D

Injection Date: 27-Feb-2023 19:25:30

Instrument ID: 19094

Lims ID: 410-116393-A-12

Lab Sample ID: 410-116393-12

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

Operator ID: knk41612

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

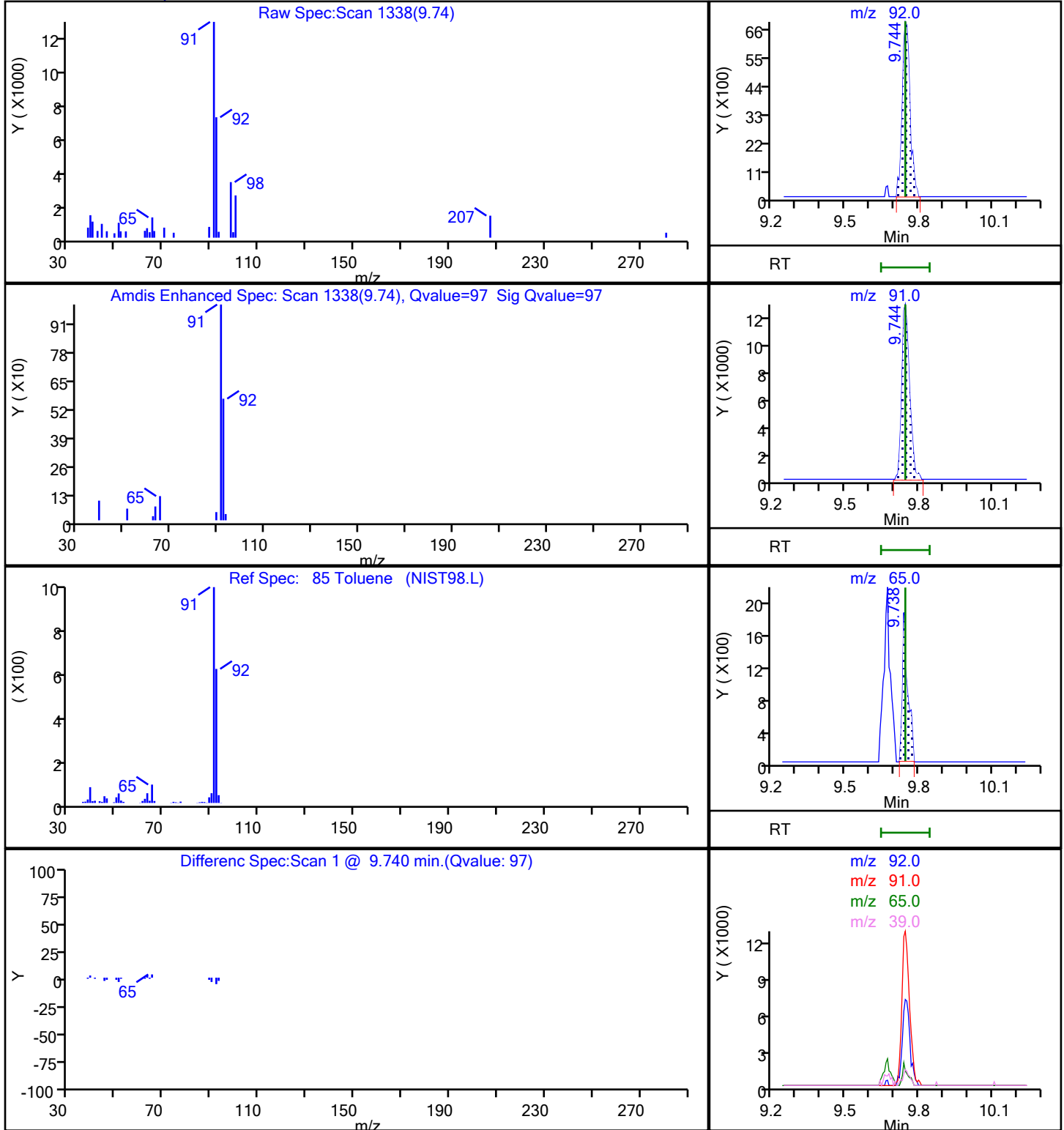
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

85 Toluene, CAS: 108-88-3



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X21.D

Injection Date: 27-Feb-2023 19:25:30

Instrument ID: 19094

Lims ID: 410-116393-A-12

Lab Sample ID: 410-116393-12

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

Operator ID: knk41612

ALS Bottle#: 21

Worklist Smp#: 22

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

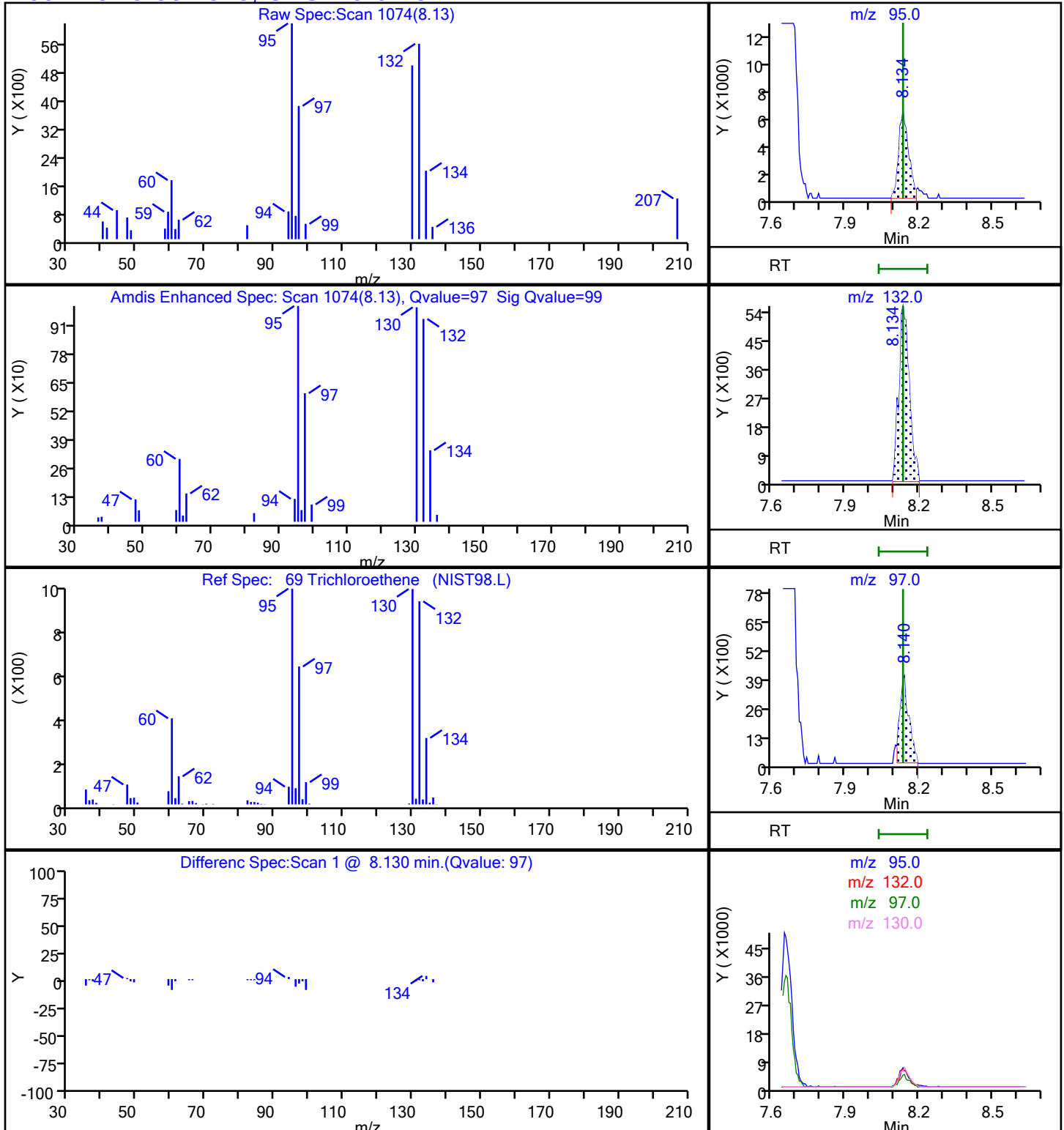
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

69 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-13

Matrix: Water

Lab File ID: HF27X22.D

Analysis Method: 8260D

Date Collected: 02/21/2023 12:00

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 19:46

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.: 348233

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	7.6		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	1.4		0.50	0.10
75-35-4	1,1-Dichloroethene	0.63		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	ND		5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	0.29	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	3.5		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
108-88-3	Toluene	ND		0.50	0.080
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-13

Matrix: Water

Lab File ID: HF27X22.D

Analysis Method: 8260D

Date Collected: 02/21/2023 12:00

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 19:46

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.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	4.4		0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		80-120
460-00-4	4-Bromofluorobenzene (Surr)	92		80-120
1868-53-7	Dibromofluoromethane (Surr)	108		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X22.D
 Lims ID: 410-116393-A-13
 Client ID: HD-QC1-0/1-1
 Sample Type: Client
 Inject. Date: 27-Feb-2023 19:46:30 ALS Bottle#: 22 Worklist Smp#: 23
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-023
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:24:26 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp Date: 28-Feb-2023 11:24:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.130				ND	7
7 Vinyl chloride	62		2.245				ND	7
9 Bromomethane	94		2.568				ND	
10 Chloroethane	64		2.648				ND	
18 1,1-Dichloroethene	96	3.495	3.507	-0.012	98	29740	0.6346	
19 Acetone	43		3.532				ND	
24 Carbon disulfide	76		3.806				ND	7
28 Methylene Chloride	84		4.160				ND	
* 29 t-Butyl alcohol-d10 (IS)	65	4.166	4.166	0.000	19	84813	50.0	
33 Methyl tert-butyl ether	73	4.550	4.556	-0.006	17	3447	0.0329	
34 trans-1,2-Dichloroethene	96	4.592	4.580	0.012	38	1749	0.0336	
37 1,1-Dichloroethane	63	5.226	5.233	-0.007	96	137176	1.41	
42 2-Butanone (MEK)	43		6.013				ND	
43 cis-1,2-Dichloroethene	96	6.061	6.068	-0.007	78	199062	3.48	
49 Chlorobromomethane	128		6.397				ND	
52 Chloroform	83	6.537	6.543	-0.006	93	26914	0.2932	
\$ 53 Dibromofluoromethane (Surr)	113	6.756	6.763	-0.007	93	492639	10.8	
54 1,1,1-Trichloroethane	97	6.769	6.769	0.000	99	651656	7.63	
57 Carbon tetrachloride	117	6.988	6.988	0.000	16	3207	0.0434	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.214	7.220	-0.006	52	89631	10.8	
60 Benzene	78	7.244	7.250	-0.006	1	6187	0.0275	
62 1,2-Dichloroethane	62		7.324				ND	7
* 65 Fluorobenzene (IS)	96	7.653	7.653	0.000	99	1801979	10.0	
69 Trichloroethene	95	8.134	8.134	0.000	96	259930	4.38	
71 1,2-Dichloropropane	63		8.464				ND	
77 Dichlorobromomethane	83		8.805				ND	
81 cis-1,3-Dichloropropene	75		9.360				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.524				ND	
\$ 84 Toluene-d8 (Surr)	98	9.671	9.665	0.006	93	2083125	9.45	
85 Toluene	92	9.744	9.744	0.000	97	9711	0.0593	
86 trans-1,3-Dichloropropene	75		10.000				ND	
106 1,1,2-Trichloroethane	97		10.207				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.298	10.293	0.005	98	7531576	99.6	E
109 2-Hexanone	43		10.414				ND	
111 Chlorodibromomethane	129		10.585				ND	7
112 Ethylene Dibromide	107		10.695				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	85	1801081	10.0	
115 Chlorobenzene	112		11.152				ND	7
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91		11.237				ND	7
S 117 Xylenes, Total	106		11.245				ND	7
119 m-Xylene & p-Xylene	106		11.353				ND	7
120 o-Xylene	106		11.676				ND	7
121 Styrene	104		11.695				ND	
122 Bromoform	173		11.853				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	93	823665	9.21	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1006477	10.0	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_LLcentISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X22.D

Injection Date: 27-Feb-2023 19:46:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: 410-116393-A-13

Lab Sample ID: 410-116393-13

Worklist Smp#: 23

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

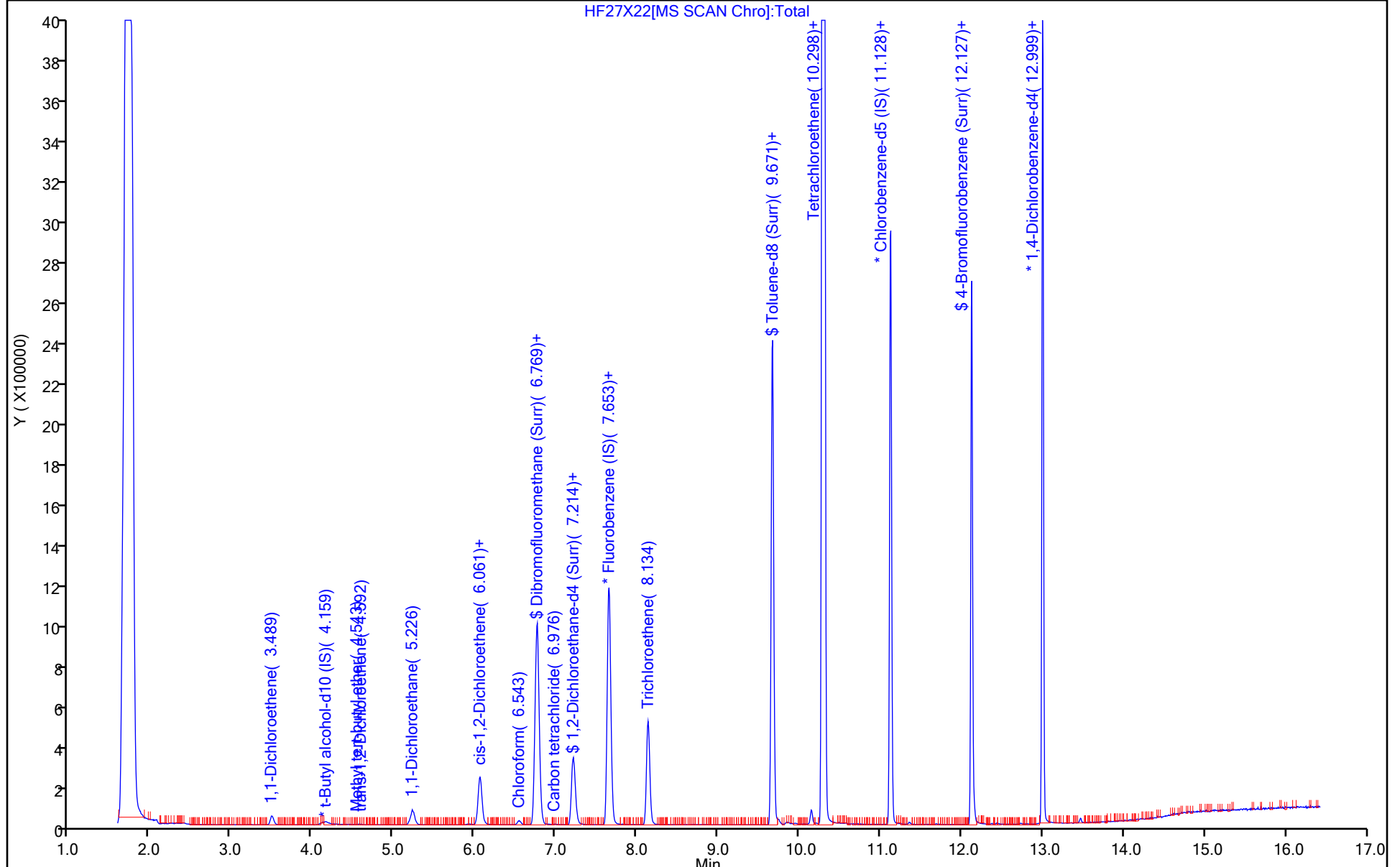
ALS Bottle#: 22

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X22.D
 Lims ID: 410-116393-A-13
 Client ID: HD-QC1-0/1-1
 Sample Type: Client
 Inject. Date: 27-Feb-2023 19:46:30 ALS Bottle#: 22 Worklist Smp#: 23
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-023
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:24:26 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp

Date: 28-Feb-2023 11:24:26

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.8	108.01
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.8	107.70
\$ 84 Toluene-d8 (Surr)	10.0	9.45	94.54
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.21	92.08

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X22.D

Injection Date: 27-Feb-2023 19:46:30

Instrument ID: 19094

Lims ID: 410-116393-A-13

Lab Sample ID: 410-116393-13

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

Operator ID: knk41612

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

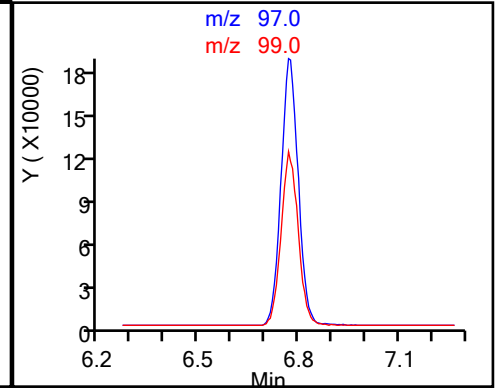
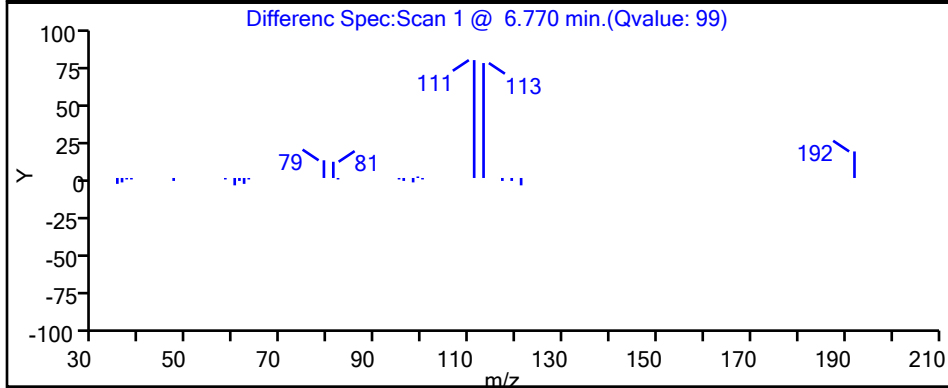
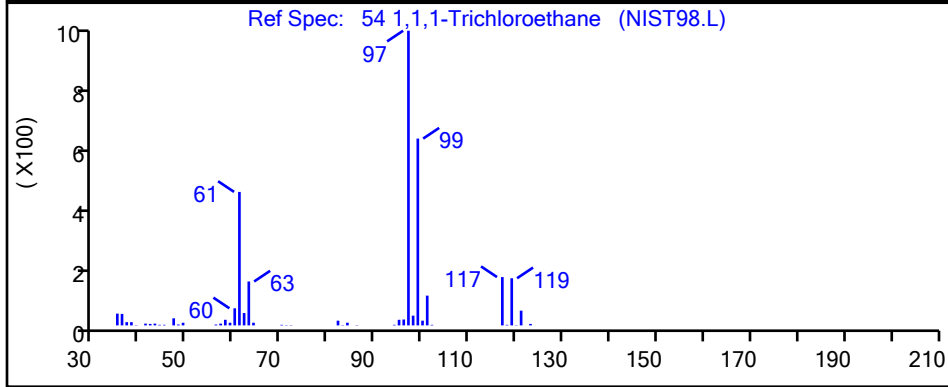
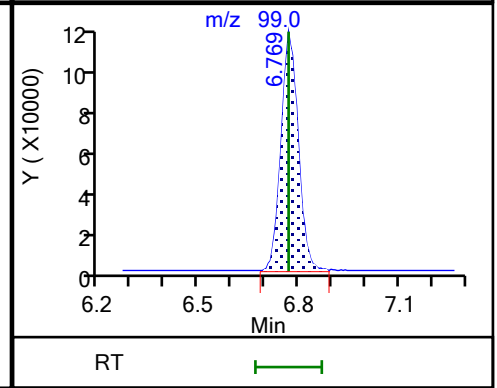
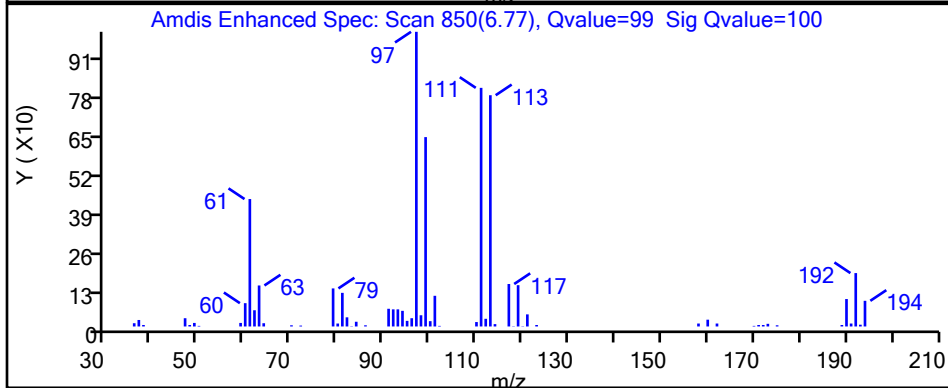
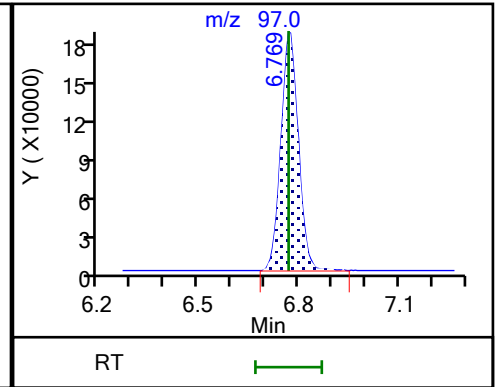
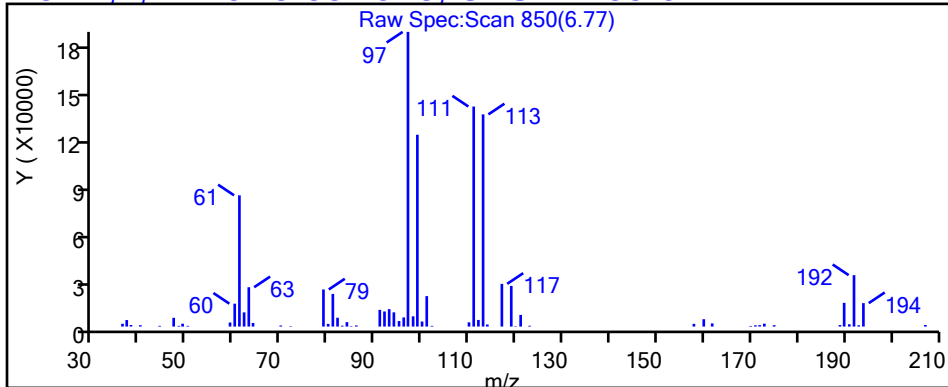
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

54 1,1,1-Trichloroethane, CAS: 71-55-6



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X22.D

Injection Date: 27-Feb-2023 19:46:30

Instrument ID: 19094

Lims ID: 410-116393-A-13

Lab Sample ID: 410-116393-13

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

Operator ID: knk41612

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

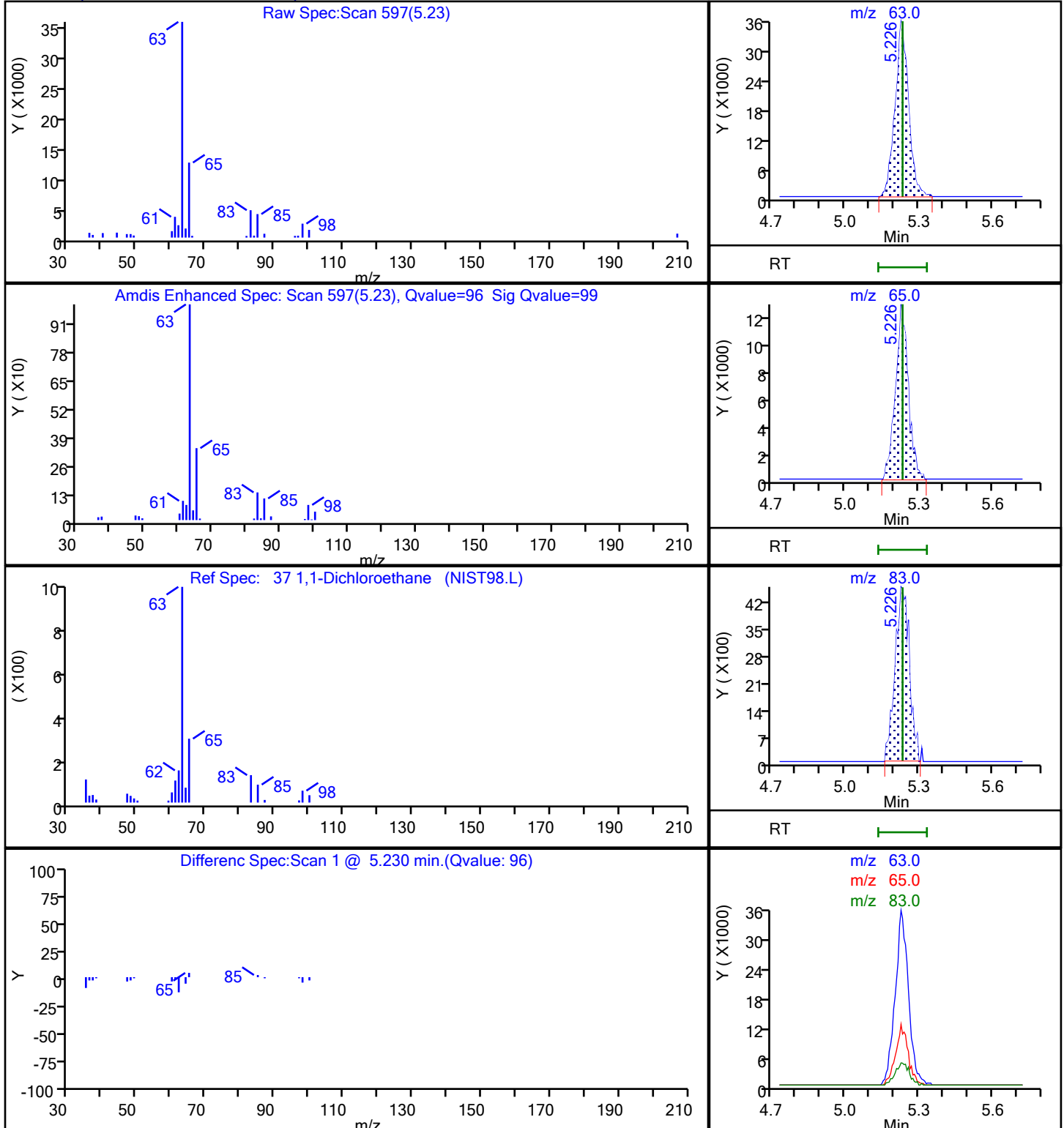
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X22.D

Injection Date: 27-Feb-2023 19:46:30

Instrument ID: 19094

Lims ID: 410-116393-A-13

Lab Sample ID: 410-116393-13

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

Operator ID: knk41612

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

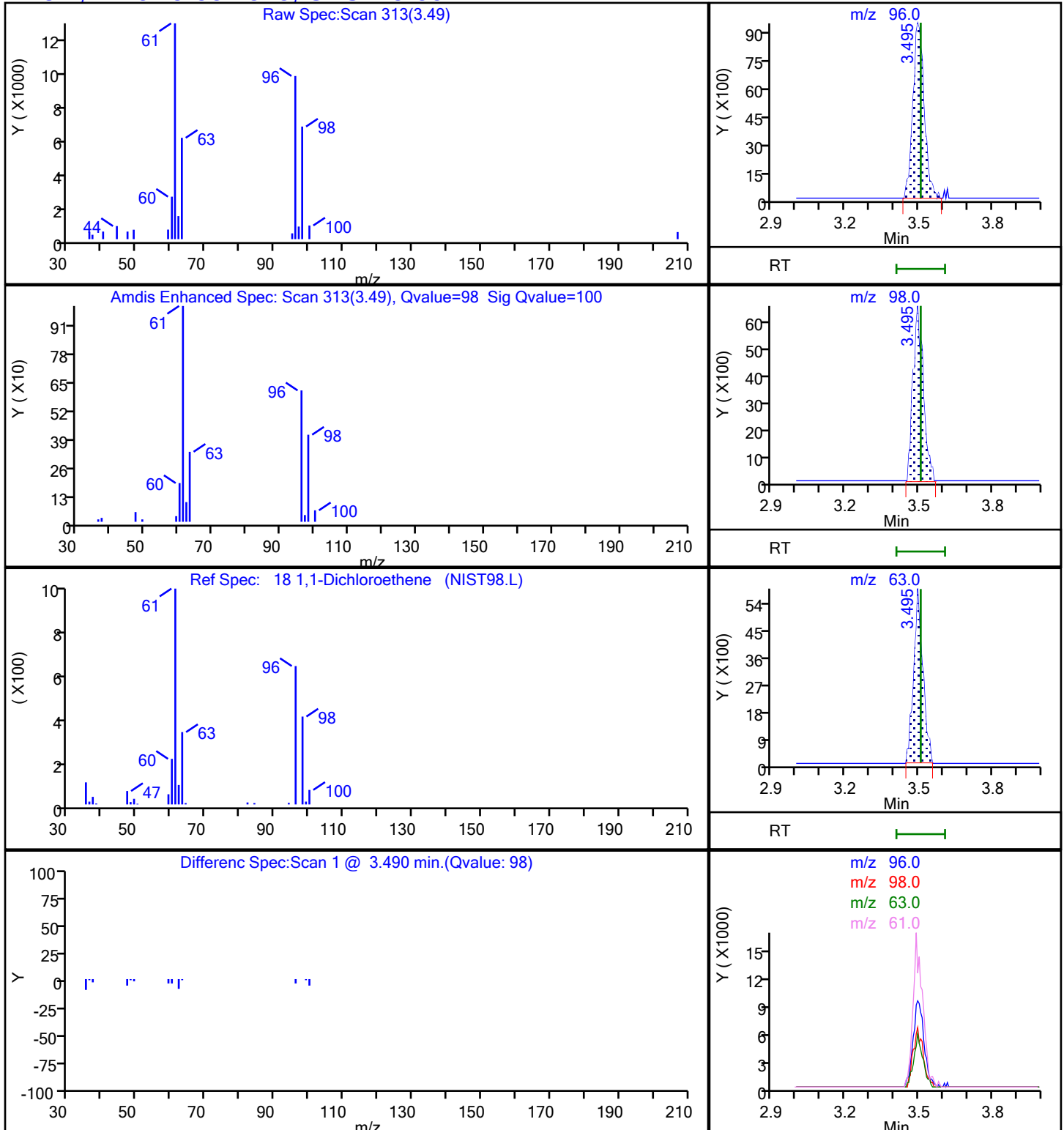
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

18 1,1-Dichloroethene, CAS: 75-35-4



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X22.D

Injection Date: 27-Feb-2023 19:46:30

Instrument ID: 19094

Lims ID: 410-116393-A-13

Lab Sample ID: 410-116393-13

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

Operator ID: knk41612

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

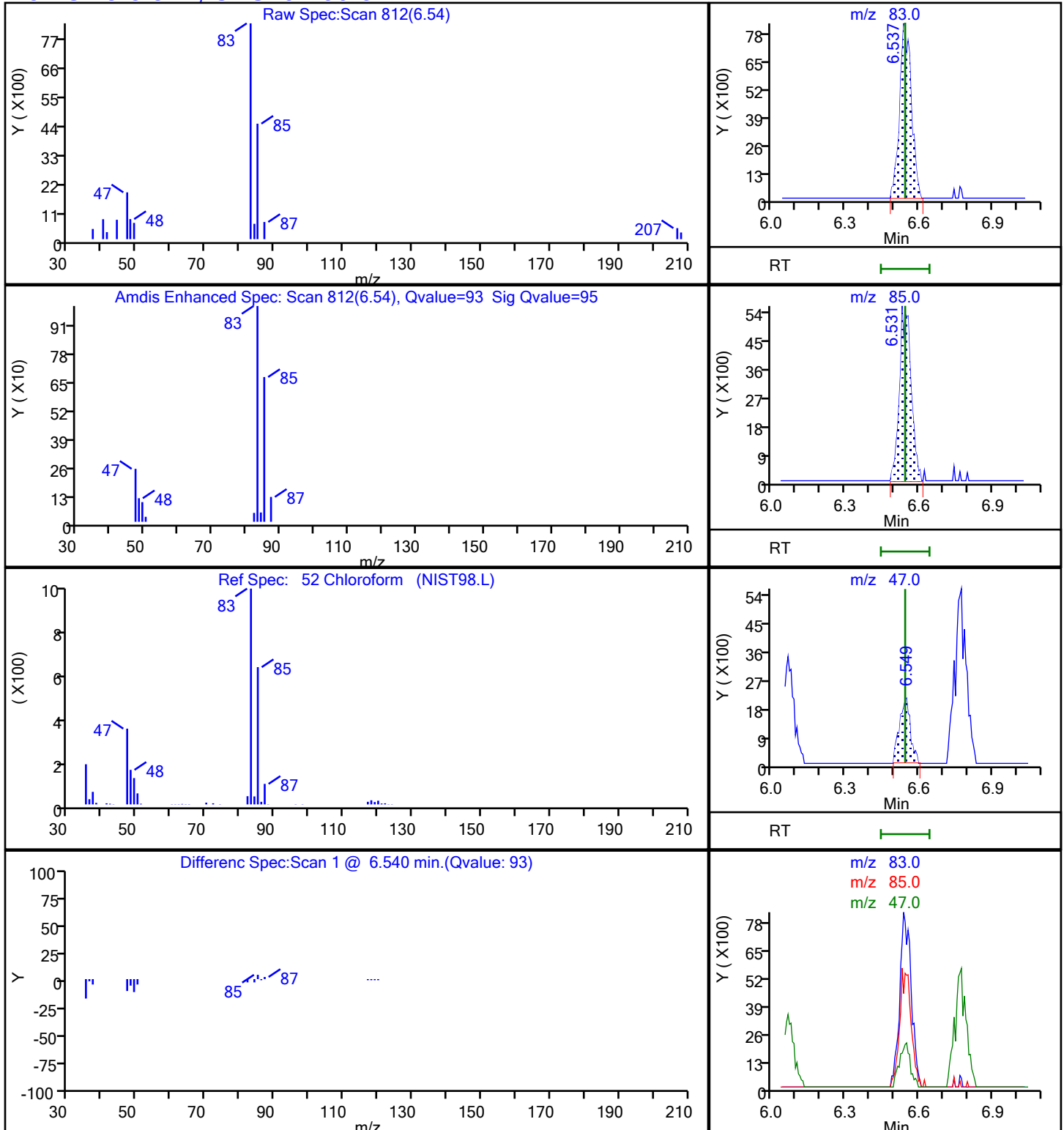
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

52 Chloroform, CAS: 67-66-3



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X22.D

Injection Date: 27-Feb-2023 19:46:30

Instrument ID: 19094

Lims ID: 410-116393-A-13

Lab Sample ID: 410-116393-13

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

Operator ID: knk41612

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

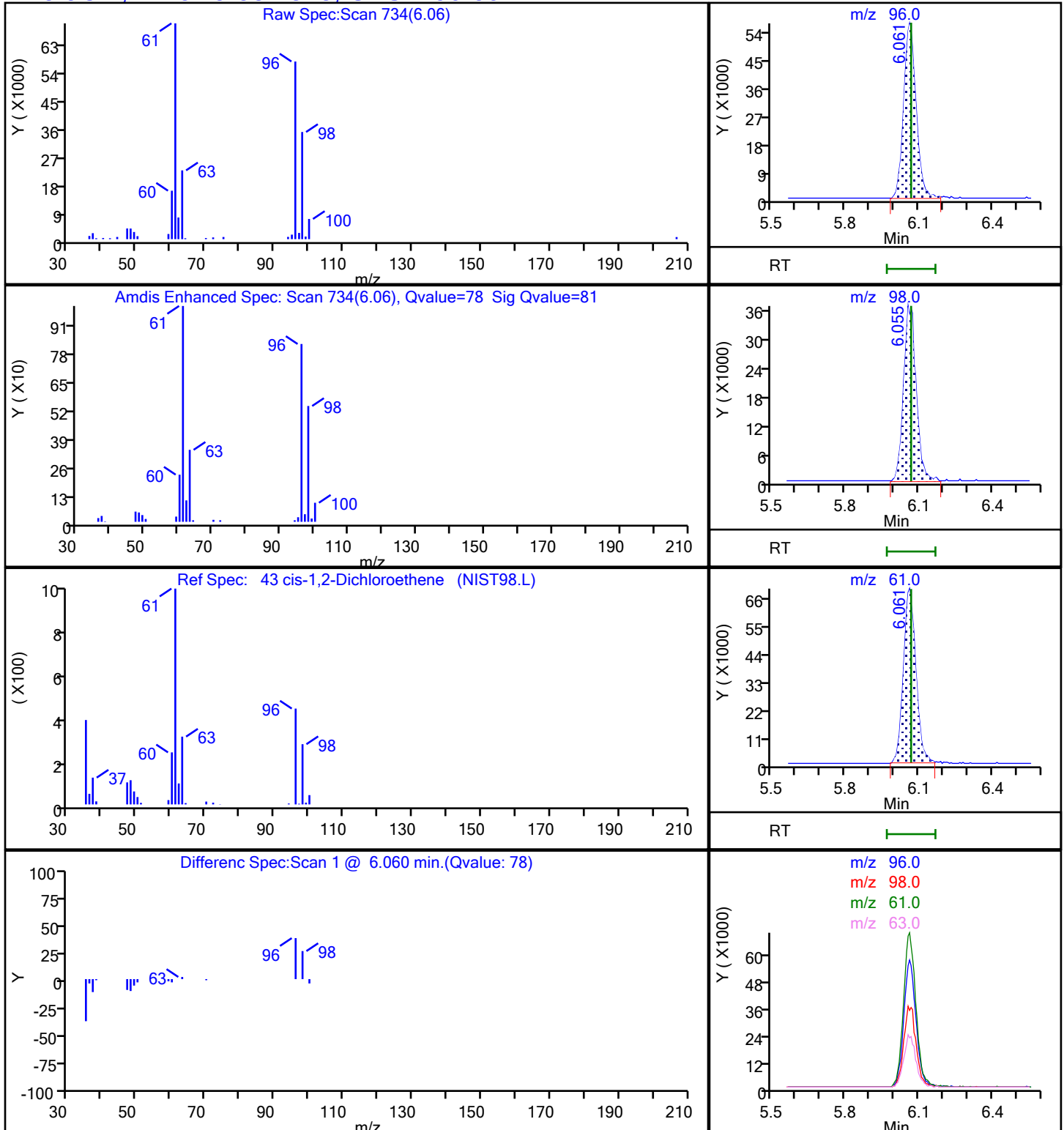
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

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



Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X22.D

Injection Date: 27-Feb-2023 19:46:30

Instrument ID: 19094

Lims ID: 410-116393-A-13

Lab Sample ID: 410-116393-13

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

Operator ID: knk41612

ALS Bottle#: 22

Worklist Smp#: 23

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

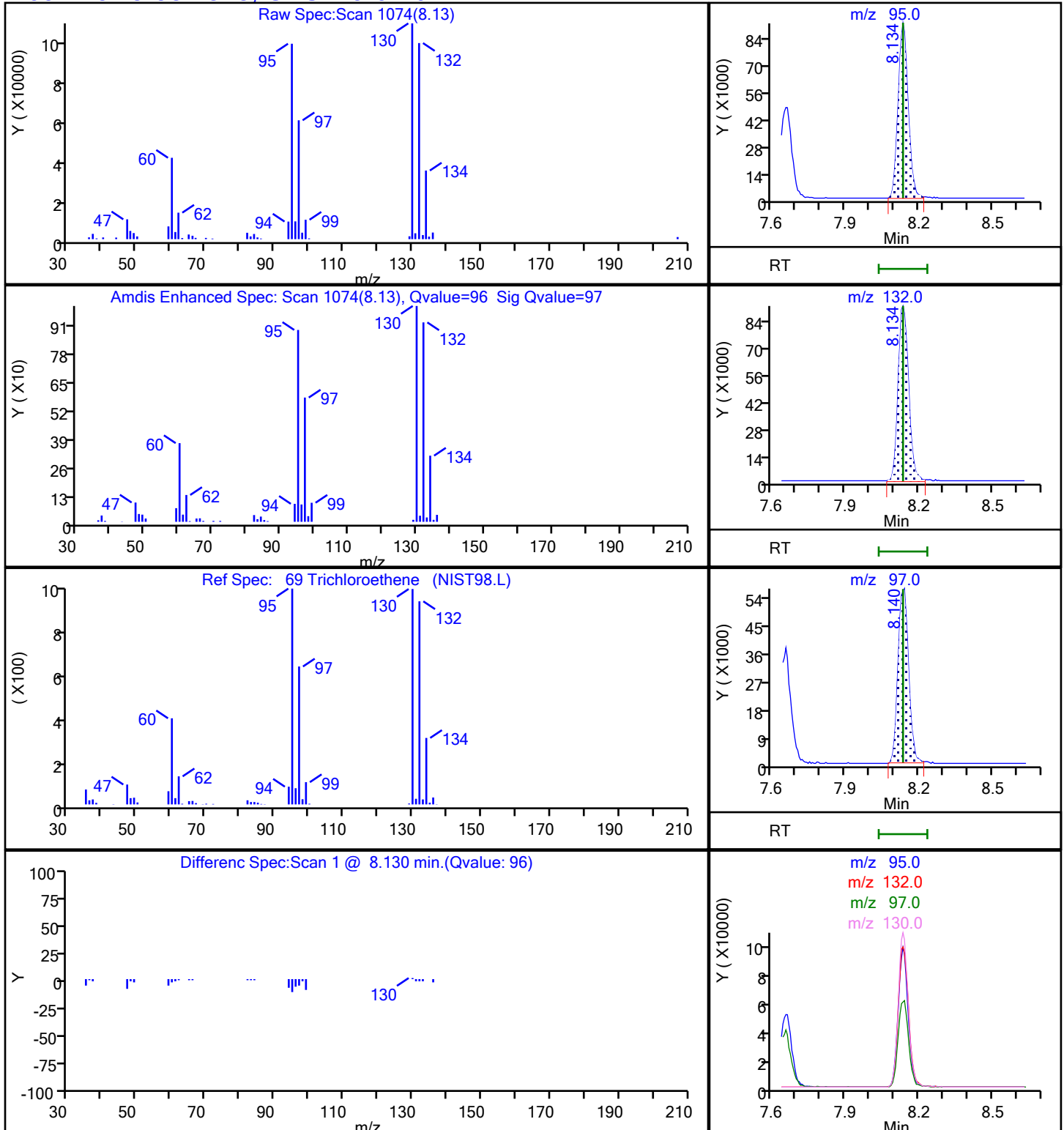
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

69 Trichloroethene, CAS: 79-01-6

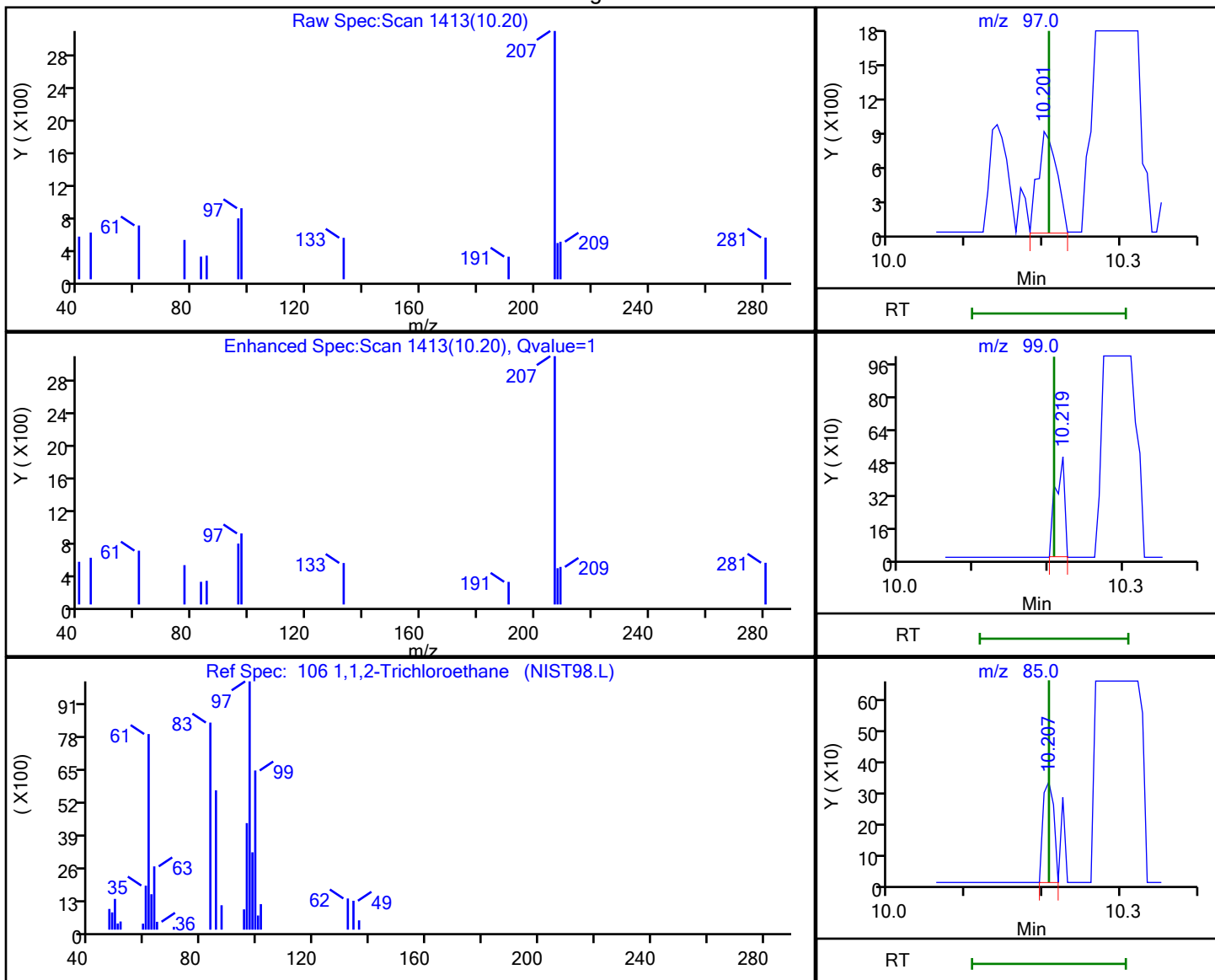


Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X22.D
 Injection Date: 27-Feb-2023 19:46:30 Instrument ID: 19094
 Lims ID: 410-116393-A-13 Lab Sample ID: 410-116393-13
 Client ID: HD-QC1-0/1-1
 Operator ID: knk41612 ALS Bottle#: 22 Worklist Smp#: 23
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

106 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
10.20	97.00	1466	0.037806
10.22	99.00	427	
10.21	85.00	318	
10.19	83.00	263	

Reviewer: kaewrungrueangp, 28-Feb-2023 11:24:17

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.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-13 DL

Matrix: Water

Lab File ID: HF28X27.D

Analysis Method: 8260D

Date Collected: 02/21/2023 12:00

Sample wt/vol: 25 (mL)

Date Analyzed: 02/28/2023 19:17

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.: 348577

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	81		5.0	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	114		80-120
2037-26-5	Toluene-d8 (Surr)	92		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X27.D
 Lims ID: 410-116393-B-13 DL
 Client ID: HD-QC1-0/1-1
 Sample Type: Client
 Inject. Date: 28-Feb-2023 19:17:30 ALS Bottle#: 27 Worklist Smp#: 28
 Purge Vol: 25.000 mL Dil. Factor: 10.0000
 Sample Info: 410-0077923-028
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 18:22:04 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1603

First Level Reviewer: kaewrungrueangp Date: 01-Mar-2023 08:41:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.129				ND	7
7 Vinyl chloride	62		2.245				ND	
9 Bromomethane	94		2.568				ND	
10 Chloroethane	64		2.648				ND	
18 1,1-Dichloroethene	96	3.513	3.507	0.006	26	2369	0.0517	M
19 Acetone	43		3.532				ND	U
24 Carbon disulfide	76	3.806	3.806	0.000	95	10105	0.0825	M
* 29 t-Butyl alcohol-d10 (IS)	65	4.160	4.153	0.007	23	94189	50.0	
28 Methylene Chloride	84		4.160				ND	
33 Methyl tert-butyl ether	73		4.562				ND	
34 trans-1,2-Dichloroethene	96		4.586				ND	
37 1,1-Dichloroethane	63	5.245	5.239	0.006	93	13342	0.1403	
42 2-Butanone (MEK)	43		6.019				ND	
43 cis-1,2-Dichloroethene	96	6.068	6.068	0.000	80	17833	0.3192	
49 Chlorobromomethane	128		6.397				ND	
52 Chloroform	83	6.561	6.549	0.012	31	2816	0.0314	
\$ 53 Dibromofluoromethane (Surr)	113	6.763	6.763	0.000	94	508219	11.4	
54 1,1,1-Trichloroethane	97	6.781	6.781	0.000	40	55916	0.6698	
57 Carbon tetrachloride	117		6.994				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.214	7.208	0.006	52	89509	11.0	
60 Benzene	78		7.250				ND	7
62 1,2-Dichloroethane	62		7.317				ND	7
* 65 Fluorobenzene (IS)	96	7.653	7.659	-0.006	99	1760434	10.0	
69 Trichloroethene	95	8.134	8.134	0.000	94	23300	0.4021	
71 1,2-Dichloropropane	63		8.464				ND	
77 Dichlorobromomethane	83		8.811				ND	
81 cis-1,3-Dichloropropene	75		9.360				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.524				ND	
\$ 84 Toluene-d8 (Surr)	98	9.671	9.671	0.000	93	2057874	9.21	
85 Toluene	92		9.744				ND	7
86 trans-1,3-Dichloropropene	75		10.006				ND	
106 1,1,2-Trichloroethane	97		10.207				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166	10.299	10.299	0.000	98	617410	8.06	
109 2-Hexanone	43		10.421				ND	
111 Chlorodibromomethane	129		10.585				ND	
112 Ethylene Dibromide	107		10.695				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	85	1825593	10.0	
115 Chlorobenzene	112		11.152				ND	7
116 1,1,1,2-Tetrachloroethane	131		11.237				ND	
118 Ethylbenzene	91		11.237				ND	7
S 117 Xylenes, Total	106		11.245				ND	7
119 m-Xylene & p-Xylene	106		11.353				ND	7
120 o-Xylene	106		11.682				ND	
121 Styrene	104		11.695				ND	
122 Bromoform	173		11.853				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.127	12.127	0.000	94	844695	9.32	
127 1,1,2,2-Tetrachloroethane	83		12.225				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1058332	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

MSV_LLcentISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X27.D

Injection Date: 28-Feb-2023 19:17:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: 410-116393-B-13 DL

Lab Sample ID: 410-116393-13

Worklist Smp#: 28

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

Purge Vol: 25.000 mL

Dil. Factor: 10.0000

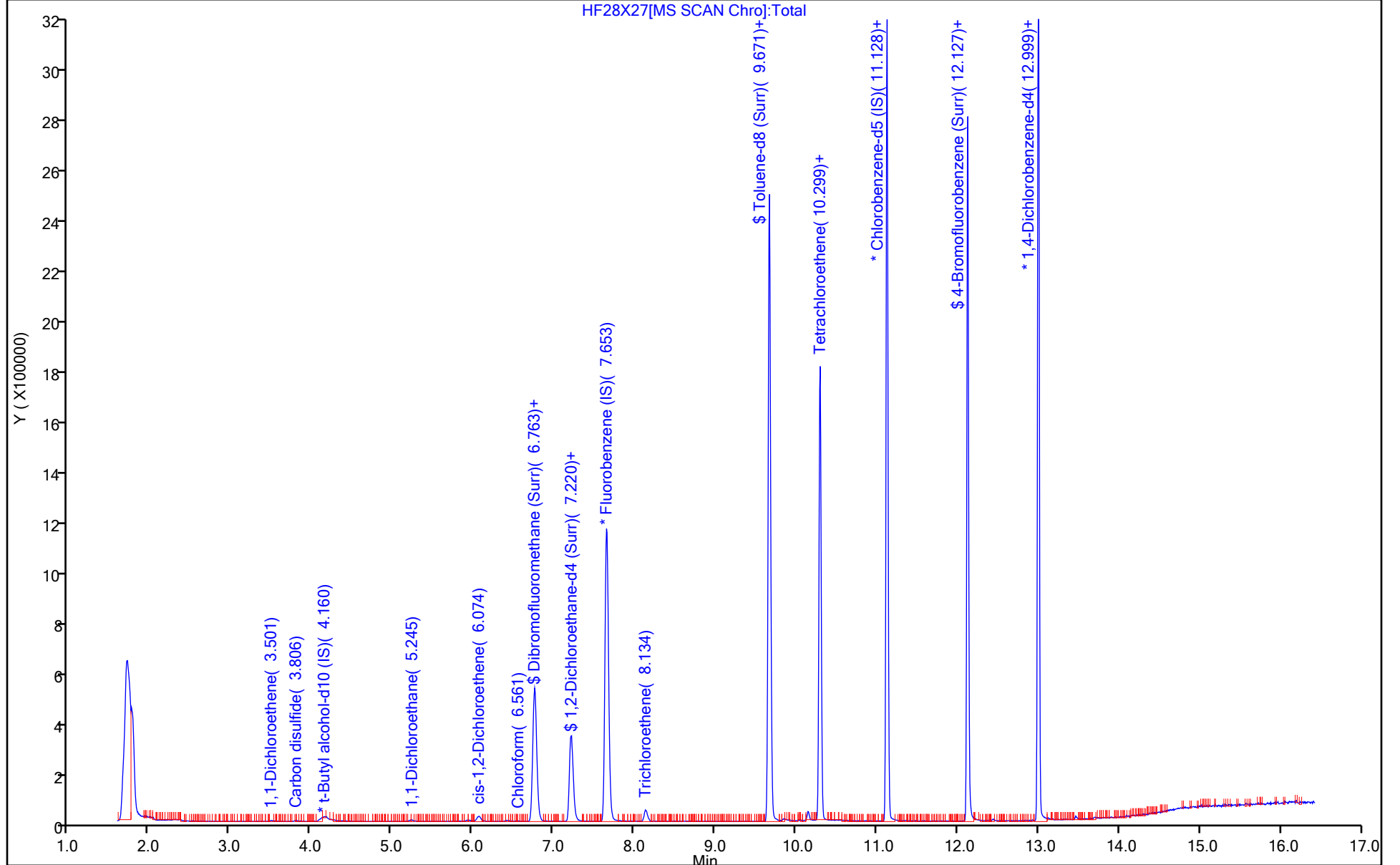
ALS Bottle#: 27

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X27.D
 Lims ID: 410-116393-B-13 DL
 Client ID: HD-QC1-0/1-1
 Sample Type: Client
 Inject. Date: 28-Feb-2023 19:17:30 ALS Bottle#: 27 Worklist Smp#: 28
 Purge Vol: 25.000 mL Dil. Factor: 10.0000
 Sample Info: 410-0077923-028
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 18:22:04 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1603

First Level Reviewer: kaewrungrueangp Date: 01-Mar-2023 08:41:29

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	11.4	114.06
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	11.0	110.09
\$ 84 Toluene-d8 (Surr)	10.0	9.21	92.14
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.32	93.16

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X27.D

Injection Date: 28-Feb-2023 19:17:30

Instrument ID: 19094

Lims ID: 410-116393-B-13 DL

Lab Sample ID: 410-116393-13

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

Operator ID: knk41612

ALS Bottle#: 27

Worklist Smp#: 28

Purge Vol: 25.000 mL

Dil. Factor: 10.0000

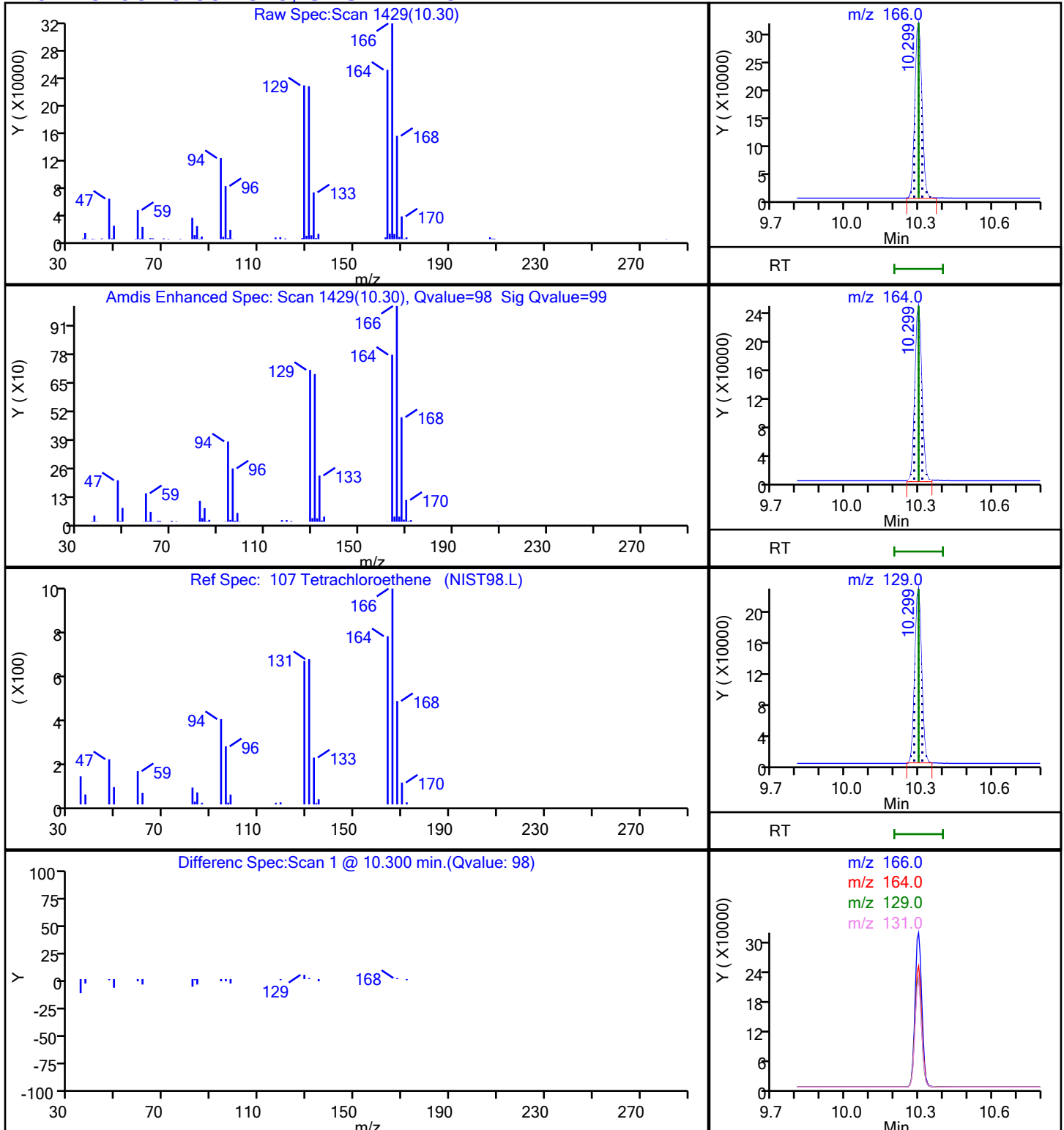
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

107 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-14

Matrix: Water

Lab File ID: HF27X07.D

Analysis Method: 8260D

Date Collected: 02/21/2023 00:00

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 14:35

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.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND	^c cn	0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	ND		5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1
 Environment Testing, LLC

SDG No.:

Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 410-116393-14

Matrix: Water Lab File ID: HF27X07.D

Analysis Method: 8260D Date Collected: 02/21/2023 00:00

Sample wt/vol: 25 (mL) Date Analyzed: 02/27/2023 14:35

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.: 348233 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	ND		0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		80-120
1868-53-7	Dibromofluoromethane (Surr)	107		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X07.D
 Lims ID: 410-116393-A-14
 Client ID: HD-QC1-0/1-2
 Sample Type: Client
 Inject. Date: 27-Feb-2023 14:35:30 ALS Bottle#: 7 Worklist Smp#: 8
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-008
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 10:47:17 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp Date: 28-Feb-2023 10:50:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.130				ND	7
7 Vinyl chloride	62		2.245				ND	
9 Bromomethane	94		2.568				ND	
10 Chloroethane	64		2.648				ND	
18 1,1-Dichloroethene	96		3.507				ND	
19 Acetone	43		3.532				ND	
24 Carbon disulfide	76		3.806				ND	7
28 Methylene Chloride	84		4.160				ND	
* 29 t-Butyl alcohol-d10 (IS)	65	4.172	4.166	0.006	19	67038	50.0	
33 Methyl tert-butyl ether	73		4.556				ND	
34 trans-1,2-Dichloroethene	96		4.580				ND	
37 1,1-Dichloroethane	63		5.233				ND	
42 2-Butanone (MEK)	43		6.013				ND	
43 cis-1,2-Dichloroethene	96		6.068				ND	
49 Chlorobromomethane	128		6.397				ND	
52 Chloroform	83		6.543				ND	
\$ 53 Dibromofluoromethane (Surr)	113	6.756	6.763	-0.007	93	435761	10.7	
54 1,1,1-Trichloroethane	97		6.769				ND	
57 Carbon tetrachloride	117		6.988				ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.208	7.220	-0.012	52	75968	10.3	
60 Benzene	78		7.250				ND	
62 1,2-Dichloroethane	62		7.324				ND	7
* 65 Fluorobenzene (IS)	96	7.647	7.653	-0.006	99	1602575	10.0	
69 Trichloroethene	95		8.134				ND	
71 1,2-Dichloropropane	63		8.464				ND	
77 Dichlorobromomethane	83		8.805				ND	
81 cis-1,3-Dichloropropene	75		9.360				ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.524				ND	
\$ 84 Toluene-d8 (Surr)	98	9.664	9.665	-0.001	93	1820809	9.54	
85 Toluene	92		9.744				ND	
86 trans-1,3-Dichloropropene	75		10.000				ND	
106 1,1,2-Trichloroethane	97		10.207				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
107 Tetrachloroethene	166		10.293				ND	
109 2-Hexanone	43		10.414				ND	
111 Chlorodibromomethane	129		10.585				ND	
112 Ethylene Dibromide	107		10.695				ND	
* 113 Chlorobenzene-d5 (IS)	117	11.121	11.128	-0.007	84	1560563	10.0	
115 Chlorobenzene	112		11.152				ND	
116 1,1,1,2-Tetrachloroethane	131		11.231				ND	
118 Ethylbenzene	91		11.237				ND	
S 117 Xylenes, Total	106		11.245				ND	7
119 m-Xylene & p-Xylene	106		11.353				ND	
120 o-Xylene	106		11.676				ND	
121 Styrene	104		11.695				ND	
122 Bromoform	173		11.853				ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	94	775517	10.0	
127 1,1,2,2-Tetrachloroethane	83		12.219				ND	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1006131	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_LLcentISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X07.D

Injection Date: 27-Feb-2023 14:35:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: 410-116393-A-14

Lab Sample ID: 410-116393-14

Worklist Smp#: 8

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

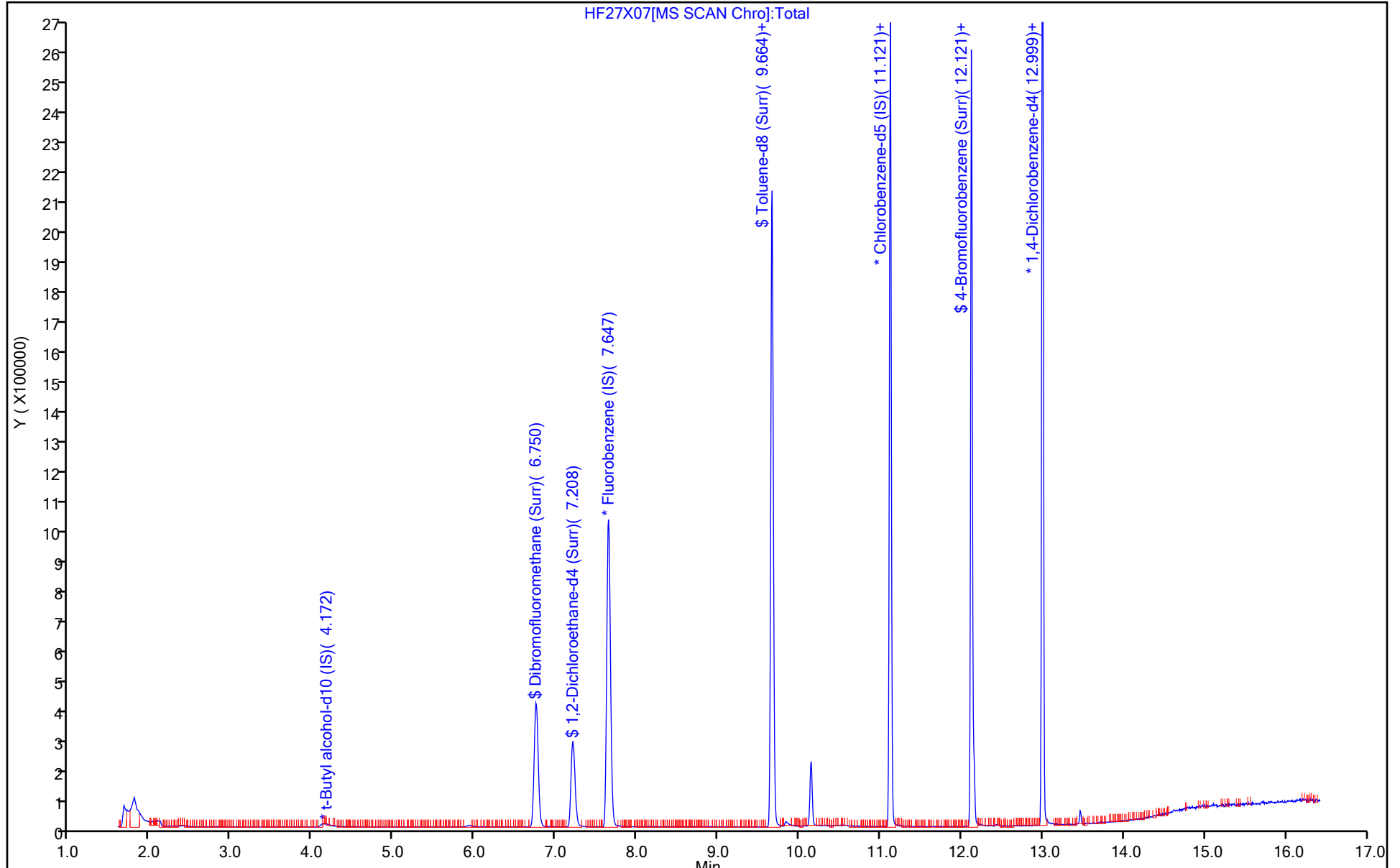
ALS Bottle#: 7

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X07.D
 Lims ID: 410-116393-A-14
 Client ID: HD-QC1-0/1-2
 Sample Type: Client
 Inject. Date: 27-Feb-2023 14:35:30 ALS Bottle#: 7 Worklist Smp#: 8
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-008
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 10:47:17 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp Date: 28-Feb-2023 10:50:58

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.7	107.43
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	102.64
\$ 84 Toluene-d8 (Surr)	10.0	9.54	95.37
\$ 126 4-Bromofluorobenzene (Surr)	10.0	10.0	100.06

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

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1 Analy Batch No.: 274149
 Environment Testing, LLC

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-274149/18	Copy_HL11X18.D
Level 2	IC 410-274149/17	HL11X17.D
Level 3	IC 410-274149/16	HL11X16.D
Level 4	IC 410-274149/15	HL11X15.D
Level 5	IC 410-274149/14	HL11X14.D
Level 6	ICIS 410-274149/13	HL11X13.D
Level 7	IC 410-274149/12	HL11X12.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Dichlorodifluoromethane	0.2899 0.3243	0.2898 0.3074	0.2915	0.3276	0.3136	Ave		0.306 3		0.1000	5.3		20.0				
Chloromethane	0.3803 0.3959	0.3521 0.3831	0.3530	0.4218	0.4001	Ave		0.383 8		0.1000	6.6		20.0				
1,3-Butadiene	0.4055 0.3689	0.3193 0.3570	0.3445	0.3879	0.3541	Ave		0.362 4			7.8		20.0				
Vinyl chloride	0.3544 0.4008	0.3380 0.3897	0.3606	0.4217	0.3964	Ave		0.380 2		0.1000	7.8		20.0				
Bromomethane	0.2768 0.2762	0.2519 0.2644	0.2409	0.2851	0.2731	Ave		0.266 9		0.1000	5.9		20.0				
Chloroethane	0.2241 0.2379	0.2198 0.2307	0.2148	0.2503	0.2371	Ave		0.230 7		0.1000	5.3		20.0				
Dichlorofluoromethane	0.5070 0.5354	0.4704 0.5193	0.4649	0.5570	0.5251	Ave		0.511 3		0.1000	6.6		20.0				
Trichlorofluoromethane	0.4267 0.4948	0.4087 0.4749	0.4290	0.5040	0.4836	Ave		0.460 2		0.1000	8.2		20.0				
Ethyl ether	0.1851 0.2049	0.1696 0.1924	0.1805	0.2134	0.2012	Ave		0.192 4			7.9		20.0				
Freon 123a	0.3385 0.3748	0.3443 0.3600	0.3305	0.3902	0.3710	Ave		0.358 5			6.0		20.0				
Acrolein	2.1925 2.9237	3.0932 2.9018	2.8924	2.7403	2.4897	Ave		2.747 6			11.2		20.0				
1,1-Dichloroethene	0.2329 0.2740	0.2636 0.2583	0.2505	0.2750	0.2660	Ave		0.260 1		0.1000	5.7		20.0				
Acetone	3.8921 2.9605	3.8819 2.7109	3.2721	2.8654	2.8088	Ave		3.198 8		0.1000	15.7		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

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

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

Analy Batch No.: 274149

SDG No.:

Instrument ID: 19094

GC Column: R-624SilMS 3 ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51

Calibration End Date: 07/11/2022 18:52

Calibration ID: 40553

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Freon 113	0.2250 0.2706	0.2422 0.2558	0.2525	0.2621	0.2670	Ave		0.253 6		0.1000	6.2		20.0				
Methyl iodide	0.4263 0.4671	0.4537 0.4452	0.4414	0.4691	0.4628	Ave		0.452 2			3.4		20.0				
Carbon disulfide	0.6592 0.7282	0.6881 0.6934	0.6636	0.7292	0.7115	Ave		0.696 2		0.1000	4.1		20.0				
Methyl acetate	8.7050 9.1432	8.0756 9.3005	8.7296	8.2006	7.0968	Ave		8.464 5		0.1000	8.9		20.0				
Allyl chloride	0.4589 0.4587	0.4514 0.4442	0.4246	0.4652	0.4563	Ave		0.451 3			3.0		20.0				
Methylene Chloride	0.2481 0.2794	0.2749 0.2683	0.2572	0.2797	0.2780	Ave		0.269 4		0.1000	4.6		20.0				
t-Butyl alcohol	1.0096 1.0682	1.1595 0.8930	1.1662	1.1599	1.1163	Ave		1.081 8			9.4		20.0				
Acrylonitrile	2.5952 4.8609	4.7395 4.9642	4.4206	4.5792	4.0677	Ave		4.318 2			18.9		20.0				
Methyl tert-butyl ether	0.5266 0.6097	0.5807 0.5882	0.5531	0.6069	0.6043	Ave		0.581 4		0.1000	5.4		20.0				
trans-1,2-Dichloroethene	0.2623 0.3005	0.2878 0.2946	0.2788	0.3030	0.2953	Ave		0.288 9		0.1000	4.9		20.0				
n-Hexane	0.3849 0.4227	0.3999 0.4054	0.3819	0.4182	0.4164	Ave		0.404 2			4.0		20.0				
1,1-Dichloroethane	0.4886 0.5634	0.5501 0.5553	0.5126	0.5538	0.5563	Ave		0.540 0		0.2000	5.2		20.0				
di-Isopropyl ether	0.8535 0.9560	0.9006 0.9387	0.8798	0.9481	0.9560	Ave		0.919 0			4.5		20.0				
2-Chloro-1,3-butadiene	0.4022 0.4636	0.4317 0.4607	0.4113	0.4594	0.4584	Ave		0.441 0			5.9		20.0				
Ethyl t-butyl ether	0.7690 0.8422	0.8029 0.8224	0.7792	0.8446	0.8304	Ave		0.813 0			3.7		20.0				
2-Butanone (MEK)	4.5344 6.0368	5.6651 6.1255	5.8778	5.4913	5.2204	Ave		5.564 5		0.1000	9.9		20.0				
cis-1,2-Dichloroethene	0.3052 0.3291	0.3106 0.3220	0.3019	0.3266	0.3258	Ave		0.317 3		0.1000	3.5		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

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

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

Analy Batch No.: 274149

SDG No.:

Instrument ID: 19094

GC Column: R-624SilMS 3 ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51

Calibration End Date: 07/11/2022 18:52

Calibration ID: 40553

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2,2-Dichloropropane	0.4080 0.4688	0.4528 0.4668	0.4314	0.4725	0.4666	Ave		0.452 4			5.3		20.0				
Propionitrile	1.0525 1.6328	1.3219 1.5249	1.4750	1.5063	1.4751	Ave		1.426 9			13.2		20.0				
Methacrylonitrile	4.5018 6.5489	7.1162 6.8274	6.5565	6.0351	5.5456	Ave		6.161 6			14.5		20.0				
Bromochloromethane	0.1301 0.1308	0.1200 0.1275	0.1187	0.1299	0.1305	Ave		0.126 8			4.1		20.0				
Tetrahydrofuran	1.2863 1.6785	1.6222 1.7068	1.7892	1.5815	1.4719	Ave		1.590 9			10.5		20.0				
Chloroform	0.4541 0.5291	0.5277 0.5209	0.4810	0.5263	0.5271	Ave		0.509 5		0.2000	5.8		20.0				
1,1,1-Trichloroethane	0.4522 0.4958	0.4661 0.4815	0.4504	0.4871	0.4862	Ave		0.474 2		0.1000	3.8		20.0				
Cyclohexane	0.5094 0.5608	0.5380 0.5462	0.5117	0.5568	0.5426	Ave		0.537 9		0.1000	3.8		20.0				
1,1-Dichloropropene	0.4167 0.4429	0.4207 0.4385	0.4059	0.4401	0.4359	Ave		0.428 7			3.3		20.0				
Carbon tetrachloride	0.3749 0.4331	0.3920 0.4280	0.3926	0.4228	0.4271	Ave		0.410 1		0.1000	5.6		20.0				
Isobutyl alcohol	0.3269 0.3867	0.3610 0.3137	0.3554	0.3695	0.3565	Ave		0.352 8			7.1		20.0				
Benzene	1.1897 1.2999	1.2346 1.2702	1.1980	1.2787	1.2755	Ave		1.249 5		0.5000	3.4		20.0				
1,2-Dichloroethane	0.2669 0.2773	0.2742 0.2690	0.2543	0.2762	0.2772	Ave		0.270 8		0.1000	3.1		20.0				
t-Amyl methyl ether	0.6173 0.7276	0.6973 0.7095	0.6683	0.7088	0.7201	Ave		0.692 7			5.5		20.0				
n-Heptane	0.4682 0.4523	0.4498 0.4336	0.4226	0.4328	0.4374	Ave		0.442 4			3.5		20.0				
n-Butanol	0.2883 0.3287	0.2355 0.2501	0.3090	0.3539	0.3464	Ave		0.301 7			15.3		20.0				
Trichloroethene	0.3182 0.3421	0.3246 0.3379	0.3124	0.3332	0.3357	Ave		0.329 2		0.2000	3.3		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

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

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

Analy Batch No.: 274149

SDG No.:

Instrument ID: 19094

GC Column: R-624SilMS 3 ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51

Calibration End Date: 07/11/2022 18:52

Calibration ID: 40553

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.5298 0.5805	0.5438 0.5550	0.5350	0.5691	0.5738	Ave		0.555 3		0.1000	3.6		20.0				
1,2-Dichloropropane	0.2859 0.3269	0.3148 0.3229	0.2995	0.3227	0.3229	Ave		0.313 7		0.1000	4.9		20.0				
Methyl methacrylate	7.9673 13.751	13.725 14.205	13.051	12.020	11.199	Ave		12.27 4			17.7		20.0				
1,4-Dioxane	++++ 0.0586	0.0835 ++++	0.0840	0.0865	0.0793	Ave		0.078 4		0.0050	14.5		20.0				
Dibromomethane	0.1301 0.1344	0.1301 0.1318	0.1240	0.1298	0.1340	Ave		0.130 6			2.7		20.0				
Bromodichloromethane	0.3400 0.3712	0.3425 0.3650	0.3280	0.3610	0.3632	Ave		0.353 n		0.2000	4.5		20.0				
2-Nitropropane	2.4865 3.3083	3.3456 3.3399	3.1361	2.9608	2.7261	Ave		3.043 3			11.0		20.0				
cis-1,3-Dichloropropene	0.3880 0.4741	0.4274 0.4691	0.4088	0.4607	0.4718	Ave		0.442 9		0.2000	7.8		20.0				
4-Methyl-2-pentanone (MIBK)	11.162 15.918	17.688 16.156	16.577	14.434	13.643	Ave		15.08 2		0.1000	14.5		20.0				
Toluene	0.8901 0.9385	0.9089 0.9125	0.8572	0.9277	0.9282	Ave		0.909 n		0.4000	3.1		20.0				
trans-1,3-Dichloropropene	0.3614 0.4103	0.3692 0.4040	0.3649	0.3966	0.4037	Ave		0.387 1		0.1000	5.4		20.0				
Ethyl methacrylate	0.2654 0.3179	0.2797 0.3081	0.2847	0.3037	0.3174	Ave		0.296 7			6.8		20.0				
1,1,2-Trichloroethane	0.2326 0.2169	0.2081 0.2116	0.2023	0.2148	0.2209	Ave		0.215 3		0.1000	4.5		20.0				
Tetrachloroethene	0.3952 0.4333	0.4290 0.4232	0.4029	0.4275	0.4264	Ave		0.419 7		0.2000	3.5		20.0				
1,3-Dichloropropane	0.3559 0.3853	0.3661 0.3746	0.3576	0.3741	0.3845	Ave		0.371 1			3.2		20.0				
2-Hexanone	6.9530 10.879	11.395 11.116	10.721	9.7750	9.2405	Ave		10.01 1		0.1000	15.5		20.0				
Dibromochloromethane	0.2584 0.2823	0.2522 0.2783	0.2474	0.2686	0.2783	Ave		0.266 5			5.2		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

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

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

Analy Batch No.: 274149

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dibromoethane (EDB)	0.1601 0.2117	0.2006 0.2052	0.1867	0.2071	0.2093	Ave		0.197 2		0.1000	9.3		20.0				
1-Chlorohexane	0.6023 0.5639	0.5613 0.5424	0.5361	0.5700	0.5563	Ave		0.561 7			3.8		20.0				
Chlorobenzene	0.9385 0.9973	0.9603 0.9758	0.9243	0.9876	0.9954	Ave		0.968 4		0.5000	2.9		20.0				
1,1,1,2-Tetrachloroethane	0.3211 0.3472	0.3234 0.3401	0.3097	0.3357	0.3483	Ave		0.332 2			4.4		20.0				
Ethylbenzene	1.7083 1.8388	1.7359 1.7937	1.6923	1.8276	1.8295	Ave		1.775 2		0.1000	3.5		20.0				
m&p-Xylene	0.6472 0.7031	0.6800 0.6834	0.6340	0.6912	0.6984	Ave		0.676 8		0.1000	3.9		20.0				
o-Xylene	0.6202 0.6776	0.6474 0.6663	0.6238	0.6758	0.6684	Ave		0.654 2		0.3000	3.7		20.0				
Styrene	0.9408 1.1299	1.0366 1.1046	1.0051	1.0969	1.1155	Ave		1.061 3		0.3000	6.6		20.0				
Bromoform	0.1367 0.1677	0.1415 0.1668	0.1411	0.1578	0.1633	Ave		0.153 6		0.1000	8.7		20.0				
Isopropylbenzene	1.6512 1.8462	1.7520 1.8070	1.6637	1.8290	1.8339	Ave		1.769 n		0.1000	4.6		20.0				
1,1,2,2-Tetrachloroethane	0.4176 0.4696	0.4600 0.4516	0.4398	0.4858	0.4790	Ave		0.457 6		0.3000	5.2		20.0				
Bromobenzene	0.6575 0.7070	0.6763 0.6801	0.6672	0.6993	0.7077	Ave		0.685 n			2.9		20.0				
trans-1,4-Dichloro-2-butene	3.7180 5.7724	5.6507 6.0271	5.4339	5.0155	4.8649	Ave		5.211 8			14.9		20.0				
1,2,3-Trichloropropane	0.1026 0.1162	0.1237 0.1124	0.1067	0.1237	0.1190	Ave		0.114 9			7.1		20.0				
N-Propylbenzene	3.5065 3.9790	3.8348 3.8071	3.6449	3.9948	3.9727	Ave		3.820 n			4.9		20.0				
2-Chlorotoluene	0.6876 0.7601	0.7303 0.7386	0.7115	0.7522	0.7654	Ave		0.735 1			3.8		20.0				
1,3,5-Trimethylbenzene	2.4679 2.7533	2.6657 2.6501	2.5649	2.7895	2.7584	Ave		2.664 3			4.4		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

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

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

Analy Batch No.: 274149

SDG No.:

Instrument ID: 19094

GC Column: R-624SilMS 3 ID: 0.25 (mm)

Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51

Calibration End Date: 07/11/2022 18:52

Calibration ID: 40553

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
4-Chlorotoluene	0.6611 0.7662	0.7575 0.7464	0.7041	0.7583	0.7730	Ave		0.738 1			5.5		20.0				
tert-Butylbenzene	0.5358 0.6306	0.5945 0.5803	0.5855	0.6004	0.5969	Ave		0.589 2			4.8		20.0				
Pentachloroethane	0.3720 0.4466	0.3700 0.4318	0.3906	0.4463	0.4393	Ave		0.413 8			8.4		20.0				
1,2,4-Trimethylbenzene	2.5049 2.7823	2.7162 2.7057	2.5558	2.7691	2.7848	Ave		2.688 4			4.2		20.0				
sec-Butylbenzene	3.3622 3.5869	3.4962 3.4314	3.3383	3.6286	3.5806	Ave		3.489 2			3.3		20.0				
1,3-Dichlorobenzene	1.3649 1.4559	1.4354 1.4133	1.3234	1.4769	1.4596	Ave		1.418 5		0.6000	3.9		20.0				
p-Isopropyltoluene	2.8662 3.0741	3.0004 2.9480	2.8503	3.1152	3.0827	Ave		2.991 0			3.6		20.0				
1,4-Dichlorobenzene	1.3842 1.4450	1.4191 1.3948	1.3216	1.4520	1.4378	Ave		1.407 8		0.5000	3.2		20.0				
1,2,3-Trimethylbenzene	1.1564 1.1744	1.1515 1.1295	1.0721	1.1696	1.1691	Ave		1.146 1			3.1		20.0				
Benzyl chloride	0.1688 0.2024	0.1696 0.1972	0.1763	0.1917	0.1966	Ave		0.186 1			7.6		20.0				
n-Butylbenzene	1.4789 1.5654	1.4558 1.5059	1.4358	1.5738	1.5521	Ave		1.509 7			3.7		20.0				
1,2-Dichlorobenzene	1.2365 1.2987	1.2434 1.2492	1.1807	1.2880	1.3003	Ave		1.256 7		0.4000	3.4		20.0				
1,2-Dibromo-3-Chloropropane	0.0414 0.0672	0.0536 0.0637	0.0554	0.0719	0.0696	Ave		0.060 4		0.0500	18.0		20.0				
1,3,5-Trichlorobenzene	1.0362 1.1307	1.1093 1.0819	1.0701	1.1682	1.1264	Ave		1.103 3			4.0		20.0				
1,2,4-Trichlorobenzene	0.8703 0.9596	0.9079 0.9056	0.8932	1.0010	0.9655	Ave		0.929 0		0.2000	5.0		20.0				
Hexachlorobutadiene	0.5602 0.4200	0.4949 0.3905	0.4298	0.4426	0.4204	Ave		0.451 2			12.8		20.0				
Naphthalene	1.4351 1.5595	1.4872 1.4130	1.4298	1.6005	1.5752	Ave		1.500 0			5.2		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

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

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1 Analy Batch No.: 274149
 Environment Testing, LLC

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,3-Trichlorobenzene	0.7394 0.8082	0.8042 0.7280	0.7753	0.8483	0.8176	Ave		0.788 7			5.5		20.0				
Dibromofluoromethane (Surr)	0.2516 0.2536	0.2535 0.2519	0.2512	0.2563	0.2536	Ave		0.253 1			0.7		20.0				
1,2-Dichloroethane-d4 (Surr)	0.0468 0.0461	0.0463 0.0460	0.0450	0.0464	0.0467	Ave		0.046 2			1.3		20.0				
Toluene-d8 (Surr)	1.2501 1.2244	1.2259 1.2138	1.2140	1.2235	1.2119	Ave		1.223 4			1.1		20.0				
4-Bromofluorobenzene (Surr)	0.4975 0.5017	0.4934 0.4963	0.4930	0.4941	0.5005	Ave		0.496 6			0.7		20.0				

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-116393-1 Analy Batch No.: 274149

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-274149/18	Copy_HL11X18.D
Level 2	IC 410-274149/17	HL11X17.D
Level 3	IC 410-274149/16	HL11X16.D
Level 4	IC 410-274149/15	HL11X15.D
Level 5	IC 410-274149/14	HL11X14.D
Level 6	ICIS 410-274149/13	HL11X13.D
Level 7	IC 410-274149/12	HL11X12.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7				LVL 6	LVL 7			
Dichlorodifluoromethane	FB	Ave	12093 675132	29441 1638876	59403	133086	330210	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloromethane	FB	Ave	15861 824161	35764 2042758	71922	171365	421301	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Butadiene	FB	Ave	16912 767941	32434 1903361	70198	157585	372846	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Vinyl chloride	FB	Ave	14783 834299	34329 2077605	73466	171314	417386	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromomethane	FB	Ave	11545 574869	25582 1409920	49078	115842	287601	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloroethane	FB	Ave	9347 495285	22322 1230005	43768	101707	249635	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dichlorofluoromethane	FB	Ave	21148 1114554	47783 2768929	94716	226294	552979	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Trichlorofluoromethane	FB	Ave	17796 1030019	41511 2531940	87411	204745	509232	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl ether	FB	Ave	7722 426652	17231 1025975	36780	86711	211984	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Freon 123a	FB	Ave	14120 780220	34976 1919633	67338	158543	390670	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acrolein	TBAd 10	Ave	56027 2963738	126498 7020232	251826	590053	1505959	10.0 500	25.0 1250	50.0	100	250
1,1-Dichloroethene	FB	Ave	9714 570272	26778 1377428	51047	111716	280143	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acetone	TBAd 10	Ave	19892	31750	56977	123401	339789	2.00	5.00	10.0	20.0	50.0

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-116393-1 Analy Batch No.: 274149

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			600215	1311669				100	250			
Freon 113	FB	Ave	9385 563286	24601 1363934	51449	106489	281165	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl iodide	FB	Ave	17782 972304	46089 2373600	89934	190590	487298	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon disulfide	FB	Ave	27494 1515951	69895 3696914	135219	296255	749209	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl acetate	TBAd 10	Ave	4449 185370	6605 450003	15201	35316	85854	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Allyl chloride	FB	Ave	19139 954854	45854 2368143	86514	188981	480474	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylene Chloride	FB	Ave	10350 581663	27920 1430268	52410	113641	292795	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Butyl alcohol	TBAd 10	Ave	10320 433119	18967 864137	40615	99901	270086	4.00 200	10.0 500	20.0	40.0	100
Acrylonitrile	TBAd 10	Ave	3316 246376	9691 600481	19244	49301	123022	0.500 25.0	1.25 62.5	2.50	5.00	12.5
Methyl tert-butyl ether	FB	Ave	21966 1269252	58986 3136251	112695	246579	636323	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,2-Dichloroethene	FB	Ave	10942 625545	29230 1570843	56807	123103	310962	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Hexane	FB	Ave	16053 879832	40616 2161687	77822	169913	438476	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloroethane	FB	Ave	20381 1172891	55872 2960872	104448	225005	585799	0.200 10.0	0.500 25.0	1.00	2.00	5.00
di-Isopropyl ether	FB	Ave	35599 1989982	91474 5004930	179260	385192	1006753	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chloro-1,3-butadiene	FB	Ave	16777 965073	43848 2456305	83795	186653	482679	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl t-butyl ether	FB	Ave	32074 1753246	81551 4384857	158776	343121	874477	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Butanone (MEK)	TBAd 10	Ave	23175	46335	102351	236486	631533	2.00	5.00	10.0	20.0	50.0

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-116393-1 Analy Batch No.: 274149

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)					
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	
			1223902	2963836					100	250			
cis-1,2-Dichloroethene	FB	Ave	12731 685145	31554 1716580	61506	132683	343086	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
2,2-Dichloropropane	FB	Ave	17016 975977	45990 2488997	87898	191971	491314	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
Propionitrile	TBAd 10	Ave	10758 662067	21624 1475682	51370	129739	356903	4.00 200	10.0 500	20.0	40.0	100	
Methacrylonitrile	TBAd 10	Ave	23008 1327716	58203 3303445	114169	259901	670885	2.00 100	5.00 250	10.0	20.0	50.0	
Bromochloromethane	FB	Ave	5425 272299	12193 679591	24178	52761	137430	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
Tetrahydrofuran	TBAd 10	Ave	3287 170150	6634 412918	15578	34053	89030	1.00 50.0	2.50 125	5.00	10.0	25.0	
Chloroform	FB	Ave	18941 1101450	53597 2777171	98008	213834	555095	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
1,1,1-Trichloroethane	FB	Ave	18862 1032101	47344 2567338	91770	197900	511965	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
Cyclohexane	FB	Ave	21247 1167343	54650 2912163	104255	226192	571420	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
1,1-Dichloropropene	FB	Ave	17380 922066	42736 2338039	82705	178784	459004	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
Carbon tetrachloride	FB	Ave	15638 901500	39816 2281907	79987	171753	449741	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
Isobutyl alcohol	TBAd 10	Ave	8353 391967	14765 759018	30946	79569	215626	10.0 500	25.0 1250	50.0	100	250	
Benzene	FB	Ave	49624 2705977	125402 6772180	244107	519476	1343156	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
1,2-Dichloroethane	FB	Ave	11134 577317	27855 1434259	51817	112224	291944	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
t-Amyl methyl ether	FB	Ave	25747 1514685	70827 3782869	136162	287948	758276	0.200 10.0	0.500 25.0	1.00	2.00	5.00	
n-Heptane	FB	Ave	19527	45690	86111	175823	460581	0.200	0.500	1.00	2.00	5.00	

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-116393-1 Analy Batch No.: 274149

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			941472	2311911				10.0	25.0			
n-Butanol	TBAd 10	Ave	12895	16852	47075	133360	366680	17.5	43.8	87.5	175	438
			583025	1058699				875	2188			
Trichloroethene	FB	Ave	13274	32976	63655	135366	353455	0.200	0.500	1.00	2.00	5.00
			712234	1801642				10.0	25.0			
Methylcyclohexane	FB	Ave	22098	55236	109016	231199	604203	0.200	0.500	1.00	2.00	5.00
			1208386	2958874				10.0	25.0			
1,2-Dichloropropane	FB	Ave	11924	31975	61027	131100	340026	0.200	0.500	1.00	2.00	5.00
			680594	1721801				10.0	25.0			
Methyl methacrylate	TBAd 10	Ave	4072	11226	22726	51766	135474	0.200	0.500	1.00	2.00	5.00
			278786	687315				10.0	25.0			
1,4-Dioxane	TBAd 10	Ave	+++++	3415	7312	18622	47977	+++++	25.0	50.0	100	250
			59377	+++++				500	+++++			
Dibromomethane	FB	Ave	5425	13211	25263	52719	141139	0.200	0.500	1.00	2.00	5.00
			279827	702912				10.0	25.0			
Bromodichloromethane	FB	Ave	14182	34786	66840	146679	382494	0.200	0.500	1.00	2.00	5.00
			772695	1945893				10.0	25.0			
2-Nitropropane	TBAd 10	Ave	6354	13682	27305	63753	164896	1.00	2.50	5.00	10.0	25.0
			335366	808003				50.0	125			
cis-1,3-Dichloropropene	FB	Ave	16185	43415	83305	187149	496791	0.200	0.500	1.00	2.00	5.00
			987001	2501036				10.0	25.0			
4-Methyl-2-pentanone (MIBK)	TBAd 10	Ave	57049	144667	288664	621615	1650404	2.00	5.00	10.0	20.0	50.0
			3227118	7816948				100	250			
Toluene	CBZd 5	Ave	32116	81056	154507	336595	872692	0.200	0.500	1.00	2.00	5.00
			1751935	4396923				10.0	25.0			
trans-1,3-Dichloropropene	CBZd 5	Ave	13040	32928	65774	143896	379506	0.200	0.500	1.00	2.00	5.00
			765868	1946661				10.0	25.0			
Ethyl methacrylate	CBZd 5	Ave	9577	24949	51321	110202	298452	0.200	0.500	1.00	2.00	5.00

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-116393-1 Analy Batch No.: 274149

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			593374	1484677				10.0	25.0			
1,1,2-Trichloroethane	CBZd 5	Ave	8392	18556	36462	77953	207686	0.200	0.500	1.00	2.00	5.00
			404842	1019488				10.0	25.0			
Tetrachloroethene	CBZd 5	Ave	14261	38259	72632	155095	400926	0.200	0.500	1.00	2.00	5.00
			808937	2039197				10.0	25.0			
1,3-Dichloropropane	CBZd 5	Ave	12843	32646	64455	135730	361499	0.200	0.500	1.00	2.00	5.00
			719249	1804958				10.0	25.0			
2-Hexanone	TBAd 10	Ave	35536	93203	186685	420963	1117872	2.00	5.00	10.0	20.0	50.0
			2205566	5378469				100	250			
Dibromochloromethane	CBZd 5	Ave	9323	22493	44590	97440	261621	0.200	0.500	1.00	2.00	5.00
			526982	1341031				10.0	25.0			
1,2-Dibromoethane (EDB)	CBZd 5	Ave	5776	17888	33650	75141	196751	0.200	0.500	1.00	2.00	5.00
			395194	988803				10.0	25.0			
1-Chlorohexane	CBZd 5	Ave	21731	50063	96628	206815	522985	0.200	0.500	1.00	2.00	5.00
			1052702	2613557				10.0	25.0			
Chlorobenzene	CBZd 5	Ave	33865	85642	166598	358343	935813	0.200	0.500	1.00	2.00	5.00
			1861729	4701939				10.0	25.0			
1,1,1,2-Tetrachloroethane	CBZd 5	Ave	11585	28846	55816	121792	327478	0.200	0.500	1.00	2.00	5.00
			648069	1638763				10.0	25.0			
Ethylbenzene	CBZd 5	Ave	61642	154814	305034	663103	1720096	0.200	0.500	1.00	2.00	5.00
			3432722	8643404				10.0	25.0			
m&p-Xylene	CBZd 5	Ave	46705	121299	228568	501557	1313262	0.400	1.00	2.00	4.00	10.0
			2625259	6586157				20.0	50.0			
o-Xylene	CBZd 5	Ave	22378	57735	112434	245217	628447	0.200	0.500	1.00	2.00	5.00

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-116393-1 Analy Batch No.: 274149

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			1264897	3210811				10.0	25.0			
Styrene	CBZd 5	Ave	33946	92450	181168	398001	1048801	0.200	0.500	1.00	2.00	5.00
			2109282	5322551				10.0	25.0			
Bromoform	CBZd 5	Ave	4931	12623	25426	57271	153558	0.200	0.500	1.00	2.00	5.00
			313065	803826				10.0	25.0			
Isopropylbenzene	CBZd 5	Ave	59579	156254	299877	663631	1724175	0.200	0.500	1.00	2.00	5.00
			3446508	8707027				10.0	25.0			
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	8357	22404	43665	96897	250852	0.200	0.500	1.00	2.00	5.00
			493678	1230941				10.0	25.0			
Bromobenzene	DCBd 4	Ave	13159	32939	66242	139476	370570	0.200	0.500	1.00	2.00	5.00
			743305	1853897				10.0	25.0			
trans-1,4-Dichloro-2-butene	TBAd 10	Ave	19002	46217	94622	215992	588527	2.00	5.00	10.0	20.0	50.0
			1170298	2916204				100	250			
1,2,3-Trichloropropane	DCBd 4	Ave	2053	6024	10598	24664	62318	0.200	0.500	1.00	2.00	5.00
			122178	306446				10.0	25.0			
N-Propylbenzene	DCBd 4	Ave	70175	186777	361905	796754	2080340	0.200	0.500	1.00	2.00	5.00
			4183114	10377351				10.0	25.0			
2-Chlorotoluene	DCBd 4	Ave	13760	35571	70640	150036	400793	0.200	0.500	1.00	2.00	5.00
			799066	2013379				10.0	25.0			
1,3,5-Trimethylbenzene	DCBd 4	Ave	49390	129835	254672	556367	1444446	0.200	0.500	1.00	2.00	5.00
			2894539	7223552				10.0	25.0			
4-Chlorotoluene	DCBd 4	Ave	13230	36896	69914	151238	404813	0.200	0.500	1.00	2.00	5.00
			805513	2034542				10.0	25.0			
tert-Butylbenzene	DCBd 4	Ave	10722	28957	58136	119759	312596	0.200	0.500	1.00	2.00	5.00

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-116393-1 Analy Batch No.: 274149

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			662962	1581905				10.0	25.0			
Pentachloroethane	DCBd 4	Ave	7445	18023	38784	89007	230027	0.200	0.500	1.00	2.00	5.00
			469487	1176887				10.0	25.0			
1,2,4-Trimethylbenzene	DCBd 4	Ave	50131	132294	253767	552306	1458270	0.200	0.500	1.00	2.00	5.00
			2924954	7375096				10.0	25.0			
sec-Butylbenzene	DCBd 4	Ave	67287	170282	331458	723734	1875046	0.200	0.500	1.00	2.00	5.00
			3770835	9353447				10.0	25.0			
1,3-Dichlorobenzene	DCBd 4	Ave	27316	69911	131401	294576	764311	0.200	0.500	1.00	2.00	5.00
			1530550	3852445				10.0	25.0			
p-Isopropyltoluene	DCBd 4	Ave	57362	146134	283008	621334	1614275	0.200	0.500	1.00	2.00	5.00
			3231751	8035560				10.0	25.0			
1,4-Dichlorobenzene	DCBd 4	Ave	27701	69120	131226	289594	752898	0.200	0.500	1.00	2.00	5.00
			1519120	3801859				10.0	25.0			
1,2,3-Trimethylbenzene	DCBd 4	Ave	23143	56083	106449	233280	612197	0.200	0.500	1.00	2.00	5.00
			1234652	3078858				10.0	25.0			
Benzyl chloride	DCBd 4	Ave	3379	8260	17500	38227	102930	0.200	0.500	1.00	2.00	5.00
			212767	537399				10.0	25.0			
n-Butylbenzene	DCBd 4	Ave	29597	70907	142558	313888	812754	0.200	0.500	1.00	2.00	5.00
			1645635	4104893				10.0	25.0			
1,2-Dichlorobenzene	DCBd 4	Ave	24746	60558	117234	256900	680916	0.200	0.500	1.00	2.00	5.00
			1365343	3405147				10.0	25.0			
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	829	2609	5499	14346	36445	0.200	0.500	1.00	2.00	5.00
			70677	173574				10.0	25.0			
1,3,5-Trichlorobenzene	DCBd 4	Ave	20738	54031	106250	233002	589869	0.200	0.500	1.00	2.00	5.00

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-116393-1 Analy Batch No.: 274149

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
			1188689	2949107				10.0	25.0			
1,2,4-Trichlorobenzene	DCBd 4	Ave	17418	44220	88686	199643	505612	0.200	0.500	1.00	2.00	5.00
			1008763	2468365				10.0	25.0			
Hexachlorobutadiene	DCBd 4	Ave	11211	24106	42671	88268	220140	0.200	0.500	1.00	2.00	5.00
			441537	1064480				10.0	25.0			
Naphthalene	DCBd 4	Ave	28721	72436	141968	319229	824852	0.200	0.500	1.00	2.00	5.00
			1639471	3851468				10.0	25.0			
1,2,3-Trichlorobenzene	DCBd 4	Ave	14798	39169	76975	169189	428129	0.200	0.500	1.00	2.00	5.00
			849598	1984437				10.0	25.0			
Dibromofluoromethane (Surr)	FB	Ave	524666	515062	511791	520651	534194	10.0	10.0	10.0	10.0	10.0
			527861	537264				10.0	10.0			
1,2-Dichloroethane-d4 (Surr)	FB	Ave	97667	94092	91709	94159	98328	10.0	10.0	10.0	10.0	10.0
			95893	98178				10.0	10.0			
Toluene-d8 (Surr)	CBZd 5	Ave	2255316	2186651	2188271	2219533	2278814	10.0	10.0	10.0	10.0	10.0
			2285826	2339533				10.0	10.0			
4-Bromofluorobenzene (Surr)	CBZd 5	Ave	897535	880073	888594	896459	941117	10.0	10.0	10.0	10.0	10.0
			936498	956657				10.0	10.0			

Curve Type Legend

Ave = Average ISTD

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-116393-1 Analy Batch No.: 274149

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-274149/18	Copy_HL11X18.D
Level 2	IC 410-274149/17	HL11X17.D
Level 3	IC 410-274149/16	HL11X16.D
Level 4	IC 410-274149/15	HL11X15.D
Level 5	IC 410-274149/14	HL11X14.D
Level 6	ICIS 410-274149/13	HL11X13.D
Level 7	IC 410-274149/12	HL11X12.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Dichlorodifluoromethane	-5.3 0.3	-5.4	-4.8	6.9	2.4	5.9	50 30	30	30	30	30	30
Chloromethane	-0.9 -0.2	-8.2	-8.0	9.9	4.3	3.2	50 30	30	30	30	30	30
1,3-Butadiene	11.9 -1.5	-11.9	-4.9	7.0	-2.3	1.8	50 30	30	30	30	30	30
Vinyl chloride	-6.8 2.5	-11.1	-5.2	10.9	4.2	5.4	50 30	30	30	30	30	30
Bromomethane	3.7 -0.9	-5.6	-9.8	6.8	2.3	3.5	50 30	30	30	30	30	30
Chloroethane	-2.9 0.0	-4.7	-6.9	8.5	2.8	3.1	50 30	30	30	30	30	30
Dichlorofluoromethane	-0.8 1.6	-8.0	-9.1	8.9	2.7	4.7	50 30	30	30	30	30	30
Trichlorofluoromethane	-7.3 3.2	-11.2	-6.8	9.5	5.1	7.5	50 30	30	30	30	30	30
Ethyl ether	-3.8 0.0	-11.9	-6.2	10.9	4.6	6.5	50 30	30	30	30	30	30
Freon 123a	-5.6 0.4	-3.9	-7.8	8.9	3.5	4.6	50 30	30	30	30	30	30
Acrolein	-20.2 5.6	12.6	5.3	-0.3	-9.4	6.4	50 30	30	30	30	30	30
1,1-Dichloroethene	-10.4 -0.7	1.4	-3.7	5.7	2.3	5.3	50 30	30	30	30	30	30
Acetone	21.7 -15.3	21.4	2.3	-10.4	-12.2	-7.4	50 30	30	30	30	30	30
Freon 113	-11.3 0.9	-4.5	-0.4	3.4	5.3	6.7	50 30	30	30	30	30	30

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-116393-1 Analy Batch No.: 274149

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Methyl iodide	-5.7 -1.6	0.3	-2.4	3.7	2.3	3.3	50 30	30	30	30	30	30
Carbon disulfide	-5.3 -0.4	-1.2	-4.7	4.7	2.2	4.6	50 30	30	30	30	30	30
Methyl acetate	2.8 9.9	-4.6	3.1	-3.1	-16.2	8.0	50 30	30	30	30	30	30
Allyl chloride	1.7 -1.6	0.0	-5.9	3.1	1.1	1.6	50 30	30	30	30	30	30
Methylene Chloride	-7.9 -0.4	2.0	-4.5	3.8	3.2	3.7	50 30	30	30	30	30	30
t-Butyl alcohol	-6.7 -17.5	7.2	7.8	7.2	3.2	-1.3	50 30	30	30	30	30	30
Acrylonitrile	-39.9 15.0	9.8	2.4	6.0	-5.8	12.6	50 30	30	30	30	30	30
Methyl tert-butyl ether	-9.4 1.2	-0.1	-4.9	4.4	3.9	4.9	50 30	30	30	30	30	30
trans-1,2-Dichloroethene	-9.2 2.0	-0.4	-3.5	4.9	2.2	4.0	50 30	30	30	30	30	30
n-Hexane	-4.8 0.3	-1.1	-5.5	3.5	3.0	4.6	50 30	30	30	30	30	30
1,1-Dichloroethane	-9.5 2.8	1.9	-5.1	2.6	3.0	4.3	50 30	30	30	30	30	30
di-Isopropyl ether	-7.1 2.1	-2.0	-4.3	3.2	4.0	4.0	50 30	30	30	30	30	30
2-Chloro-1,3-butadiene	-8.8 4.5	-2.1	-6.8	4.2	3.9	5.1	50 30	30	30	30	30	30
Ethyl t-butyl ether	-5.4 1.2	-1.2	-4.1	3.9	2.1	3.6	50 30	30	30	30	30	30
2-Butanone (MEK)	-18.5 10.1	1.8	5.6	-1.3	-6.2	8.5	50 30	30	30	30	30	30
cis-1,2-Dichloroethene	-3.8 1.5	-2.1	-4.9	2.9	2.7	3.7	50 30	30	30	30	30	30
2,2-Dichloropropane	-9.8 3.2	0.1	-4.6	4.4	3.1	3.6	50 30	30	30	30	30	30
Propionitrile	-26.2 6.9	-7.4	3.4	5.6	3.4	14.4	50 30	30	30	30	30	30
Methacrylonitrile	-26.9 10.8	15.5	6.4	-2.1	-10.0	6.3	50 30	30	30	30	30	30

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-116393-1 Analy Batch No.: 274149

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Bromochloromethane	2.6 0.5	-5.3	-6.4	2.4	2.9	3.2	50 30	30	30	30	30	30
Tetrahydrofuran	-19.1 7.3	2.0	12.5	-0.6	-7.5	5.5	50 30	30	30	30	30	30
Chloroform	-10.9 2.2	3.6	-5.6	3.3	3.5	3.9	50 30	30	30	30	30	30
1,1,1-Trichloroethane	-4.6 1.5	-1.7	-5.0	2.7	2.5	4.6	50 30	30	30	30	30	30
Cyclohexane	-5.3 1.5	0.0	-4.9	3.5	0.9	4.2	50 30	30	30	30	30	30
1,1-Dichloropropene	-2.8 2.3	-1.9	-5.3	2.7	1.7	3.3	50 30	30	30	30	30	30
Carbon tetrachloride	-8.6 4.4	-4.4	-4.3	3.1	4.2	5.6	50 30	30	30	30	30	30
Isobutyl alcohol	-7.4 -11.1	2.3	0.7	4.7	1.0	9.6	50 30	30	30	30	30	30
Benzene	-4.8 1.7	-1.2	-4.1	2.3	2.1	4.0	50 30	30	30	30	30	30
1,2-Dichloroethane	-1.4 -0.6	1.3	-6.1	2.0	2.4	2.4	50 30	30	30	30	30	30
t-Amyl methyl ether	-10.9 2.4	0.7	-3.5	2.3	4.0	5.0	50 30	30	30	30	30	30
n-Heptane	5.8 -2.0	1.7	-4.5	-2.2	-1.1	2.2	50 30	30	30	30	30	30
n-Butanol	-4.4 -17.1	-21.9	2.4	17.3	14.8	8.9	50 30	30	30	30	30	30
Trichloroethene	-3.3 2.7	-1.4	-5.1	1.2	2.0	3.9	50 30	30	30	30	30	30
Methylcyclohexane	-4.6 -0.1	-2.1	-3.6	2.5	3.3	4.5	50 30	30	30	30	30	30
1,2-Dichloropropane	-8.9 3.0	0.4	-4.5	2.9	2.9	4.2	50 30	30	30	30	30	30
Methyl methacrylate	-35.1 15.7	11.8	6.3	-2.1	-8.8	12.0	50 30	30	30	30	30	30
1,4-Dioxane	+++++ +++++	6.6	7.2	10.3	1.2	-25.3		50	30	30	30	30
Dibromomethane	-0.4 0.9	-0.4	-5.1	-0.6	2.6	2.9	50 30	30	30	30	30	30

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-116393-1 Analy Batch No.: 274149

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Bromodichloromethane	-3.7 3.4	-3.0	-7.1	2.3	2.9	5.2	50 30	30	30	30	30	30
2-Nitropropane	-18.3 9.7	9.9	3.0	-2.7	-10.4	8.7	50 30	30	30	30	30	30
cis-1,3-Dichloropropene	-12.4 5.9	-3.5	-7.7	4.0	6.5	7.1	50 30	30	30	30	30	30
4-Methyl-2-pentanone (MIBK)	-26.0 7.1	17.3	9.9	-4.3	-9.5	5.5	50 30	30	30	30	30	30
Toluene	-2.1 0.4	0.0	-5.7	2.1	2.1	3.2	50 30	30	30	30	30	30
trans-1,3-Dichloropropene	-6.7 4.4	-4.6	-5.7	2.4	4.3	6.0	50 30	30	30	30	30	30
Ethyl methacrylate	-10.5 3.8	-5.7	-4.0	2.4	7.0	7.1	50 30	30	30	30	30	30
1,1,2-Trichloroethane	8.0 -1.7	-3.4	-6.0	-0.2	2.6	0.7	50 30	30	30	30	30	30
Tetrachloroethene	-5.8 0.8	2.2	-4.0	1.9	1.6	3.3	50 30	30	30	30	30	30
1,3-Dichloropropane	-4.1 0.9	-1.4	-3.7	0.8	3.6	3.8	50 30	30	30	30	30	30
2-Hexanone	-30.5 11.0	13.8	7.1	-2.4	-7.7	8.7	50 30	30	30	30	30	30
Dibromochloromethane	-3.0 4.4	-5.4	-7.2	0.8	4.4	5.9	50 30	30	30	30	30	30
1,2-Dibromoethane (EDB)	-18.8 4.0	1.7	-5.3	5.0	6.1	7.3	50 30	30	30	30	30	30
1-Chlorohexane	7.2 -3.4	-0.1	-4.6	1.5	-1.0	0.4	50 30	30	30	30	30	30
Chlorobenzene	-3.1 0.8	-0.8	-4.6	2.0	2.8	3.0	50 30	30	30	30	30	30
1,1,1,2-Tetrachloroethane	-3.4 2.4	-2.6	-6.8	1.0	4.9	4.5	50 30	30	30	30	30	30
Ethylbenzene	-3.8 1.0	-2.2	-4.7	3.0	3.1	3.6	50 30	30	30	30	30	30
m&p-Xylene	-4.4 1.0	0.5	-6.3	2.1	3.2	3.9	50 30	30	30	30	30	30
o-Xylene	-5.2 1.9	-1.0	-4.7	3.3	2.2	3.6	50 30	30	30	30	30	30

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-116393-1 Analy Batch No.: 274149

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Styrene	-11.4 4.1	-2.3	-5.3	3.4	5.1	6.5	50 30	30	30	30	30	30
Bromoform	-11.0 8.6	-7.8	-8.1	2.8	6.4	9.2	50 30	30	30	30	30	30
Isopropylbenzene	-6.7 2.1	-1.0	-6.0	3.4	3.7	4.4	50 30	30	30	30	30	30
1,1,2,2-Tetrachloroethane	-8.8 -1.3	0.5	-3.9	6.2	4.7	2.6	50 30	30	30	30	30	30
Bromobenzene	-4.0 -0.7	-1.3	-2.6	2.1	3.3	3.2	50 30	30	30	30	30	30
trans-1,4-Dichloro-2-butene	-28.7 15.6	8.4	4.3	-3.8	-6.7	10.8	50 30	30	30	30	30	30
1,2,3-Trichloropropane	-10.7 -2.2	7.6	-7.1	7.6	3.6	1.1	50 30	30	30	30	30	30
N-Propylbenzene	-8.2 -0.3	0.4	-4.6	4.6	4.0	4.2	50 30	30	30	30	30	30
2-Chlorotoluene	-6.5 0.5	-0.6	-3.2	2.3	4.1	3.4	50 30	30	30	30	30	30
1,3,5-Trimethylbenzene	-7.4 -0.5	0.1	-3.7	4.7	3.5	3.3	50 30	30	30	30	30	30
4-Chlorotoluene	-10.4 1.1	2.6	-4.6	2.7	4.7	3.8	50 30	30	30	30	30	30
tert-Butylbenzene	-9.1 -1.5	0.9	-0.6	1.9	1.3	7.0	50 30	30	30	30	30	30
Pentachloroethane	-10.1 4.3	-10.6	-5.6	7.8	6.2	7.9	50 30	30	30	30	30	30
1,2,4-Trimethylbenzene	-6.8 0.6	1.0	-4.9	3.0	3.6	3.5	50 30	30	30	30	30	30
sec-Butylbenzene	-3.6 -1.7	0.2	-4.3	4.0	2.6	2.8	50 30	30	30	30	30	30
1,3-Dichlorobenzene	-3.8 -0.4	1.2	-6.7	4.1	2.9	2.6	50 30	30	30	30	30	30
p-Isopropyltoluene	-4.2 -1.4	0.3	-4.7	4.2	3.1	2.8	50 30	30	30	30	30	30
1,4-Dichlorobenzene	-1.7 -0.9	0.8	-6.1	3.1	2.1	2.6	50 30	30	30	30	30	30
1,2,3-Trimethylbenzene	0.9 -1.4	0.5	-6.5	2.1	2.0	2.5	50 30	30	30	30	30	30

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

Lab Name: Eurofins Lancaster Laboratories Enviro Job No.: 410-116393-1 Analy Batch No.: 274149

SDG No.: _____

Instrument ID: 19094 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/11/2022 16:51 Calibration End Date: 07/11/2022 18:52 Calibration ID: 40553

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Benzyl chloride	-9.3 6.0	-8.9	-5.3	3.0	5.6	8.8	50 30	30	30	30	30	30
n-Butylbenzene	-2.0 -0.2	-3.6	-4.9	4.2	2.8	3.7	50 30	30	30	30	30	30
1,2-Dichlorobenzene	-1.6 -0.6	-1.1	-6.0	2.5	3.5	3.3	50 30	30	30	30	30	30
1,2-Dibromo-3-Chloropropane	-31.4 5.4	-11.3	-8.3	19.1	15.2	11.3	50 30	30	30	30	30	30
1,3,5-Trichlorobenzene	-6.1 -1.9	0.5	-3.0	5.9	2.1	2.5	50 30	30	30	30	30	30
1,2,4-Trichlorobenzene	-6.3 -2.5	-2.3	-3.9	7.7	3.9	3.3	50 30	30	30	30	30	30
Hexachlorobutadiene	24.2 -13.4	9.7	-4.7	-1.9	-6.8	-6.9	50 30	30	30	30	30	30
Naphthalene	-4.3 -5.8	-0.9	-4.7	6.7	5.0	4.0	50 30	30	30	30	30	30
1,2,3-Trichlorobenzene	-6.2 -7.7	2.0	-1.7	7.6	3.7	2.5	50 30	30	30	30	30	30
Dibromofluoromethane (Surr)	-0.6 -0.5	0.2	-0.8	1.3	0.2	0.2	50 30	30	30	30	30	30
1,2-Dichloroethane-d4 (Surr)	1.4 -0.3	0.3	-2.5	0.4	1.1	-0.3	50 30	30	30	30	30	30
Toluene-d8 (Surr)	2.2 -0.8	0.2	-0.8	0.0	-0.9	0.1	50 30	30	30	30	30	30
4-Bromofluorobenzene (Surr)	0.2 -0.1	-0.7	-0.7	-0.5	0.8	1.0	50 30	30	30	30	30	30

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X12.D
 Lims ID: IC std7 25
 Client ID:
 Sample Type: IC Calib Level: 7
 Inject. Date: 11-Jul-2022 16:51:30 ALS Bottle#: 12 Worklist Smp#: 12
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0052505-012
 Operator ID: kas02648 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 12-Jul-2022 11:50:21 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1678

First Level Reviewer: UKAD

Date: 12-Jul-2022 09:47:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	1.940	1.940	0.000	99	1638876	25.0	25.1	
6 Chloromethane	50	2.129	2.129	0.000	99	2042758	25.0	25.0	
8 Butadiene	39	2.245	2.245	0.000	91	1903361	25.0	24.6	
7 Vinyl chloride	62	2.245	2.251	-0.006	98	2077605	25.0	25.6	
9 Bromomethane	94	2.568	2.562	0.006	90	1409920	25.0	24.8	
10 Chloroethane	64	2.647	2.648	-0.001	100	1230005	25.0	25.0	
11 Dichlorofluoromethane	67	2.873	2.873	0.000	97	2768929	25.0	25.4	
13 Trichlorofluoromethane	101	2.952	2.952	0.000	98	2531940	25.0	25.8	
15 Ethyl ether	59	3.178	3.154	0.024	93	1025975	25.0	25.0	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.269	3.257	0.012	94	1919633	25.0	25.1	
17 Acrolein	56	3.342	3.349	-0.007	99	7020232	1250.0	1320.1	
18 1,1-Dichloroethene	96	3.489	3.489	0.000	98	1377428	25.0	24.8	
19 Acetone	43	3.501	3.507	-0.006	100	1311669	250.0	211.9	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.531	3.519	0.012	93	1363934	25.0	25.2	
21 Isopropyl alcohol	45	3.623	3.660	-0.037	96	406572	500.0	NQ	M
22 Iodomethane	142	3.678	3.672	0.006	98	2373600	25.0	24.6	
23 Ethyl bromide	108	3.708	3.708	0.000	98	1255606	25.0	25.8	
24 Carbon disulfide	76	3.788	3.788	0.000	98	3696914	25.0	24.9	
26 Methyl acetate	43	3.897	3.910	-0.013	99	450003	25.0	27.5	M
27 3-Chloro-1-propene	41	3.952	3.952	0.000	94	2368143	25.0	24.6	
29 Methylene Chloride	84	4.129	4.129	0.000	92	1430268	25.0	24.9	
* 28 t-Butyl alcohol-d10 (IS)	65	4.135	4.135	0.000	0	96770	50.0	50.0	
30 2-Methyl-2-propanol	59	4.257	4.275	-0.018	99	864137	500.0	412.7	
31 Acrylonitrile	53	4.446	4.464	-0.018	99	600481	62.5	71.9	
32 Methyl tert-butyl ether	73	4.525	4.519	0.006	94	3136251	25.0	25.3	
33 trans-1,2-Dichloroethene	96	4.543	4.544	-0.001	100	1570843	25.0	25.5	
34 Hexane	57	4.964	4.970	-0.006	92	2161687	25.0	25.1	
35 1,1-Dichloroethane	63	5.202	5.202	0.000	96	2960872	25.0	25.7	
37 Isopropyl ether	45	5.257	5.263	-0.006	96	5004930	25.0	25.5	
38 2-Chloro-1,3-butadiene	53	5.306	5.306	0.000	90	2456305	25.0	26.1	
39 Tert-butyl ethyl ether	59	5.793	5.793	0.000	98	4384857	25.0	25.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	5.982	5.988	-0.006	100	2963836	250.0	275.2	
42 cis-1,2-Dichloroethene	96	6.031	6.031	0.000	82	1716580	25.0	25.4	
43 2,2-Dichloropropane	77	6.055	6.055	0.000	86	2488997	25.0	25.8	
45 Propionitrile	54	6.068	6.074	-0.006	98	1475682	500.0	534.3	
S 40 1,2-Dichloroethene, Total	100				0			50.9	
47 Methacrylonitrile	67	6.287	6.293	-0.006	92	3303445	250.0	277.0	
48 Chlorobromomethane	128	6.366	6.360	0.006	94	679591	25.0	25.1	
49 Tetrahydrofuran	71	6.366	6.372	-0.006	77	412918	125.0	134.1	
50 Chloroform	83	6.519	6.513	0.006	93	2777171	25.0	25.6	
\$ 51 Dibromofluoromethane (Surr)	113	6.732	6.726	0.006	94	537264	10.0	9.95	
52 1,1,1-Trichloroethane	97	6.756	6.757	-0.001	98	2567338	25.0	25.4	
53 Cyclohexane	56	6.860	6.860	0.000	90	2912163	25.0	25.4	
55 1,1-Dichloropropene	75	6.958	6.958	0.000	98	2338039	25.0	25.6	
56 Carbon tetrachloride	117	6.970	6.964	0.006	97	2281907	25.0	26.1	
57 Isobutyl alcohol	41	7.092	7.098	-0.006	95	759018	1250.0	1111.5	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.183	7.189	-0.006	0	98178	10.0	9.97	
59 Benzene	78	7.220	7.220	0.000	96	6772180	25.0	25.4	
60 1,2-Dichloroethane	62	7.293	7.293	0.000	97	1434259	25.0	24.8	
62 Tert-amyl methyl ether	73	7.421	7.415	0.006	99	3782869	25.0	25.6	
* 65 Fluorobenzene (IS)	96	7.628	7.628	0.000	99	2132698	10.0	10.0	
64 n-Heptane	43	7.647	7.653	-0.007	92	2311911	25.0	24.5	
66 n-Butanol	56	7.982	7.988	-0.006	87	1058699	2187.5	1813.2	
67 Trichloroethene	95	8.116	8.116	0.000	98	1801642	25.0	25.7	
68 Methylcyclohexane	83	8.433	8.433	0.000	94	2958874	25.0	25.0	
70 1,2-Dichloropropane	63	8.451	8.451	0.000	98	1721801	25.0	25.7	
69 2-ethoxy-2-methyl butane	87	8.463	8.451	0.012	92	2422099	25.0	25.8	
71 Methyl methacrylate	69	8.530	8.537	-0.007	91	687315	25.0	28.9	
72 1,4-Dioxane	88	8.537	8.549	-0.012	29	73635	1250.0	485.5	M
73 Dibromomethane	93	8.561	8.555	0.006	96	702912	25.0	25.2	
75 Dichlorobromomethane	83	8.793	8.799	-0.006	100	1945893	25.0	25.8	
76 2-Nitropropane	41	9.061	9.067	-0.006	97	808003	125.0	137.2	
79 1-Bromo-2-chloroethane	63	9.195	9.195	0.000	98	1602309	25.0	26.1	
80 cis-1,3-Dichloropropene	75	9.347	9.354	-0.007	97	2501036	25.0	26.5	
81 4-Methyl-2-pentanone (MIBK)	43	9.518	9.518	0.000	96	7816948	250.0	267.8	
\$ 82 Toluene-d8 (Surr)	98	9.664	9.665	-0.001	93	2339533	10.0	9.92	
83 Toluene	92	9.744	9.744	0.000	98	4396923	25.0	25.1	
85 trans-1,3-Dichloropropene	75	10.000	10.000	0.000	92	1946661	25.0	26.1	
S 84 1,3-Dichloropropene, Total	100				0			52.6	
86 Ethyl methacrylate	69	10.061	10.067	-0.006	89	1484677	25.0	26.0	
87 1,1,2-Trichloroethane	97	10.207	10.207	0.000	89	1019488	25.0	24.6	
88 Tetrachloroethene	166	10.298	10.299	-0.001	97	2039197	25.0	25.2	
89 1,3-Dichloropropane	76	10.372	10.372	0.000	89	1804958	25.0	25.2	
91 2-Hexanone	43	10.420	10.420	0.000	97	5378469	250.0	277.6	
93 Chlorodibromomethane	129	10.591	10.591	0.000	90	1341031	25.0	26.1	
94 Ethylene Dibromide	107	10.701	10.701	0.000	99	988803	25.0	26.0	
* 97 Chlorobenzene-d5 (IS)	117	11.134	11.134	0.000	85	1927449	10.0	10.0	
96 1-Chlorohexane	91	11.146	11.146	0.000	97	2613557	25.0	24.1	
98 Chlorobenzene	112	11.164	11.164	0.000	99	4701939	25.0	25.2	
99 1,1,1,2-Tetrachloroethane	131	11.243	11.243	0.000	97	1638763	25.0	25.6	
S 95 Xylenes, Total	106				0			76.0	
100 Ethylbenzene	91	11.249	11.250	-0.001	98	8643404	25.0	25.3	
101 m-Xylene & p-Xylene	106	11.365	11.365	0.000	0	6586157	50.0	50.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 o-Xylene	106	11.694	11.695	-0.001	97	3210811	25.0	25.5	
103 Styrene	104	11.713	11.713	0.000	95	5322551	25.0	26.0	
104 Bromoform	173	11.871	11.871	0.000	98	803826	25.0	27.2	
105 Isopropylbenzene	105	11.999	11.999	0.000	96	8707027	25.0	25.5	
* 108 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	92	956657	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.243	12.243	0.000	91	1230941	25.0	24.7	
111 Bromobenzene	156	12.261	12.262	-0.001	96	1853897	25.0	24.8	
110 trans-1,4-Dichloro-2-butene	53	12.268	12.268	0.000	90	2916204	250.0	289.1	
112 1,2,3-Trichloropropane	110	12.286	12.292	-0.006	79	306446	25.0	24.5	
113 N-Propylbenzene	91	12.329	12.329	0.000	99	10377351	25.0	24.9	
114 2-Chlorotoluene	126	12.402	12.402	0.000	97	2013379	25.0	25.1	
115 1,3,5-Trimethylbenzene	105	12.463	12.463	0.000	94	7223552	25.0	24.9	
116 4-Chlorotoluene	126	12.493	12.493	0.000	97	2034542	25.0	25.3	
118 tert-Butylbenzene	134	12.706	12.707	-0.001	93	1581905	25.0	24.6	
119 Pentachloroethane	167	12.737	12.737	0.000	95	1176887	25.0	26.1	
120 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	7375096	25.0	25.2	
121 sec-Butylbenzene	105	12.871	12.871	0.000	94	9353447	25.0	24.6	
122 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	3852445	25.0	24.9	
123 4-Isopropyltoluene	119	12.975	12.975	0.000	97	8035560	25.0	24.6	
* 124 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	1090322	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.042	13.042	0.000	94	3801859	25.0	24.8	
126 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	3078858	25.0	24.6	
127 Benzyl chloride	126	13.115	13.121	-0.006	98	537399	25.0	26.5	
129 p-Diethylbenzene	119	13.176	13.176	0.000	91	4705394	25.0	25.0	
130 n-Butylbenzene	92	13.267	13.267	0.000	96	4104893	25.0	24.9	
131 1,2-Dichlorobenzene	146	13.304	13.304	0.000	99	3405147	25.0	24.9	
134 1,2-Dibromo-3-Chloropropane	155	13.847	13.847	0.000	96	173574	25.0	26.4	
135 1,3,5-Trichlorobenzene	180	13.968	13.969	-0.001	98	2949107	25.0	24.5	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	2468365	25.0	24.4	
137 Hexachlorobutadiene	225	14.474	14.475	-0.001	95	1064480	25.0	21.6	
138 Naphthalene	128	14.572	14.572	0.000	97	3851468	25.0	23.5	
139 1,2,3-Trichlorobenzene	180	14.712	14.712	0.000	96	1984437	25.0	23.1	
140 2-Methylnaphthalene	142	15.334	15.340	-0.006	93	2004576	25.0	20.4	
194 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

NQ - Not Quantifiable

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00049	Amount Added: 25.00	Units: uL	
MSV_LL_GAS826_00101	Amount Added: 25.00	Units: uL	
MSV_LL_#2_826_00053	Amount Added: 25.00	Units: uL	
MSV_LLcentISS_00005	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X12.D

Injection Date: 11-Jul-2022 16:51:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std7 25

Worklist Smp#: 12

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

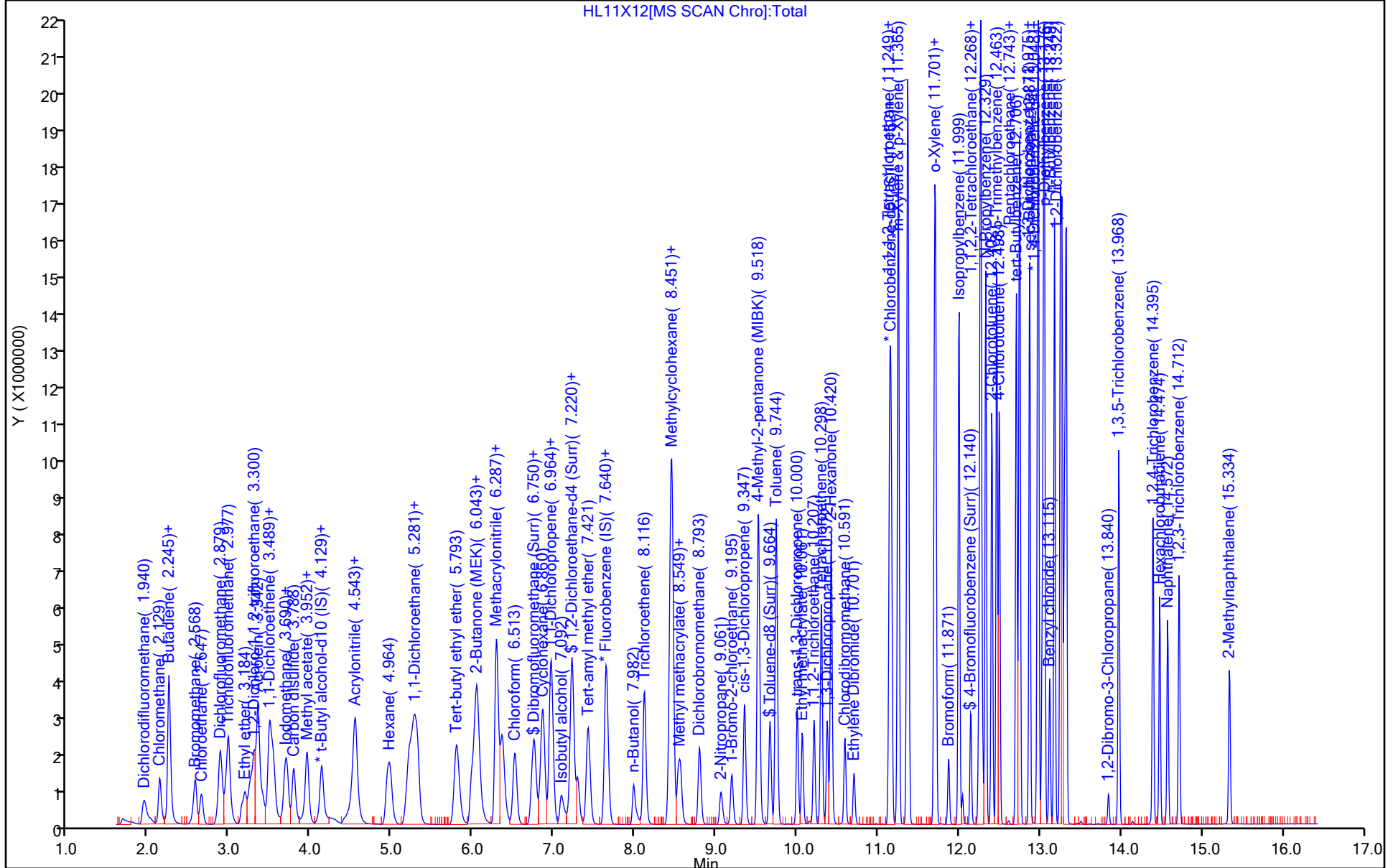
ALS Bottle#: 12

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

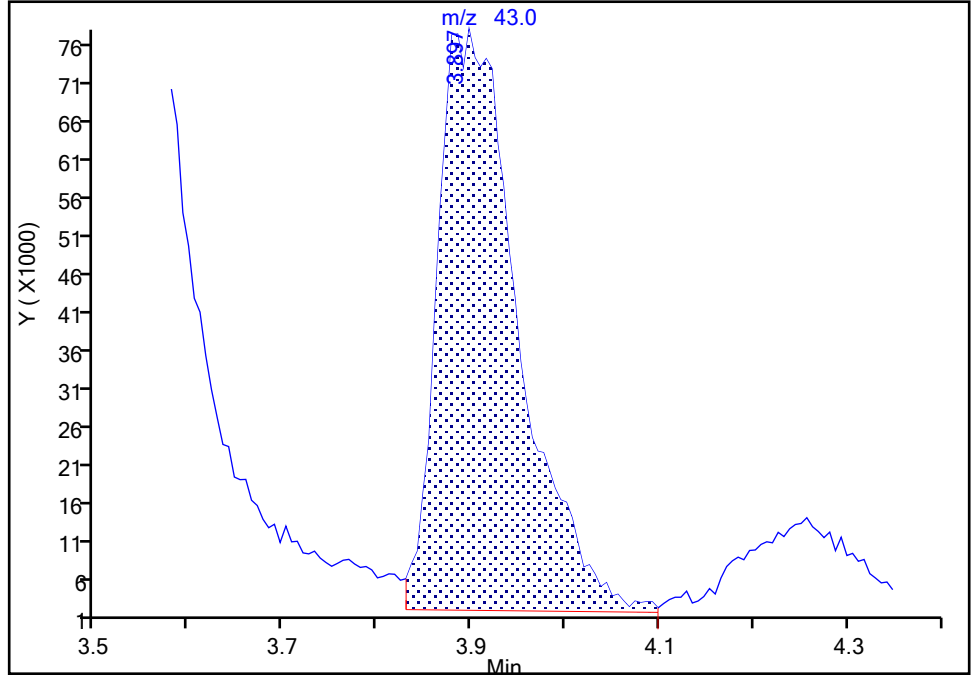
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X12.D
 Injection Date: 11-Jul-2022 16:51:30 Instrument ID: 19094
 Lims ID: IC std7 25
 Client ID:
 Operator ID: kas02648 ALS Bottle#: 12 Worklist Smp#: 12
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

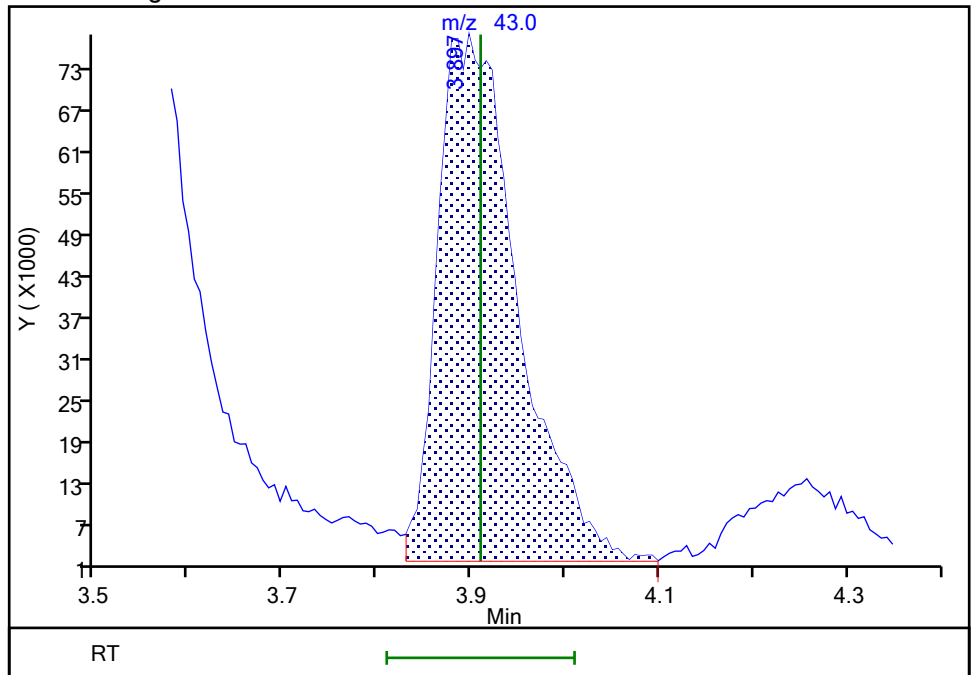
RT: 3.90
 Area: 455739
 Amount: 24.981822
 Amount Units: ug/l

Processing Integration Results



RT: 3.90
 Area: 450003
 Amount: 27.469157
 Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 09:48:02
 Audit Action: Assigned New Baseline

Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC

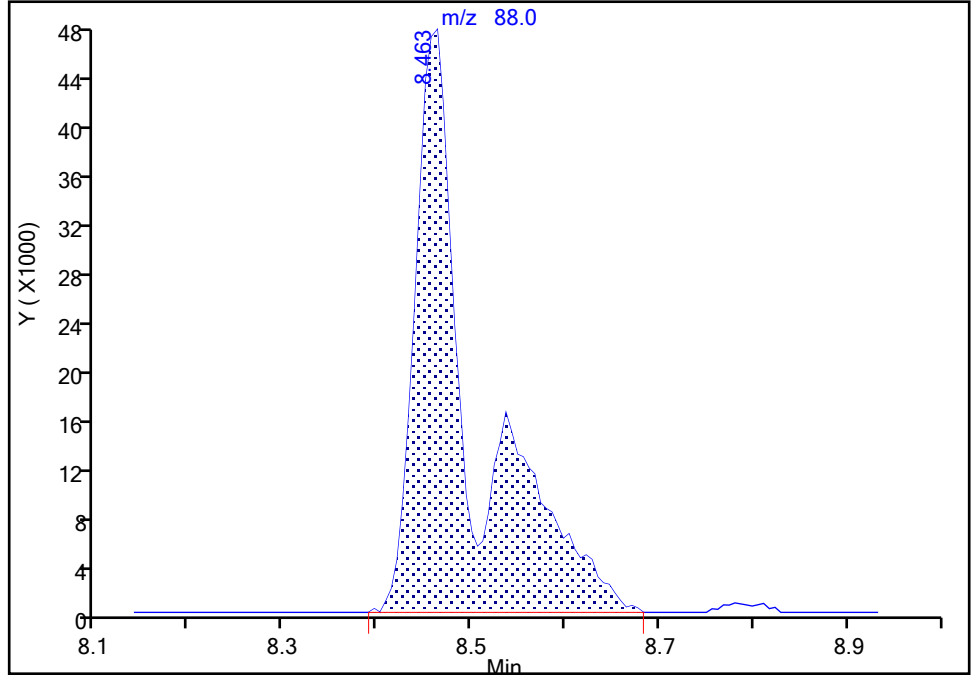
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X12.D
Injection Date: 11-Jul-2022 16:51:30 Instrument ID: 19094
Lims ID: IC std7 25
Client ID:
Operator ID: kas02648 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

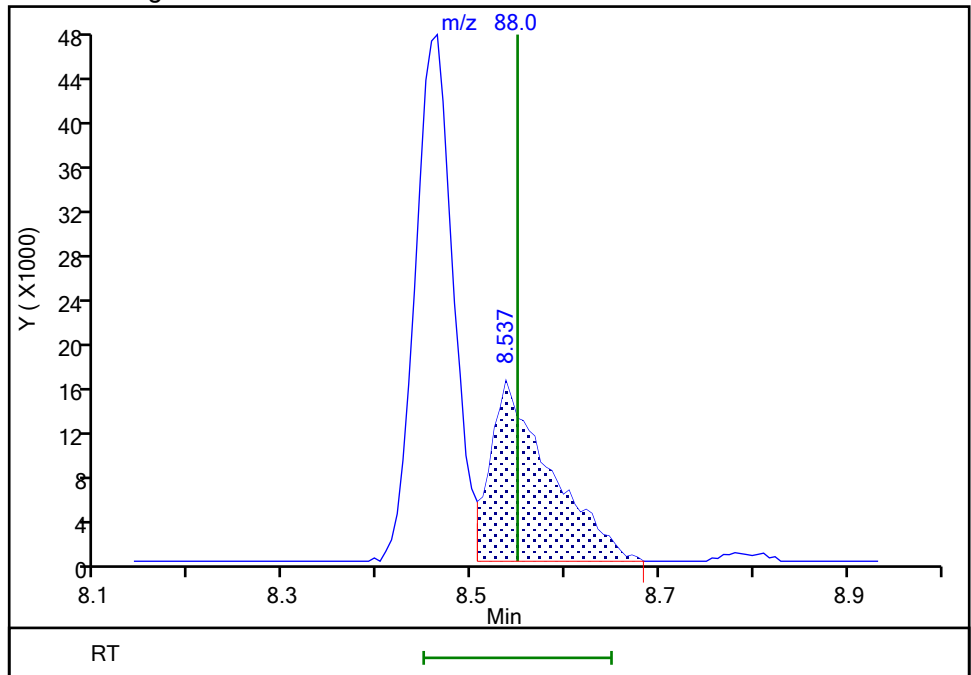
RT: 8.46
Area: 206080
Amount: 1481.3689
Amount Units: ug/l

Processing Integration Results



RT: 8.54
Area: 73635
Amount: 485.4549
Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 09:48:29
Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X13.D
 Lims ID: ICIS 10
 Client ID:
 Sample Type: ICIS Calib Level: 6
 Inject. Date: 11-Jul-2022 17:11:30 ALS Bottle#: 13 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0052505-013
 Operator ID: kas02648 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 12-Jul-2022 11:50:31 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1678

First Level Reviewer: UKAD

Date: 12-Jul-2022 09:47:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	1.934	1.934	0.000	99	675132	10.0	10.6	
6 Chloromethane	50	2.123	2.123	0.000	99	824161	10.0	10.3	
8 Butadiene	39	2.239	2.239	0.000	90	767941	10.0	10.2	
7 Vinyl chloride	62	2.245	2.245	0.000	97	834299	10.0	10.5	
9 Bromomethane	94	2.556	2.556	0.000	90	574869	10.0	10.3	
10 Chloroethane	64	2.641	2.641	0.000	100	495285	10.0	10.3	
11 Dichlorofluoromethane	67	2.867	2.867	0.000	97	1114554	10.0	10.5	
13 Trichlorofluoromethane	101	2.946	2.946	0.000	98	1030019	10.0	10.8	
15 Ethyl ether	59	3.172	3.172	0.000	93	426652	10.0	10.7	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.263	3.263	0.000	96	780220	10.0	10.5	
17 Acrolein	56	3.336	3.336	0.000	99	2963738	500.0	532.0	
18 1,1-Dichloroethene	96	3.483	3.483	0.000	98	570272	10.0	10.5	
19 Acetone	43	3.501	3.501	0.000	100	600215	100.0	92.6	
20 1,1,2-Trichloro-1,2,2-trifluoroethane	101	3.525	3.525	0.000	92	563286	10.0	10.7	
21 Isopropyl alcohol	45	3.641	3.641	0.000	100	238428	200.0	192.7	
22 Iodomethane	142	3.672	3.672	0.000	98	972304	10.0	10.3	
23 Ethyl bromide	108	3.696	3.696	0.000	98	514602	10.0	10.8	
24 Carbon disulfide	76	3.775	3.775	0.000	98	1515951	10.0	10.5	
26 Methyl acetate	43	3.879	3.879	0.000	96	185370	10.0	10.8	M
27 3-Chloro-1-propene	41	3.940	3.940	0.000	95	954854	10.0	10.2	
29 Methylene Chloride	84	4.123	4.123	0.000	92	581663	10.0	10.4	
* 28 t-Butyl alcohol-d10 (IS)	65	4.123	4.123	0.000	0	101370	50.0	50.0	
30 2-Methyl-2-propanol	59	4.245	4.245	0.000	99	433119	200.0	197.5	
31 Acrylonitrile	53	4.434	4.434	0.000	99	246376	25.0	28.1	
32 Methyl tert-butyl ether	73	4.519	4.519	0.000	95	1269252	10.0	10.5	
33 trans-1,2-Dichloroethene	96	4.543	4.543	0.000	100	625545	10.0	10.4	
34 Hexane	57	4.958	4.958	0.000	92	879832	10.0	10.5	
35 1,1-Dichloroethane	63	5.196	5.196	0.000	95	1172891	10.0	10.4	
37 Isopropyl ether	45	5.257	5.257	0.000	96	1989982	10.0	10.4	
38 2-Chloro-1,3-butadiene	53	5.299	5.299	0.000	89	965073	10.0	10.5	
39 Tert-butyl ethyl ether	59	5.787	5.787	0.000	98	1753246	10.0	10.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	5.982	5.982	0.000	100	1223902	100.0	108.5	
42 cis-1,2-Dichloroethene	96	6.025	6.025	0.000	82	685145	10.0	10.4	
43 2,2-Dichloropropane	77	6.049	6.049	0.000	87	975977	10.0	10.4	
45 Propionitrile	54	6.061	6.061	0.000	99	662067	200.0	228.9	
47 Methacrylonitrile	67	6.287	6.287	0.000	91	1327716	100.0	106.3	
48 Chlorobromomethane	128	6.360	6.360	0.000	94	272299	10.0	10.3	
49 Tetrahydrofuran	71	6.366	6.366	0.000	77	170150	50.0	52.8	
50 Chloroform	83	6.513	6.513	0.000	92	1101450	10.0	10.4	
\$ 51 Dibromofluoromethane (Surr)	113	6.726	6.726	0.000	94	527861	10.0	10.0	
52 1,1,1-Trichloroethane	97	6.750	6.750	0.000	98	1032101	10.0	10.5	
53 Cyclohexane	56	6.854	6.854	0.000	90	1167343	10.0	10.4	
55 1,1-Dichloropropene	75	6.958	6.958	0.000	98	922066	10.0	10.3	
56 Carbon tetrachloride	117	6.964	6.964	0.000	96	901500	10.0	10.6	
57 Isobutyl alcohol	41	7.086	7.086	0.000	95	391967	500.0	548.0	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.189	7.189	0.000	0	95893	10.0	9.97	
59 Benzene	78	7.220	7.220	0.000	96	2705977	10.0	10.4	
60 1,2-Dichloroethane	62	7.287	7.287	0.000	96	577317	10.0	10.2	
62 Tert-amyl methyl ether	73	7.415	7.415	0.000	99	1514685	10.0	10.5	
* 65 Fluorobenzene (IS)	96	7.628	7.628	0.000	99	2081655	10.0	10.0	
64 n-Heptane	43	7.647	7.647	0.000	90	941472	10.0	10.2	
66 n-Butanol	56	7.982	7.982	0.000	87	583025	875.0	953.2	
67 Trichloroethene	95	8.110	8.110	0.000	98	712234	10.0	10.4	
68 Methylcyclohexane	83	8.433	8.433	0.000	94	1208386	10.0	10.5	
70 1,2-Dichloropropane	63	8.445	8.445	0.000	97	680594	10.0	10.4	
69 2-ethoxy-2-methyl butane	87	8.457	8.457	0.000	93	967634	10.0	10.6	
71 Methyl methacrylate	69	8.530	8.530	0.000	93	278786	10.0	11.2	
72 1,4-Dioxane	88	8.537	8.537	0.000	35	59377	500.0	373.7	
73 Dibromomethane	93	8.555	8.555	0.000	97	279827	10.0	10.3	
75 Dichlorobromomethane	83	8.793	8.793	0.000	100	772695	10.0	10.5	
76 2-Nitropropane	41	9.061	9.061	0.000	98	335366	50.0	54.4	
79 1-Bromo-2-chloroethane	63	9.189	9.189	0.000	98	645473	10.0	10.8	
80 cis-1,3-Dichloropropene	75	9.347	9.347	0.000	97	987001	10.0	10.7	
81 4-Methyl-2-pentanone (MIBK)	43	9.518	9.518	0.000	96	3227118	100.0	105.5	
\$ 82 Toluene-d8 (Surr)	98	9.664	9.664	0.000	93	2285826	10.0	10.0	
83 Toluene	92	9.744	9.744	0.000	98	1751935	10.0	10.3	
85 trans-1,3-Dichloropropene	75	10.000	10.000	0.000	92	765868	10.0	10.6	
86 Ethyl methacrylate	69	10.061	10.061	0.000	90	593374	10.0	10.7	
87 1,1,2-Trichloroethane	97	10.207	10.207	0.000	89	404842	10.0	10.1	
88 Tetrachloroethene	166	10.298	10.298	0.000	97	808937	10.0	10.3	
89 1,3-Dichloropropane	76	10.372	10.372	0.000	89	719249	10.0	10.4	
91 2-Hexanone	43	10.420	10.420	0.000	97	2205566	100.0	108.7	
93 Chlorodibromomethane	129	10.591	10.591	0.000	90	526982	10.0	10.6	
94 Ethylene Dibromide	107	10.701	10.701	0.000	99	395194	10.0	10.7	
* 97 Chlorobenzene-d5 (IS)	117	11.134	11.134	0.000	87	1866823	10.0	10.0	
96 1-Chlorohexane	91	11.146	11.146	0.000	97	1052702	10.0	10.0	
98 Chlorobenzene	112	11.164	11.164	0.000	95	1861729	10.0	10.3	
99 1,1,1,2-Tetrachloroethane	131	11.243	11.243	0.000	95	648069	10.0	10.5	
100 Ethylbenzene	91	11.249	11.249	0.000	98	3432722	10.0	10.4	
101 m-Xylene & p-Xylene	106	11.365	11.365	0.000	0	2625259	20.0	20.8	
102 o-Xylene	106	11.695	11.695	0.000	96	1264897	10.0	10.4	
103 Styrene	104	11.713	11.713	0.000	95	2109282	10.0	10.6	
104 Bromoform	173	11.871	11.871	0.000	98	313065	10.0	10.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 Isopropylbenzene	105	11.999	11.999	0.000	96	3446508	10.0	10.4	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	92	936498	10.0	10.1	
109 1,1,2,2-Tetrachloroethane	83	12.243	12.243	0.000	92	493678	10.0	10.3	
111 Bromobenzene	156	12.255	12.255	0.000	96	743305	10.0	10.3	
110 trans-1,4-Dichloro-2-butene	53	12.268	12.268	0.000	91	1170298	100.0	110.8	
112 1,2,3-Trichloropropane	110	12.286	12.286	0.000	80	122178	10.0	10.1	
113 N-Propylbenzene	91	12.329	12.329	0.000	99	4183114	10.0	10.4	
114 2-Chlorotoluene	126	12.402	12.402	0.000	97	799066	10.0	10.3	
115 1,3,5-Trimethylbenzene	105	12.463	12.463	0.000	94	2894539	10.0	10.3	
116 4-Chlorotoluene	126	12.493	12.493	0.000	97	805513	10.0	10.4	
118 tert-Butylbenzene	134	12.707	12.707	0.000	93	662962	10.0	10.7	
119 Pentachloroethane	167	12.737	12.737	0.000	89	469487	10.0	10.8	
120 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	2924954	10.0	10.3	
121 sec-Butylbenzene	105	12.871	12.871	0.000	94	3770835	10.0	10.3	
122 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	1530550	10.0	10.3	
123 4-Isopropyltoluene	119	12.975	12.975	0.000	97	3231751	10.0	10.3	
* 124 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	1051287	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.042	13.042	0.000	94	1519120	10.0	10.3	
126 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	1234652	10.0	10.2	
127 Benzyl chloride	126	13.115	13.115	0.000	98	212767	10.0	10.9	
129 p-Diethylbenzene	119	13.176	13.176	0.000	91	1885445	10.0	10.4	
130 n-Butylbenzene	92	13.267	13.267	0.000	97	1645635	10.0	10.4	
131 1,2-Dichlorobenzene	146	13.304	13.304	0.000	99	1365343	10.0	10.3	
134 1,2-Dibromo-3-Chloropropane	155	13.847	13.847	0.000	90	70677	10.0	11.1	
135 1,3,5-Trichlorobenzene	180	13.968	13.968	0.000	98	1188689	10.0	10.2	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	1008763	10.0	10.3	
137 Hexachlorobutadiene	225	14.474	14.474	0.000	95	441537	10.0	9.31	
138 Naphthalene	128	14.572	14.572	0.000	97	1639471	10.0	10.4	
139 1,2,3-Trichlorobenzene	180	14.718	14.718	0.000	96	849598	10.0	10.2	
140 2-Methylnaphthalene	142	15.334	15.334	0.000	92	1005842	10.0	10.6	
194 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00049	Amount Added: 10.00	Units: uL	
MSV_LL_GAS826_00101	Amount Added: 10.00	Units: uL	
MSV_LL_#2_826_00053	Amount Added: 10.00	Units: uL	
MSV_LLcentISS_00005	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X13.D

Injection Date: 11-Jul-2022 17:11:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: ICIS 10

Worklist Smp#: 13

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

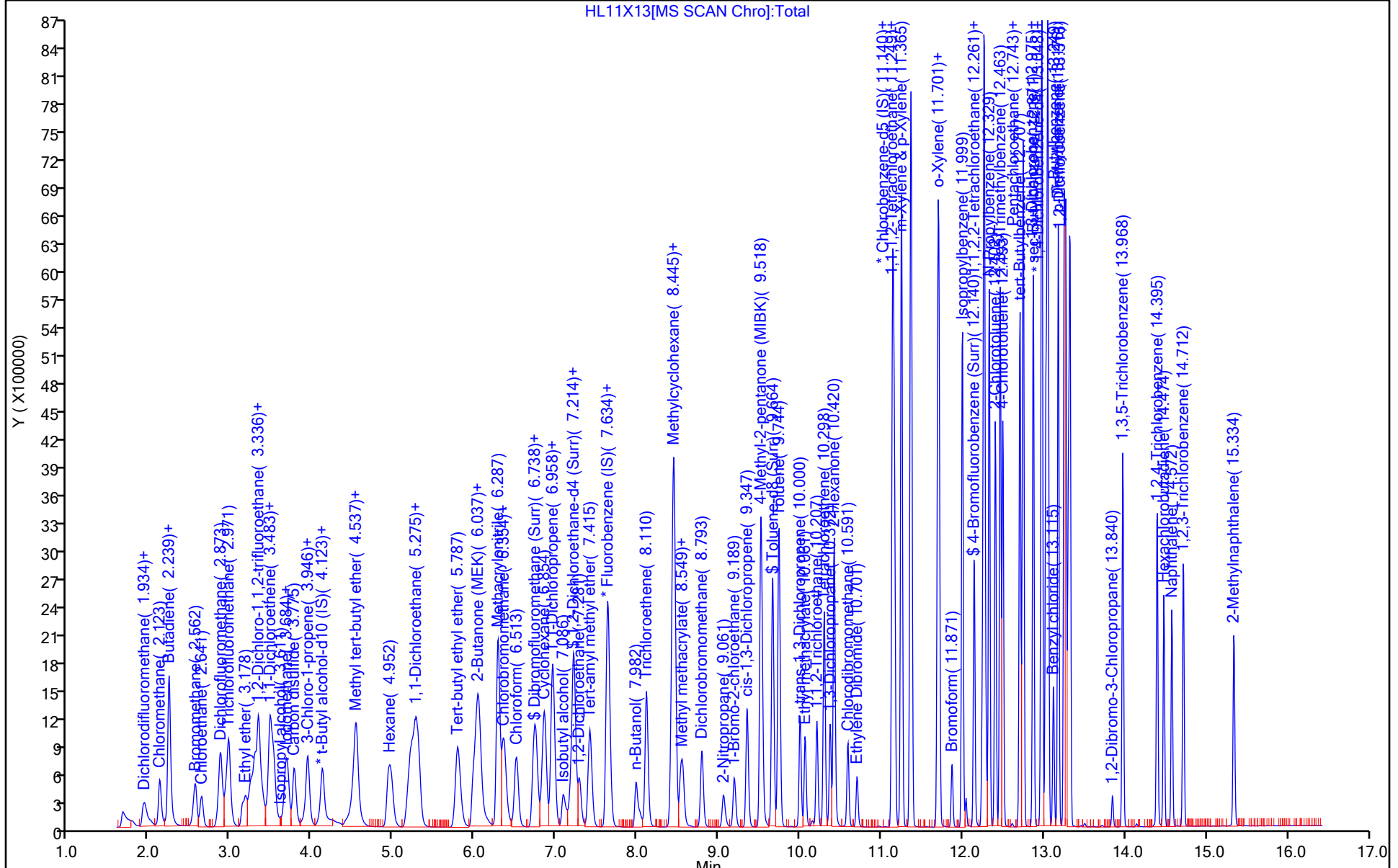
ALS Bottle#: 13

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

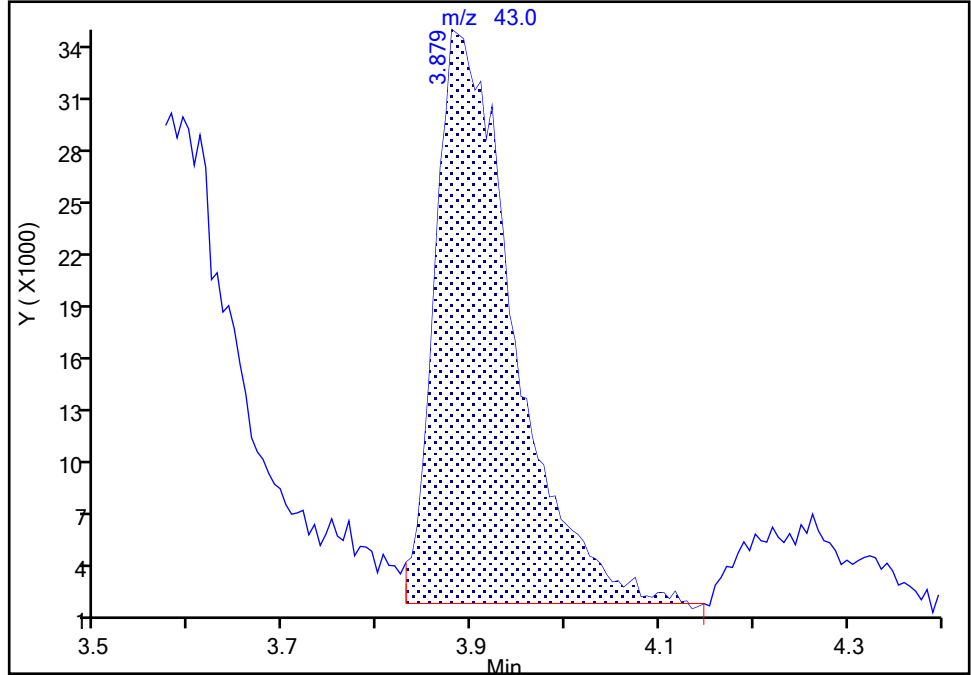
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X13.D
Injection Date: 11-Jul-2022 17:11:30 Instrument ID: 19094
Lims ID: ICIS 10
Client ID:
Operator ID: kas02648 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

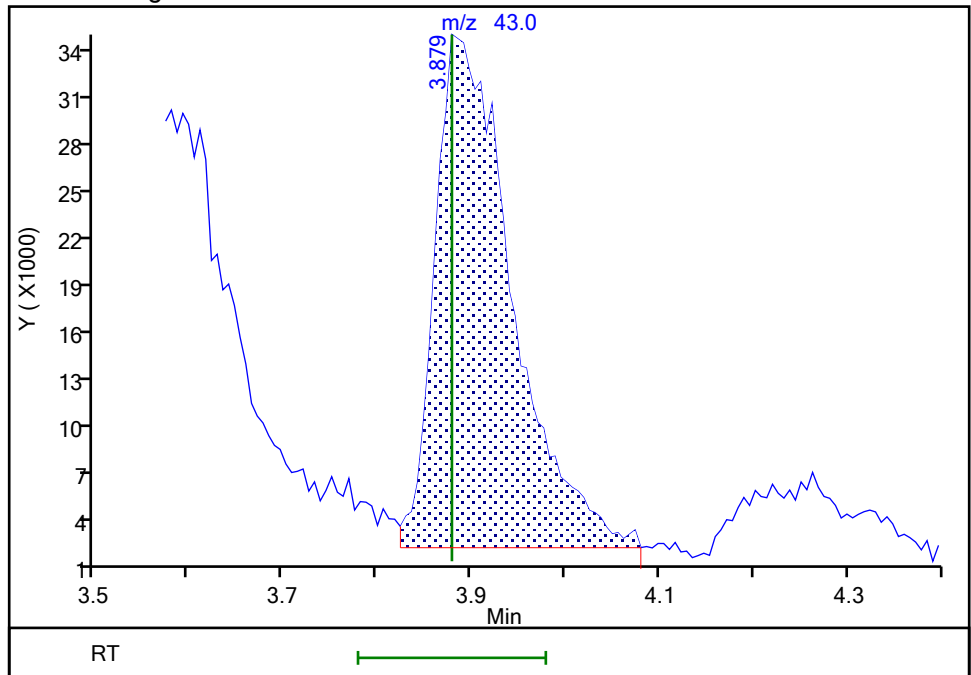
RT: 3.88
Area: 191239
Amount: 10.070600
Amount Units: ug/l

Processing Integration Results



RT: 3.88
Area: 185370
Amount: 10.801913
Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 09:49:27
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X14.D
 Lims ID: IC std5 5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 11-Jul-2022 17:31:30 ALS Bottle#: 14 Worklist Smp#: 14
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0052505-014
 Operator ID: kas02648 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 12-Jul-2022 11:50:46 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1678

First Level Reviewer: UKAD

Date: 12-Jul-2022 09:51:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	1.934	1.934	0.000	99	330210	5.00	5.12	
6 Chloromethane	50	2.129	2.123	0.006	99	421301	5.00	5.21	
8 Butadiene	39	2.239	2.239	0.000	92	372846	5.00	4.88	
7 Vinyl chloride	62	2.245	2.245	0.000	98	417386	5.00	5.21	
9 Bromomethane	94	2.568	2.556	0.012	91	287601	5.00	5.12	
10 Chloroethane	64	2.641	2.641	0.000	99	249635	5.00	5.14	
11 Dichlorofluoromethane	67	2.873	2.867	0.006	97	552979	5.00	5.14	
13 Trichlorofluoromethane	101	2.946	2.946	0.000	97	509232	5.00	5.25	
15 Ethyl ether	59	3.178	3.172	0.006	91	211984	5.00	5.23	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.269	3.263	0.006	93	390670	5.00	5.17	
17 Acrolein	56	3.343	3.336	0.007	99	1505959	250.0	226.5	
18 1,1-Dichloroethene	96	3.483	3.483	0.000	98	280143	5.00	5.11	
19 Acetone	43	3.507	3.501	0.006	98	339789	50.0	43.9	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.532	3.525	0.007	92	281165	5.00	5.26	
21 Isopropyl alcohol	45	3.660	3.641	0.019	96	148640	100.0	109.1	
22 Iodomethane	142	3.678	3.672	0.006	98	487298	5.00	5.12	
23 Ethyl bromide	108	3.702	3.696	0.006	98	254488	5.00	5.29	
24 Carbon disulfide	76	3.788	3.775	0.013	99	749209	5.00	5.11	
26 Methyl acetate	43	3.903	3.879	0.024	97	85854	5.00	4.19	
27 3-Chloro-1-propene	41	3.952	3.940	0.012	95	480474	5.00	5.05	
29 Methylene Chloride	84	4.129	4.123	0.006	93	292795	5.00	5.16	
* 28 t-Butyl alcohol-d10 (IS)	65	4.123	4.123	0.000	0	120975	50.0	50.0	
30 2-Methyl-2-propanol	59	4.257	4.245	0.012	99	270086	100.0	103.2	
31 Acrylonitrile	53	4.452	4.434	0.018	98	123022	12.5	11.8	
32 Methyl tert-butyl ether	73	4.519	4.519	0.000	94	636323	5.00	5.20	
33 trans-1,2-Dichloroethene	96	4.544	4.543	0.001	99	310962	5.00	5.11	
34 Hexane	57	4.958	4.958	0.000	92	438476	5.00	5.15	
35 1,1-Dichloroethane	63	5.196	5.196	0.000	95	585799	5.00	5.15	
37 Isopropyl ether	45	5.257	5.257	0.000	96	1006753	5.00	5.20	
38 2-Chloro-1,3-butadiene	53	5.312	5.299	0.013	91	482679	5.00	5.20	
39 Tert-butyl ethyl ether	59	5.787	5.787	0.000	98	874477	5.00	5.11	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	5.982	5.982	0.000	100	631533	50.0	46.9	
42 cis-1,2-Dichloroethene	96	6.025	6.025	0.000	82	343086	5.00	5.13	
43 2,2-Dichloropropane	77	6.049	6.049	0.000	87	491314	5.00	5.16	
45 Propionitrile	54	6.068	6.061	0.007	99	356903	100.0	103.4	
S 40 1,2-Dichloroethene, Total	100				0			10.2	
47 Methacrylonitrile	67	6.293	6.287	0.006	91	670885	50.0	45.0	
48 Chlorobromomethane	128	6.360	6.360	0.000	93	137430	5.00	5.15	
49 Tetrahydrofuran	71	6.366	6.366	0.000	80	89030	25.0	23.1	
50 Chloroform	83	6.513	6.513	0.000	93	555095	5.00	5.17	
\$ 51 Dibromofluoromethane (Surr)	113	6.726	6.726	0.000	94	534194	10.0	10.0	
52 1,1,1-Trichloroethane	97	6.750	6.750	0.000	98	511965	5.00	5.13	
53 Cyclohexane	56	6.854	6.854	0.000	90	571420	5.00	5.04	
55 1,1-Dichloropropene	75	6.958	6.958	0.000	98	459004	5.00	5.08	
56 Carbon tetrachloride	117	6.970	6.964	0.006	85	449741	5.00	5.21	
57 Isobutyl alcohol	41	7.092	7.086	0.006	95	215626	250.0	252.6	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.189	7.189	0.000	0	98328	10.0	10.1	
59 Benzene	78	7.220	7.220	0.000	97	1343156	5.00	5.10	
60 1,2-Dichloroethane	62	7.293	7.287	0.006	97	291944	5.00	5.12	
62 Tert-amyl methyl ether	73	7.415	7.415	0.000	99	758276	5.00	5.20	
* 65 Fluorobenzene (IS)	96	7.628	7.628	0.000	98	2106074	10.0	10.0	
64 n-Heptane	43	7.647	7.647	0.000	88	460581	5.00	4.94	
66 n-Butanol	56	7.988	7.982	0.006	87	366680	437.5	502.3	
67 Trichloroethene	95	8.116	8.110	0.006	98	353455	5.00	5.10	
68 Methylcyclohexane	83	8.433	8.433	0.000	93	604203	5.00	5.17	
70 1,2-Dichloropropane	63	8.451	8.445	0.006	85	340026	5.00	5.15	
69 2-ethoxy-2-methyl butane	87	8.457	8.457	0.000	90	477549	5.00	5.16	
71 Methyl methacrylate	69	8.531	8.530	0.001	90	135474	5.00	4.56	
72 1,4-Dioxane	88	8.543	8.537	0.006	33	47977	250.0	253.0	M
73 Dibromomethane	93	8.555	8.555	0.000	96	141139	5.00	5.13	
75 Dichlorobromomethane	83	8.793	8.793	0.000	100	382494	5.00	5.14	
76 2-Nitropropane	41	9.061	9.061	0.000	98	164896	25.0	22.4	
79 1-Bromo-2-chloroethane	63	9.195	9.189	0.006	98	314354	5.00	5.18	
80 cis-1,3-Dichloropropene	75	9.348	9.347	0.001	97	496791	5.00	5.33	
81 4-Methyl-2-pentanone (MIBK)	43	9.518	9.518	0.000	96	1650404	50.0	45.2	
\$ 82 Toluene-d8 (Surr)	98	9.665	9.664	0.000	93	2278814	10.0	9.91	
83 Toluene	92	9.744	9.744	0.000	98	872692	5.00	5.11	
85 trans-1,3-Dichloropropene	75	10.000	10.000	0.000	92	379506	5.00	5.21	
S 84 1,3-Dichloropropene, Total	100				0			10.5	
86 Ethyl methacrylate	69	10.061	10.061	0.000	88	298452	5.00	5.35	
87 1,1,2-Trichloroethane	97	10.207	10.207	0.000	89	207686	5.00	5.13	
88 Tetrachloroethene	166	10.299	10.298	0.001	97	400926	5.00	5.08	
89 1,3-Dichloropropane	76	10.372	10.372	0.000	88	361499	5.00	5.18	
91 2-Hexanone	43	10.420	10.420	0.000	97	1117872	50.0	46.2	
93 Chlorodibromomethane	129	10.591	10.591	0.000	90	261621	5.00	5.22	
94 Ethylene Dibromide	107	10.701	10.701	0.000	99	196751	5.00	5.31	
* 97 Chlorobenzene-d5 (IS)	117	11.134	11.134	0.000	88	1880356	10.0	10.0	
96 1-Chlorohexane	91	11.146	11.146	0.000	98	522985	5.00	4.95	
98 Chlorobenzene	112	11.164	11.164	0.000	95	935813	5.00	5.14	
99 1,1,1,2-Tetrachloroethane	131	11.243	11.243	0.000	97	327478	5.00	5.24	
S 95 Xylenes, Total	106				0			15.4	
100 Ethylbenzene	91	11.250	11.249	0.001	98	1720096	5.00	5.15	
101 m-Xylene & p-Xylene	106	11.365	11.365	0.000	0	1313262	10.0	10.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 o-Xylene	106	11.695	11.695	0.001	97	628447	5.00	5.11	
103 Styrene	104	11.713	11.713	0.000	95	1048801	5.00	5.26	
104 Bromoform	173	11.871	11.871	0.000	98	153558	5.00	5.32	
105 Isopropylbenzene	105	11.999	11.999	0.000	96	1724175	5.00	5.18	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	92	941117	10.0	10.1	
109 1,1,2,2-Tetrachloroethane	83	12.243	12.243	0.000	92	250852	5.00	5.23	
111 Bromobenzene	156	12.262	12.255	0.007	96	370570	5.00	5.17	
110 trans-1,4-Dichloro-2-butene	53	12.268	12.268	0.000	91	588527	50.0	46.7	
112 1,2,3-Trichloropropane	110	12.286	12.286	0.000	80	62318	5.00	5.18	
113 N-Propylbenzene	91	12.329	12.329	0.000	99	2080340	5.00	5.20	
114 2-Chlorotoluene	126	12.402	12.402	0.000	97	400793	5.00	5.21	
115 1,3,5-Trimethylbenzene	105	12.463	12.463	0.000	94	1444446	5.00	5.18	
116 4-Chlorotoluene	126	12.493	12.493	0.000	97	404813	5.00	5.24	
118 tert-Butylbenzene	134	12.707	12.707	0.001	93	312596	5.00	5.07	
119 Pentachloroethane	167	12.737	12.737	0.000	92	230027	5.00	5.31	
120 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	1458270	5.00	5.18	
121 sec-Butylbenzene	105	12.871	12.871	0.000	94	1875046	5.00	5.13	
122 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	764311	5.00	5.14	
123 4-Isopropyltoluene	119	12.975	12.975	0.000	97	1614275	5.00	5.15	
* 124 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	1047322	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.042	13.042	0.000	95	752898	5.00	5.11	
126 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	612197	5.00	5.10	
127 Benzyl chloride	126	13.121	13.115	0.006	98	102930	5.00	5.28	
129 p-Diethylbenzene	119	13.176	13.176	0.000	91	933626	5.00	5.16	
130 n-Butylbenzene	92	13.267	13.267	0.000	98	812754	5.00	5.14	
131 1,2-Dichlorobenzene	146	13.304	13.304	0.000	99	680916	5.00	5.17	
134 1,2-Dibromo-3-Chloropropane	155	13.847	13.847	0.000	89	36445	5.00	5.76	
135 1,3,5-Trichlorobenzene	180	13.969	13.968	0.001	98	589869	5.00	5.10	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	505612	5.00	5.20	
137 Hexachlorobutadiene	225	14.475	14.474	0.001	95	220140	5.00	4.66	
138 Naphthalene	128	14.572	14.572	0.000	97	824852	5.00	5.25	
139 1,2,3-Trichlorobenzene	180	14.712	14.718	-0.006	96	428129	5.00	5.18	
140 2-Methylnaphthalene	142	15.340	15.334	0.006	92	500575	5.00	5.29	
194 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00049	Amount Added: 5.00	Units: uL	
MSV_LL_GAS826_00101	Amount Added: 5.00	Units: uL	
MSV_LL_#2_826_00053	Amount Added: 5.00	Units: uL	
MSV_LLcentISS_00005	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X14.D

Injection Date: 11-Jul-2022 17:31:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std5 5

Worklist Smp#: 14

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

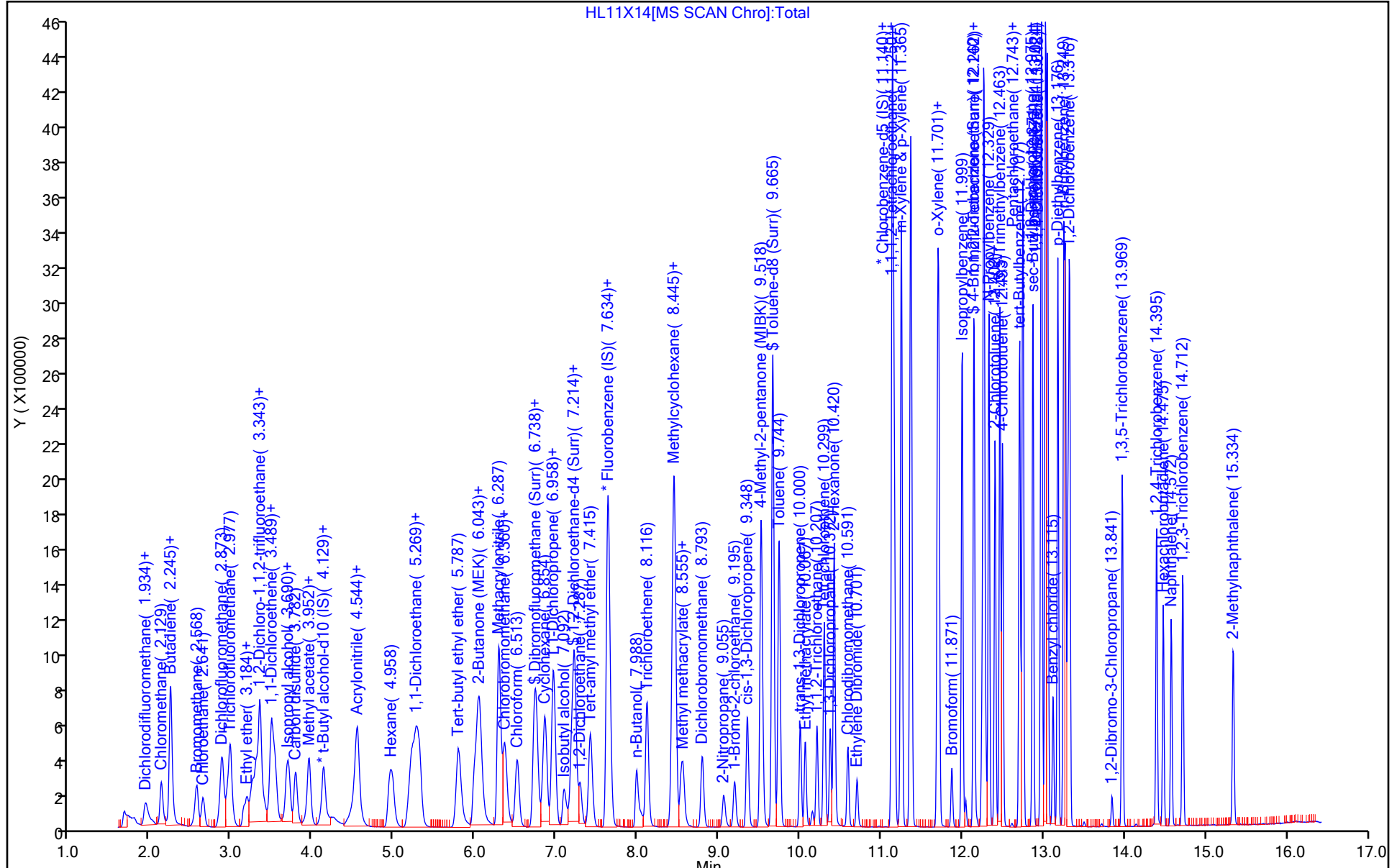
ALS Bottle#: 14

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

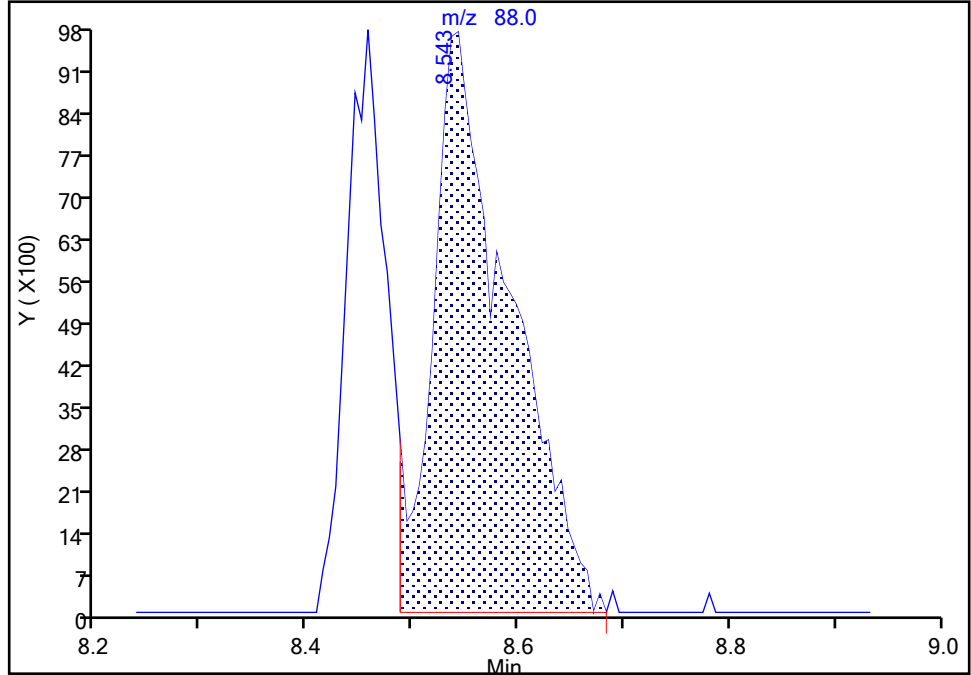
Data File:	\\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X14.D		
Injection Date:	11-Jul-2022 17:31:30	Instrument ID:	19094
Lims ID:	IC std5 5		
Client ID:			
Operator ID:	kas02648	ALS Bottle#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	14

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

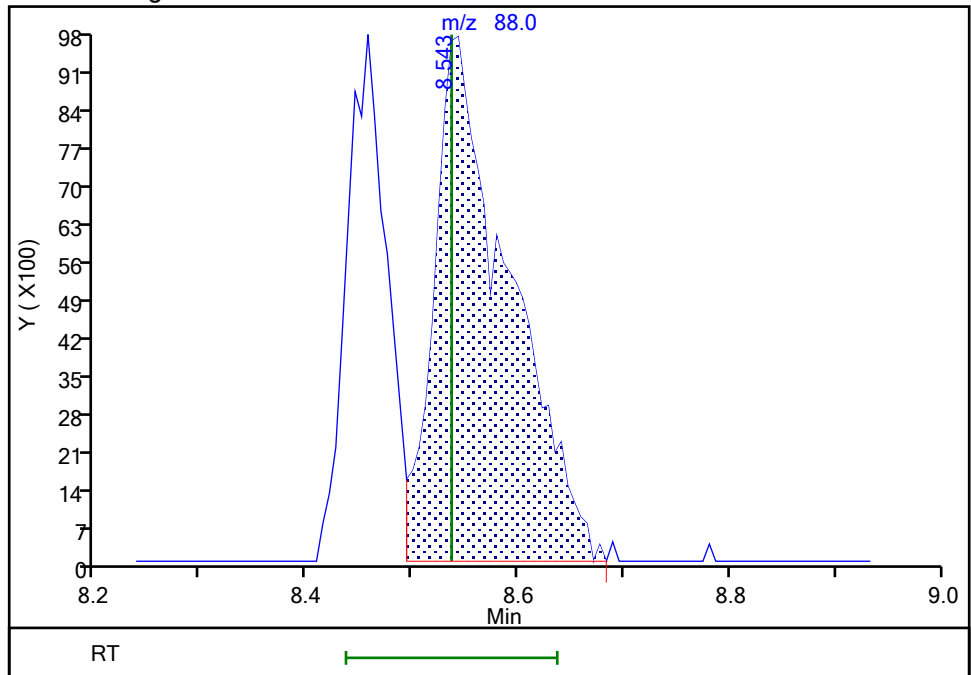
RT: 8.54
 Area: 49030
 Amount: 357.4625
 Amount Units: ug/l

Processing Integration Results



RT: 8.54
 Area: 47977
 Amount: 253.0130
 Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 09:51:05
 Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X15.D
 Lims ID: IC std4 2
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 11-Jul-2022 17:51:30 ALS Bottle#: 15 Worklist Smp#: 15
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0052505-015
 Operator ID: kas02648 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 12-Jul-2022 11:50:56 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1678

First Level Reviewer: UKAD

Date: 12-Jul-2022 09:26:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	1.940	1.940	0.000	99	133086	2.00	2.14	
6 Chloromethane	50	2.129	2.129	0.000	99	171365	2.00	2.20	
8 Butadiene	39	2.245	2.245	0.000	91	157585	2.00	2.14	
7 Vinyl chloride	62	2.251	2.251	0.000	85	171314	2.00	2.22	
9 Bromomethane	94	2.562	2.562	0.000	90	115842	2.00	2.14	
10 Chloroethane	64	2.648	2.648	0.000	100	101707	2.00	2.17	
11 Dichlorofluoromethane	67	2.873	2.873	0.000	97	226294	2.00	2.18	
13 Trichlorofluoromethane	101	2.952	2.952	0.000	96	204745	2.00	2.19	
15 Ethyl ether	59	3.154	3.154	0.000	92	86711	2.00	2.22	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.257	3.257	0.000	95	158543	2.00	2.18	
17 Acrolein	56	3.349	3.349	0.000	100	590053	100.0	99.7	
18 1,1-Dichloroethene	96	3.489	3.489	0.000	98	111716	2.00	2.11	
19 Acetone	43	3.507	3.507	0.000	63	123401	20.0	17.9	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.519	3.519	0.000	91	106489	2.00	2.07	
21 Isopropyl alcohol	45	3.660	3.660	0.000	95	56636	40.0	41.8	
22 Iodomethane	142	3.672	3.672	0.000	99	190590	2.00	2.07	
23 Ethyl bromide	108	3.708	3.708	0.000	98	101436	2.00	2.19	
24 Carbon disulfide	76	3.788	3.788	0.000	99	296255	2.00	2.09	
26 Methyl acetate	43	3.910	3.910	0.000	20	35316	2.00	1.94	M
27 3-Chloro-1-propene	41	3.952	3.952	0.000	94	188981	2.00	2.06	
29 Methylene Chloride	84	4.129	4.129	0.000	92	113641	2.00	2.08	
* 28 t-Butyl alcohol-d10 (IS)	65	4.123	4.123	0.000	0	107663	50.0	50.0	
30 2-Methyl-2-propanol	59	4.275	4.275	0.000	98	99901	40.0	42.9	
31 Acrylonitrile	53	4.464	4.464	0.000	96	49301	5.00	5.30	
32 Methyl tert-butyl ether	73	4.519	4.519	0.000	94	246579	2.00	2.09	
33 trans-1,2-Dichloroethene	96	4.544	4.544	0.000	99	123103	2.00	2.10	
34 Hexane	57	4.970	4.970	0.000	93	169913	2.00	2.07	
35 1,1-Dichloroethane	63	5.202	5.202	0.000	95	225005	2.00	2.05	
37 Isopropyl ether	45	5.263	5.263	0.000	96	385192	2.00	2.06	
38 2-Chloro-1,3-butadiene	53	5.306	5.306	0.000	89	186653	2.00	2.08	
39 Tert-butyl ethyl ether	59	5.793	5.793	0.000	99	343121	2.00	2.08	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	5.988	5.988	0.000	100	236486	20.0	19.7	
42 cis-1,2-Dichloroethene	96	6.031	6.031	0.000	82	132683	2.00	2.06	
43 2,2-Dichloropropane	77	6.055	6.055	0.000	85	191971	2.00	2.09	
45 Propionitrile	54	6.074	6.074	0.000	99	129739	40.0	42.2	
S 40 1,2-Dichloroethene, Total	100				0			4.16	
47 Methacrylonitrile	67	6.293	6.293	0.000	91	259901	20.0	19.6	
48 Chlorobromomethane	128	6.360	6.360	0.000	96	52761	2.00	2.05	
49 Tetrahydrofuran	71	6.372	6.372	0.000	79	34053	10.0	9.94	
50 Chloroform	83	6.513	6.513	0.000	93	213834	2.00	2.07	
\$ 51 Dibromofluoromethane (Surr)	113	6.726	6.726	0.000	94	520651	10.0	10.1	
52 1,1,1-Trichloroethane	97	6.757	6.757	0.000	98	197900	2.00	2.05	
53 Cyclohexane	56	6.860	6.860	0.000	90	226192	2.00	2.07	
55 1,1-Dichloropropene	75	6.958	6.958	0.000	98	178784	2.00	2.05	
56 Carbon tetrachloride	117	6.964	6.964	0.000	82	171753	2.00	2.06	
57 Isobutyl alcohol	41	7.098	7.098	0.000	96	79569	100.0	104.7	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.189	7.189	0.000	0	94159	10.0	10.0	
59 Benzene	78	7.220	7.220	0.000	97	519476	2.00	2.05	
60 1,2-Dichloroethane	62	7.293	7.293	0.000	96	112224	2.00	2.04	
62 Tert-amyl methyl ether	73	7.415	7.415	0.000	98	287948	2.00	2.05	
* 65 Fluorobenzene (IS)	96	7.628	7.628	0.000	98	2031307	10.0	10.0	
64 n-Heptane	43	7.653	7.653	0.000	93	175823	2.00	1.96	
66 n-Butanol	56	7.988	7.988	0.000	86	133360	175.0	205.3	
67 Trichloroethene	95	8.116	8.116	0.000	98	135366	2.00	2.02	
68 Methylcyclohexane	83	8.433	8.433	0.000	93	231199	2.00	2.05	
70 1,2-Dichloropropane	63	8.451	8.451	0.000	85	131100	2.00	2.06	
69 2-ethoxy-2-methyl butane	87	8.451	8.451	0.000	90	182421	2.00	2.04	
71 Methyl methacrylate	69	8.537	8.537	0.000	89	51766	2.00	1.96	
72 1,4-Dioxane	88	8.549	8.549	0.000	37	18622	100.0	110.3	
73 Dibromomethane	93	8.555	8.555	0.000	94	52719	2.00	1.99	
75 Dichlorobromomethane	83	8.799	8.799	0.000	100	146679	2.00	2.05	
76 2-Nitropropane	41	9.067	9.067	0.000	99	63753	10.0	9.73	
79 1-Bromo-2-chloroethane	63	9.195	9.195	0.000	98	128748	2.00	2.20	
80 cis-1,3-Dichloropropene	75	9.354	9.354	0.000	97	187149	2.00	2.08	
81 4-Methyl-2-pentanone (MIBK)	43	9.518	9.518	0.000	96	621615	20.0	19.1	
\$ 82 Toluene-d8 (Surr)	98	9.665	9.665	0.000	93	2219533	10.0	10.0	
83 Toluene	92	9.744	9.744	0.000	99	336595	2.00	2.04	
85 trans-1,3-Dichloropropene	75	10.000	10.000	0.000	92	143896	2.00	2.05	
S 84 1,3-Dichloropropene, Total	100				0			4.13	
86 Ethyl methacrylate	69	10.067	10.067	0.000	88	110202	2.00	2.05	
87 1,1,2-Trichloroethane	97	10.207	10.207	0.000	89	77953	2.00	2.00	
88 Tetrachloroethene	166	10.299	10.299	0.000	97	155095	2.00	2.04	
89 1,3-Dichloropropane	76	10.372	10.372	0.000	90	135730	2.00	2.02	
91 2-Hexanone	43	10.420	10.420	0.000	97	420963	20.0	19.5	
93 Chlorodibromomethane	129	10.591	10.591	0.000	90	97440	2.00	2.02	
94 Ethylene Dibromide	107	10.701	10.701	0.000	99	75141	2.00	2.10	
* 97 Chlorobenzene-d5 (IS)	117	11.134	11.134	0.000	85	1814146	10.0	10.0	
96 1-Chlorohexane	91	11.146	11.146	0.000	96	206815	2.00	2.03	
98 Chlorobenzene	112	11.164	11.164	0.000	96	358343	2.00	2.04	
99 1,1,1,2-Tetrachloroethane	131	11.243	11.243	0.000	97	121792	2.00	2.02	
S 95 Xylenes, Total	106				0			6.15	
100 Ethylbenzene	91	11.250	11.250	0.000	98	663103	2.00	2.06	
101 m-Xylene & p-Xylene	106	11.365	11.365	0.000	0	501557	4.00	4.09	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 o-Xylene	106	11.695	11.695	0.000	97	245217	2.00	2.07	
103 Styrene	104	11.713	11.713	0.000	95	398001	2.00	2.07	
104 Bromoform	173	11.871	11.871	0.000	98	57271	2.00	2.06	
105 Isopropylbenzene	105	11.999	11.999	0.000	95	663631	2.00	2.07	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	91	896459	10.0	9.95	
109 1,1,2,2-Tetrachloroethane	83	12.243	12.243	0.000	92	96897	2.00	2.12	
111 Bromobenzene	156	12.262	12.262	0.000	97	139476	2.00	2.04	
110 trans-1,4-Dichloro-2-butene	53	12.268	12.268	0.000	91	215992	20.0	19.2	
112 1,2,3-Trichloropropane	110	12.292	12.292	0.000	81	24664	2.00	2.15	
113 N-Propylbenzene	91	12.329	12.329	0.000	99	796754	2.00	2.09	
114 2-Chlorotoluene	126	12.402	12.402	0.000	97	150036	2.00	2.05	
115 1,3,5-Trimethylbenzene	105	12.463	12.463	0.000	93	556367	2.00	2.09	
116 4-Chlorotoluene	126	12.493	12.493	0.000	97	151238	2.00	2.05	
118 tert-Butylbenzene	134	12.707	12.707	0.000	92	119759	2.00	2.04	
119 Pentachloroethane	167	12.737	12.737	0.000	93	89007	2.00	2.16	
120 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	552306	2.00	2.06	
121 sec-Butylbenzene	105	12.871	12.871	0.000	94	723734	2.00	2.08	
122 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	294576	2.00	2.08	
123 4-Isopropyltoluene	119	12.975	12.975	0.000	97	621334	2.00	2.08	
* 124 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	95	997250	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.042	13.042	0.000	96	289594	2.00	2.06	
126 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	233280	2.00	2.04	
127 Benzyl chloride	126	13.121	13.121	0.000	98	38227	2.00	2.06	
129 p-Diethylbenzene	119	13.176	13.176	0.000	91	357868	2.00	2.08	
130 n-Butylbenzene	92	13.267	13.267	0.000	97	313888	2.00	2.08	
131 1,2-Dichlorobenzene	146	13.304	13.304	0.000	99	256900	2.00	2.05	
134 1,2-Dibromo-3-Chloropropane	155	13.847	13.847	0.000	89	14346	2.00	2.38	
135 1,3,5-Trichlorobenzene	180	13.969	13.969	0.000	98	233002	2.00	2.12	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	93	199643	2.00	2.15	
137 Hexachlorobutadiene	225	14.475	14.475	0.000	95	88268	2.00	1.96	
138 Naphthalene	128	14.572	14.572	0.000	97	319229	2.00	2.13	
139 1,2,3-Trichlorobenzene	180	14.712	14.712	0.000	95	169189	2.00	2.15	
140 2-Methylnaphthalene	142	15.340	15.340	0.000	92	196259	2.00	2.18	
194 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00049	Amount Added: 2.00	Units: uL	
MSV_LL_GAS826_00101	Amount Added: 2.00	Units: uL	
MSV_LL_#2_826_00053	Amount Added: 2.00	Units: uL	
MSV_LLcentISS_00005	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X15.D

Injection Date: 11-Jul-2022 17:51:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std4 2

Worklist Smp#: 15

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

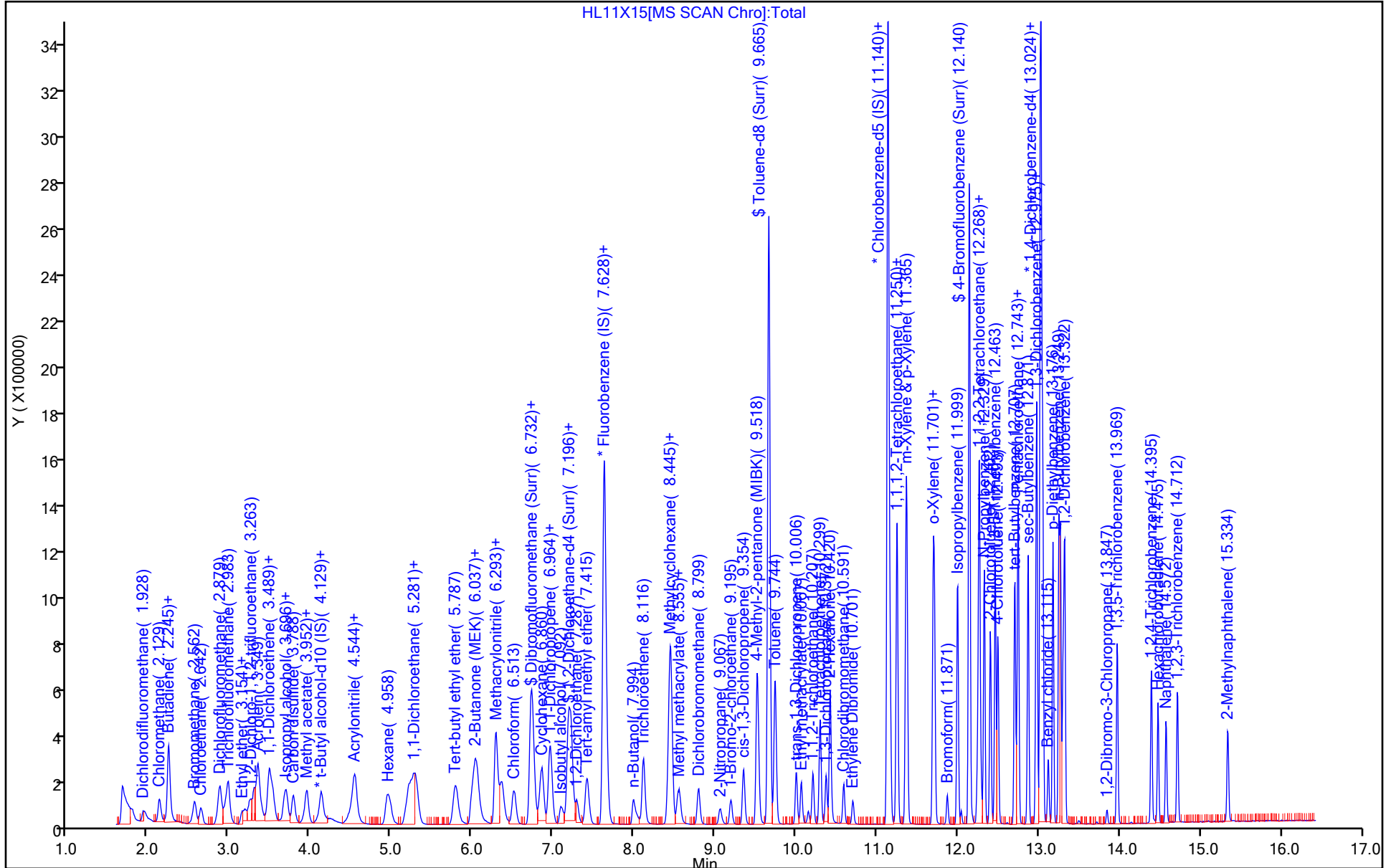
ALS Bottle#: 15

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

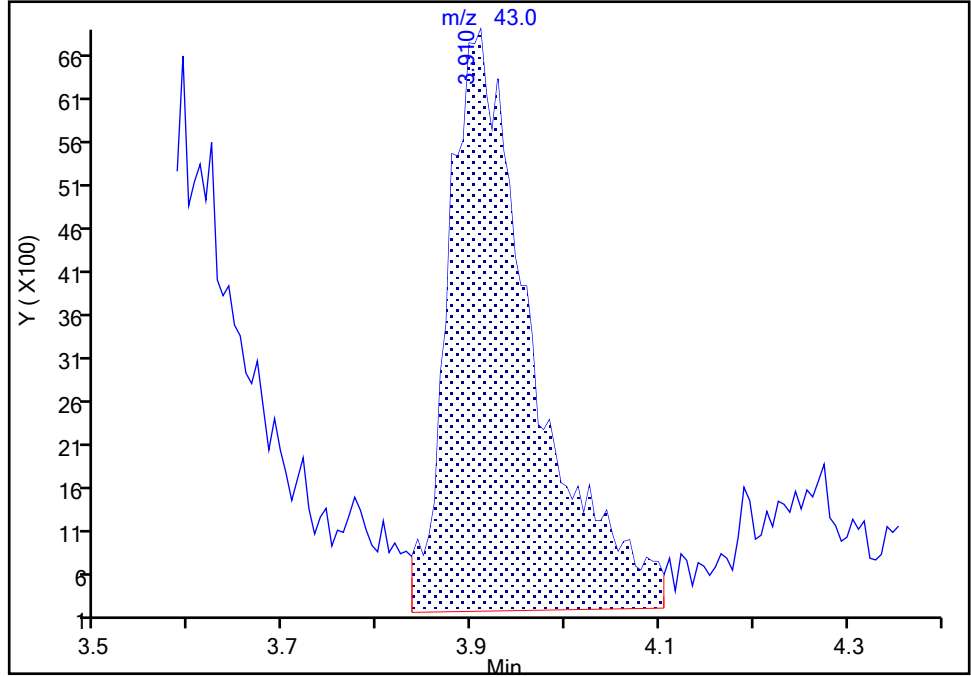
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X15.D
 Injection Date: 11-Jul-2022 17:51:30 Instrument ID: 19094
 Lims ID: IC std4 2
 Client ID:
 Operator ID: kas02648 ALS Bottle#: 15 Worklist Smp#: 15
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

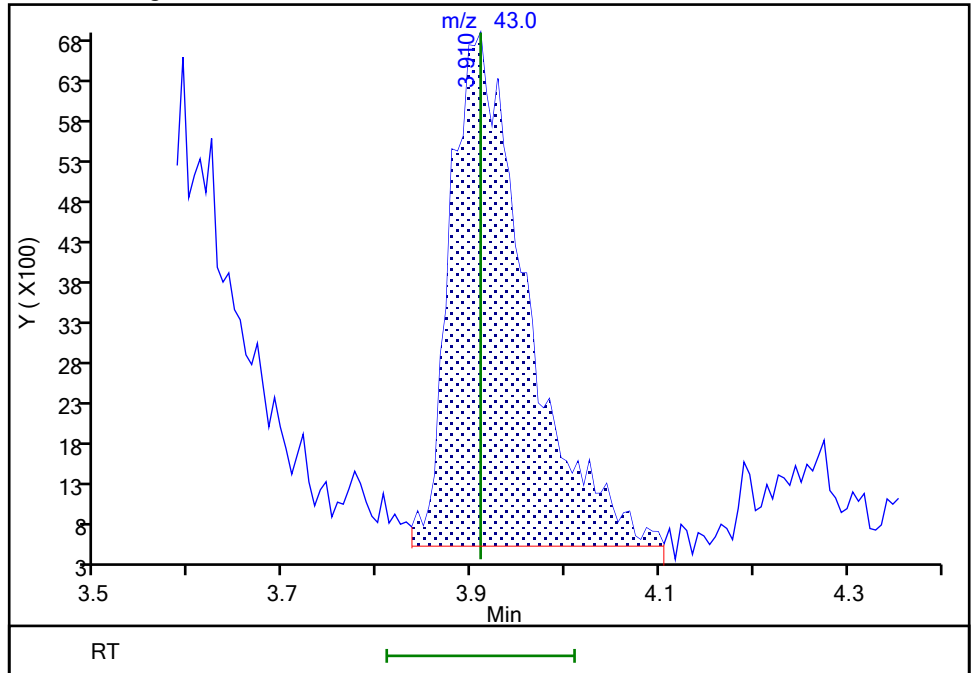
RT: 3.91
 Area: 41579
 Amount: 2.194579
 Amount Units: ug/l

Processing Integration Results



RT: 3.91
 Area: 35316
 Amount: 1.937652
 Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 09:51:53
 Audit Action: Assigned New Baseline

Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X16.D
 Lims ID: IC std3 1
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 11-Jul-2022 18:11:30 ALS Bottle#: 16 Worklist Smp#: 16
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0052505-016
 Operator ID: kas02648 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 12-Jul-2022 11:51:06 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1678

First Level Reviewer: UKAD

Date: 12-Jul-2022 09:54:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	1.934	1.940	-0.006	99	59403	1.00	0.9518	
6 Chloromethane	50	2.123	2.129	-0.006	99	71922	1.00	0.9198	
8 Butadiene	39	2.245	2.245	0.000	92	70198	1.00	0.9505	
7 Vinyl chloride	62	2.245	2.251	-0.006	87	73466	1.00	0.9483	
9 Bromomethane	94	2.562	2.562	0.000	88	49078	1.00	0.9024	
10 Chloroethane	64	2.641	2.648	-0.007	99	43768	1.00	0.9312	
11 Dichlorofluoromethane	67	2.873	2.873	0.000	97	94716	1.00	0.9091	
13 Trichlorofluoromethane	101	2.940	2.952	-0.012	96	87411	1.00	0.9321	
15 Ethyl ether	59	3.160	3.154	0.006	90	36780	1.00	0.9380	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.257	3.257	0.000	93	67338	1.00	0.9219	
17 Acrolein	56	3.349	3.349	0.000	99	251826	50.0	52.6	
18 1,1-Dichloroethene	96	3.483	3.489	-0.006	98	51047	1.00	0.9634	
19 Acetone	43	3.507	3.507	0.000	57	56977	10.0	10.2	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.525	3.519	0.006	91	51449	1.00	1.00	
21 Isopropyl alcohol	45	3.672	3.660	0.012	26	19191	20.0	15.4	
22 Iodomethane	142	3.678	3.672	0.006	97	89934	1.00	0.9760	
23 Ethyl bromide	108	3.702	3.708	-0.006	97	43476	1.00	0.9338	
24 Carbon disulfide	76	3.781	3.788	-0.007	98	135219	1.00	0.9533	
26 Methyl acetate	43	3.885	3.910	-0.025	20	15201	1.00	1.03	M
27 3-Chloro-1-propene	41	3.946	3.952	-0.006	94	86514	1.00	0.9408	
* 28 t-Butyl alcohol-d10 (IS)	65	4.147	4.123	0.024	0	87066	50.0	50.0	
29 Methylene Chloride	84	4.135	4.129	0.006	94	52410	1.00	0.9548	
30 2-Methyl-2-propanol	59	4.226	4.275	-0.049	77	40615	20.0	21.6	
31 Acrylonitrile	53	4.470	4.464	0.006	19	19244	2.50	2.56	M
32 Methyl tert-butyl ether	73	4.531	4.519	0.012	93	112695	1.00	0.9513	
33 trans-1,2-Dichloroethene	96	4.556	4.544	0.012	99	56807	1.00	0.9650	
34 Hexane	57	4.946	4.970	-0.024	93	77822	1.00	0.9449	
35 1,1-Dichloroethane	63	5.196	5.202	-0.006	95	104448	1.00	0.9492	
37 Isopropyl ether	45	5.257	5.263	-0.006	96	179260	1.00	0.9574	
38 2-Chloro-1,3-butadiene	53	5.306	5.306	0.000	91	83795	1.00	0.9325	
39 Tert-butyl ethyl ether	59	5.781	5.793	-0.012	99	158776	1.00	0.9585	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	5.988	5.988	0.000	100	102351	10.0	10.6	
42 cis-1,2-Dichloroethene	96	6.031	6.031	0.000	81	61506	1.00	0.9513	
43 2,2-Dichloropropane	77	6.049	6.055	-0.006	86	87898	1.00	0.9535	
45 Propionitrile	54	6.086	6.074	0.012	98	51370	20.0	20.7	
S 40 1,2-Dichloroethene, Total	100				0			1.92	
47 Methacrylonitrile	67	6.293	6.293	0.000	92	114169	10.0	10.6	
48 Chlorobromomethane	128	6.366	6.360	0.006	94	24178	1.00	0.9360	
49 Tetrahydrofuran	71	6.372	6.372	0.000	83	15578	5.00	5.62	
50 Chloroform	83	6.519	6.513	0.006	92	98008	1.00	0.9441	
\$ 51 Dibromofluoromethane (Surr)	113	6.726	6.726	0.000	94	511791	10.0	9.92	
52 1,1,1-Trichloroethane	97	6.756	6.757	-0.001	98	91770	1.00	0.9498	
53 Cyclohexane	56	6.860	6.860	0.000	91	104255	1.00	0.9512	
55 1,1-Dichloropropene	75	6.952	6.958	-0.006	97	82705	1.00	0.9469	
56 Carbon tetrachloride	117	6.964	6.964	0.000	78	79987	1.00	0.9573	
57 Isobutyl alcohol	41	7.098	7.098	0.000	95	30946	50.0	50.4	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.177	7.189	-0.012	0	91709	10.0	9.75	
59 Benzene	78	7.220	7.220	0.000	95	244107	1.00	0.9588	
60 1,2-Dichloroethane	62	7.299	7.293	0.006	97	51817	1.00	0.9393	
62 Tert-amyl methyl ether	73	7.409	7.415	-0.006	98	136162	1.00	0.9647	
* 65 Fluorobenzene (IS)	96	7.628	7.628	0.000	99	2037557	10.0	10.0	
64 n-Heptane	43	7.647	7.653	-0.007	92	86111	1.00	0.9553	
66 n-Butanol	56	7.994	7.988	0.006	88	47075	87.5	89.6	
67 Trichloroethene	95	8.110	8.116	-0.006	98	63655	1.00	0.9491	
68 Methylcyclohexane	83	8.433	8.433	0.000	93	109016	1.00	0.9635	
70 1,2-Dichloropropane	63	8.451	8.451	0.000	88	61027	1.00	0.9549	
69 2-ethoxy-2-methyl butane	87	8.457	8.451	0.006	91	86257	1.00	0.9633	
71 Methyl methacrylate	69	8.537	8.537	0.000	91	22726	1.00	1.06	
72 1,4-Dioxane	88	8.567	8.549	0.018	33	7312	50.0	53.6	
73 Dibromomethane	93	8.561	8.555	0.006	95	25263	1.00	0.9494	
75 Dichlorobromomethane	83	8.793	8.799	-0.006	99	66840	1.00	0.9293	
76 2-Nitropropane	41	9.061	9.067	-0.006	96	27305	5.00	5.15	
79 1-Bromo-2-chloroethane	63	9.195	9.195	0.000	98	54639	1.00	0.9300	
80 cis-1,3-Dichloropropene	75	9.347	9.354	-0.007	96	83305	1.00	0.9232	
81 4-Methyl-2-pentanone (MIBK)	43	9.518	9.518	0.000	96	288664	10.0	11.0	
\$ 82 Toluene-d8 (Surr)	98	9.664	9.665	-0.001	93	2188271	10.0	9.92	
83 Toluene	92	9.738	9.744	-0.006	98	154507	1.00	0.9430	
85 trans-1,3-Dichloropropene	75	10.006	10.000	0.006	91	65774	1.00	0.9426	
S 84 1,3-Dichloropropene, Total	100				0			1.87	
86 Ethyl methacrylate	69	10.067	10.067	0.000	88	51321	1.00	0.9596	
87 1,1,2-Trichloroethane	97	10.213	10.207	0.006	90	36462	1.00	0.9395	
88 Tetrachloroethene	166	10.298	10.299	-0.001	97	72632	1.00	0.9602	
89 1,3-Dichloropropane	76	10.372	10.372	0.000	88	64455	1.00	0.9635	
91 2-Hexanone	43	10.420	10.420	0.000	98	186685	10.0	10.7	
93 Chlorodibromomethane	129	10.591	10.591	0.000	89	44590	1.00	0.9283	
94 Ethylene Dibromide	107	10.701	10.701	0.000	97	33650	1.00	0.9465	
* 97 Chlorobenzene-d5 (IS)	117	11.134	11.134	0.000	85	1802515	10.0	10.0	
96 1-Chlorohexane	91	11.146	11.146	0.000	97	96628	1.00	0.9543	
98 Chlorobenzene	112	11.164	11.164	0.000	95	166598	1.00	0.9544	
99 1,1,1,2-Tetrachloroethane	131	11.243	11.243	0.000	95	55816	1.00	0.9321	
S 95 Xylenes, Total	106				0			2.83	
100 Ethylbenzene	91	11.249	11.250	-0.001	98	305034	1.00	0.9533	
101 m-Xylene & p-Xylene	106	11.365	11.365	0.000	0	228568	2.00	1.87	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 o-Xylene	106	11.695	11.695	-0.001	97	112434	1.00	0.9535	
103 Styrene	104	11.713	11.713	0.000	96	181168	1.00	0.9470	
104 Bromoform	173	11.871	11.871	0.000	97	25426	1.00	0.9186	
105 Isopropylbenzene	105	11.999	11.999	0.000	95	299877	1.00	0.9405	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	91	888594	10.0	9.93	
109 1,1,2,2-Tetrachloroethane	83	12.243	12.243	0.000	93	43665	1.00	0.9610	
111 Bromobenzene	156	12.261	12.262	-0.001	96	66242	1.00	0.9739	
110 trans-1,4-Dichloro-2-butene	53	12.268	12.268	0.000	91	94622	10.0	10.4	
112 1,2,3-Trichloropropane	110	12.286	12.292	-0.006	79	10598	1.00	0.9290	
113 N-Propylbenzene	91	12.329	12.329	0.000	99	361905	1.00	0.9542	
114 2-Chlorotoluene	126	12.402	12.402	0.000	97	70640	1.00	0.9678	
115 1,3,5-Trimethylbenzene	105	12.463	12.463	0.000	94	254672	1.00	0.9627	
116 4-Chlorotoluene	126	12.493	12.493	0.000	98	69914	1.00	0.9540	
118 tert-Butylbenzene	134	12.706	12.707	-0.001	93	58136	1.00	0.99	
119 Pentachloroethane	167	12.737	12.737	0.000	85	38784	1.00	0.9440	
120 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	253767	1.00	0.9507	
121 sec-Butylbenzene	105	12.871	12.871	0.000	94	331458	1.00	0.9568	
122 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	131401	1.00	0.9330	
123 4-Isopropyltoluene	119	12.975	12.975	0.000	97	283008	1.00	0.9530	
* 124 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	992900	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.042	13.042	0.000	96	131226	1.00	0.9388	
126 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	96	106449	1.00	0.9354	
127 Benzyl chloride	126	13.121	13.121	0.000	98	17500	1.00	0.9473	
129 p-Diethylbenzene	119	13.176	13.176	0.000	92	164633	1.00	0.9591	
130 n-Butylbenzene	92	13.267	13.267	0.000	96	142558	1.00	0.9511	
131 1,2-Dichlorobenzene	146	13.304	13.304	0.000	98	117234	1.00	0.9395	
134 1,2-Dibromo-3-Chloropropane	155	13.847	13.847	0.000	85	5499	1.00	0.9169	
135 1,3,5-Trichlorobenzene	180	13.968	13.969	-0.001	98	106250	1.00	0.9699	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	88686	1.00	0.9615	
137 Hexachlorobutadiene	225	14.474	14.475	-0.001	96	42671	1.00	0.9525	
138 Naphthalene	128	14.572	14.572	0.000	97	141968	1.00	0.9532	
139 1,2,3-Trichlorobenzene	180	14.718	14.712	0.006	96	76975	1.00	0.9830	
140 2-Methylnaphthalene	142	15.334	15.340	-0.006	91	88905	1.00	0.99	
194 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00049

Amount Added: 2.00

Units: uL

MSV_LL_GAS826_00101

Amount Added: 2.00

Units: uL

MSV_LL_#2_826_00053

Amount Added: 2.00

Units: uL

MSV_LLcentISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X16.D

Injection Date: 11-Jul-2022 18:11:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std3 1

Worklist Smp#: 16

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

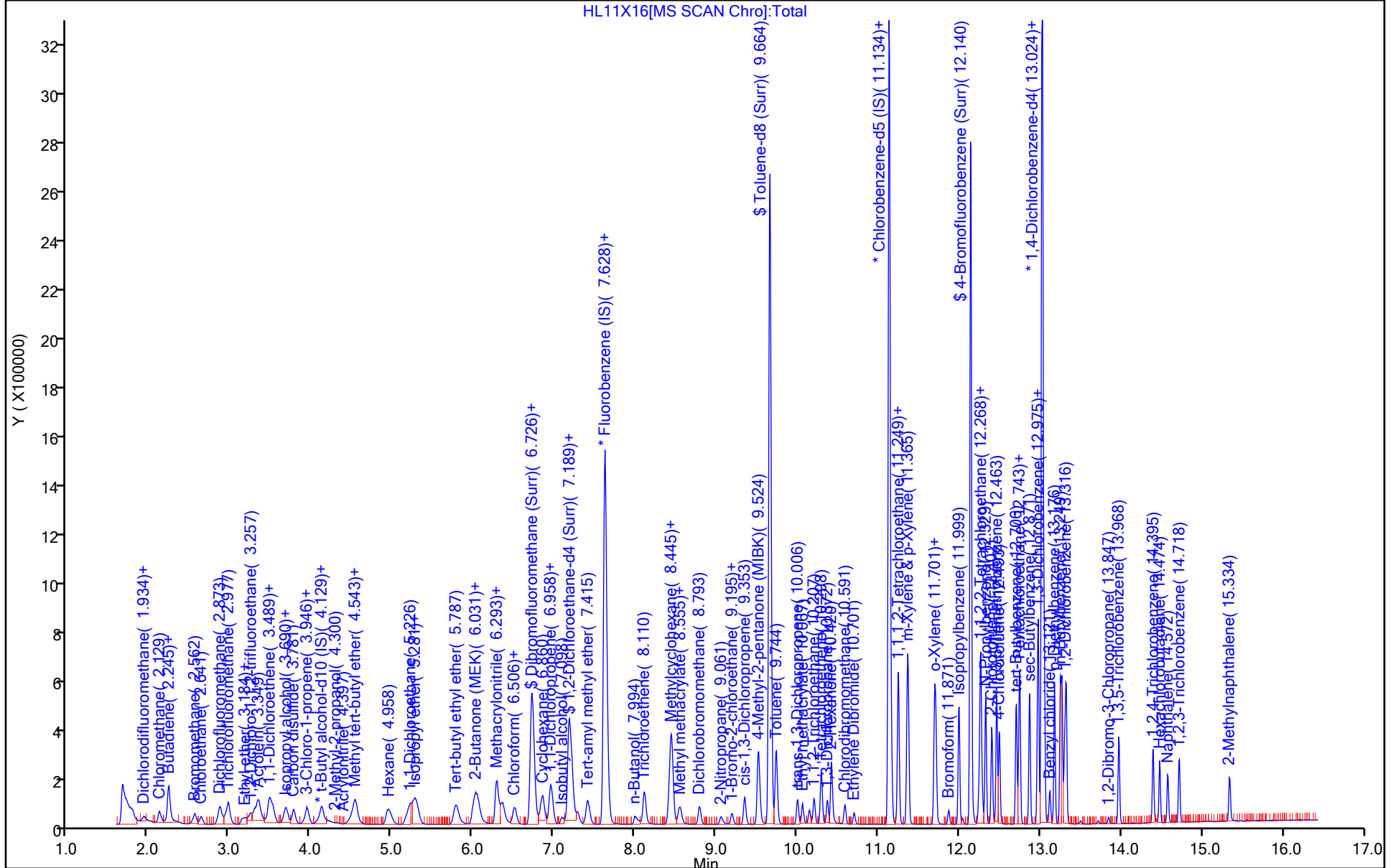
ALS Bottle#: 16

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

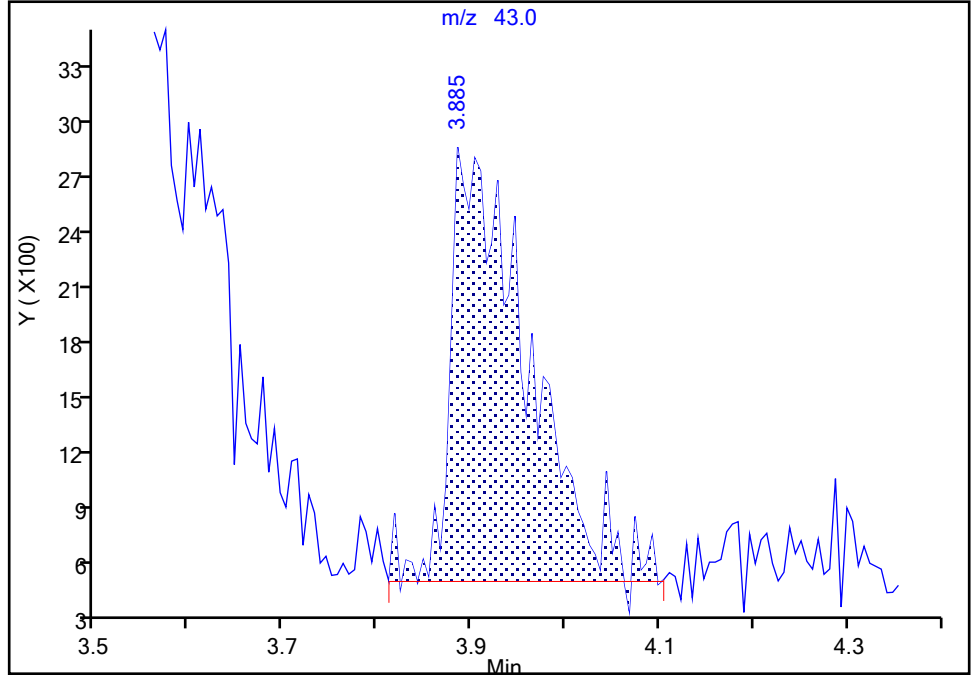
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X16.D
Injection Date: 11-Jul-2022 18:11:30 Instrument ID: 19094
Lims ID: IC std3 1
Client ID:
Operator ID: kas02648 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

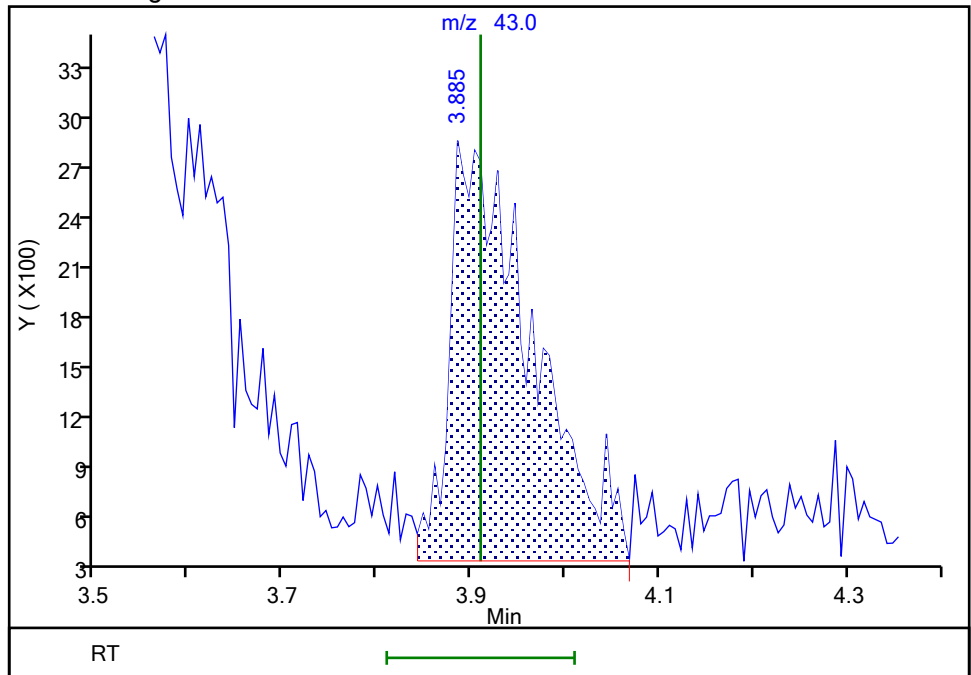
RT: 3.89
Area: 13369
Amount: 0.926818
Amount Units: ug/l

Processing Integration Results



RT: 3.89
Area: 15201
Amount: 1.031322
Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 09:53:38
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC

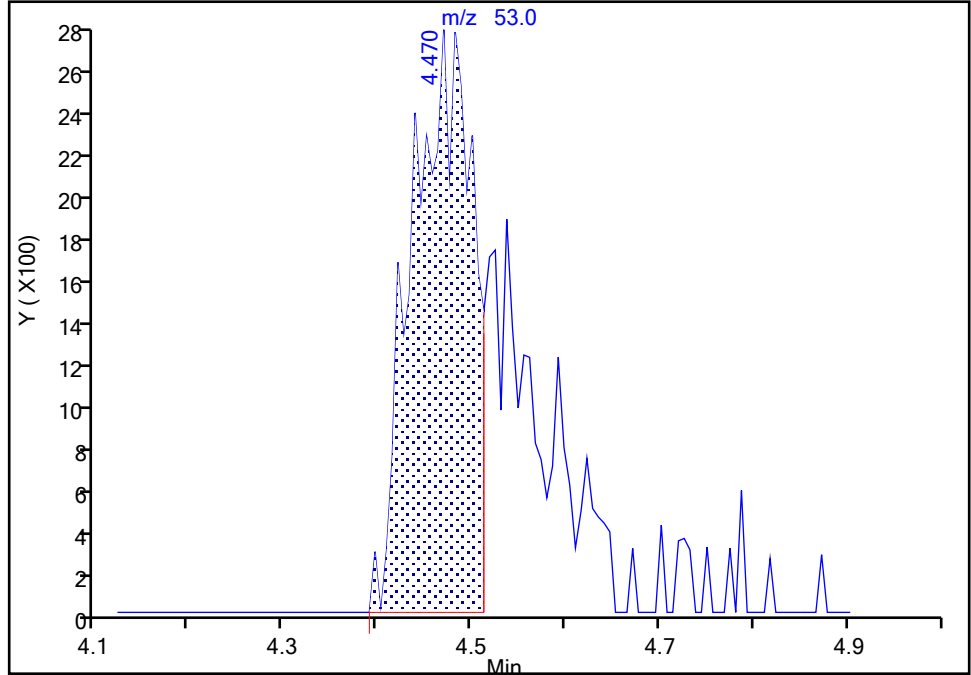
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X16.D
Injection Date: 11-Jul-2022 18:11:30 Instrument ID: 19094
Lims ID: IC std3 1
Client ID:
Operator ID: kas02648 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

31 Acrylonitrile, CAS: 107-13-1

Signal: 1

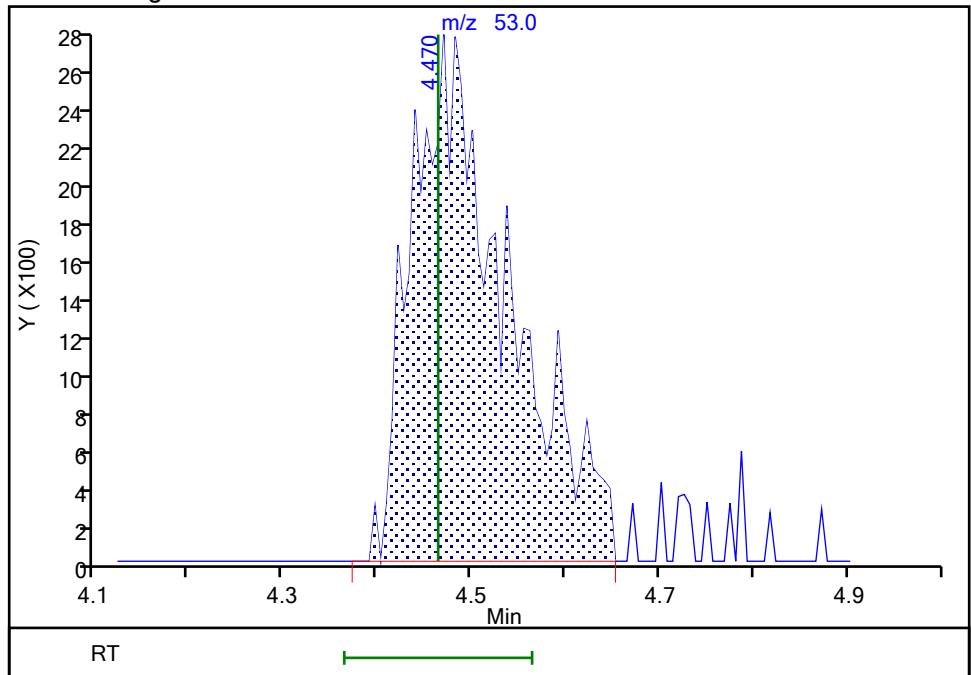
RT: 4.47
Area: 12185
Amount: 1.927957
Amount Units: ug/l

Processing Integration Results



RT: 4.47
Area: 19244
Amount: 2.559270
Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 10:11:14
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X17.D
 Lims ID: IC std2 0.5
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 11-Jul-2022 18:32:30 ALS Bottle#: 17 Worklist Smp#: 17
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0052505-017
 Operator ID: kas02648 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 12-Jul-2022 11:51:15 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1678

First Level Reviewer: UKAD

Date: 12-Jul-2022 09:56:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	1.946	1.940	0.006	98	29441	0.5000	0.4731	
6 Chloromethane	50	2.129	2.129	0.000	99	35764	0.5000	0.4588	
8 Butadiene	39	2.239	2.245	-0.006	91	32434	0.5000	0.4405	
7 Vinyl chloride	62	2.245	2.251	-0.006	83	34329	0.5000	0.4445	
9 Bromomethane	94	2.568	2.562	0.006	89	25582	0.5000	0.4718	
10 Chloroethane	64	2.641	2.648	-0.007	99	22322	0.5000	0.4764	
11 Dichlorofluoromethane	67	2.867	2.873	-0.006	96	47783	0.5000	0.4600	
13 Trichlorofluoromethane	101	2.952	2.952	0.000	96	41511	0.5000	0.4440	
15 Ethyl ether	59	3.154	3.154	0.000	84	17231	0.5001	0.4408	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.257	3.257	0.000	92	34976	0.5000	0.4803	
17 Acrolein	56	3.355	3.349	0.006	99	126498	25.0	28.1	
18 1,1-Dichloroethene	96	3.483	3.489	-0.006	97	26778	0.5000	0.5069	
19 Acetone	43	3.532	3.507	0.025	68	31750	5.00	6.07	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.525	3.519	0.006	88	24601	0.5000	0.4775	
21 Isopropyl alcohol	45	3.684	3.660	0.024	28	9017	10.0	8.58	M
22 Iodomethane	142	3.678	3.672	0.006	98	46089	0.5000	0.5017	
23 Ethyl bromide	108	3.708	3.708	0.000	97	20594	0.4999	0.4436	
24 Carbon disulfide	76	3.788	3.788	0.000	99	69895	0.5000	0.4942	
26 Methyl acetate	43	3.946	3.910	0.036	24	6605	0.5000	0.4770	M
27 3-Chloro-1-propene	41	3.952	3.952	0.000	93	45854	0.5000	0.5001	
* 28 t-Butyl alcohol-d10 (IS)	65	4.129	4.123	0.006	0	81790	50.0	50.0	
29 Methylene Chloride	84	4.135	4.129	0.006	93	27920	0.5000	0.5102	
30 2-Methyl-2-propanol	59	4.263	4.275	-0.012	63	18967	10.0	10.7	
31 Acrylonitrile	53	4.476	4.464	0.012	19	9691	1.25	1.37	M
32 Methyl tert-butyl ether	73	4.525	4.519	0.006	94	58986	0.5000	0.4994	
33 trans-1,2-Dichloroethene	96	4.550	4.544	0.006	100	29230	0.5000	0.4980	
34 Hexane	57	4.964	4.970	-0.006	90	40616	0.5000	0.4946	
35 1,1-Dichloroethane	63	5.190	5.202	-0.012	95	55872	0.5000	0.5093	
37 Isopropyl ether	45	5.257	5.263	-0.006	97	91474	0.5000	0.4900	
38 2-Chloro-1,3-butadiene	53	5.293	5.306	-0.013	89	43848	0.5000	0.4894	
39 Tert-butyl ethyl ether	59	5.787	5.793	-0.006	98	81551	0.5000	0.4938	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	6.007	5.988	0.019	100	46335	5.00	5.09	
42 cis-1,2-Dichloroethene	96	6.031	6.031	0.000	82	31554	0.5000	0.4895	
43 2,2-Dichloropropane	77	6.049	6.055	-0.006	89	45990	0.5000	0.5004	
45 Propionitrile	54	6.098	6.074	0.024	90	21624	10.0	9.26	
S 40 1,2-Dichloroethene, Total	100				0			0.9875	
47 Methacrylonitrile	67	6.293	6.293	0.000	90	58203	5.00	5.77	
48 Chlorobromomethane	128	6.360	6.360	0.000	92	12193	0.5000	0.4734	
49 Tetrahydrofuran	71	6.366	6.372	-0.006	68	6634	2.50	2.55	
50 Chloroform	83	6.507	6.513	-0.006	93	53597	0.5000	0.5179	
\$ 51 Dibromofluoromethane (Surr)	113	6.726	6.726	0.000	94	515062	10.0	10.0	
52 1,1,1-Trichloroethane	97	6.757	6.757	0.000	98	47344	0.5000	0.4915	
53 Cyclohexane	56	6.842	6.860	-0.018	90	54650	0.5000	0.5001	
55 1,1-Dichloropropene	75	6.958	6.958	0.000	97	42736	0.5000	0.4907	
56 Carbon tetrachloride	117	6.964	6.964	0.000	91	39816	0.5000	0.4780	
57 Isobutyl alcohol	41	7.141	7.098	0.043	98	14765	25.0	25.6	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.189	7.189	0.000	0	94092	10.0	10.0	
59 Benzene	78	7.220	7.220	0.000	92	125402	0.5000	0.4940	
60 1,2-Dichloroethane	62	7.293	7.293	0.000	96	27855	0.5000	0.5064	
62 Tert-amyl methyl ether	73	7.409	7.415	-0.006	98	70827	0.5000	0.5033	
* 65 Fluorobenzene (IS)	96	7.628	7.628	0.000	99	2031490	10.0	10.0	
64 n-Heptane	43	7.647	7.653	-0.006	89	45690	0.5000	0.5084	
66 n-Butanol	56	8.012	7.988	0.024	83	16852	43.8	34.1	
67 Trichloroethene	95	8.122	8.116	0.006	97	32976	0.5000	0.4931	
68 Methylcyclohexane	83	8.433	8.433	0.000	93	55236	0.5000	0.4897	
70 1,2-Dichloropropane	63	8.445	8.451	-0.006	74	31975	0.5000	0.5018	
69 2-ethoxy-2-methyl butane	87	8.451	8.451	0.000	90	44274	0.5000	0.4959	
71 Methyl methacrylate	69	8.537	8.537	0.000	95	11226	0.5000	0.5591	
72 1,4-Dioxane	88	8.561	8.549	0.012	34	3415	25.0	26.6	M
73 Dibromomethane	93	8.561	8.555	0.006	93	13211	0.5000	0.4980	
75 Dichlorobromomethane	83	8.793	8.799	-0.006	98	34786	0.5000	0.4851	
76 2-Nitropropane	41	9.067	9.067	0.000	93	13682	2.50	2.75	
79 1-Bromo-2-chloroethane	63	9.201	9.195	0.006	98	25444	0.5000	0.4344	
80 cis-1,3-Dichloropropene	75	9.354	9.354	0.000	97	43415	0.5000	0.4826	
81 4-Methyl-2-pentanone (MIBK)	43	9.518	9.518	0.000	96	144667	5.00	5.86	
\$ 82 Toluene-d8 (Surr)	98	9.664	9.665	-0.001	93	2186651	10.0	10.0	
83 Toluene	92	9.744	9.744	0.000	98	81056	0.5000	0.4999	
85 trans-1,3-Dichloropropene	75	10.006	10.000	0.006	91	32928	0.5000	0.4768	
S 84 1,3-Dichloropropene, Total	100				0			0.9594	
86 Ethyl methacrylate	69	10.067	10.067	0.000	88	24949	0.5000	0.4714	
87 1,1,2-Trichloroethane	97	10.213	10.207	0.006	89	18556	0.5000	0.4832	
88 Tetrachloroethene	166	10.299	10.299	-0.001	97	38259	0.5000	0.5111	
89 1,3-Dichloropropane	76	10.372	10.372	0.000	88	32646	0.5000	0.4931	
91 2-Hexanone	43	10.427	10.420	0.007	96	93203	5.00	5.69	
93 Chlorodibromomethane	129	10.591	10.591	0.000	91	22493	0.5000	0.4732	
94 Ethylene Dibromide	107	10.701	10.701	0.000	97	17888	0.5000	0.5085	
* 97 Chlorobenzene-d5 (IS)	117	11.134	11.134	0.000	85	1783683	10.0	10.0	
96 1-Chlorohexane	91	11.146	11.146	0.000	97	50063	0.5000	0.4996	
98 Chlorobenzene	112	11.158	11.164	-0.006	95	85642	0.5000	0.4958	
99 1,1,1,2-Tetrachloroethane	131	11.243	11.243	0.000	94	28846	0.5000	0.4868	
S 95 Xylenes, Total	106				0			1.50	
100 Ethylbenzene	91	11.250	11.250	0.000	98	154814	0.5000	0.4889	
101 m-Xylene & p-Xylene	106	11.365	11.365	0.000	0	121299	1.00	1.00	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 o-Xylene	106	11.695	11.695	0.000	96	57735	0.5000	0.4948	
103 Styrene	104	11.713	11.713	0.000	95	92450	0.5000	0.4884	
104 Bromoform	173	11.871	11.871	0.000	97	12623	0.5000	0.4608	
105 Isopropylbenzene	105	11.999	11.999	0.000	95	156254	0.5000	0.4952	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	91	880073	10.0	9.93	
109 1,1,2,2-Tetrachloroethane	83	12.243	12.243	0.000	92	22404	0.5000	0.5026	
111 Bromobenzene	156	12.262	12.262	0.000	95	32939	0.5000	0.4936	
110 trans-1,4-Dichloro-2-butene	53	12.268	12.268	0.000	91	46217	5.00	5.42	
112 1,2,3-Trichloropropane	110	12.292	12.292	0.000	79	6024	0.5000	0.5382	
113 N-Propylbenzene	91	12.329	12.329	0.000	99	186777	0.5000	0.5019	
114 2-Chlorotoluene	126	12.408	12.402	0.006	97	35571	0.5000	0.4968	
115 1,3,5-Trimethylbenzene	105	12.463	12.463	0.000	94	129835	0.5000	0.5003	
116 4-Chlorotoluene	126	12.493	12.493	0.000	97	36896	0.5000	0.5132	
118 tert-Butylbenzene	134	12.707	12.707	0.000	93	28957	0.5000	0.5046	
119 Pentachloroethane	167	12.737	12.737	0.000	82	18023	0.5000	0.4471	
120 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	132294	0.5000	0.5052	
121 sec-Butylbenzene	105	12.871	12.871	0.000	94	170282	0.5000	0.5010	
122 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	69911	0.5000	0.5060	
123 4-Isopropyltoluene	119	12.981	12.975	0.006	97	146134	0.5000	0.5016	
* 124 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	974107	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.042	13.042	0.000	93	69120	0.5000	0.5040	
126 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	56083	0.5000	0.5024	
127 Benzyl chloride	126	13.121	13.121	0.000	99	8260	0.5000	0.4557	
129 p-Diethylbenzene	119	13.176	13.176	0.000	90	85170	0.5000	0.5058	
130 n-Butylbenzene	92	13.267	13.267	0.000	97	70907	0.5000	0.4822	
131 1,2-Dichlorobenzene	146	13.304	13.304	0.000	98	60558	0.5000	0.4947	
134 1,2-Dibromo-3-Chloropropane	155	13.847	13.847	0.000	82	2609	0.5000	0.4434	
135 1,3,5-Trichlorobenzene	180	13.975	13.969	0.006	94	54031	0.5000	0.5027	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	44220	0.5000	0.4886	
137 Hexachlorobutadiene	225	14.475	14.475	0.000	93	24106	0.5000	0.5485	
138 Naphthalene	128	14.578	14.572	0.006	97	72436	0.5000	0.4957	
139 1,2,3-Trichlorobenzene	180	14.718	14.712	0.006	96	39169	0.5000	0.5098	
140 2-Methylnaphthalene	142	15.340	15.340	0.000	89	42541	0.5000	0.4835	
194 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00049

Amount Added: 2.00

Units: uL

MSV_LL_GAS826_00101

Amount Added: 2.00

Units: uL

MSV_LL_#2_826_00053

Amount Added: 2.00

Units: uL

MSV_LLcentISS_00005

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X17.D

Injection Date: 11-Jul-2022 18:32:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: IC std2 0.5

Worklist Smp#: 17

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

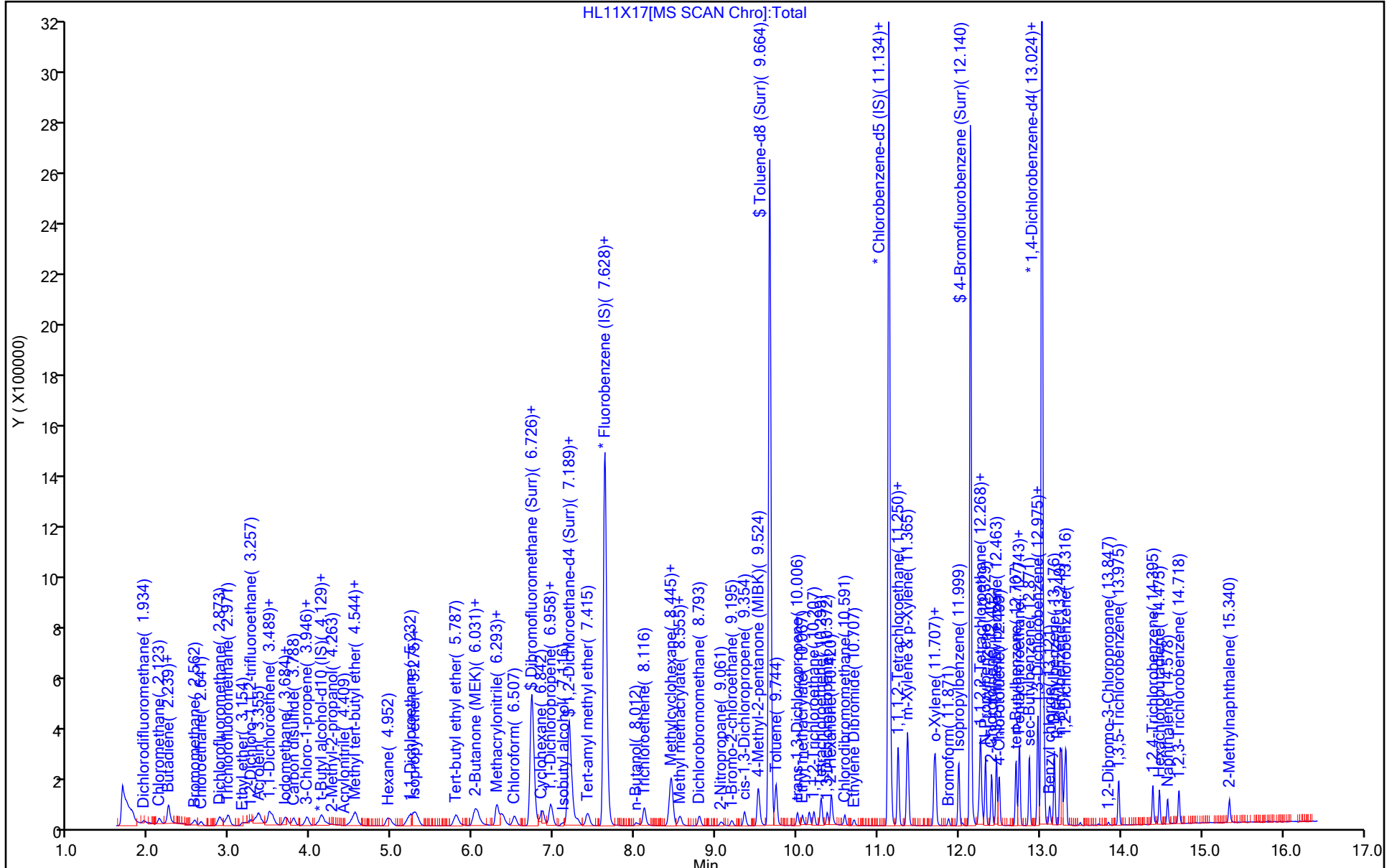
ALS Bottle#: 17

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

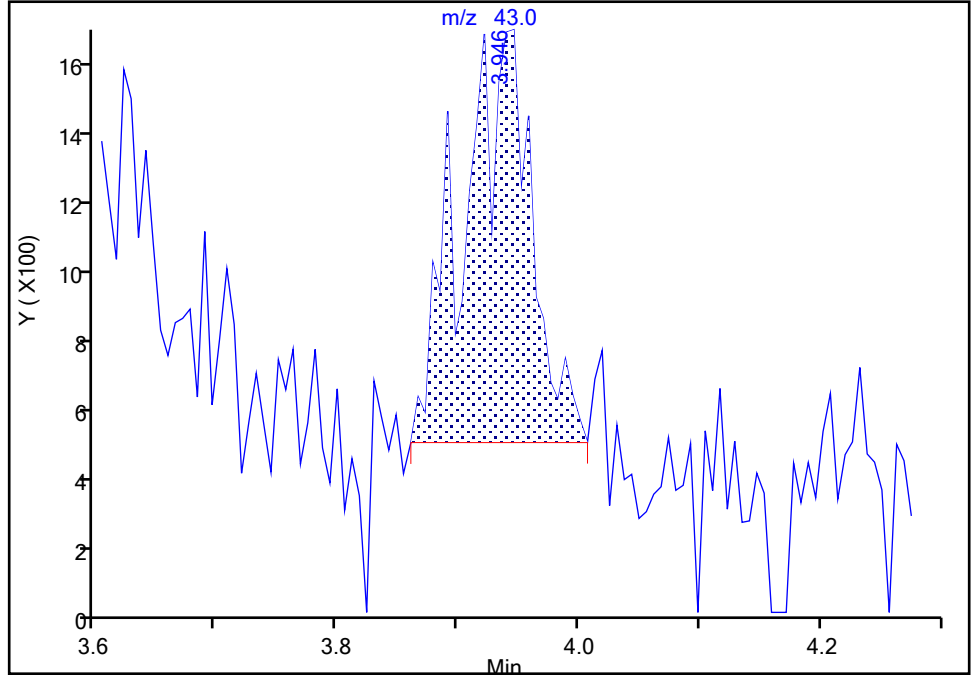
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X17.D
Injection Date: 11-Jul-2022 18:32:30 Instrument ID: 19094
Lims ID: IC std2 0.5
Client ID:
Operator ID: kas02648 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

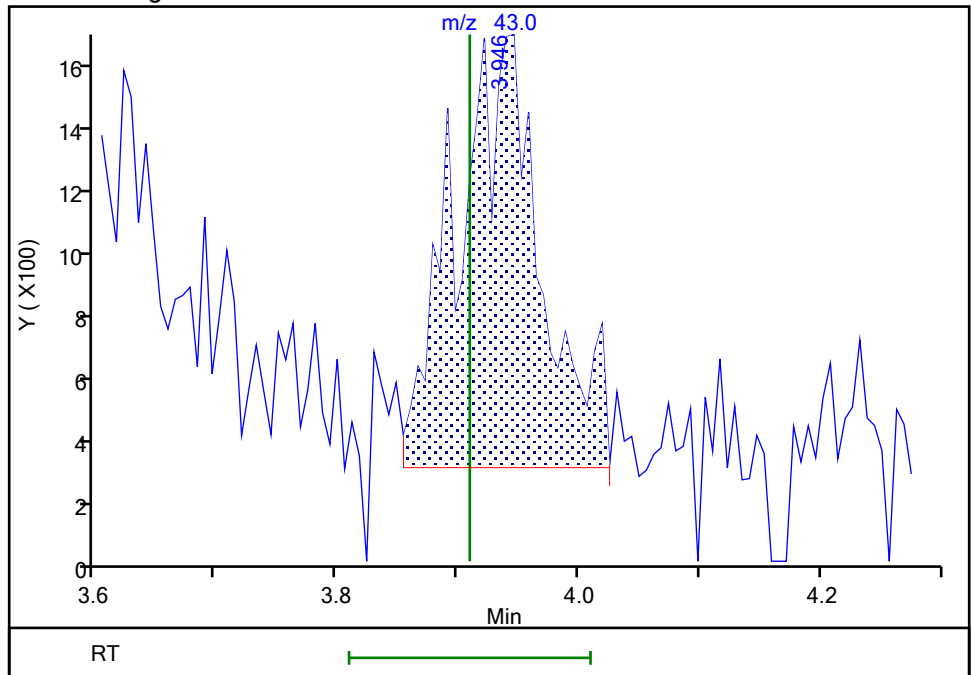
RT: 3.95
Area: 4569
Amount: 0.348727
Amount Units: ug/l

Processing Integration Results



RT: 3.95
Area: 6605
Amount: 0.477027
Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 09:54:55
Audit Action: Manually Integrated

Audit Reason: Baseline

Eurofins Lancaster Laboratories Environment Testing, LLC

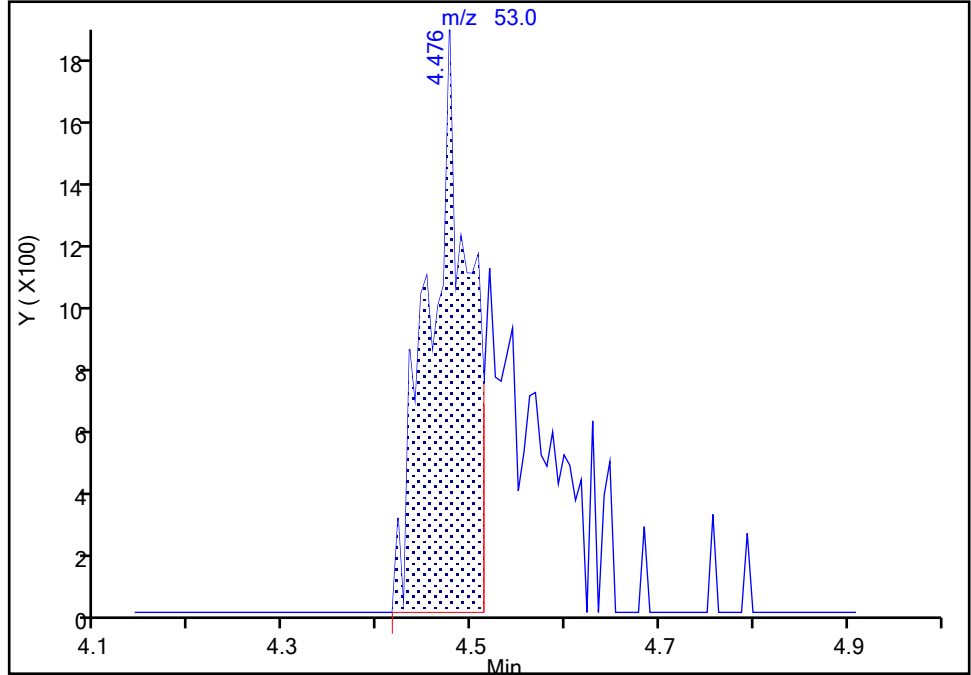
Data File:	\\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X17.D		
Injection Date:	11-Jul-2022 18:32:30	Instrument ID:	19094
Lims ID:	IC std2 0.5		
Client ID:			
Operator ID:	kas02648	ALS Bottle#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	17

31 Acrylonitrile, CAS: 107-13-1

Signal: 1

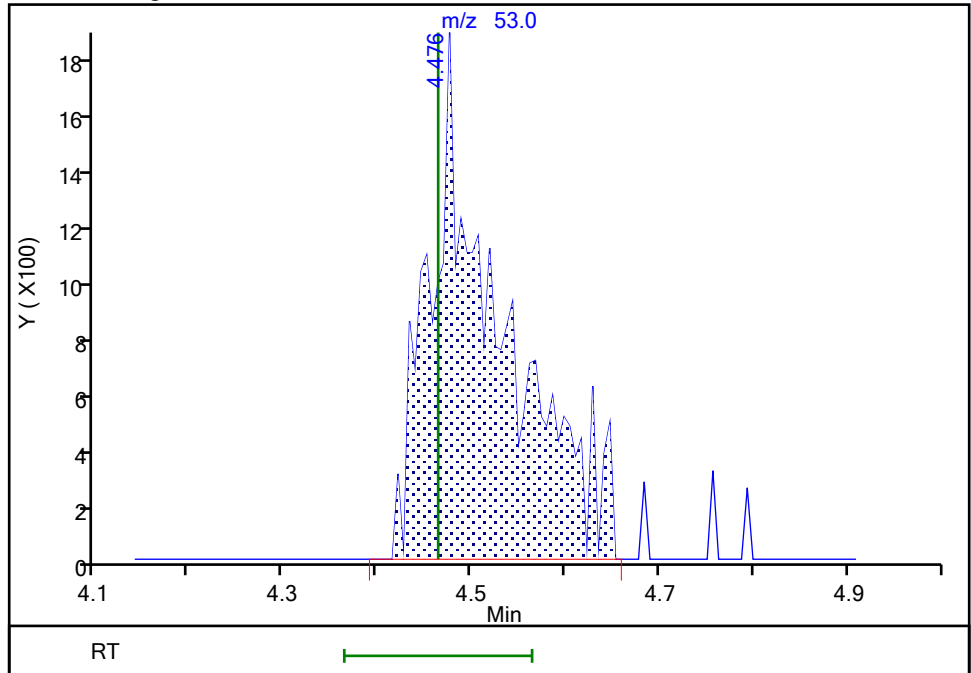
RT: 4.48
 Area: 5403
 Amount: 1.079301
 Amount Units: ug/l

Processing Integration Results



RT: 4.48
 Area: 9691
 Amount: 1.371948
 Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 10:11:30
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

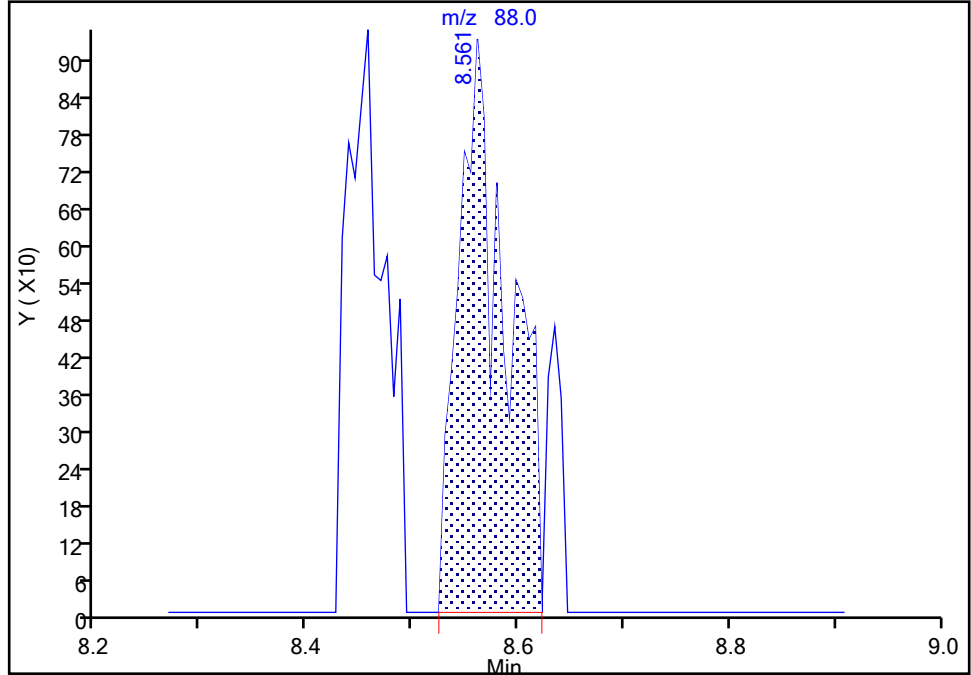
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11X17.D
 Injection Date: 11-Jul-2022 18:32:30 Instrument ID: 19094
 Lims ID: IC std2 0.5
 Client ID:
 Operator ID: kas02648 ALS Bottle#: 17 Worklist Smp#: 17
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

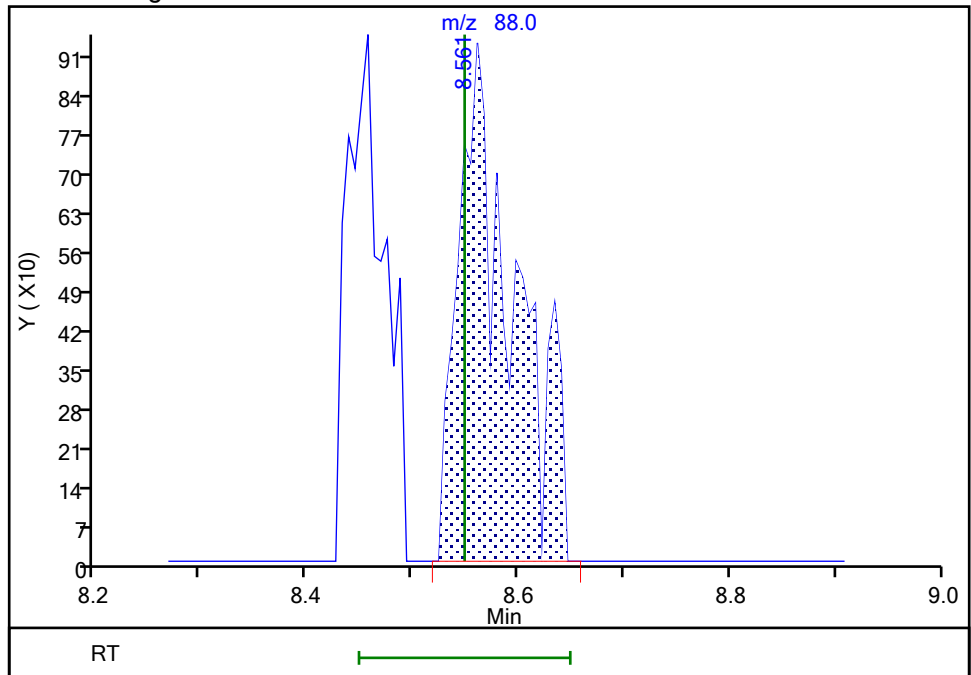
RT: 8.56
 Area: 2977
 Amount: 28.394918
 Amount Units: ug/l

Processing Integration Results



RT: 8.56
 Area: 3415
 Amount: 26.637646
 Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 10:13:53
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Lims ID: IC std1 0.2
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 11-Jul-2022 18:52:30 ALS Bottle#: 18 Worklist Smp#: 18
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0052505-019
 Operator ID: kas02648 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 12-Jul-2022 11:51:24 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1678

First Level Reviewer: UKAD

Date: 12-Jul-2022 09:59:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	1.922	1.940	-0.018	97	12093	0.2000	0.1893	
6 Chloromethane	50	2.117	2.129	-0.012	98	15861	0.2000	0.1982	
8 Butadiene	39	2.233	2.245	-0.012	97	16912	0.2000	0.2237	
7 Vinyl chloride	62	2.233	2.251	-0.018	85	14783	0.2000	0.1864	
9 Bromomethane	94	2.550	2.562	-0.012	92	11545	0.2000	0.2074	
10 Chloroethane	64	2.635	2.648	-0.013	98	9347	0.2000	0.1943	
11 Dichlorofluoromethane	67	2.867	2.873	-0.006	96	21148	0.2000	0.1983	
13 Trichlorofluoromethane	101	2.946	2.952	-0.006	93	17796	0.2000	0.1854	
15 Ethyl ether	59	3.172	3.154	0.018	70	7722	0.2001	0.1924	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.251	3.257	-0.006	86	14120	0.2000	0.1889	
17 Acrolein	56	3.336	3.349	-0.013	99	56027	10.0	7.98	
18 1,1-Dichloroethene	96	3.477	3.489	-0.012	97	9714	0.2000	0.1791	
19 Acetone	43	3.507	3.507	0.000	76	19892	2.00	2.43	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.513	3.519	-0.006	89	9385	0.2000	0.1774	
21 Isopropyl alcohol	45	3.611	3.660	-0.049	25	3822	4.00	5.02	M
22 Iodomethane	142	3.653	3.672	-0.019	99	17782	0.2000	0.1885	
23 Ethyl bromide	108	3.696	3.708	-0.012	96	8718	0.2000	0.1829	
24 Carbon disulfide	76	3.775	3.788	-0.013	98	27494	0.2000	0.1894	
26 Methyl acetate	43	3.946	3.910	0.036	22	4449	0.2000	0.2057	M
27 3-Chloro-1-propene	41	3.940	3.952	-0.012	94	19139	0.2000	0.2033	
* 28 t-Butyl alcohol-d10 (IS)	65	4.129	4.123	0.006	0	127772	50.0	50.0	
29 Methylene Chloride	84	4.117	4.129	-0.012	92	10350	0.2000	0.1842	
30 2-Methyl-2-propanol	59	4.239	4.275	-0.036	70	10320	4.00	3.73	
31 Acrylonitrile	53	4.476	4.464	0.012	21	3316	0.5000	0.3005	M
32 Methyl tert-butyl ether	73	4.519	4.519	0.000	93	21966	0.2000	0.1812	
33 trans-1,2-Dichloroethene	96	4.531	4.544	-0.013	96	10942	0.2000	0.1816	
34 Hexane	57	4.940	4.970	-0.030	90	16053	0.2000	0.1904	
35 1,1-Dichloroethane	63	5.196	5.202	-0.006	74	20381	0.2000	0.1810	
37 Isopropyl ether	45	5.232	5.263	-0.031	91	35599	0.2000	0.1858	
38 2-Chloro-1,3-butadiene	53	5.305	5.306	-0.001	43	16777	0.2000	0.1824	
39 Tert-butyl ethyl ether	59	5.781	5.793	-0.012	96	32074	0.2000	0.1892	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	6.007	5.988	0.019	99	23175	2.00	1.63	
42 cis-1,2-Dichloroethene	96	6.031	6.031	0.000	80	12731	0.2000	0.1924	
43 2,2-Dichloropropane	77	6.037	6.055	-0.018	83	17016	0.2000	0.1803	
45 Propionitrile	54	6.086	6.074	0.012	95	10758	4.00	2.95	M
S 40 1,2-Dichloroethene, Total	100				0			0.3740	
47 Methacrylonitrile	67	6.293	6.293	0.000	92	23008	2.00	1.46	
48 Chlorobromomethane	128	6.360	6.360	0.000	75	5425	0.2000	0.2052	
49 Tetrahydrofuran	71	6.360	6.372	-0.012	71	3287	1.00	0.8085	
50 Chloroform	83	6.506	6.513	-0.007	92	18941	0.2000	0.1783	
\$ 51 Dibromofluoromethane (Surr)	113	6.726	6.726	0.000	94	524666	10.0	9.94	
52 1,1,1-Trichloroethane	97	6.756	6.757	-0.001	93	18862	0.2000	0.1907	
53 Cyclohexane	56	6.848	6.860	-0.012	88	21247	0.2000	0.1894	
55 1,1-Dichloropropene	75	6.958	6.958	0.000	96	17380	0.2000	0.1944	
56 Carbon tetrachloride	117	6.958	6.964	-0.006	90	15638	0.2000	0.1829	
57 Isobutyl alcohol	41	7.104	7.098	0.006	94	8353	10.0	9.26	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.177	7.189	-0.012	0	97667	10.0	10.1	
59 Benzene	78	7.214	7.220	-0.006	93	49624	0.2000	0.1904	
60 1,2-Dichloroethane	62	7.287	7.293	-0.006	67	11134	0.2000	0.1972	
62 Tert-amyl methyl ether	73	7.403	7.415	-0.012	99	25747	0.2000	0.1782	
* 65 Fluorobenzene (IS)	96	7.622	7.628	-0.006	99	2085513	10.0	10.0	
64 n-Heptane	43	7.646	7.653	-0.007	36	19527	0.2000	0.2117	
66 n-Butanol	56	8.018	7.988	0.030	93	12895	17.5	16.7	
67 Trichloroethene	95	8.110	8.116	-0.006	95	13274	0.2000	0.1934	
68 Methylcyclohexane	83	8.433	8.433	0.000	94	22098	0.2000	0.1908	
70 1,2-Dichloropropane	63	8.445	8.451	-0.006	75	11924	0.2000	0.1823	
69 2-ethoxy-2-methyl butane	87	8.451	8.451	0.000	89	16495	0.2000	0.1800	
71 Methyl methacrylate	69	8.537	8.537	0.000	43	4072	0.2000	0.1298	
72 1,4-Dioxane	88	8.555	8.549	0.006	33	947	10.0	4.73	M
73 Dibromomethane	93	8.561	8.555	0.006	94	5425	0.2000	0.1992	
75 Dichlorobromomethane	83	8.793	8.799	-0.006	94	14182	0.2000	0.1926	
76 2-Nitropropane	41	9.061	9.067	-0.006	98	6354	1.00	0.8170	
79 1-Bromo-2-chloroethane	63	9.189	9.195	-0.006	96	11419	0.2000	0.1899	
80 cis-1,3-Dichloropropene	75	9.353	9.354	-0.001	96	16185	0.2000	0.1752	
81 4-Methyl-2-pentanone (MIBK)	43	9.512	9.518	-0.006	96	57049	2.00	1.48	
\$ 82 Toluene-d8 (Surr)	98	9.658	9.665	-0.007	93	2255316	10.0	10.2	
83 Toluene	92	9.744	9.744	0.000	98	32116	0.2000	0.1958	
85 trans-1,3-Dichloropropene	75	10.006	10.000	0.006	90	13040	0.2000	0.1867	
S 84 1,3-Dichloropropene, Total	100				0			0.3619	
86 Ethyl methacrylate	69	10.067	10.067	0.000	83	9577	0.2000	0.1789	M
87 1,1,2-Trichloroethane	97	10.213	10.207	0.006	86	8392	0.2000	0.2160	
88 Tetrachloroethene	166	10.298	10.299	-0.001	96	14261	0.2000	0.1884	
89 1,3-Dichloropropane	76	10.378	10.372	0.006	88	12843	0.2000	0.1918	
91 2-Hexanone	43	10.426	10.420	0.006	96	35536	2.00	1.39	
93 Chlorodibromomethane	129	10.585	10.591	-0.006	88	9323	0.2000	0.1939	
94 Ethylene Dibromide	107	10.701	10.701	0.000	95	5776	0.2000	0.1623	
* 97 Chlorobenzene-d5 (IS)	117	11.134	11.134	0.000	85	1804145	10.0	10.0	
96 1-Chlorohexane	91	11.146	11.146	0.000	33	21731	0.2000	0.2144	
98 Chlorobenzene	112	11.158	11.164	-0.006	94	33865	0.2000	0.1938	
99 1,1,1,2-Tetrachloroethane	131	11.243	11.243	0.000	92	11585	0.2000	0.1933	
S 95 Xylenes, Total	106				0			0.5721	
100 Ethylbenzene	91	11.249	11.250	-0.001	98	61642	0.2000	0.1925	
101 m-Xylene & p-Xylene	106	11.365	11.365	0.000	0	46705	0.4000	0.3825	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 o-Xylene	106	11.694	11.695	-0.001	96	22378	0.2000	0.1896	
103 Styrene	104	11.713	11.713	0.000	96	33946	0.2000	0.1773	
104 Bromoform	173	11.871	11.871	0.000	96	4931	0.2000	0.1780	
105 Isopropylbenzene	105	11.993	11.999	-0.006	95	59579	0.2000	0.1867	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	91	897535	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.243	12.243	0.000	91	8357	0.2000	0.1825	
111 Bromobenzene	156	12.255	12.262	-0.007	90	13159	0.2000	0.1920	
110 trans-1,4-Dichloro-2-butene	53	12.268	12.268	0.000	92	19002	2.00	1.43	
112 1,2,3-Trichloropropane	110	12.292	12.292	0.000	76	2053	0.2000	0.1786	
113 N-Propylbenzene	91	12.328	12.329	-0.001	99	70175	0.2000	0.1836	
114 2-Chlorotoluene	126	12.402	12.402	0.000	96	13760	0.2000	0.1871	
115 1,3,5-Trimethylbenzene	105	12.463	12.463	0.000	93	49390	0.2000	0.1853	
116 4-Chlorotoluene	126	12.499	12.493	0.006	96	13230	0.2000	0.1791	
118 tert-Butylbenzene	134	12.706	12.707	-0.001	92	10722	0.2000	0.1819	
119 Pentachloroethane	167	12.737	12.737	0.000	82	7445	0.2000	0.1798	
120 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	96	50131	0.2000	0.1864	
121 sec-Butylbenzene	105	12.871	12.871	0.000	94	67287	0.2000	0.1927	
122 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	27316	0.2000	0.1924	
123 4-Isopropyltoluene	119	12.975	12.975	0.000	97	57362	0.2000	0.1917	
* 124 1,4-Dichlorobenzene-d4	152	13.023	13.024	-0.001	94	1000650	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.042	13.042	0.000	93	27701	0.2000	0.1966	
126 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	96	23143	0.2000	0.2018	
127 Benzyl chloride	126	13.127	13.121	0.006	97	3379	0.2000	0.1815	
129 p-Diethylbenzene	119	13.176	13.176	0.000	91	31975	0.2000	0.1848	
130 n-Butylbenzene	92	13.267	13.267	0.000	98	29597	0.2000	0.1959	
131 1,2-Dichlorobenzene	146	13.304	13.304	0.000	97	24746	0.2000	0.1968	
134 1,2-Dibromo-3-Chloropropane	155	13.846	13.847	-0.001	83	829	0.2000	0.1372	
135 1,3,5-Trichlorobenzene	180	13.975	13.969	0.005	97	20738	0.2000	0.1878	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	17418	0.2000	0.1874	
137 Hexachlorobutadiene	225	14.474	14.475	-0.001	93	11211	0.2000	0.2483	
138 Naphthalene	128	14.578	14.572	0.006	97	28721	0.2000	0.1913	
139 1,2,3-Trichlorobenzene	180	14.718	14.712	0.006	93	14798	0.2000	0.1875	
140 2-Methylnaphthalene	142	15.340	15.340	0.000	94	18442	0.2000	0.2041	
194 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

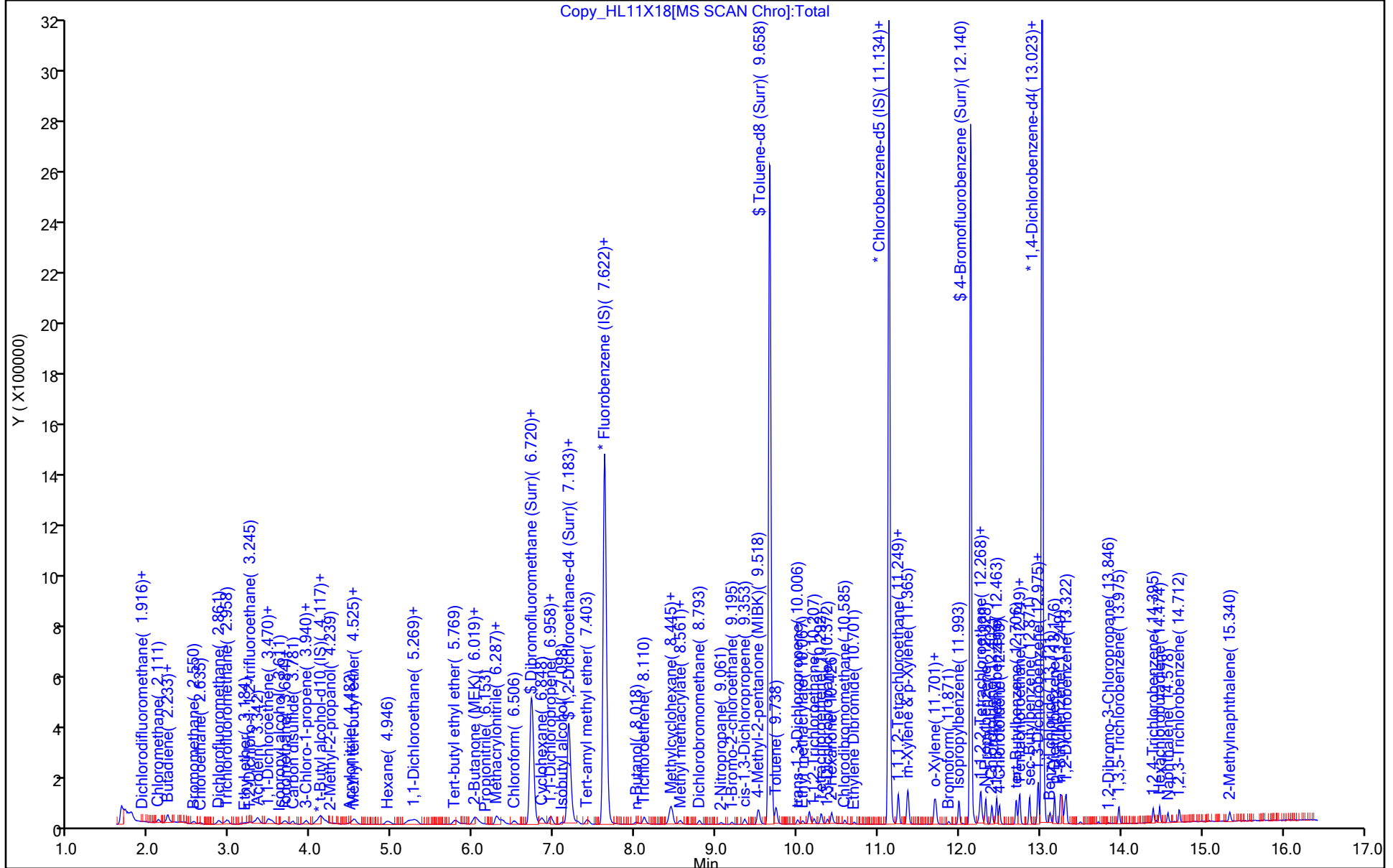
ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00049	Amount Added: 2.00	Units: uL	
MSV_LL_GAS826_00101	Amount Added: 2.00	Units: uL	
MSV_LL_#2_826_00053	Amount Added: 2.00	Units: uL	
MSV_LLcentISS_00005	Amount Added: 5.00	Units: uL	Run Reagent



Eurofins Lancaster Laboratories Environment Testing, LLC

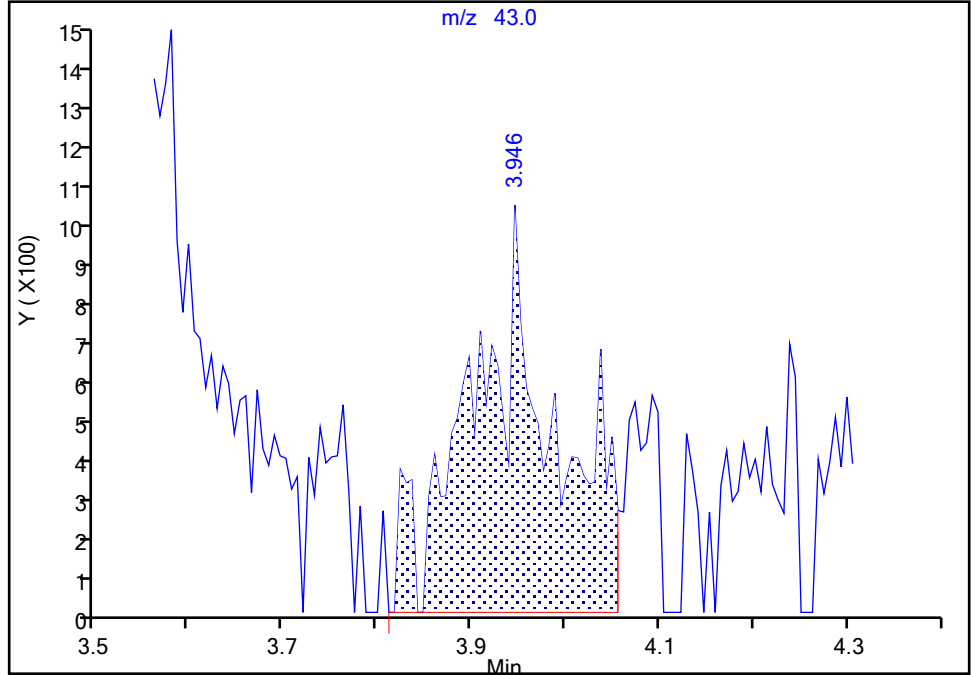
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
Injection Date: 11-Jul-2022 18:52:30 Instrument ID: 19094
Lims ID: IC std1 0.2
Client ID:
Operator ID: kas02648 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

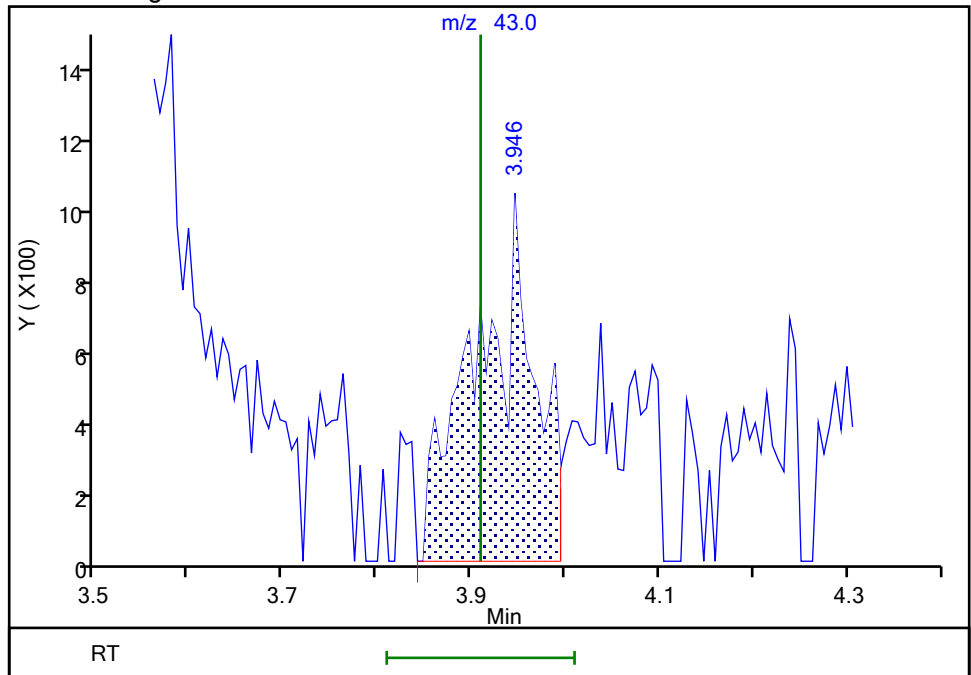
RT: 3.95
Area: 6208
Amount: 0.271247
Amount Units: ug/l

Processing Integration Results



RT: 3.95
Area: 4449
Amount: 0.205683
Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 09:57:38
Audit Action: Split an Integrated Peak

Audit Reason: Split Peak

Eurofins Lancaster Laboratories Environment Testing, LLC

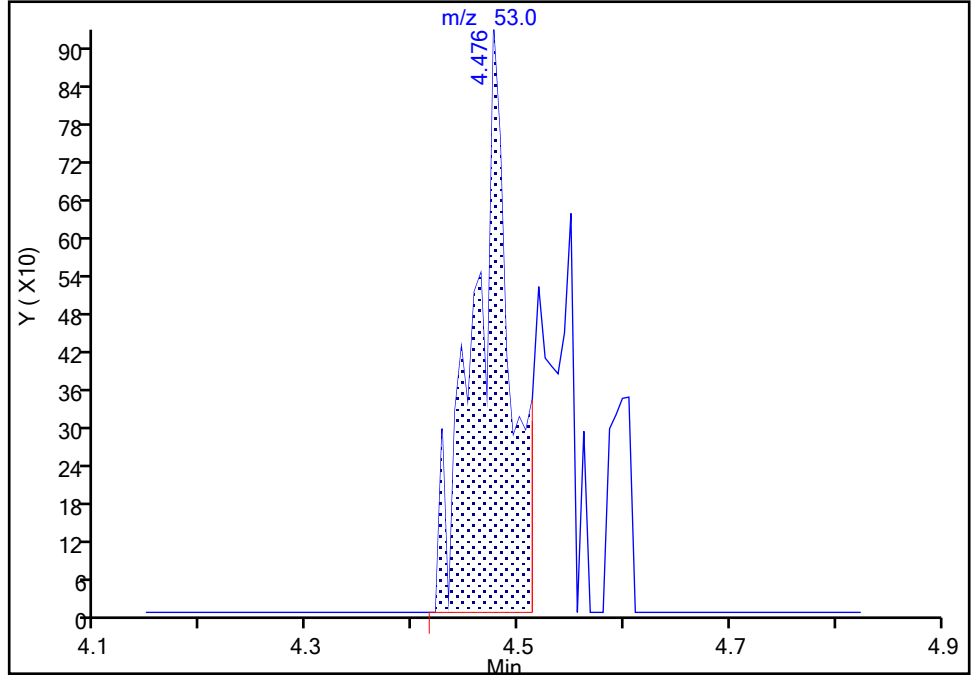
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Injection Date: 11-Jul-2022 18:52:30 Instrument ID: 19094
 Lims ID: IC std1 0.2
 Client ID:
 Operator ID: kas02648 ALS Bottle#: 18 Worklist Smp#: 18
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

31 Acrylonitrile, CAS: 107-13-1

Signal: 1

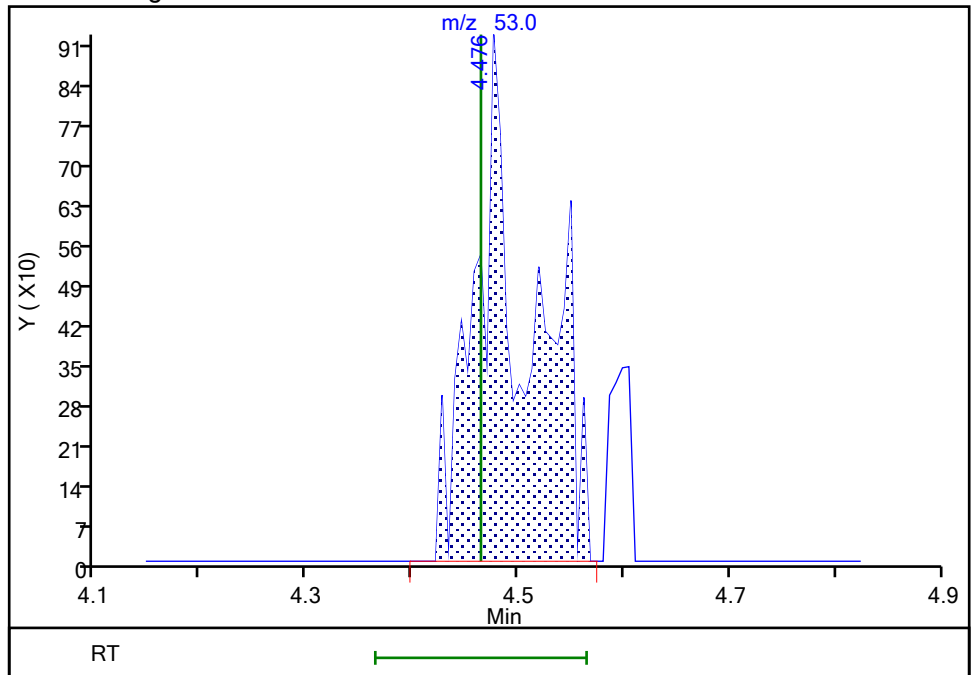
RT: 4.48
 Area: 2201
 Amount: 0.454116
 Amount Units: ug/l

Processing Integration Results



RT: 4.48
 Area: 3316
 Amount: 0.300503
 Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 10:11:46
 Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

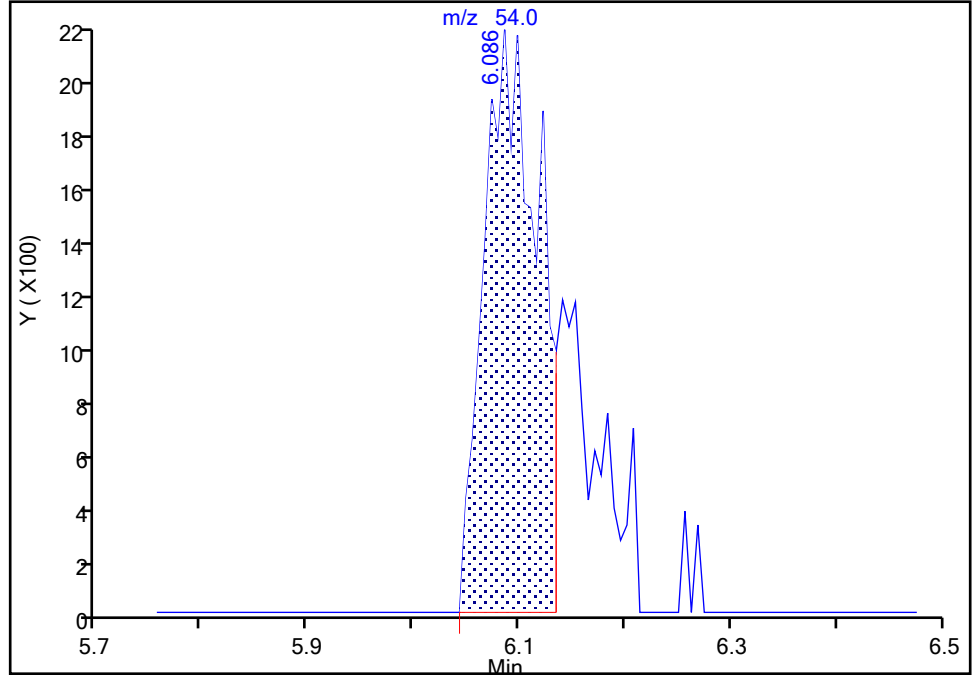
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
Injection Date: 11-Jul-2022 18:52:30 Instrument ID: 19094
Lims ID: IC std1 0.2
Client ID:
Operator ID: kas02648 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

45 Propionitrile, CAS: 107-12-0

Signal: 1

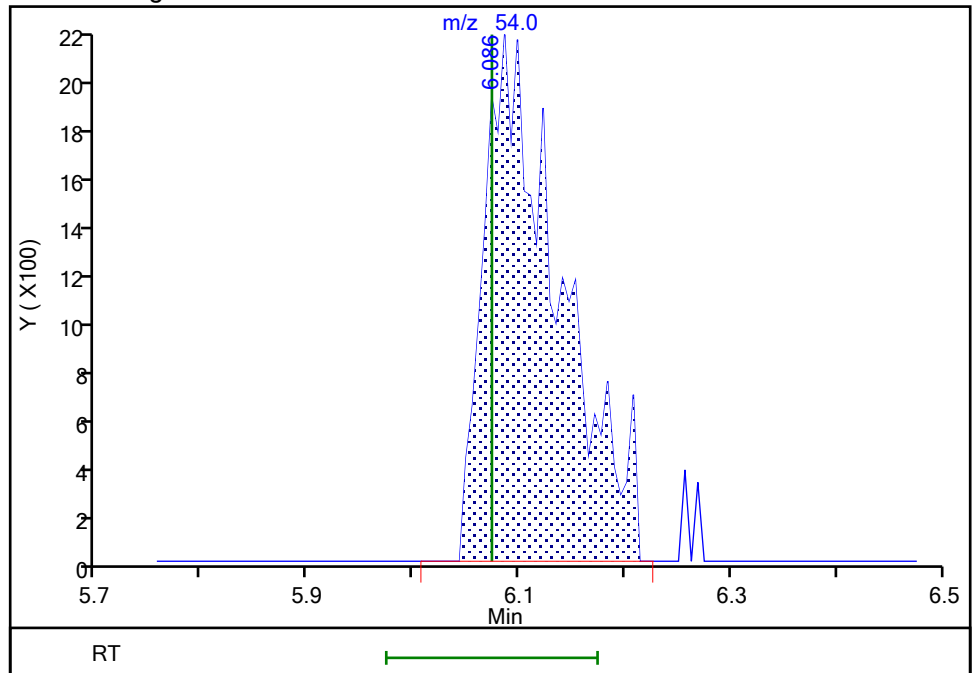
RT: 6.09
Area: 7805
Amount: 2.135891
Amount Units: ug/l

Processing Integration Results



RT: 6.09
Area: 10758
Amount: 2.950262
Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 09:57:55
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

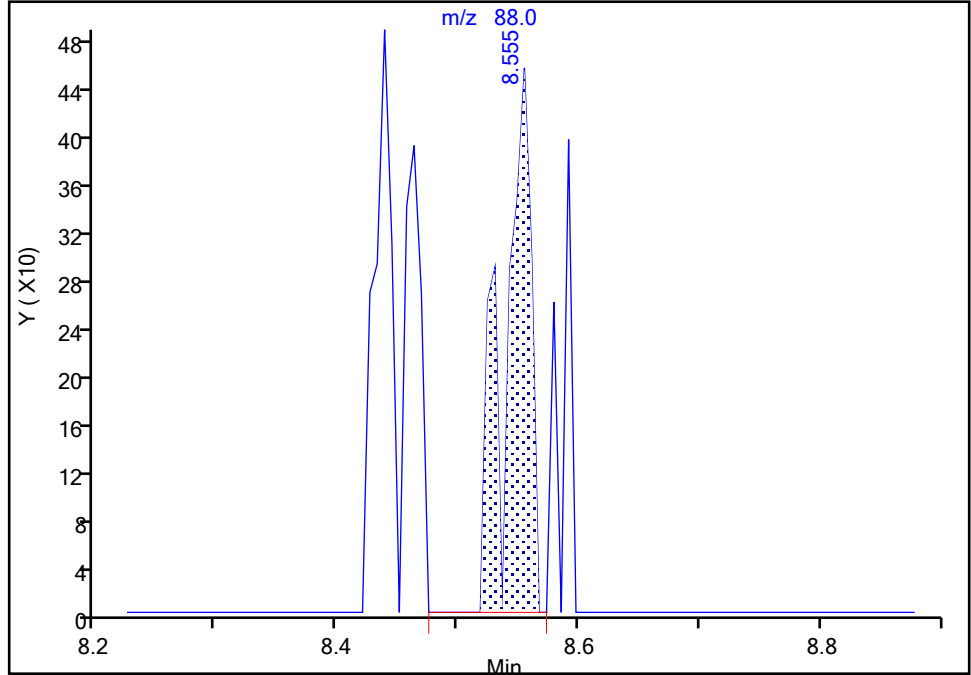
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
Injection Date: 11-Jul-2022 18:52:30 Instrument ID: 19094
Lims ID: IC std1 0.2
Client ID:
Operator ID: kas02648 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

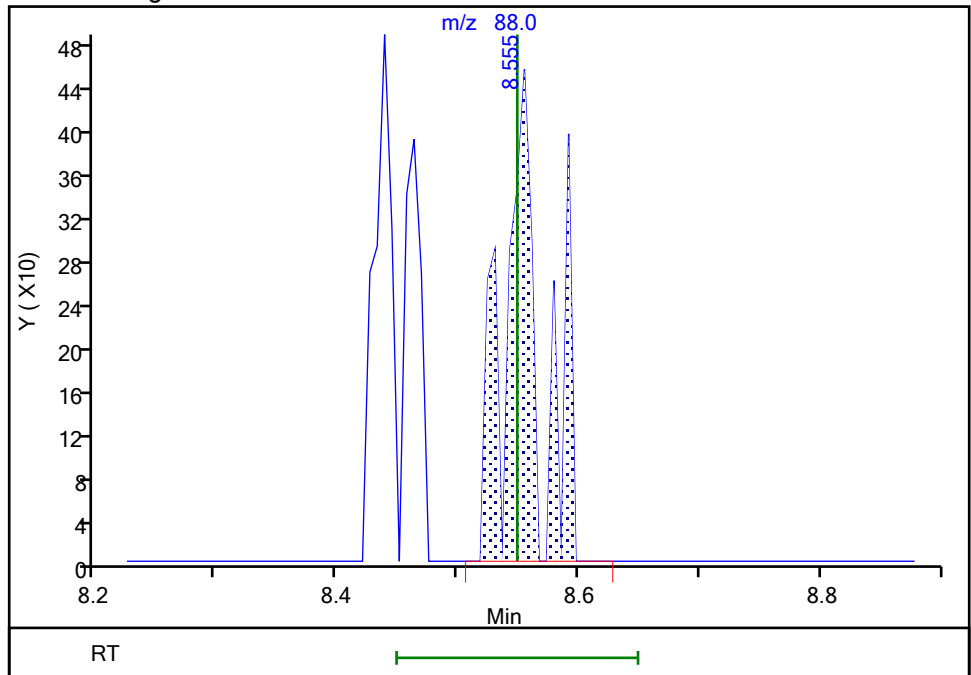
RT: 8.55
Area: 707
Amount: 4.408933
Amount Units: ug/l

Processing Integration Results



RT: 8.55
Area: 947
Amount: 4.728459
Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 09:58:10
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

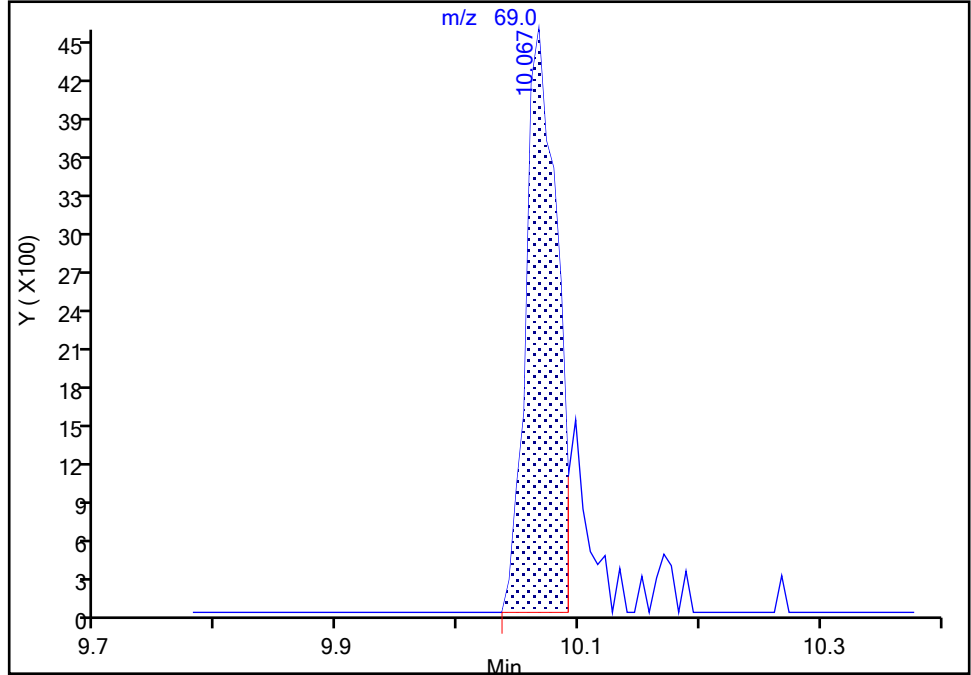
Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
Injection Date: 11-Jul-2022 18:52:30 Instrument ID: 19094
Lims ID: IC std1 0.2
Client ID:
Operator ID: kas02648 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

86 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

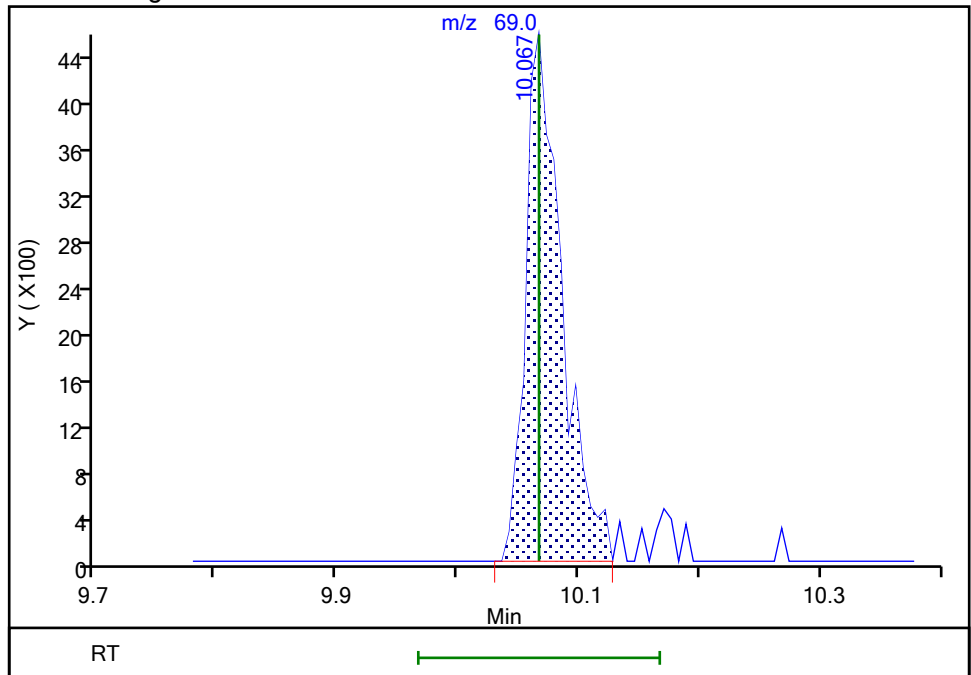
RT: 10.07
Area: 8246
Amount: 0.156824
Amount Units: ug/l

Processing Integration Results



RT: 10.07
Area: 9577
Amount: 0.178902
Amount Units: ug/l

Manual Integration Results



Reviewer: UKAD, 12-Jul-2022 09:58:23
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Calibration

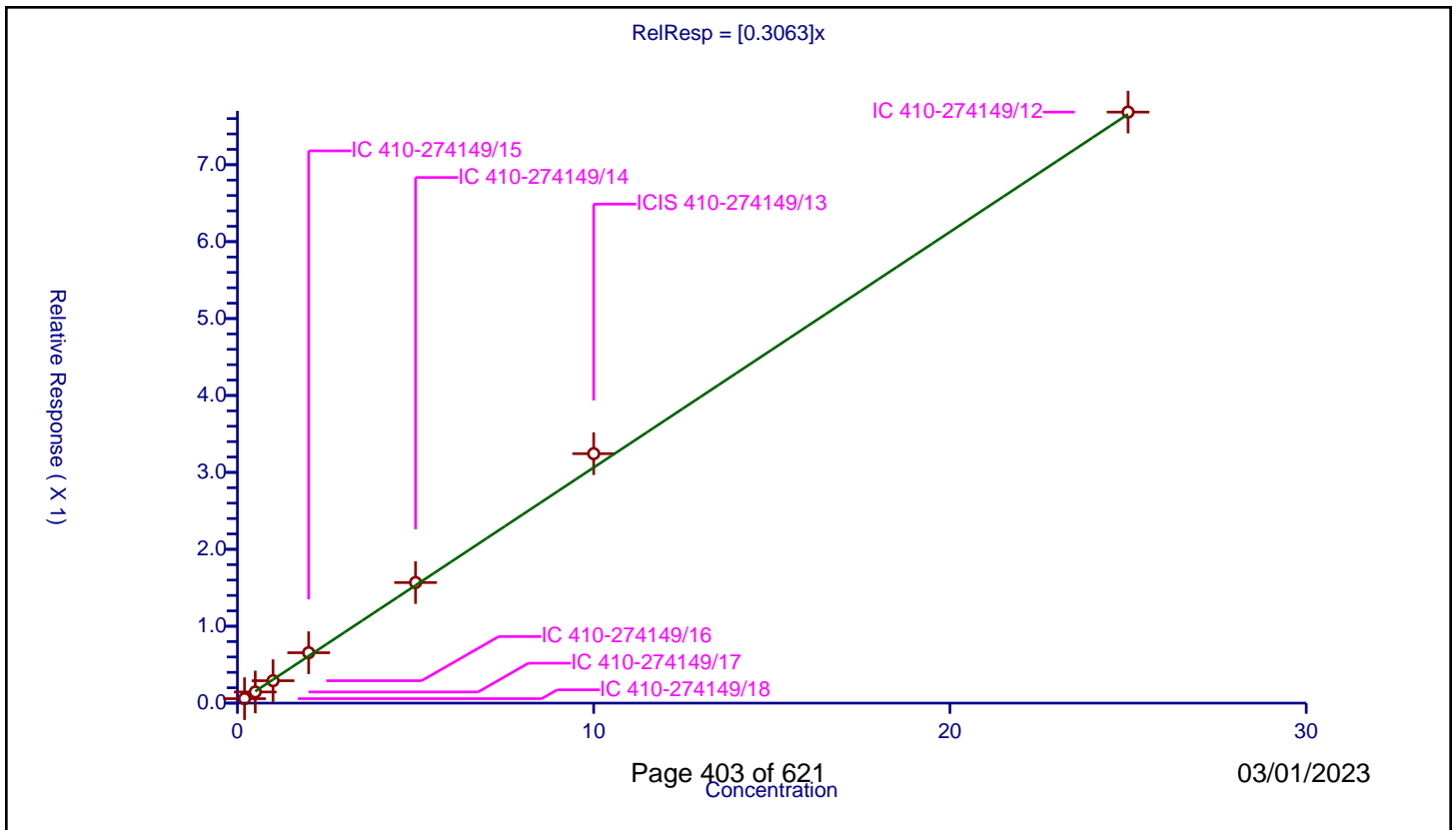
/ Dichlorodifluoromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3063

Error Coefficients	
Standard Error:	739000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.057986	10.0	2085513.0	0.289929	Y
2	IC 410-274149/17	0.5	0.144923	10.0	2031490.0	0.289846	Y
3	IC 410-274149/16	1.0	0.29154	10.0	2037557.0	0.29154	Y
4	IC 410-274149/15	2.0	0.655174	10.0	2031307.0	0.327587	Y
5	IC 410-274149/14	5.0	1.567894	10.0	2106074.0	0.313579	Y
6	ICIS 410-274149/13	10.0	3.243246	10.0	2081655.0	0.324325	Y
7	IC 410-274149/12	25.0	7.68452	10.0	2132698.0	0.307381	Y



Calibration

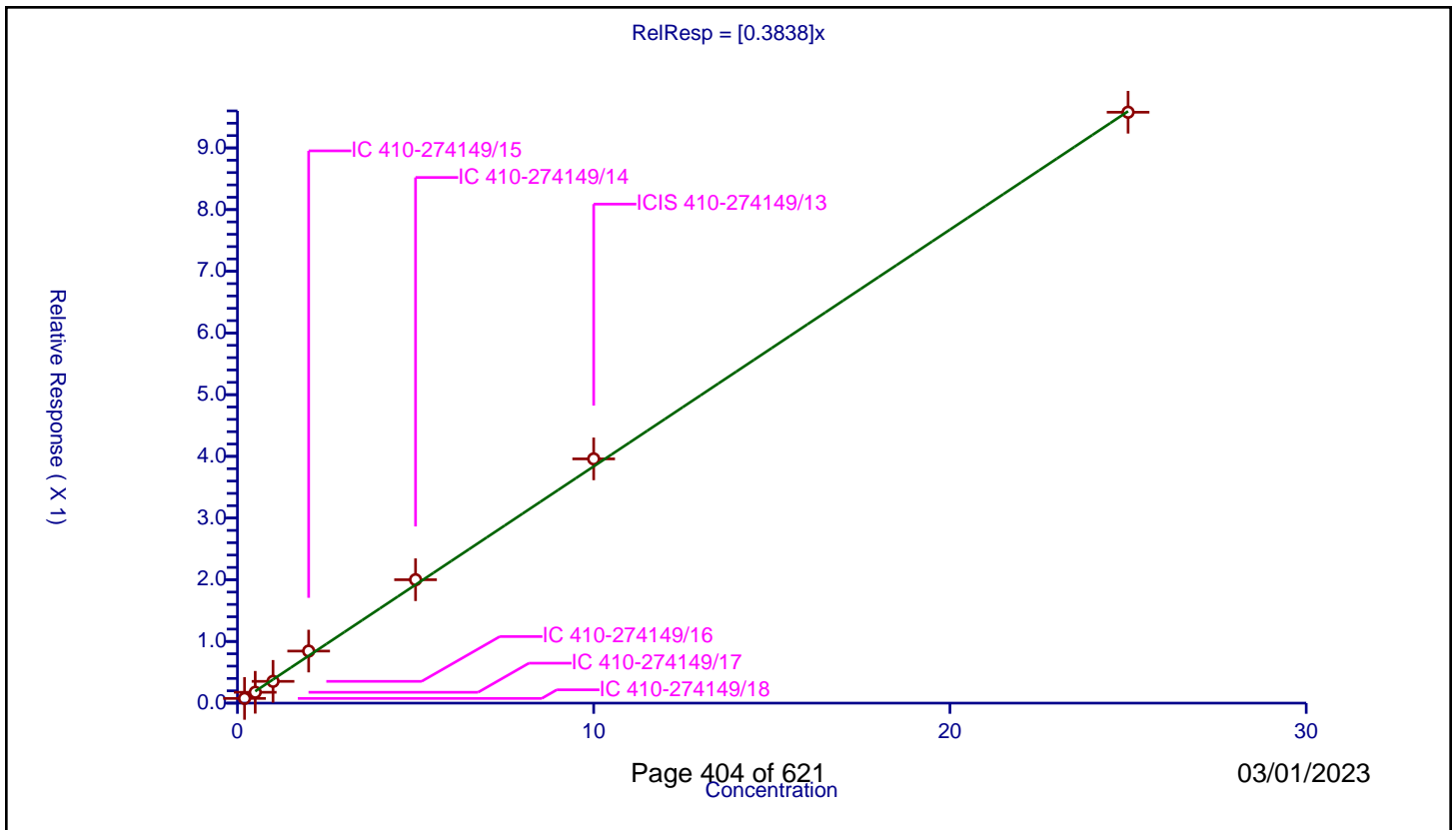
/ Chloromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3838

Error Coefficients	
Standard Error:	919000
Relative Standard Error:	6.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.076053	10.0	2085513.0	0.380266	Y
2	IC 410-274149/17	0.5	0.176048	10.0	2031490.0	0.352096	Y
3	IC 410-274149/16	1.0	0.352982	10.0	2037557.0	0.352982	Y
4	IC 410-274149/15	2.0	0.843619	10.0	2031307.0	0.42181	Y
5	IC 410-274149/14	5.0	2.000409	10.0	2106074.0	0.400082	Y
6	ICIS 410-274149/13	10.0	3.959162	10.0	2081655.0	0.395916	Y
7	IC 410-274149/12	25.0	9.578281	10.0	2132698.0	0.383131	Y



Calibration

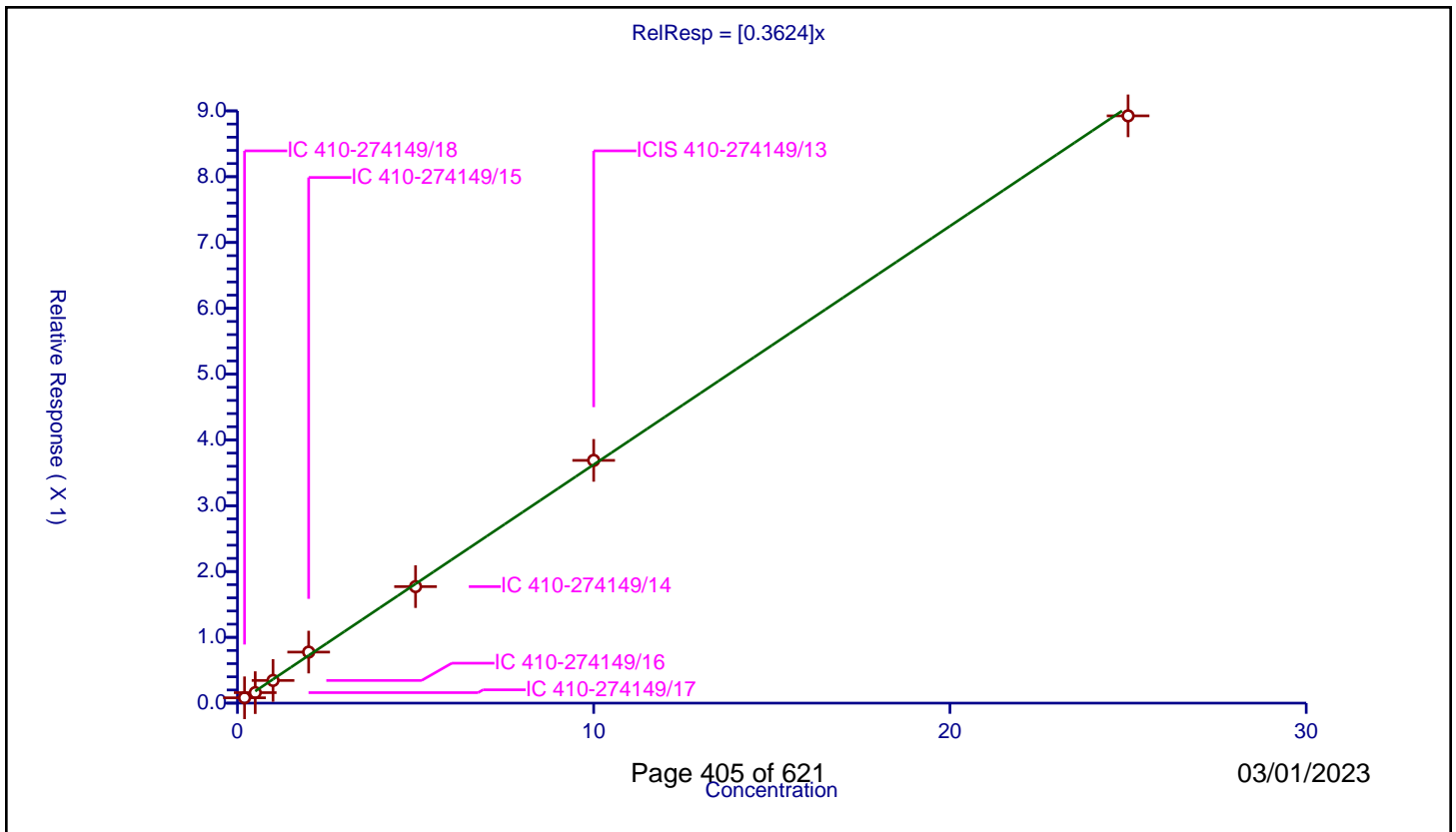
/ Butadiene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3624

Error Coefficients	
Standard Error:	855000
Relative Standard Error:	7.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.081093	10.0	2085513.0	0.405464	Y
2	IC 410-274149/17	0.5	0.159656	10.0	2031490.0	0.319312	Y
3	IC 410-274149/16	1.0	0.34452	10.0	2037557.0	0.34452	Y
4	IC 410-274149/15	2.0	0.775781	10.0	2031307.0	0.387891	Y
5	IC 410-274149/14	5.0	1.770337	10.0	2106074.0	0.354067	Y
6	ICIS 410-274149/13	10.0	3.689089	10.0	2081655.0	0.368909	Y
7	IC 410-274149/12	25.0	8.924663	10.0	2132698.0	0.356987	Y



Calibration

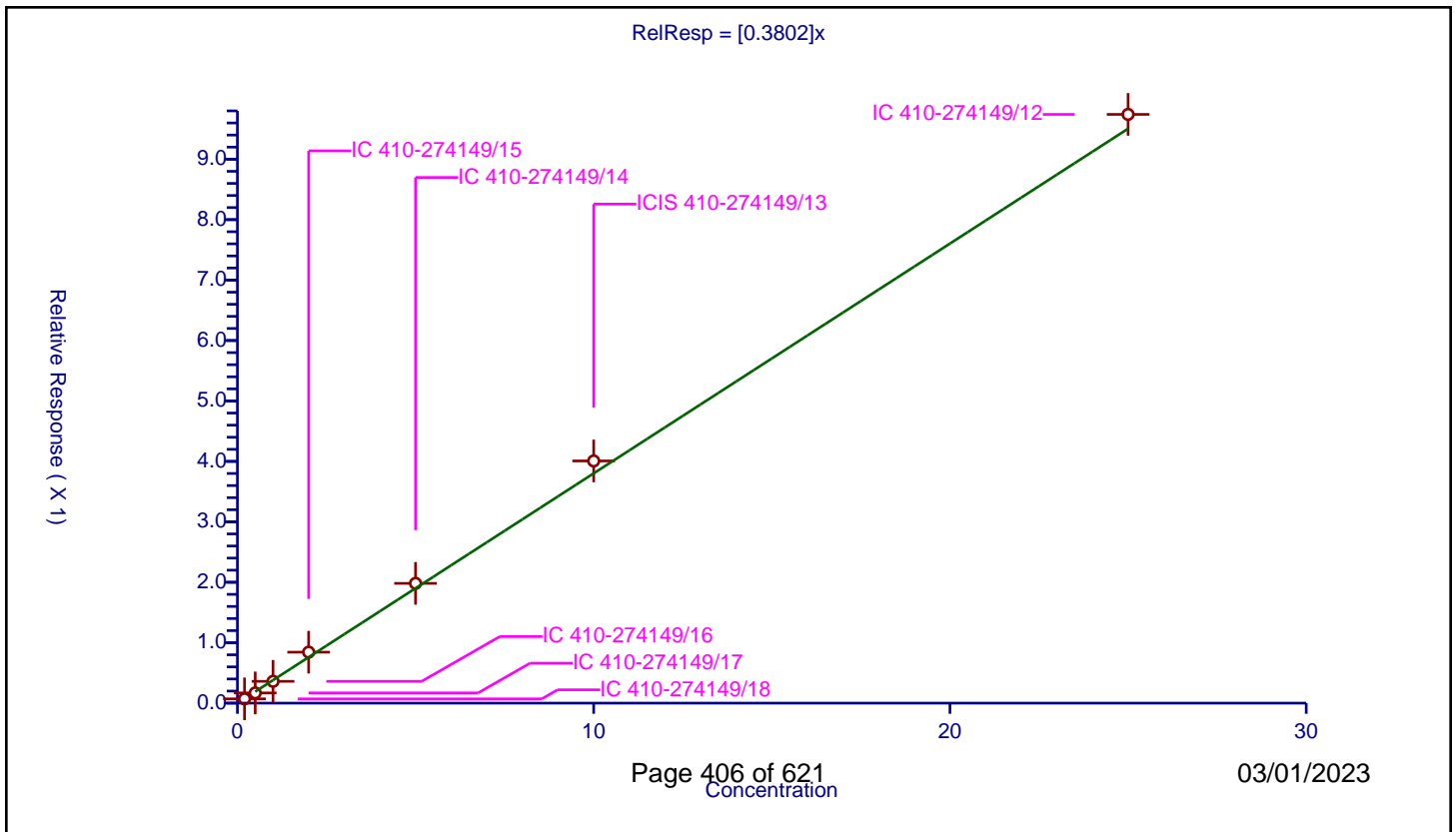
/ Vinyl chloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3802

Error Coefficients	
Standard Error:	933000
Relative Standard Error:	7.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.070884	10.0	2085513.0	0.354421	Y
2	IC 410-274149/17	0.5	0.168984	10.0	2031490.0	0.337969	Y
3	IC 410-274149/16	1.0	0.360559	10.0	2037557.0	0.360559	Y
4	IC 410-274149/15	2.0	0.843368	10.0	2031307.0	0.421684	Y
5	IC 410-274149/14	5.0	1.98182	10.0	2106074.0	0.396364	Y
6	ICIS 410-274149/13	10.0	4.007864	10.0	2081655.0	0.400786	Y
7	IC 410-274149/12	25.0	9.741675	10.0	2132698.0	0.389667	Y



Calibration

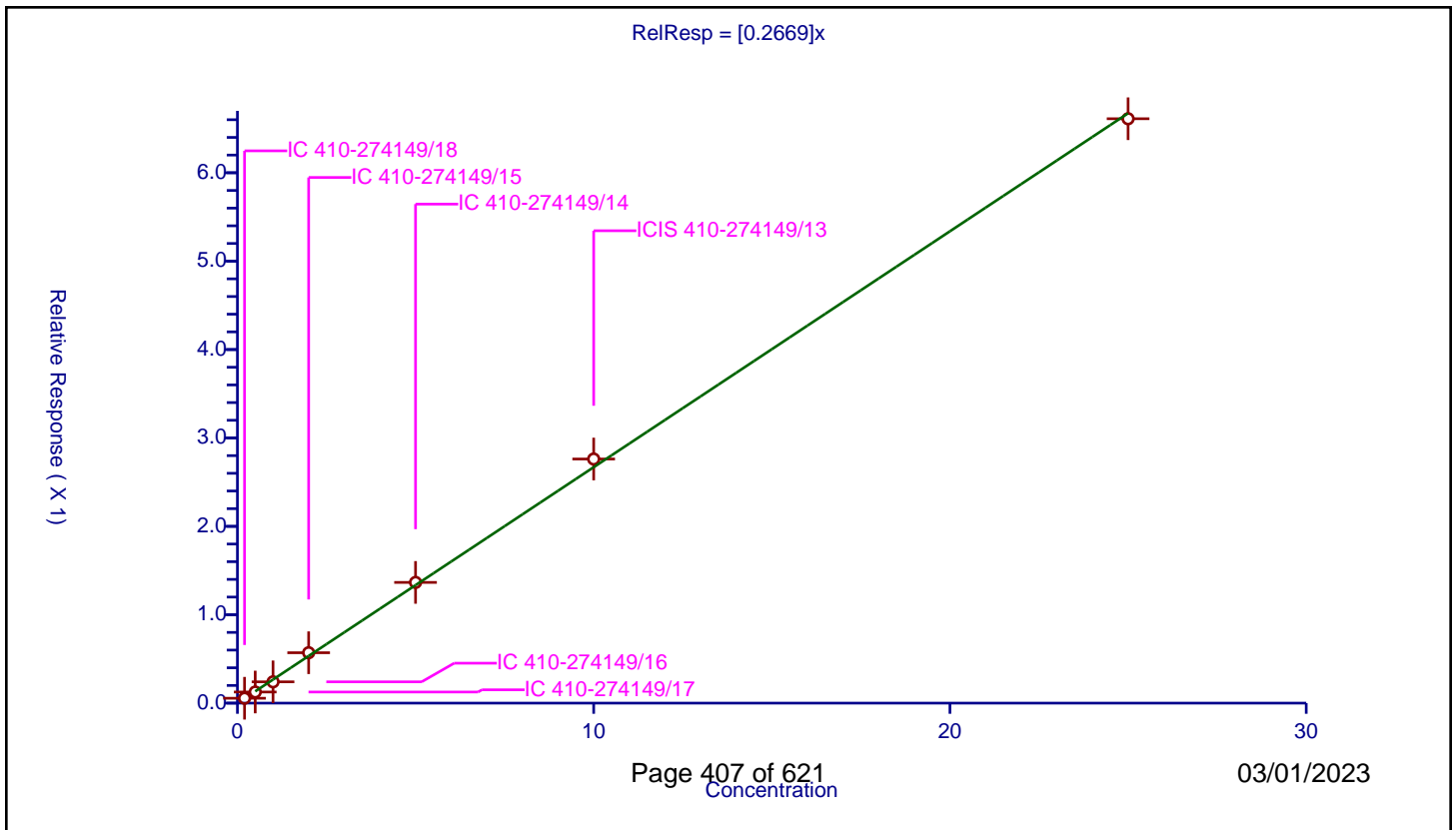
/ Bromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2669

Error Coefficients	
Standard Error:	635000
Relative Standard Error:	5.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.055358	10.0	2085513.0	0.27679	Y
2	IC 410-274149/17	0.5	0.125927	10.0	2031490.0	0.251855	Y
3	IC 410-274149/16	1.0	0.240867	10.0	2037557.0	0.240867	Y
4	IC 410-274149/15	2.0	0.570283	10.0	2031307.0	0.285142	Y
5	IC 410-274149/14	5.0	1.365579	10.0	2106074.0	0.273116	Y
6	ICIS 410-274149/13	10.0	2.761596	10.0	2081655.0	0.27616	Y
7	IC 410-274149/12	25.0	6.610969	10.0	2132698.0	0.264439	Y



Calibration

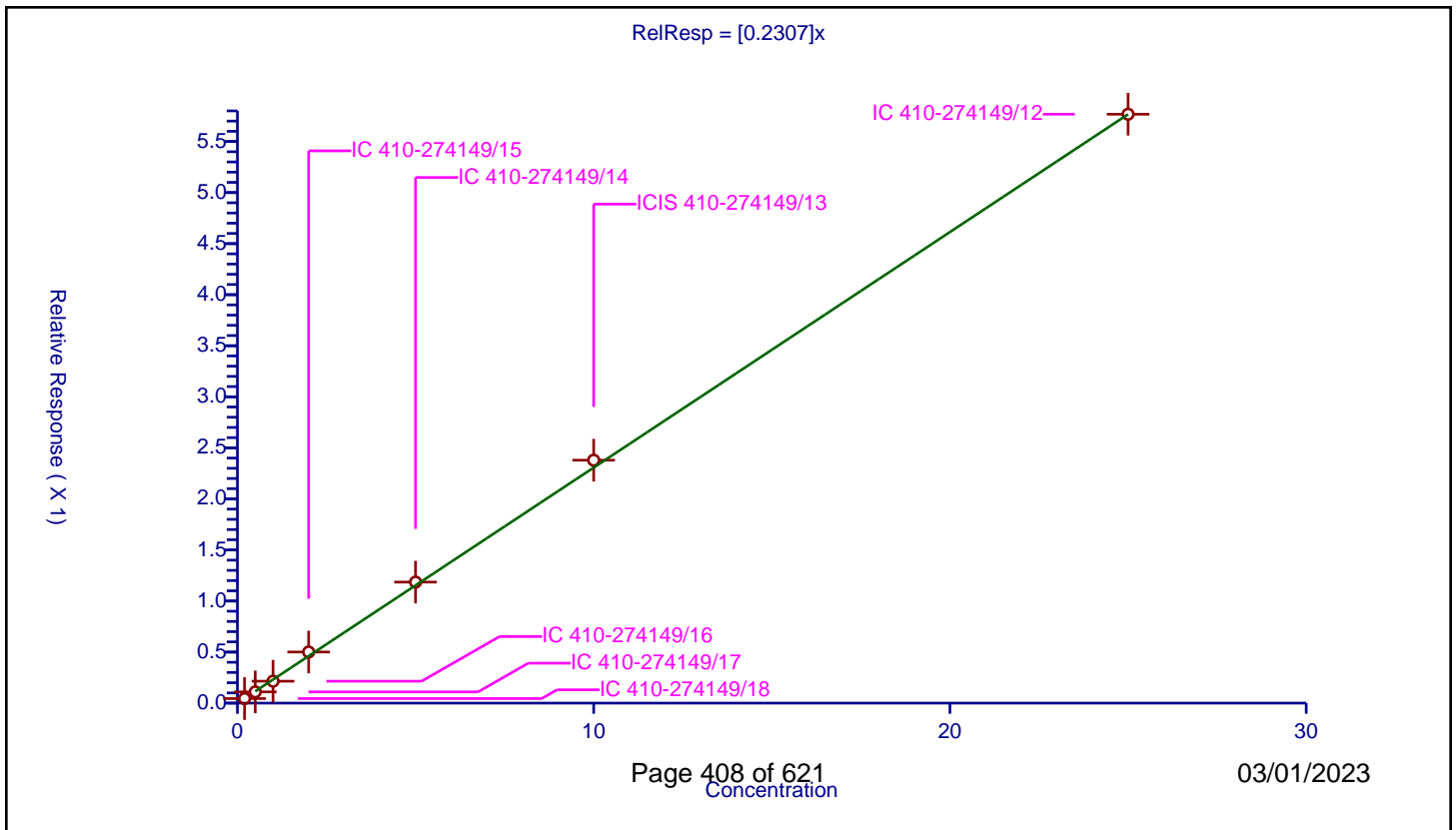
/ Chloroethane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2307

Error Coefficients	
Standard Error:	553000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.044819	10.0	2085513.0	0.224094	Y
2	IC 410-274149/17	0.5	0.10988	10.0	2031490.0	0.21976	Y
3	IC 410-274149/16	1.0	0.214806	10.0	2037557.0	0.214806	Y
4	IC 410-274149/15	2.0	0.500697	10.0	2031307.0	0.250349	Y
5	IC 410-274149/14	5.0	1.18531	10.0	2106074.0	0.237062	Y
6	ICIS 410-274149/13	10.0	2.379285	10.0	2081655.0	0.237928	Y
7	IC 410-274149/12	25.0	5.767366	10.0	2132698.0	0.230695	Y



Calibration

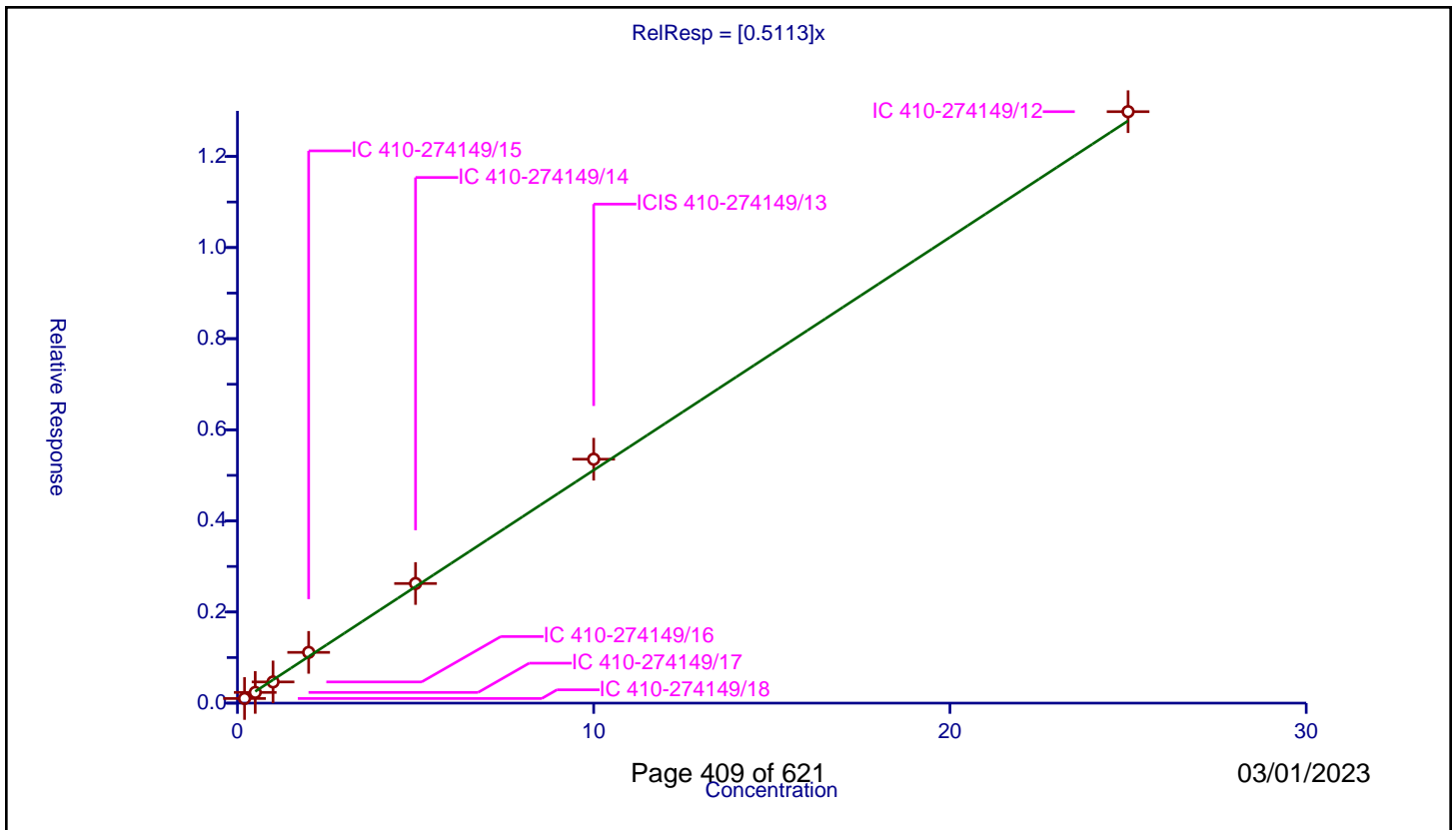
/ Dichlorofluoromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5113

Error Coefficients	
Standard Error:	1240000
Relative Standard Error:	6.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.101404	10.0	2085513.0	0.507022	Y
2	IC 410-274149/17	0.5	0.235212	10.0	2031490.0	0.470423	Y
3	IC 410-274149/16	1.0	0.464851	10.0	2037557.0	0.464851	Y
4	IC 410-274149/15	2.0	1.114032	10.0	2031307.0	0.557016	Y
5	IC 410-274149/14	5.0	2.625639	10.0	2106074.0	0.525128	Y
6	ICIS 410-274149/13	10.0	5.354173	10.0	2081655.0	0.535417	Y
7	IC 410-274149/12	25.0	12.983221	10.0	2132698.0	0.519329	Y



Calibration

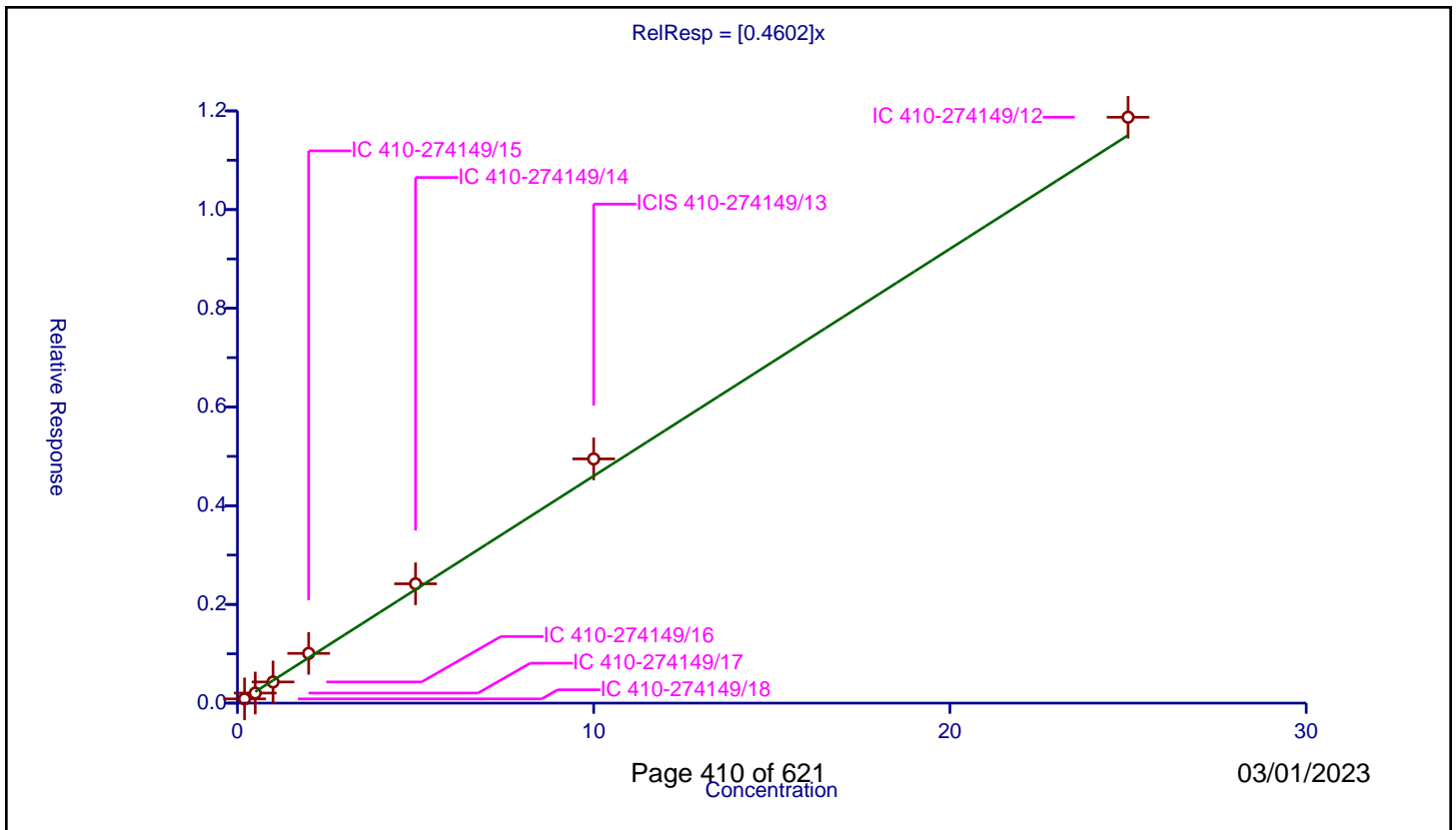
/ Trichlorofluoromethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4602

Error Coefficients	
Standard Error:	1140000
Relative Standard Error:	8.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.085332	10.0	2085513.0	0.426658	Y
2	IC 410-274149/17	0.5	0.204338	10.0	2031490.0	0.408675	Y
3	IC 410-274149/16	1.0	0.428999	10.0	2037557.0	0.428999	Y
4	IC 410-274149/15	2.0	1.007947	10.0	2031307.0	0.503974	Y
5	IC 410-274149/14	5.0	2.417921	10.0	2106074.0	0.483584	Y
6	ICIS 410-274149/13	10.0	4.948077	10.0	2081655.0	0.494808	Y
7	IC 410-274149/12	25.0	11.872004	10.0	2132698.0	0.47488	Y



Calibration

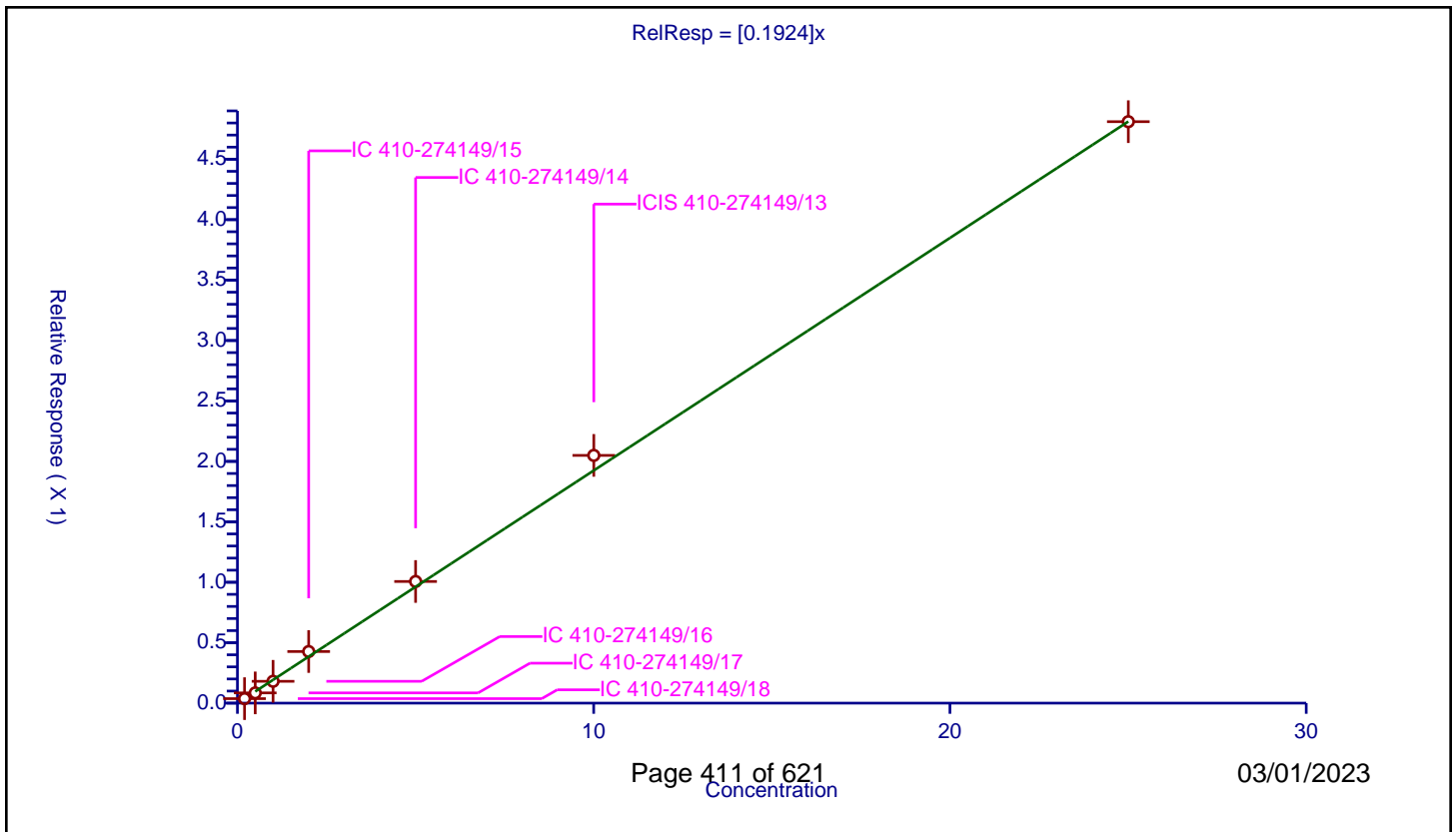
/ Ethyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1924

Error Coefficients	
Standard Error:	463000
Relative Standard Error:	7.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.200057	0.037027	10.0	2085513.0	0.185081	Y
2	IC 410-274149/17	0.500143	0.08482	10.0	2031490.0	0.169591	Y
3	IC 410-274149/16	1.000286	0.18051	10.0	2037557.0	0.180459	Y
4	IC 410-274149/15	2.000572	0.426873	10.0	2031307.0	0.213375	Y
5	IC 410-274149/14	5.00143	1.006536	10.0	2106074.0	0.20125	Y
6	ICIS 410-274149/13	10.00286	2.049581	10.0	2081655.0	0.204899	Y
7	IC 410-274149/12	25.00715	4.81069	10.0	2132698.0	0.192373	Y



Calibration

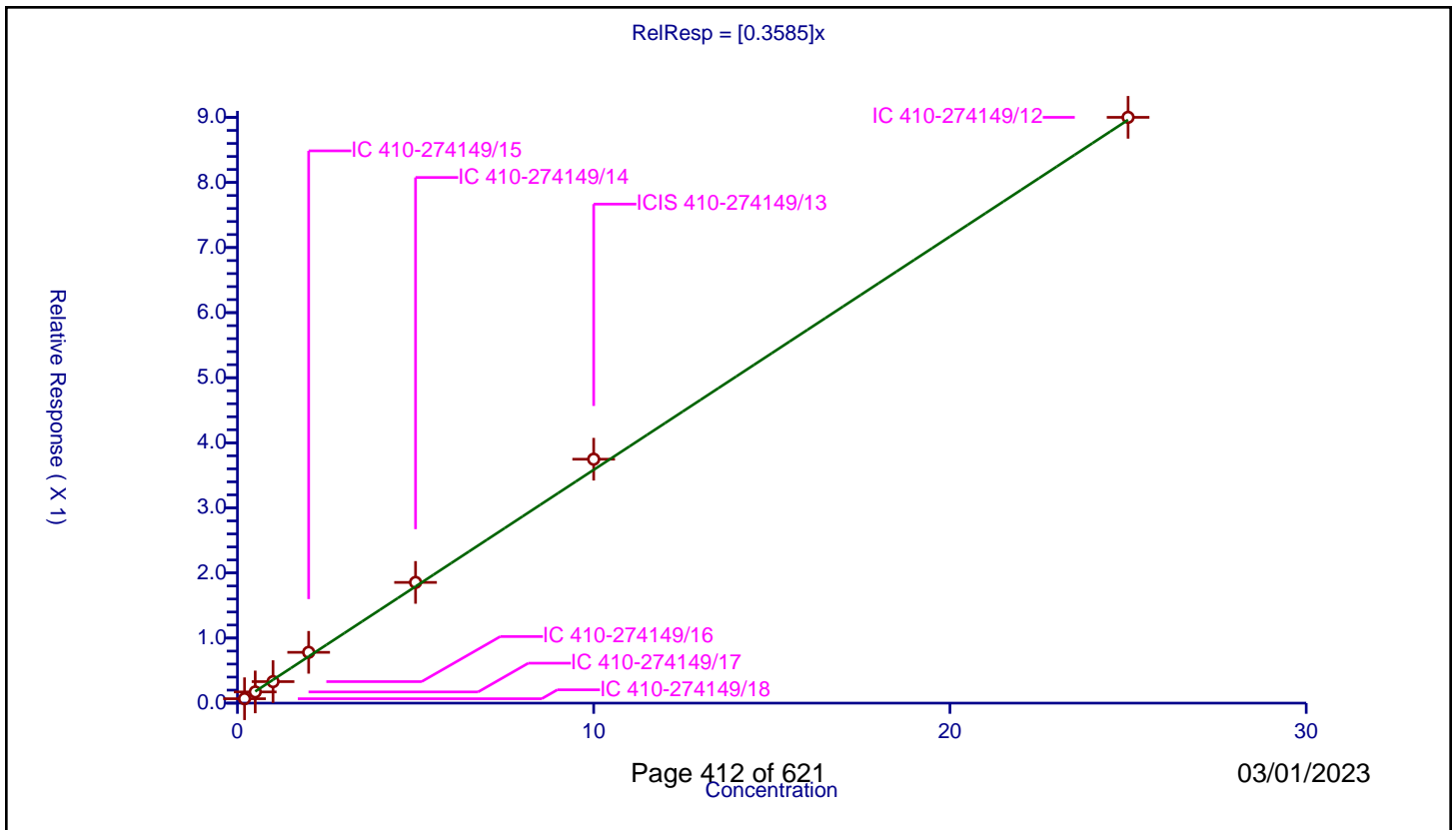
/ 1,2-Dichloro-1,1,2-trifluoroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3585

Error Coefficients	
Standard Error:	864000
Relative Standard Error:	6.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.067705	10.0	2085513.0	0.338526	Y
2	IC 410-274149/17	0.5	0.172169	10.0	2031490.0	0.344338	Y
3	IC 410-274149/16	1.0	0.330484	10.0	2037557.0	0.330484	Y
4	IC 410-274149/15	2.0	0.780497	10.0	2031307.0	0.390249	Y
5	IC 410-274149/14	5.0	1.854968	10.0	2106074.0	0.370994	Y
6	ICIS 410-274149/13	10.0	3.748075	10.0	2081655.0	0.374808	Y
7	IC 410-274149/12	25.0	9.00096	10.0	2132698.0	0.360038	Y



Calibration

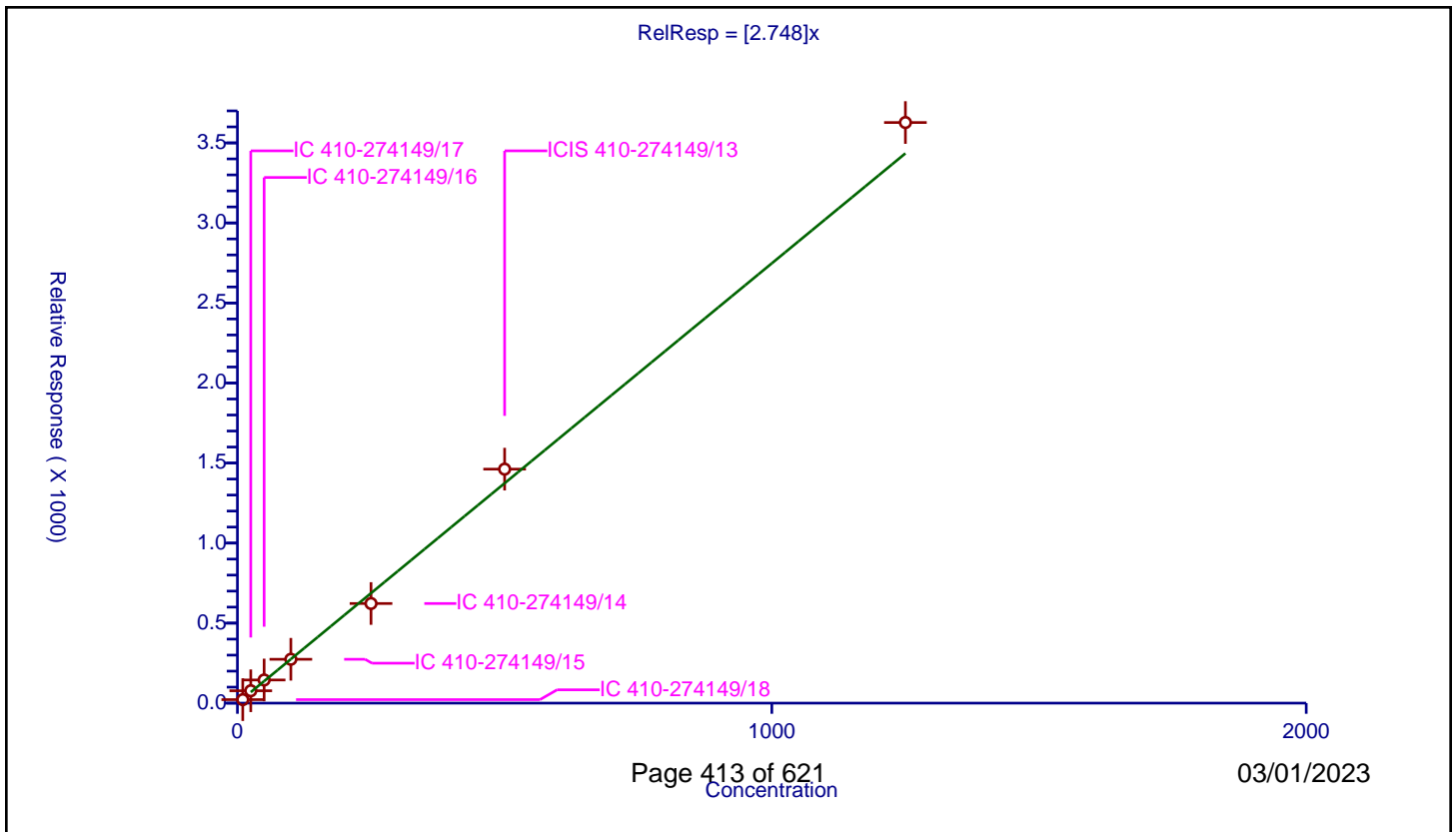
/ Acrolein

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.748

Error Coefficients	
Standard Error:	3180000
Relative Standard Error:	11.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	10.000019	21.9246	50.0	127772.0	2.192456	Y
2	IC 410-274149/17	25.000046	77.33097	50.0	81790.0	3.093233	Y
3	IC 410-274149/16	50.000093	144.617876	50.0	87066.0	2.892352	Y
4	IC 410-274149/15	100.000185	274.027753	50.0	107663.0	2.740272	Y
5	IC 410-274149/14	250.000463	622.425708	50.0	120975.0	2.489698	Y
6	ICIS 410-274149/13	500.000926	1461.841768	50.0	101370.0	2.923678	Y
7	IC 410-274149/12	1250.002314	3627.277049	50.0	96770.0	2.901816	Y



Calibration

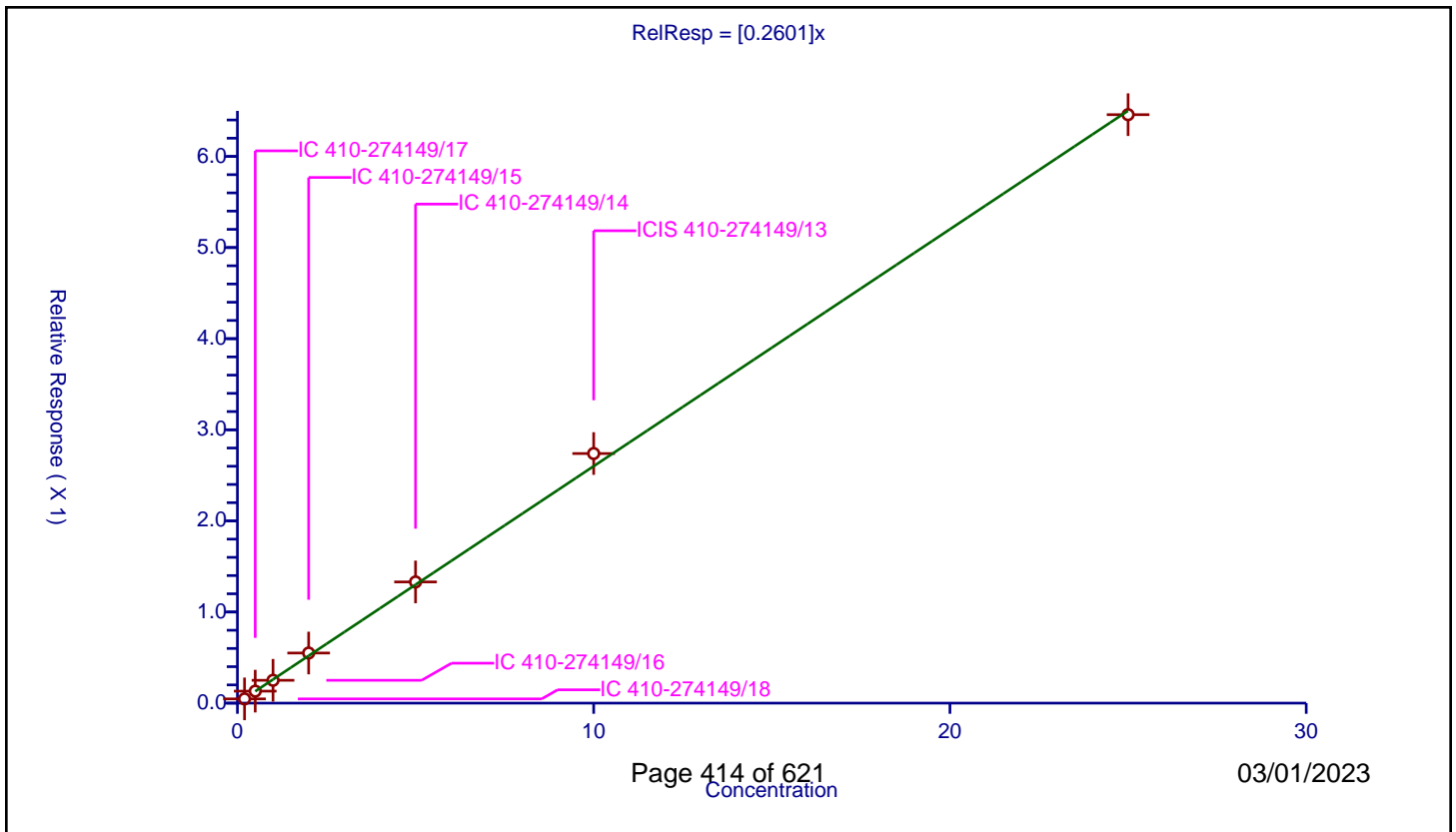
/ 1,1-Dichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2601

Error Coefficients	
Standard Error:	621000
Relative Standard Error:	5.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.046578	10.0	2085513.0	0.232892	Y
2	IC 410-274149/17	0.5	0.131815	10.0	2031490.0	0.263629	Y
3	IC 410-274149/16	1.0	0.25053	10.0	2037557.0	0.25053	Y
4	IC 410-274149/15	2.0	0.549971	10.0	2031307.0	0.274986	Y
5	IC 410-274149/14	5.0	1.330167	10.0	2106074.0	0.266033	Y
6	ICIS 410-274149/13	10.0	2.739513	10.0	2081655.0	0.273951	Y
7	IC 410-274149/12	25.0	6.458617	10.0	2132698.0	0.258345	Y



Calibration

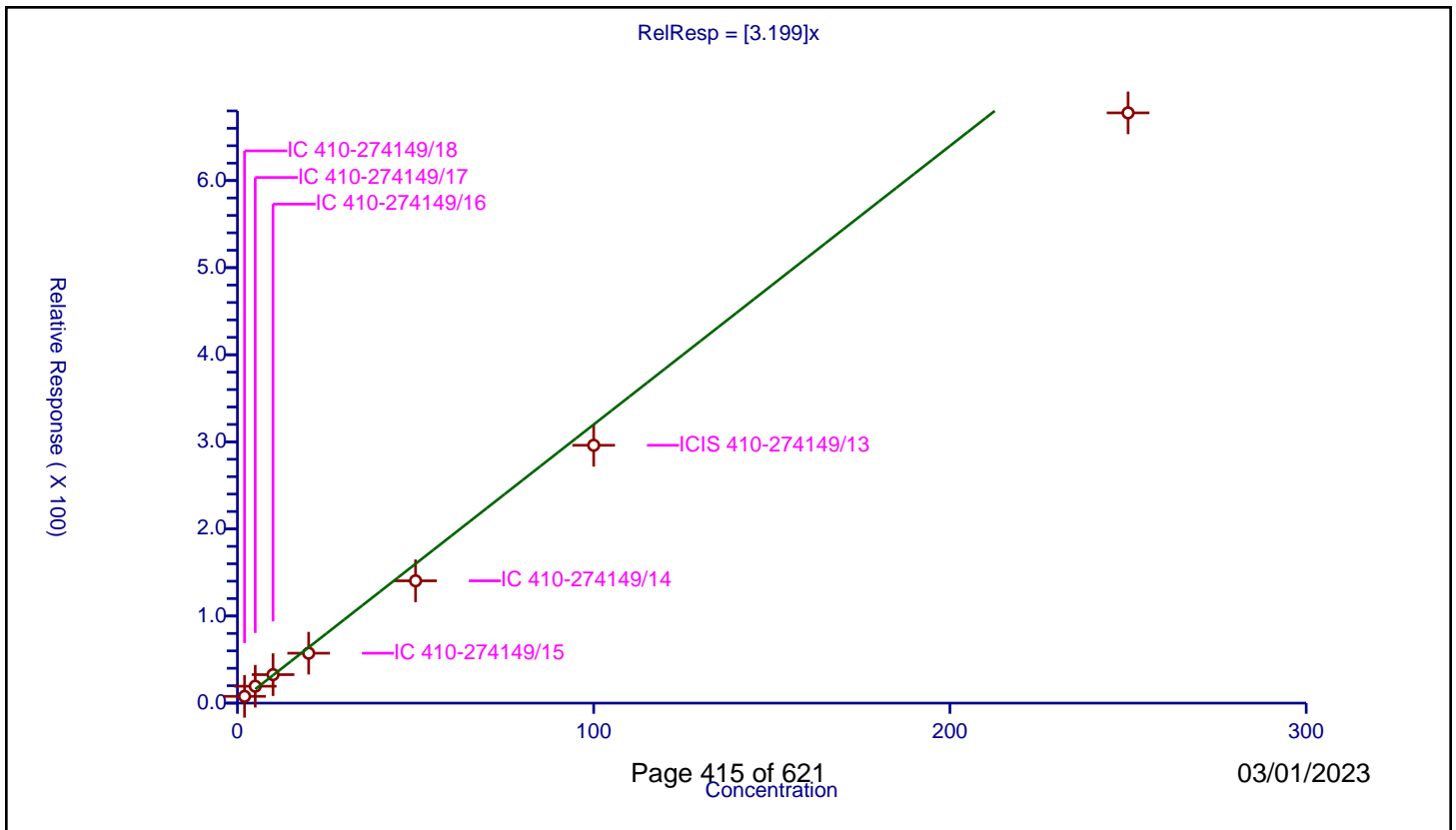
/ Acetone

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.199

Error Coefficients	
Standard Error:	607000
Relative Standard Error:	15.7
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.960

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	2.0	7.784178	50.0	127772.0	3.892089	Y
2	IC 410-274149/17	5.0	19.409463	50.0	81790.0	3.881893	Y
3	IC 410-274149/16	10.0	32.72058	50.0	87066.0	3.272058	Y
4	IC 410-274149/15	20.0	57.308918	50.0	107663.0	2.865446	Y
5	IC 410-274149/14	50.0	140.437694	50.0	120975.0	2.808754	Y
6	ICIS 410-274149/13	100.0	296.051593	50.0	101370.0	2.960516	Y
7	IC 410-274149/12	250.0	677.725018	50.0	96770.0	2.7109	Y



Calibration

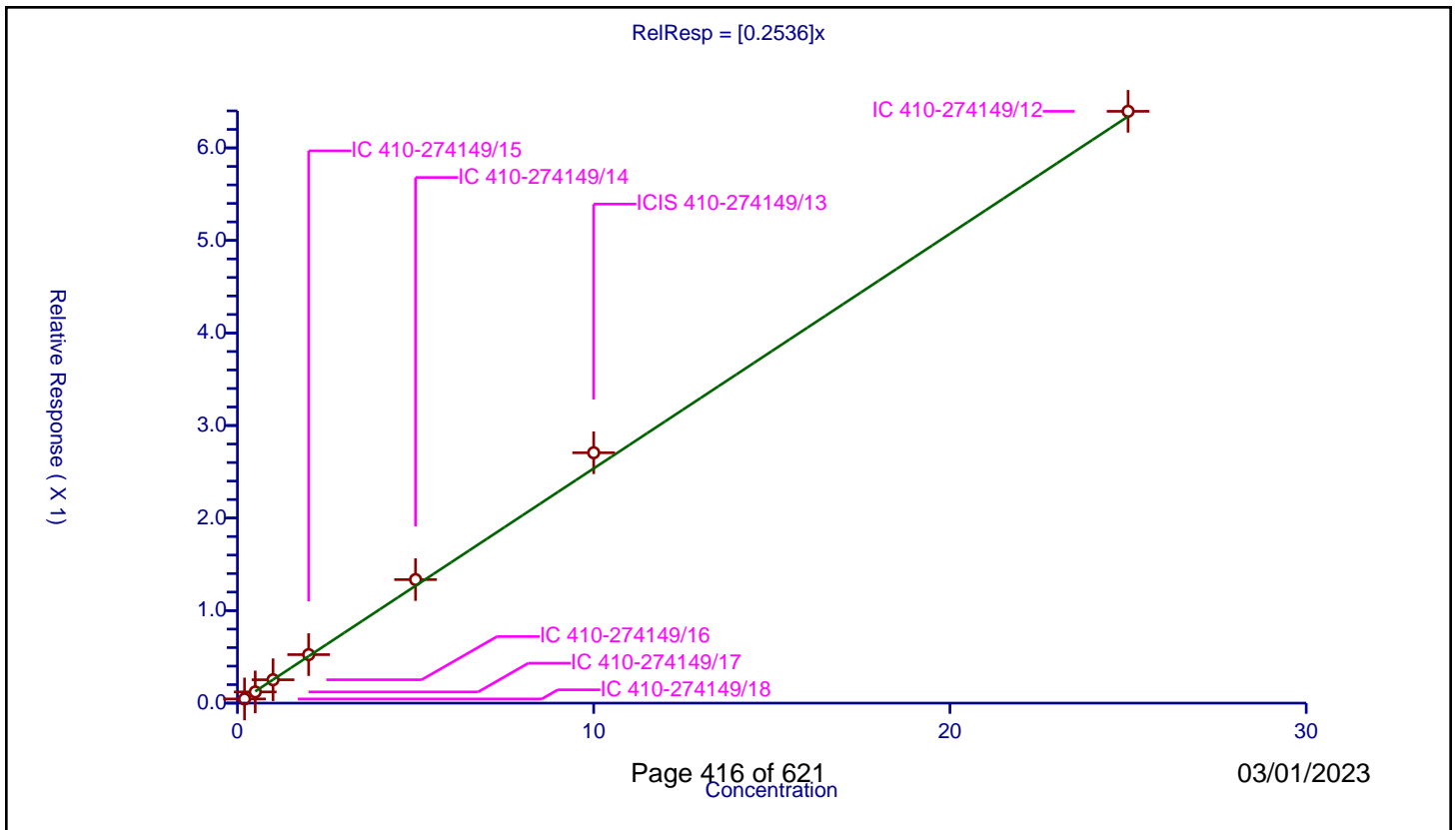
/ 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2536

Error Coefficients	
Standard Error:	615000
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.045001	10.0	2085513.0	0.225005	Y
2	IC 410-274149/17	0.5	0.121098	10.0	2031490.0	0.242197	Y
3	IC 410-274149/16	1.0	0.252503	10.0	2037557.0	0.252503	Y
4	IC 410-274149/15	2.0	0.524239	10.0	2031307.0	0.262119	Y
5	IC 410-274149/14	5.0	1.33502	10.0	2106074.0	0.267004	Y
6	ICIS 410-274149/13	10.0	2.705953	10.0	2081655.0	0.270595	Y
7	IC 410-274149/12	25.0	6.395345	10.0	2132698.0	0.255814	Y



Calibration

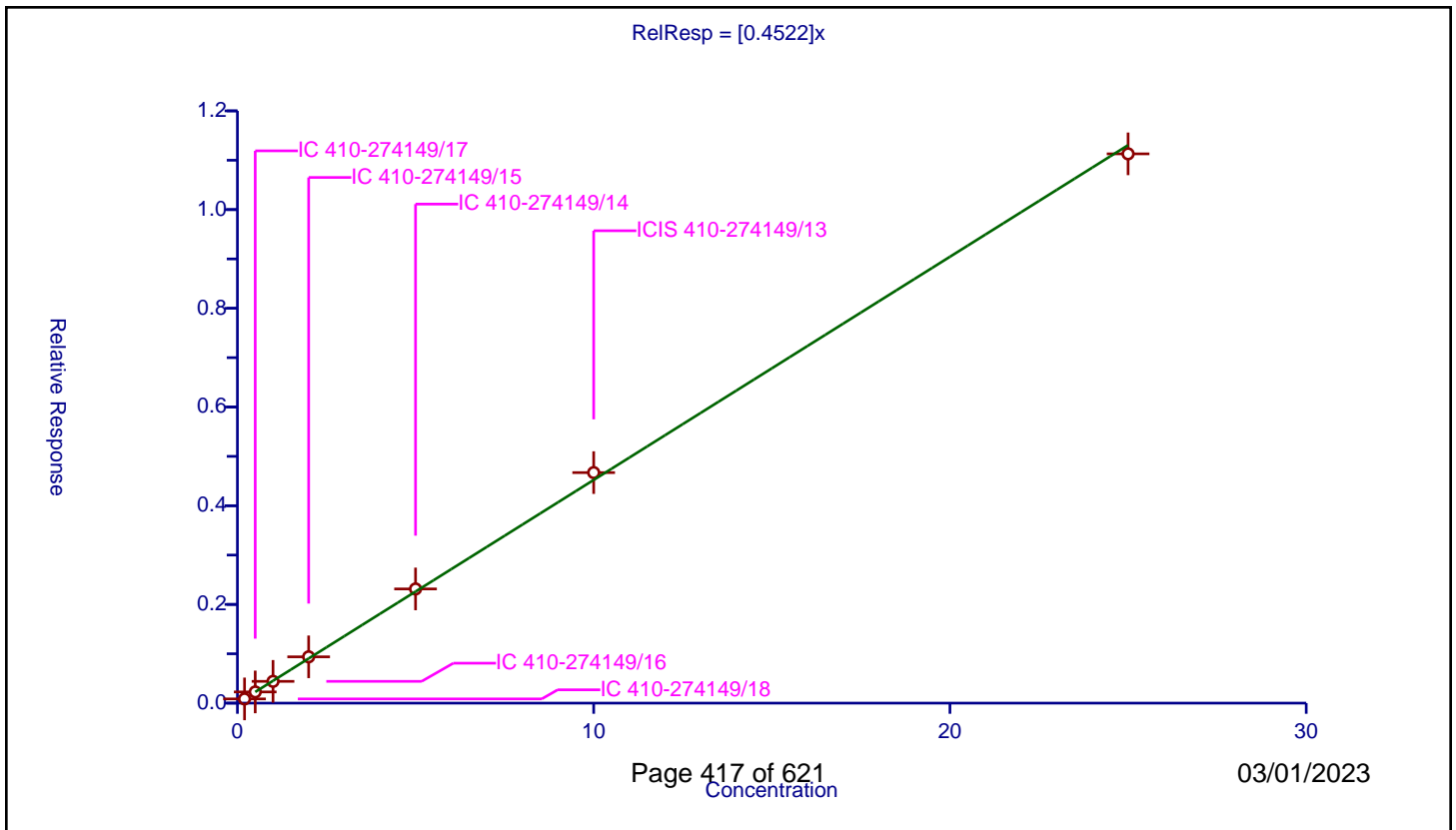
/ Iodomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4522

Error Coefficients	
Standard Error:	1070000
Relative Standard Error:	3.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.085264	10.0	2085513.0	0.426322	Y
2	IC 410-274149/17	0.5	0.226873	10.0	2031490.0	0.453746	Y
3	IC 410-274149/16	1.0	0.441382	10.0	2037557.0	0.441382	Y
4	IC 410-274149/15	2.0	0.938263	10.0	2031307.0	0.469131	Y
5	IC 410-274149/14	5.0	2.313774	10.0	2106074.0	0.462755	Y
6	ICIS 410-274149/13	10.0	4.670822	10.0	2081655.0	0.467082	Y
7	IC 410-274149/12	25.0	11.129565	10.0	2132698.0	0.445183	Y



Calibration

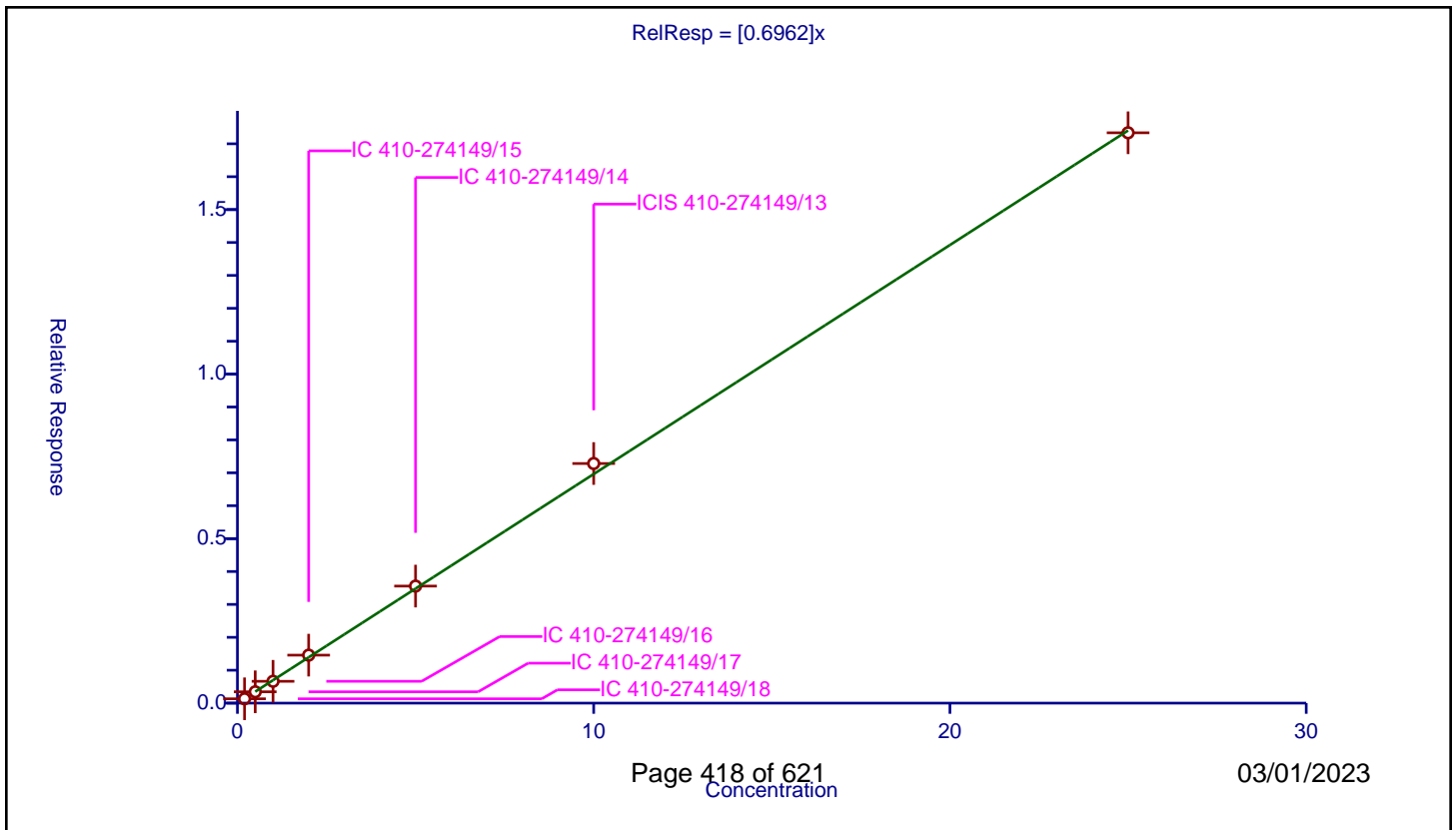
/ Carbon disulfide

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6962

Error Coefficients	
Standard Error:	1670000
Relative Standard Error:	4.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.131833	10.0	2085513.0	0.659166	Y
2	IC 410-274149/17	0.5	0.344058	10.0	2031490.0	0.688116	Y
3	IC 410-274149/16	1.0	0.663633	10.0	2037557.0	0.663633	Y
4	IC 410-274149/15	2.0	1.458445	10.0	2031307.0	0.729223	Y
5	IC 410-274149/14	5.0	3.557373	10.0	2106074.0	0.711475	Y
6	ICIS 410-274149/13	10.0	7.282432	10.0	2081655.0	0.728243	Y
7	IC 410-274149/12	25.0	17.334447	10.0	2132698.0	0.693378	Y



Calibration

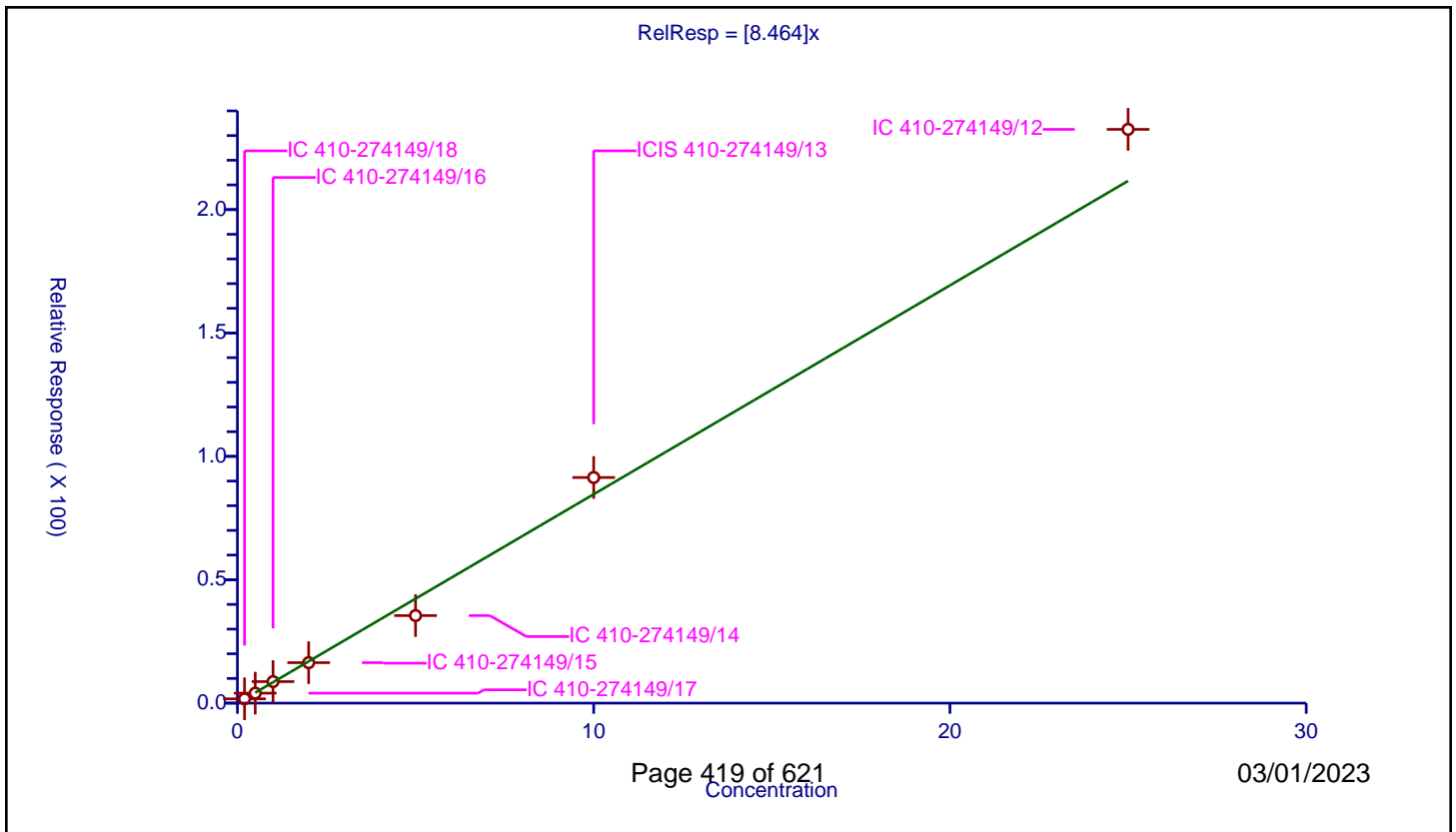
/ Methyl acetate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	8.464

Error Coefficients	
Standard Error:	202000
Relative Standard Error:	8.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	1.740992	50.0	127772.0	8.704959	Y
2	IC 410-274149/17	0.5	4.03778	50.0	81790.0	8.075559	Y
3	IC 410-274149/16	1.0	8.729584	50.0	87066.0	8.729584	Y
4	IC 410-274149/15	2.0	16.401178	50.0	107663.0	8.200589	Y
5	IC 410-274149/14	5.0	35.484191	50.0	120975.0	7.096838	Y
6	ICIS 410-274149/13	10.0	91.432376	50.0	101370.0	9.143238	Y
7	IC 410-274149/12	25.0	232.511626	50.0	96770.0	9.300465	Y



Calibration

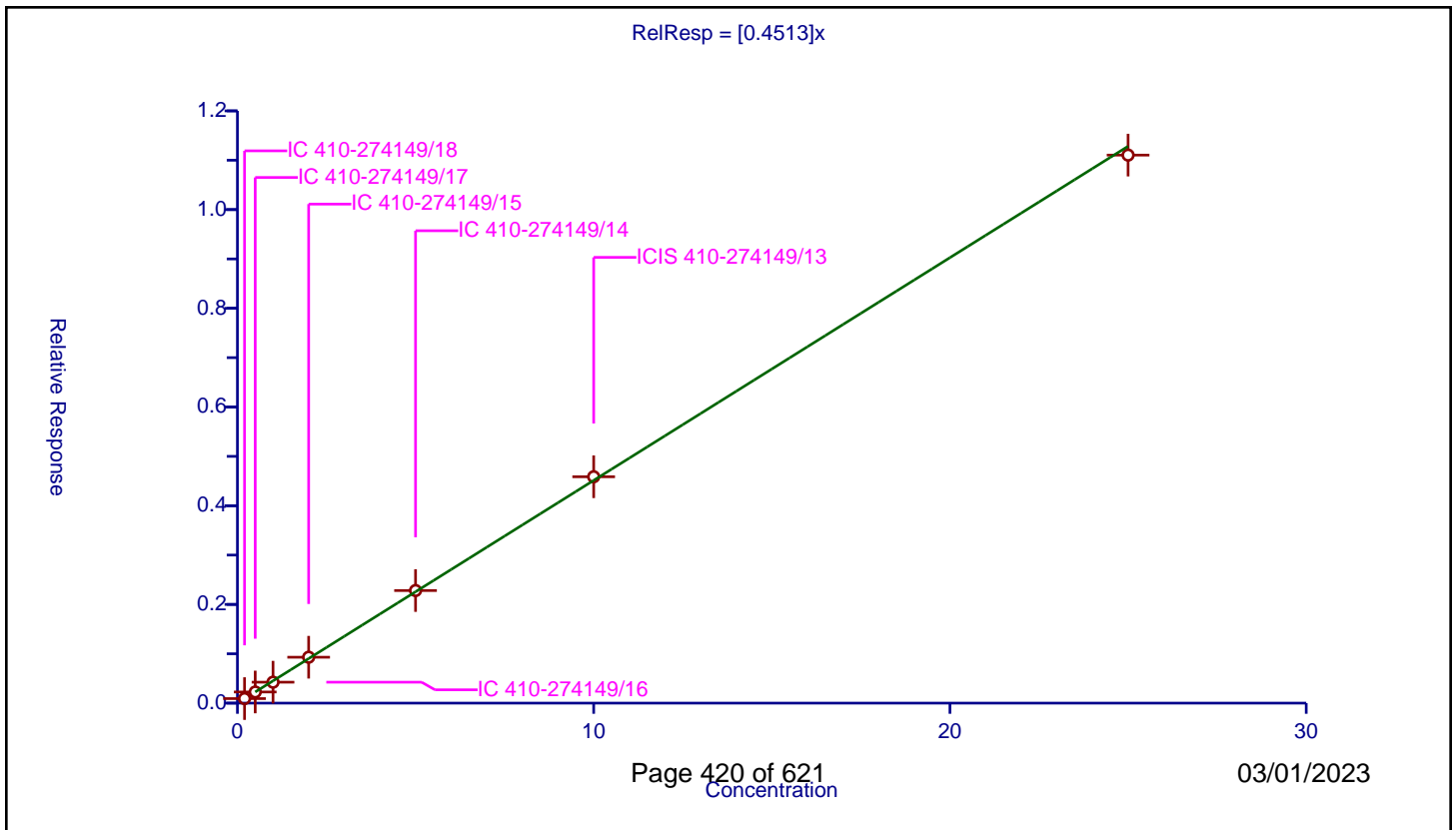
/ 3-Chloro-1-propene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4513

Error Coefficients	
Standard Error:	1060000
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.091771	10.0	2085513.0	0.458856	Y
2	IC 410-274149/17	0.5	0.225716	10.0	2031490.0	0.451432	Y
3	IC 410-274149/16	1.0	0.424597	10.0	2037557.0	0.424597	Y
4	IC 410-274149/15	2.0	0.930342	10.0	2031307.0	0.465171	Y
5	IC 410-274149/14	5.0	2.281373	10.0	2106074.0	0.456275	Y
6	ICIS 410-274149/13	10.0	4.586994	10.0	2081655.0	0.458699	Y
7	IC 410-274149/12	25.0	11.103977	10.0	2132698.0	0.444159	Y



Calibration

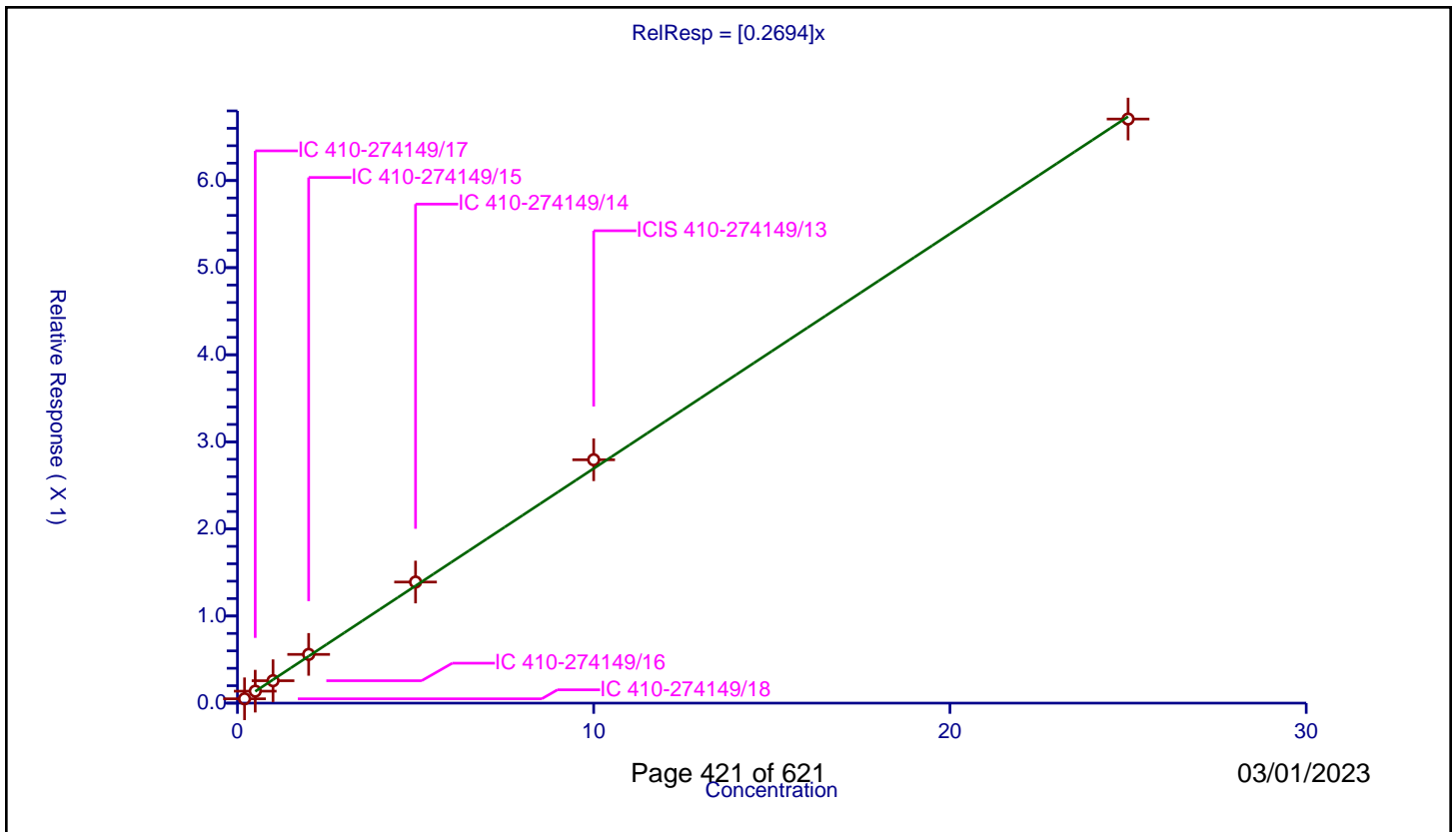
/ Methylene Chloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2694

Error Coefficients	
Standard Error:	644000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.049628	10.0	2085513.0	0.24814	Y
2	IC 410-274149/17	0.5	0.137436	10.0	2031490.0	0.274872	Y
3	IC 410-274149/16	1.0	0.25722	10.0	2037557.0	0.25722	Y
4	IC 410-274149/15	2.0	0.559448	10.0	2031307.0	0.279724	Y
5	IC 410-274149/14	5.0	1.390241	10.0	2106074.0	0.278048	Y
6	ICIS 410-274149/13	10.0	2.794233	10.0	2081655.0	0.279423	Y
7	IC 410-274149/12	25.0	6.706378	10.0	2132698.0	0.268255	Y



Calibration

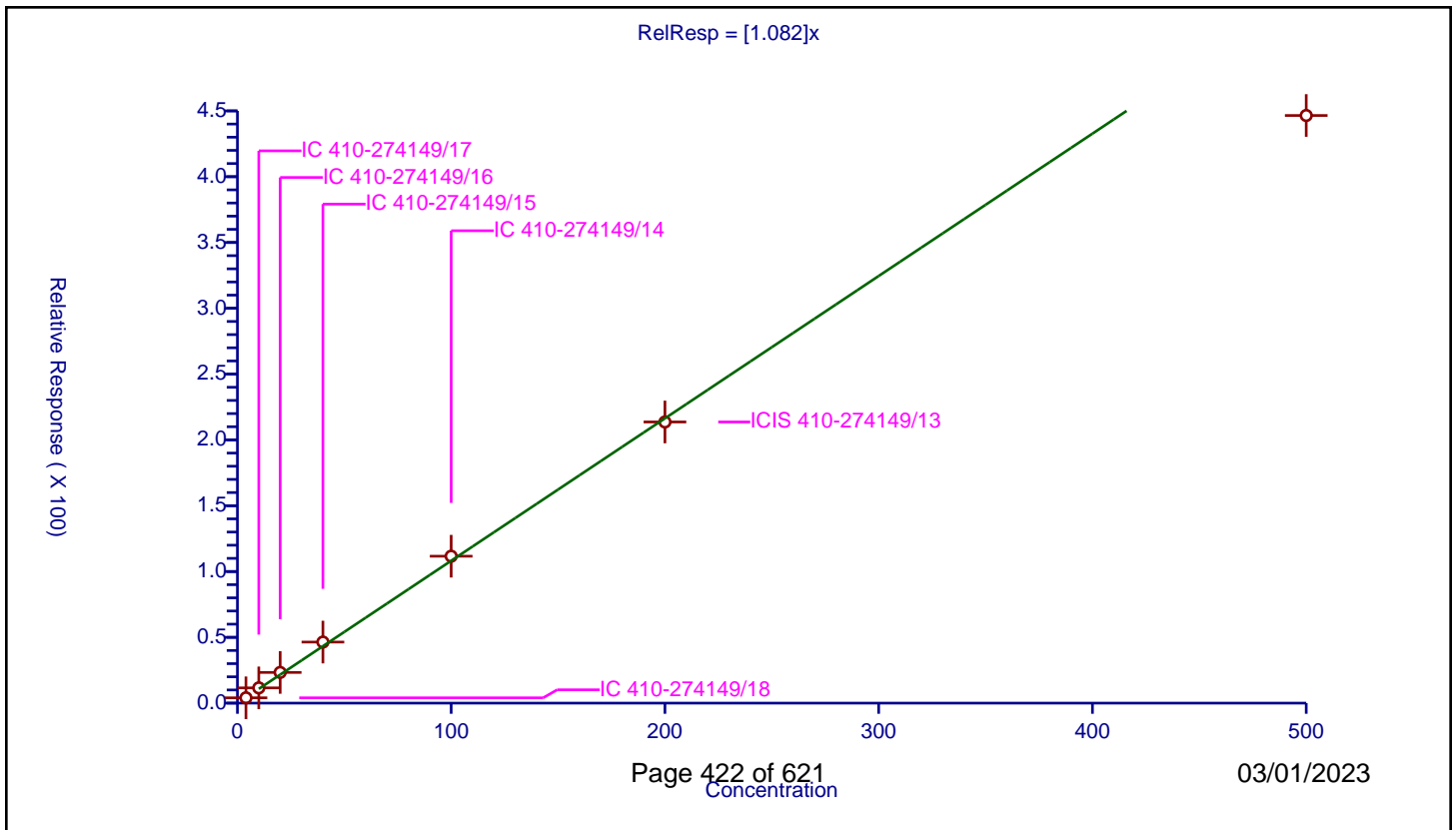
/ 2-Methyl-2-propanol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.082

Error Coefficients	
Standard Error:	412000
Relative Standard Error:	9.4
Correlation Coefficient:	0.982
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	4.0	4.038443	50.0	127772.0	1.009611	Y
2	IC 410-274149/17	10.0	11.594938	50.0	81790.0	1.159494	Y
3	IC 410-274149/16	20.0	23.32426	50.0	87066.0	1.166213	Y
4	IC 410-274149/15	40.0	46.395233	50.0	107663.0	1.159881	Y
5	IC 410-274149/14	100.0	111.628849	50.0	120975.0	1.116288	Y
6	ICIS 410-274149/13	200.0	213.632732	50.0	101370.0	1.068164	Y
7	IC 410-274149/12	500.0	446.490131	50.0	96770.0	0.89298	Y



Calibration

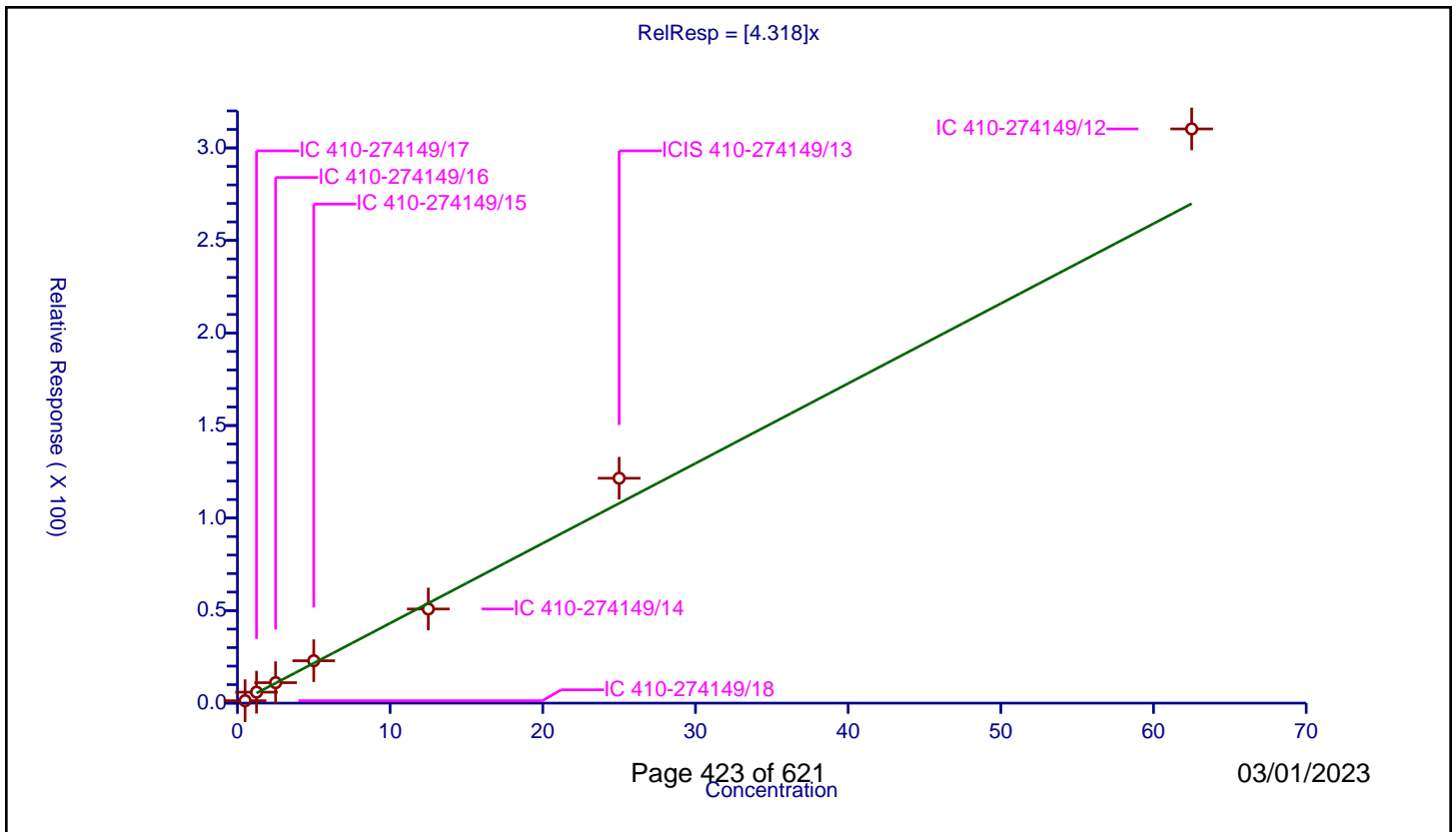
/ Acrylonitrile

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	4.318

Error Coefficients	
Standard Error:	270000
Relative Standard Error:	18.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.961

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.5	1.297624	50.0	127772.0	2.595248	Y
2	IC 410-274149/17	1.25	5.924318	50.0	81790.0	4.739455	Y
3	IC 410-274149/16	2.5	11.051386	50.0	87066.0	4.420555	Y
4	IC 410-274149/15	5.0	22.895981	50.0	107663.0	4.579196	Y
5	IC 410-274149/14	12.5	50.846043	50.0	120975.0	4.067683	Y
6	ICIS 410-274149/13	25.0	121.523133	50.0	101370.0	4.860925	Y
7	IC 410-274149/12	62.5	310.261961	50.0	96770.0	4.964191	Y



Calibration

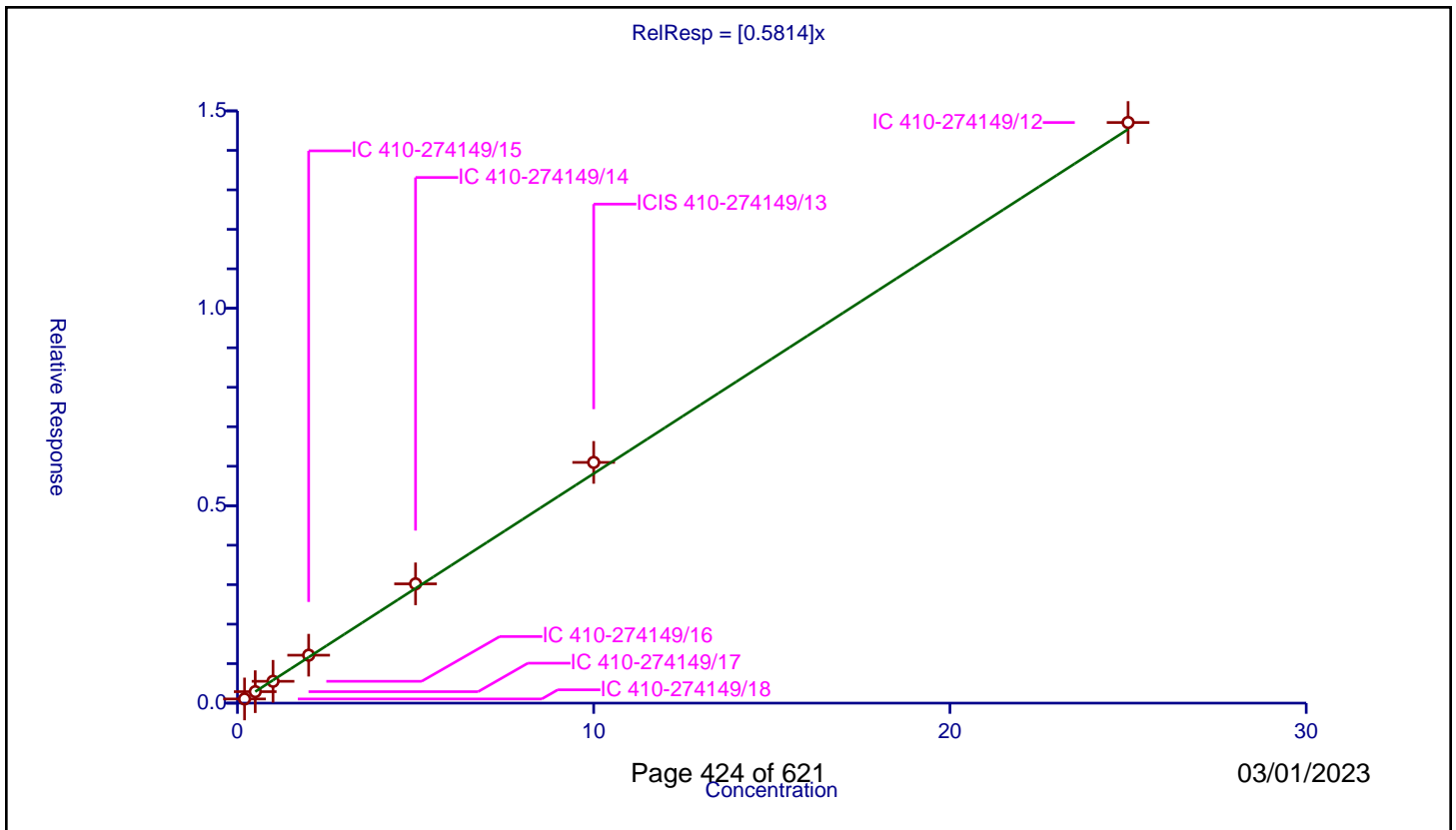
/ Methyl tert-butyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5814

Error Coefficients	
Standard Error:	1410000
Relative Standard Error:	5.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.105327	10.0	2085513.0	0.526633	Y
2	IC 410-274149/17	0.5	0.290358	10.0	2031490.0	0.580717	Y
3	IC 410-274149/16	1.0	0.553089	10.0	2037557.0	0.553089	Y
4	IC 410-274149/15	2.0	1.213893	10.0	2031307.0	0.606947	Y
5	IC 410-274149/14	5.0	3.021371	10.0	2106074.0	0.604274	Y
6	ICIS 410-274149/13	10.0	6.097322	10.0	2081655.0	0.609732	Y
7	IC 410-274149/12	25.0	14.705556	10.0	2132698.0	0.588222	Y



Calibration

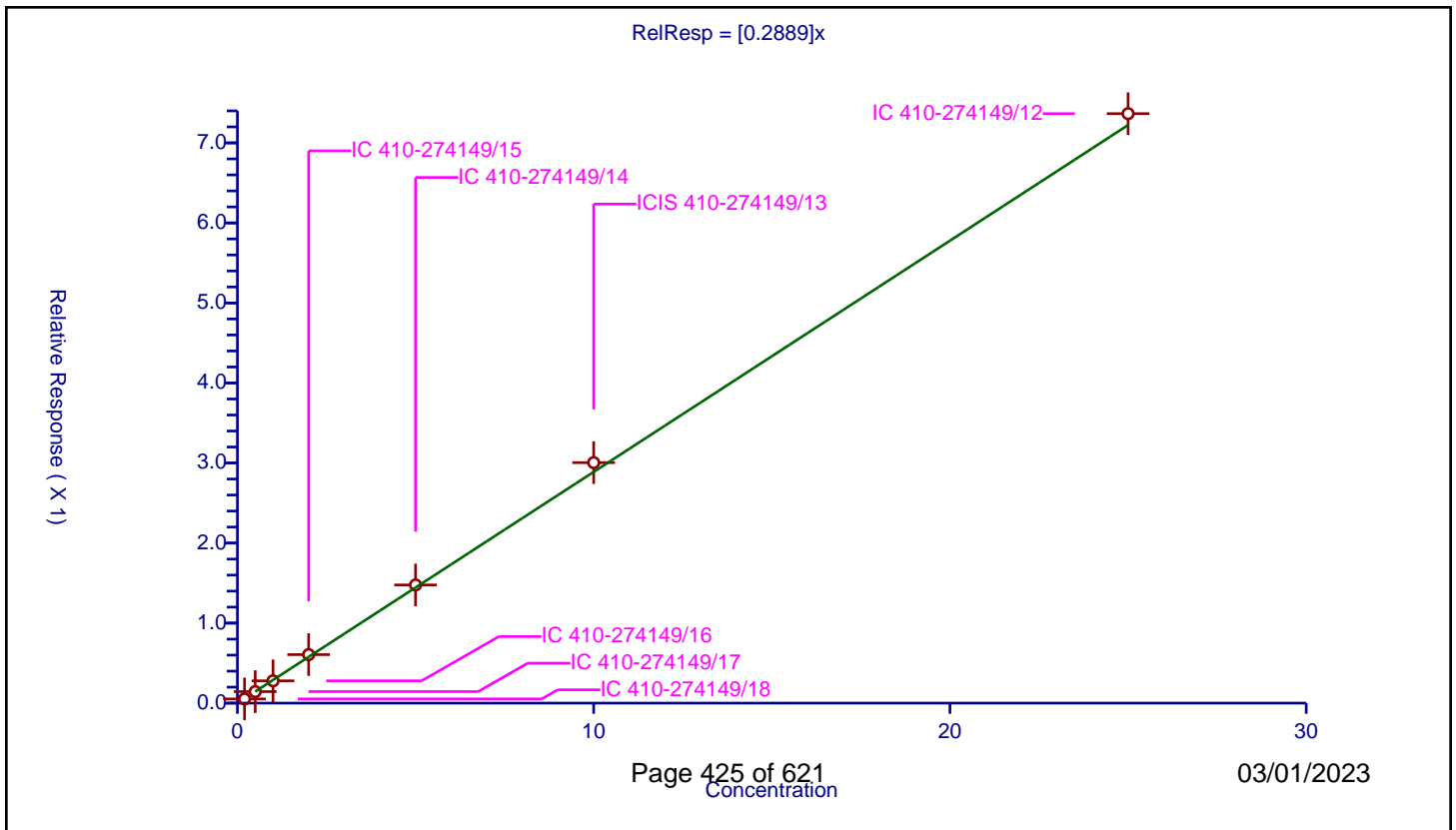
/ trans-1,2-Dichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2889

Error Coefficients	
Standard Error:	704000
Relative Standard Error:	4.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.052467	10.0	2085513.0	0.262334	Y
2	IC 410-274149/17	0.5	0.143885	10.0	2031490.0	0.287769	Y
3	IC 410-274149/16	1.0	0.2788	10.0	2037557.0	0.2788	Y
4	IC 410-274149/15	2.0	0.606029	10.0	2031307.0	0.303014	Y
5	IC 410-274149/14	5.0	1.476501	10.0	2106074.0	0.2953	Y
6	ICIS 410-274149/13	10.0	3.005037	10.0	2081655.0	0.300504	Y
7	IC 410-274149/12	25.0	7.36552	10.0	2132698.0	0.294621	Y



Calibration

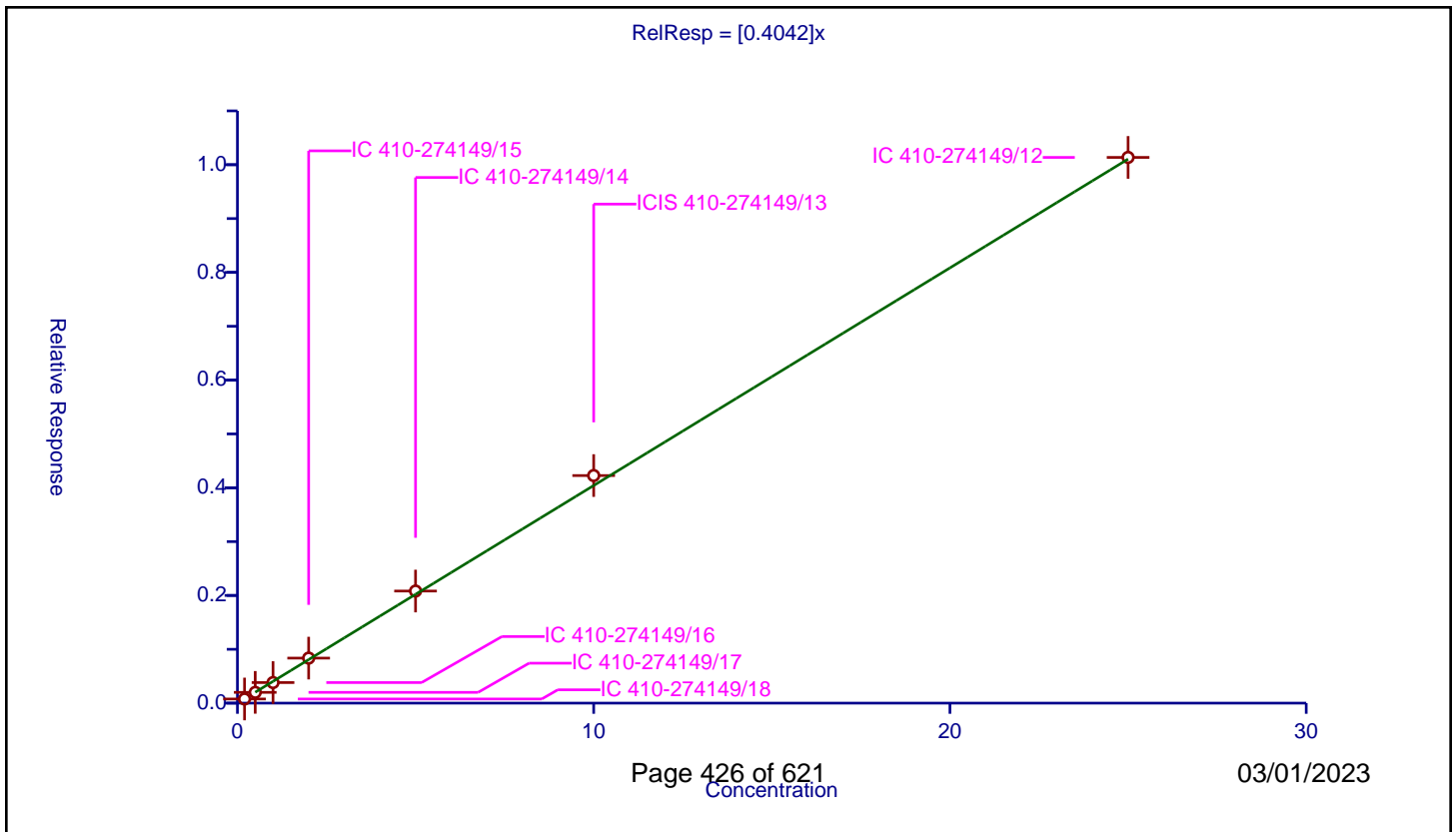
/ Hexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4042

Error Coefficients	
Standard Error:	973000
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.076974	10.0	2085513.0	0.384869	Y
2	IC 410-274149/17	0.5	0.199932	10.0	2031490.0	0.399864	Y
3	IC 410-274149/16	1.0	0.381938	10.0	2037557.0	0.381938	Y
4	IC 410-274149/15	2.0	0.836471	10.0	2031307.0	0.418236	Y
5	IC 410-274149/14	5.0	2.081959	10.0	2106074.0	0.416392	Y
6	ICIS 410-274149/13	10.0	4.226599	10.0	2081655.0	0.42266	Y
7	IC 410-274149/12	25.0	10.135926	10.0	2132698.0	0.405437	Y



Calibration

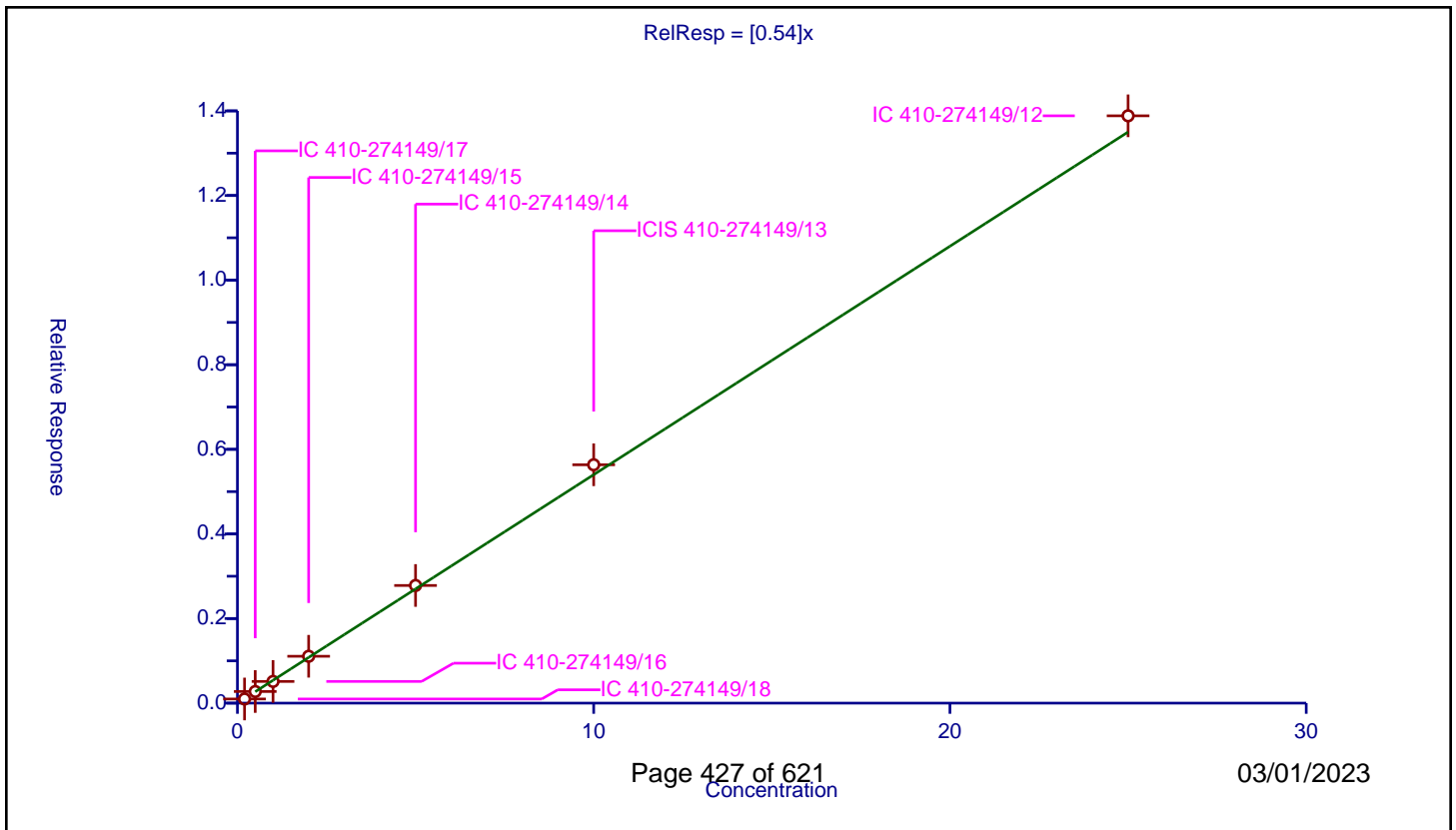
/ 1,1-Dichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.54

Error Coefficients	
Standard Error:	1330000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.097727	10.0	2085513.0	0.488633	Y
2	IC 410-274149/17	0.5	0.27503	10.0	2031490.0	0.550059	Y
3	IC 410-274149/16	1.0	0.512614	10.0	2037557.0	0.512614	Y
4	IC 410-274149/15	2.0	1.107686	10.0	2031307.0	0.553843	Y
5	IC 410-274149/14	5.0	2.781474	10.0	2106074.0	0.556295	Y
6	ICIS 410-274149/13	10.0	5.634416	10.0	2081655.0	0.563442	Y
7	IC 410-274149/12	25.0	13.883222	10.0	2132698.0	0.555329	Y



Calibration

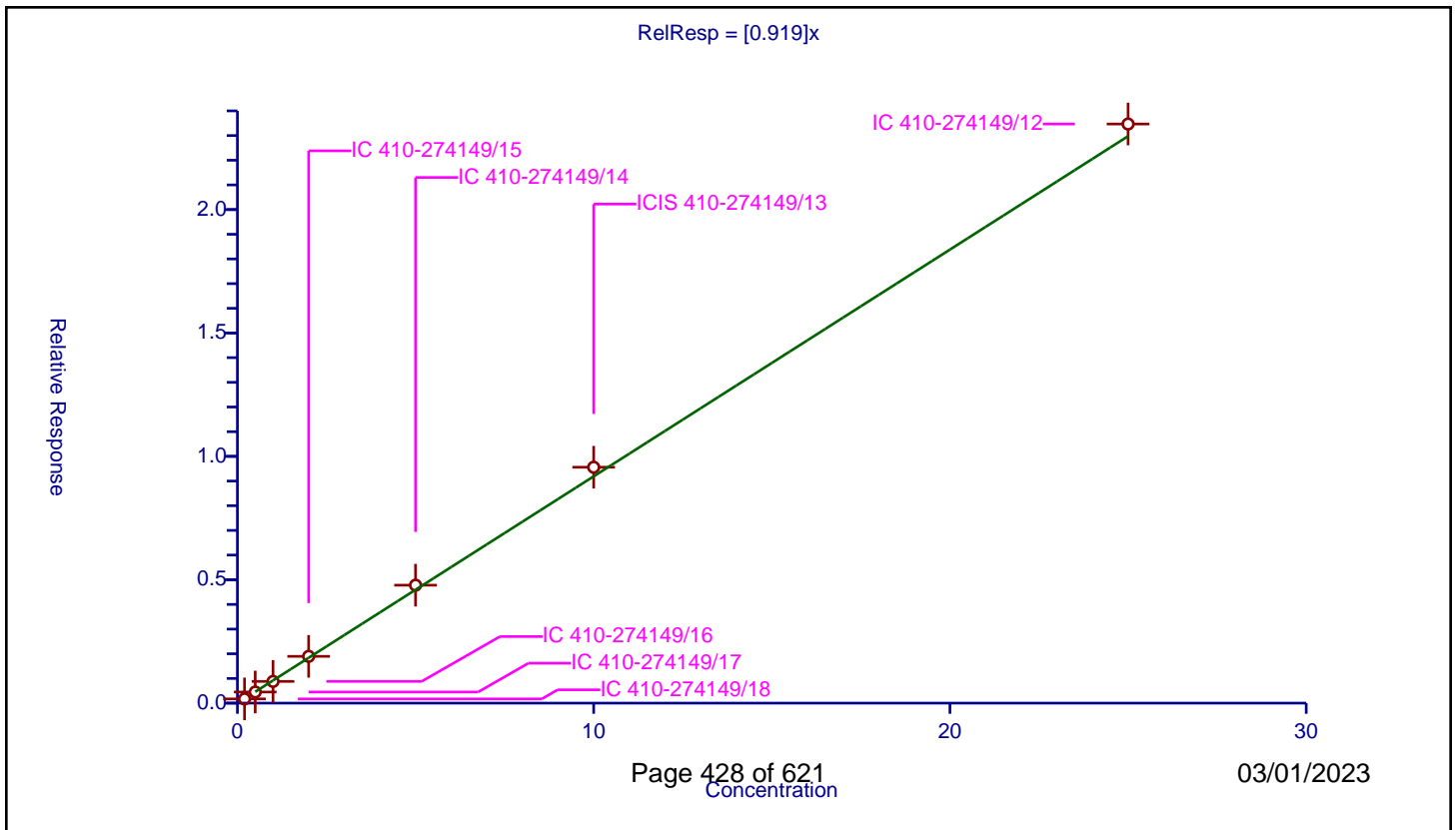
/ Isopropyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.919

Error Coefficients	
Standard Error:	2240000
Relative Standard Error:	4.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.170697	10.0	2085513.0	0.853483	Y
2	IC 410-274149/17	0.5	0.45028	10.0	2031490.0	0.900561	Y
3	IC 410-274149/16	1.0	0.879779	10.0	2037557.0	0.879779	Y
4	IC 410-274149/15	2.0	1.896277	10.0	2031307.0	0.948138	Y
5	IC 410-274149/14	5.0	4.780236	10.0	2106074.0	0.956047	Y
6	ICIS 410-274149/13	10.0	9.559615	10.0	2081655.0	0.955961	Y
7	IC 410-274149/12	25.0	23.467598	10.0	2132698.0	0.938704	Y



Calibration

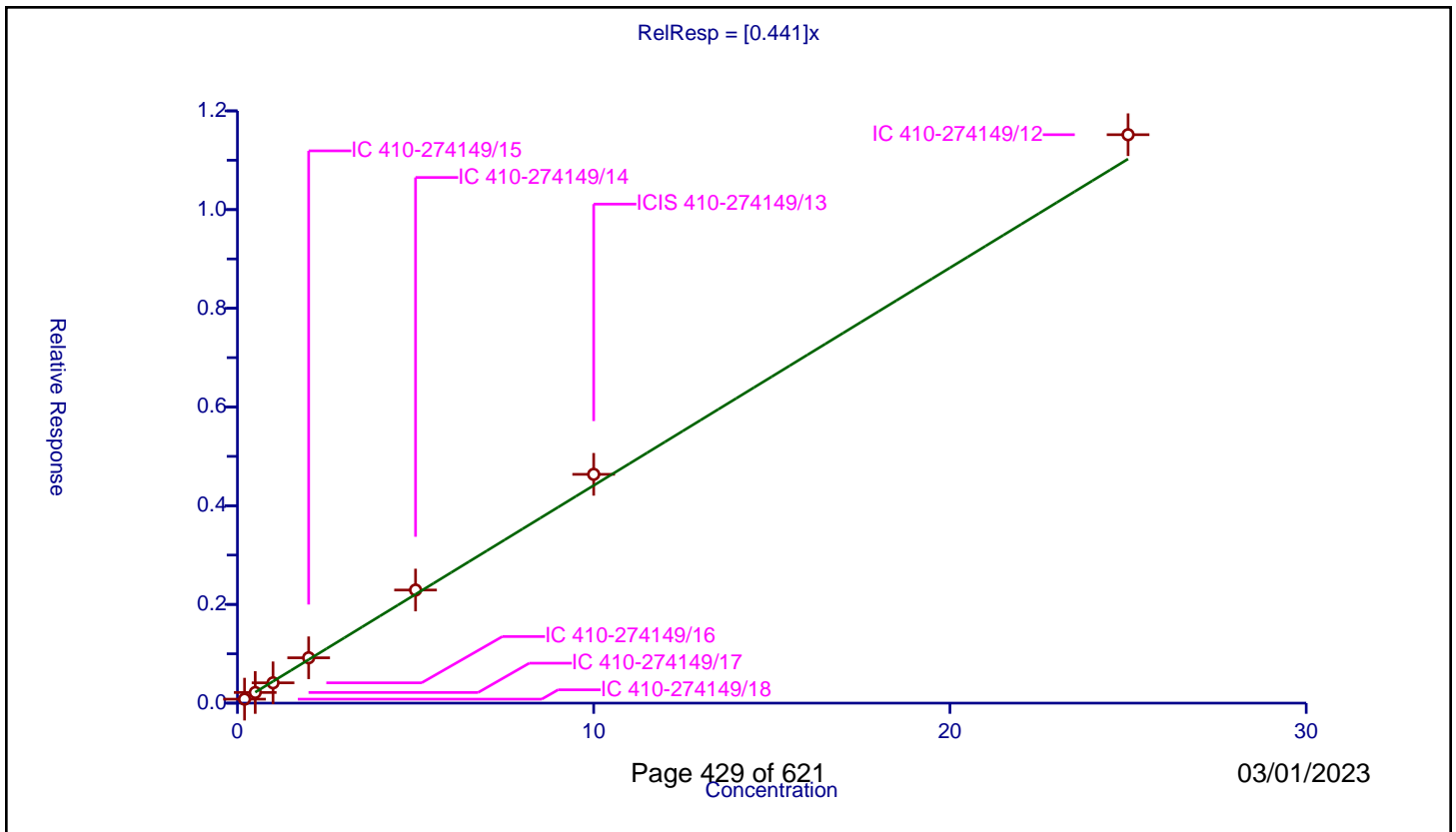
/ 2-Chloro-1,3-butadiene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.441

Error Coefficients	
Standard Error:	1100000
Relative Standard Error:	5.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.080445	10.0	2085513.0	0.402227	Y
2	IC 410-274149/17	0.5	0.215842	10.0	2031490.0	0.431683	Y
3	IC 410-274149/16	1.0	0.411252	10.0	2037557.0	0.411252	Y
4	IC 410-274149/15	2.0	0.918881	10.0	2031307.0	0.459441	Y
5	IC 410-274149/14	5.0	2.291843	10.0	2106074.0	0.458369	Y
6	ICIS 410-274149/13	10.0	4.636085	10.0	2081655.0	0.463609	Y
7	IC 410-274149/12	25.0	11.51736	10.0	2132698.0	0.460694	Y



Calibration

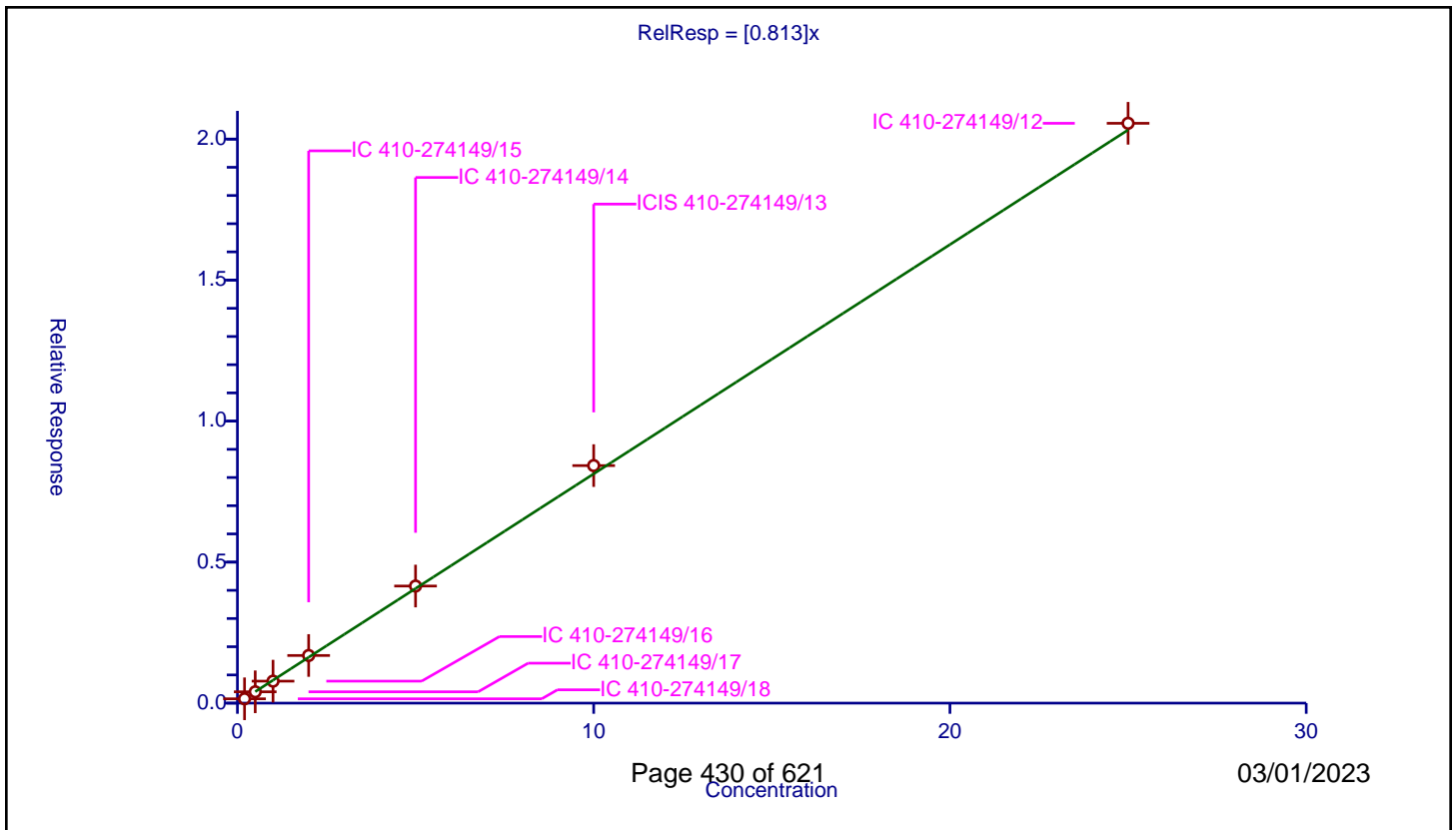
/ Tert-butyl ethyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.813

Error Coefficients	
Standard Error:	1970000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.153794	10.0	2085513.0	0.768971	Y
2	IC 410-274149/17	0.5	0.401434	10.0	2031490.0	0.802869	Y
3	IC 410-274149/16	1.0	0.779247	10.0	2037557.0	0.779247	Y
4	IC 410-274149/15	2.0	1.689164	10.0	2031307.0	0.844582	Y
5	IC 410-274149/14	5.0	4.152167	10.0	2106074.0	0.830433	Y
6	ICIS 410-274149/13	10.0	8.422366	10.0	2081655.0	0.842237	Y
7	IC 410-274149/12	25.0	20.56014	10.0	2132698.0	0.822406	Y



Calibration

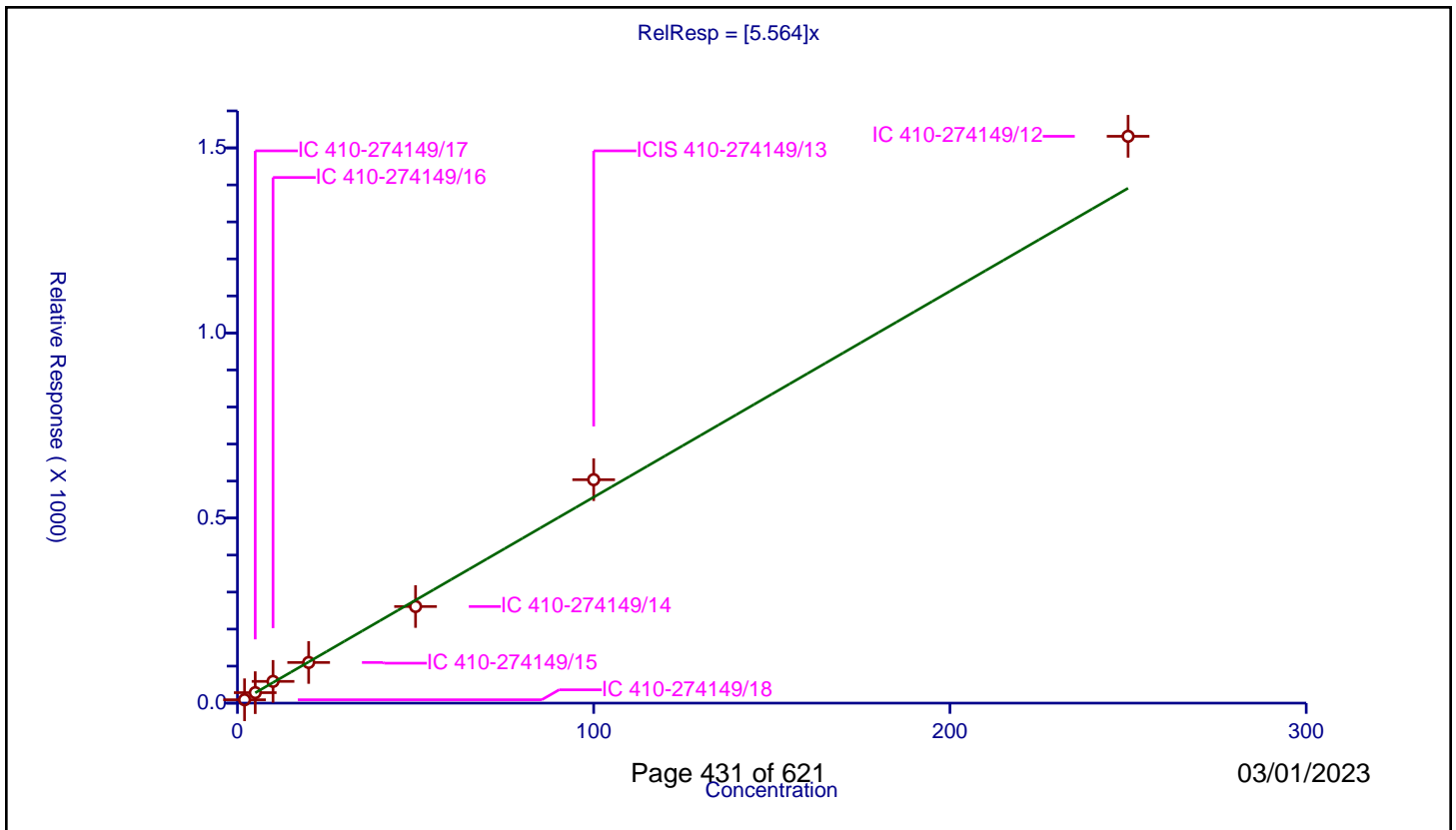
/ 2-Butanone (MEK)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.564

Error Coefficients	
Standard Error:	1340000
Relative Standard Error:	9.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	2.0	9.068888	50.0	127772.0	4.534444	Y
2	IC 410-274149/17	5.0	28.32559	50.0	81790.0	5.665118	Y
3	IC 410-274149/16	10.0	58.777824	50.0	87066.0	5.877782	Y
4	IC 410-274149/15	20.0	109.82696	50.0	107663.0	5.491348	Y
5	IC 410-274149/14	50.0	261.017979	50.0	120975.0	5.22036	Y
6	ICIS 410-274149/13	100.0	603.680576	50.0	101370.0	6.036806	Y
7	IC 410-274149/12	250.0	1531.381627	50.0	96770.0	6.125527	Y



Calibration

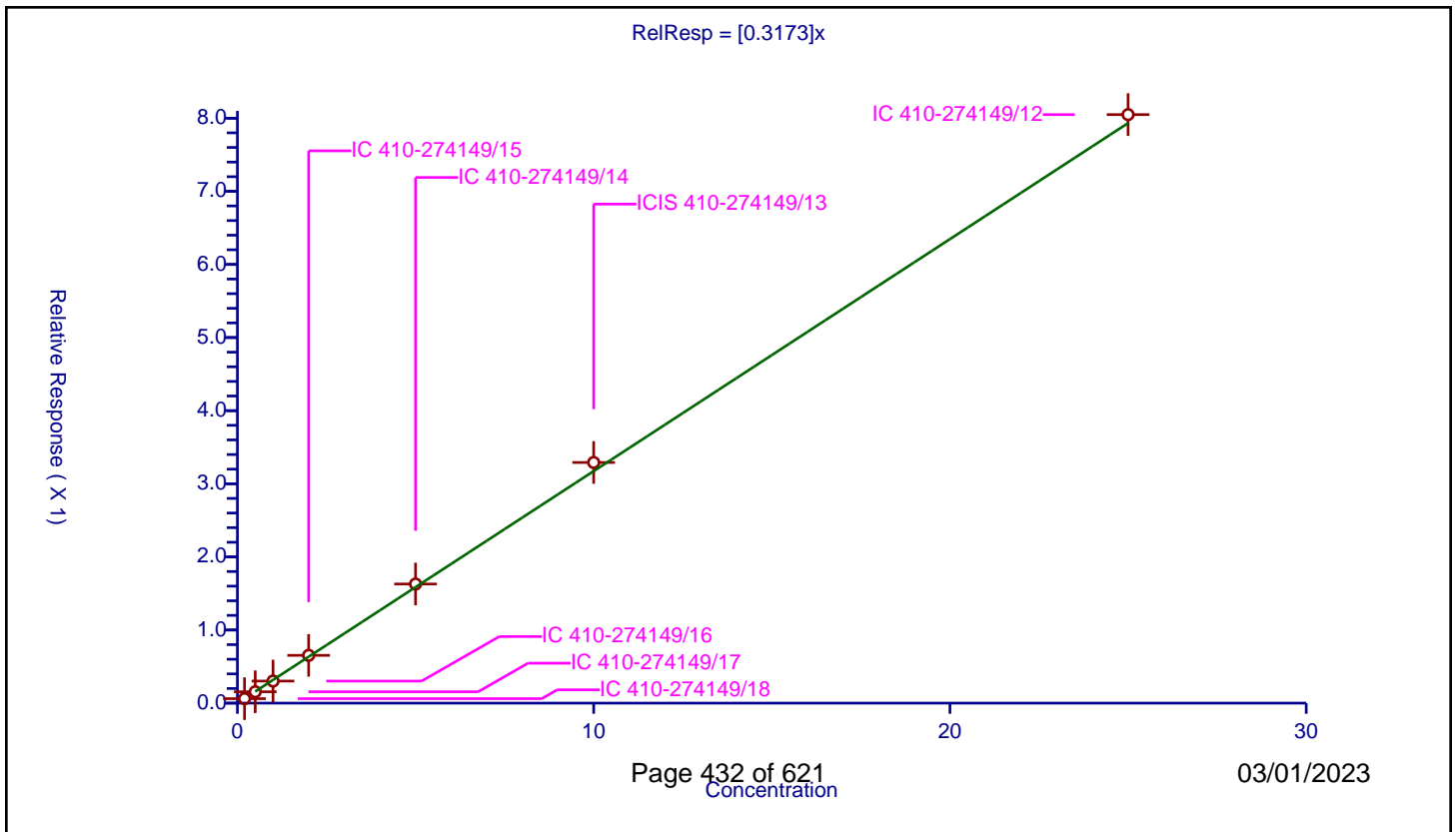
/ cis-1,2-Dichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3173

Error Coefficients	
Standard Error:	770000
Relative Standard Error:	3.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.061045	10.0	2085513.0	0.305225	Y
2	IC 410-274149/17	0.5	0.155324	10.0	2031490.0	0.310649	Y
3	IC 410-274149/16	1.0	0.301861	10.0	2037557.0	0.301861	Y
4	IC 410-274149/15	2.0	0.65319	10.0	2031307.0	0.326595	Y
5	IC 410-274149/14	5.0	1.629031	10.0	2106074.0	0.325806	Y
6	ICIS 410-274149/13	10.0	3.291348	10.0	2081655.0	0.329135	Y
7	IC 410-274149/12	25.0	8.048866	10.0	2132698.0	0.321955	Y



Calibration

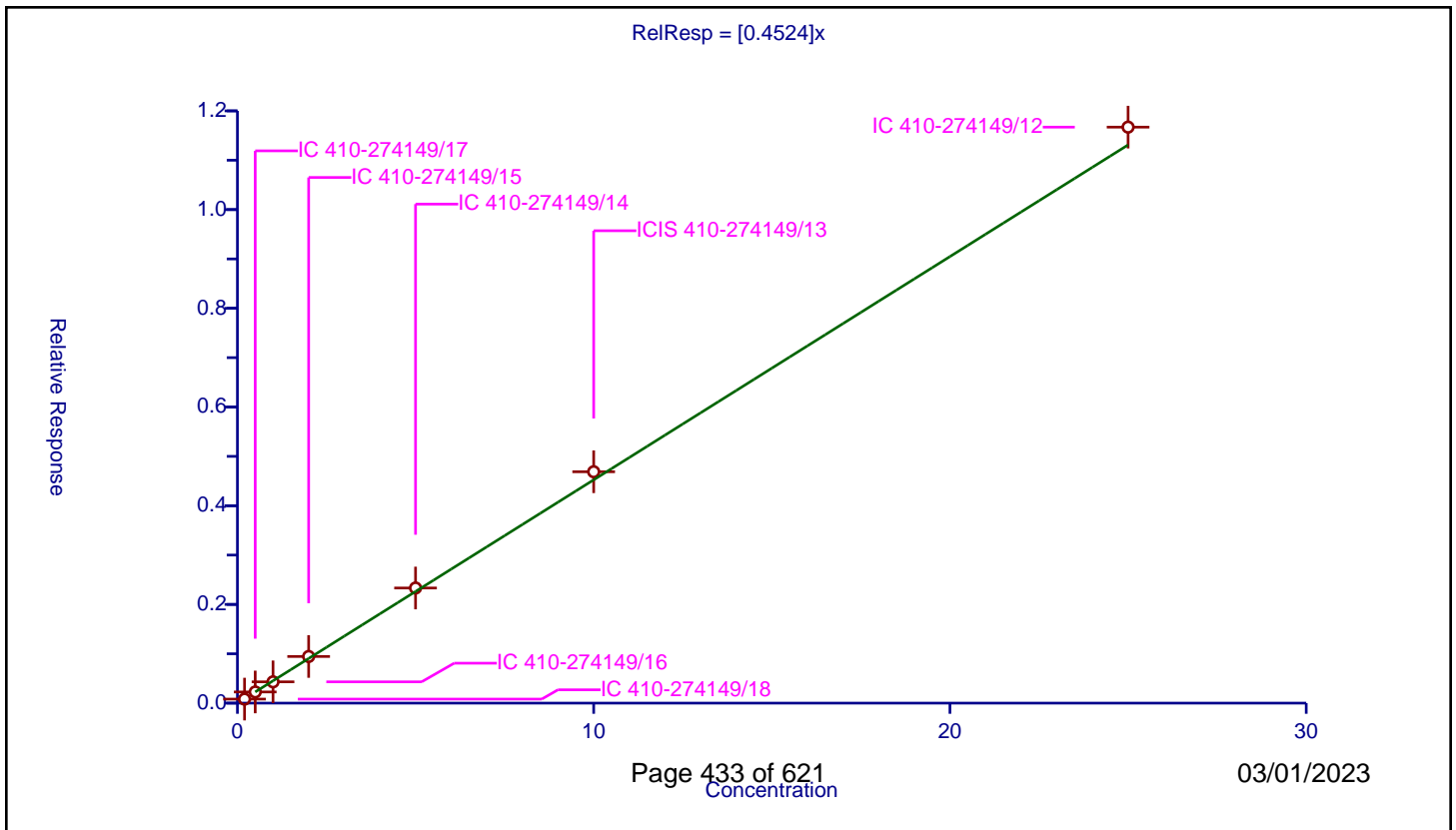
/ 2,2-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4524

Error Coefficients	
Standard Error:	1110000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.081591	10.0	2085513.0	0.407957	Y
2	IC 410-274149/17	0.5	0.226386	10.0	2031490.0	0.452771	Y
3	IC 410-274149/16	1.0	0.431389	10.0	2037557.0	0.431389	Y
4	IC 410-274149/15	2.0	0.945061	10.0	2031307.0	0.472531	Y
5	IC 410-274149/14	5.0	2.332843	10.0	2106074.0	0.466569	Y
6	ICIS 410-274149/13	10.0	4.688467	10.0	2081655.0	0.468847	Y
7	IC 410-274149/12	25.0	11.670649	10.0	2132698.0	0.466826	Y



Calibration

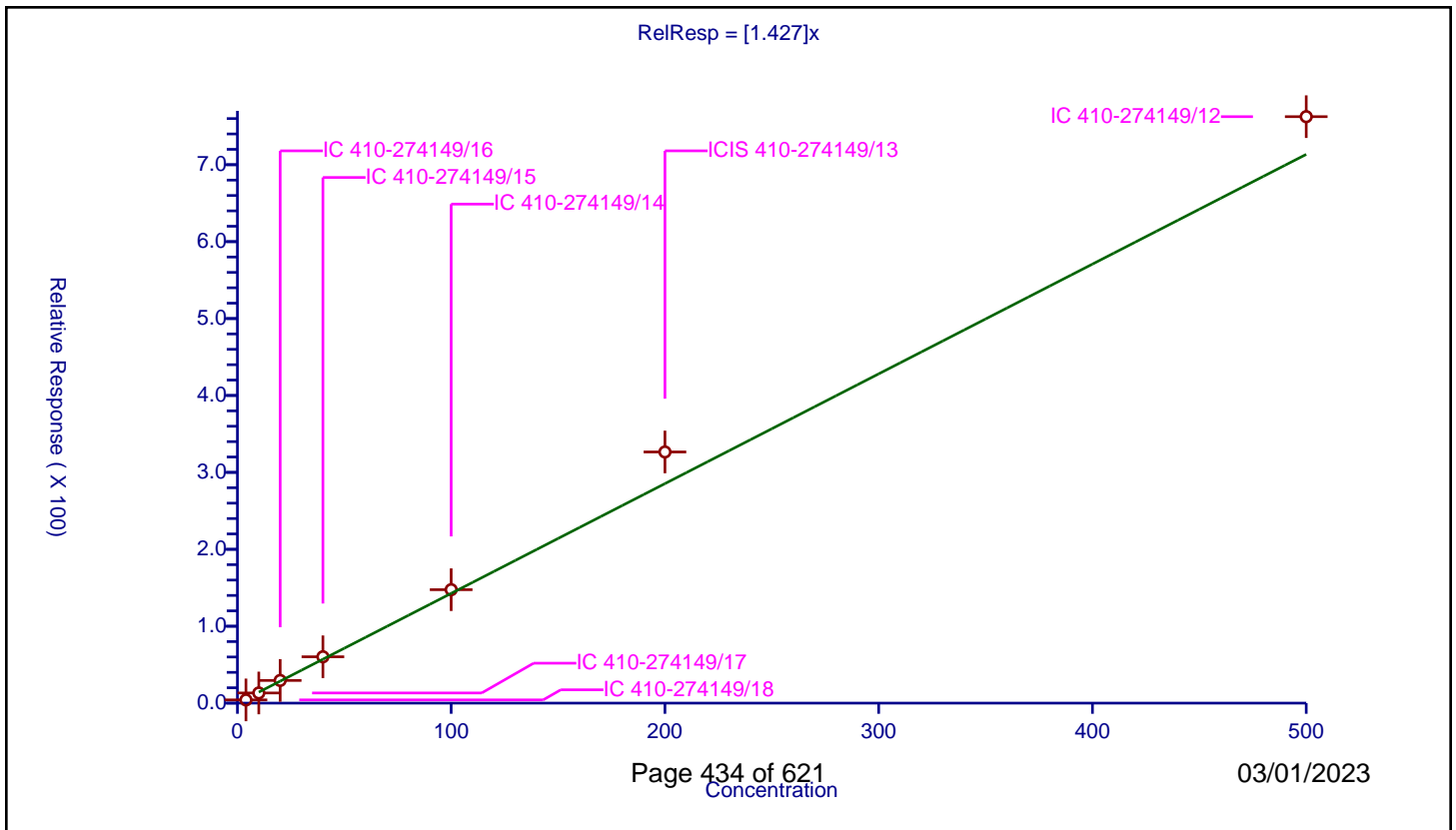
/ Propionitrile

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.427

Error Coefficients	
Standard Error:	678000
Relative Standard Error:	13.2
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	4.0	4.209843	50.0	127772.0	1.052461	Y
2	IC 410-274149/17	10.0	13.21922	50.0	81790.0	1.321922	Y
3	IC 410-274149/16	20.0	29.500609	50.0	87066.0	1.47503	Y
4	IC 410-274149/15	40.0	60.252362	50.0	107663.0	1.506309	Y
5	IC 410-274149/14	100.0	147.511056	50.0	120975.0	1.475111	Y
6	ICIS 410-274149/13	200.0	326.559633	50.0	101370.0	1.632798	Y
7	IC 410-274149/12	500.0	762.46874	50.0	96770.0	1.524937	Y



Calibration

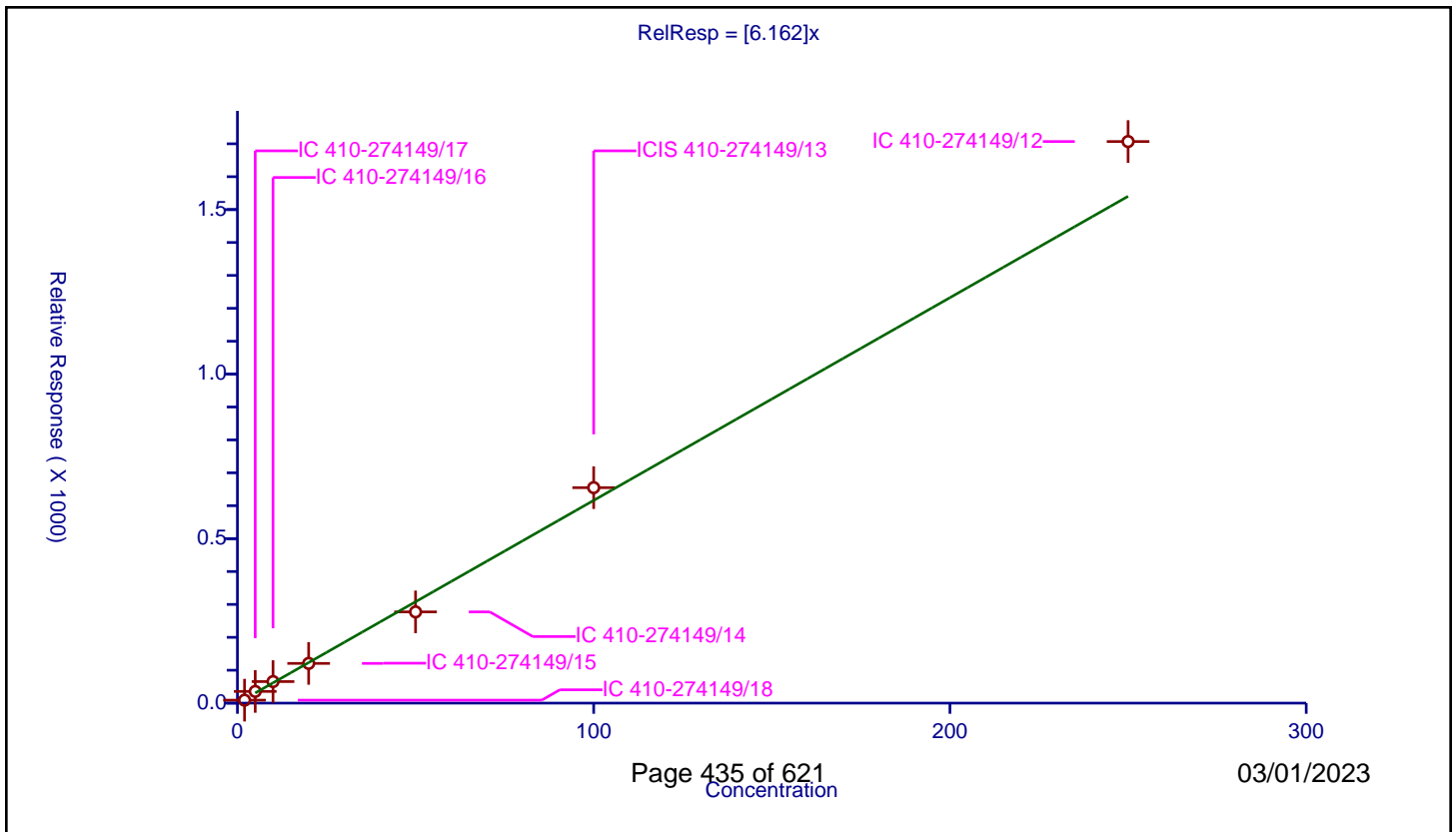
/ Methacrylonitrile

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	6.162

Error Coefficients	
Standard Error:	1480000
Relative Standard Error:	14.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	2.0	9.003538	50.0	127772.0	4.501769	Y
2	IC 410-274149/17	5.0	35.580756	50.0	81790.0	7.116151	Y
3	IC 410-274149/16	10.0	65.564629	50.0	87066.0	6.556463	Y
4	IC 410-274149/15	20.0	120.701169	50.0	107663.0	6.035058	Y
5	IC 410-274149/14	50.0	277.282496	50.0	120975.0	5.54565	Y
6	ICIS 410-274149/13	100.0	654.886061	50.0	101370.0	6.548861	Y
7	IC 410-274149/12	250.0	1706.85388	50.0	96770.0	6.827416	Y



Calibration

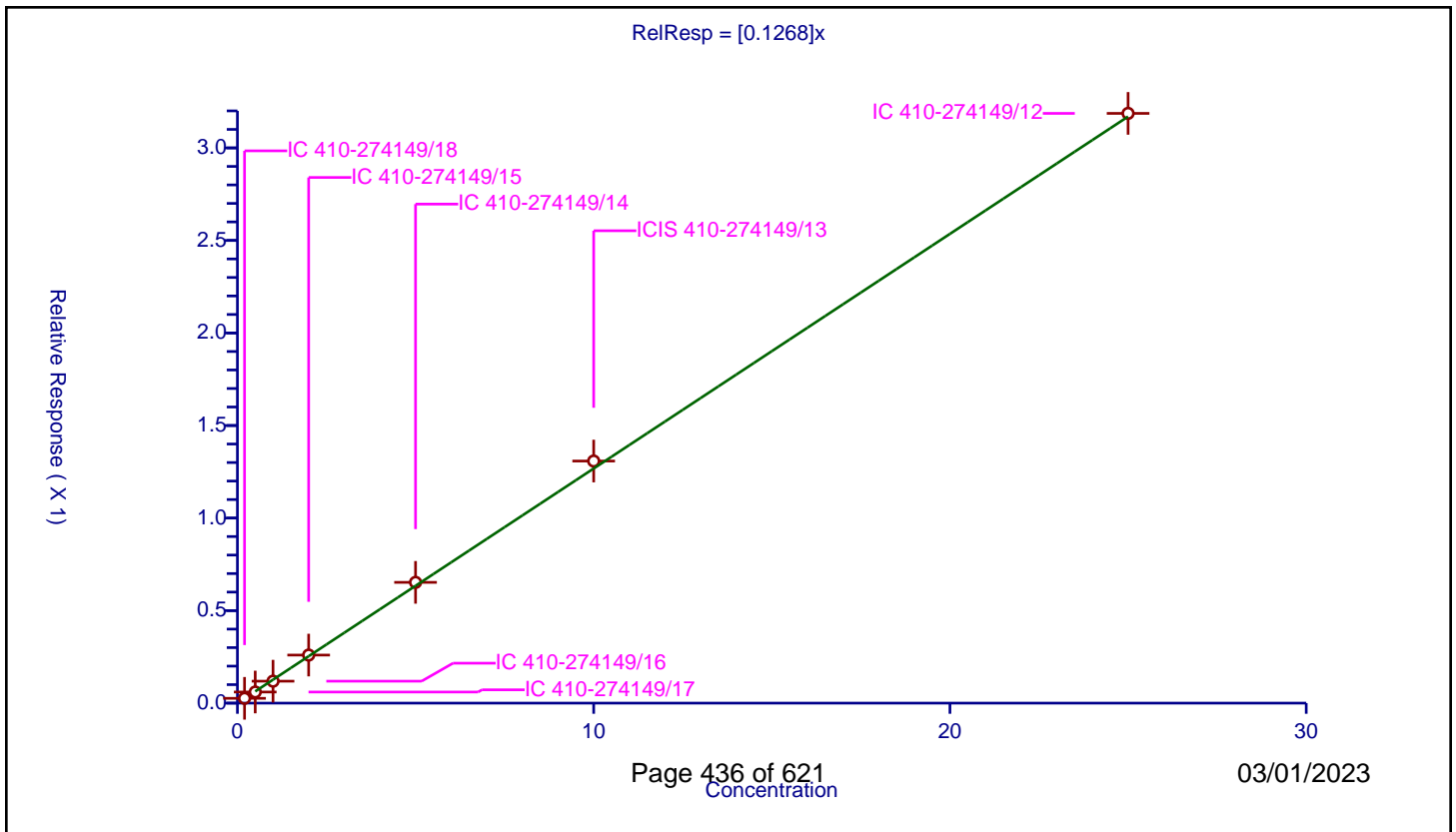
/ Chlorobromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1268

Error Coefficients	
Standard Error:	305000
Relative Standard Error:	4.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.026013	10.0	2085513.0	0.130064	Y
2	IC 410-274149/17	0.5	0.06002	10.0	2031490.0	0.12004	Y
3	IC 410-274149/16	1.0	0.118662	10.0	2037557.0	0.118662	Y
4	IC 410-274149/15	2.0	0.259739	10.0	2031307.0	0.12987	Y
5	IC 410-274149/14	5.0	0.652541	10.0	2106074.0	0.130508	Y
6	ICIS 410-274149/13	10.0	1.308089	10.0	2081655.0	0.130809	Y
7	IC 410-274149/12	25.0	3.186532	10.0	2132698.0	0.127461	Y



Calibration

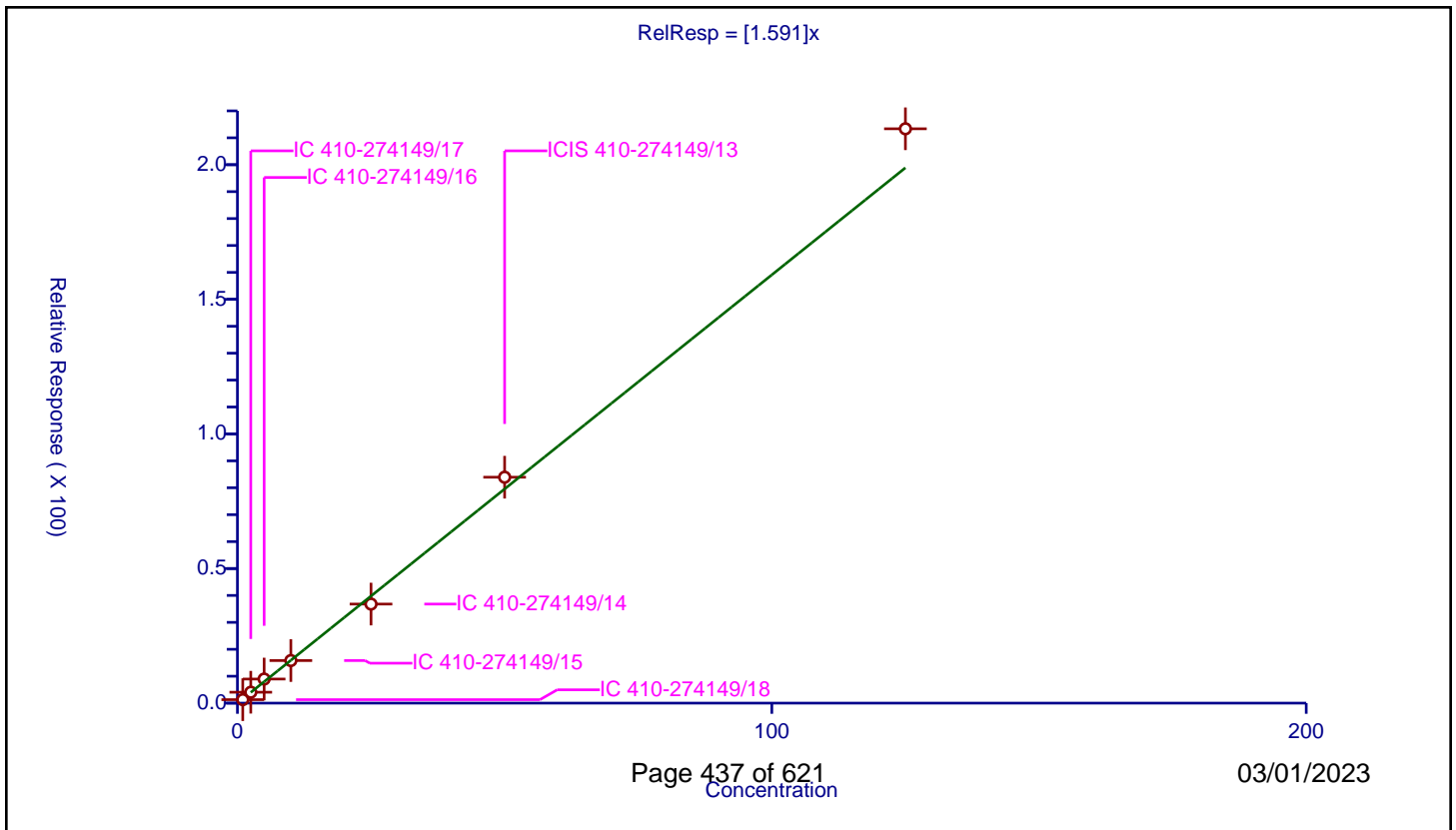
/ Tetrahydrofuran

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.591

Error Coefficients	
Standard Error:	186000
Relative Standard Error:	10.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	1.0	1.286276	50.0	127772.0	1.286276	Y
2	IC 410-274149/17	2.5	4.055508	50.0	81790.0	1.622203	Y
3	IC 410-274149/16	5.0	8.946087	50.0	87066.0	1.789217	Y
4	IC 410-274149/15	10.0	15.814625	50.0	107663.0	1.581463	Y
5	IC 410-274149/14	25.0	36.796859	50.0	120975.0	1.471874	Y
6	ICIS 410-274149/13	50.0	83.925224	50.0	101370.0	1.678504	Y
7	IC 410-274149/12	125.0	213.350212	50.0	96770.0	1.706802	Y



Calibration

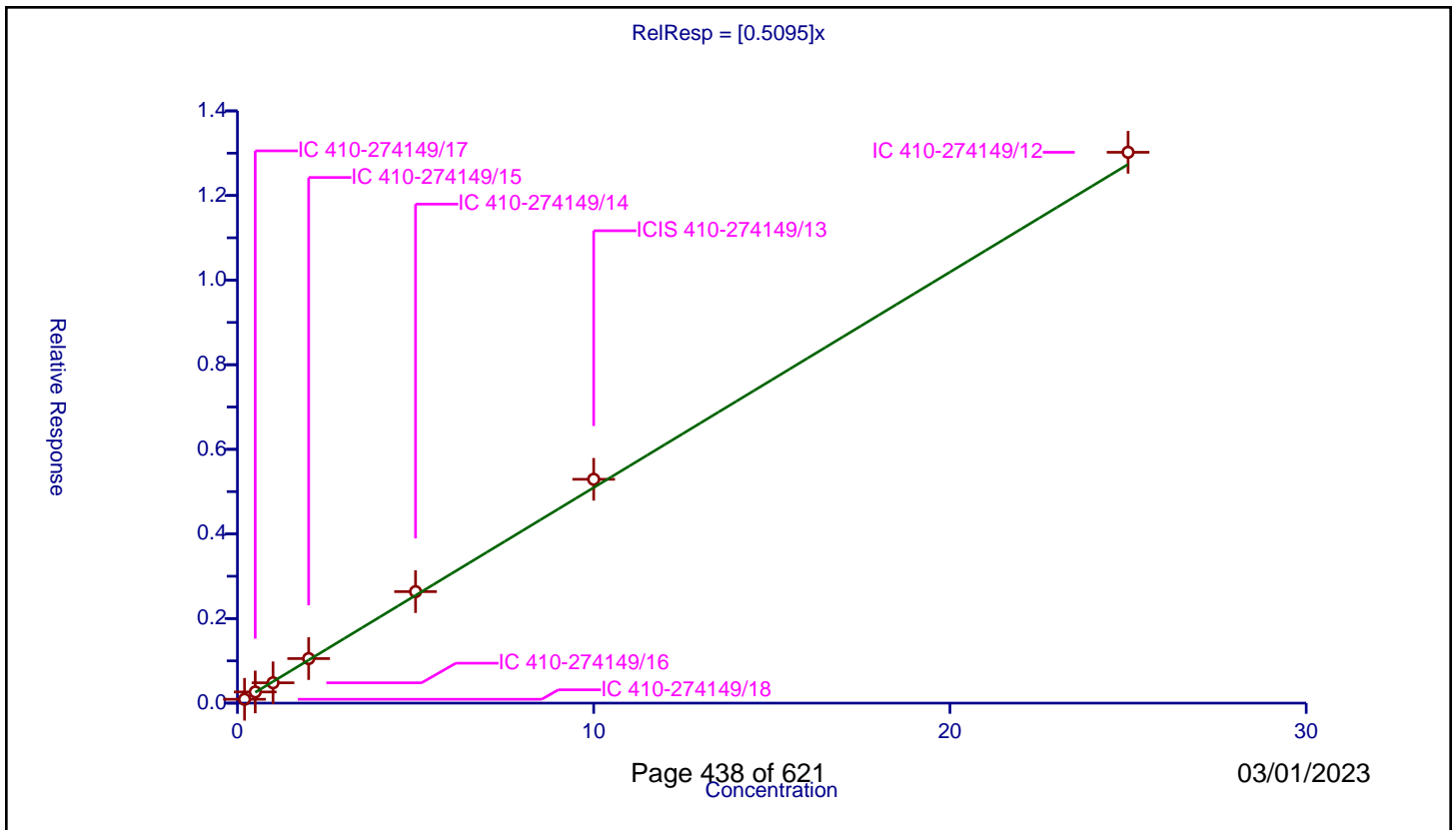
/ Chloroform

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5095

Error Coefficients	
Standard Error:	1240000
Relative Standard Error:	5.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.090822	10.0	2085513.0	0.454109	Y
2	IC 410-274149/17	0.5	0.263831	10.0	2031490.0	0.527662	Y
3	IC 410-274149/16	1.0	0.481007	10.0	2037557.0	0.481007	Y
4	IC 410-274149/15	2.0	1.052692	10.0	2031307.0	0.526346	Y
5	IC 410-274149/14	5.0	2.635686	10.0	2106074.0	0.527137	Y
6	ICIS 410-274149/13	10.0	5.291223	10.0	2081655.0	0.529122	Y
7	IC 410-274149/12	25.0	13.021867	10.0	2132698.0	0.520875	Y



Calibration

/ Dibromofluoromethane (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

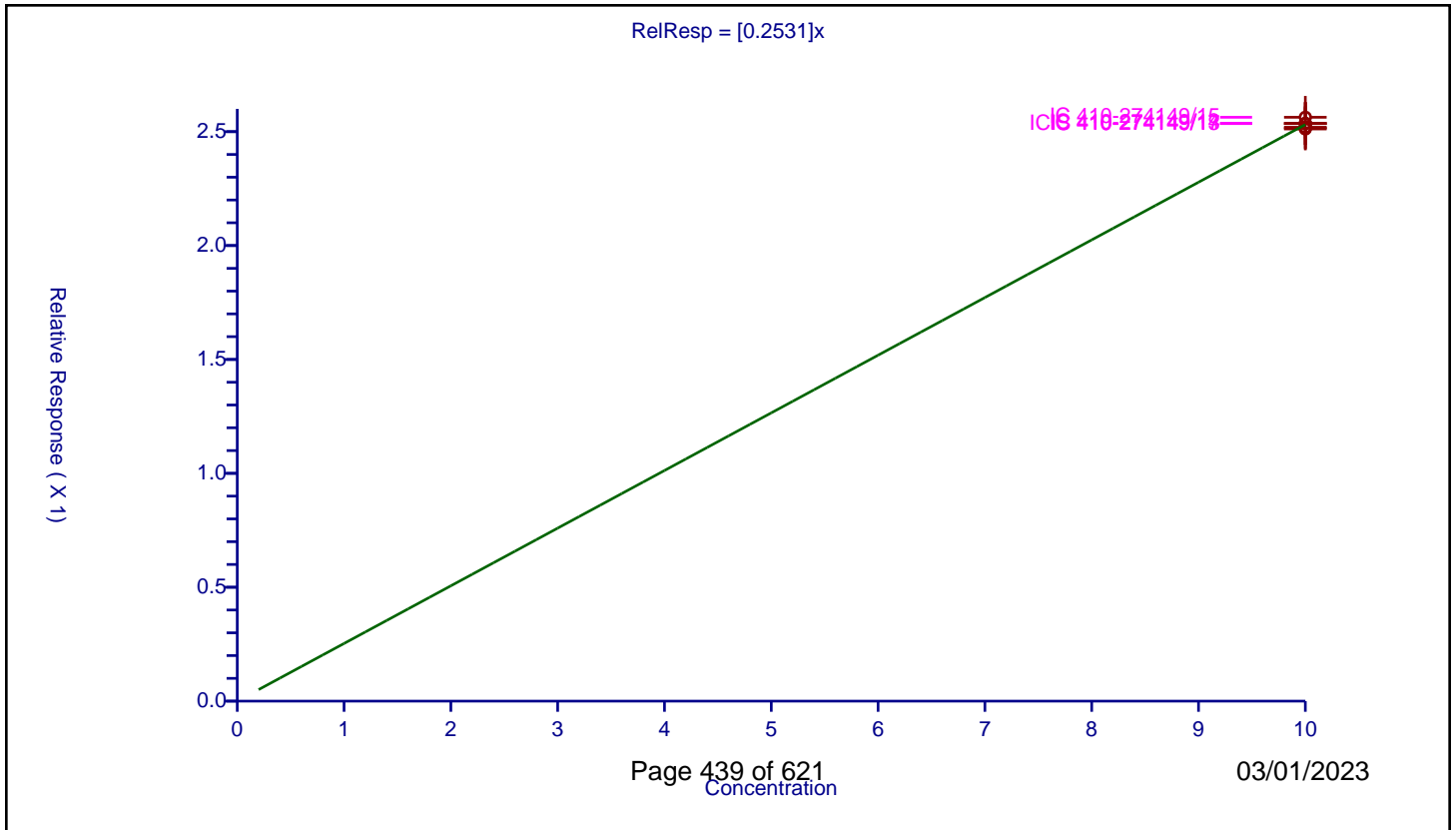
Curve Coefficients

Intercept: 0
 Slope: 0.2531

Error Coefficients

Standard Error: 567000
 Relative Standard Error: 0.7
 Correlation Coefficient: NA
 Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/12	10.0	2.519175	10.0	2132698.0	0.251918	Y
2	ICIS 410-274149/13	10.0	2.535776	10.0	2081655.0	0.253578	Y
3	IC 410-274149/14	10.0	2.536445	10.0	2106074.0	0.253644	Y
4	IC 410-274149/15	10.0	2.563133	10.0	2031307.0	0.256313	Y
5	IC 410-274149/16	10.0	2.511787	10.0	2037557.0	0.251179	Y
6	IC 410-274149/17	10.0	2.53539	10.0	2031490.0	0.253539	Y
7	IC 410-274149/18	10.0	2.515765	10.0	2085513.0	0.251576	Y



Calibration

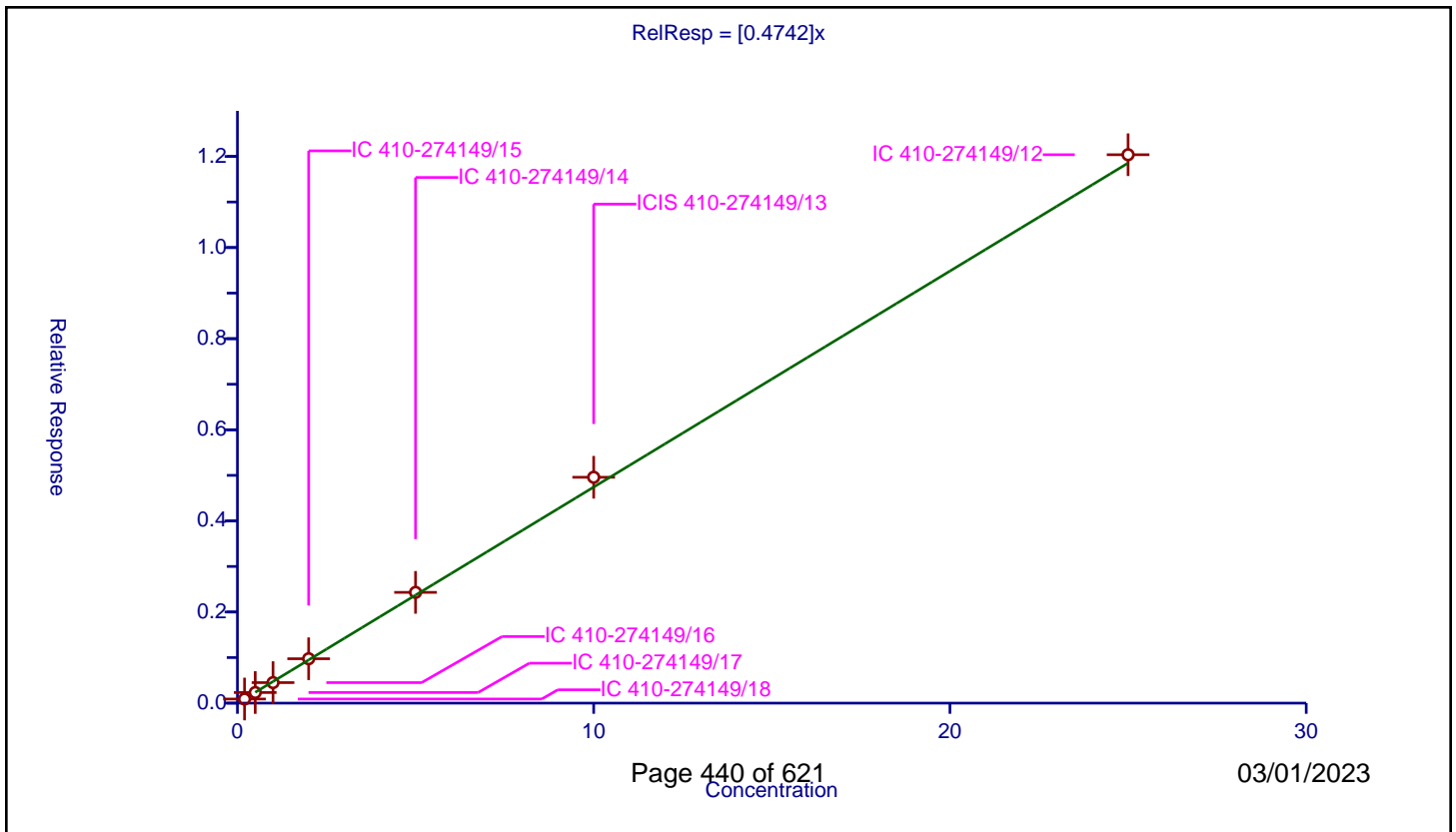
/ 1,1,1-Trichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4742

Error Coefficients	
Standard Error:	1150000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.090443	10.0	2085513.0	0.452215	Y
2	IC 410-274149/17	0.5	0.233051	10.0	2031490.0	0.466101	Y
3	IC 410-274149/16	1.0	0.450392	10.0	2037557.0	0.450392	Y
4	IC 410-274149/15	2.0	0.97425	10.0	2031307.0	0.487125	Y
5	IC 410-274149/14	5.0	2.430897	10.0	2106074.0	0.486179	Y
6	ICIS 410-274149/13	10.0	4.958079	10.0	2081655.0	0.495808	Y
7	IC 410-274149/12	25.0	12.037982	10.0	2132698.0	0.481519	Y



Calibration

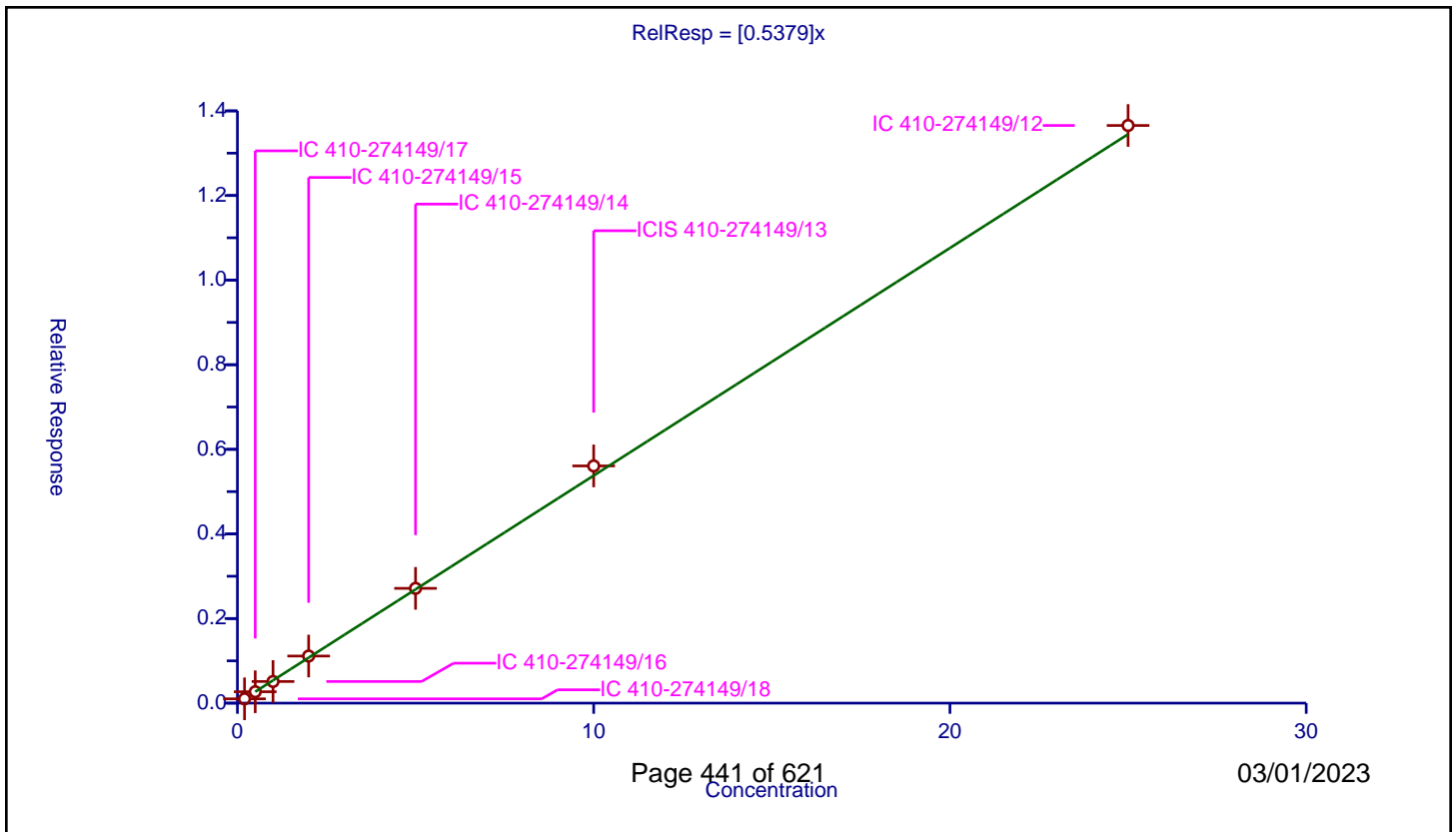
/ Cyclohexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5379

Error Coefficients	
Standard Error:	1310000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.101879	10.0	2085513.0	0.509395	Y
2	IC 410-274149/17	0.5	0.269014	10.0	2031490.0	0.538029	Y
3	IC 410-274149/16	1.0	0.511667	10.0	2037557.0	0.511667	Y
4	IC 410-274149/15	2.0	1.113529	10.0	2031307.0	0.556765	Y
5	IC 410-274149/14	5.0	2.7132	10.0	2106074.0	0.54264	Y
6	ICIS 410-274149/13	10.0	5.607764	10.0	2081655.0	0.560776	Y
7	IC 410-274149/12	25.0	13.654831	10.0	2132698.0	0.546193	Y



Calibration

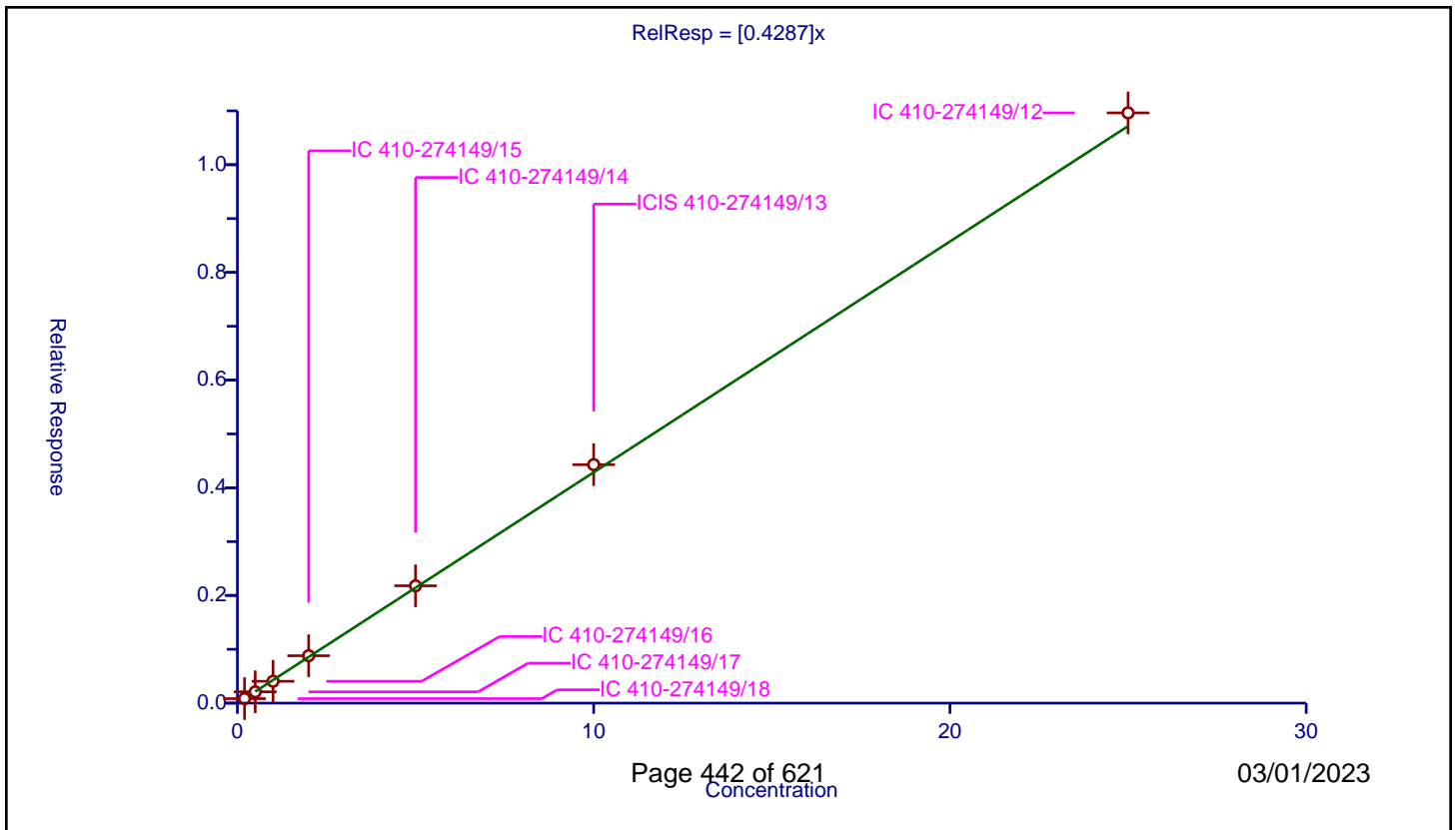
/ 1,1-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4287

Error Coefficients	
Standard Error:	1050000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.083337	10.0	2085513.0	0.416684	Y
2	IC 410-274149/17	0.5	0.210368	10.0	2031490.0	0.420736	Y
3	IC 410-274149/16	1.0	0.405903	10.0	2037557.0	0.405903	Y
4	IC 410-274149/15	2.0	0.880143	10.0	2031307.0	0.440071	Y
5	IC 410-274149/14	5.0	2.17943	10.0	2106074.0	0.435886	Y
6	ICIS 410-274149/13	10.0	4.429485	10.0	2081655.0	0.442949	Y
7	IC 410-274149/12	25.0	10.962823	10.0	2132698.0	0.438513	Y



Calibration

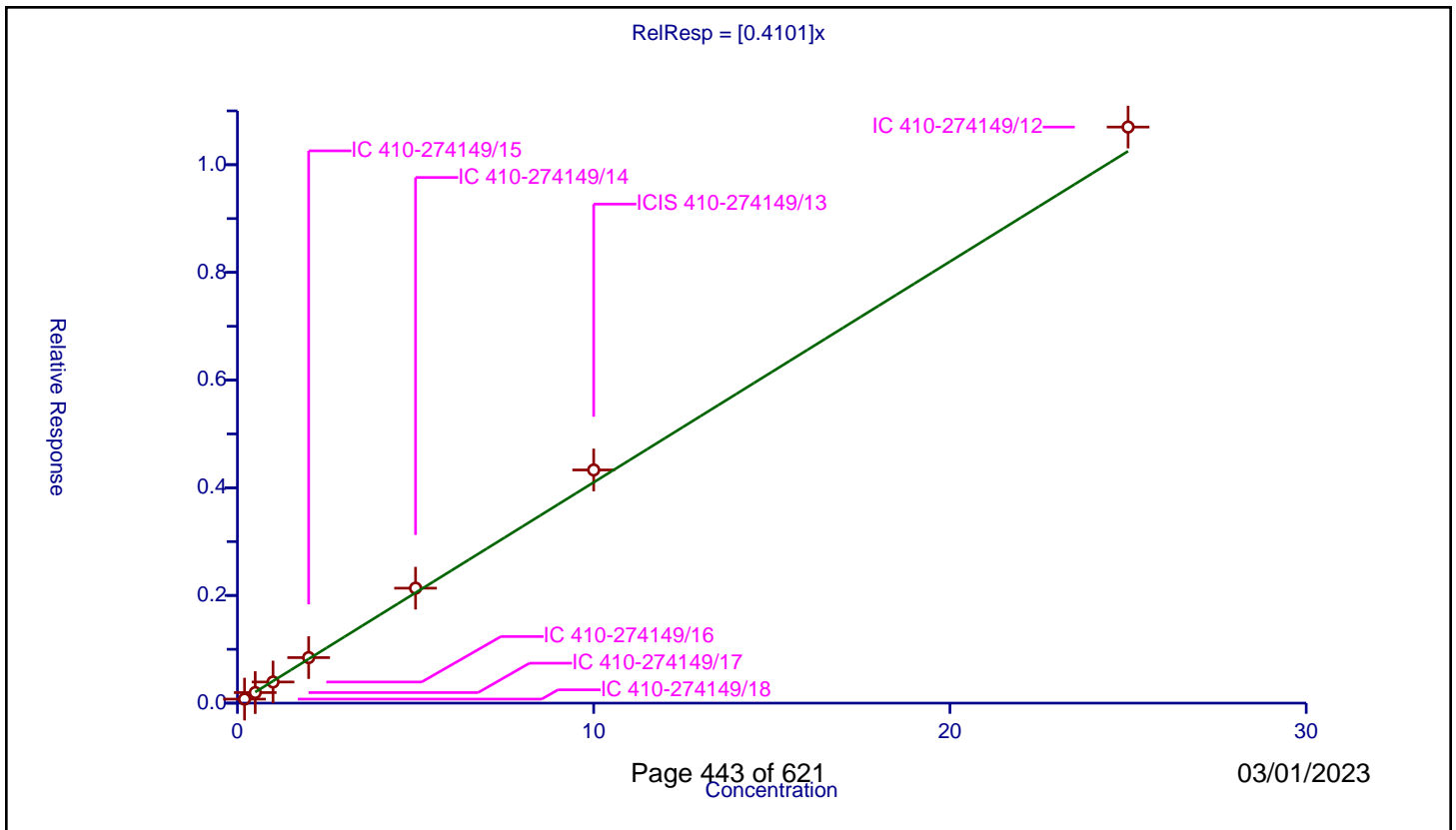
/ Carbon tetrachloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4101

Error Coefficients	
Standard Error:	1020000
Relative Standard Error:	5.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.074984	10.0	2085513.0	0.37492	Y
2	IC 410-274149/17	0.5	0.195994	10.0	2031490.0	0.391988	Y
3	IC 410-274149/16	1.0	0.392563	10.0	2037557.0	0.392563	Y
4	IC 410-274149/15	2.0	0.84553	10.0	2031307.0	0.422765	Y
5	IC 410-274149/14	5.0	2.135447	10.0	2106074.0	0.427089	Y
6	ICIS 410-274149/13	10.0	4.330689	10.0	2081655.0	0.433069	Y
7	IC 410-274149/12	25.0	10.699626	10.0	2132698.0	0.427985	Y



Calibration

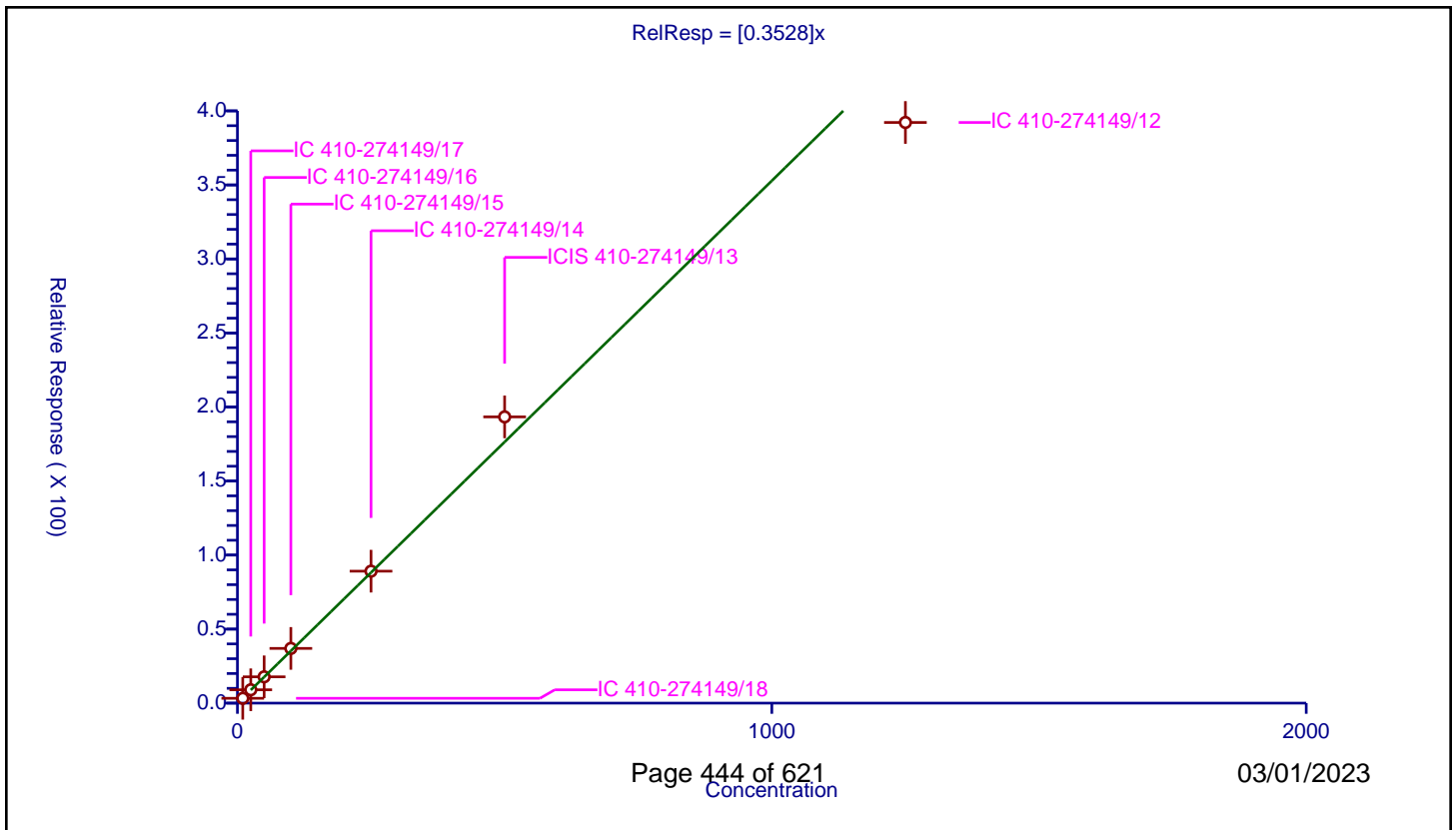
/ Isobutyl alcohol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3528

Error Coefficients	
Standard Error:	361000
Relative Standard Error:	7.1
Correlation Coefficient:	0.983
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	10.0	3.268713	50.0	127772.0	0.326871	Y
2	IC 410-274149/17	25.0	9.026165	50.0	81790.0	0.361047	Y
3	IC 410-274149/16	50.0	17.771576	50.0	87066.0	0.355432	Y
4	IC 410-274149/15	100.0	36.952806	50.0	107663.0	0.369528	Y
5	IC 410-274149/14	250.0	89.120066	50.0	120975.0	0.35648	Y
6	ICIS 410-274149/13	500.0	193.334813	50.0	101370.0	0.38667	Y
7	IC 410-274149/12	1250.0	392.176294	50.0	96770.0	0.313741	Y



Calibration

/ 1,2-Dichloroethane-d4 (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

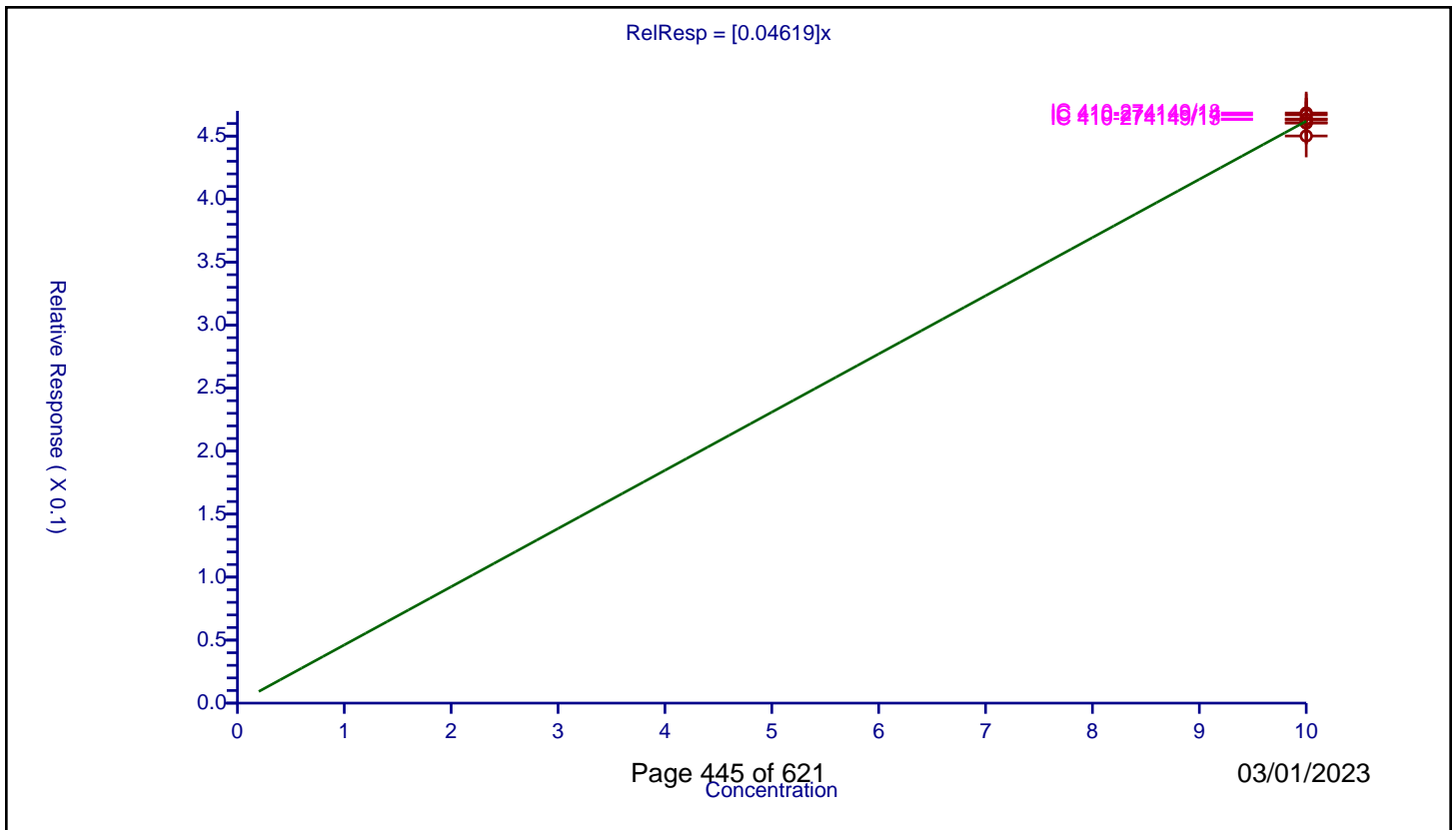
Curve Coefficients

Intercept: 0
 Slope: 0.04619

Error Coefficients

Standard Error: 103000
 Relative Standard Error: 1.3
 Correlation Coefficient: 0
 Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/12	10.0	0.460346	10.0	2132698.0	0.046035	Y
2	ICIS 410-274149/13	10.0	0.460658	10.0	2081655.0	0.046066	Y
3	IC 410-274149/14	10.0	0.466878	10.0	2106074.0	0.046688	Y
4	IC 410-274149/15	10.0	0.463539	10.0	2031307.0	0.046354	Y
5	IC 410-274149/16	10.0	0.450093	10.0	2037557.0	0.045009	Y
6	IC 410-274149/17	10.0	0.463167	10.0	2031490.0	0.046317	Y
7	IC 410-274149/18	10.0	0.468312	10.0	2085513.0	0.046831	Y



Calibration

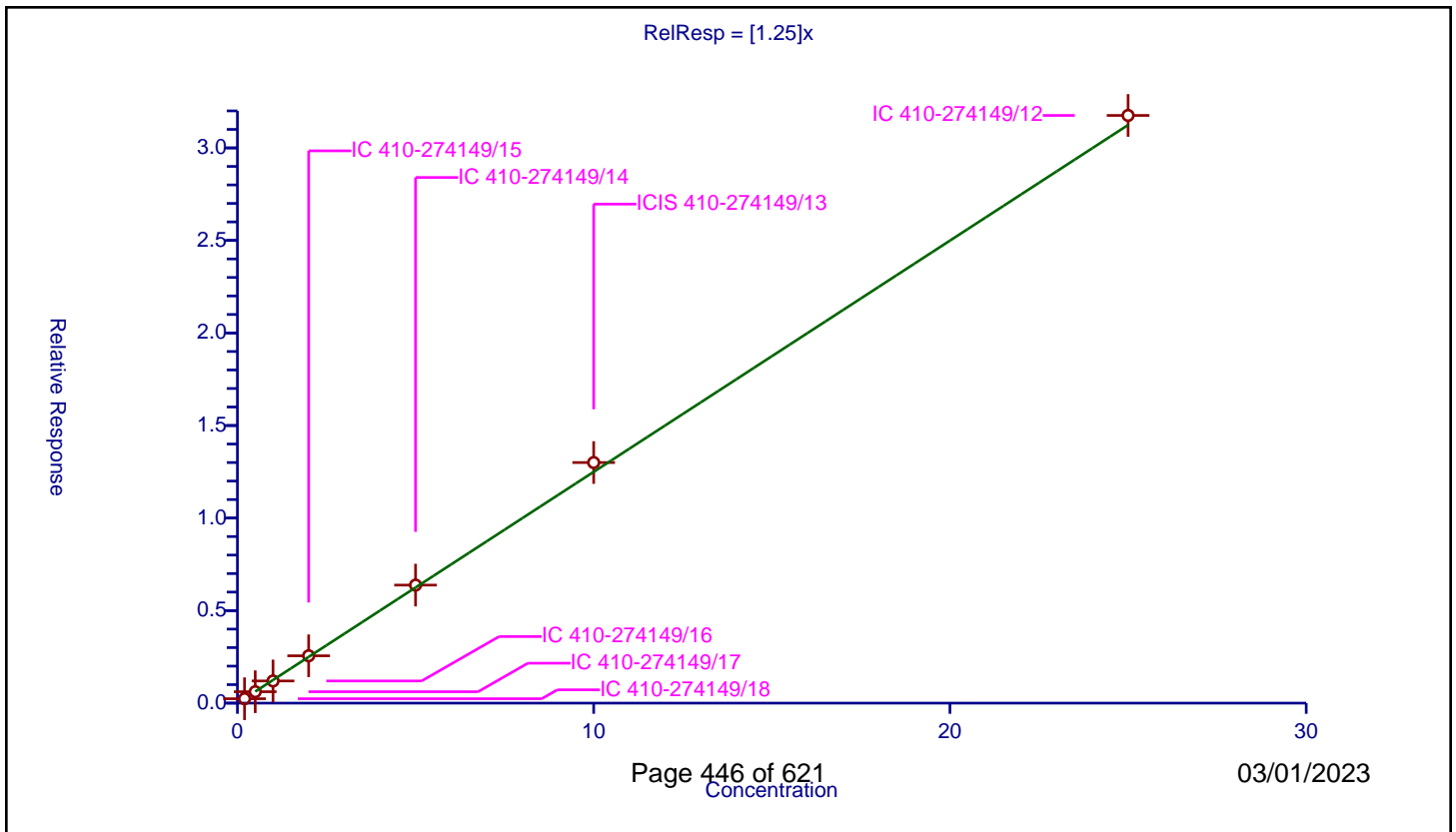
/ Benzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.25

Error Coefficients	
Standard Error:	3040000
Relative Standard Error:	3.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.237946	10.0	2085513.0	1.189731	Y
2	IC 410-274149/17	0.5	0.617291	10.0	2031490.0	1.234582	Y
3	IC 410-274149/16	1.0	1.198038	10.0	2037557.0	1.198038	Y
4	IC 410-274149/15	2.0	2.557349	10.0	2031307.0	1.278674	Y
5	IC 410-274149/14	5.0	6.377535	10.0	2106074.0	1.275507	Y
6	ICIS 410-274149/13	10.0	12.999162	10.0	2081655.0	1.299916	Y
7	IC 410-274149/12	25.0	31.754051	10.0	2132698.0	1.270162	Y



Calibration

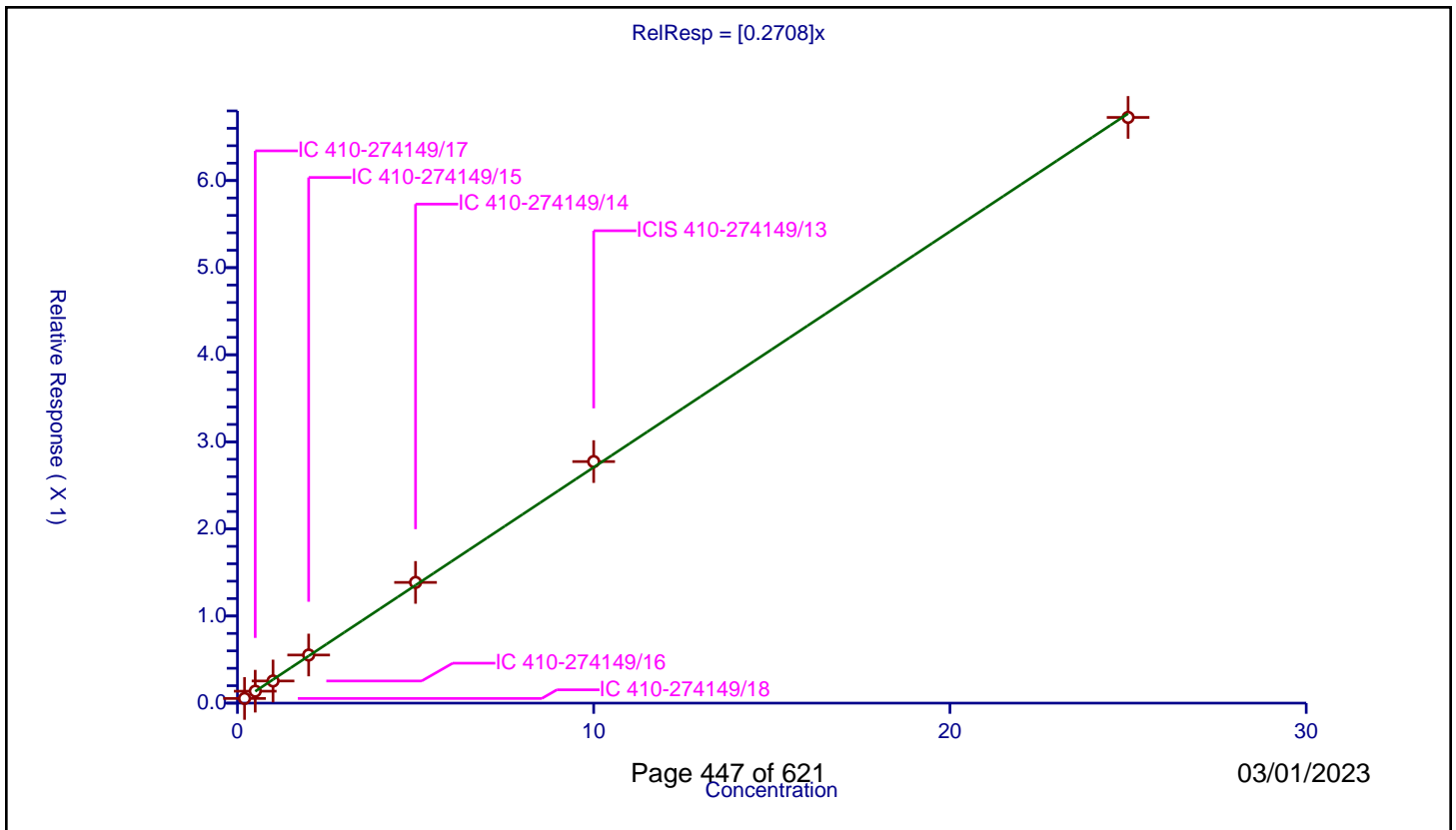
/ 1,2-Dichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2708

Error Coefficients	
Standard Error:	644000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.053387	10.0	2085513.0	0.266937	Y
2	IC 410-274149/17	0.5	0.137116	10.0	2031490.0	0.274232	Y
3	IC 410-274149/16	1.0	0.254309	10.0	2037557.0	0.254309	Y
4	IC 410-274149/15	2.0	0.552472	10.0	2031307.0	0.276236	Y
5	IC 410-274149/14	5.0	1.3862	10.0	2106074.0	0.27724	Y
6	ICIS 410-274149/13	10.0	2.773356	10.0	2081655.0	0.277336	Y
7	IC 410-274149/12	25.0	6.725092	10.0	2132698.0	0.269004	Y



Calibration

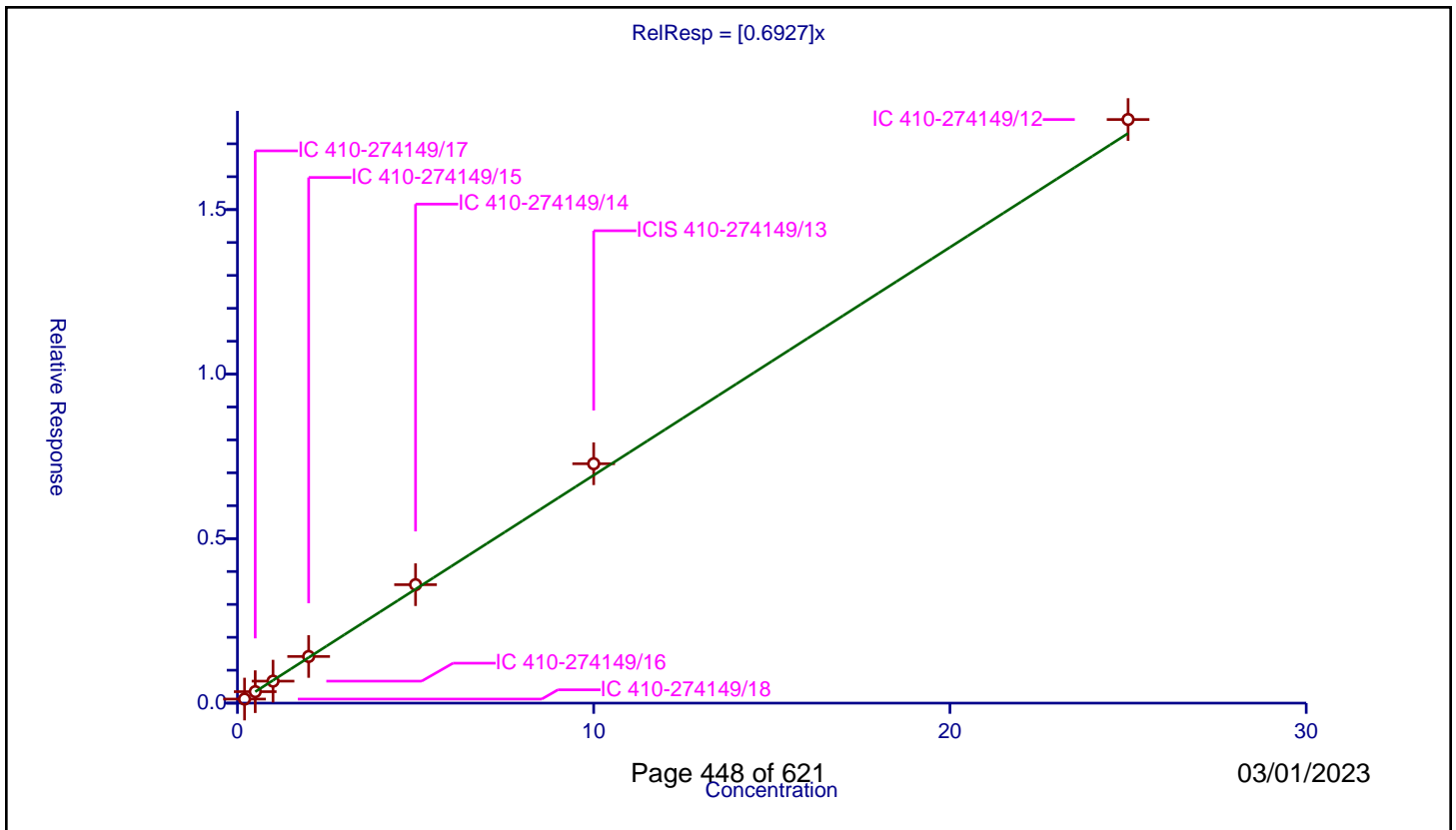
/ Tert-amyl methyl ether

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6927

Error Coefficients	
Standard Error:	1700000
Relative Standard Error:	5.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.123456	10.0	2085513.0	0.617282	Y
2	IC 410-274149/17	0.5	0.348646	10.0	2031490.0	0.697291	Y
3	IC 410-274149/16	1.0	0.668261	10.0	2037557.0	0.668261	Y
4	IC 410-274149/15	2.0	1.41755	10.0	2031307.0	0.708775	Y
5	IC 410-274149/14	5.0	3.600424	10.0	2106074.0	0.720085	Y
6	ICIS 410-274149/13	10.0	7.27635	10.0	2081655.0	0.727635	Y
7	IC 410-274149/12	25.0	17.737481	10.0	2132698.0	0.709499	Y



Calibration

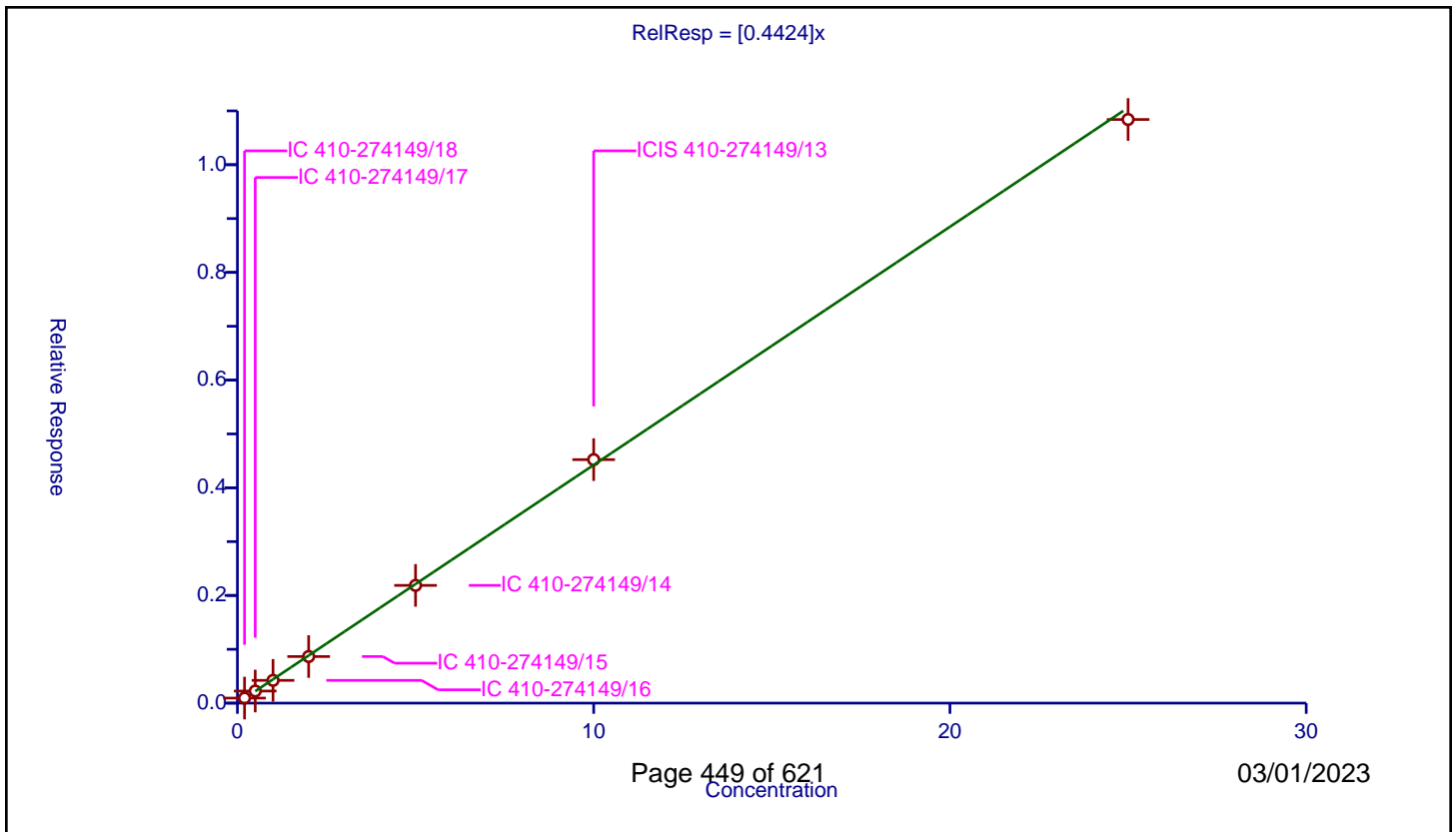
/ n-Heptane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4424

Error Coefficients	
Standard Error:	1040000
Relative Standard Error:	3.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.093632	10.0	2085513.0	0.468158	Y
2	IC 410-274149/17	0.5	0.224909	10.0	2031490.0	0.449818	Y
3	IC 410-274149/16	1.0	0.422619	10.0	2037557.0	0.422619	Y
4	IC 410-274149/15	2.0	0.865566	10.0	2031307.0	0.432783	Y
5	IC 410-274149/14	5.0	2.186917	10.0	2106074.0	0.437383	Y
6	ICIS 410-274149/13	10.0	4.522709	10.0	2081655.0	0.452271	Y
7	IC 410-274149/12	25.0	10.840311	10.0	2132698.0	0.433612	Y



Calibration

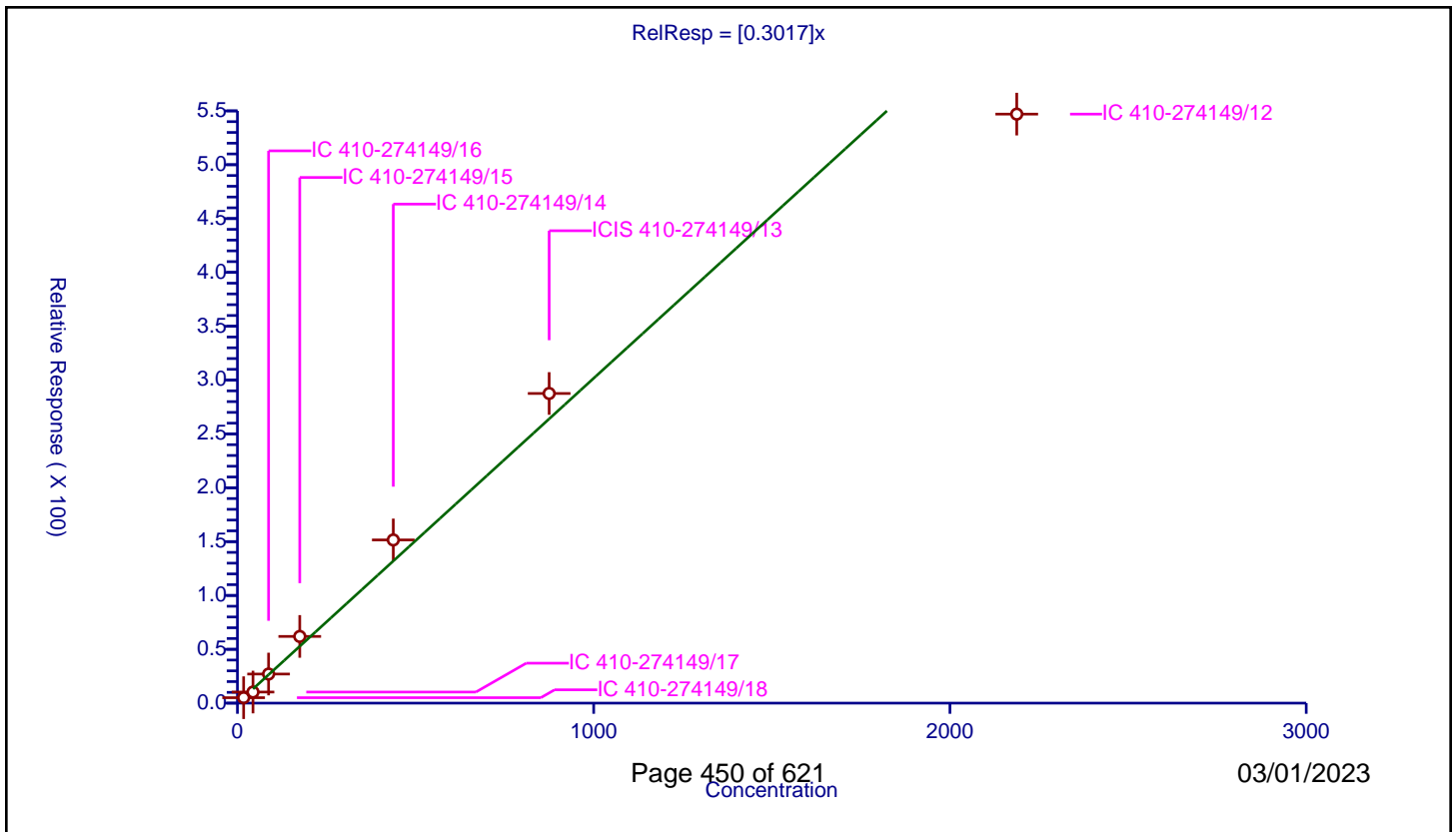
/ n-Butanol

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3017

Error Coefficients	
Standard Error:	519000
Relative Standard Error:	15.3
Correlation Coefficient:	0.964
Coefficient of Determination (Adjusted):	0.971

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	17.5	5.046098	50.0	127772.0	0.288348	Y
2	IC 410-274149/17	43.75	10.301993	50.0	81790.0	0.235474	Y
3	IC 410-274149/16	87.5	27.034089	50.0	87066.0	0.308961	Y
4	IC 410-274149/15	175.0	61.933998	50.0	107663.0	0.353909	Y
5	IC 410-274149/14	437.5	151.551974	50.0	120975.0	0.346405	Y
6	ICIS 410-274149/13	875.0	287.572753	50.0	101370.0	0.328655	Y
7	IC 410-274149/12	2187.5	547.018187	50.0	96770.0	0.250065	Y



Calibration

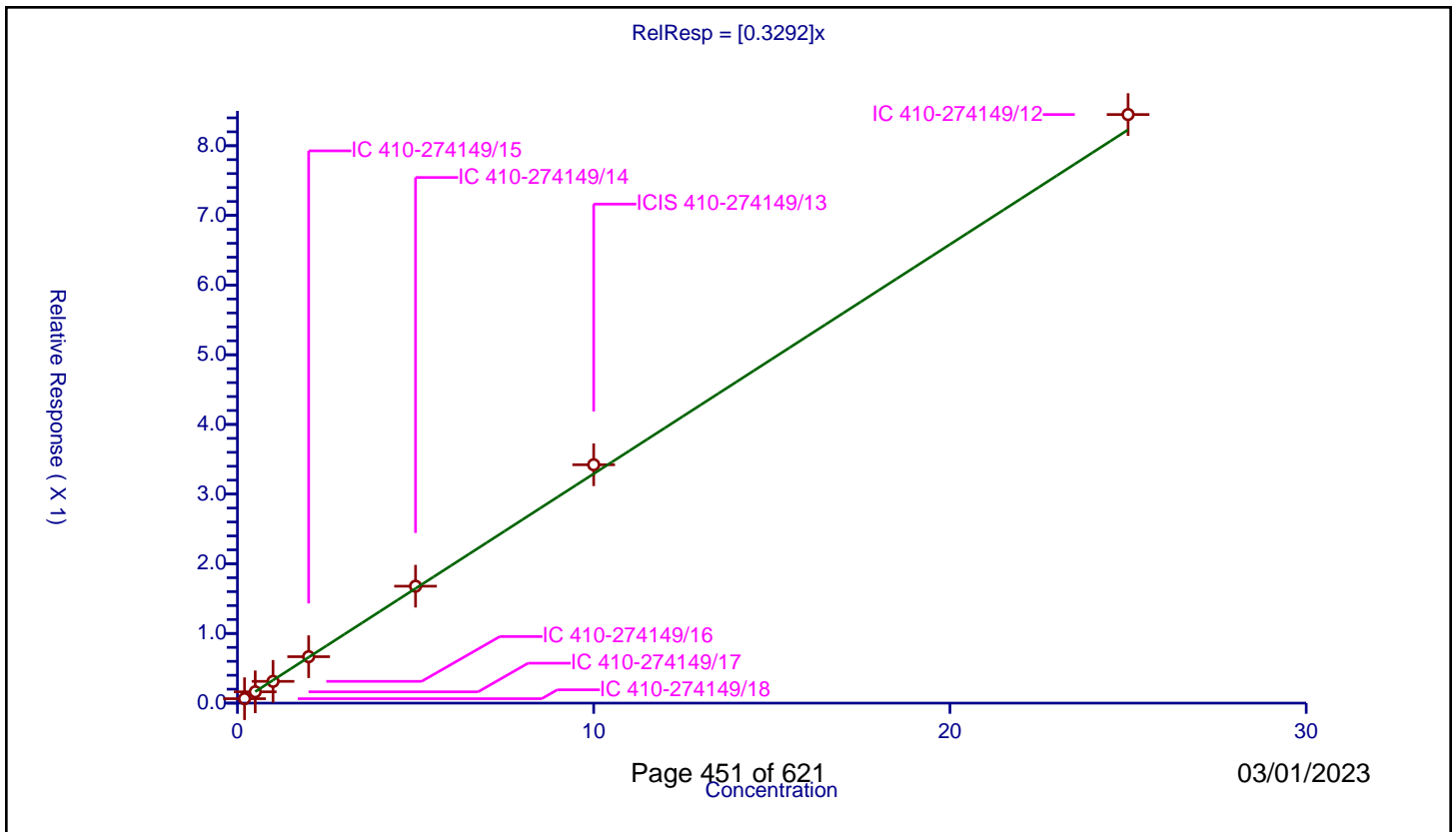
/ Trichloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3292

Error Coefficients	
Standard Error:	806000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.063649	10.0	2085513.0	0.318243	Y
2	IC 410-274149/17	0.5	0.162324	10.0	2031490.0	0.324648	Y
3	IC 410-274149/16	1.0	0.312408	10.0	2037557.0	0.312408	Y
4	IC 410-274149/15	2.0	0.666399	10.0	2031307.0	0.333199	Y
5	IC 410-274149/14	5.0	1.678265	10.0	2106074.0	0.335653	Y
6	ICIS 410-274149/13	10.0	3.42148	10.0	2081655.0	0.342148	Y
7	IC 410-274149/12	25.0	8.447713	10.0	2132698.0	0.337909	Y



Calibration

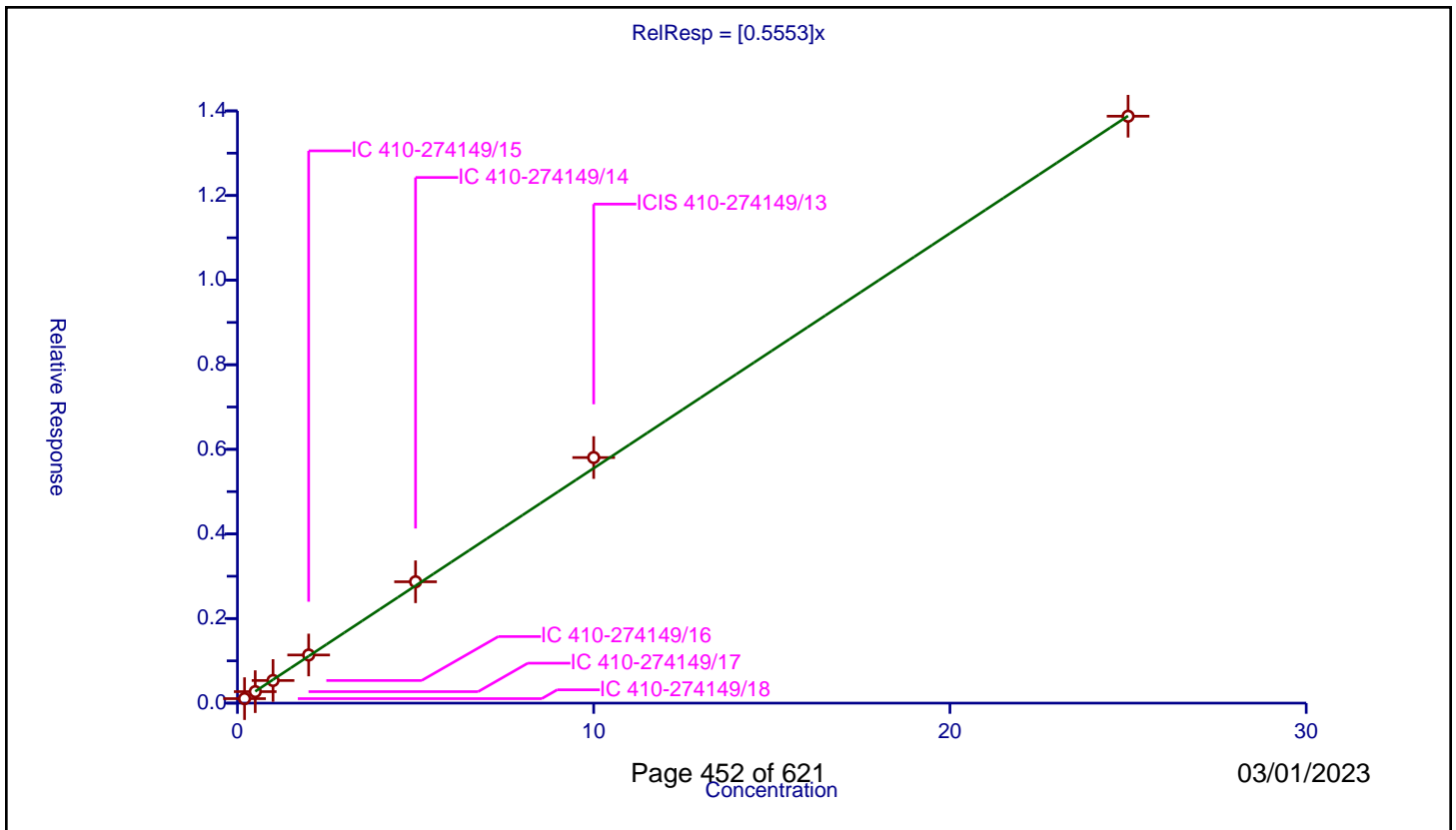
/ Methylcyclohexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5553

Error Coefficients	
Standard Error:	1330000
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.10596	10.0	2085513.0	0.529798	Y
2	IC 410-274149/17	0.5	0.271899	10.0	2031490.0	0.543798	Y
3	IC 410-274149/16	1.0	0.535033	10.0	2037557.0	0.535033	Y
4	IC 410-274149/15	2.0	1.138179	10.0	2031307.0	0.569089	Y
5	IC 410-274149/14	5.0	2.868859	10.0	2106074.0	0.573772	Y
6	ICIS 410-274149/13	10.0	5.804929	10.0	2081655.0	0.580493	Y
7	IC 410-274149/12	25.0	13.873854	10.0	2132698.0	0.554954	Y



Calibration

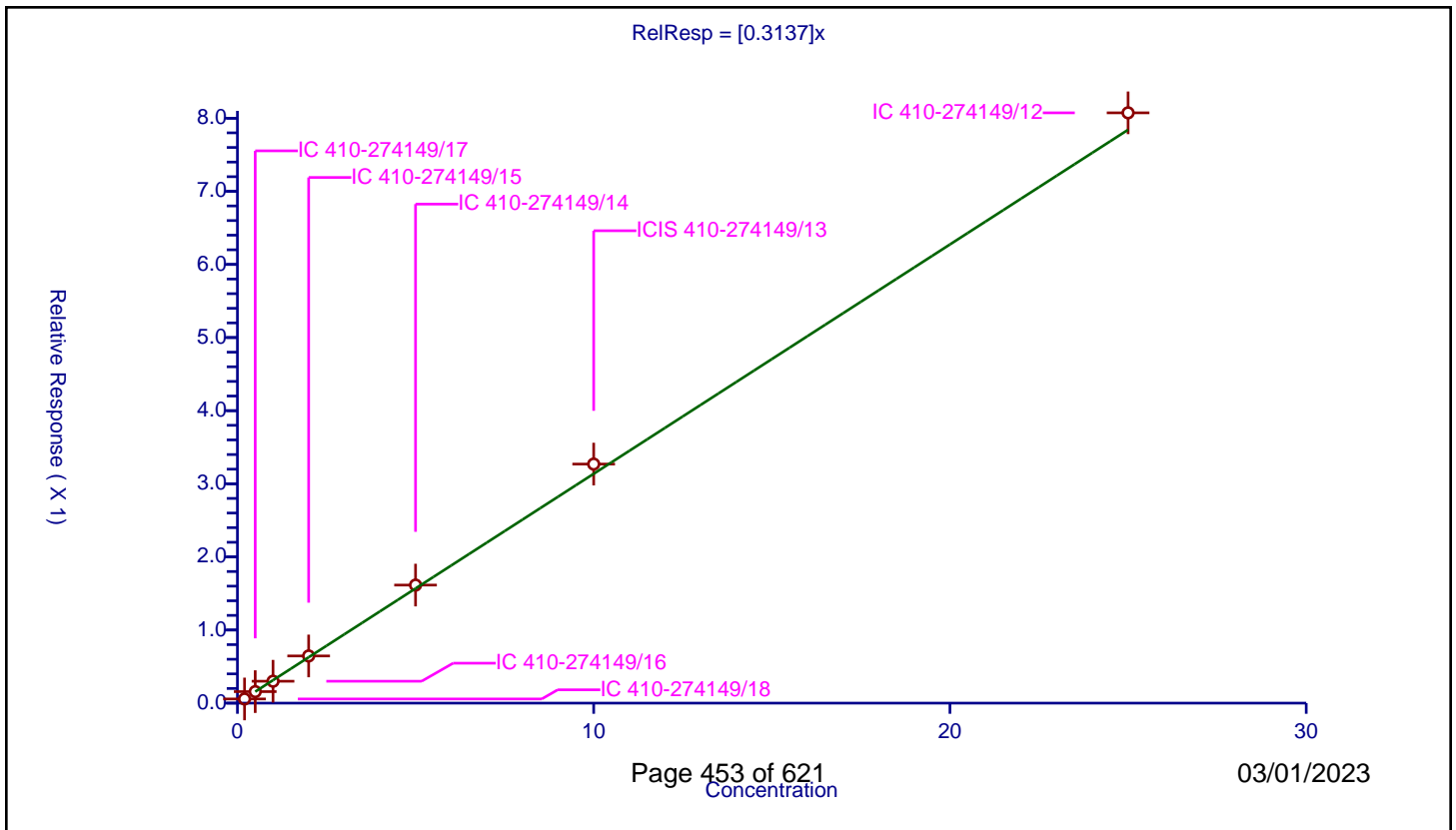
/ 1,2-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3137

Error Coefficients	
Standard Error:	771000
Relative Standard Error:	4.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.057175	10.0	2085513.0	0.285877	Y
2	IC 410-274149/17	0.5	0.157397	10.0	2031490.0	0.314794	Y
3	IC 410-274149/16	1.0	0.299511	10.0	2037557.0	0.299511	Y
4	IC 410-274149/15	2.0	0.645397	10.0	2031307.0	0.322699	Y
5	IC 410-274149/14	5.0	1.614502	10.0	2106074.0	0.3229	Y
6	ICIS 410-274149/13	10.0	3.269485	10.0	2081655.0	0.326949	Y
7	IC 410-274149/12	25.0	8.073347	10.0	2132698.0	0.322934	Y



Calibration

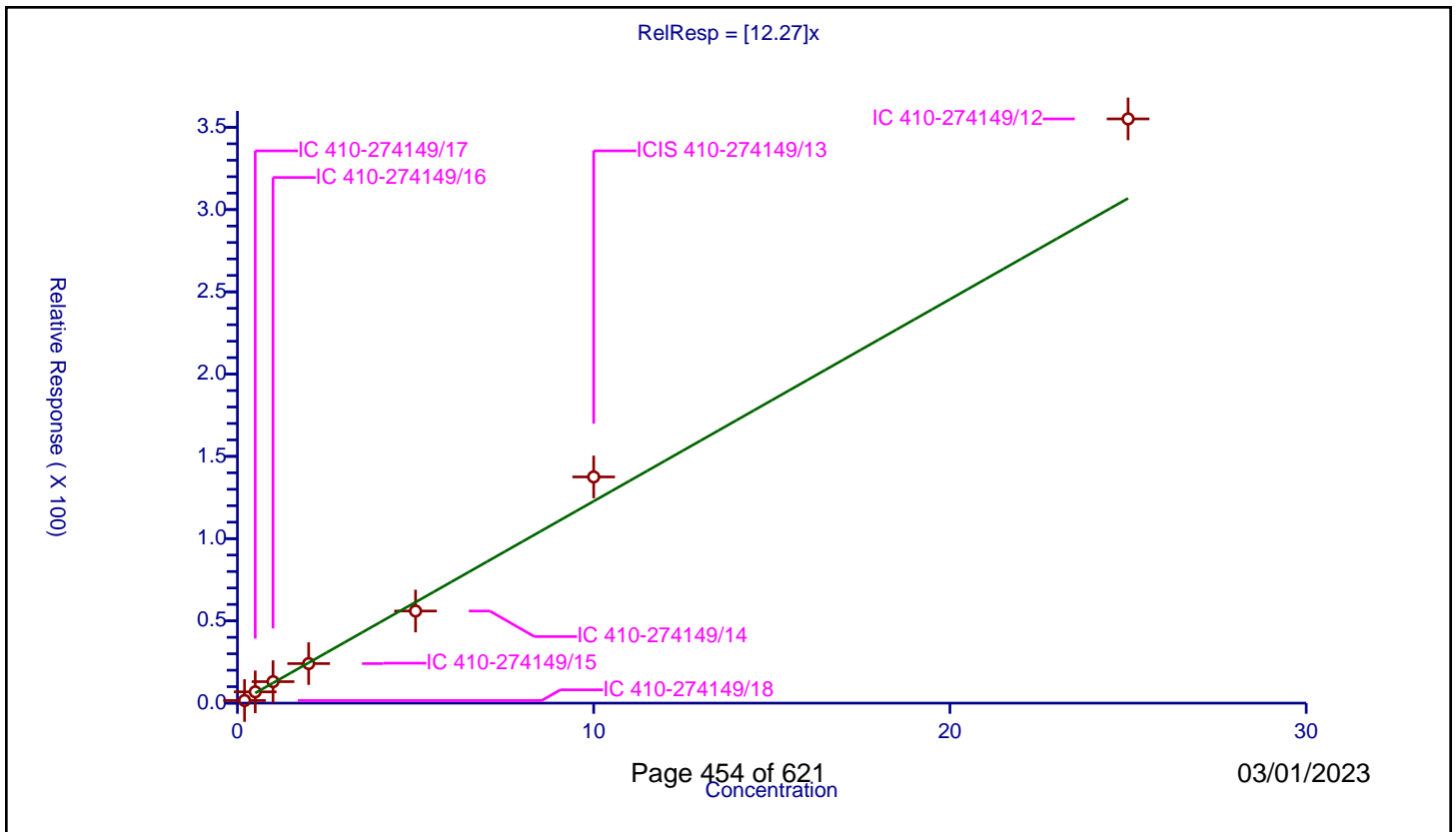
/ Methyl methacrylate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	12.27

Error Coefficients	
Standard Error:	309000
Relative Standard Error:	17.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.965

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	1.593463	50.0	127772.0	7.967317	Y
2	IC 410-274149/17	0.5	6.862697	50.0	81790.0	13.725394	Y
3	IC 410-274149/16	1.0	13.051019	50.0	87066.0	13.051019	Y
4	IC 410-274149/15	2.0	24.040757	50.0	107663.0	12.020378	Y
5	IC 410-274149/14	5.0	55.99256	50.0	120975.0	11.198512	Y
6	ICIS 410-274149/13	10.0	137.509125	50.0	101370.0	13.750912	Y
7	IC 410-274149/12	25.0	355.128139	50.0	96770.0	14.205126	Y



Calibration

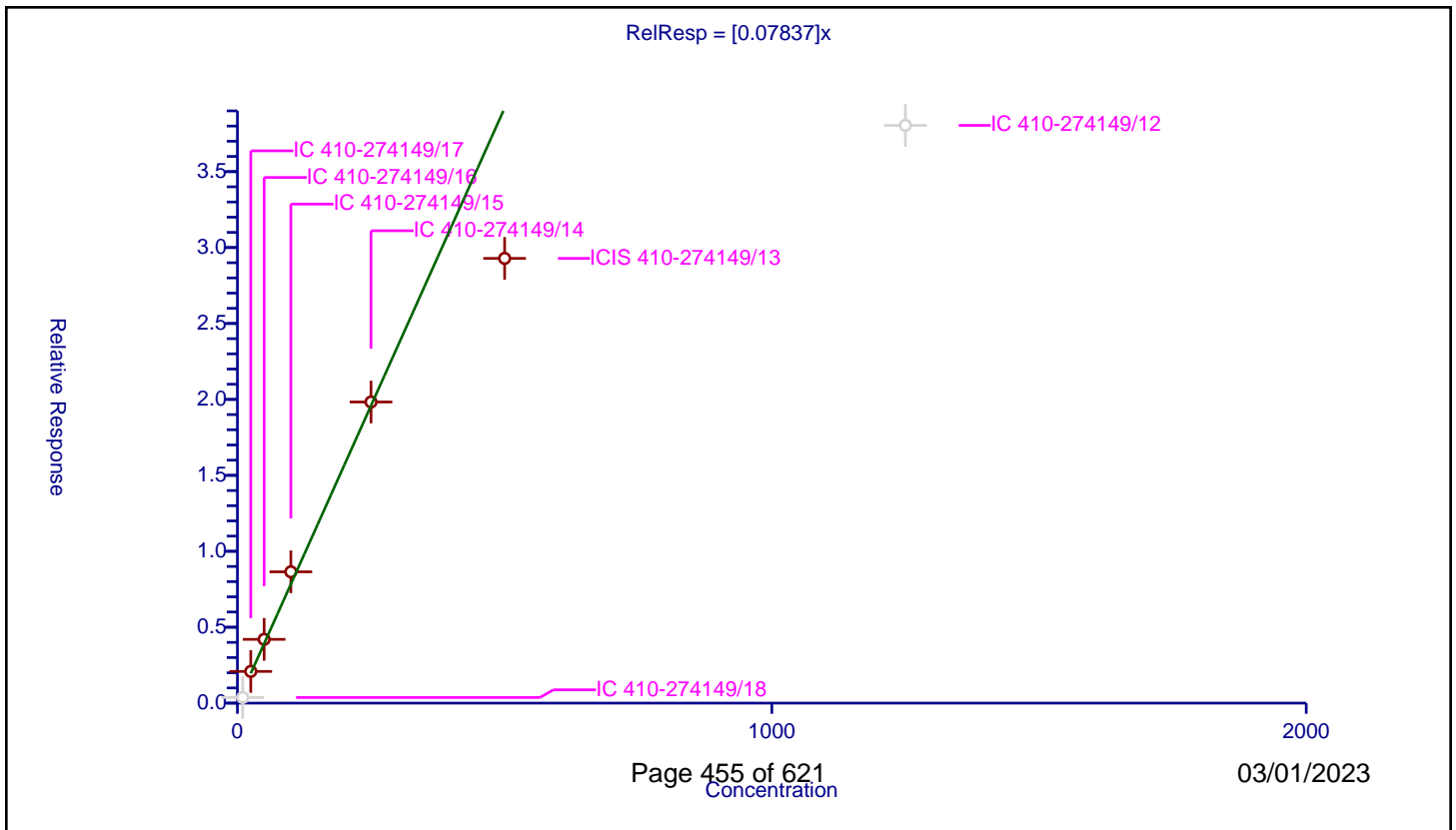
/ 1,4-Dioxane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.07837

Error Coefficients	
Standard Error:	39500
Relative Standard Error:	14.5
Correlation Coefficient:	0.905
Coefficient of Determination (Adjusted):	0.958

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	10.0	0.370582	50.0	127772.0	0.037058	N
2	IC 410-274149/17	25.0	2.087664	50.0	81790.0	0.083507	Y
3	IC 410-274149/16	50.0	4.199113	50.0	87066.0	0.083982	Y
4	IC 410-274149/15	100.0	8.648282	50.0	107663.0	0.086483	Y
5	IC 410-274149/14	250.0	19.829304	50.0	120975.0	0.079317	Y
6	ICIS 410-274149/13	500.0	29.287264	50.0	101370.0	0.058575	Y
7	IC 410-274149/12	1250.0	38.046399	50.0	96770.0	0.030437	N



Calibration

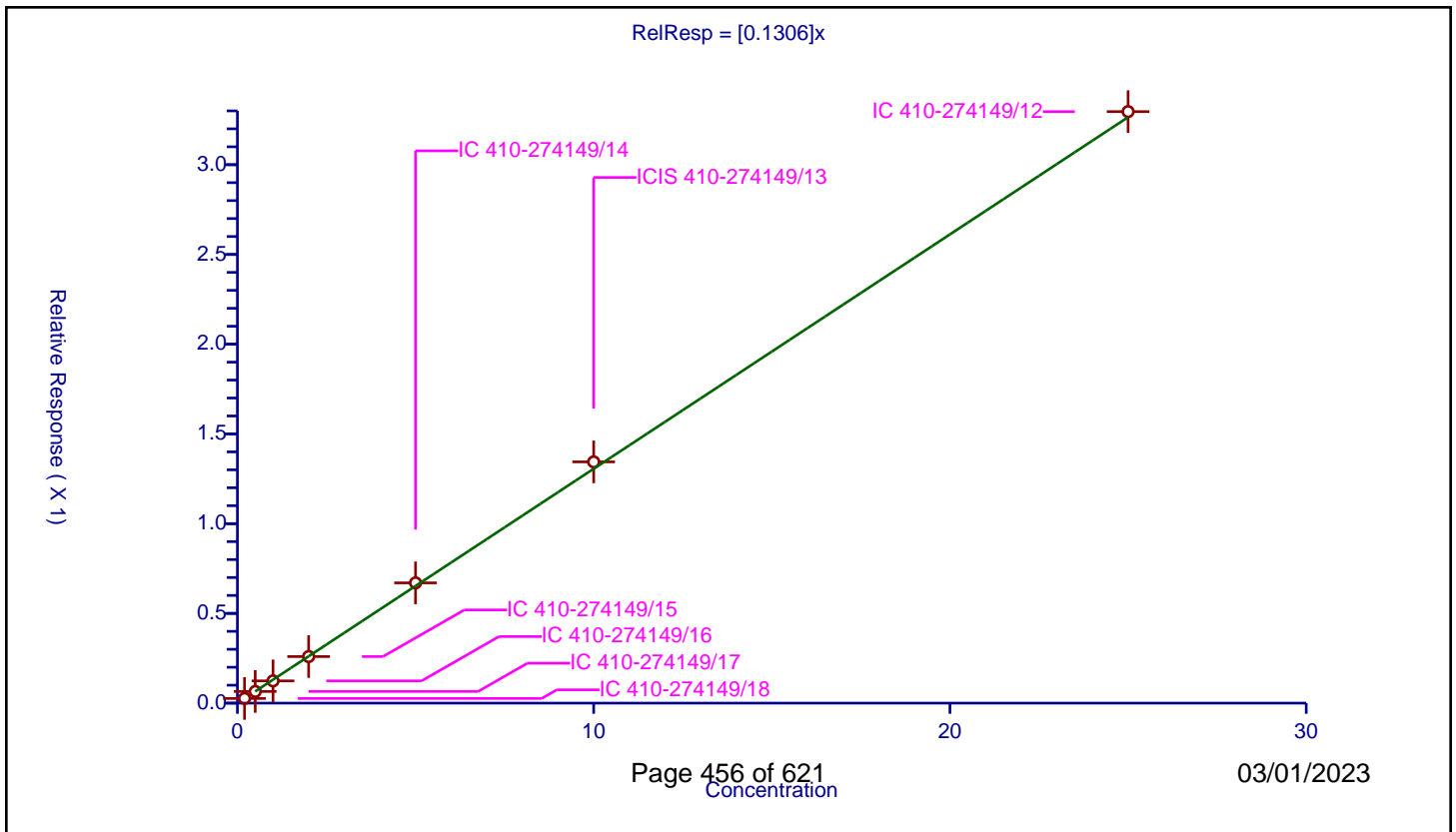
/ Dibromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1306

Error Coefficients	
Standard Error:	315000
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.026013	10.0	2085513.0	0.130064	Y
2	IC 410-274149/17	0.5	0.065031	10.0	2031490.0	0.130062	Y
3	IC 410-274149/16	1.0	0.123987	10.0	2037557.0	0.123987	Y
4	IC 410-274149/15	2.0	0.259532	10.0	2031307.0	0.129766	Y
5	IC 410-274149/14	5.0	0.670152	10.0	2106074.0	0.13403	Y
6	ICIS 410-274149/13	10.0	1.344253	10.0	2081655.0	0.134425	Y
7	IC 410-274149/12	25.0	3.295882	10.0	2132698.0	0.131835	Y



Calibration

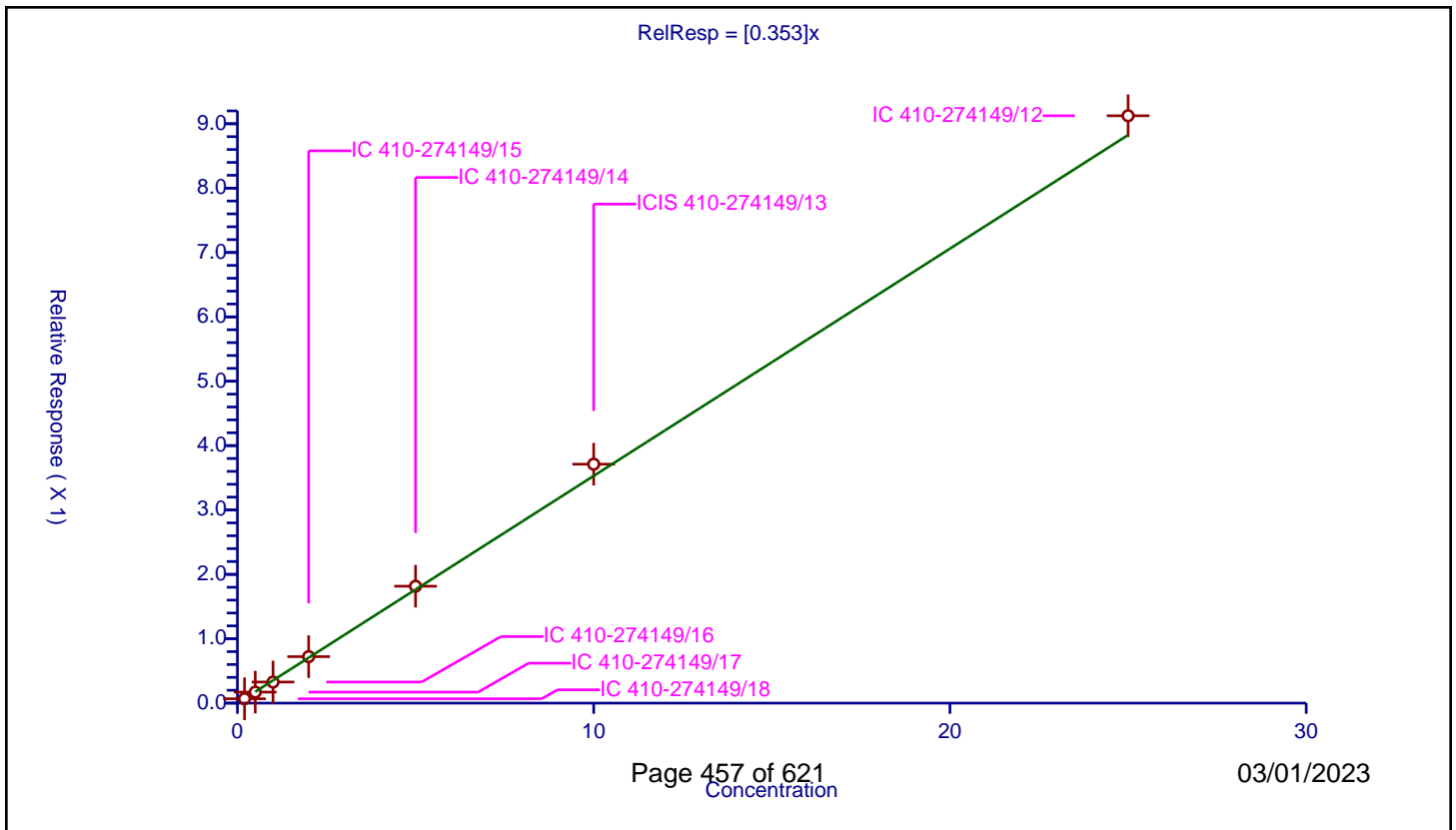
/ Dichlorobromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.353

Error Coefficients	
Standard Error:	872000
Relative Standard Error:	4.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.068002	10.0	2085513.0	0.340012	Y
2	IC 410-274149/17	0.5	0.171234	10.0	2031490.0	0.342468	Y
3	IC 410-274149/16	1.0	0.32804	10.0	2037557.0	0.32804	Y
4	IC 410-274149/15	2.0	0.722092	10.0	2031307.0	0.361046	Y
5	IC 410-274149/14	5.0	1.816147	10.0	2106074.0	0.363229	Y
6	ICIS 410-274149/13	10.0	3.711926	10.0	2081655.0	0.371193	Y
7	IC 410-274149/12	25.0	9.124091	10.0	2132698.0	0.364964	Y



Calibration

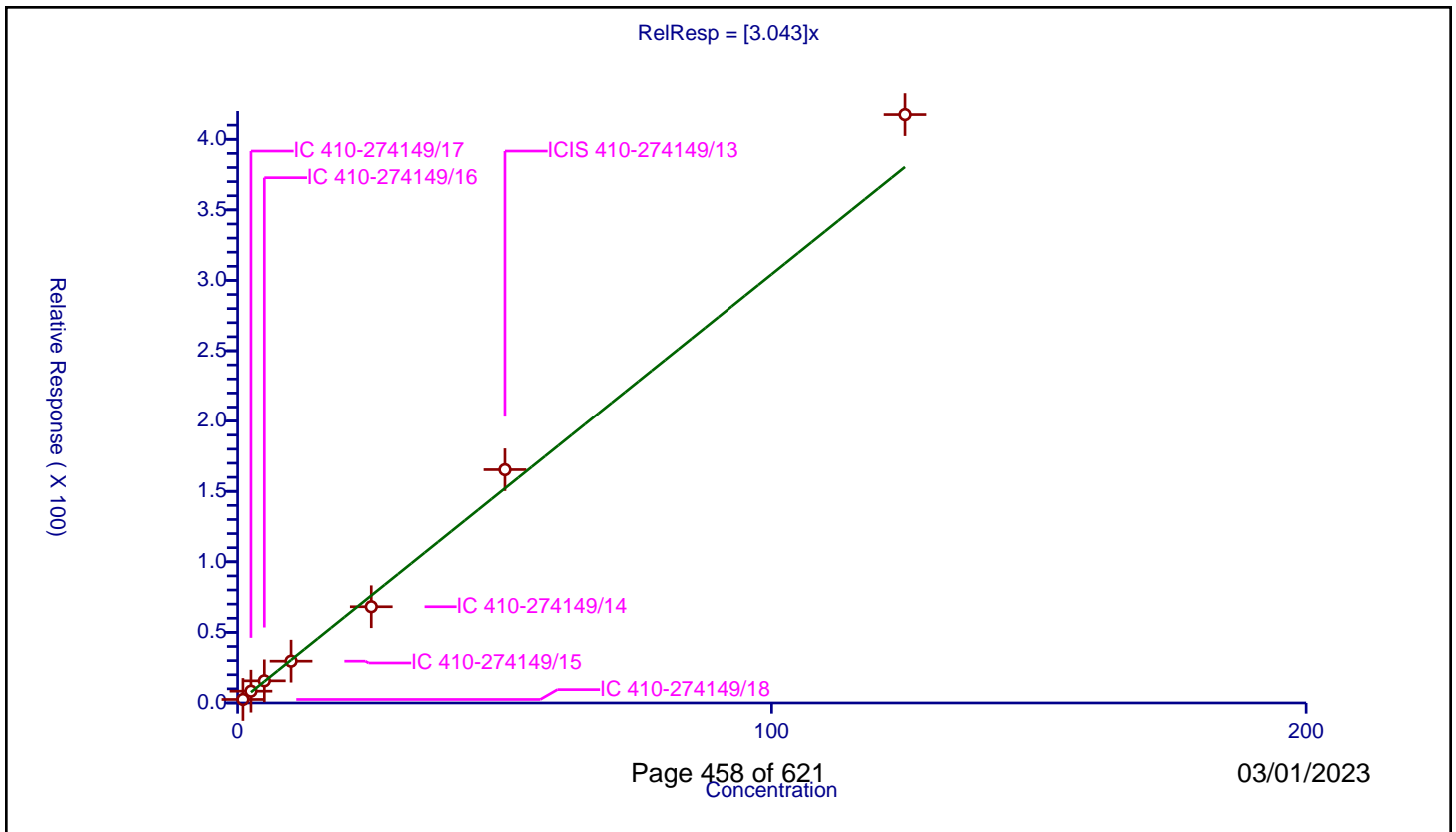
/ 2-Nitropropane

Curve Type: Average
Weighting: Conc_Sq
Origin: Force
Dependency: Response
Calib Mode: ISTD
Response Base: AREA
RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.043

Error Coefficients	
Standard Error:	364000
Relative Standard Error:	11.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	1.0	2.48646	50.0	127772.0	2.48646	Y
2	IC 410-274149/17	2.5	8.364103	50.0	81790.0	3.345641	Y
3	IC 410-274149/16	5.0	15.680633	50.0	87066.0	3.136127	Y
4	IC 410-274149/15	10.0	29.607665	50.0	107663.0	2.960766	Y
5	IC 410-274149/14	25.0	68.152924	50.0	120975.0	2.726117	Y
6	ICIS 410-274149/13	50.0	165.41679	50.0	101370.0	3.308336	Y
7	IC 410-274149/12	125.0	417.486308	50.0	96770.0	3.33989	Y



Calibration

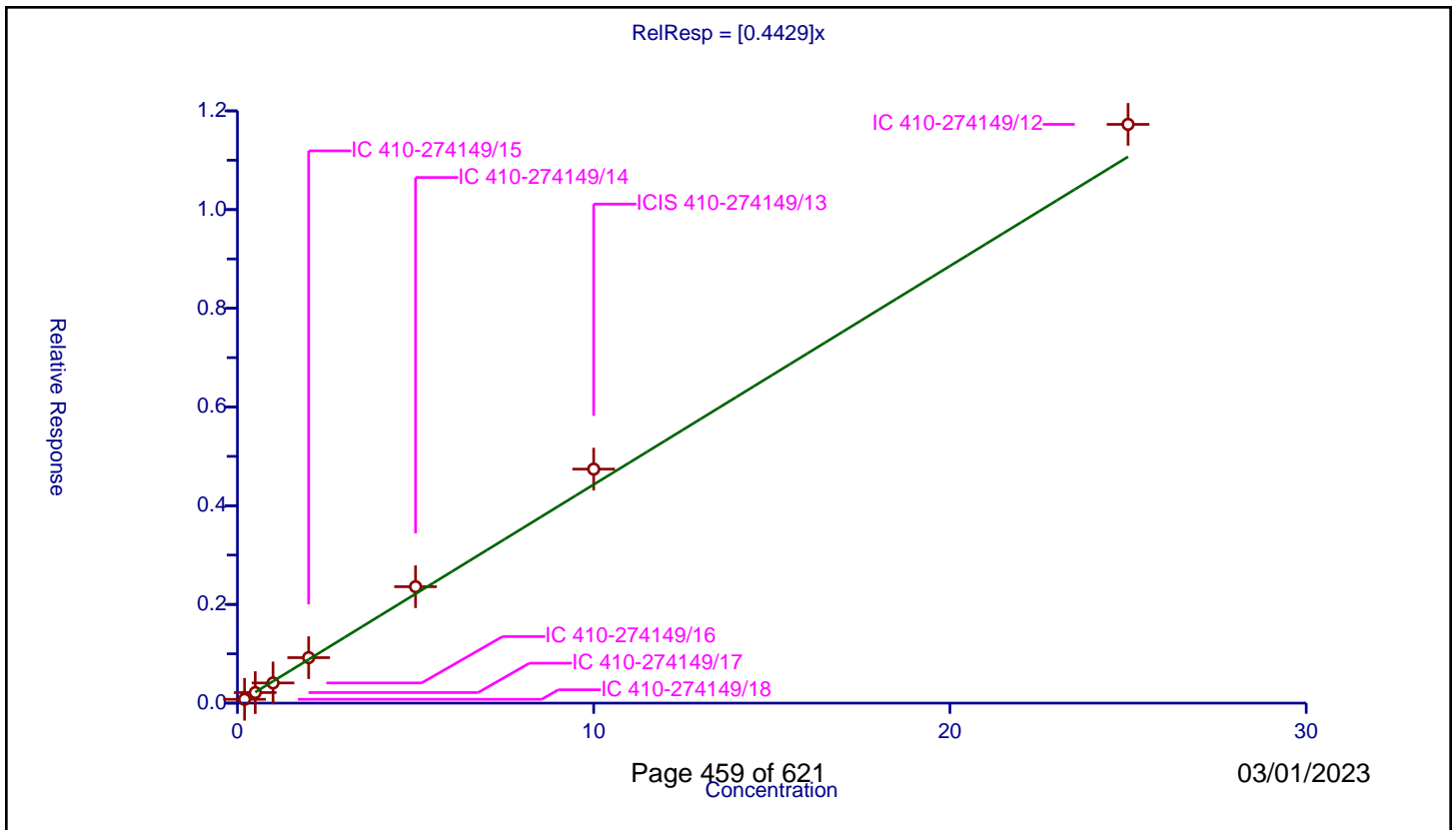
/ cis-1,3-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4429

Error Coefficients	
Standard Error:	1120000
Relative Standard Error:	7.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.077607	10.0	2085513.0	0.388034	Y
2	IC 410-274149/17	0.5	0.21371	10.0	2031490.0	0.42742	Y
3	IC 410-274149/16	1.0	0.408847	10.0	2037557.0	0.408847	Y
4	IC 410-274149/15	2.0	0.921323	10.0	2031307.0	0.460662	Y
5	IC 410-274149/14	5.0	2.358849	10.0	2106074.0	0.47177	Y
6	ICIS 410-274149/13	10.0	4.741424	10.0	2081655.0	0.474142	Y
7	IC 410-274149/12	25.0	11.727099	10.0	2132698.0	0.469084	Y



Calibration

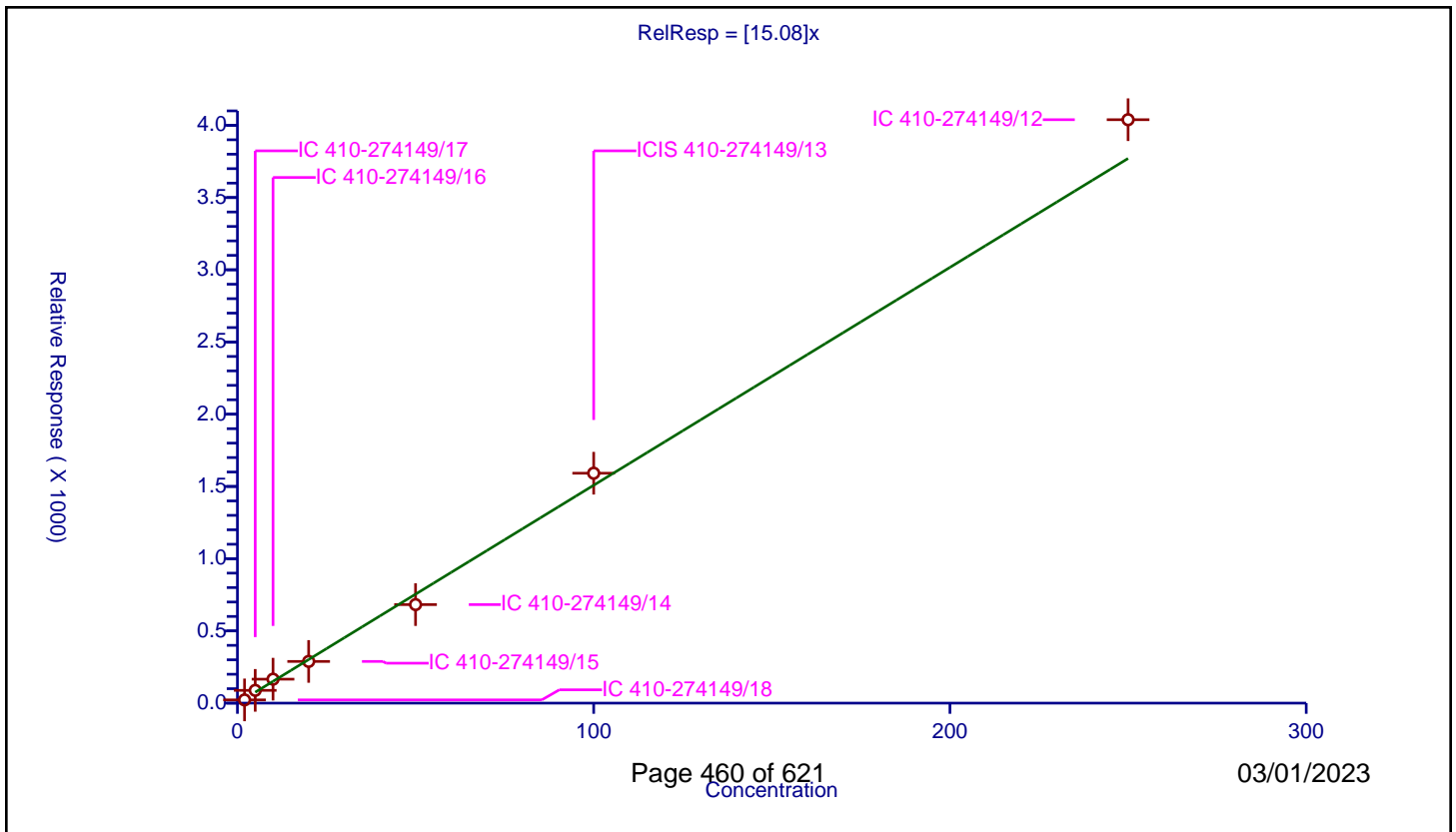
/ 4-Methyl-2-pentanone (MIBK)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	15.08

Error Coefficients	
Standard Error:	3530000
Relative Standard Error:	14.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	2.0	22.324531	50.0	127772.0	11.162266	Y
2	IC 410-274149/17	5.0	88.438073	50.0	81790.0	17.687615	Y
3	IC 410-274149/16	10.0	165.773092	50.0	87066.0	16.577309	Y
4	IC 410-274149/15	20.0	288.685528	50.0	107663.0	14.434276	Y
5	IC 410-274149/14	50.0	682.126059	50.0	120975.0	13.642521	Y
6	ICIS 410-274149/13	100.0	1591.751998	50.0	101370.0	15.91752	Y
7	IC 410-274149/12	250.0	4038.931487	50.0	96770.0	16.155726	Y



Calibration

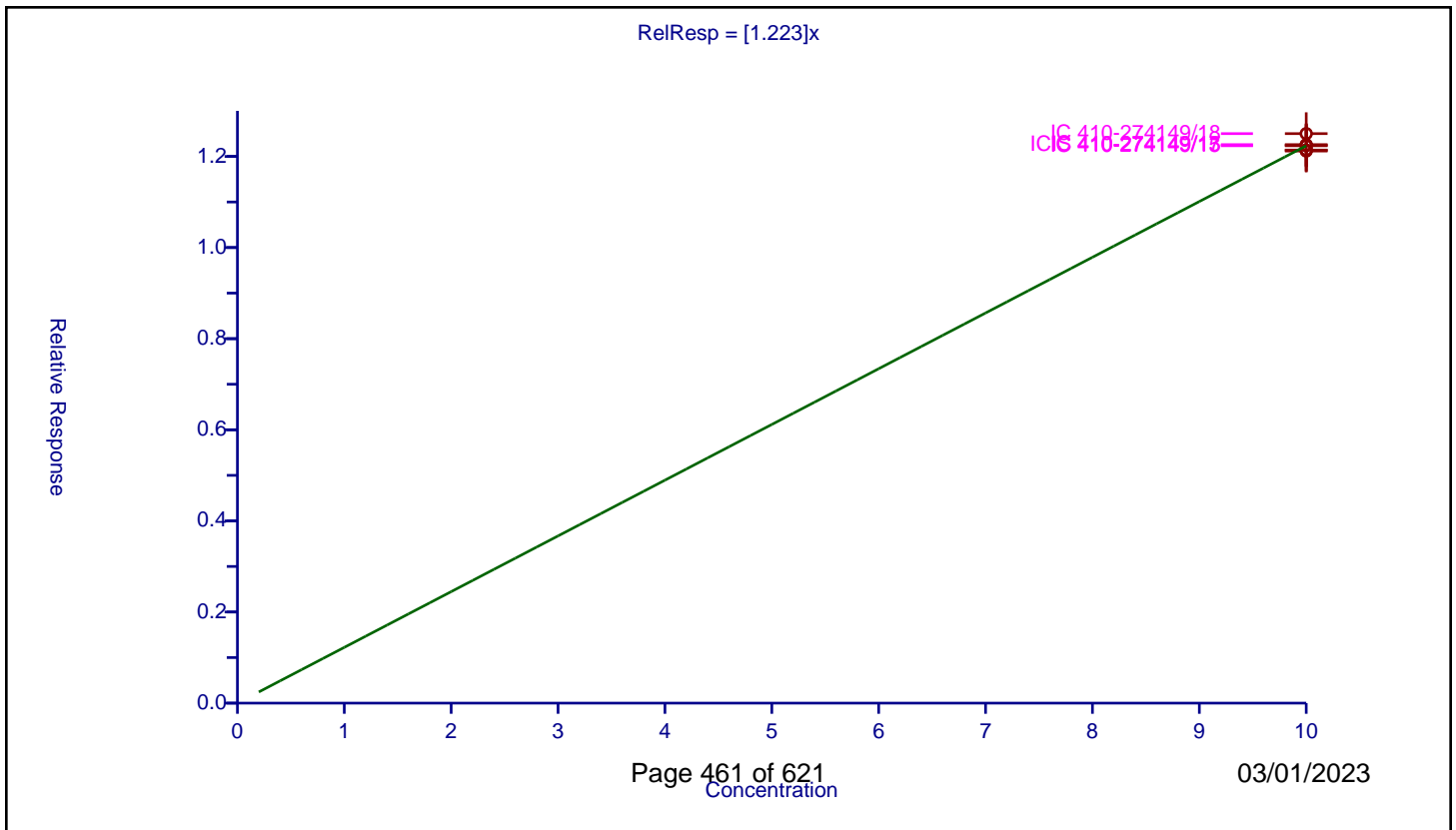
/ Toluene-d8 (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.223

Error Coefficients	
Standard Error:	2430000
Relative Standard Error:	1.1
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0.0000000000000000222

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/12	10.0	12.137976	10.0	1927449.0	1.213798	Y
2	ICIS 410-274149/13	10.0	12.244471	10.0	1866823.0	1.224447	Y
3	IC 410-274149/14	10.0	12.119056	10.0	1880356.0	1.211906	Y
4	IC 410-274149/15	10.0	12.234589	10.0	1814146.0	1.223459	Y
5	IC 410-274149/16	10.0	12.140099	10.0	1802515.0	1.21401	Y
6	IC 410-274149/17	10.0	12.259191	10.0	1783683.0	1.225919	Y
7	IC 410-274149/18	10.0	12.500747	10.0	1804145.0	1.250075	Y



Calibration

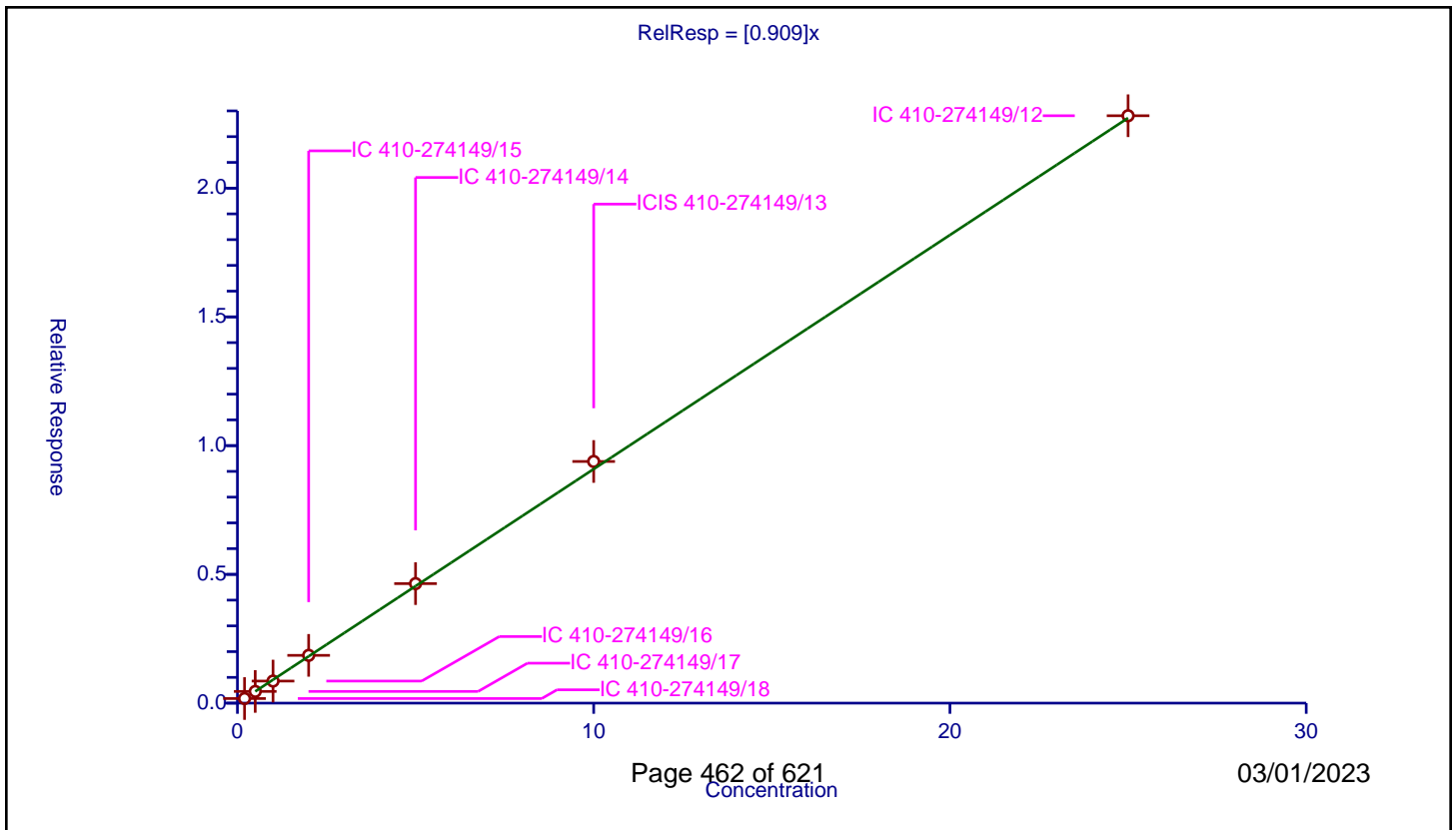
/ Toluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.909

Error Coefficients	
Standard Error:	1970000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.178012	10.0	1804145.0	0.890061	Y
2	IC 410-274149/17	0.5	0.454431	10.0	1783683.0	0.908861	Y
3	IC 410-274149/16	1.0	0.857175	10.0	1802515.0	0.857175	Y
4	IC 410-274149/15	2.0	1.855391	10.0	1814146.0	0.927695	Y
5	IC 410-274149/14	5.0	4.6411	10.0	1880356.0	0.92822	Y
6	ICIS 410-274149/13	10.0	9.38458	10.0	1866823.0	0.938458	Y
7	IC 410-274149/12	25.0	22.812137	10.0	1927449.0	0.912485	Y



Calibration

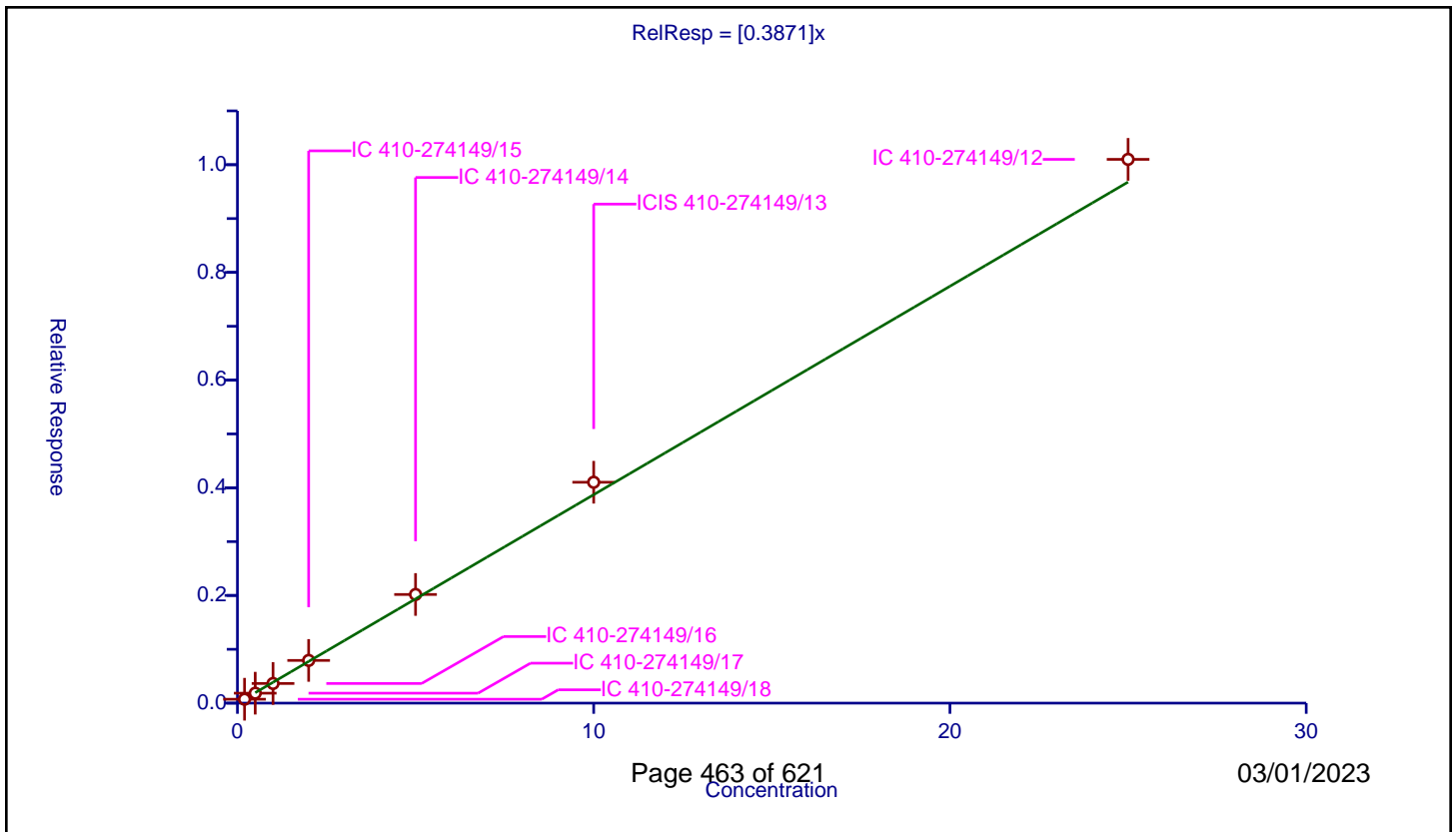
/ trans-1,3-Dichloropropene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3871

Error Coefficients	
Standard Error:	870000
Relative Standard Error:	5.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.072278	10.0	1804145.0	0.36139	Y
2	IC 410-274149/17	0.5	0.184607	10.0	1783683.0	0.369214	Y
3	IC 410-274149/16	1.0	0.364901	10.0	1802515.0	0.364901	Y
4	IC 410-274149/15	2.0	0.793189	10.0	1814146.0	0.396594	Y
5	IC 410-274149/14	5.0	2.018267	10.0	1880356.0	0.403653	Y
6	ICIS 410-274149/13	10.0	4.102521	10.0	1866823.0	0.410252	Y
7	IC 410-274149/12	25.0	10.099676	10.0	1927449.0	0.403987	Y



Calibration

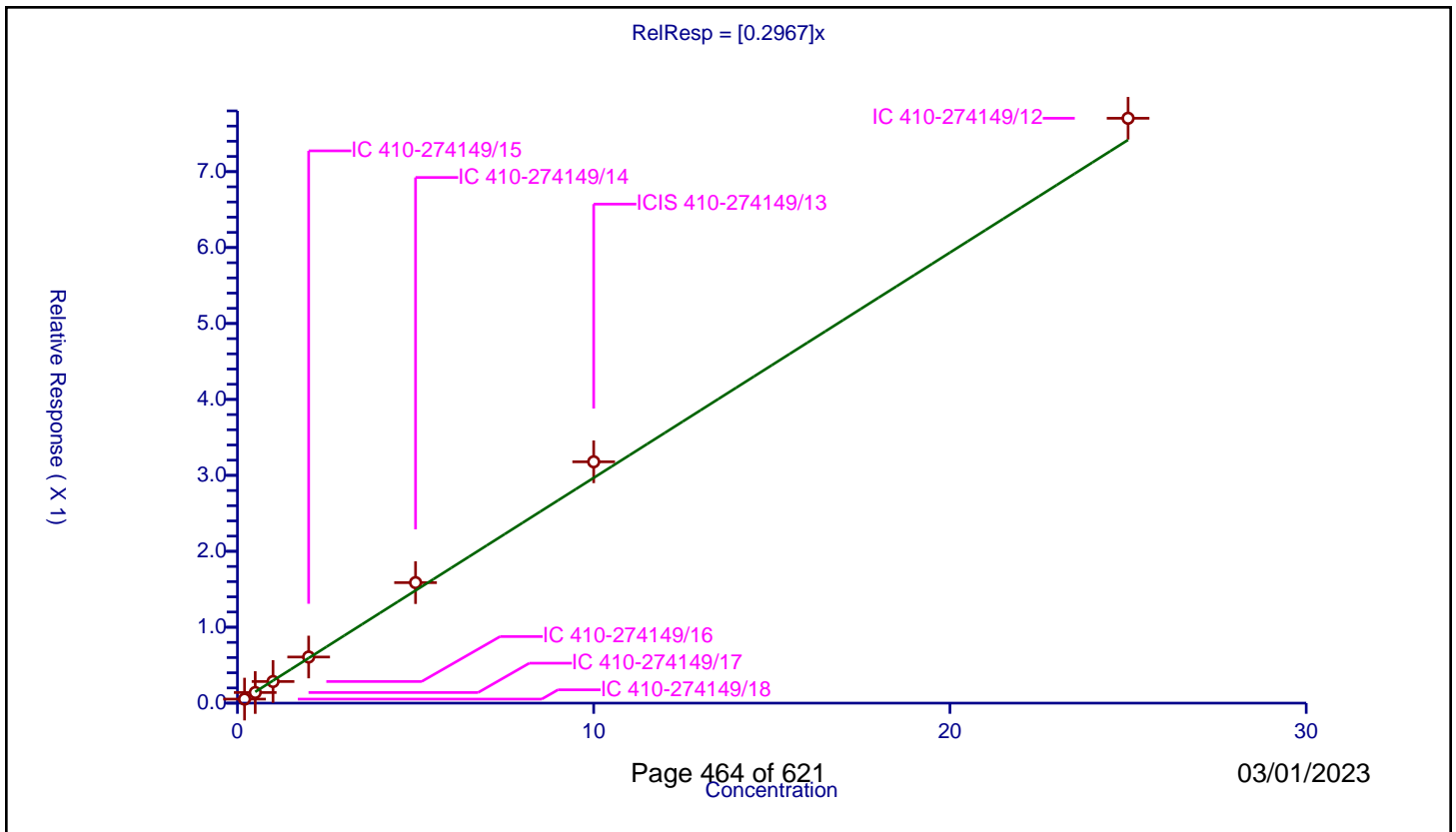
/ Ethyl methacrylate

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2967

Error Coefficients	
Standard Error:	666000
Relative Standard Error:	6.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.053083	10.0	1804145.0	0.265417	Y
2	IC 410-274149/17	0.5	0.139874	10.0	1783683.0	0.279747	Y
3	IC 410-274149/16	1.0	0.284719	10.0	1802515.0	0.284719	Y
4	IC 410-274149/15	2.0	0.607459	10.0	1814146.0	0.30373	Y
5	IC 410-274149/14	5.0	1.58721	10.0	1880356.0	0.317442	Y
6	ICIS 410-274149/13	10.0	3.178523	10.0	1866823.0	0.317852	Y
7	IC 410-274149/12	25.0	7.702808	10.0	1927449.0	0.308112	Y



Calibration

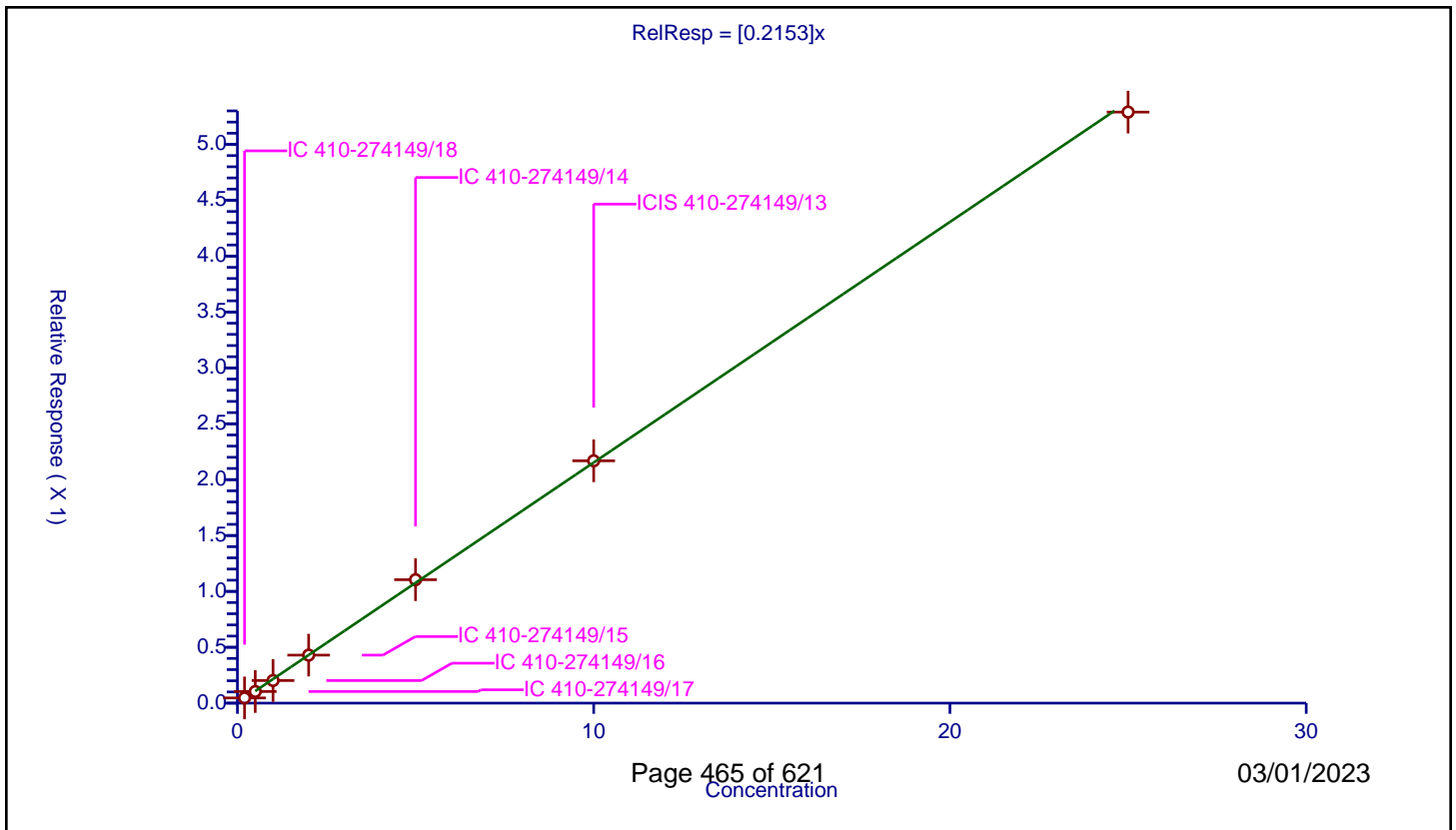
/ 1,1,2-Trichloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2153

Error Coefficients	
Standard Error:	457000
Relative Standard Error:	4.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.046515	10.0	1804145.0	0.232576	Y
2	IC 410-274149/17	0.5	0.104032	10.0	1783683.0	0.208064	Y
3	IC 410-274149/16	1.0	0.202284	10.0	1802515.0	0.202284	Y
4	IC 410-274149/15	2.0	0.429695	10.0	1814146.0	0.214848	Y
5	IC 410-274149/14	5.0	1.104504	10.0	1880356.0	0.220901	Y
6	ICIS 410-274149/13	10.0	2.168615	10.0	1866823.0	0.216861	Y
7	IC 410-274149/12	25.0	5.289312	10.0	1927449.0	0.211572	Y



Calibration

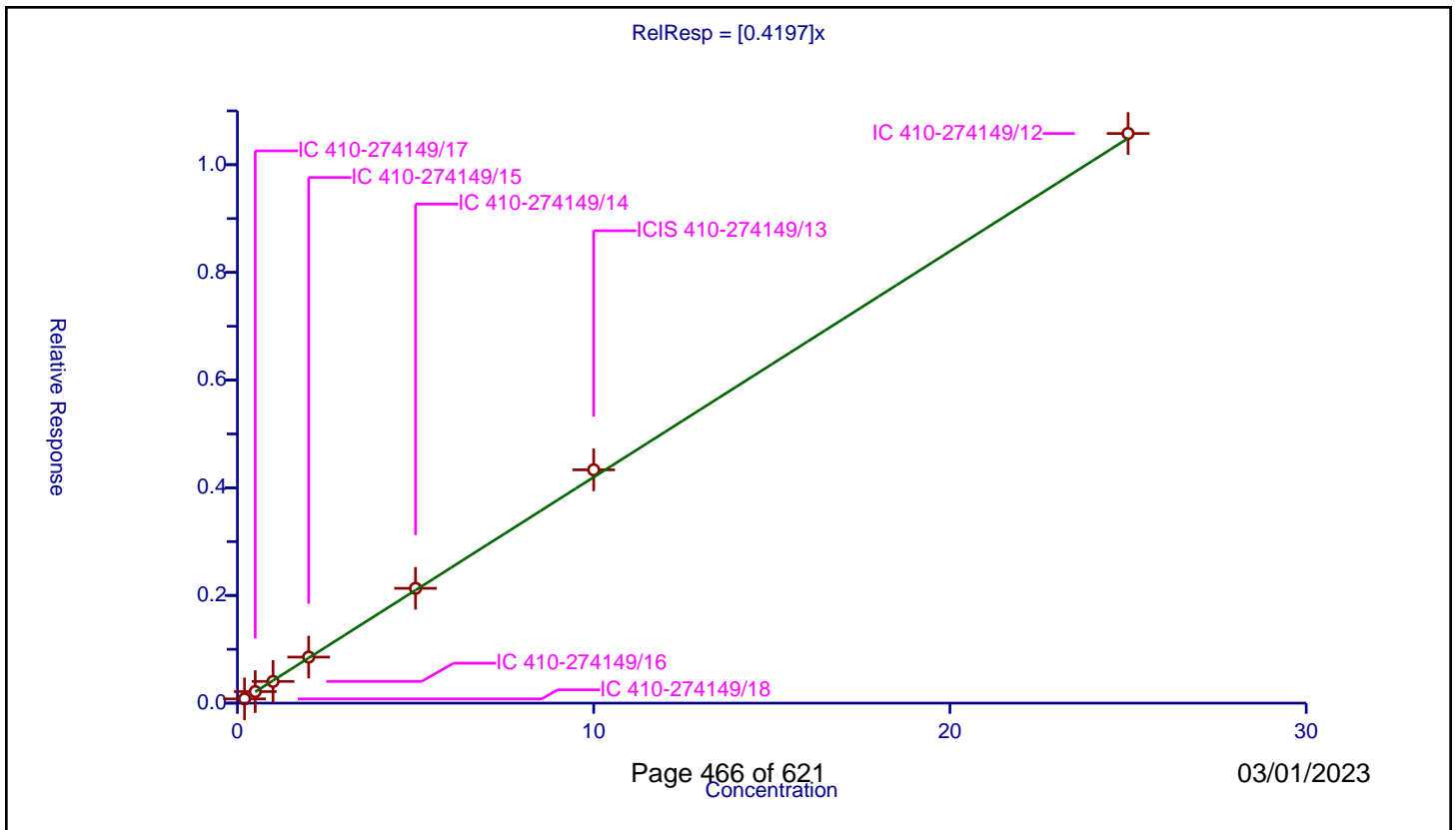
/ Tetrachloroethene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4197

Error Coefficients	
Standard Error:	913000
Relative Standard Error:	3.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.079046	10.0	1804145.0	0.395229	Y
2	IC 410-274149/17	0.5	0.214494	10.0	1783683.0	0.428989	Y
3	IC 410-274149/16	1.0	0.402948	10.0	1802515.0	0.402948	Y
4	IC 410-274149/15	2.0	0.85492	10.0	1814146.0	0.42746	Y
5	IC 410-274149/14	5.0	2.132181	10.0	1880356.0	0.426436	Y
6	ICIS 410-274149/13	10.0	4.333228	10.0	1866823.0	0.433323	Y
7	IC 410-274149/12	25.0	10.579772	10.0	1927449.0	0.423191	Y



Calibration

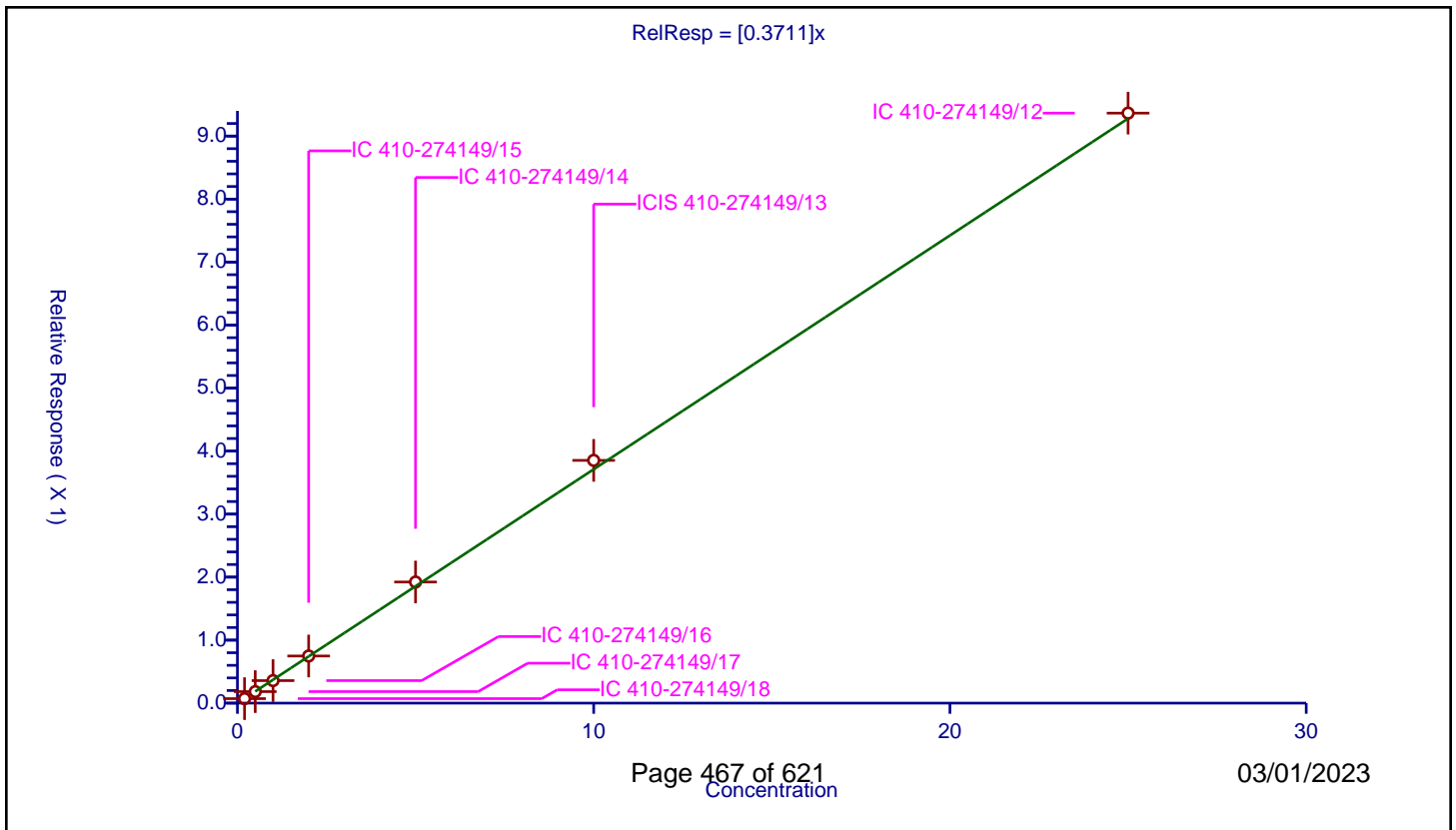
/ 1,3-Dichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3711

Error Coefficients	
Standard Error:	809000
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.071186	10.0	1804145.0	0.35593	Y
2	IC 410-274149/17	0.5	0.183026	10.0	1783683.0	0.366052	Y
3	IC 410-274149/16	1.0	0.357584	10.0	1802515.0	0.357584	Y
4	IC 410-274149/15	2.0	0.748176	10.0	1814146.0	0.374088	Y
5	IC 410-274149/14	5.0	1.922503	10.0	1880356.0	0.384501	Y
6	ICIS 410-274149/13	10.0	3.852797	10.0	1866823.0	0.38528	Y
7	IC 410-274149/12	25.0	9.364492	10.0	1927449.0	0.37458	Y



Calibration

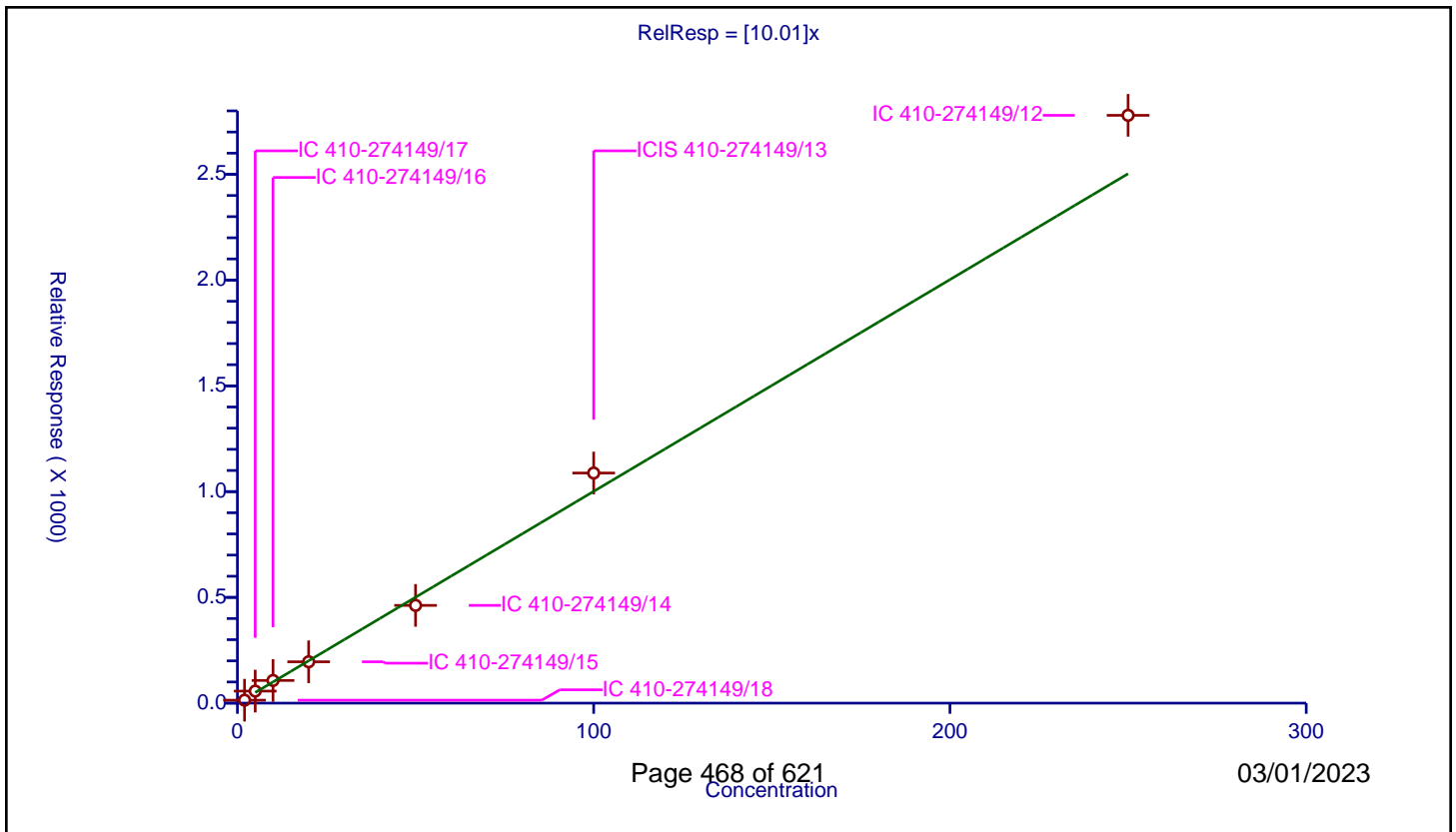
/ 2-Hexanone

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	10.01

Error Coefficients	
Standard Error:	2420000
Relative Standard Error:	15.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.972

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	2.0	13.90602	50.0	127772.0	6.95301	Y
2	IC 410-274149/17	5.0	56.977014	50.0	81790.0	11.395403	Y
3	IC 410-274149/16	10.0	107.208899	50.0	87066.0	10.72089	Y
4	IC 410-274149/15	20.0	195.500311	50.0	107663.0	9.775016	Y
5	IC 410-274149/14	50.0	462.026038	50.0	120975.0	9.240521	Y
6	ICIS 410-274149/13	100.0	1087.879057	50.0	101370.0	10.878791	Y
7	IC 410-274149/12	250.0	2778.996073	50.0	96770.0	11.115984	Y



Calibration

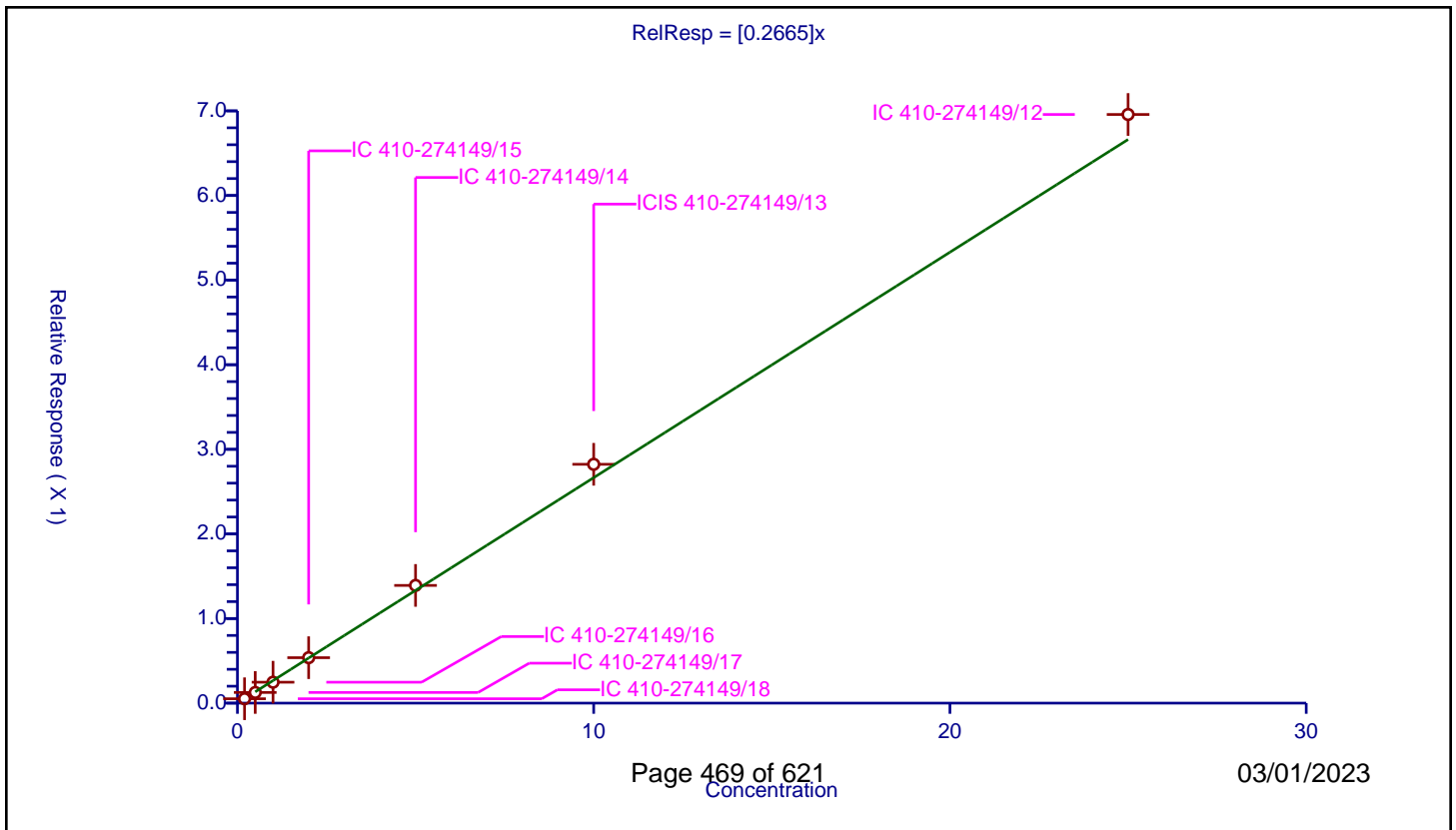
/ Chlorodibromomethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.2665

Error Coefficients	
Standard Error:	600000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.051675	10.0	1804145.0	0.258377	Y
2	IC 410-274149/17	0.5	0.126104	10.0	1783683.0	0.252208	Y
3	IC 410-274149/16	1.0	0.247377	10.0	1802515.0	0.247377	Y
4	IC 410-274149/15	2.0	0.537112	10.0	1814146.0	0.268556	Y
5	IC 410-274149/14	5.0	1.391338	10.0	1880356.0	0.278268	Y
6	ICIS 410-274149/13	10.0	2.822881	10.0	1866823.0	0.282288	Y
7	IC 410-274149/12	25.0	6.957543	10.0	1927449.0	0.278302	Y



Calibration

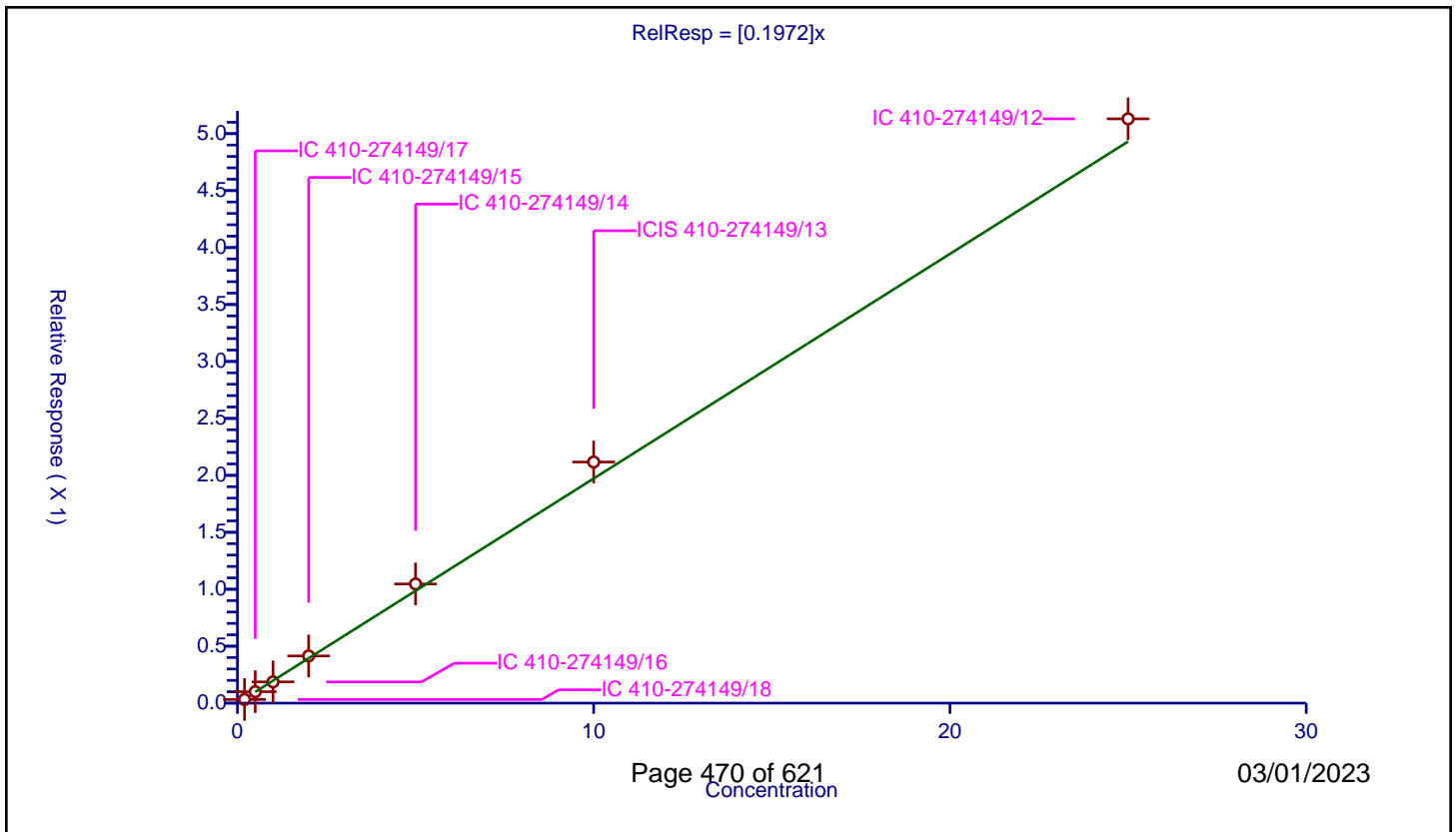
/ Ethylene Dibromide

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1972

Error Coefficients	
Standard Error:	443000
Relative Standard Error:	9.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.032015	10.0	1804145.0	0.160076	Y
2	IC 410-274149/17	0.5	0.100287	10.0	1783683.0	0.200574	Y
3	IC 410-274149/16	1.0	0.186684	10.0	1802515.0	0.186684	Y
4	IC 410-274149/15	2.0	0.414195	10.0	1814146.0	0.207097	Y
5	IC 410-274149/14	5.0	1.04635	10.0	1880356.0	0.20927	Y
6	ICIS 410-274149/13	10.0	2.116933	10.0	1866823.0	0.211693	Y
7	IC 410-274149/12	25.0	5.130112	10.0	1927449.0	0.205204	Y



Calibration

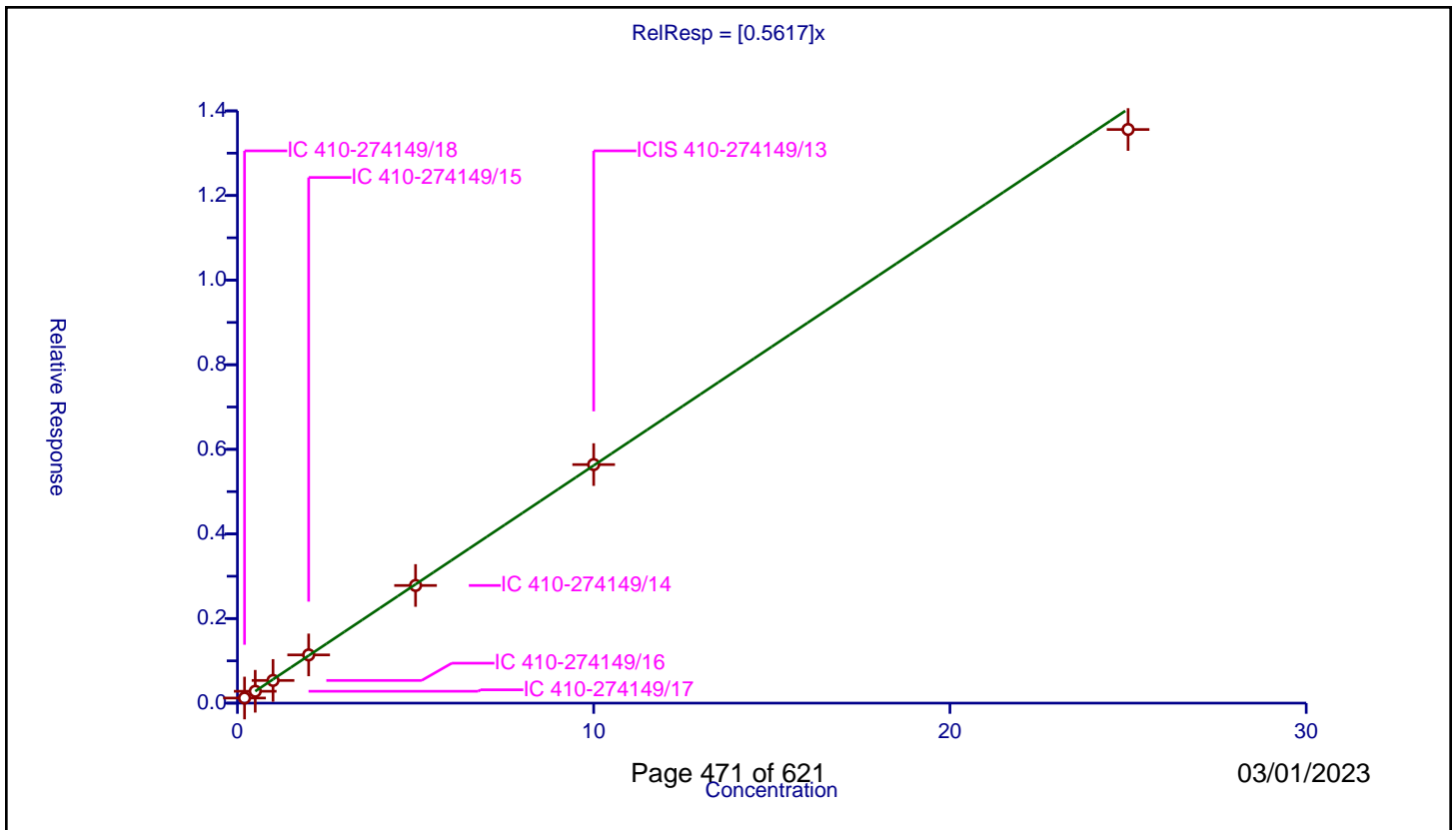
/ 1-Chlorohexane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5617

Error Coefficients	
Standard Error:	1170000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.12045	10.0	1804145.0	0.602252	Y
2	IC 410-274149/17	0.5	0.280672	10.0	1783683.0	0.561344	Y
3	IC 410-274149/16	1.0	0.536073	10.0	1802515.0	0.536073	Y
4	IC 410-274149/15	2.0	1.140013	10.0	1814146.0	0.570006	Y
5	IC 410-274149/14	5.0	2.781308	10.0	1880356.0	0.556262	Y
6	ICIS 410-274149/13	10.0	5.639003	10.0	1866823.0	0.5639	Y
7	IC 410-274149/12	25.0	13.559669	10.0	1927449.0	0.542387	Y



Calibration

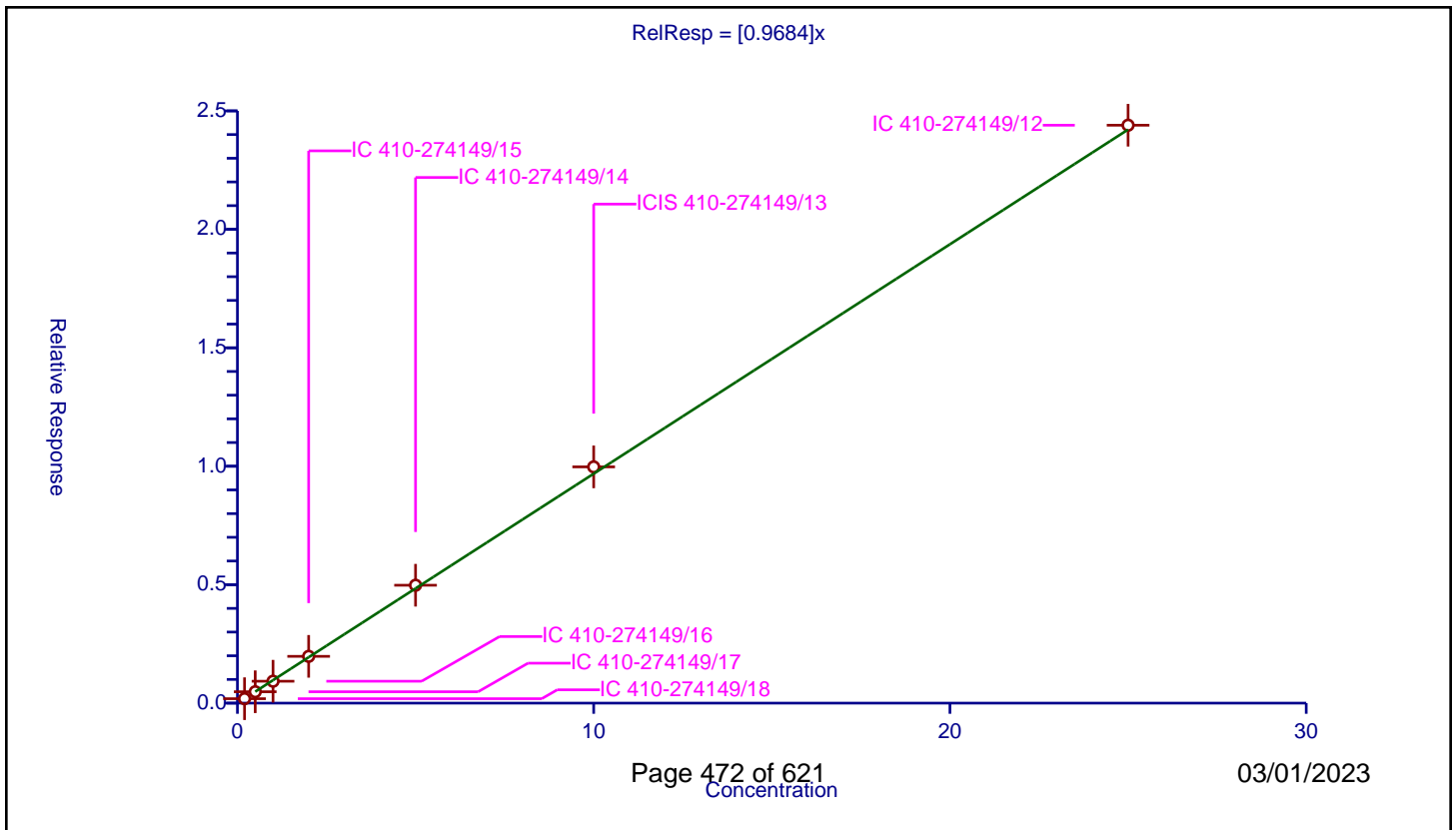
/ Chlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.9684

Error Coefficients	
Standard Error:	2110000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.187707	10.0	1804145.0	0.938533	Y
2	IC 410-274149/17	0.5	0.480141	10.0	1783683.0	0.960283	Y
3	IC 410-274149/16	1.0	0.924253	10.0	1802515.0	0.924253	Y
4	IC 410-274149/15	2.0	1.975271	10.0	1814146.0	0.987636	Y
5	IC 410-274149/14	5.0	4.976786	10.0	1880356.0	0.995357	Y
6	ICIS 410-274149/13	10.0	9.972713	10.0	1866823.0	0.997271	Y
7	IC 410-274149/12	25.0	24.394622	10.0	1927449.0	0.975785	Y



Calibration

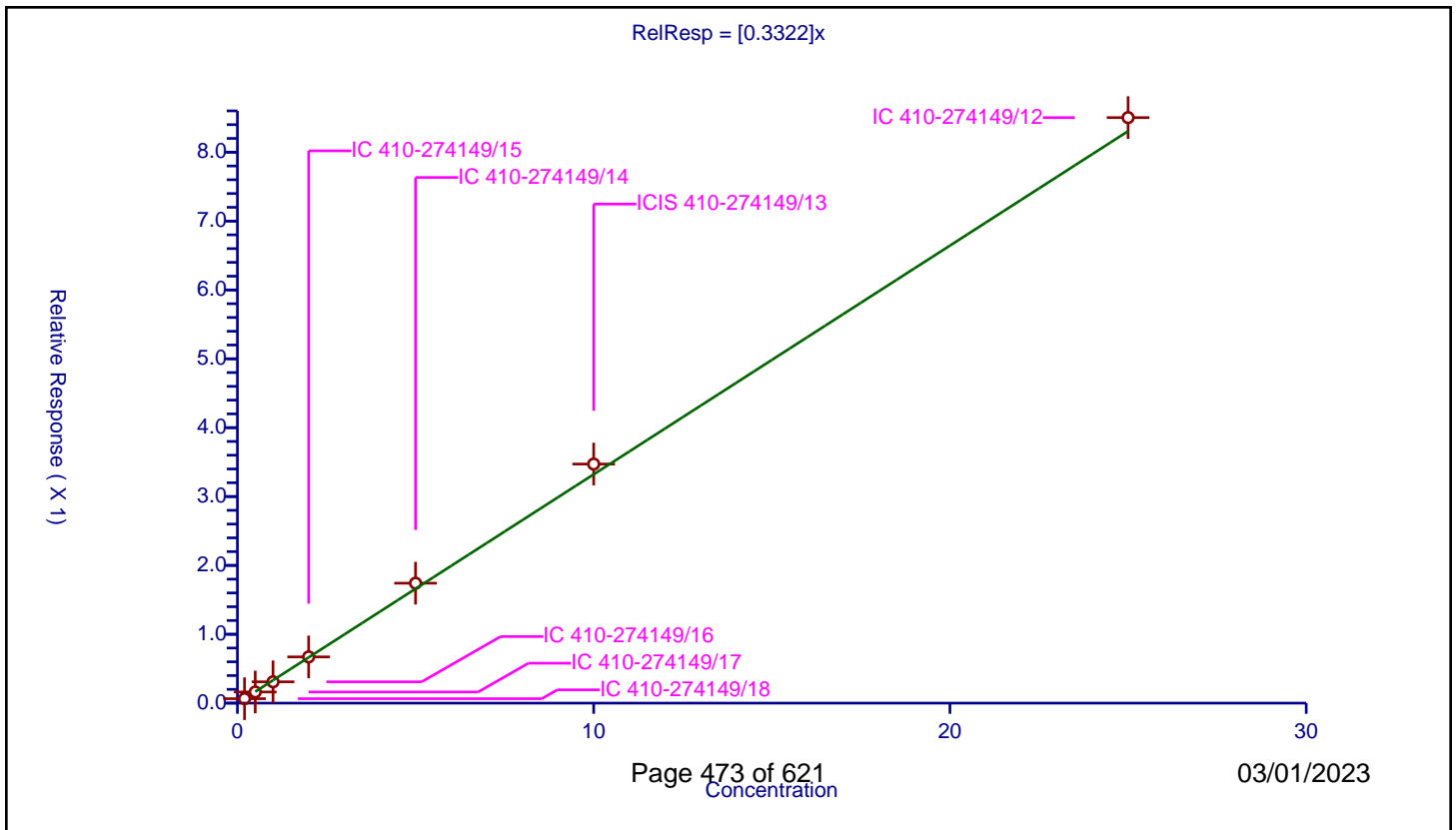
/ 1,1,1,2-Tetrachloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.3322

Error Coefficients	
Standard Error:	734000
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.064213	10.0	1804145.0	0.321066	Y
2	IC 410-274149/17	0.5	0.161722	10.0	1783683.0	0.323443	Y
3	IC 410-274149/16	1.0	0.309656	10.0	1802515.0	0.309656	Y
4	IC 410-274149/15	2.0	0.671346	10.0	1814146.0	0.335673	Y
5	IC 410-274149/14	5.0	1.741574	10.0	1880356.0	0.348315	Y
6	ICIS 410-274149/13	10.0	3.471507	10.0	1866823.0	0.347151	Y
7	IC 410-274149/12	25.0	8.502238	10.0	1927449.0	0.34009	Y



Calibration

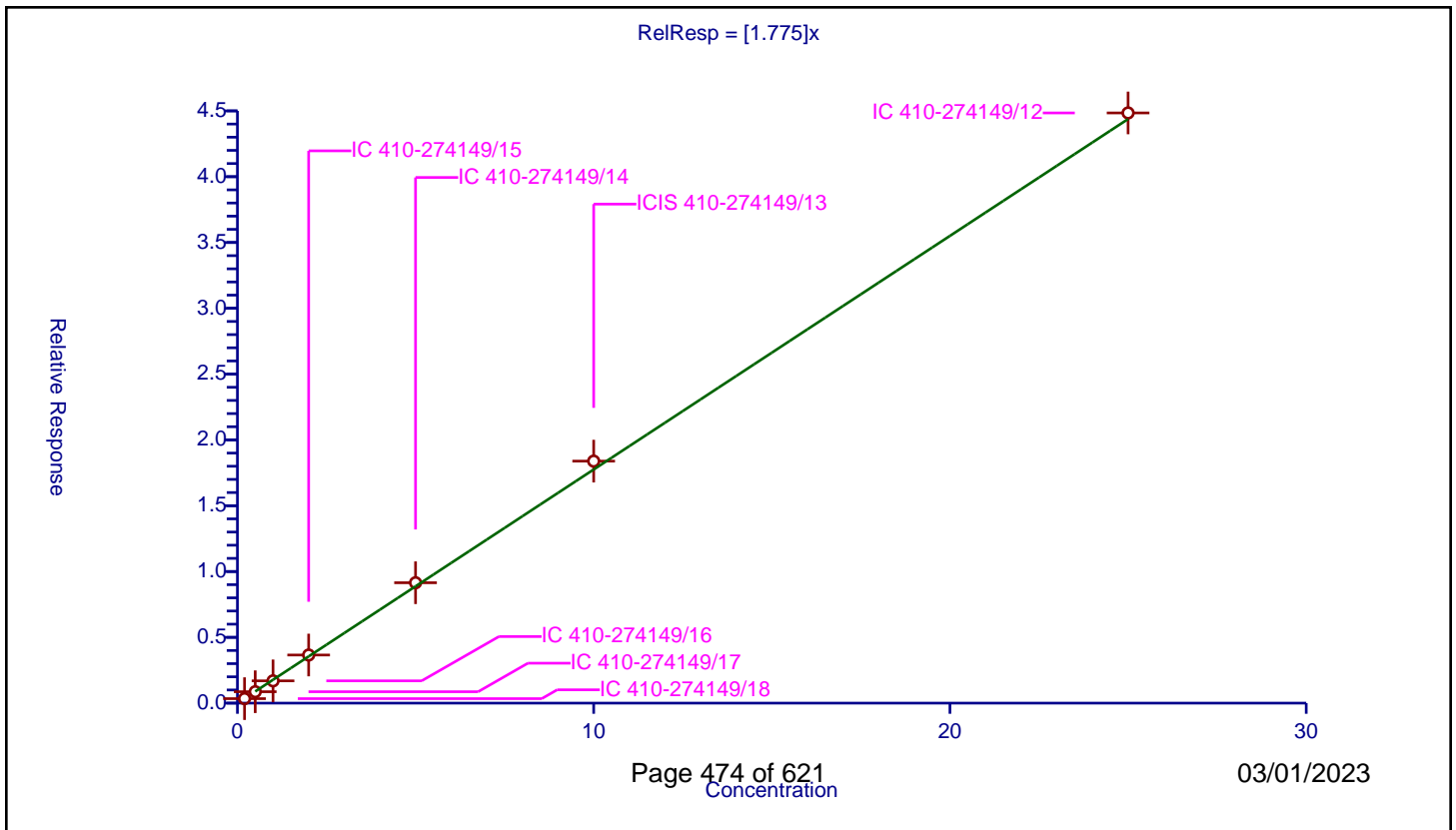
/ Ethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.775

Error Coefficients	
Standard Error:	3870000
Relative Standard Error:	3.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.341669	10.0	1804145.0	1.708344	Y
2	IC 410-274149/17	0.5	0.867946	10.0	1783683.0	1.735891	Y
3	IC 410-274149/16	1.0	1.692269	10.0	1802515.0	1.692269	Y
4	IC 410-274149/15	2.0	3.65518	10.0	1814146.0	1.82759	Y
5	IC 410-274149/14	5.0	9.147715	10.0	1880356.0	1.829543	Y
6	ICIS 410-274149/13	10.0	18.388042	10.0	1866823.0	1.838804	Y
7	IC 410-274149/12	25.0	44.843749	10.0	1927449.0	1.79375	Y



Calibration

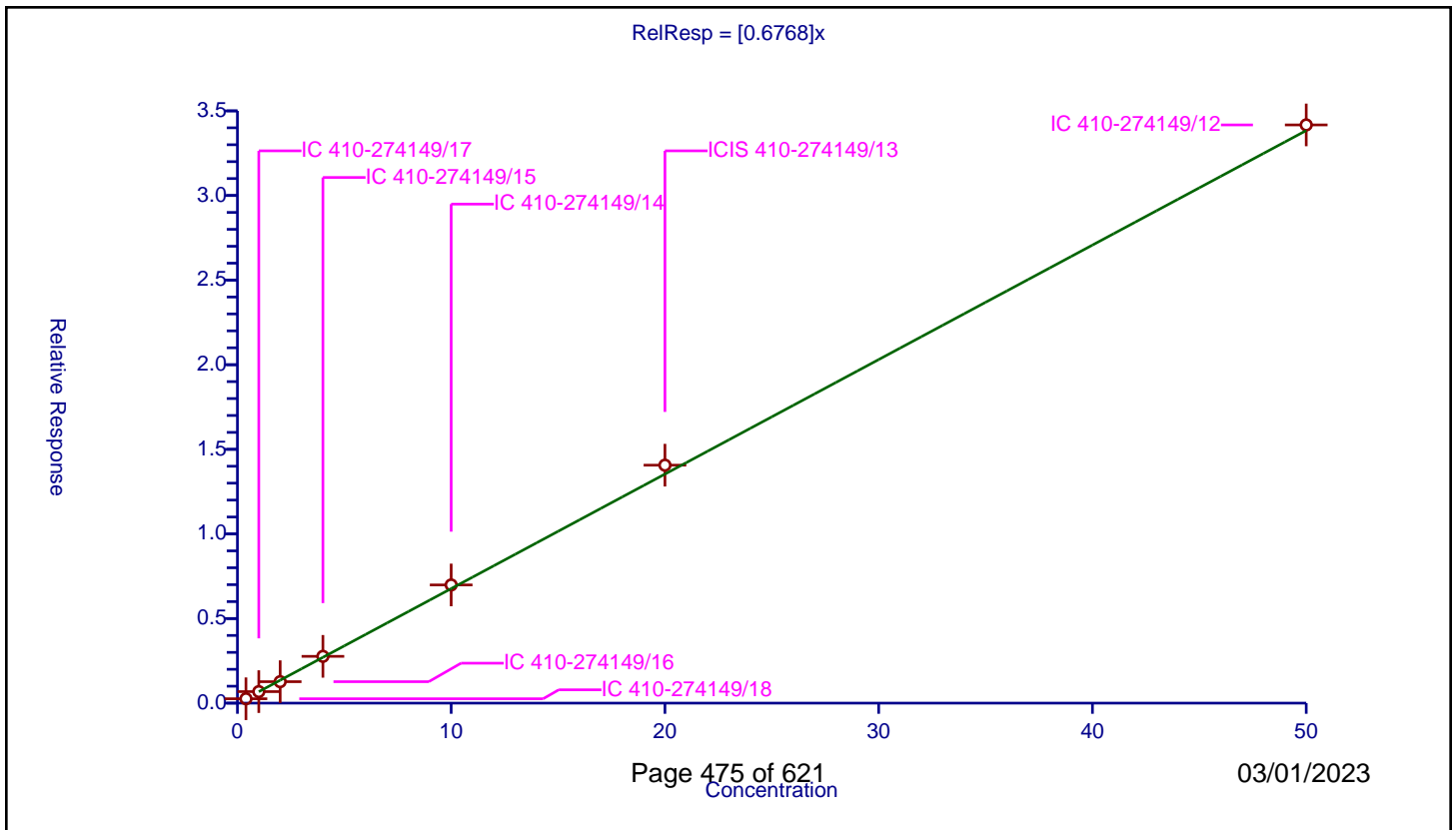
/ m-Xylene & p-Xylene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6768

Error Coefficients	
Standard Error:	2950000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.4	0.258876	10.0	1804145.0	0.64719	Y
2	IC 410-274149/17	1.0	0.680048	10.0	1783683.0	0.680048	Y
3	IC 410-274149/16	2.0	1.26805	10.0	1802515.0	0.634025	Y
4	IC 410-274149/15	4.0	2.7647	10.0	1814146.0	0.691175	Y
5	IC 410-274149/14	10.0	6.984114	10.0	1880356.0	0.698411	Y
6	ICIS 410-274149/13	20.0	14.06271	10.0	1866823.0	0.703135	Y
7	IC 410-274149/12	50.0	34.170331	10.0	1927449.0	0.683407	Y



Calibration

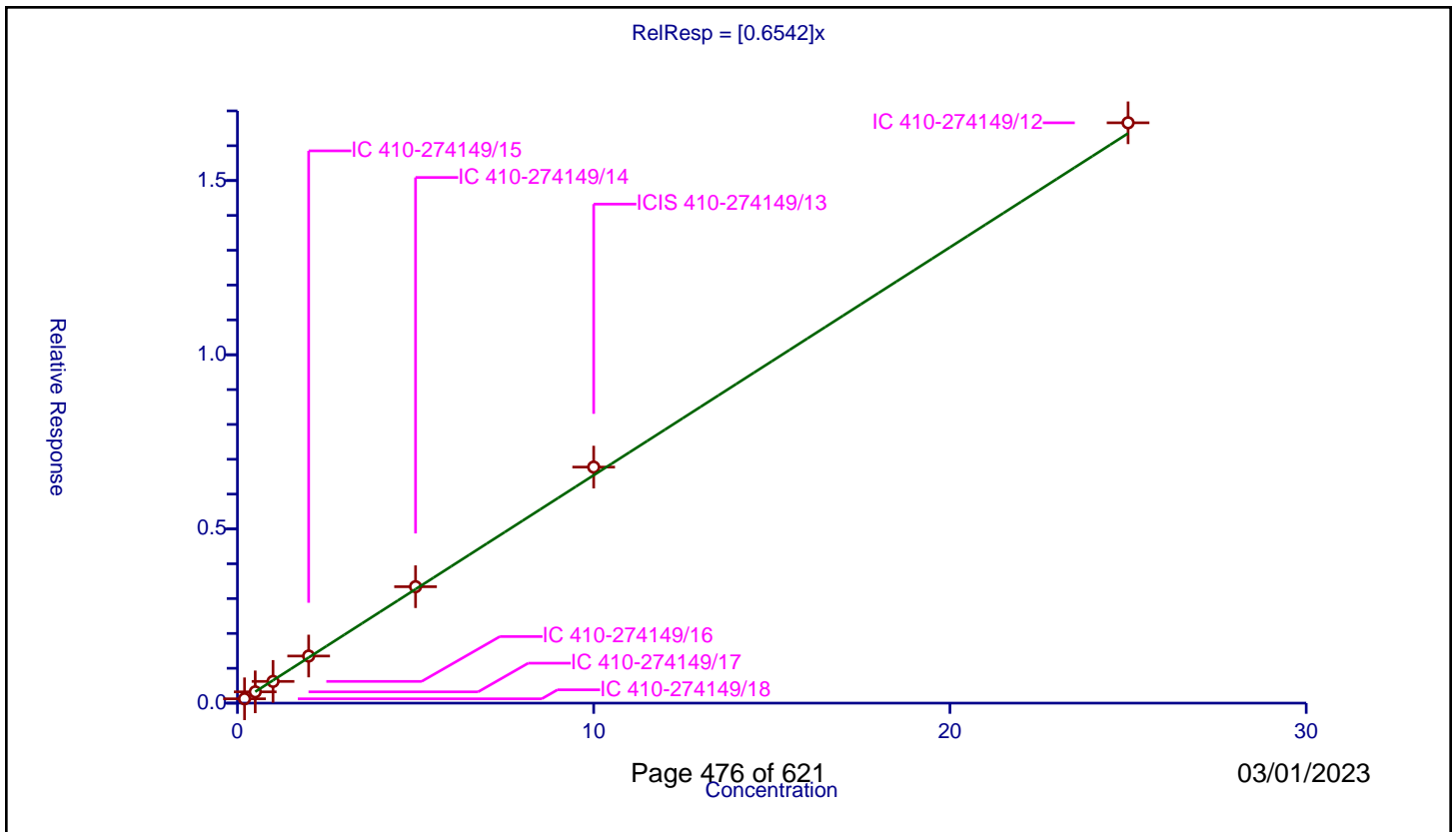
/ o-Xylene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.6542

Error Coefficients	
Standard Error:	1440000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.124037	10.0	1804145.0	0.620183	Y
2	IC 410-274149/17	0.5	0.323684	10.0	1783683.0	0.647368	Y
3	IC 410-274149/16	1.0	0.623762	10.0	1802515.0	0.623762	Y
4	IC 410-274149/15	2.0	1.351694	10.0	1814146.0	0.675847	Y
5	IC 410-274149/14	5.0	3.34217	10.0	1880356.0	0.668434	Y
6	ICIS 410-274149/13	10.0	6.775666	10.0	1866823.0	0.677567	Y
7	IC 410-274149/12	25.0	16.658345	10.0	1927449.0	0.666334	Y



Calibration

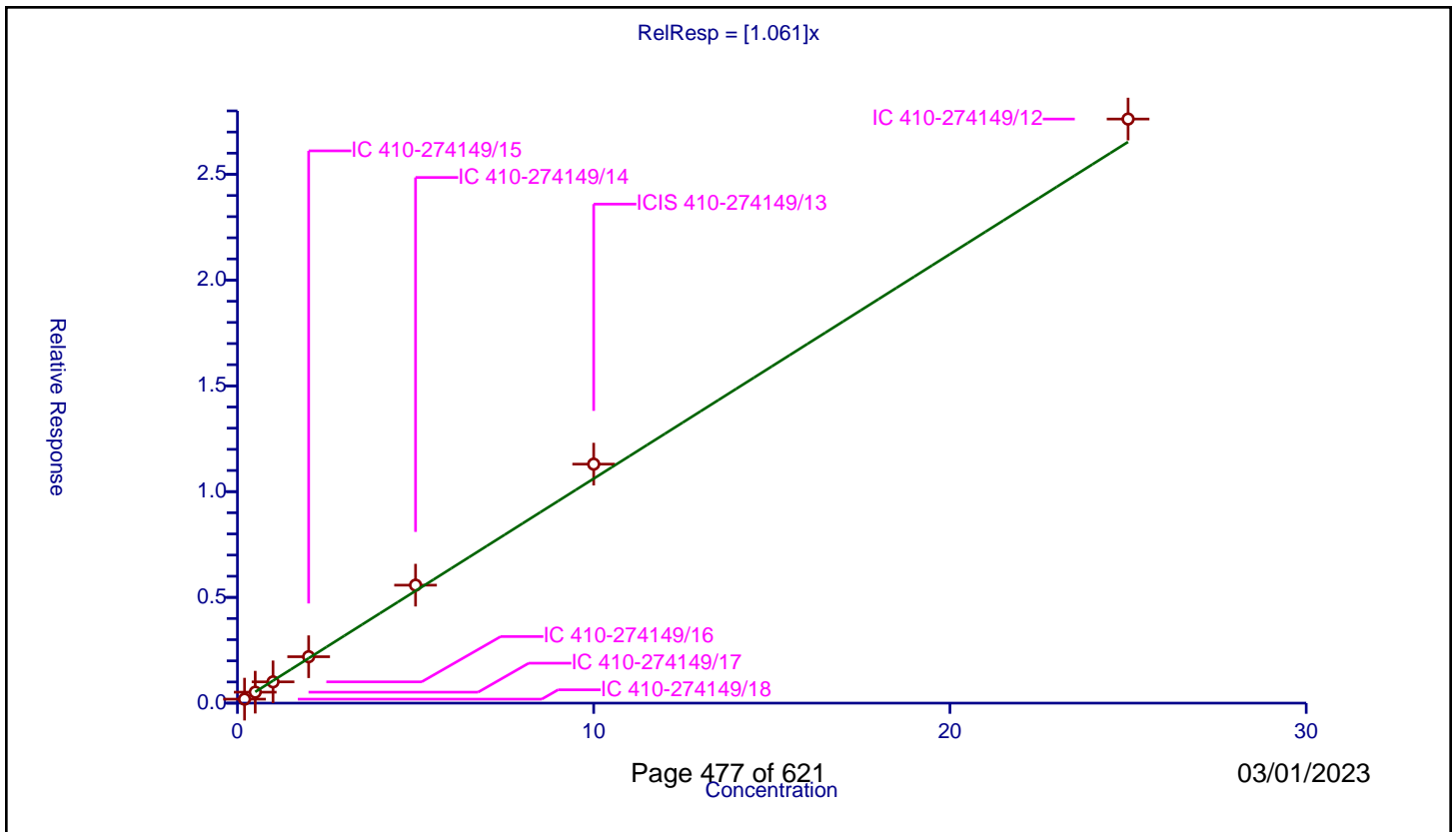
/ Styrene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.061

Error Coefficients	
Standard Error:	2380000
Relative Standard Error:	6.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.188156	10.0	1804145.0	0.940778	Y
2	IC 410-274149/17	0.5	0.51831	10.0	1783683.0	1.036619	Y
3	IC 410-274149/16	1.0	1.005085	10.0	1802515.0	1.005085	Y
4	IC 410-274149/15	2.0	2.193875	10.0	1814146.0	1.096938	Y
5	IC 410-274149/14	5.0	5.577673	10.0	1880356.0	1.115535	Y
6	ICIS 410-274149/13	10.0	11.298779	10.0	1866823.0	1.129878	Y
7	IC 410-274149/12	25.0	27.614484	10.0	1927449.0	1.104579	Y



Calibration

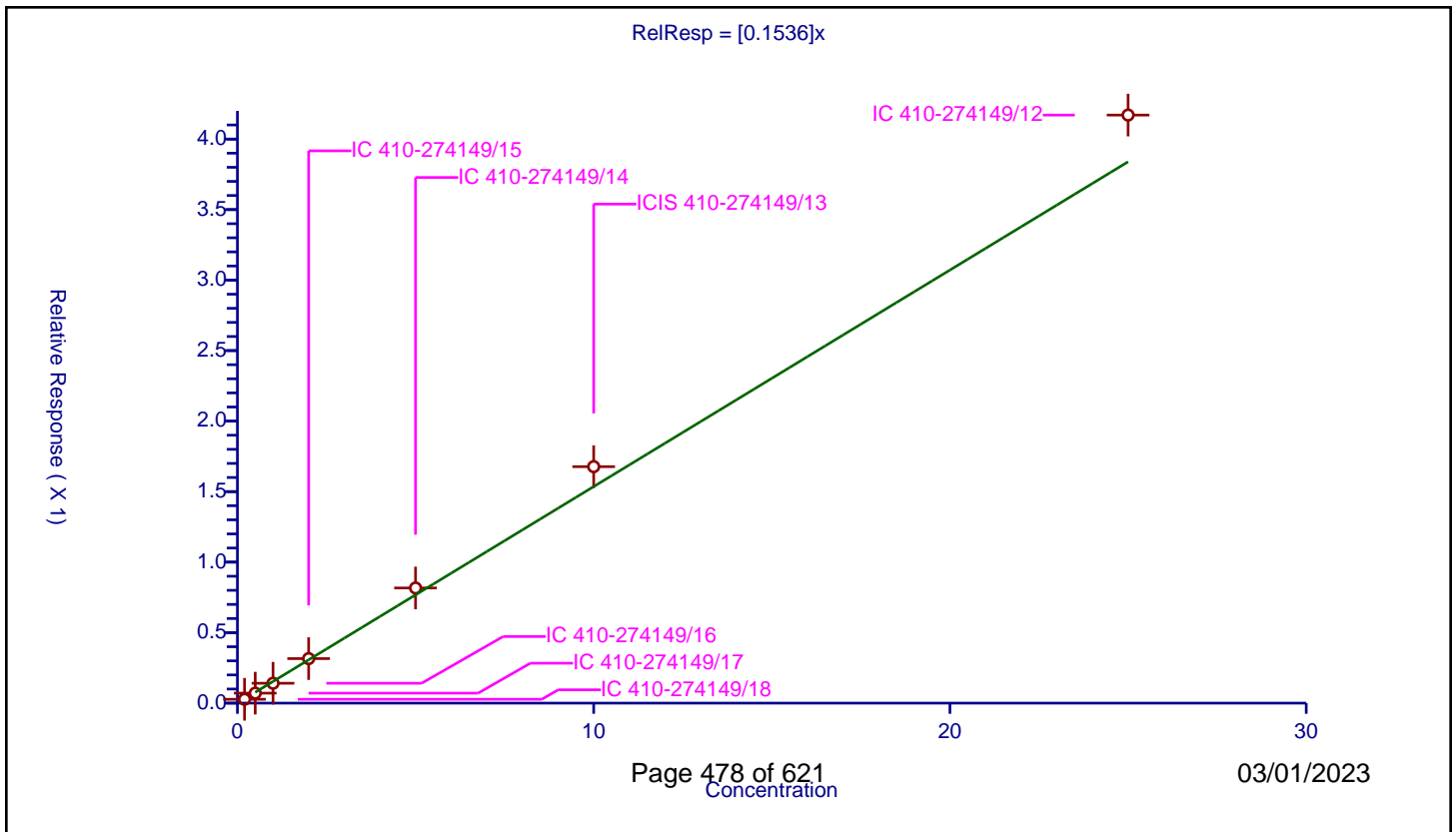
/ Bromoform

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1536

Error Coefficients	
Standard Error:	359000
Relative Standard Error:	8.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.027332	10.0	1804145.0	0.136658	Y
2	IC 410-274149/17	0.5	0.070769	10.0	1783683.0	0.141539	Y
3	IC 410-274149/16	1.0	0.141058	10.0	1802515.0	0.141058	Y
4	IC 410-274149/15	2.0	0.315691	10.0	1814146.0	0.157846	Y
5	IC 410-274149/14	5.0	0.816643	10.0	1880356.0	0.163329	Y
6	ICIS 410-274149/13	10.0	1.676993	10.0	1866823.0	0.167699	Y
7	IC 410-274149/12	25.0	4.170414	10.0	1927449.0	0.166817	Y



Calibration

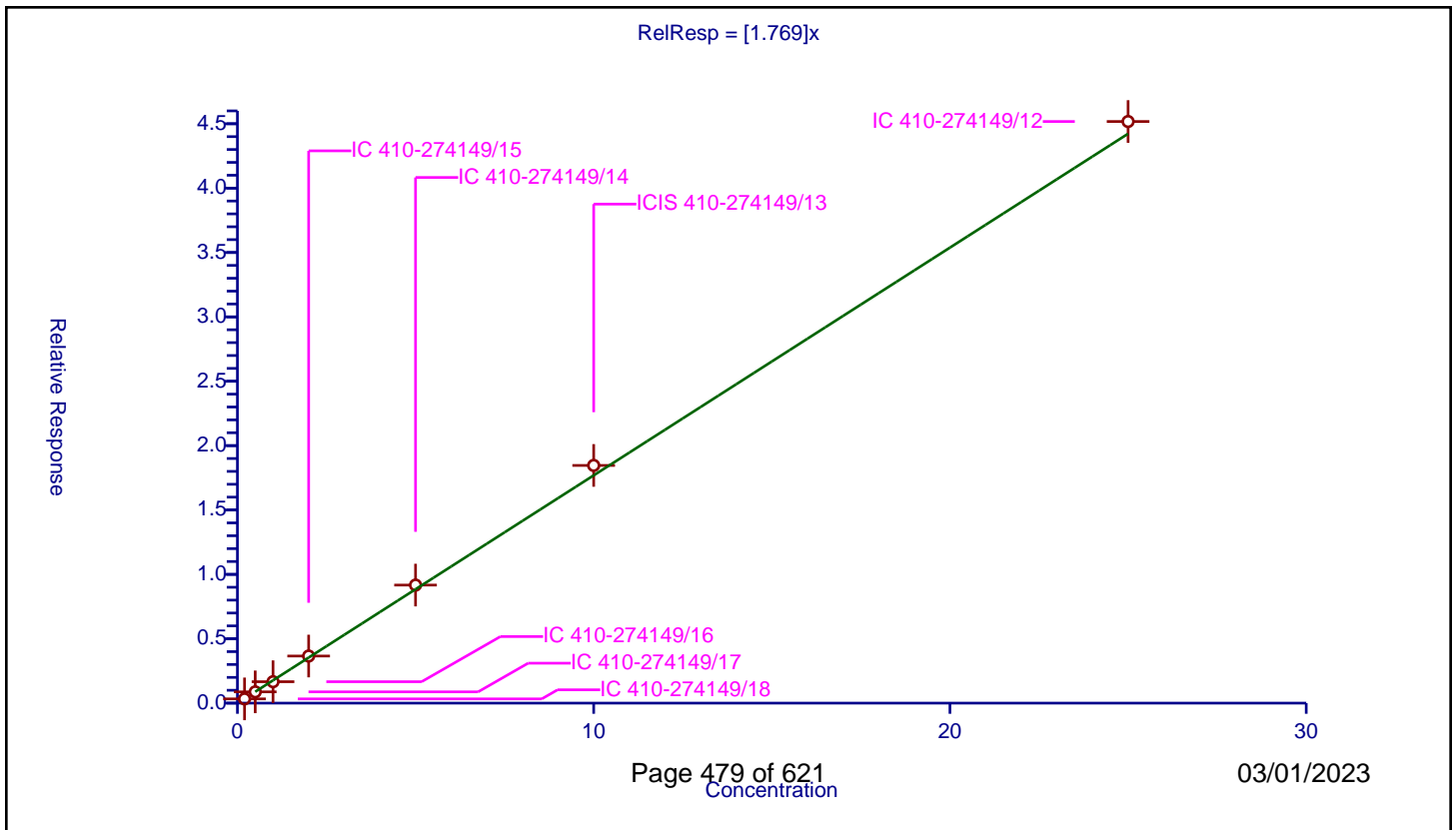
/ Isopropylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.769

Error Coefficients	
Standard Error:	3900000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.330234	10.0	1804145.0	1.65117	Y
2	IC 410-274149/17	0.5	0.876019	10.0	1783683.0	1.752038	Y
3	IC 410-274149/16	1.0	1.663659	10.0	1802515.0	1.663659	Y
4	IC 410-274149/15	2.0	3.65809	10.0	1814146.0	1.829045	Y
5	IC 410-274149/14	5.0	9.169407	10.0	1880356.0	1.833881	Y
6	ICIS 410-274149/13	10.0	18.46189	10.0	1866823.0	1.846189	Y
7	IC 410-274149/12	25.0	45.173839	10.0	1927449.0	1.806954	Y



Calibration

/ 4-Bromofluorobenzene (Surr)

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

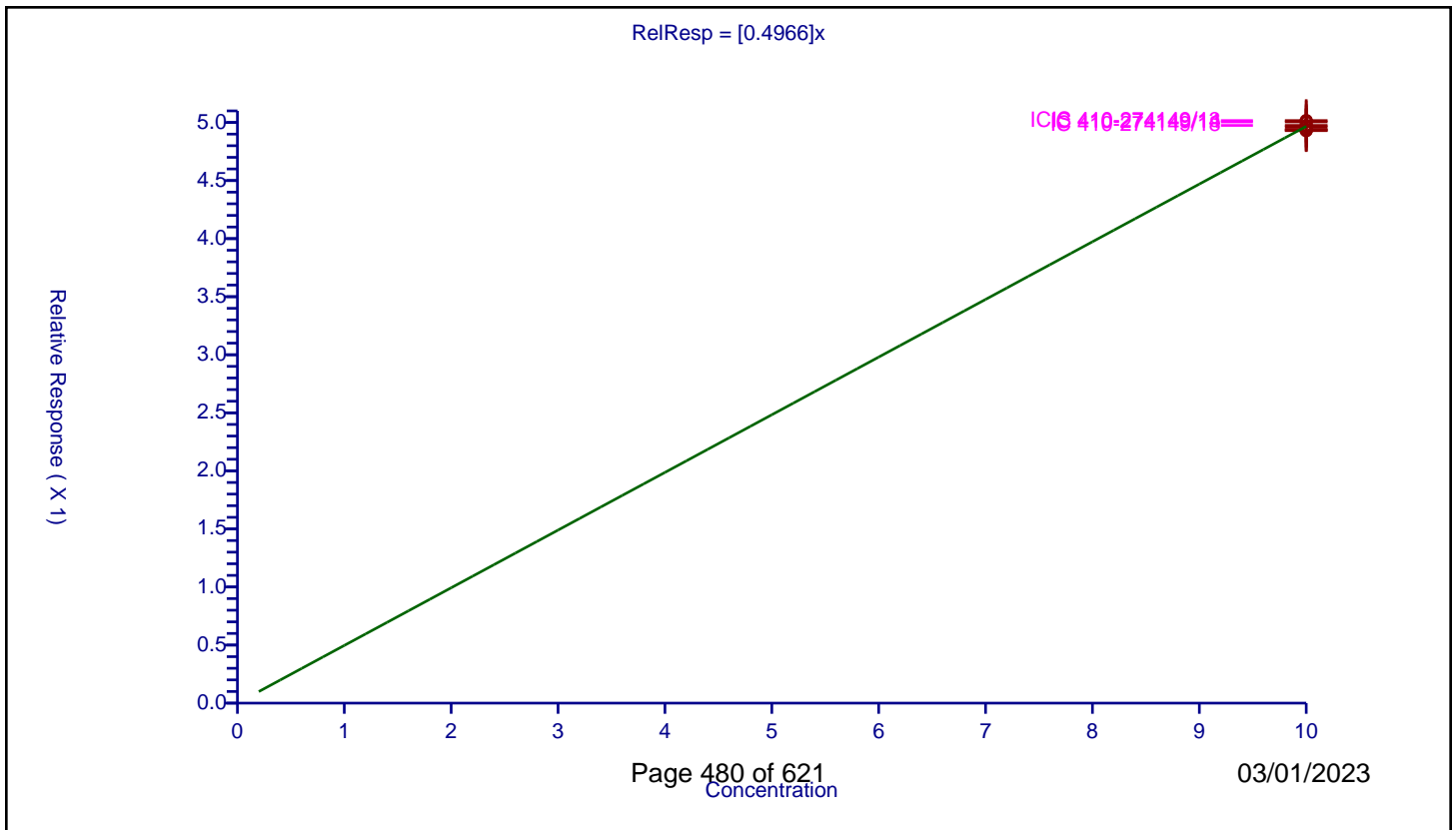
Curve Coefficients

Intercept: 0
 Slope: 0.4966

Error Coefficients

Standard Error: 988000
 Relative Standard Error: 0.7
 Correlation Coefficient: NA
 Coefficient of Determination (Adjusted): 0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/12	10.0	4.963332	10.0	1927449.0	0.496333	Y
2	ICIS 410-274149/13	10.0	5.016533	10.0	1866823.0	0.501653	Y
3	IC 410-274149/14	10.0	5.004994	10.0	1880356.0	0.500499	Y
4	IC 410-274149/15	10.0	4.941493	10.0	1814146.0	0.494149	Y
5	IC 410-274149/16	10.0	4.929745	10.0	1802515.0	0.492975	Y
6	IC 410-274149/17	10.0	4.934021	10.0	1783683.0	0.493402	Y
7	IC 410-274149/18	10.0	4.97485	10.0	1804145.0	0.497485	Y



Calibration

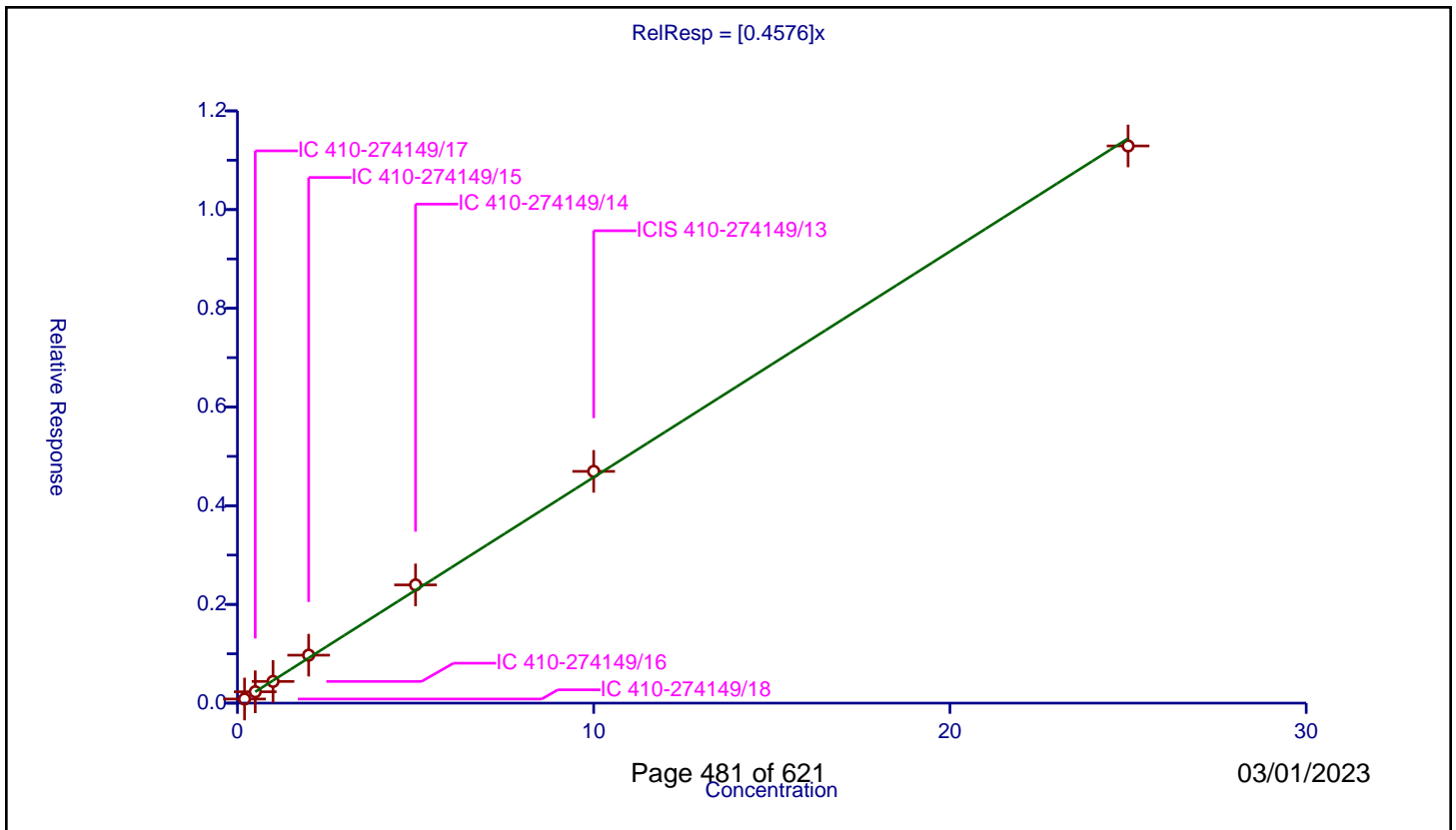
/ 1,1,2,2-Tetrachloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4576

Error Coefficients	
Standard Error:	553000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.083516	10.0	1000650.0	0.417579	Y
2	IC 410-274149/17	0.5	0.229995	10.0	974107.0	0.459991	Y
3	IC 410-274149/16	1.0	0.439772	10.0	992900.0	0.439772	Y
4	IC 410-274149/15	2.0	0.971642	10.0	997250.0	0.485821	Y
5	IC 410-274149/14	5.0	2.395176	10.0	1047322.0	0.479035	Y
6	ICIS 410-274149/13	10.0	4.695939	10.0	1051287.0	0.469594	Y
7	IC 410-274149/12	25.0	11.289702	10.0	1090322.0	0.451588	Y



Calibration

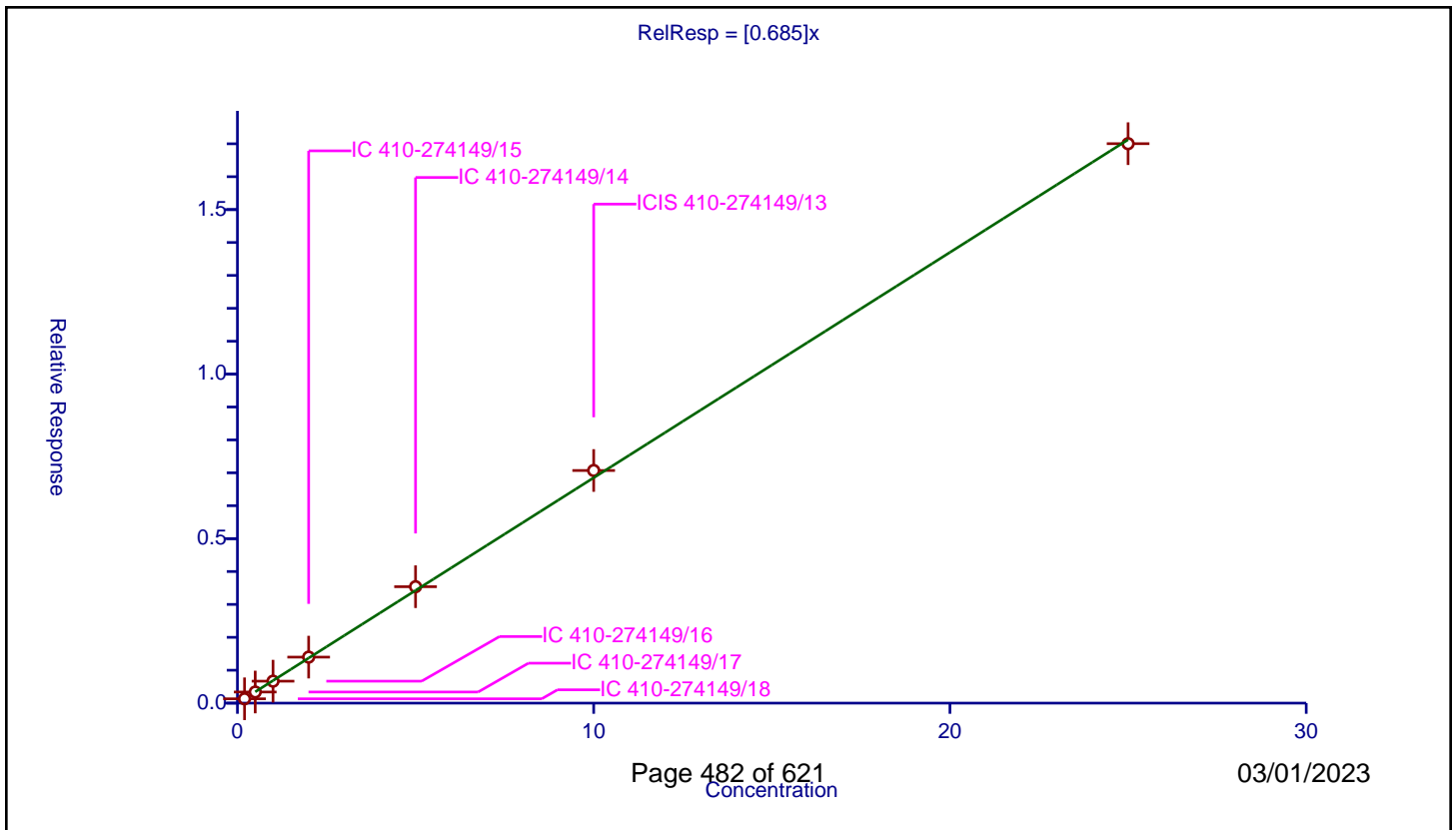
/ Bromobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.685

Error Coefficients	
Standard Error:	832000
Relative Standard Error:	2.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.131505	10.0	1000650.0	0.657523	Y
2	IC 410-274149/17	0.5	0.338146	10.0	974107.0	0.676291	Y
3	IC 410-274149/16	1.0	0.667157	10.0	992900.0	0.667157	Y
4	IC 410-274149/15	2.0	1.398606	10.0	997250.0	0.699303	Y
5	IC 410-274149/14	5.0	3.538262	10.0	1047322.0	0.707652	Y
6	ICIS 410-274149/13	10.0	7.070429	10.0	1051287.0	0.707043	Y
7	IC 410-274149/12	25.0	17.003206	10.0	1090322.0	0.680128	Y



Calibration

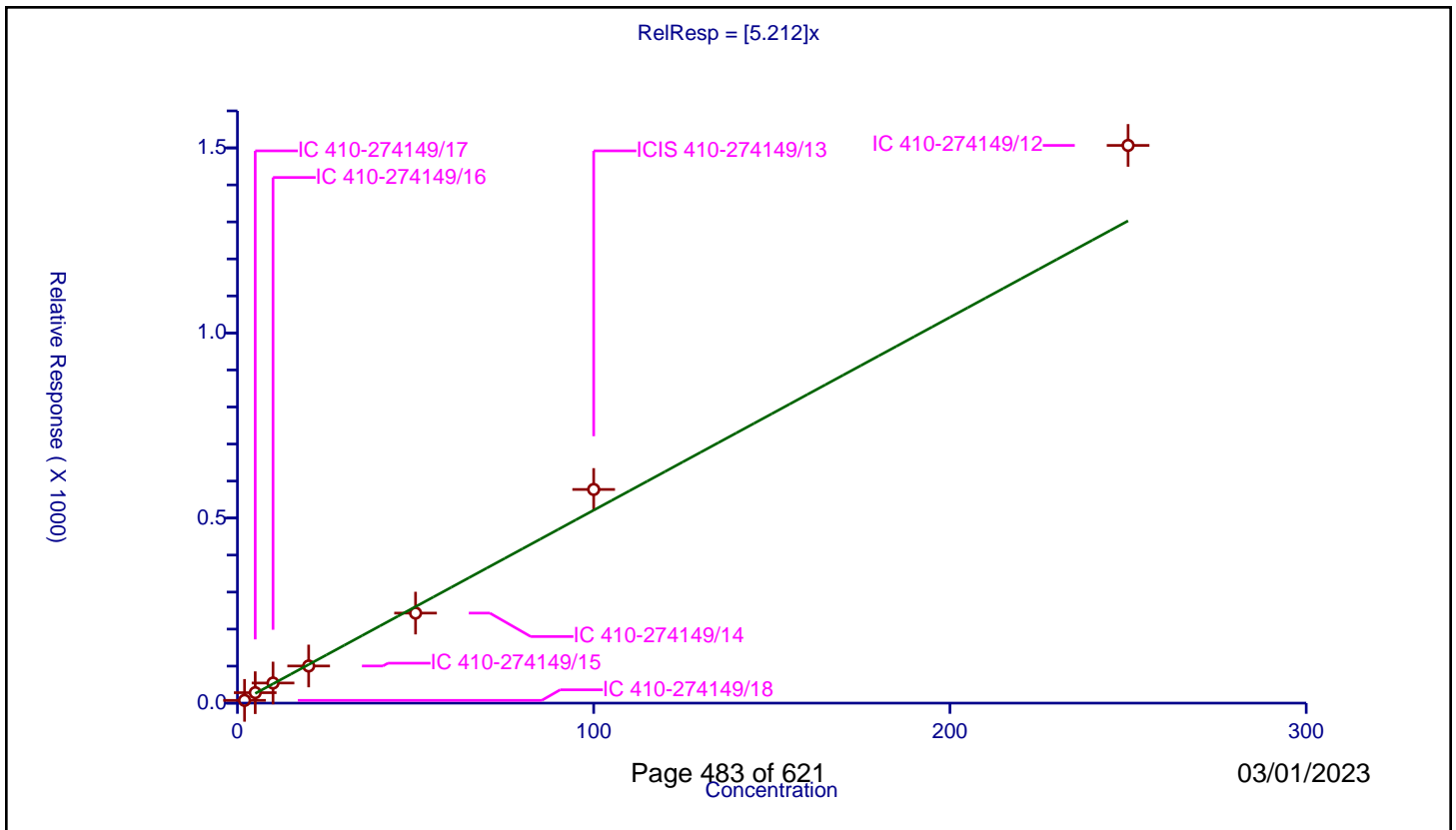
/ trans-1,4-Dichloro-2-butene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	5.212

Error Coefficients	
Standard Error:	1310000
Relative Standard Error:	14.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	2.0	7.435901	50.0	127772.0	3.717951	Y
2	IC 410-274149/17	5.0	28.253454	50.0	81790.0	5.650691	Y
3	IC 410-274149/16	10.0	54.339237	50.0	87066.0	5.433924	Y
4	IC 410-274149/15	20.0	100.309298	50.0	107663.0	5.015465	Y
5	IC 410-274149/14	50.0	243.243232	50.0	120975.0	4.864865	Y
6	ICIS 410-274149/13	100.0	577.240801	50.0	101370.0	5.772408	Y
7	IC 410-274149/12	250.0	1506.770693	50.0	96770.0	6.027083	Y



Calibration

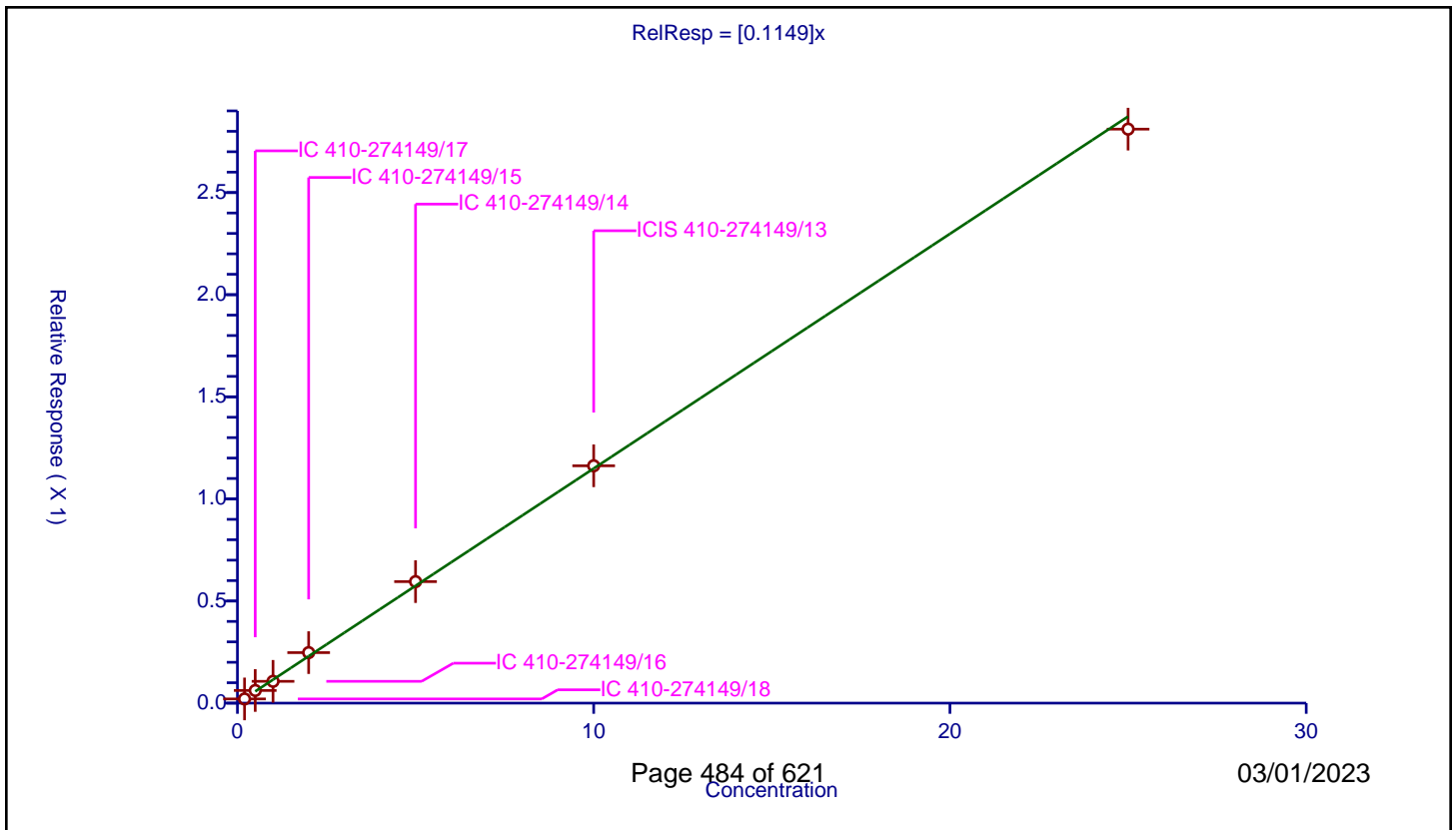
/ 1,2,3-Trichloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1149

Error Coefficients	
Standard Error:	138000
Relative Standard Error:	7.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.020517	10.0	1000650.0	0.102583	Y
2	IC 410-274149/17	0.5	0.061841	10.0	974107.0	0.123683	Y
3	IC 410-274149/16	1.0	0.106738	10.0	992900.0	0.106738	Y
4	IC 410-274149/15	2.0	0.24732	10.0	997250.0	0.12366	Y
5	IC 410-274149/14	5.0	0.595022	10.0	1047322.0	0.119004	Y
6	ICIS 410-274149/13	10.0	1.162176	10.0	1051287.0	0.116218	Y
7	IC 410-274149/12	25.0	2.810601	10.0	1090322.0	0.112424	Y



Calibration

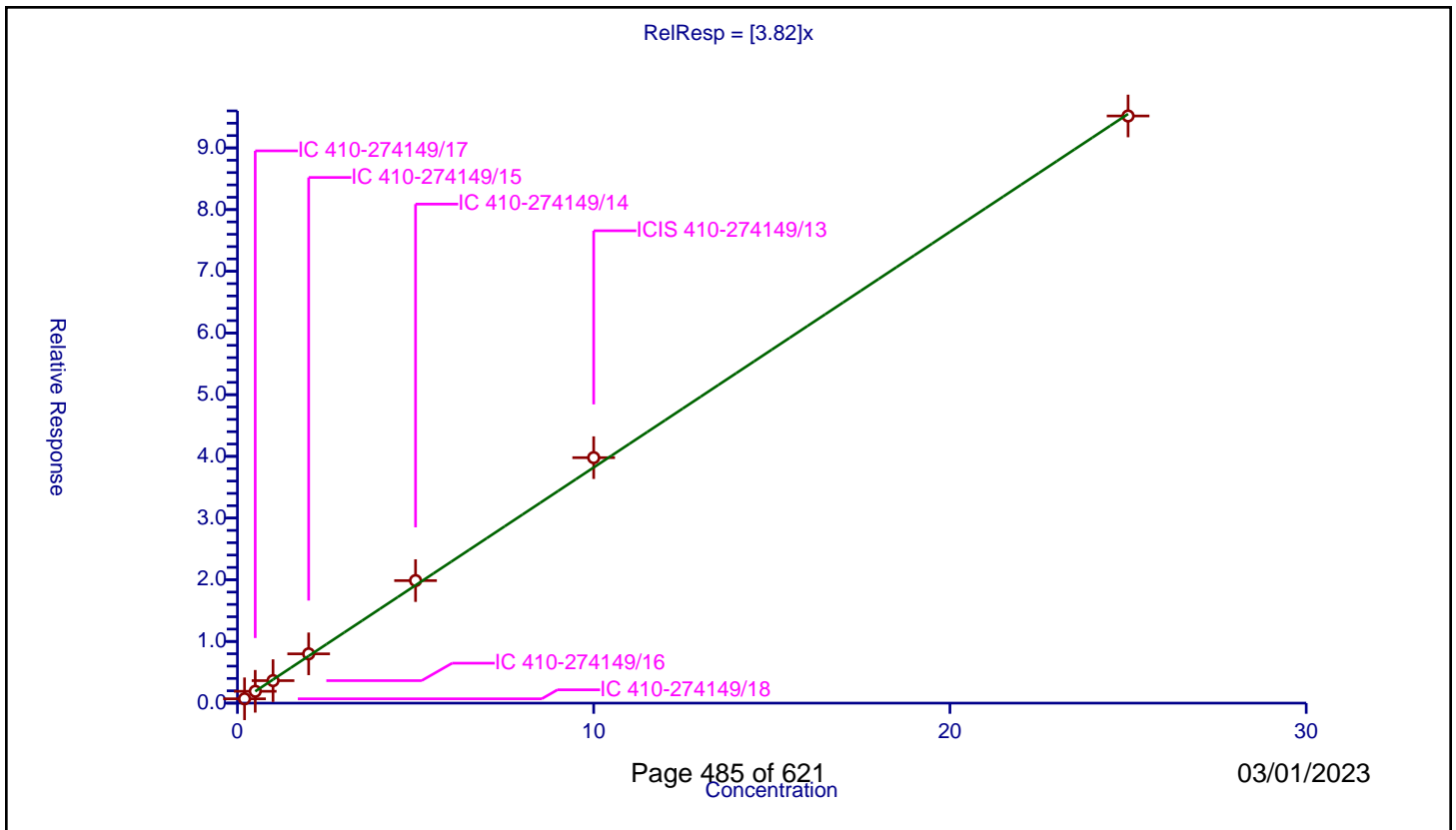
/ N-Propylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.82

Error Coefficients	
Standard Error:	4660000
Relative Standard Error:	4.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.701294	10.0	1000650.0	3.506471	Y
2	IC 410-274149/17	0.5	1.917418	10.0	974107.0	3.834835	Y
3	IC 410-274149/16	1.0	3.644929	10.0	992900.0	3.644929	Y
4	IC 410-274149/15	2.0	7.989511	10.0	997250.0	3.994756	Y
5	IC 410-274149/14	5.0	19.863423	10.0	1047322.0	3.972685	Y
6	ICIS 410-274149/13	10.0	39.790409	10.0	1051287.0	3.979041	Y
7	IC 410-274149/12	25.0	95.176939	10.0	1090322.0	3.807078	Y



Calibration

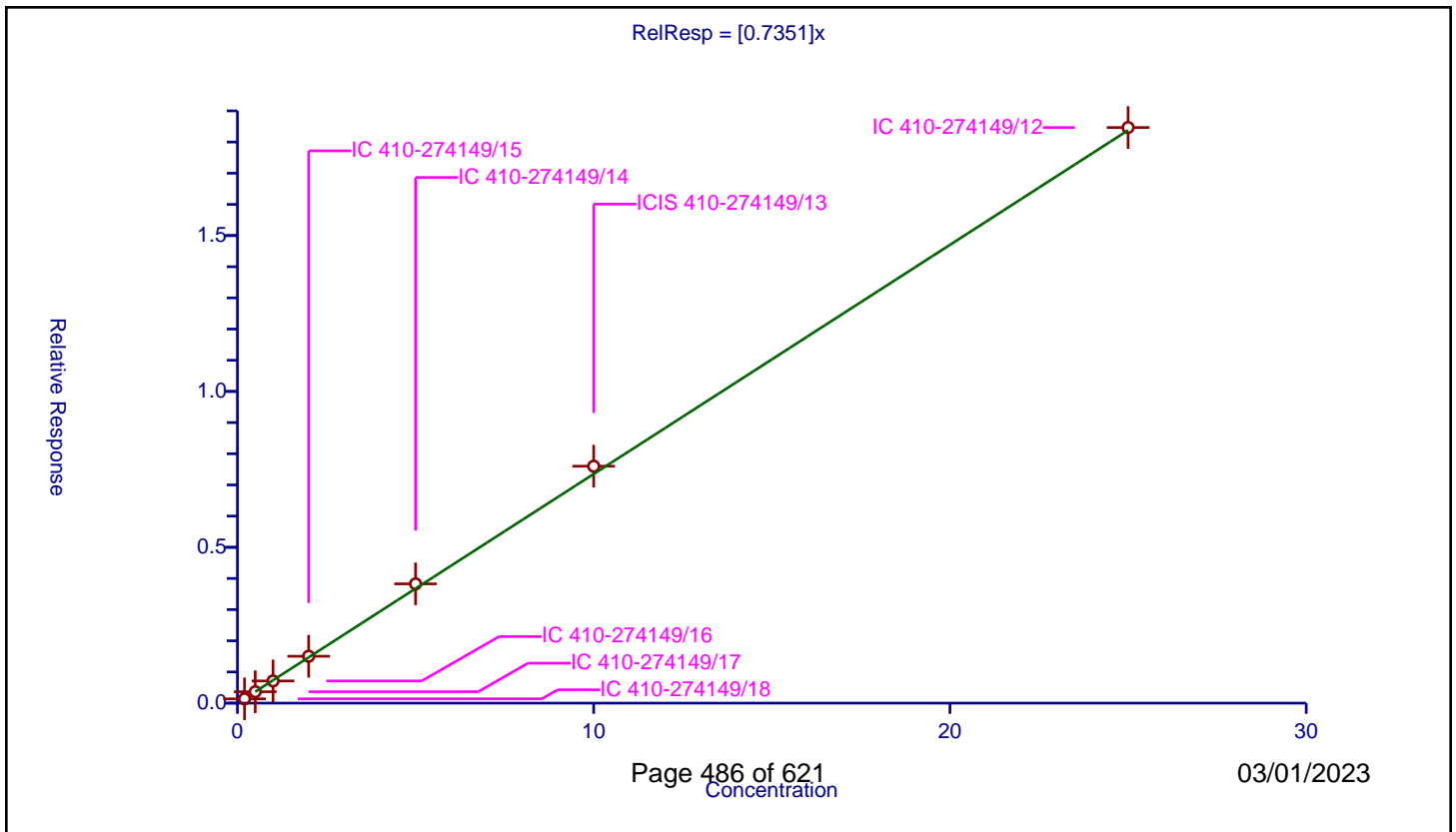
/ 2-Chlorotoluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7351

Error Coefficients	
Standard Error:	902000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.137511	10.0	1000650.0	0.687553	Y
2	IC 410-274149/17	0.5	0.365165	10.0	974107.0	0.73033	Y
3	IC 410-274149/16	1.0	0.711451	10.0	992900.0	0.711451	Y
4	IC 410-274149/15	2.0	1.504497	10.0	997250.0	0.752249	Y
5	IC 410-274149/14	5.0	3.826836	10.0	1047322.0	0.765367	Y
6	ICIS 410-274149/13	10.0	7.600836	10.0	1051287.0	0.760084	Y
7	IC 410-274149/12	25.0	18.465912	10.0	1090322.0	0.738636	Y



Calibration

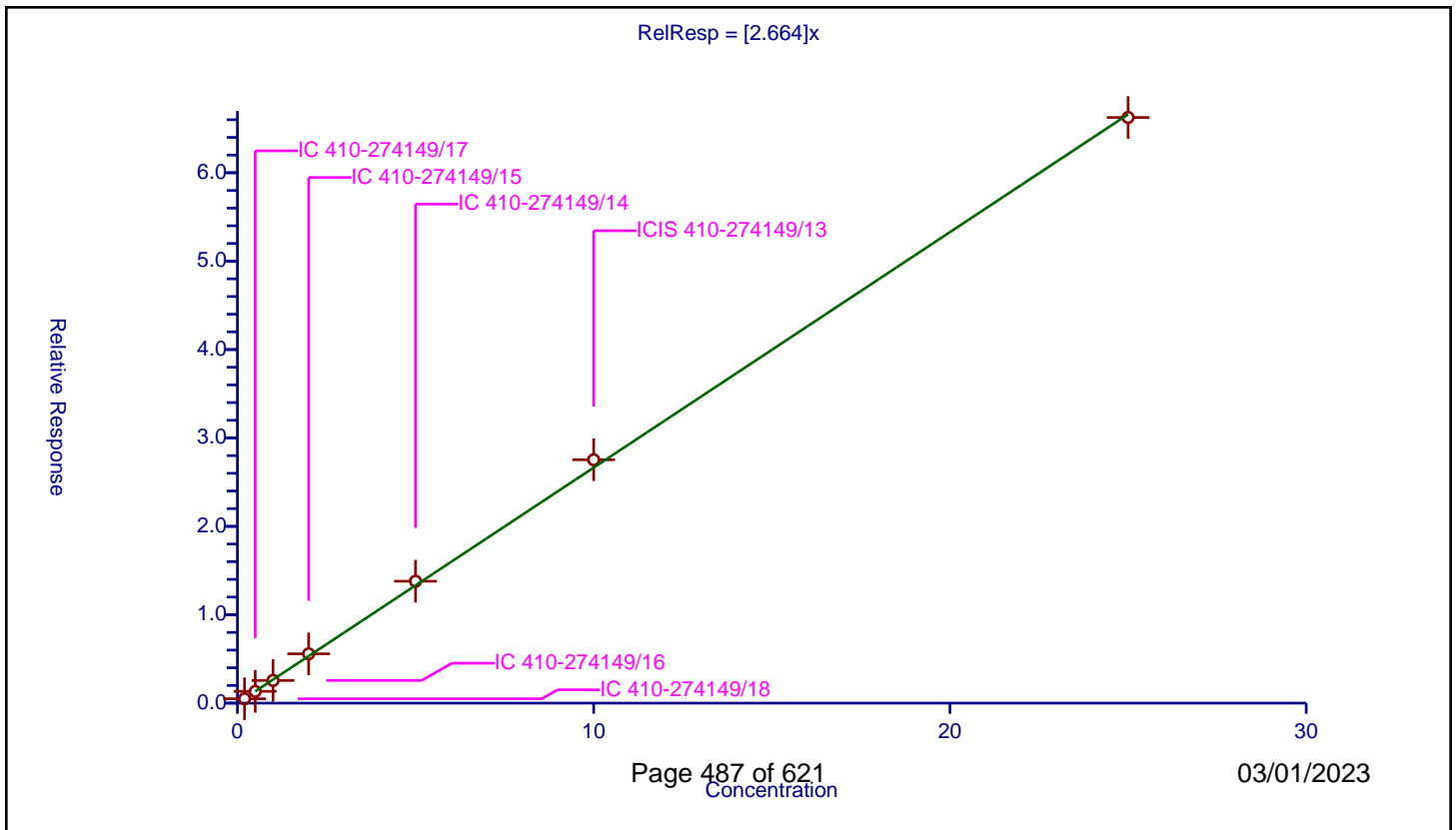
/ 1,3,5-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.664

Error Coefficients	
Standard Error:	3240000
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.493579	10.0	1000650.0	2.467896	Y
2	IC 410-274149/17	0.5	1.332862	10.0	974107.0	2.665724	Y
3	IC 410-274149/16	1.0	2.564931	10.0	992900.0	2.564931	Y
4	IC 410-274149/15	2.0	5.579012	10.0	997250.0	2.789506	Y
5	IC 410-274149/14	5.0	13.791804	10.0	1047322.0	2.758361	Y
6	ICIS 410-274149/13	10.0	27.53329	10.0	1051287.0	2.753329	Y
7	IC 410-274149/12	25.0	66.251548	10.0	1090322.0	2.650062	Y



Calibration

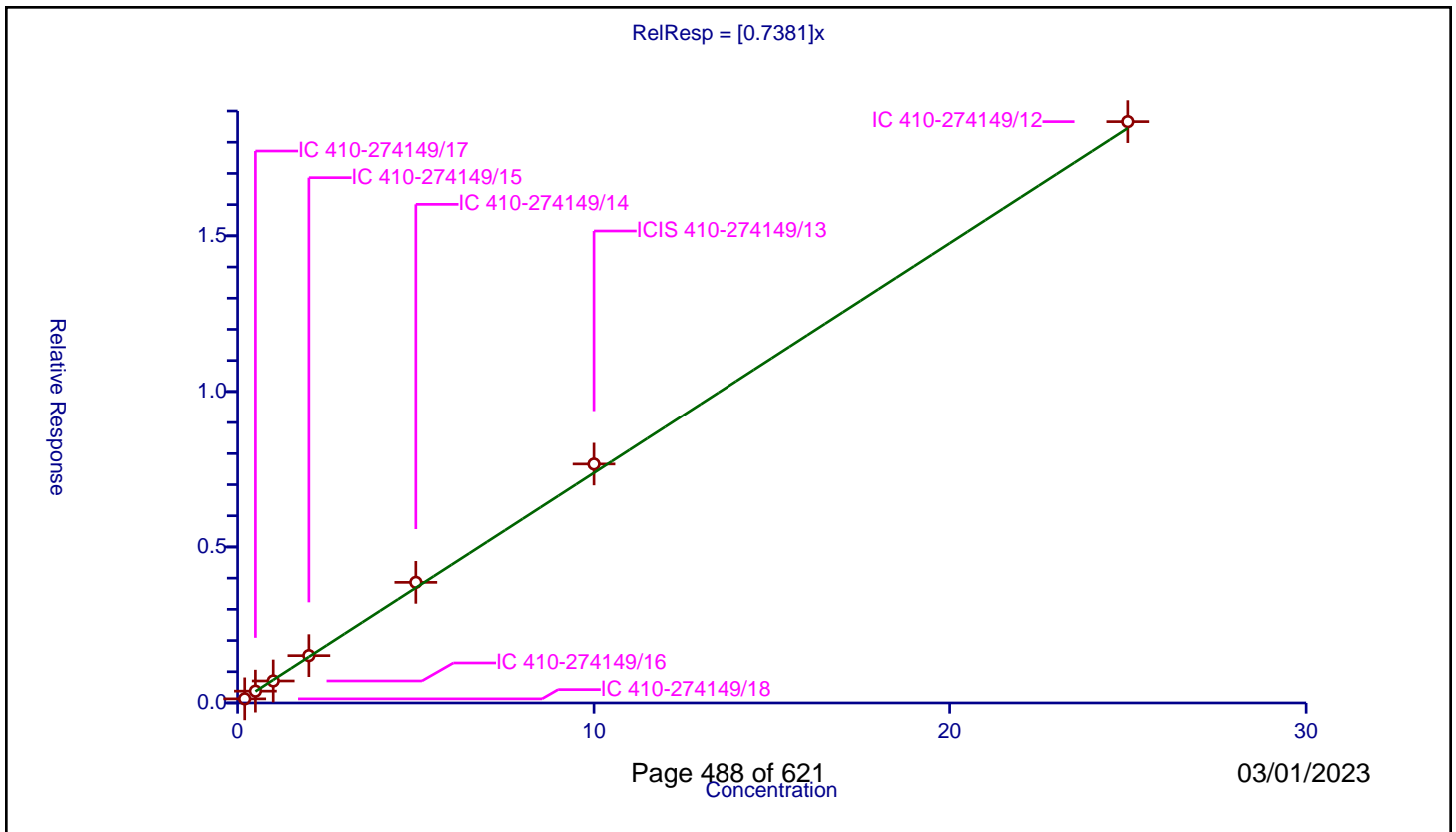
/ 4-Chlorotoluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7381

Error Coefficients	
Standard Error:	911000
Relative Standard Error:	5.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.132214	10.0	1000650.0	0.66107	Y
2	IC 410-274149/17	0.5	0.378767	10.0	974107.0	0.757535	Y
3	IC 410-274149/16	1.0	0.704139	10.0	992900.0	0.704139	Y
4	IC 410-274149/15	2.0	1.516551	10.0	997250.0	0.758275	Y
5	IC 410-274149/14	5.0	3.86522	10.0	1047322.0	0.773044	Y
6	ICIS 410-274149/13	10.0	7.662161	10.0	1051287.0	0.766216	Y
7	IC 410-274149/12	25.0	18.660011	10.0	1090322.0	0.7464	Y



Calibration

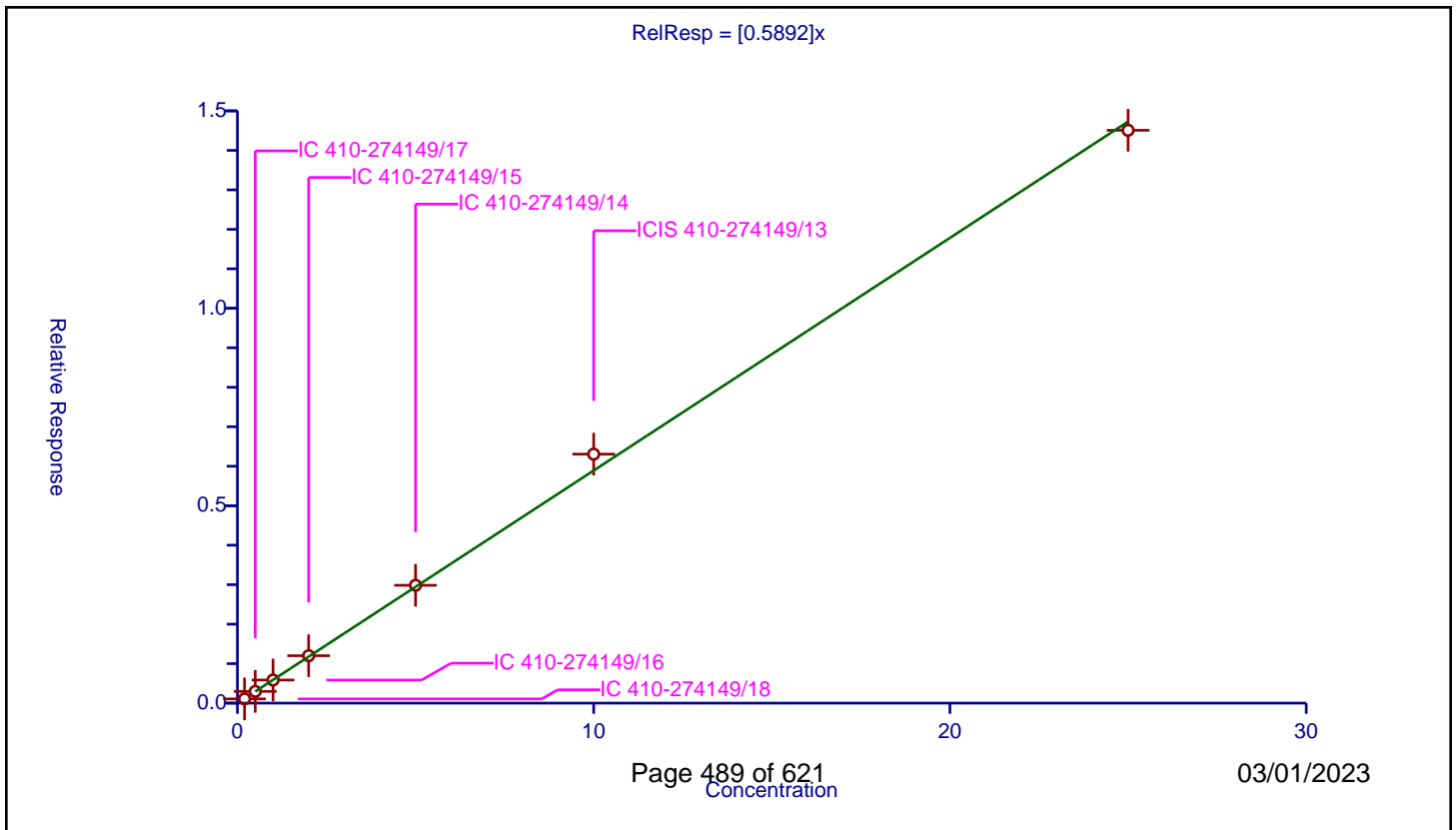
/ tert-Butylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.5892

Error Coefficients	
Standard Error:	714000
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.10715	10.0	1000650.0	0.535752	Y
2	IC 410-274149/17	0.5	0.297267	10.0	974107.0	0.594534	Y
3	IC 410-274149/16	1.0	0.585517	10.0	992900.0	0.585517	Y
4	IC 410-274149/15	2.0	1.200892	10.0	997250.0	0.600446	Y
5	IC 410-274149/14	5.0	2.984717	10.0	1047322.0	0.596943	Y
6	ICIS 410-274149/13	10.0	6.306194	10.0	1051287.0	0.630619	Y
7	IC 410-274149/12	25.0	14.508604	10.0	1090322.0	0.580344	Y



Calibration

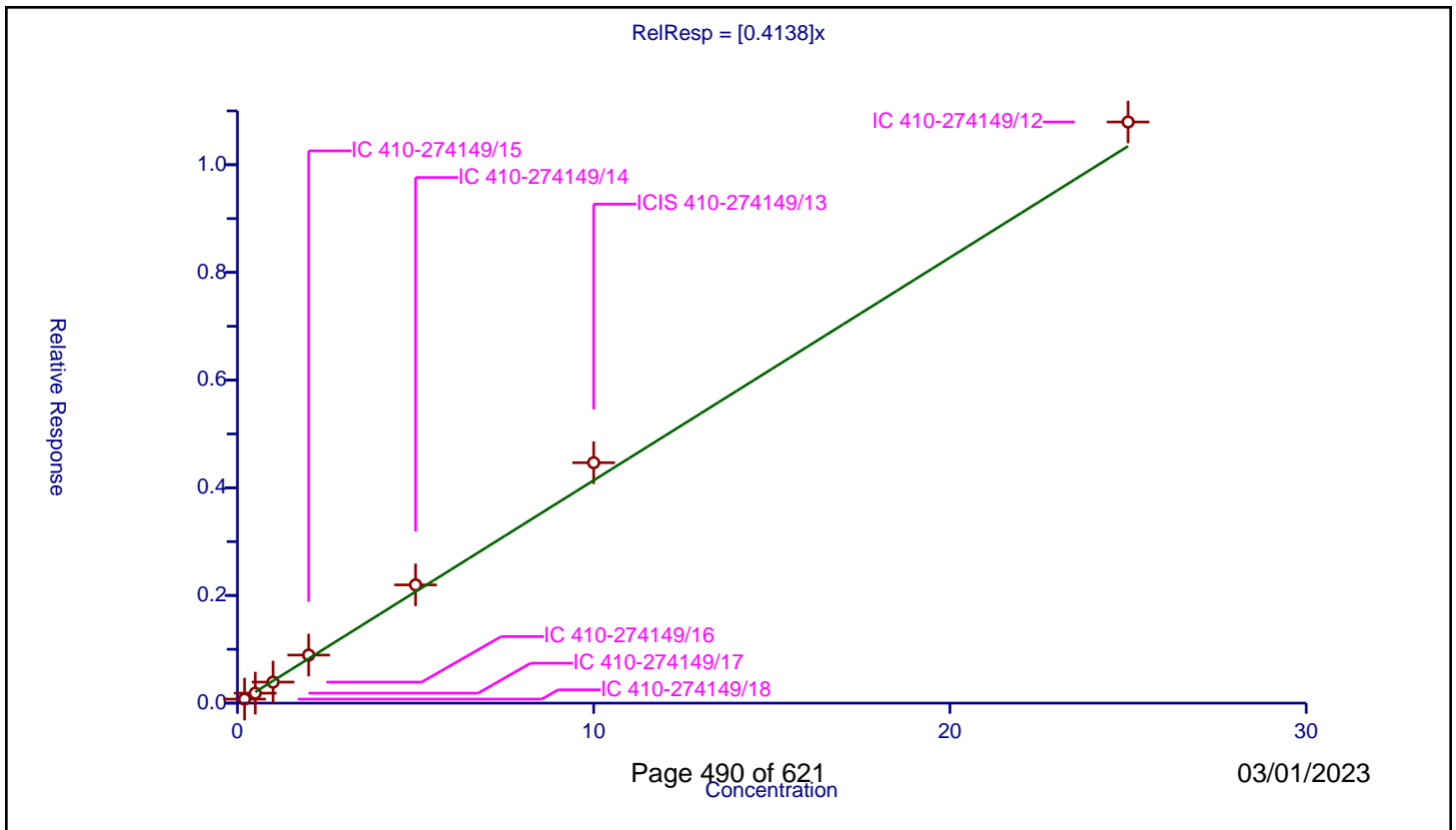
/ Pentachloroethane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4138

Error Coefficients	
Standard Error:	527000
Relative Standard Error:	8.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.074402	10.0	1000650.0	0.372008	Y
2	IC 410-274149/17	0.5	0.185021	10.0	974107.0	0.370041	Y
3	IC 410-274149/16	1.0	0.390613	10.0	992900.0	0.390613	Y
4	IC 410-274149/15	2.0	0.892524	10.0	997250.0	0.446262	Y
5	IC 410-274149/14	5.0	2.196335	10.0	1047322.0	0.439267	Y
6	ICIS 410-274149/13	10.0	4.465831	10.0	1051287.0	0.446583	Y
7	IC 410-274149/12	25.0	10.79394	10.0	1090322.0	0.431758	Y



Calibration

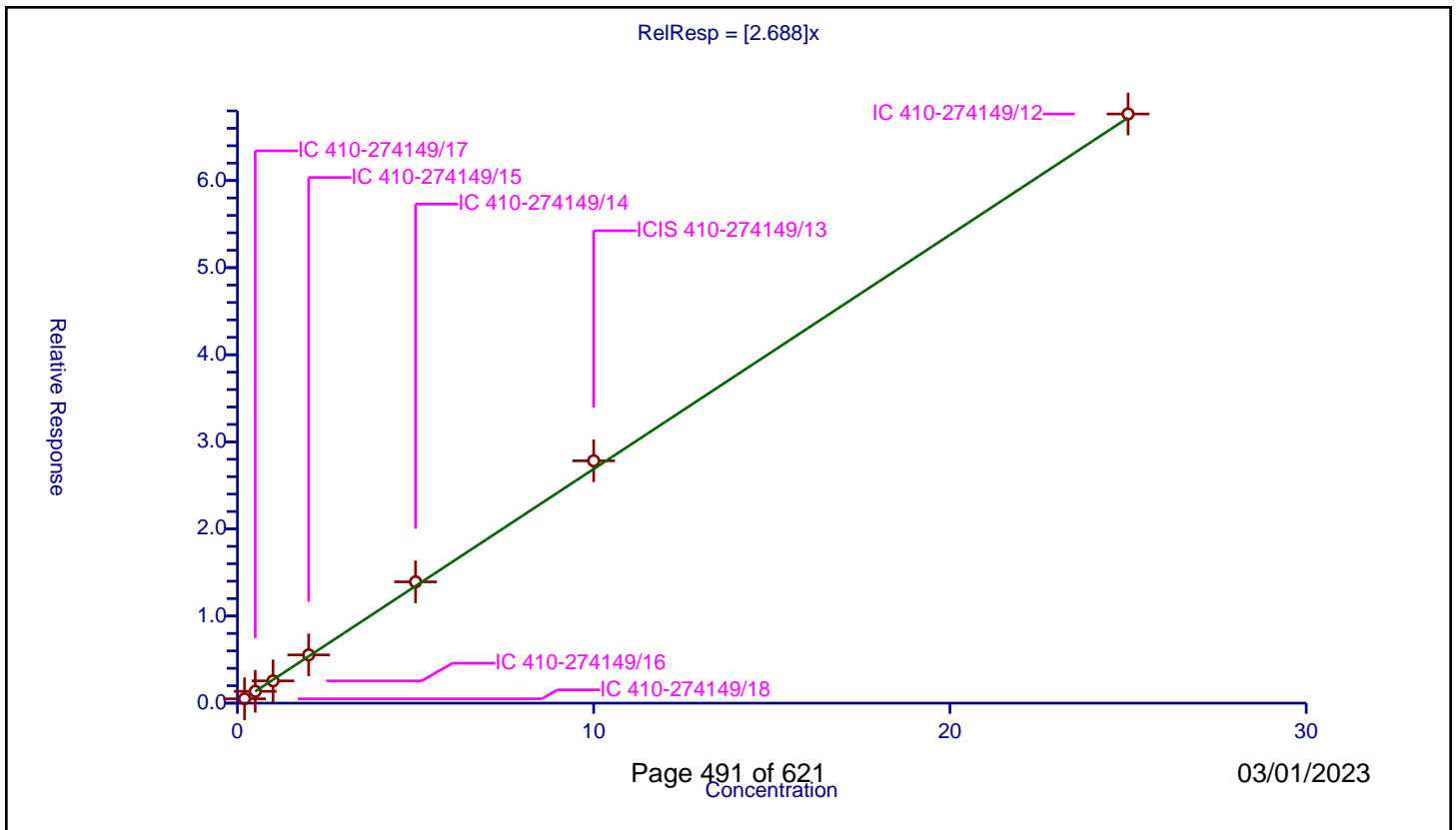
/ 1,2,4-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.688

Error Coefficients	
Standard Error:	3300000
Relative Standard Error:	4.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.500984	10.0	1000650.0	2.504922	Y
2	IC 410-274149/17	0.5	1.358105	10.0	974107.0	2.716211	Y
3	IC 410-274149/16	1.0	2.555816	10.0	992900.0	2.555816	Y
4	IC 410-274149/15	2.0	5.53829	10.0	997250.0	2.769145	Y
5	IC 410-274149/14	5.0	13.923798	10.0	1047322.0	2.78476	Y
6	ICIS 410-274149/13	10.0	27.822602	10.0	1051287.0	2.78226	Y
7	IC 410-274149/12	25.0	67.641449	10.0	1090322.0	2.705658	Y



Calibration

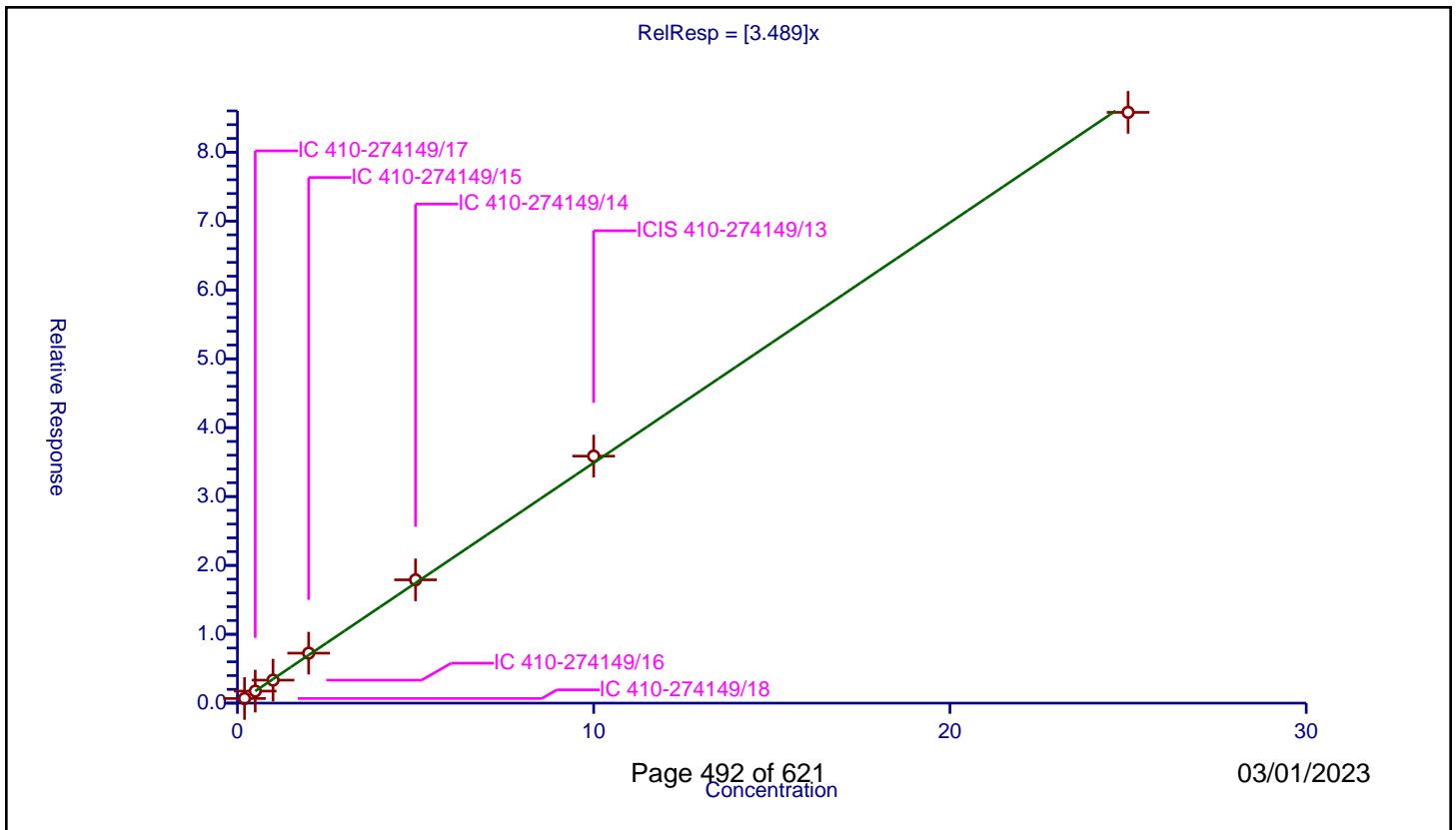
/ sec-Butylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	3.489

Error Coefficients	
Standard Error:	4200000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.672433	10.0	1000650.0	3.362165	Y
2	IC 410-274149/17	0.5	1.748083	10.0	974107.0	3.496166	Y
3	IC 410-274149/16	1.0	3.338282	10.0	992900.0	3.338282	Y
4	IC 410-274149/15	2.0	7.257298	10.0	997250.0	3.628649	Y
5	IC 410-274149/14	5.0	17.903243	10.0	1047322.0	3.580649	Y
6	ICIS 410-274149/13	10.0	35.868749	10.0	1051287.0	3.586875	Y
7	IC 410-274149/12	25.0	85.786098	10.0	1090322.0	3.431444	Y



Calibration

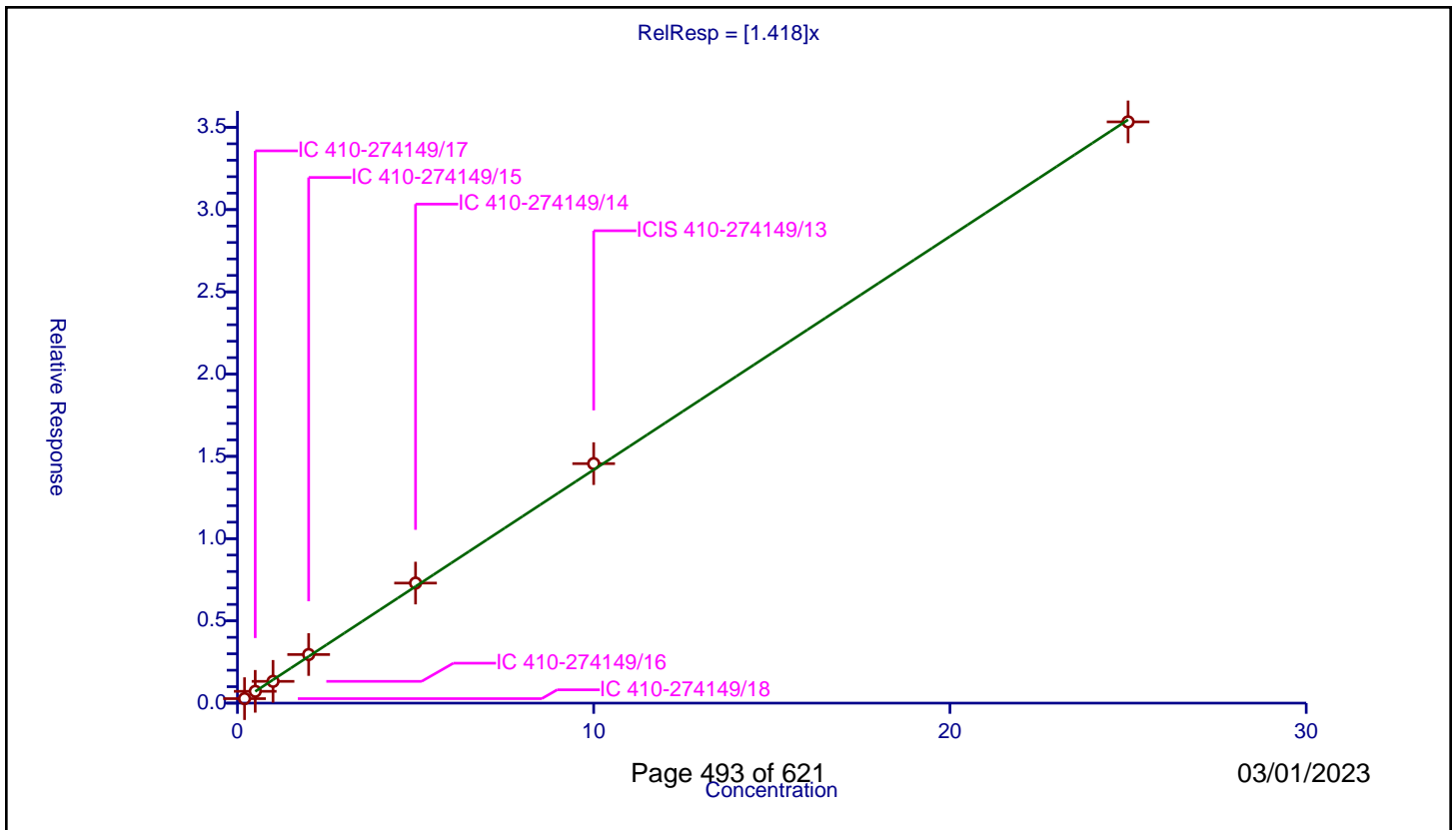
/ 1,3-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.418

Error Coefficients	
Standard Error:	1730000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.272983	10.0	1000650.0	1.364913	Y
2	IC 410-274149/17	0.5	0.717693	10.0	974107.0	1.435386	Y
3	IC 410-274149/16	1.0	1.323406	10.0	992900.0	1.323406	Y
4	IC 410-274149/15	2.0	2.953883	10.0	997250.0	1.476942	Y
5	IC 410-274149/14	5.0	7.297765	10.0	1047322.0	1.459553	Y
6	ICIS 410-274149/13	10.0	14.558822	10.0	1051287.0	1.455882	Y
7	IC 410-274149/12	25.0	35.333094	10.0	1090322.0	1.413324	Y



Calibration

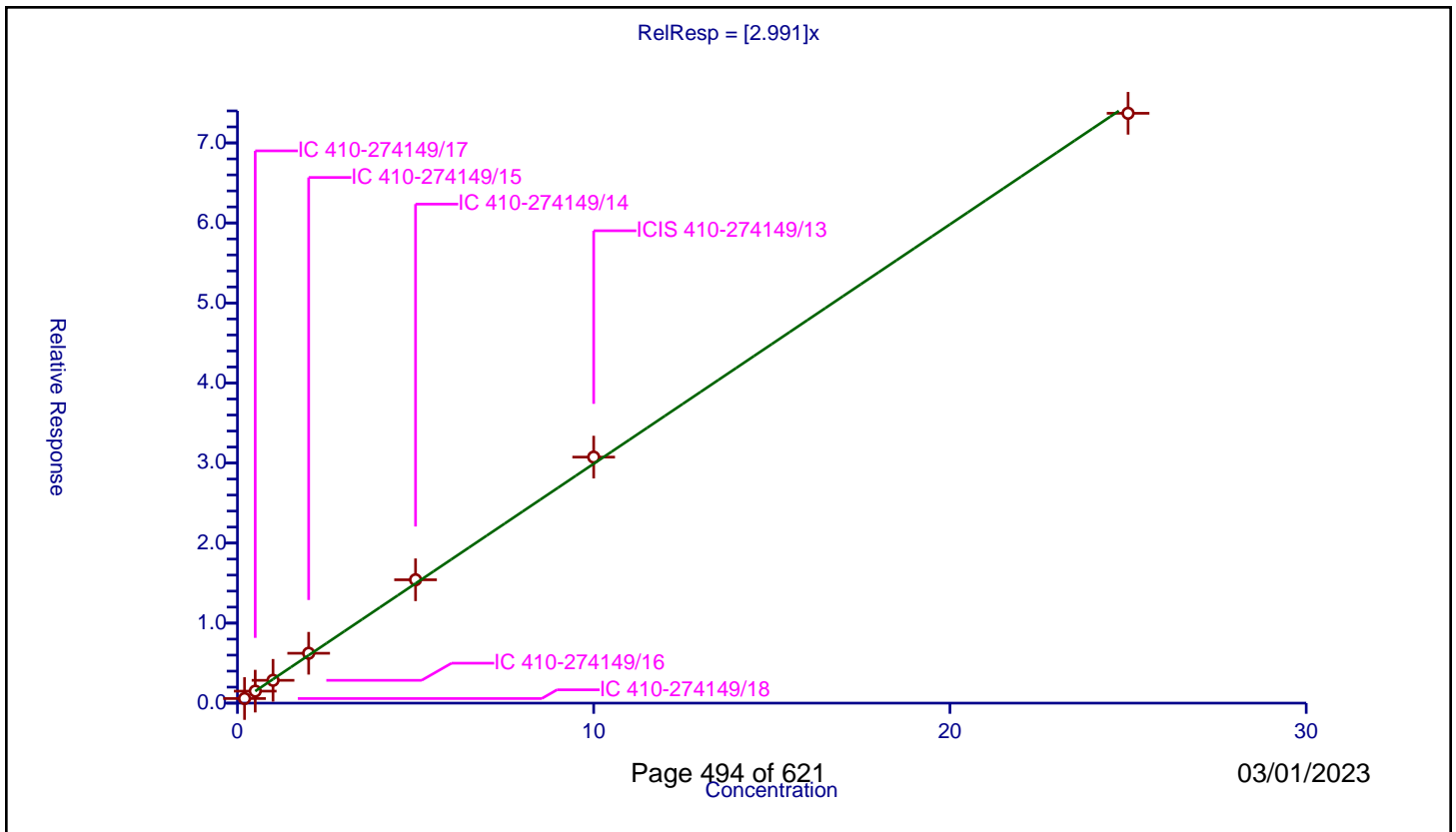
/ 4-Isopropyltoluene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	2.991

Error Coefficients	
Standard Error:	3610000
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.573247	10.0	1000650.0	2.866237	Y
2	IC 410-274149/17	0.5	1.500184	10.0	974107.0	3.000369	Y
3	IC 410-274149/16	1.0	2.850317	10.0	992900.0	2.850317	Y
4	IC 410-274149/15	2.0	6.230474	10.0	997250.0	3.115237	Y
5	IC 410-274149/14	5.0	15.413359	10.0	1047322.0	3.082672	Y
6	ICIS 410-274149/13	10.0	30.740901	10.0	1051287.0	3.07409	Y
7	IC 410-274149/12	25.0	73.698962	10.0	1090322.0	2.947958	Y



Calibration

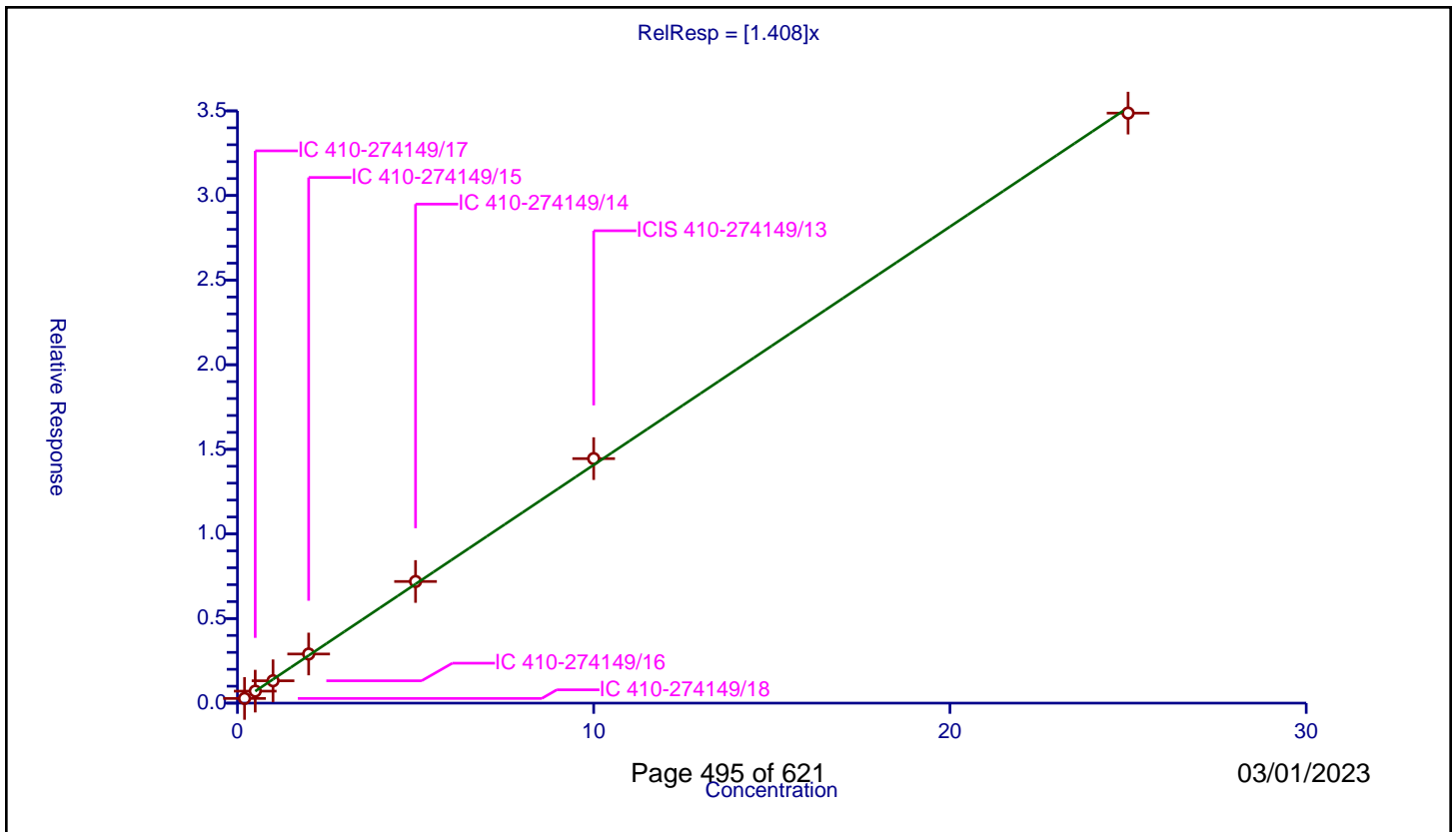
/ 1,4-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.408

Error Coefficients	
Standard Error:	1700000
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.27683	10.0	1000650.0	1.38415	Y
2	IC 410-274149/17	0.5	0.709573	10.0	974107.0	1.419146	Y
3	IC 410-274149/16	1.0	1.321644	10.0	992900.0	1.321644	Y
4	IC 410-274149/15	2.0	2.903926	10.0	997250.0	1.451963	Y
5	IC 410-274149/14	5.0	7.188792	10.0	1047322.0	1.437758	Y
6	ICIS 410-274149/13	10.0	14.450098	10.0	1051287.0	1.44501	Y
7	IC 410-274149/12	25.0	34.86914	10.0	1090322.0	1.394766	Y



Calibration

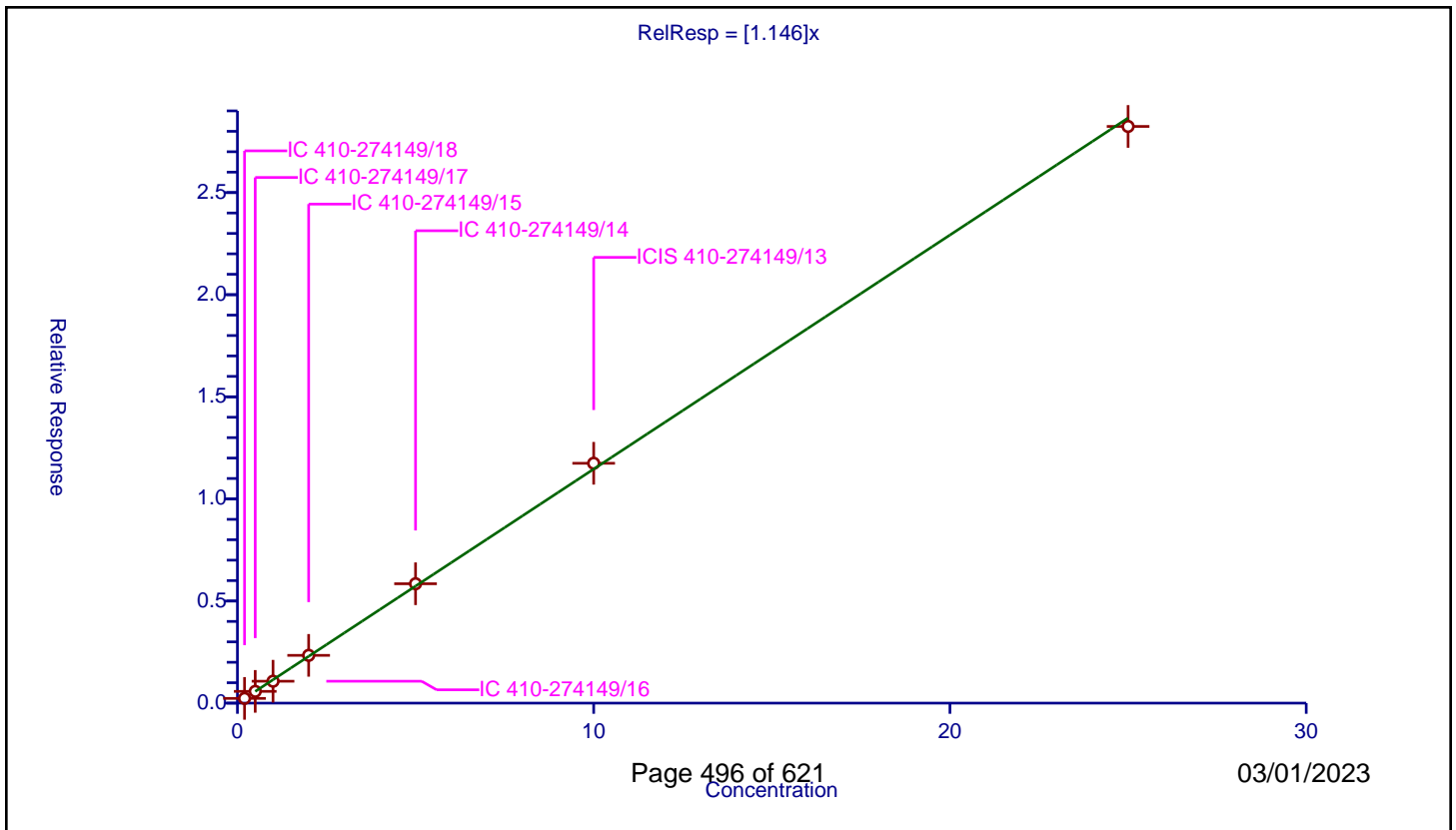
/ 1,2,3-Trimethylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.146

Error Coefficients	
Standard Error:	1380000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.23128	10.0	1000650.0	1.156398	Y
2	IC 410-274149/17	0.5	0.575738	10.0	974107.0	1.151475	Y
3	IC 410-274149/16	1.0	1.072102	10.0	992900.0	1.072102	Y
4	IC 410-274149/15	2.0	2.339233	10.0	997250.0	1.169616	Y
5	IC 410-274149/14	5.0	5.845356	10.0	1047322.0	1.169071	Y
6	ICIS 410-274149/13	10.0	11.744195	10.0	1051287.0	1.17442	Y
7	IC 410-274149/12	25.0	28.238062	10.0	1090322.0	1.129522	Y



Calibration

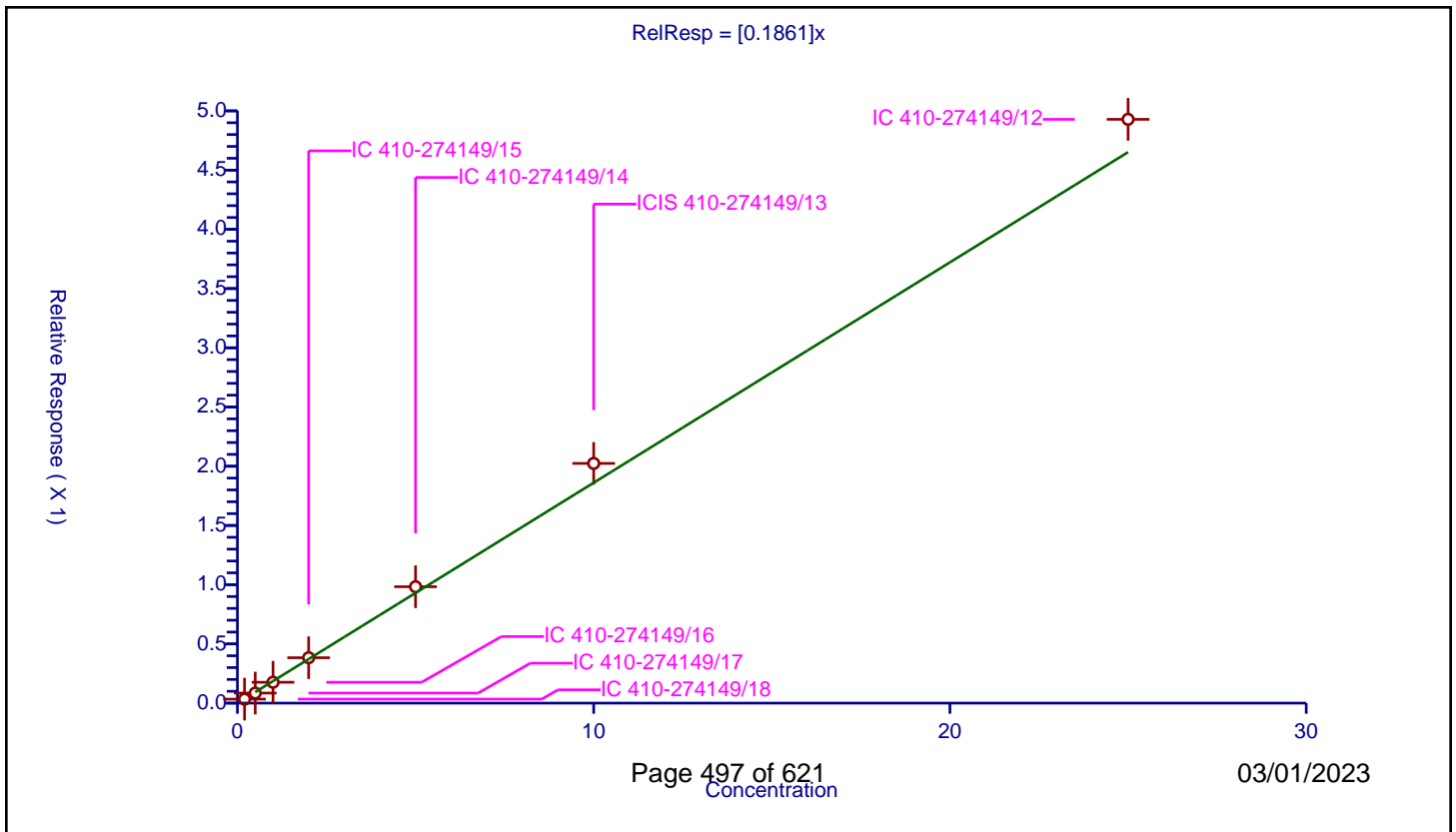
/ Benzyl chloride

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.1861

Error Coefficients	
Standard Error:	240000
Relative Standard Error:	7.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.033768	10.0	1000650.0	0.16884	Y
2	IC 410-274149/17	0.5	0.084796	10.0	974107.0	0.169591	Y
3	IC 410-274149/16	1.0	0.176251	10.0	992900.0	0.176251	Y
4	IC 410-274149/15	2.0	0.383324	10.0	997250.0	0.191662	Y
5	IC 410-274149/14	5.0	0.982792	10.0	1047322.0	0.196558	Y
6	ICIS 410-274149/13	10.0	2.023872	10.0	1051287.0	0.202387	Y
7	IC 410-274149/12	25.0	4.92881	10.0	1090322.0	0.197152	Y



Calibration

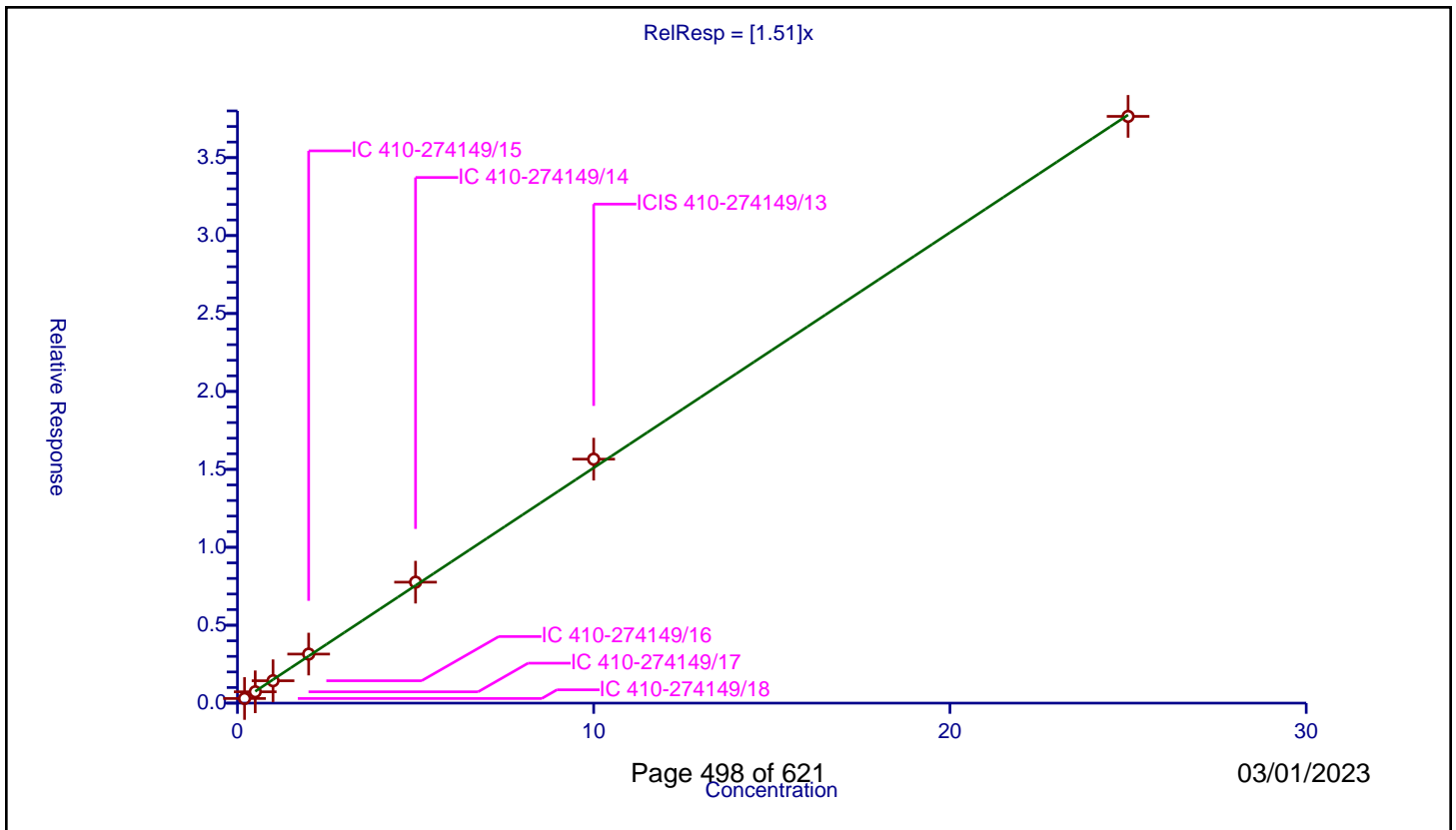
/ n-Butylbenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.51

Error Coefficients	
Standard Error:	1840000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.295778	10.0	1000650.0	1.478889	Y
2	IC 410-274149/17	0.5	0.727918	10.0	974107.0	1.455836	Y
3	IC 410-274149/16	1.0	1.435774	10.0	992900.0	1.435774	Y
4	IC 410-274149/15	2.0	3.147536	10.0	997250.0	1.573768	Y
5	IC 410-274149/14	5.0	7.760307	10.0	1047322.0	1.552061	Y
6	ICIS 410-274149/13	10.0	15.653528	10.0	1051287.0	1.565353	Y
7	IC 410-274149/12	25.0	37.648447	10.0	1090322.0	1.505938	Y



Calibration

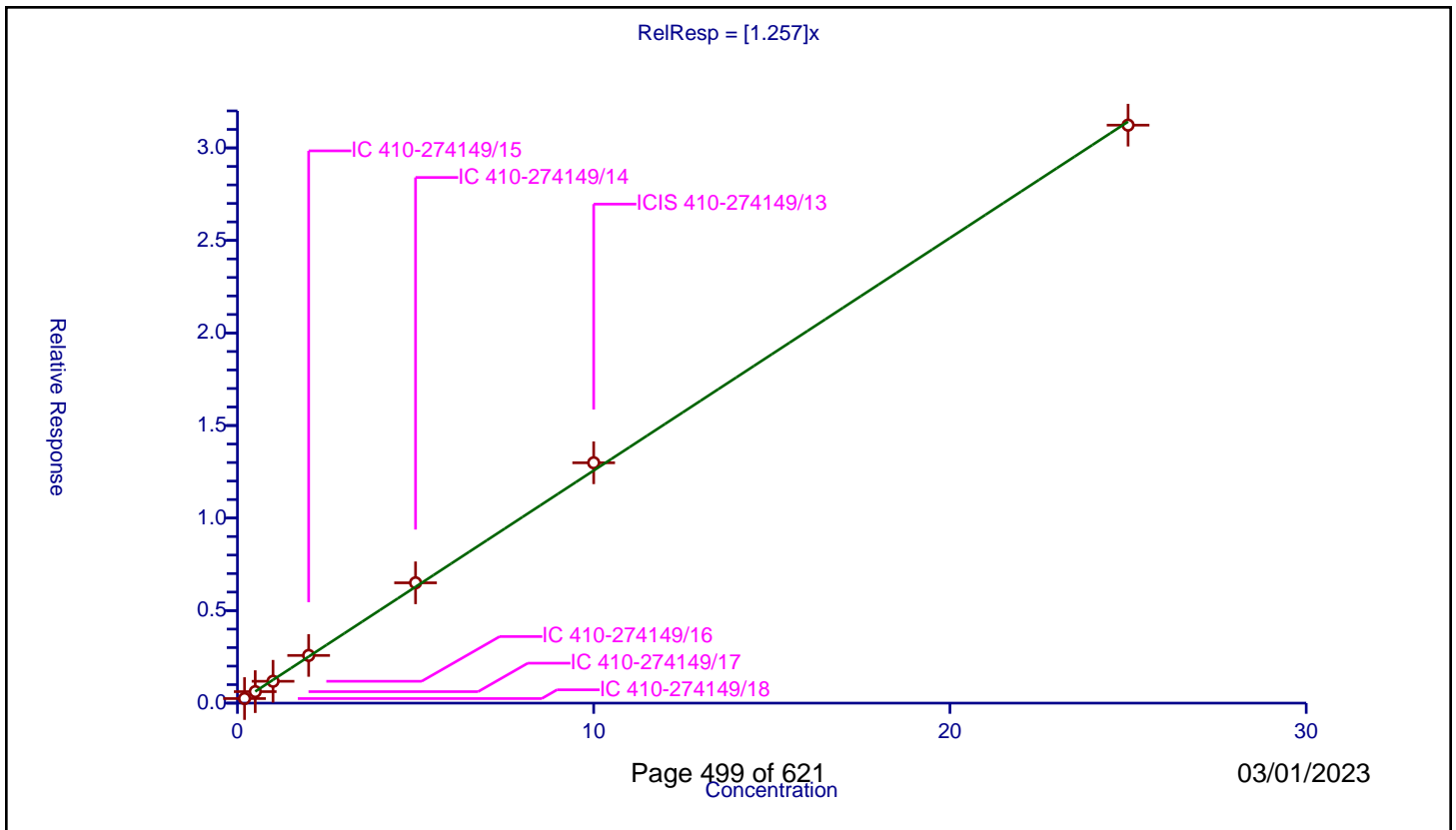
/ 1,2-Dichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.257

Error Coefficients	
Standard Error:	1530000
Relative Standard Error:	3.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.247299	10.0	1000650.0	1.236496	Y
2	IC 410-274149/17	0.5	0.621677	10.0	974107.0	1.243354	Y
3	IC 410-274149/16	1.0	1.180723	10.0	992900.0	1.180723	Y
4	IC 410-274149/15	2.0	2.576084	10.0	997250.0	1.288042	Y
5	IC 410-274149/14	5.0	6.501496	10.0	1047322.0	1.300299	Y
6	ICIS 410-274149/13	10.0	12.987348	10.0	1051287.0	1.298735	Y
7	IC 410-274149/12	25.0	31.230655	10.0	1090322.0	1.249226	Y



Calibration

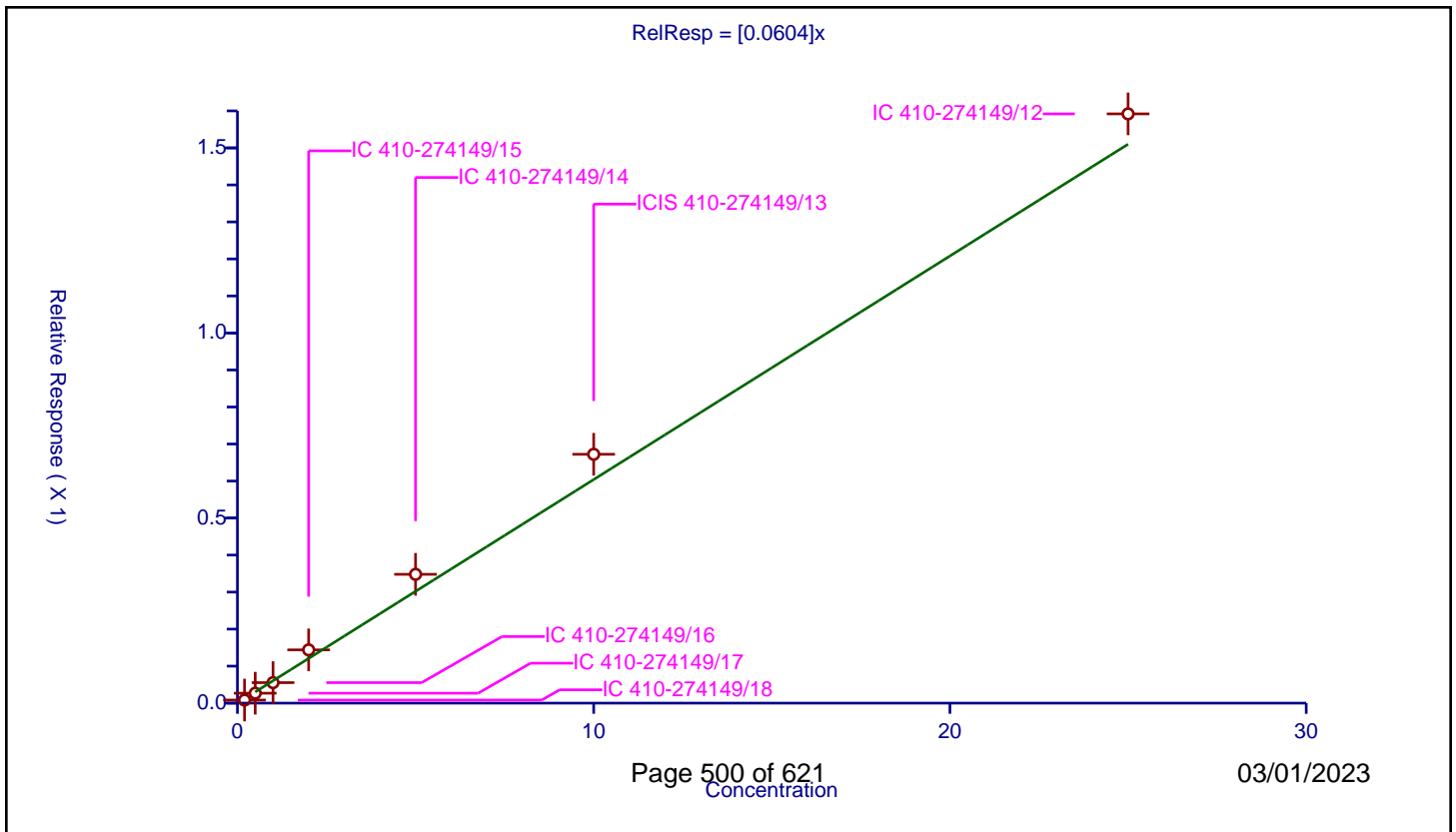
/ 1,2-Dibromo-3-Chloropropane

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.0604

Error Coefficients	
Standard Error:	78200
Relative Standard Error:	18.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.965

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.008285	10.0	1000650.0	0.041423	Y
2	IC 410-274149/17	0.5	0.026784	10.0	974107.0	0.053567	Y
3	IC 410-274149/16	1.0	0.055383	10.0	992900.0	0.055383	Y
4	IC 410-274149/15	2.0	0.143856	10.0	997250.0	0.071928	Y
5	IC 410-274149/14	5.0	0.347983	10.0	1047322.0	0.069597	Y
6	ICIS 410-274149/13	10.0	0.67229	10.0	1051287.0	0.067229	Y
7	IC 410-274149/12	25.0	1.591952	10.0	1090322.0	0.063678	Y



Calibration

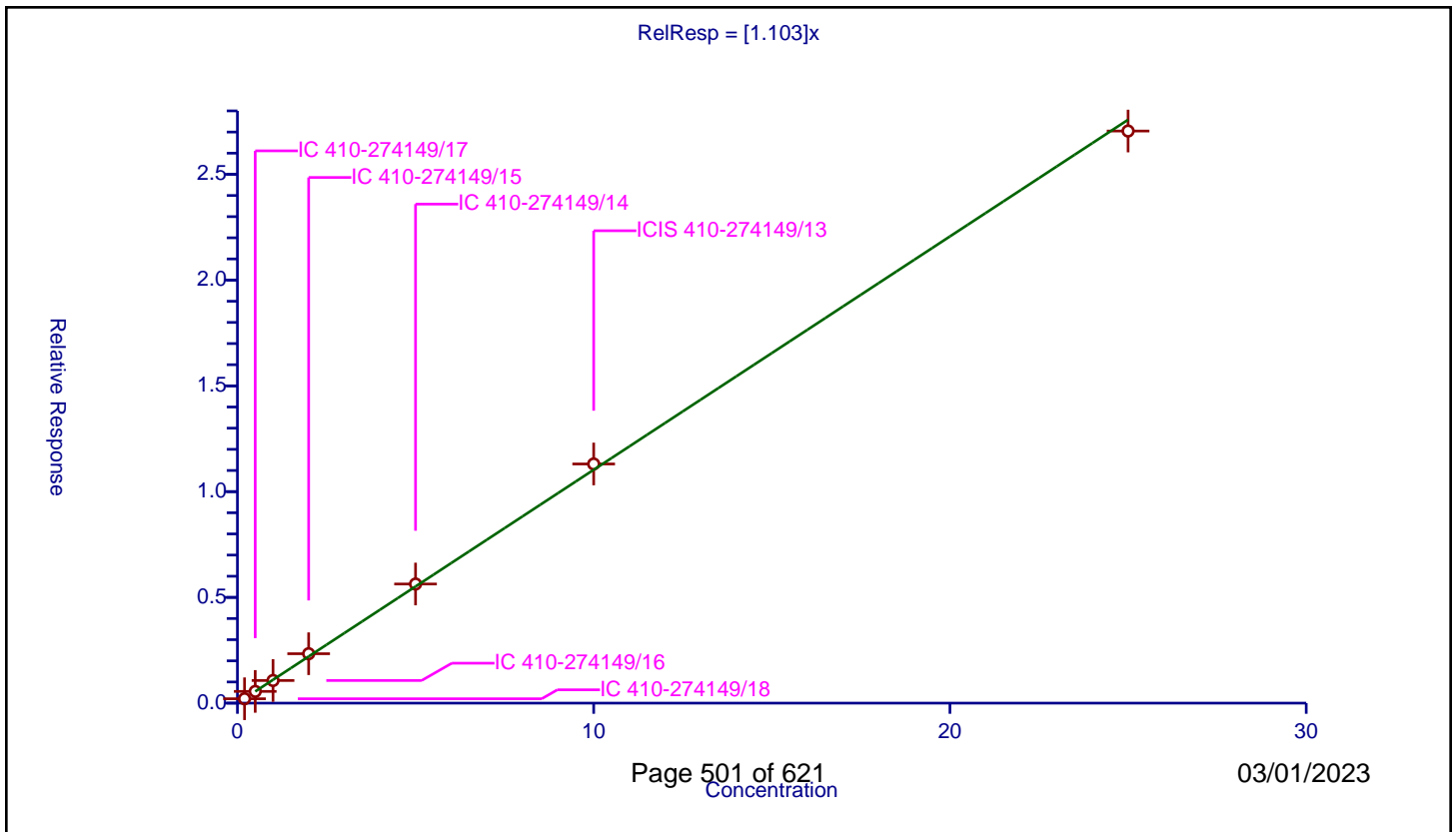
/ 1,3,5-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.103

Error Coefficients	
Standard Error:	1320000
Relative Standard Error:	4.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.207245	10.0	1000650.0	1.036226	Y
2	IC 410-274149/17	0.5	0.554672	10.0	974107.0	1.109344	Y
3	IC 410-274149/16	1.0	1.070098	10.0	992900.0	1.070098	Y
4	IC 410-274149/15	2.0	2.336445	10.0	997250.0	1.168223	Y
5	IC 410-274149/14	5.0	5.632165	10.0	1047322.0	1.126433	Y
6	ICIS 410-274149/13	10.0	11.306988	10.0	1051287.0	1.130699	Y
7	IC 410-274149/12	25.0	27.048037	10.0	1090322.0	1.081921	Y



Calibration

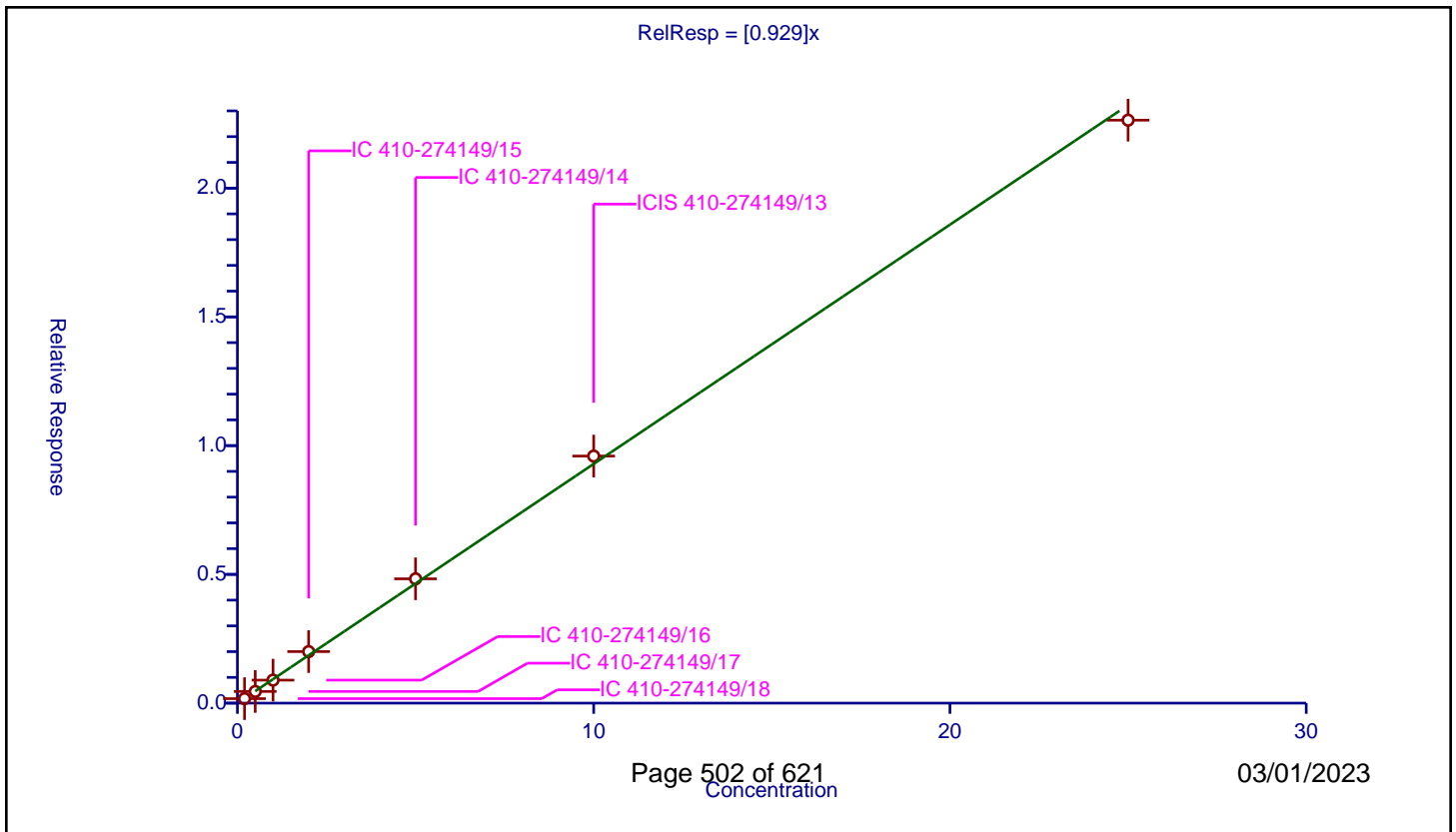
/ 1,2,4-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.929

Error Coefficients	
Standard Error:	1110000
Relative Standard Error:	5.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.174067	10.0	1000650.0	0.870334	Y
2	IC 410-274149/17	0.5	0.453954	10.0	974107.0	0.907908	Y
3	IC 410-274149/16	1.0	0.893202	10.0	992900.0	0.893202	Y
4	IC 410-274149/15	2.0	2.001935	10.0	997250.0	1.000968	Y
5	IC 410-274149/14	5.0	4.827665	10.0	1047322.0	0.965533	Y
6	ICIS 410-274149/13	10.0	9.595505	10.0	1051287.0	0.959551	Y
7	IC 410-274149/12	25.0	22.638863	10.0	1090322.0	0.905555	Y



Calibration

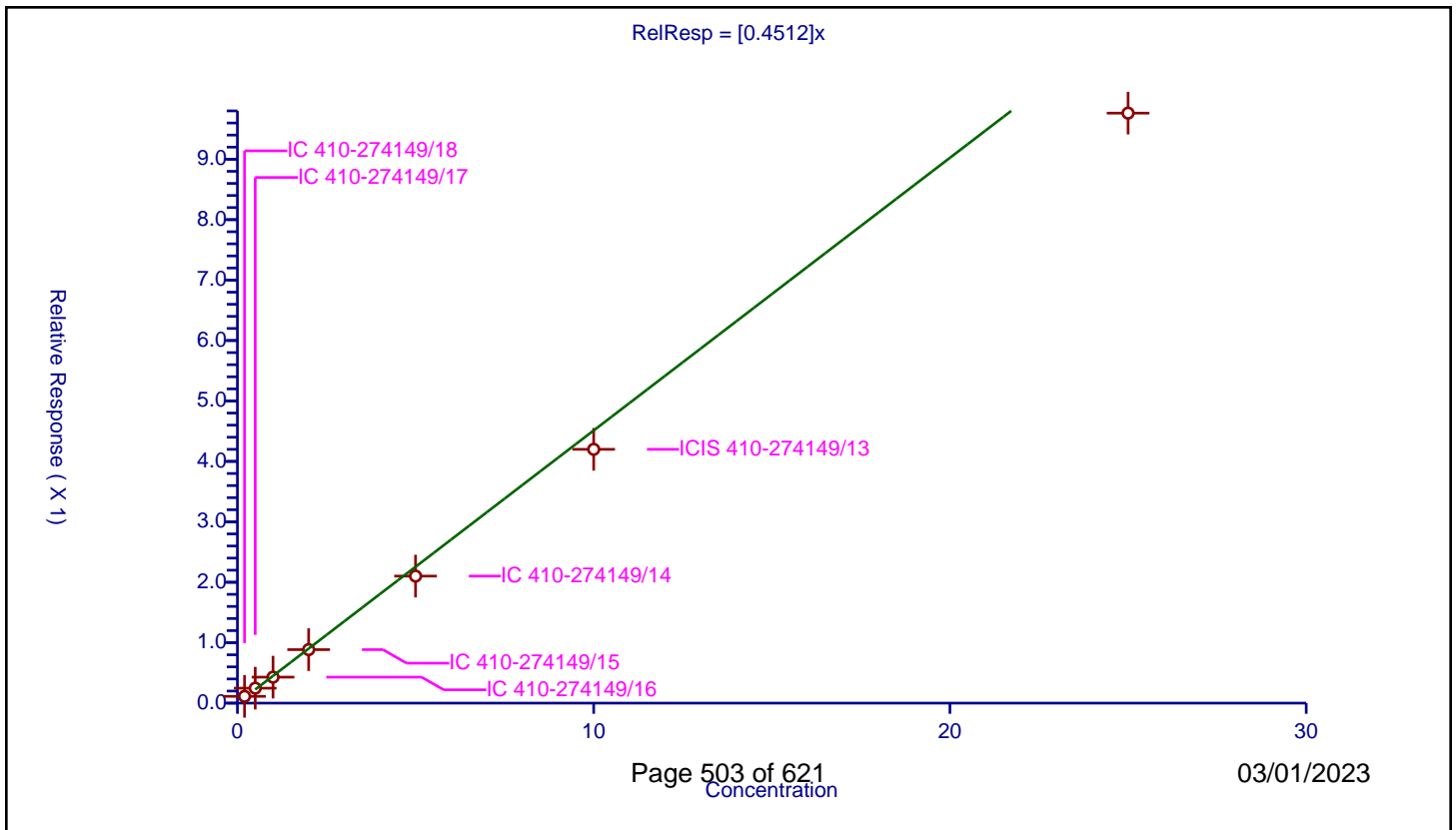
/ Hexachlorobutadiene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.4512

Error Coefficients	
Standard Error:	481000
Relative Standard Error:	12.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.973

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.112037	10.0	1000650.0	0.560186	Y
2	IC 410-274149/17	0.5	0.247468	10.0	974107.0	0.494935	Y
3	IC 410-274149/16	1.0	0.429761	10.0	992900.0	0.429761	Y
4	IC 410-274149/15	2.0	0.885114	10.0	997250.0	0.442557	Y
5	IC 410-274149/14	5.0	2.101932	10.0	1047322.0	0.420386	Y
6	ICIS 410-274149/13	10.0	4.199966	10.0	1051287.0	0.419997	Y
7	IC 410-274149/12	25.0	9.762987	10.0	1090322.0	0.390519	Y



Calibration

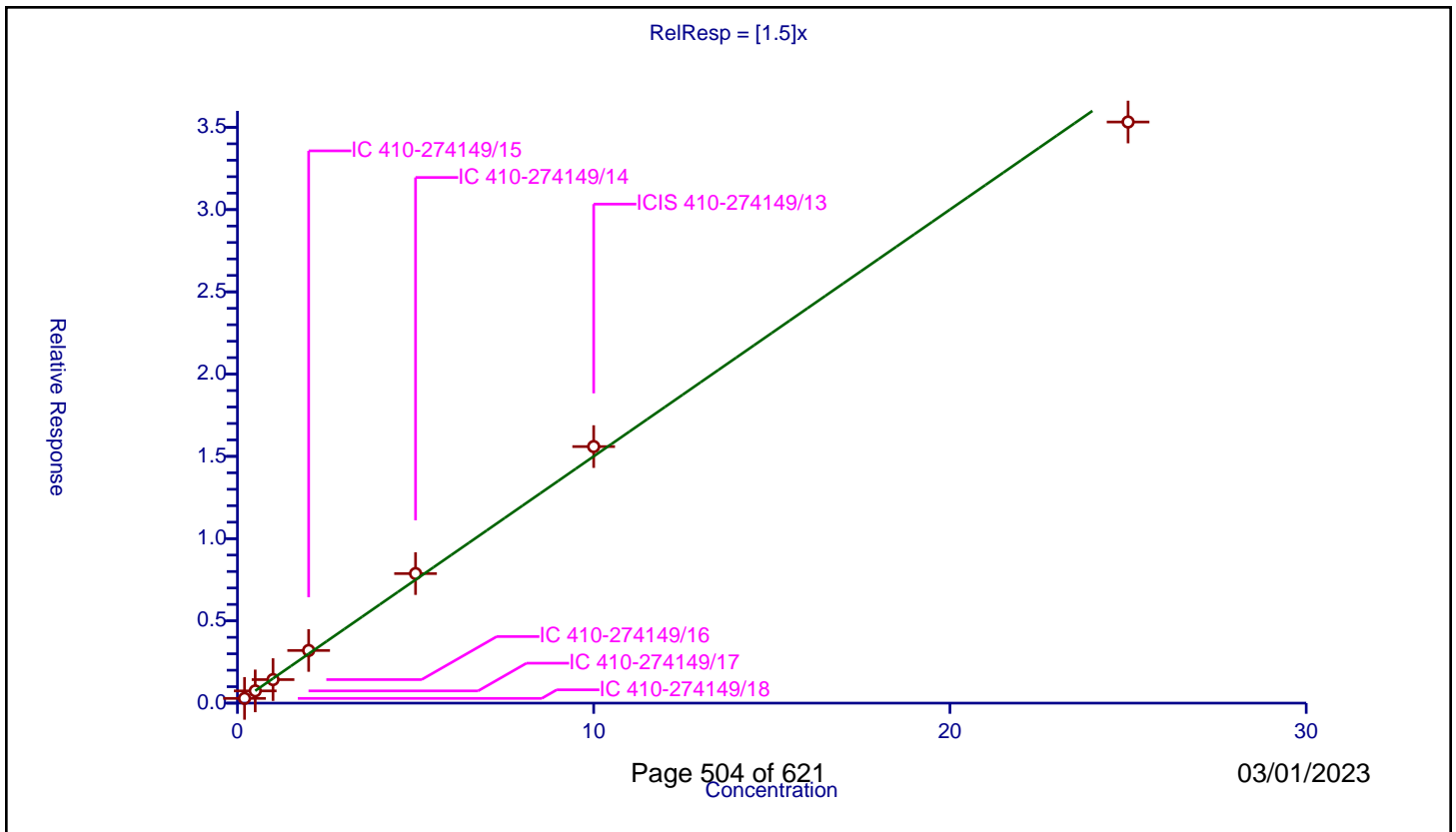
/ Naphthalene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	1.5

Error Coefficients	
Standard Error:	1750000
Relative Standard Error:	5.2
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.287023	10.0	1000650.0	1.435117	Y
2	IC 410-274149/17	0.5	0.743614	10.0	974107.0	1.487229	Y
3	IC 410-274149/16	1.0	1.429832	10.0	992900.0	1.429832	Y
4	IC 410-274149/15	2.0	3.201093	10.0	997250.0	1.600547	Y
5	IC 410-274149/14	5.0	7.87582	10.0	1047322.0	1.575164	Y
6	ICIS 410-274149/13	10.0	15.594895	10.0	1051287.0	1.559489	Y
7	IC 410-274149/12	25.0	35.324134	10.0	1090322.0	1.412965	Y



Calibration

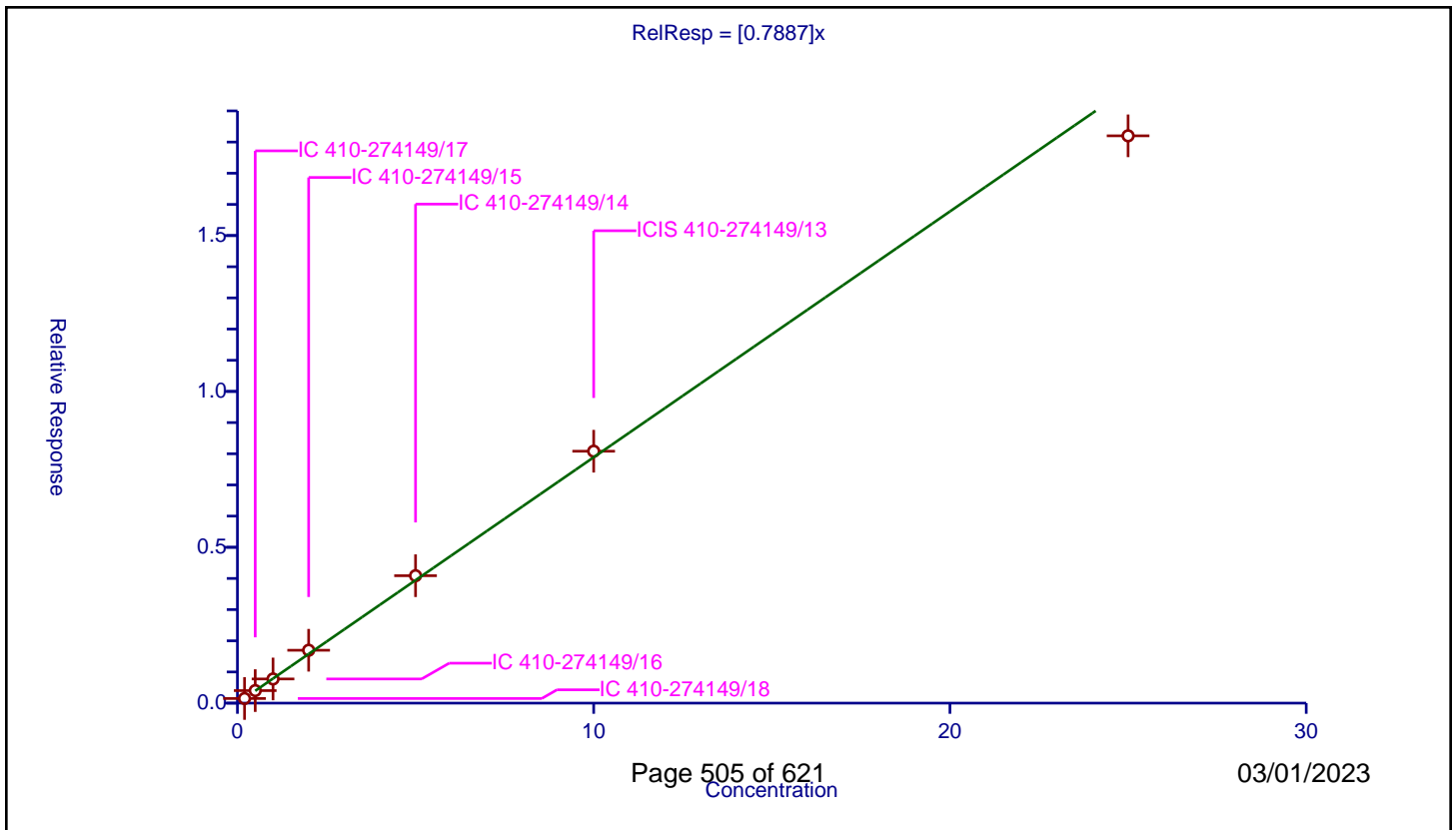
/ 1,2,3-Trichlorobenzene

Curve Type: Average
 Weighting: Conc_Sq
 Origin: Force
 Dependency: Response
 Calib Mode: ISTD
 Response Base: AREA
 RF Rounding: 0

Curve Coefficients	
Intercept:	0
Slope:	0.7887

Error Coefficients	
Standard Error:	902000
Relative Standard Error:	5.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-274149/18	0.2	0.147884	10.0	1000650.0	0.739419	Y
2	IC 410-274149/17	0.5	0.402102	10.0	974107.0	0.804203	Y
3	IC 410-274149/16	1.0	0.775254	10.0	992900.0	0.775254	Y
4	IC 410-274149/15	2.0	1.696556	10.0	997250.0	0.848278	Y
5	IC 410-274149/14	5.0	4.087845	10.0	1047322.0	0.817569	Y
6	ICIS 410-274149/13	10.0	8.081504	10.0	1051287.0	0.80815	Y
7	IC 410-274149/12	25.0	18.200467	10.0	1090322.0	0.728019	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-116393-1

SDG No.: _____

Lab Sample ID: ICV 410-275687/4 Calibration Date: 07/14/2022 20:04

Instrument ID: 19094 Calib Start Date: 07/11/2022 16:51

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 07/11/2022 18:52

Lab File ID: copy_HL14X03.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3063	0.2590	0.1000	4.23	5.00	-15.5	30.0
Chloromethane	Ave	0.3838	0.3406	0.1000	4.44	5.00	-11.2	30.0
1,3-Butadiene	Ave	0.3624	0.2894		3.99	5.00	-20.1	30.0
Vinyl chloride	Ave	0.3802	0.3321	0.1000	4.37	5.00	-12.6	30.0
Bromomethane	Ave	0.2669	0.2374	0.1000	4.45	5.00	-11.1	30.0
Chloroethane	Ave	0.2307	0.2091	0.1000	4.53	5.00	-9.4	30.0
Dichlorofluoromethane	Ave	0.5113	0.4758		4.65	5.00	-7.0	30.0
Trichlorofluoromethane	Ave	0.4602	0.4030	0.1000	4.38	5.00	-12.4	30.0
Ethyl ether	Ave	0.1924	0.1740		4.51	4.98	-9.6	30.0
Freon 123a	Ave	0.3585	0.3120		4.35	5.00	-13.0	30.0
Acrolein	Ave	2.748	2.918		39.8	37.5	6.2	30.0
1,1-Dichloroethene	Ave	0.2601	0.2385	0.1000	4.58	5.00	-8.3	30.0
Acetone	Ave	3.199	2.905	0.1000	56.8	62.5	-9.2	30.0
Freon 113	Ave	0.2536	0.2389	0.1000	4.71	5.00	-5.8	30.0
Methyl iodide	Ave	0.4522	0.4407		4.87	5.00	-2.5	30.0
Ethyl bromide	Ave	0.2285	0.1794		3.84	4.89	-21.5	30.0
Carbon disulfide	Ave	0.6962	0.6999	0.1000	5.03	5.00	0.5	30.0
Methyl acetate	Ave	8.464	10.17	0.1000	6.01	5.00	20.2	30.0
Allyl chloride	Ave	0.4513	0.4237		4.69	5.00	-6.1	30.0
Methylene Chloride	Ave	0.2694	0.2461	0.1000	4.57	5.00	-8.6	30.0
t-Butyl alcohol	Ave	1.082	1.257		58.1	50.0	16.2	30.0
Acrylonitrile	Ave	4.318	4.902		28.4	25.0	13.5	30.0
Methyl tert-butyl ether	Ave	0.5814	0.5286	0.1000	4.55	5.00	-9.1	30.0
trans-1,2-Dichloroethene	Ave	0.2889	0.2589	0.1000	4.48	5.00	-10.4	30.0
n-Hexane	Ave	0.4042	0.3482		4.31	5.00	-13.8	30.0
1,1-Dichloroethane	Ave	0.5400	0.4802	0.2000	4.45	5.00	-11.1	30.0
di-Isopropyl ether	Ave	0.9190	0.8318		4.53	5.00	-9.5	30.0
2-Chloro-1,3-butadiene	Ave	0.4410	0.4111		4.66	5.00	-6.8	30.0
Ethyl t-butyl ether	Ave	0.8130	0.7399		4.55	5.00	-9.0	30.0
2-Butanone (MEK)	Ave	5.564	6.373	0.1000	71.6	62.5	14.5	30.0
cis-1,2-Dichloroethene	Ave	0.3173	0.2894	0.1000	4.56	5.00	-8.8	30.0
2,2-Dichloropropane	Ave	0.4524	0.4185		4.63	5.00	-7.5	30.0
Propionitrile	Ave	1.427	1.628		42.8	37.5	14.1	30.0
Methacrylonitrile	Ave	6.162	6.912		42.1	37.5	12.2	30.0
Bromochloromethane	Ave	0.1268	0.1101		4.34	5.00	-13.1	30.0
Tetrahydrofuran	Ave	1.591	1.765		27.7	25.0	10.9	30.0
Chloroform	Ave	0.5095	0.4508	0.2000	4.42	5.00	-11.5	30.0
1,1,1-Trichloroethane	Ave	0.4742	0.4165	0.1000	4.39	5.00	-12.2	30.0
Cyclohexane	Ave	0.5379	0.4679	0.1000	4.35	5.00	-13.0	30.0
1,1-Dichloropropene	Ave	0.4287	0.3790		4.42	5.00	-11.6	30.0
Carbon tetrachloride	Ave	0.4101	0.3658	0.1000	4.46	5.00	-10.8	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-116393-1

SDG No.: _____

Lab Sample ID: ICV 410-275687/4 Calibration Date: 07/14/2022 20:04

Instrument ID: 19094 Calib Start Date: 07/11/2022 16:51

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 07/11/2022 18:52

Lab File ID: copy_HL14X03.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Isobutyl alcohol	Ave	0.3528	0.4228		150	125	19.8	30.0
Benzene	Ave	1.250	1.112	0.5000	4.45	5.00	-11.0	30.0
1,2-Dichloroethane	Ave	0.2708	0.2363	0.1000	4.36	5.00	-12.7	30.0
t-Amyl methyl ether	Ave	0.6927	0.6217		4.49	5.00	-10.3	30.0
n-Heptane	Ave	0.4424	0.3695		4.18	5.00	-16.5	30.0
n-Butanol	Ave	0.3017	0.3876		321	250	28.5	30.0
Trichloroethene	Ave	0.3292	0.2871	0.2000	4.36	5.00	-12.8	30.0
Methylcyclohexane	Ave	0.5553	0.4738	0.1000	4.27	5.00	-14.7	30.0
1,2-Dichloropropane	Ave	0.3137	0.2794	0.1000	4.45	5.00	-10.9	30.0
Methyl methacrylate	Ave	12.27	14.09		5.74	5.00	14.8	30.0
1,4-Dioxane	Ave	0.0784	0.1088	0.0050	174	125	38.8*	30.0
Dibromomethane	Ave	0.1306	0.1128		4.32	5.00	-13.6	30.0
Bromodichloromethane	Ave	0.3530	0.3184	0.2000	4.51	5.00	-9.8	30.0
2-Nitropropane	Ave	3.043	3.335		5.48	5.00	9.6	30.0
1-Bromo-2-chloroethane	Ave	0.2884	0.2512		4.36	5.00	-12.9	30.0
cis-1,3-Dichloropropene	Ave	0.4429	0.3951	0.2000	4.46	5.00	-10.8	30.0
4-Methyl-2-pentanone (MIBK)	Ave	15.08	17.02	0.1000	70.5	62.5	12.9	30.0
Toluene	Ave	0.9090	0.9510	0.4000	5.23	5.00	4.6	30.0
trans-1,3-Dichloropropene	Ave	0.3871	0.4277	0.1000	5.52	5.00	10.5	30.0
Ethyl methacrylate	Ave	0.2967	0.3279		5.53	5.00	10.5	30.0
1,1,2-Trichloroethane	Ave	0.2153	0.2263	0.1000	5.26	5.00	5.1	30.0
Tetrachloroethene	Ave	0.4197	0.4390	0.2000	5.23	5.00	4.6	30.0
1,3-Dichloropropane	Ave	0.3711	0.3928		5.29	5.00	5.8	30.0
2-Hexanone	Ave	10.01	11.61	0.1000	72.5	62.5	16.0	30.0
Dibromochloromethane	Ave	0.2665	0.2917		5.47	5.00	9.5	30.0
1,2-Dibromoethane (EDB)	Ave	0.1972	0.2124	0.1000	5.39	5.00	7.7	30.0
1-Chlorohexane	Ave	0.5617	0.5539		4.93	5.00	-1.4	30.0
Chlorobenzene	Ave	0.9684	1.013	0.5000	5.23	5.00	4.6	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3322	0.3578		5.39	5.00	7.7	30.0
Ethylbenzene	Ave	1.775	1.871	0.1000	5.27	5.00	5.4	30.0
m&p-Xylene	Ave	0.6768	0.7128	0.1000	10.5	10.0	5.3	30.0
o-Xylene	Ave	0.6542	0.6926	0.3000	5.29	5.00	5.9	30.0
Styrene	Ave	1.061	1.144	0.3000	5.39	5.00	7.8	30.0
Bromoform	Ave	0.1536	0.1691	0.1000	5.51	5.00	10.1	30.0
Isopropylbenzene	Ave	1.769	1.898	0.1000	5.37	5.00	7.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.4576	0.5046	0.3000	5.51	5.00	10.3	30.0
Bromobenzene	Ave	0.6850	0.7706		5.62	5.00	12.5	30.0
trans-1,4-Dichloro-2-butene	Ave	5.212	6.058		29.1	25.0	16.2	30.0
1,2,3-Trichloropropane	Ave	0.1149	0.1261		5.49	5.00	9.7	30.0
N-Propylbenzene	Ave	3.820	4.163		5.45	5.00	9.0	30.0
2-Chlorotoluene	Ave	0.7351	0.8087		5.50	5.00	10.0	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-116393-1

SDG No.: _____

Lab Sample ID: ICV 410-275687/4 Calibration Date: 07/14/2022 20:04

Instrument ID: 19094 Calib Start Date: 07/11/2022 16:51

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 07/11/2022 18:52

Lab File ID: copy_HL14X03.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	2.664	2.897		5.44	5.00	8.7	30.0
4-Chlorotoluene	Ave	0.7381	0.8125		5.50	5.00	10.1	30.0
tert-Butylbenzene	Ave	0.5892	0.6228		5.29	5.00	5.7	30.0
Pentachloroethane	Ave	0.4138	0.4711		5.69	5.00	13.9	30.0
1,2,4-Trimethylbenzene	Ave	2.688	2.935		5.46	5.00	9.2	30.0
sec-Butylbenzene	Ave	3.489	3.813		5.46	5.00	9.3	30.0
1,3-Dichlorobenzene	Ave	1.418	1.530	0.6000	5.39	5.00	7.8	30.0
p-Isopropyltoluene	Ave	2.991	3.252		5.44	5.00	8.7	30.0
1,4-Dichlorobenzene	Ave	1.408	1.536	0.5000	5.46	5.00	9.1	30.0
1,2,3-Trimethylbenzene	Ave	1.146	1.244		5.43	5.00	8.6	30.0
Benzyl chloride	Ave	0.1861	0.2164		5.81	5.00	16.3	30.0
n-Butylbenzene	Ave	1.510	1.613		5.34	5.00	6.8	30.0
1,2-Dichlorobenzene	Ave	1.257	1.361	0.4000	5.41	5.00	8.3	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.0604	0.0657	0.0500	5.44	5.00	8.8	30.0
1,3,5-Trichlorobenzene	Ave	1.103	1.206		5.46	5.00	9.3	30.0
1,2,4-Trichlorobenzene	Ave	0.9290	1.003	0.2000	5.40	5.00	8.0	30.0
Hexachlorobutadiene	Ave	0.4512	0.4475		4.96	5.00	-0.8	30.0
Naphthalene	Ave	1.500	1.590		5.30	5.00	6.0	30.0
1,2,3-Trichlorobenzene	Ave	0.7887	0.8508		5.39	5.00	7.9	30.0
Dibromofluoromethane (Surr)	Ave	0.2531	0.2329		9.20	10.0	-8.0	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0462	0.0444		9.60	10.0	-4.0	30.0
Toluene-d8 (Surr)	Ave	1.223	1.331		10.9	10.0	8.8	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4966	0.4783		9.63	10.0	-3.7	30.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20220714-61834.b\copy_HL14X03.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 14-Jul-2022 20:04:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0061844-004
 Misc. Info.: LCS
 Operator ID: MEC29284 Instrument ID: 19094
 Sublist:
 Method: \\chromfs\Lancaster\ChromData\19094\20220714-61834.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 14-Jul-2022 20:49:54 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1670

First Level Reviewer: K4WN

Date: 14-Jul-2022 20:47:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	1.928	1.934	-0.006	99	317261	5.00	4.23	M
6 Chloromethane	50	2.123	2.123	0.000	99	417299	5.00	4.44	
8 Butadiene	39	2.239	2.239	0.000	91	354600	5.00	3.99	M
7 Vinyl chloride	62	2.239	2.245	-0.006	87	406878	5.00	4.37	M
9 Bromomethane	94	2.562	2.562	0.000	90	290804	5.00	4.45	
10 Chloroethane	64	2.636	2.642	-0.006	100	256155	5.00	4.53	
11 Dichlorofluoromethane	67	2.867	2.873	-0.006	97	582865	5.00	4.65	
13 Trichlorofluoromethane	101	2.946	2.946	0.000	97	493715	5.00	4.38	
15 Ethyl ether	59	3.172	3.178	-0.006	92	212494	4.98	4.51	
16 1,2-Dichloro-1,1,2-trifluoroethane	67	3.257	3.257	0.000	93	382207	5.00	4.35	
17 Acrolein	56	3.343	3.343	0.000	97	211963	37.5	39.8	
18 1,1-Dichloroethene	96	3.483	3.483	0.000	98	292133	5.00	4.58	
19 Acetone	43	3.501	3.501	0.000	100	351741	62.5	56.8	
20 1,1,2-Trichloro-1,2,2-trifluoroethane	101	3.526	3.520	0.006	92	292691	5.00	4.71	
21 Isopropyl alcohol	45	3.654	3.623	0.031	96	66567	37.5	40.7	M
22 Iodomethane	142	3.672	3.672	0.000	98	539919	5.00	4.87	
23 Ethyl bromide	108	3.702	3.702	0.000	98	214737	4.89	3.84	
24 Carbon disulfide	76	3.782	3.782	0.000	98	857500	5.00	5.03	
26 Methyl acetate	43	3.904	3.897	0.007	97	98544	5.00	6.01	M
27 3-Chloro-1-propene	41	3.946	3.946	0.000	94	519083	5.00	4.69	
29 Methylene Chloride	84	4.123	4.123	0.000	92	301496	5.00	4.57	
* 28 t-Butyl alcohol-d10 (IS)	65	4.129	4.129	0.000	0	96858	50.0	50.0	
30 2-Methyl-2-propanol	59	4.245	4.245	0.000	100	121776	50.0	58.1	M
31 Acrylonitrile	53	4.440	4.446	-0.006	99	237419	25.0	28.4	
32 Methyl tert-butyl ether	73	4.519	4.525	-0.006	95	647586	5.00	4.55	
33 trans-1,2-Dichloroethene	96	4.544	4.544	0.000	100	317139	5.00	4.48	
34 Hexane	57	4.952	4.952	0.000	92	426626	5.00	4.31	
35 1,1-Dichloroethane	63	5.202	5.196	0.006	95	588266	5.00	4.45	
37 Isopropyl ether	45	5.251	5.251	0.000	96	1018982	5.00	4.53	
38 2-Chloro-1,3-butadiene	53	5.306	5.306	0.000	89	503677	5.00	4.66	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.793	5.787	0.006	98	906405	5.00	4.55	
41 2-Butanone (MEK)	43	5.982	5.982	0.000	100	771623	62.5	71.6	
42 cis-1,2-Dichloroethene	96	6.025	6.025	0.000	82	354488	5.00	4.56	
43 2,2-Dichloropropane	77	6.049	6.056	-0.007	86	512736	5.00	4.63	
45 Propionitrile	54	6.062	6.062	0.000	98	118244	37.5	42.8	
47 Methacrylonitrile	67	6.287	6.287	0.000	92	502139	37.5	42.1	
48 Chlorobromomethane	128	6.360	6.360	0.000	95	134934	5.00	4.34	
49 Tetrahydrofuran	71	6.360	6.367	-0.006	84	85478	25.0	27.7	
50 Chloroform	83	6.507	6.513	-0.006	93	552291	5.00	4.42	
\$ 51 Dibromofluoromethane (Surr)	113	6.726	6.726	0.000	94	570532	10.0	9.20	
52 1,1,1-Trichloroethane	97	6.757	6.751	0.006	98	510286	5.00	4.39	
53 Cyclohexane	56	6.848	6.854	-0.006	90	573185	5.00	4.35	
55 1,1-Dichloropropene	75	6.952	6.958	-0.006	99	464331	5.00	4.42	
56 Carbon tetrachloride	117	6.970	6.964	0.006	96	448172	5.00	4.46	
57 Isobutyl alcohol	41	7.086	7.086	0.000	95	102383	125.0	149.8	
\$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.183	7.183	0.000	0	108671	10.0	9.60	
59 Benzene	78	7.214	7.220	-0.006	97	1362583	5.00	4.45	
60 1,2-Dichloroethane	62	7.293	7.287	0.006	97	289443	5.00	4.36	
62 Tert-amyl methyl ether	73	7.415	7.415	0.000	99	761612	5.00	4.49	
* 65 Fluorobenzene (IS)	96	7.628	7.628	0.000	98	2450189	10.0	10.0	
64 n-Heptane	43	7.647	7.647	0.000	92	452715	5.00	4.18	
66 n-Butanol	56	7.988	7.982	0.006	86	187727	250.0	321.2	
67 Trichloroethene	95	8.110	8.110	0.000	98	351712	5.00	4.36	
68 Methylcyclohexane	83	8.433	8.427	0.006	93	580483	5.00	4.27	
70 1,2-Dichloropropane	63	8.445	8.445	0.000	80	342293	5.00	4.45	
69 2-ethoxy-2-methyl butane	87	8.451	8.458	-0.007	90	484021	5.00	4.50	
72 1,4-Dioxane	88	8.543	8.531	0.012	31	26349	125.0	173.6	
71 Methyl methacrylate	69	8.537	8.531	0.006	89	136500	5.00	5.74	
73 Dibromomethane	93	8.555	8.555	0.000	95	138155	5.00	4.32	
75 Dichlorobromomethane	83	8.793	8.793	0.000	100	390074	5.00	4.51	
76 2-Nitropropane	41	9.061	9.061	0.000	97	32304	5.00	5.48	
79 1-Bromo-2-chloroethane	63	9.189	9.195	-0.006	99	307741	5.00	4.36	
80 cis-1,3-Dichloropropene	75	9.348	9.348	0.000	97	484052	5.00	4.46	
81 4-Methyl-2-pentanone (MIBK)	43	9.518	9.518	0.000	96	2061124	62.5	70.5	
\$ 82 Toluene-d8 (Surr)	98	9.665	9.665	0.000	93	2424916	10.0	10.9	
83 Toluene	92	9.744	9.738	0.006	99	866148	5.00	5.23	
85 trans-1,3-Dichloropropene	75	10.000	10.000	0.000	91	389562	5.00	5.52	
86 Ethyl methacrylate	69	10.061	10.061	0.000	89	298664	5.00	5.53	
87 1,1,2-Trichloroethane	97	10.207	10.207	0.000	89	206112	5.00	5.26	
88 Tetrachloroethene	166	10.299	10.299	0.000	97	399862	5.00	5.23	
89 1,3-Dichloropropane	76	10.372	10.372	0.000	89	357771	5.00	5.29	
91 2-Hexanone	43	10.421	10.421	0.000	97	1405955	62.5	72.5	
93 Chlorodibromomethane	129	10.591	10.591	0.000	89	265663	5.00	5.47	
94 Ethylene Dibromide	107	10.701	10.701	0.000	99	193481	5.00	5.39	
* 97 Chlorobenzene-d5 (IS)	117	11.134	11.134	0.000	85	1821571	10.0	10.0	
96 1-Chlorohexane	91	11.146	11.146	0.000	98	504456	5.00	4.93	
98 Chlorobenzene	112	11.164	11.164	0.000	95	922229	5.00	5.23	
99 1,1,1,2-Tetrachloroethane	131	11.244	11.244	0.000	96	325896	5.00	5.39	
100 Ethylbenzene	91	11.250	11.250	0.000	98	1703874	5.00	5.27	
101 m-Xylene & p-Xylene	106	11.366	11.366	0.000	0	1298435	10.0	10.5	
102 o-Xylene	106	11.695	11.695	0.000	96	630822	5.00	5.29	
103 Styrene	104	11.713	11.707	0.006	95	1041579	5.00	5.39	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 Bromoform	173	11.872	11.872	0.000	98	154007	5.00	5.51	
105 Isopropylbenzene	105	11.993	11.993	0.000	96	1728871	5.00	5.37	
\$ 108 4-Bromofluorobenzene (Surr)	95	12.140	12.140	0.000	92	871254	10.0	9.63	
109 1,1,2,2-Tetrachloroethane	83	12.243	12.243	0.000	92	247560	5.00	5.51	
111 Bromobenzene	156	12.256	12.256	0.000	96	378040	5.00	5.62	
110 trans-1,4-Dichloro-2-butene	53	12.268	12.268	0.000	91	293360	25.0	29.1	
112 1,2,3-Trichloropropane	110	12.286	12.286	0.000	81	61842	5.00	5.49	
113 N-Propylbenzene	91	12.329	12.329	0.000	99	2042179	5.00	5.45	
114 2-Chlorotoluene	126	12.402	12.402	0.000	97	396739	5.00	5.50	
115 1,3,5-Trimethylbenzene	105	12.463	12.463	0.000	94	1421117	5.00	5.44	
116 4-Chlorotoluene	126	12.493	12.493	0.000	97	398583	5.00	5.50	
118 tert-Butylbenzene	134	12.707	12.707	0.000	93	305540	5.00	5.29	
119 Pentachloroethane	167	12.737	12.737	0.000	94	231131	5.00	5.69	
120 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	1439971	5.00	5.46	
121 sec-Butylbenzene	105	12.871	12.871	0.000	94	1870814	5.00	5.46	
122 1,3-Dichlorobenzene	146	12.969	12.969	0.000	98	750424	5.00	5.39	
123 4-Isopropyltoluene	119	12.975	12.975	0.000	97	1595293	5.00	5.44	
* 124 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	981185	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.042	13.042	0.000	95	753566	5.00	5.46	
126 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	610505	5.00	5.43	
127 Benzyl chloride	126	13.115	13.115	0.000	98	106143	5.00	5.81	
129 p-Diethylbenzene	119	13.176	13.176	0.000	92	932730	5.00	5.50	
130 n-Butylbenzene	92	13.268	13.268	0.000	97	791229	5.00	5.34	
131 1,2-Dichlorobenzene	146	13.298	13.298	0.000	99	667486	5.00	5.41	
134 1,2-Dibromo-3-Chloropropane	155	13.847	13.847	0.000	89	32241	5.00	5.44	
135 1,3,5-Trichlorobenzene	180	13.969	13.969	0.000	98	591489	5.00	5.46	
136 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	492177	5.00	5.40	
137 Hexachlorobutadiene	225	14.475	14.475	0.000	95	219557	5.00	4.96	
138 Naphthalene	128	14.572	14.572	0.000	97	780013	5.00	5.30	
139 1,2,3-Trichlorobenzene	180	14.712	14.712	0.000	95	417400	5.00	5.39	
140 2-Methylnaphthalene	142	15.334	15.334	0.000	93	464135	5.00	5.24	
194 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_VOC#1_00063	Amount Added: 12.50	Units: uL	
MSV_LCS_ACROL_00066	Amount Added: 12.50	Units: uL	
MSV_LCS_EE_00003	Amount Added: 12.50	Units: uL	
LCS_ETBR_00003	Amount Added: 12.50	Units: uL	
MSV_LCS_Penta_00017	Amount Added: 12.50	Units: uL	
MSV_QC_Gas826_00089	Amount Added: 12.50	Units: uL	
MSV_LLcentISS_00005	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20220714-61834.b\copy_HL14X03.D

Injection Date: 14-Jul-2022 20:04:30

Instrument ID: 19094

Operator ID: MEC29284

Lims ID: ICV

Worklist Smp#: 4

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

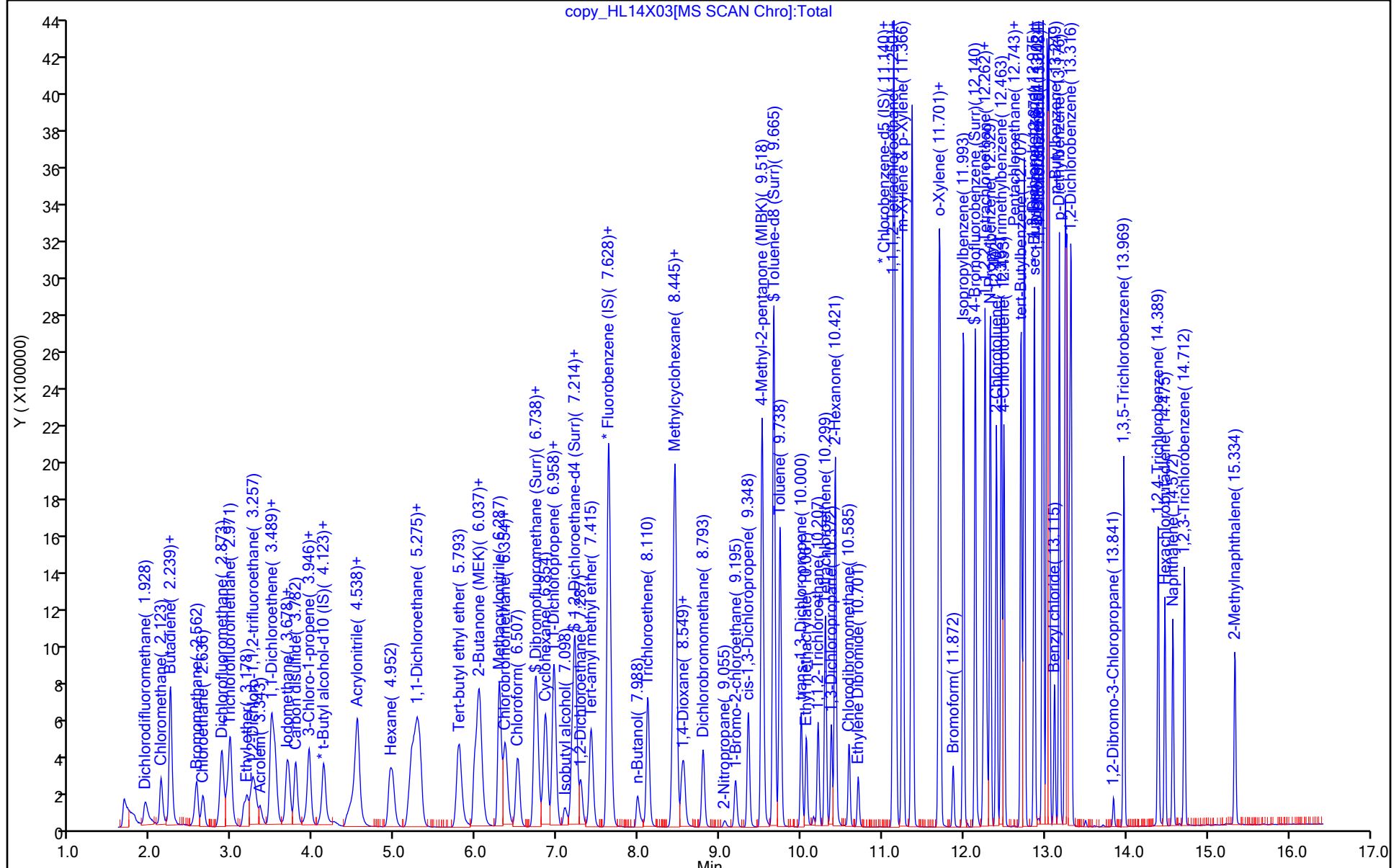
ALS Bottle#: 3

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

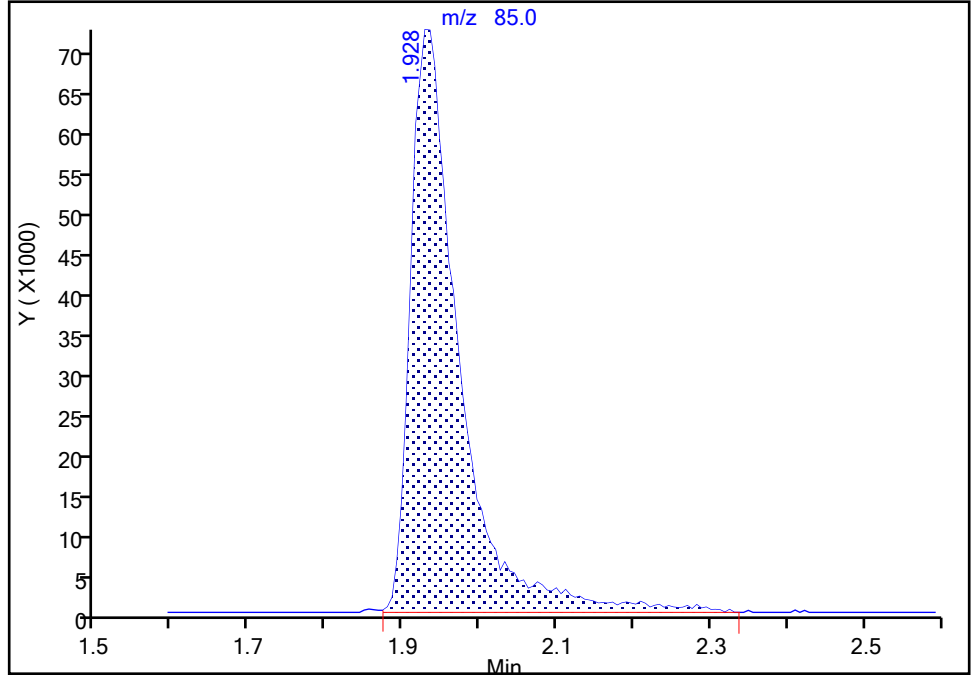
Data File: \\chromfs\Lancaster\ChromData\19094\20220714-61834.b\copy_HL14X03.D
Injection Date: 14-Jul-2022 20:04:30 Instrument ID: 19094
Lims ID: ICV
Client ID:
Operator ID: MEC29284 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

3 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

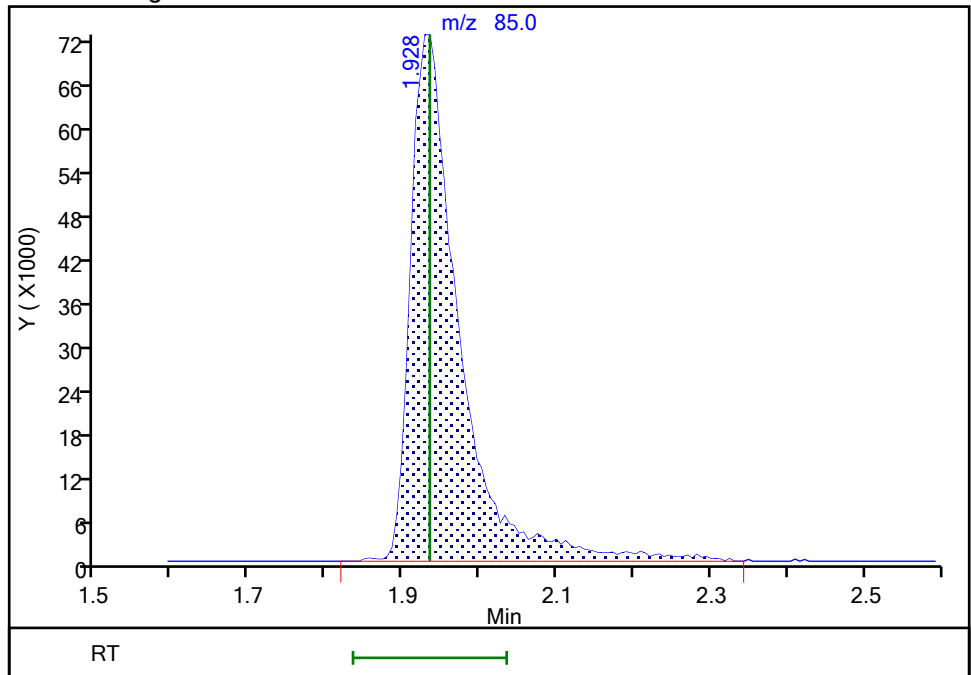
RT: 1.93
Area: 316797
Amount: 4.221015
Amount Units: ug/l

Processing Integration Results



RT: 1.93
Area: 317261
Amount: 4.227198
Amount Units: ug/l

Manual Integration Results



Reviewer: K4WN, 14-Jul-2022 20:43:53
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

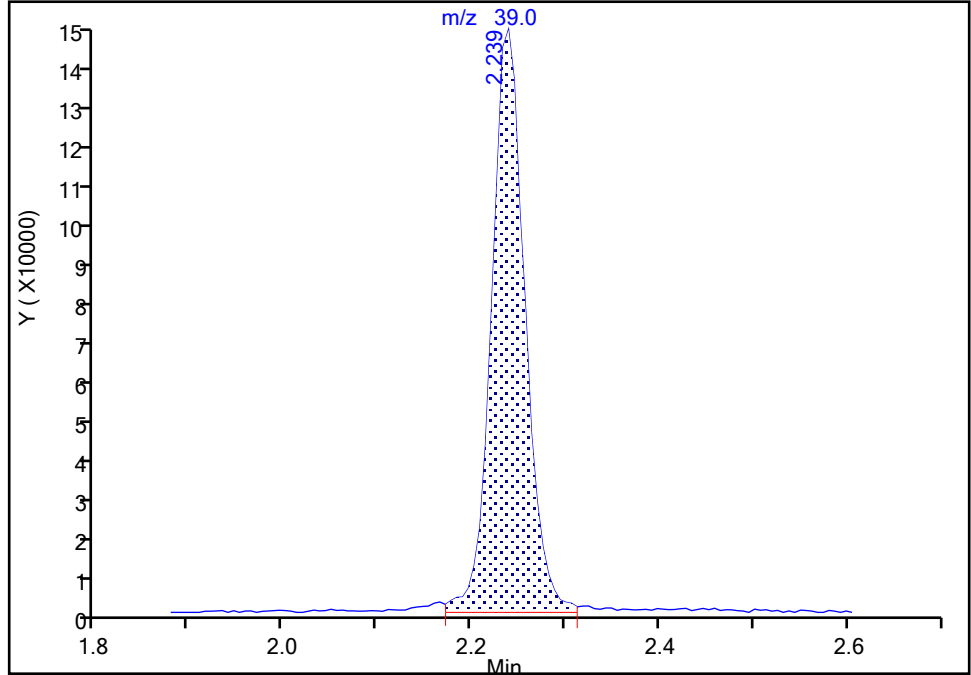
Data File: \\chromfs\Lancaster\ChromData\19094\20220714-61834.b\copy_HL14X03.D
Injection Date: 14-Jul-2022 20:04:30 Instrument ID: 19094
Lims ID: ICV
Client ID:
Operator ID: MEC29284 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

8 Butadiene, CAS: 106-99-0

Signal: 1

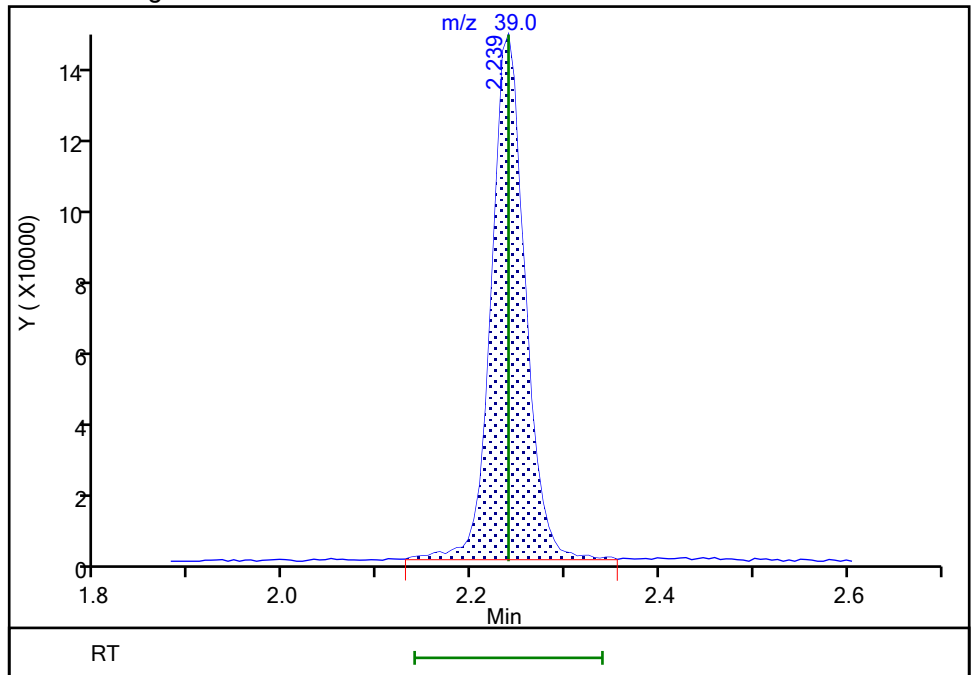
RT: 2.24
Area: 353737
Amount: 3.983206
Amount Units: ug/l

Processing Integration Results



RT: 2.24
Area: 354600
Amount: 3.992924
Amount Units: ug/l

Manual Integration Results



Reviewer: K4WN, 14-Jul-2022 20:44:09
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

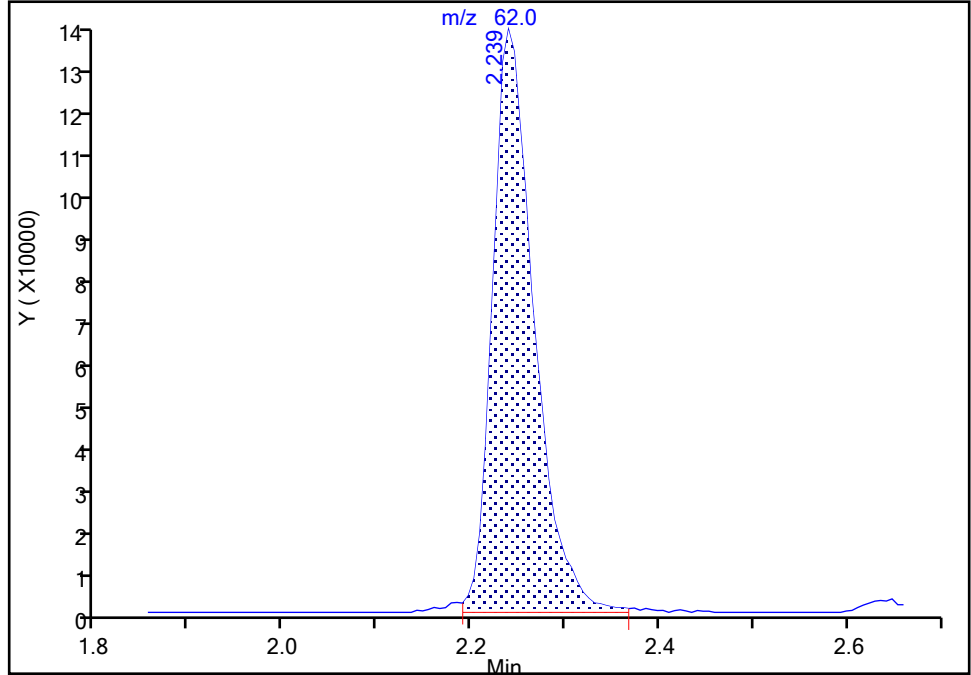
Data File: \\chromfs\Lancaster\ChromData\19094\20220714-61834.b\copy_HL14X03.D
Injection Date: 14-Jul-2022 20:04:30 Instrument ID: 19094
Lims ID: ICV
Client ID:
Operator ID: MEC29284 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

7 Vinyl chloride, CAS: 75-01-4

Signal: 1

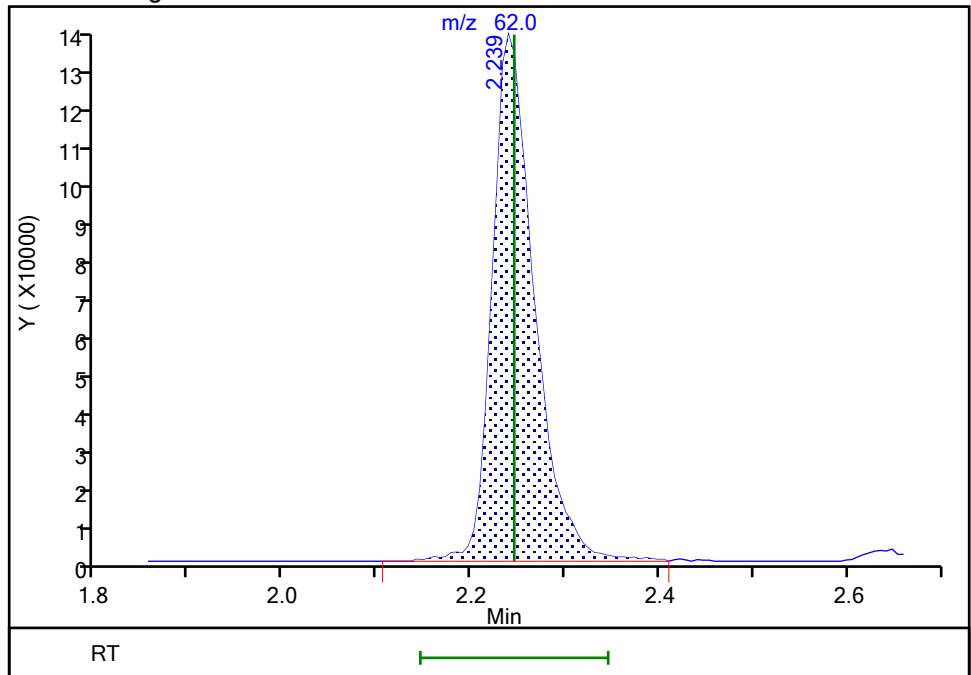
RT: 2.24
Area: 402254
Amount: 4.317978
Amount Units: ug/l

Processing Integration Results



RT: 2.24
Area: 406878
Amount: 4.367614
Amount Units: ug/l

Manual Integration Results



Reviewer: K4WN, 14-Jul-2022 20:44:16
Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

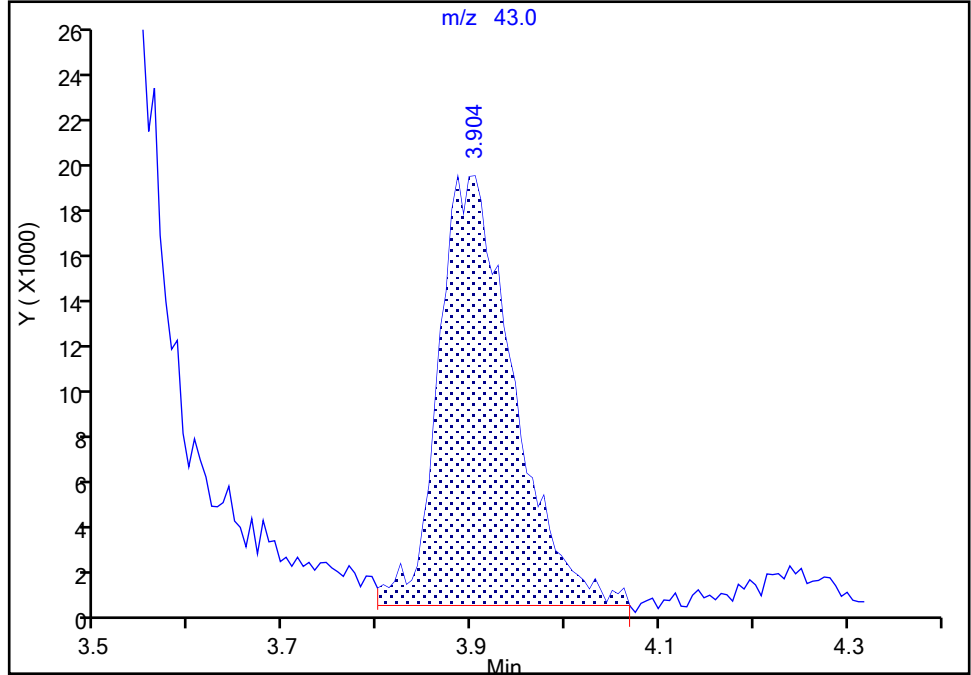
Data File: \\chromfs\Lancaster\ChromData\19094\20220714-61834.b\copy_HL14X03.D
Injection Date: 14-Jul-2022 20:04:30 Instrument ID: 19094
Lims ID: ICV
Client ID:
Operator ID: MEC29284 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

26 Methyl acetate, CAS: 79-20-9

Signal: 1

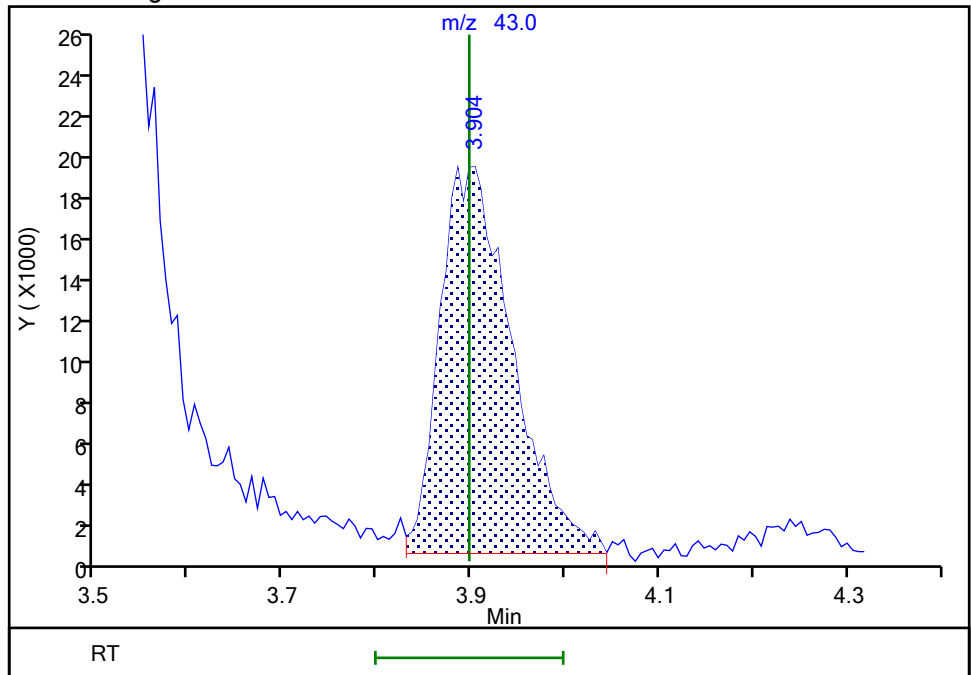
RT: 3.90
Area: 102033
Amount: 6.222656
Amount Units: ug/l

Processing Integration Results



RT: 3.90
Area: 98544
Amount: 6.009874
Amount Units: ug/l

Manual Integration Results



Reviewer: K4WN, 14-Jul-2022 20:44:53
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC

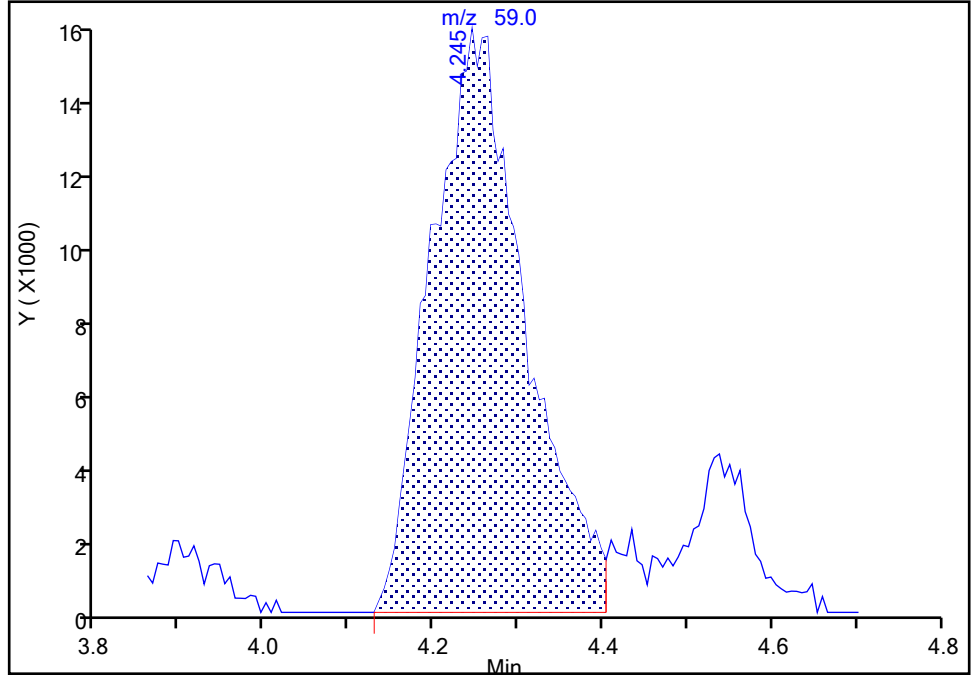
Data File: \\chromfs\Lancaster\ChromData\19094\20220714-61834.b\copy_HL14X03.D
Injection Date: 14-Jul-2022 20:04:30 Instrument ID: 19094
Lims ID: ICV
Client ID:
Operator ID: MEC29284 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

30 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

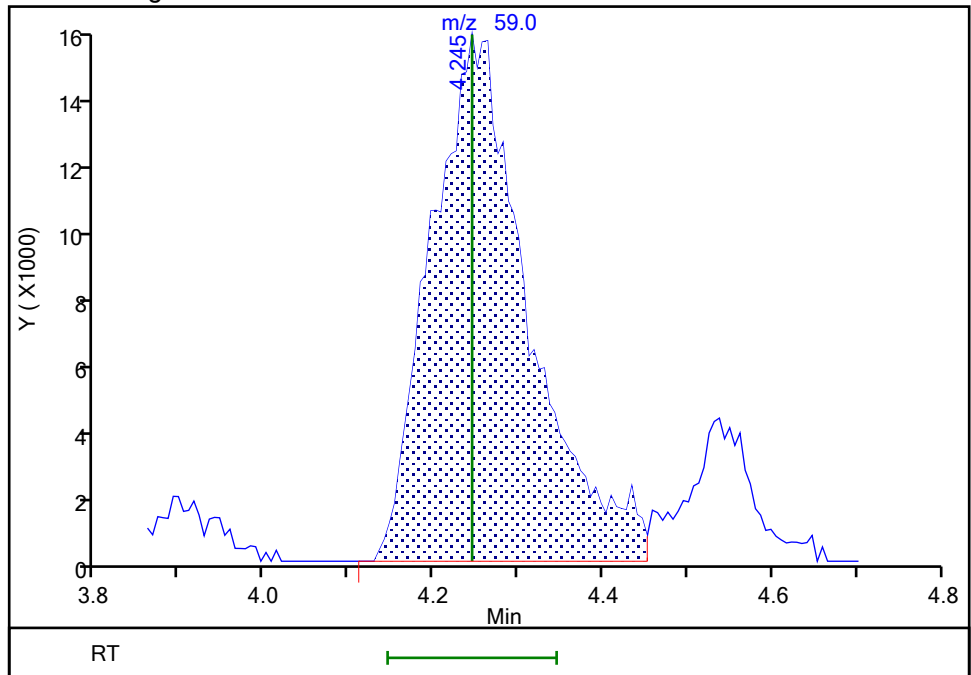
RT: 4.24
Area: 117435
Amount: 56.038088
Amount Units: ug/l

Processing Integration Results



RT: 4.24
Area: 121776
Amount: 58.109543
Amount Units: ug/l

Manual Integration Results



Reviewer: K4WN, 14-Jul-2022 20:45:07
Audit Action: Split an Integrated Peak

Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-116393-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-348233/3 Calibration Date: 02/27/2023 12:18
 Instrument ID: 19094 Calib Start Date: 07/11/2022 16:51
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 07/11/2022 18:52
 Lab File ID: HF27X02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3063	0.3734	0.1000	12.2	10.0	21.9*	20.0
Chloromethane	Ave	0.3838	0.4400	0.1000	11.5	10.0	14.7	20.0
1,3-Butadiene	Ave	0.3624	0.3555		9.81	10.0	-1.9	20.0
Vinyl chloride	Ave	0.3802	0.4434	0.1000	11.7	10.0	16.6	20.0
Bromomethane	Ave	0.2669	0.2857	0.1000	10.7	10.0	7.0	20.0
Chloroethane	Ave	0.2307	0.2338	0.1000	10.1	10.0	1.4	20.0
Dichlorofluoromethane	Ave	0.5113	0.5371		10.5	10.0	5.0	20.0
Trichlorofluoromethane	Ave	0.4602	0.5356	0.1000	11.6	10.0	16.4	20.0
Ethyl ether	Ave	0.1924	0.1725		8.96	10.0	-10.4	20.0
Freon 123a	Ave	0.3585	0.3434		9.58	10.0	-4.2	20.0
Acrolein	Ave	2.748	2.982		543	500	8.5	20.0
1,1-Dichloroethene	Ave	0.2601	0.2620	0.1000	10.1	10.0	0.8	20.0
Acetone	Ave	3.199	2.996	0.1000	93.7	100	-6.3	20.0
Freon 113	Ave	0.2536	0.2645	0.1000	10.4	10.0	4.3	20.0
Methyl iodide	Ave	0.4522	0.5450		12.1	10.0	20.5*	20.0
Ethyl bromide	Ave	0.2285	0.2456		10.8	10.0	7.5	20.0
Carbon disulfide	Ave	0.6962	0.8132	0.1000	11.7	10.0	16.8	20.0
Methyl acetate	Ave	8.464	10.16	0.1000	12.0	10.0	20.1*	20.0
Allyl chloride	Ave	0.4513	0.4261		9.44	10.0	-5.6	20.0
Methylene Chloride	Ave	0.2694	0.2728	0.1000	10.1	10.0	1.3	20.0
t-Butyl alcohol	Ave	1.082	0.8744		162	200	-19.2	20.0
Acrylonitrile	Ave	4.318	4.723		27.3	25.0	9.4	20.0
Methyl tert-butyl ether	Ave	0.5814	0.5622	0.1000	9.67	10.0	-3.3	20.0
trans-1,2-Dichloroethene	Ave	0.2889	0.2903	0.1000	10.0	10.0	0.5	20.0
n-Hexane	Ave	0.4042	0.3364		8.32	10.0	-16.8	20.0
1,1-Dichloroethane	Ave	0.5400	0.5267	0.2000	9.75	10.0	-2.5	20.0
di-Isopropyl ether	Ave	0.9190	0.7638		8.31	10.0	-16.9	20.0
2-Chloro-1,3-butadiene	Ave	0.4410	0.4356		9.88	10.0	-1.2	20.0
Ethyl t-butyl ether	Ave	0.8130	0.7229		8.89	10.0	-11.1	20.0
2-Butanone (MEK)	Ave	5.564	5.537	0.1000	99.5	100	-0.5	20.0
cis-1,2-Dichloroethene	Ave	0.3173	0.3124	0.1000	9.85	10.0	-1.5	20.0
2,2-Dichloropropane	Ave	0.4524	0.4710		10.4	10.0	4.1	20.0
Propionitrile	Ave	1.427	1.522		213	200	6.6	20.0
Methacrylonitrile	Ave	6.162	7.176		116	100	16.5	20.0
Bromochloromethane	Ave	0.1268	0.1363		10.8	10.0	7.5	20.0
Tetrahydrofuran	Ave	1.591	1.681		52.8	50.0	5.6	20.0
Chloroform	Ave	0.5095	0.5397	0.2000	10.6	10.0	5.9	20.0
1,1,1-Trichloroethane	Ave	0.4742	0.5092	0.1000	10.7	10.0	7.4	20.0
Cyclohexane	Ave	0.5379	0.4722	0.1000	8.78	10.0	-12.2	20.0
1,1-Dichloropropene	Ave	0.4287	0.4305		10.0	10.0	0.4	20.0
Carbon tetrachloride	Ave	0.4101	0.4680	0.1000	11.4	10.0	14.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-116393-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-348233/3 Calibration Date: 02/27/2023 12:18
 Instrument ID: 19094 Calib Start Date: 07/11/2022 16:51
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 07/11/2022 18:52
 Lab File ID: HF27X02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Isobutyl alcohol	Ave	0.3528	0.3271		464	500	-7.3	20.0
Benzene	Ave	1.250	1.258	0.5000	10.1	10.0	0.7	20.0
1,2-Dichloroethane	Ave	0.2708	0.3072	0.1000	11.3	10.0	13.5	20.0
t-Amyl methyl ether	Ave	0.6927	0.6471		9.34	10.0	-6.6	20.0
n-Heptane	Ave	0.4424	0.3067		6.93	10.0	-30.7*	20.0
n-Butanol	Ave	0.3017	0.2741		795	875	-9.2	20.0
Trichloroethene	Ave	0.3292	0.3260	0.2000	9.90	10.0	-1.0	20.0
Methylcyclohexane	Ave	0.5553	0.4684	0.1000	8.44	10.0	-15.6	20.0
1,2-Dichloropropane	Ave	0.3137	0.2875	0.1000	9.17	10.0	-8.3	20.0
Methyl methacrylate	Ave	12.27	12.61		10.3	10.0	2.8	20.0
1,4-Dioxane	Ave	0.0784	0.0479	0.0050	306	500	-38.8*	20.0
Dibromomethane	Ave	0.1306	0.1246		9.54	10.0	-4.6	20.0
Bromodichloromethane	Ave	0.3530	0.3615	0.2000	10.2	10.0	2.4	20.0
2-Nitropropane	Ave	3.043	3.672		60.3	50.0	20.6*	20.0
1-Bromo-2-chloroethane	Ave	0.2884	0.2701		9.37	10.0	-6.3	20.0
cis-1,3-Dichloropropene	Ave	0.4429	0.4347	0.2000	9.81	10.0	-1.9	20.0
4-Methyl-2-pentanone (MIBK)	Ave	15.08	15.06	0.1000	99.8	100	-0.2	20.0
Toluene	Ave	0.9090	0.7637	0.4000	8.40	10.0	-16.0	20.0
trans-1,3-Dichloropropene	Ave	0.3871	0.3559	0.1000	9.19	10.0	-8.1	20.0
Ethyl methacrylate	Ave	0.2967	0.2181		7.35	10.0	-26.5*	20.0
1,1,2-Trichloroethane	Ave	0.2153	0.1808	0.1000	8.40	10.0	-16.0	20.0
Tetrachloroethene	Ave	0.4197	0.3983	0.2000	9.49	10.0	-5.1	20.0
1,3-Dichloropropane	Ave	0.3711	0.3063		8.25	10.0	-17.5	20.0
2-Hexanone	Ave	10.01	11.05	0.1000	110	100	10.3	20.0
Dibromochloromethane	Ave	0.2665	0.2613		9.80	10.0	-2.0	20.0
1,2-Dibromoethane (EDB)	Ave	0.1972	0.1777	0.1000	9.01	10.0	-9.9	20.0
1-Chlorohexane	Ave	0.5617	0.4647		8.27	10.0	-17.3	20.0
Chlorobenzene	Ave	0.9684	0.9239	0.5000	9.54	10.0	-4.6	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3322	0.3131		9.42	10.0	-5.8	20.0
Ethylbenzene	Ave	1.775	1.557	0.1000	8.77	10.0	-12.3	20.0
m&p-Xylene	Ave	0.6768	0.6469	0.1000	19.1	20.0	-4.4	20.0
o-Xylene	Ave	0.6542	0.6183	0.3000	9.45	10.0	-5.5	20.0
Styrene	Ave	1.061	0.9620	0.3000	9.06	10.0	-9.4	20.0
Bromoform	Ave	0.1536	0.1508	0.1000	9.82	10.0	-1.8	20.0
Isopropylbenzene	Ave	1.769	1.543	0.1000	8.72	10.0	-12.8	20.0
1,1,2,2-Tetrachloroethane	Ave	0.4576	0.3472	0.3000	7.59	10.0	-24.1*	20.0
Bromobenzene	Ave	0.6850	0.5935		8.66	10.0	-13.4	20.0
trans-1,4-Dichloro-2-butene	Ave	5.212	6.969		134	100	33.7*	20.0
1,2,3-Trichloropropane	Ave	0.1149	0.0943		8.21	10.0	-17.9	20.0
N-Propylbenzene	Ave	3.820	3.026		7.92	10.0	-20.8*	20.0
2-Chlorotoluene	Ave	0.7351	0.6174		8.40	10.0	-16.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-116393-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-348233/3 Calibration Date: 02/27/2023 12:18
 Instrument ID: 19094 Calib Start Date: 07/11/2022 16:51
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 07/11/2022 18:52
 Lab File ID: HF27X02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	2.664	2.148		8.06	10.0	-19.4	20.0
4-Chlorotoluene	Ave	0.7381	0.6434		8.72	10.0	-12.8	20.0
tert-Butylbenzene	Ave	0.5892	0.4730		8.03	10.0	-19.7	20.0
Pentachloroethane	Ave	0.4138	0.3992		9.65	10.0	-3.5	20.0
1,2,4-Trimethylbenzene	Ave	2.688	2.203		8.19	10.0	-18.1	20.0
sec-Butylbenzene	Ave	3.489	2.686		7.70	10.0	-23.0*	20.0
1,3-Dichlorobenzene	Ave	1.418	1.244	0.6000	8.77	10.0	-12.3	20.0
p-Isopropyltoluene	Ave	2.991	2.395		8.01	10.0	-19.9	20.0
1,4-Dichlorobenzene	Ave	1.408	1.165	0.5000	8.28	10.0	-17.2	20.0
1,2,3-Trimethylbenzene	Ave	1.146	0.9742		8.50	10.0	-15.0	20.0
Benzyl chloride	Ave	0.1861	0.1730		9.30	10.0	-7.0	20.0
n-Butylbenzene	Ave	1.510	1.080		7.16	10.0	-28.4*	20.0
1,2-Dichlorobenzene	Ave	1.257	1.074	0.4000	8.55	10.0	-14.5	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0604	0.0480*	0.0500	7.95	10.0	-20.5*	20.0
1,3,5-Trichlorobenzene	Ave	1.103	0.8484		7.69	10.0	-23.1*	20.0
1,2,4-Trichlorobenzene	Ave	0.9290	0.6492	0.2000	6.99	10.0	-30.1*	20.0
Hexachlorobutadiene	Ave	0.4512	0.2279		5.05	10.0	-49.5*	20.0
Naphthalene	Ave	1.500	0.9381		6.25	10.0	-37.5*	20.0
1,2,3-Trichlorobenzene	Ave	0.7887	0.4871		6.18	10.0	-38.2*	20.0
Dibromofluoromethane (Surr)	Ave	0.2531	0.2777		11.0	10.0	9.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0462	0.0474		10.3	10.0	2.6	20.0
Toluene-d8 (Surr)	Ave	1.223	1.120		9.15	10.0	-8.5	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4966	0.4708		9.48	10.0	-5.2	20.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X02.D
 Lims ID: CCVIS VSTD10
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 27-Feb-2023 12:18:30 ALS Bottle#: 2 Worklist Smp#: 3
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-003
 Misc. Info.: CCVIS
 Operator ID: knk41612 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 27-Feb-2023 13:33:27 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1617

First Level Reviewer: DVW2

Date: 27-Feb-2023 13:33:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.941	1.941	0.000	99	648344	10.0	12.2	
5 Chloromethane	50	2.130	2.130	0.000	99	764024	10.0	11.5	
6 Butadiene	39	2.239	2.239	0.000	92	617334	10.0	9.81	
7 Vinyl chloride	62	2.245	2.245	0.000	97	769875	10.0	11.7	
9 Bromomethane	94	2.568	2.568	0.000	90	496003	10.0	10.7	
10 Chloroethane	64	2.648	2.648	0.000	100	405963	10.0	10.1	
11 Dichlorofluoromethane	67	2.873	2.873	0.000	97	932505	10.0	10.5	
12 Trichlorofluoromethane	101	2.959	2.959	0.000	97	929984	10.0	11.6	
14 Ethyl ether	59	3.202	3.202	0.000	89	299474	10.0	8.96	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.276	3.276	0.000	92	596172	10.0	9.58	
16 Acrolein	56	3.367	3.367	0.000	99	2097443	500.0	542.6	
18 1,1-Dichloroethene	96	3.507	3.507	0.000	98	454974	10.0	10.1	
19 Acetone	43	3.532	3.532	0.000	70	421508	100.0	93.7	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.544	3.544	0.000	91	459257	10.0	10.4	
21 Isopropyl alcohol	45	3.684	3.684	0.000	96	107138	200.0	94.2	
22 Iodomethane	142	3.702	3.702	0.000	98	946345	10.0	12.1	
23 Ethyl bromide	108	3.727	3.727	0.000	98	427210	10.0	10.8	
24 Carbon disulfide	76	3.806	3.806	0.000	99	1412050	10.0	11.7	
25 Methyl acetate	43	3.940	3.940	0.000	97	142970	10.0	12.0	
27 3-Chloro-1-propene	41	3.977	3.977	0.000	91	739838	10.0	9.44	
28 Methylene Chloride	84	4.160	4.160	0.000	91	473704	10.0	10.1	
* 29 t-Butyl alcohol-d10 (IS)	65	4.166	4.166	0.000	98	70345	50.0	50.0	
31 2-Methyl-2-propanol	59	4.275	4.275	0.000	99	246029	200.0	161.6	
32 Acrylonitrile	53	4.483	4.483	0.000	99	166103	25.0	27.3	
33 Methyl tert-butyl ether	73	4.556	4.556	0.000	95	976148	10.0	9.67	
34 trans-1,2-Dichloroethene	96	4.580	4.580	0.000	99	504081	10.0	10.0	
35 Hexane	57	5.013	5.013	0.000	91	584108	10.0	8.32	
37 1,1-Dichloroethane	63	5.233	5.233	0.000	96	914488	10.0	9.75	
38 Isopropyl ether	45	5.294	5.294	0.000	93	1326131	10.0	8.31	
39 2-Chloro-1,3-butadiene	53	5.348	5.348	0.000	90	756418	10.0	9.88	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 Tert-butyl ethyl ether	59	5.824	5.824	0.000	97	1255246	10.0	8.89	
42 2-Butanone (MEK)	43	6.013	6.013	0.000	99	779067	100.0	99.5	
43 cis-1,2-Dichloroethene	96	6.068	6.068	0.000	82	542485	10.0	9.85	
44 2,2-Dichloropropane	77	6.074	6.074	0.000	87	817800	10.0	10.4	
45 Propionitrile	54	6.104	6.104	0.000	98	428138	200.0	213.3	
48 Methacrylonitrile	67	6.318	6.318	0.000	90	1009639	100.0	116.5	
49 Chlorobromomethane	128	6.397	6.397	0.000	87	236672	10.0	10.8	
50 Tetrahydrofuran	71	6.409	6.409	0.000	74	118216	50.0	52.8	
52 Chloroform	83	6.543	6.543	0.000	93	937141	10.0	10.6	
\$ 53 Dibromofluoromethane (Surr)	113	6.763	6.763	0.000	93	482087	10.0	11.0	
54 1,1,1-Trichloroethane	97	6.769	6.769	0.000	98	884138	10.0	10.7	
55 Cyclohexane	56	6.879	6.879	0.000	88	819826	10.0	8.78	
56 1,1-Dichloropropene	75	6.988	6.988	0.000	96	747426	10.0	10.0	
57 Carbon tetrachloride	117	6.988	6.988	0.000	96	812591	10.0	11.4	
58 Isobutyl alcohol	41	7.116	7.116	0.000	95	230116	500.0	463.6	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.220	7.220	0.000	92	82309	10.0	10.3	
60 Benzene	78	7.250	7.250	0.000	96	2184319	10.0	10.1	
62 1,2-Dichloroethane	62	7.324	7.324	0.000	97	533414	10.0	11.3	
64 Tert-amyl methyl ether	73	7.439	7.439	0.000	99	1123478	10.0	9.34	
* 65 Fluorobenzene (IS)	96	7.653	7.653	0.000	99	1736306	10.0	10.0	
66 n-Heptane	43	7.671	7.671	0.000	90	532469	10.0	6.93	
68 n-Butanol	56	8.006	8.006	0.000	87	337376	875.0	794.9	
69 Trichloroethene	95	8.134	8.134	0.000	96	566084	10.0	9.90	
70 Methylcyclohexane	83	8.445	8.445	0.000	92	813300	10.0	8.44	
71 1,2-Dichloropropane	63	8.464	8.464	0.000	92	499174	10.0	9.17	
72 2-ethoxy-2-methyl butane	87	8.470	8.470	0.000	93	764049	10.0	10.0	
74 Methyl methacrylate	69	8.543	8.543	0.000	90	177453	10.0	10.3	
73 1,4-Dioxane	88	8.555	8.555	0.000	35	33714	500.0	305.8	
75 Dibromomethane	93	8.579	8.579	0.000	92	216264	10.0	9.54	
77 Dichlorobromomethane	83	8.805	8.805	0.000	99	627619	10.0	10.2	
78 2-Nitropropane	41	9.067	9.067	0.000	98	258288	50.0	60.3	
80 1-Bromo-2-chloroethane	63	9.195	9.195	0.000	99	468927	10.0	9.37	
81 cis-1,3-Dichloropropene	75	9.360	9.360	0.000	96	754686	10.0	9.81	
83 4-Methyl-2-pentanone (MIBK)	43	9.524	9.524	0.000	96	2118709	100.0	99.8	
\$ 84 Toluene-d8 (Surr)	98	9.665	9.665	0.000	92	1970464	10.0	9.15	
85 Toluene	92	9.744	9.744	0.000	99	1343985	10.0	8.40	
86 trans-1,3-Dichloropropene	75	10.000	10.000	0.000	91	626353	10.0	9.19	
105 Ethyl methacrylate	69	10.061	10.061	0.000	88	383865	10.0	7.35	
106 1,1,2-Trichloroethane	97	10.207	10.207	0.000	91	318180	10.0	8.40	
107 Tetrachloroethene	166	10.293	10.293	0.000	97	700912	10.0	9.49	
108 1,3-Dichloropropane	76	10.366	10.366	0.000	89	538983	10.0	8.25	
109 2-Hexanone	43	10.414	10.414	0.000	97	1554123	100.0	110.3	
111 Chlorodibromomethane	129	10.585	10.585	0.000	90	459746	10.0	9.80	
112 Ethylene Dibromide	107	10.695	10.695	0.000	99	312664	10.0	9.01	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	84	1759727	10.0	10.0	
114 1-Chlorohexane	91	11.134	11.134	0.000	95	817690	10.0	8.27	
115 Chlorobenzene	112	11.152	11.152	0.000	96	1625737	10.0	9.54	
116 1,1,1,2-Tetrachloroethane	131	11.231	11.231	0.000	96	550958	10.0	9.42	
118 Ethylbenzene	91	11.237	11.237	0.000	98	2740199	10.0	8.77	
119 m-Xylene & p-Xylene	106	11.353	11.353	0.000	99	2276862	20.0	19.1	
120 o-Xylene	106	11.676	11.676	0.000	96	1088087	10.0	9.45	
121 Styrene	104	11.695	11.695	0.000	94	1692787	10.0	9.06	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
122 Bromoform	173	11.853	11.853	0.000	98	265322	10.0	9.82	
123 Isopropylbenzene	105	11.981	11.981	0.000	95	2715741	10.0	8.72	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	93	828397	10.0	9.48	
127 1,1,2,2-Tetrachloroethane	83	12.219	12.219	0.000	92	369022	10.0	7.59	
128 Bromobenzene	156	12.237	12.237	0.000	97	630769	10.0	8.66	
129 trans-1,4-Dichloro-2-butene	53	12.243	12.243	0.000	90	980535	100.0	133.7	
130 1,2,3-Trichloropropane	110	12.268	12.268	0.000	81	100212	10.0	8.21	
131 N-Propylbenzene	91	12.304	12.304	0.000	99	3215504	10.0	7.92	
132 2-Chlorotoluene	126	12.384	12.384	0.000	97	656207	10.0	8.40	
133 1,3,5-Trimethylbenzene	105	12.445	12.445	0.000	94	2283389	10.0	8.06	
134 4-Chlorotoluene	126	12.475	12.475	0.000	97	683777	10.0	8.72	
135 tert-Butylbenzene	134	12.682	12.682	0.000	92	502725	10.0	8.03	
136 Pentachloroethane	167	12.713	12.713	0.000	91	424243	10.0	9.65	
137 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	96	2341440	10.0	8.19	
138 sec-Butylbenzene	105	12.847	12.847	0.000	94	2855063	10.0	7.70	
139 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	1322382	10.0	8.77	
140 4-Isopropyltoluene	119	12.951	12.951	0.000	97	2545366	10.0	8.01	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	93	1062784	10.0	10.0	
142 1,4-Dichlorobenzene	146	13.018	13.018	0.000	95	1238113	10.0	8.28	
143 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	98	1035412	10.0	8.50	
144 Benzyl chloride	126	13.091	13.091	0.000	98	183824	10.0	9.30	
145 p-Diethylbenzene	119	13.152	13.152	0.000	92	1476721	10.0	8.04	
146 n-Butylbenzene	92	13.243	13.243	0.000	97	1148200	10.0	7.16	
147 1,2-Dichlorobenzene	146	13.274	13.274	0.000	99	1141419	10.0	8.55	
149 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	88	51014	10.0	7.95	
150 1,3,5-Trichlorobenzene	180	13.938	13.938	0.000	98	901666	10.0	7.69	
151 1,2,4-Trichlorobenzene	180	14.359	14.359	0.000	94	689955	10.0	6.99	
152 Hexachlorobutadiene	225	14.444	14.444	0.000	95	242187	10.0	5.05	
153 Naphthalene	128	14.542	14.542	0.000	97	997022	10.0	6.25	
154 1,2,3-Trichlorobenzene	180	14.682	14.682	0.000	95	517705	10.0	6.18	
155 2-Methylnaphthalene	142	15.298	15.298	0.000	94	332789	10.0	3.47	
158 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MSV_LL_#2_826_00074	Amount Added: 20.00	Units: uL	
MSV_LL_#1_826_00067	Amount Added: 20.00	Units: uL	
MSV_LL_GAS826_00138	Amount Added: 20.00	Units: uL	
MSV_LLcentISS_00006	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X02.D

Injection Date: 27-Feb-2023 12:18:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: CCVIS VSTD10

Worklist Smp#: 3

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

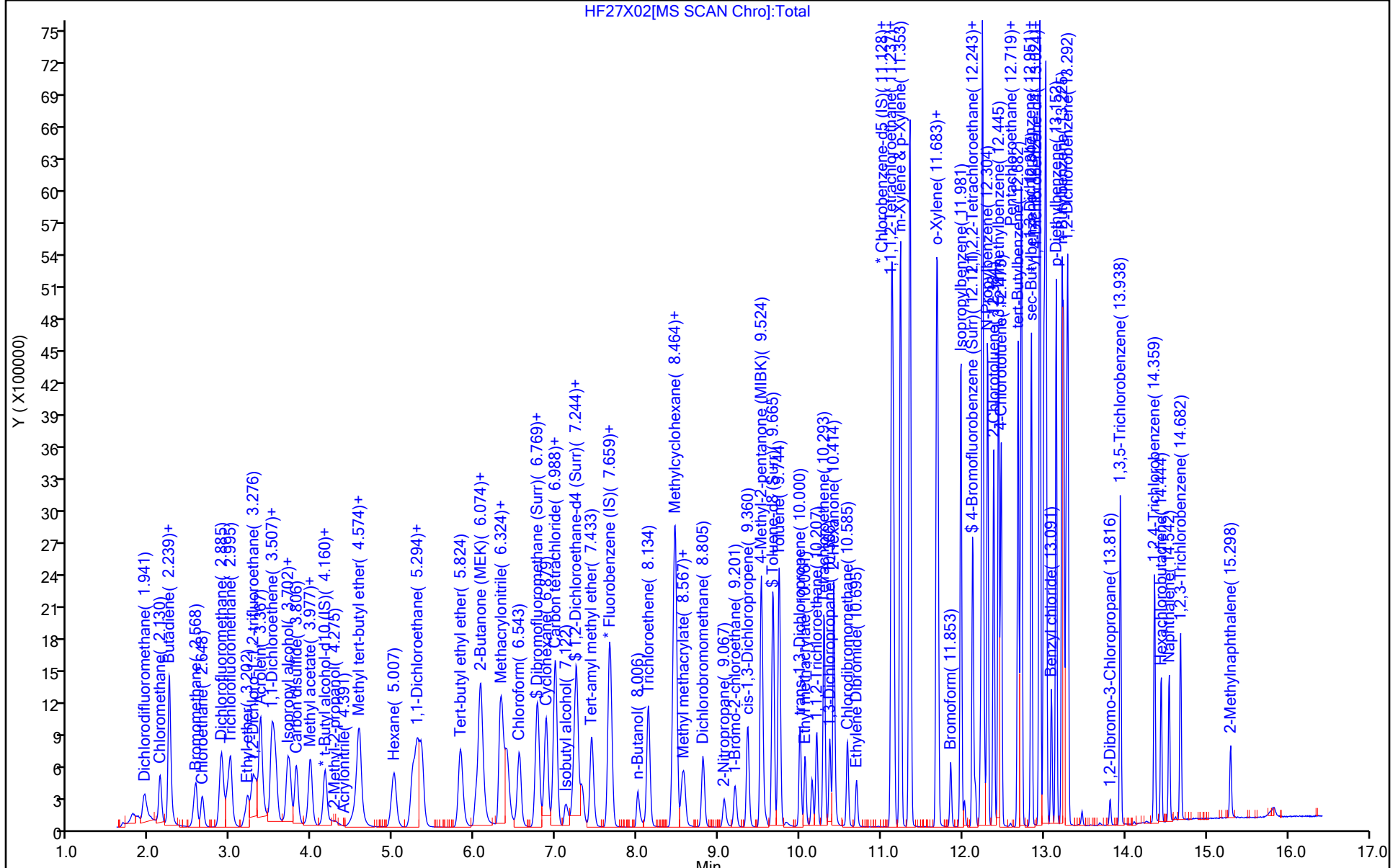
ALS Bottle#: 2

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



HF27X02[MS SCAN Chrom]:Total

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-116393-1

SDG No.: _____

Lab Sample ID: CCVIS 410-348577/6 Calibration Date: 02/28/2023 11:42

Instrument ID: 19094 Calib Start Date: 07/11/2022 16:51

GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 07/11/2022 18:52

Lab File ID: HF28X05.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3063	0.3860	0.1000	12.6	10.0	26.0*	20.0
Chloromethane	Ave	0.3838	0.4988	0.1000	13.0	10.0	30.0*	20.0
1,3-Butadiene	Ave	0.3624	0.5610		15.5	10.0	54.8*	20.0
Vinyl chloride	Ave	0.3802	0.4452	0.1000	11.7	10.0	17.1	20.0
Bromomethane	Ave	0.2669	0.2949	0.1000	11.0	10.0	10.5	20.0
Chloroethane	Ave	0.2307	0.2508	0.1000	10.9	10.0	8.7	20.0
Dichlorofluoromethane	Ave	0.5113	0.5738		11.2	10.0	12.2	20.0
Trichlorofluoromethane	Ave	0.4602	0.5565	0.1000	12.1	10.0	20.9*	20.0
Ethyl ether	Ave	0.1924	0.1882		9.78	10.0	-2.2	20.0
Freon 123a	Ave	0.3585	0.3662		10.2	10.0	2.2	20.0
Acrolein	Ave	2.748	1.967		358	500	-28.4*	20.0
1,1-Dichloroethene	Ave	0.2601	0.2761	0.1000	10.6	10.0	6.2	20.0
Acetone	Ave	3.199	3.060	0.1000	95.7	100	-4.3	20.0
Freon 113	Ave	0.2536	0.2752	0.1000	10.9	10.0	8.5	20.0
Methyl iodide	Ave	0.4522	0.5470		12.1	10.0	21.0*	20.0
Ethyl bromide	Ave	0.2285	0.2562		11.2	10.0	12.1	20.0
Carbon disulfide	Ave	0.6962	0.8683	0.1000	12.5	10.0	24.7*	20.0
Methyl acetate	Ave	8.464	9.827	0.1000	11.6	10.0	16.1	20.0
Allyl chloride	Ave	0.4513	0.4398		9.74	10.0	-2.6	20.0
Methylene Chloride	Ave	0.2694	0.2897	0.1000	10.8	10.0	7.5	20.0
t-Butyl alcohol	Ave	1.082	0.8271		153	200	-23.5*	20.0
Acrylonitrile	Ave	4.318	4.570		26.5	25.0	5.8	20.0
Methyl tert-butyl ether	Ave	0.5814	0.5993	0.1000	10.3	10.0	3.1	20.0
trans-1,2-Dichloroethene	Ave	0.2889	0.3105	0.1000	10.7	10.0	7.5	20.0
n-Hexane	Ave	0.4042	0.3766		9.32	10.0	-6.8	20.0
1,1-Dichloroethane	Ave	0.5400	0.5710	0.2000	10.6	10.0	5.7	20.0
di-Isopropyl ether	Ave	0.9190	0.8826		9.60	10.0	-4.0	20.0
2-Chloro-1,3-butadiene	Ave	0.4410	0.4721		10.7	10.0	7.1	20.0
Ethyl t-butyl ether	Ave	0.8130	0.7821		9.62	10.0	-3.8	20.0
2-Butanone (MEK)	Ave	5.564	5.810	0.1000	104	100	4.4	20.0
cis-1,2-Dichloroethene	Ave	0.3173	0.3338	0.1000	10.5	10.0	5.2	20.0
2,2-Dichloropropane	Ave	0.4524	0.5025		11.1	10.0	11.1	20.0
Propionitrile	Ave	1.427	1.411		198	200	-1.1	20.0
Methacrylonitrile	Ave	6.162	6.770		110	100	9.9	20.0
Bromochloromethane	Ave	0.1268	0.1394		11.0	10.0	10.0	20.0
Tetrahydrofuran	Ave	1.591	1.672		52.5	50.0	5.1	20.0
Chloroform	Ave	0.5095	0.5518	0.2000	10.8	10.0	8.3	20.0
1,1,1-Trichloroethane	Ave	0.4742	0.5090	0.1000	10.7	10.0	7.3	20.0
Cyclohexane	Ave	0.5379	0.4933	0.1000	9.17	10.0	-8.3	20.0
1,1-Dichloropropene	Ave	0.4287	0.4433		10.3	10.0	3.4	20.0
Carbon tetrachloride	Ave	0.4101	0.4579	0.1000	11.2	10.0	11.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-116393-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-348577/6 Calibration Date: 02/28/2023 11:42
 Instrument ID: 19094 Calib Start Date: 07/11/2022 16:51
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 07/11/2022 18:52
 Lab File ID: HF28X05.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Isobutyl alcohol	Ave	0.3528	0.3115		441	500	-11.7	20.0
Benzene	Ave	1.250	1.282	0.5000	10.3	10.0	2.6	20.0
1,2-Dichloroethane	Ave	0.2708	0.3137	0.1000	11.6	10.0	15.9	20.0
t-Amyl methyl ether	Ave	0.6927	0.6901		9.96	10.0	-0.4	20.0
n-Heptane	Ave	0.4424	0.3519		7.95	10.0	-20.5*	20.0
n-Butanol	Ave	0.3017	0.2745		796	875	-9.0	20.0
Trichloroethene	Ave	0.3292	0.3518	0.2000	10.7	10.0	6.9	20.0
Methylcyclohexane	Ave	0.5553	0.5174	0.1000	9.32	10.0	-6.8	20.0
1,2-Dichloropropane	Ave	0.3137	0.3166	0.1000	10.1	10.0	0.9	20.0
Methyl methacrylate	Ave	12.27	12.81		10.4	10.0	4.4	20.0
1,4-Dioxane	Ave	0.0784	0.0388	0.0050	248	500	-50.4*	20.0
Dibromomethane	Ave	0.1306	0.1338		10.2	10.0	2.5	20.0
Bromodichloromethane	Ave	0.3530	0.3806	0.2000	10.8	10.0	7.8	20.0
2-Nitropropane	Ave	3.043	3.620		59.5	50.0	18.9	20.0
1-Bromo-2-chloroethane	Ave	0.2884	0.2968		10.3	10.0	2.9	20.0
cis-1,3-Dichloropropene	Ave	0.4429	0.4660	0.2000	10.5	10.0	5.2	20.0
4-Methyl-2-pentanone (MIBK)	Ave	15.08	16.09	0.1000	107	100	6.7	20.0
Toluene	Ave	0.9090	0.8443	0.4000	9.29	10.0	-7.1	20.0
trans-1,3-Dichloropropene	Ave	0.3871	0.3856	0.1000	9.96	10.0	-0.4	20.0
Ethyl methacrylate	Ave	0.2967	0.2586		8.71	10.0	-12.9	20.0
1,1,2-Trichloroethane	Ave	0.2153	0.2020	0.1000	9.38	10.0	-6.2	20.0
Tetrachloroethene	Ave	0.4197	0.4324	0.2000	10.3	10.0	3.0	20.0
1,3-Dichloropropane	Ave	0.3711	0.3446		9.28	10.0	-7.2	20.0
2-Hexanone	Ave	10.01	10.97	0.1000	110	100	9.6	20.0
Dibromochloromethane	Ave	0.2665	0.2757		10.3	10.0	3.4	20.0
1,2-Dibromoethane (EDB)	Ave	0.1972	0.1895	0.1000	9.61	10.0	-3.9	20.0
1-Chlorohexane	Ave	0.5617	0.4963		8.84	10.0	-11.6	20.0
Chlorobenzene	Ave	0.9684	0.9700	0.5000	10.0	10.0	0.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3322	0.3301		9.94	10.0	-0.6	20.0
Ethylbenzene	Ave	1.775	1.658	0.1000	9.34	10.0	-6.6	20.0
m&p-Xylene	Ave	0.6768	0.6716	0.1000	19.8	20.0	-0.8	20.0
o-Xylene	Ave	0.6542	0.6388	0.3000	9.76	10.0	-2.4	20.0
Styrene	Ave	1.061	1.020	0.3000	9.61	10.0	-3.9	20.0
Bromoform	Ave	0.1536	0.1599	0.1000	10.4	10.0	4.1	20.0
Isopropylbenzene	Ave	1.769	1.665	0.1000	9.41	10.0	-5.9	20.0
1,1,2,2-Tetrachloroethane	Ave	0.4576	0.3831	0.3000	8.37	10.0	-16.3	20.0
Bromobenzene	Ave	0.6850	0.6204		9.06	10.0	-9.4	20.0
trans-1,4-Dichloro-2-butene	Ave	5.212	4.598		88.2	100	-11.8	20.0
1,2,3-Trichloropropane	Ave	0.1149	0.1003		8.73	10.0	-12.7	20.0
N-Propylbenzene	Ave	3.820	3.268		8.56	10.0	-14.4	20.0
2-Chlorotoluene	Ave	0.7351	0.6644		9.04	10.0	-9.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-116393-1
 SDG No.: _____
 Lab Sample ID: CCVIS 410-348577/6 Calibration Date: 02/28/2023 11:42
 Instrument ID: 19094 Calib Start Date: 07/11/2022 16:51
 GC Column: R-624SilMS 30m ID: 0.25 (mm) Calib End Date: 07/11/2022 18:52
 Lab File ID: HF28X05.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	2.664	2.295		8.62	10.0	-13.8	20.0
4-Chlorotoluene	Ave	0.7381	0.6907		9.36	10.0	-6.4	20.0
tert-Butylbenzene	Ave	0.5892	0.5046		8.57	10.0	-14.3	20.0
Pentachloroethane	Ave	0.4138	0.4127		9.97	10.0	-0.3	20.0
1,2,4-Trimethylbenzene	Ave	2.688	2.367		8.80	10.0	-12.0	20.0
sec-Butylbenzene	Ave	3.489	2.959		8.48	10.0	-15.2	20.0
1,3-Dichlorobenzene	Ave	1.418	1.328	0.6000	9.36	10.0	-6.4	20.0
p-Isopropyltoluene	Ave	2.991	2.583		8.64	10.0	-13.6	20.0
1,4-Dichlorobenzene	Ave	1.408	1.249	0.5000	8.87	10.0	-11.3	20.0
1,2,3-Trimethylbenzene	Ave	1.146	1.046		9.12	10.0	-8.8	20.0
Benzyl chloride	Ave	0.1861	0.1865		10.0	10.0	0.3	20.0
n-Butylbenzene	Ave	1.510	1.231		8.15	10.0	-18.5	20.0
1,2-Dichlorobenzene	Ave	1.257	1.167	0.4000	9.29	10.0	-7.1	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0604	0.0522	0.0500	8.64	10.0	-13.6	20.0
1,3,5-Trichlorobenzene	Ave	1.103	0.9151		8.29	10.0	-17.1	20.0
1,2,4-Trichlorobenzene	Ave	0.9290	0.7107	0.2000	7.65	10.0	-23.5*	20.0
Hexachlorobutadiene	Ave	0.4512	0.2811		6.23	10.0	-37.7*	20.0
Naphthalene	Ave	1.500	1.067		7.11	10.0	-28.9*	20.0
1,2,3-Trichlorobenzene	Ave	0.7887	0.5571		7.06	10.0	-29.4*	20.0
Dibromofluoromethane (Surr)	Ave	0.2531	0.2696		10.7	10.0	6.5	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0462	0.0479		10.4	10.0	3.8	20.0
Toluene-d8 (Surr)	Ave	1.223	1.184		9.68	10.0	-3.2	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4966	0.4866		9.80	10.0	-2.0	20.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X05.D
 Lims ID: CCVIS VSTD10
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 28-Feb-2023 11:42:30 ALS Bottle#: 5 Worklist Smp#: 6
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077923-006
 Misc. Info.: LCSD
 Operator ID: knk41612 Instrument ID: 19094
 Sublist: chrom-MSV_19094_25mL*sub1
 Method: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 13:06:55 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1673

First Level Reviewer: DVW2

Date: 28-Feb-2023 12:08:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.934	1.934	0.000	99	736325	10.0	12.6	
5 Chloromethane	50	2.129	2.129	0.000	99	951673	10.0	13.0	
6 Butadiene	39	2.239	2.239	0.000	93	1070174	10.0	15.5	
7 Vinyl chloride	62	2.245	2.245	0.000	98	849317	10.0	11.7	
9 Bromomethane	94	2.568	2.568	0.000	91	562579	10.0	11.0	
10 Chloroethane	64	2.648	2.648	0.000	100	478522	10.0	10.9	
11 Dichlorofluoromethane	67	2.879	2.879	0.000	97	1094732	10.0	11.2	
12 Trichlorofluoromethane	101	2.959	2.959	0.000	99	1061672	10.0	12.1	
14 Ethyl ether	59	3.202	3.202	0.000	91	359065	10.0	9.78	
15 1,2-Dichloro-1,1,2-trifluoroethane	67	3.276	3.276	0.000	90	698674	10.0	10.2	
16 Acrolein	56	3.367	3.367	0.000	100	1723709	500.0	357.9	
18 1,1-Dichloroethene	96	3.507	3.507	0.000	98	526768	10.0	10.6	
19 Acetone	43	3.532	3.532	0.000	65	536438	100.0	95.7	
20 1,1,2-Trichloro-1,2,2-trifluoroethane	101	3.544	3.544	0.000	91	525066	10.0	10.9	
21 Isopropyl alcohol	45	3.660	3.660	0.000	96	120221	200.0	96.4	
22 Iodomethane	142	3.696	3.696	0.000	98	1043550	10.0	12.1	
23 Ethyl bromide	108	3.727	3.727	0.000	98	489726	10.0	11.2	
24 Carbon disulfide	76	3.806	3.806	0.000	99	1656541	10.0	12.5	
25 Methyl acetate	43	3.946	3.946	0.000	20	172250	10.0	11.6	M
27 3-Chloro-1-propene	41	3.977	3.977	0.000	92	839020	10.0	9.74	
* 29 t-Butyl alcohol-d10 (IS)	65	4.153	4.153	0.000	98	87644	50.0	50.0	
28 Methylene Chloride	84	4.160	4.160	0.000	91	552591	10.0	10.8	
31 2-Methyl-2-propanol	59	4.288	4.288	0.000	98	289950	200.0	152.9	
32 Acrylonitrile	53	4.495	4.495	0.000	95	200270	25.0	26.5	
33 Methyl tert-butyl ether	73	4.562	4.562	0.000	94	1143363	10.0	10.3	
34 trans-1,2-Dichloroethene	96	4.586	4.586	0.000	99	592399	10.0	10.7	
35 Hexane	57	5.007	5.007	0.000	92	718432	10.0	9.32	
37 1,1-Dichloroethane	63	5.239	5.239	0.000	96	1089408	10.0	10.6	
38 Isopropyl ether	45	5.300	5.300	0.000	94	1683835	10.0	9.60	
39 2-Chloro-1,3-butadiene	53	5.348	5.348	0.000	90	900736	10.0	10.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 Tert-butyl ethyl ether	59	5.830	5.830	0.000	97	1492136	10.0	9.62	
42 2-Butanone (MEK)	43	6.019	6.019	0.000	100	1018344	100.0	104.4	
43 cis-1,2-Dichloroethene	96	6.068	6.068	0.000	82	636746	10.0	10.5	
44 2,2-Dichloropropane	77	6.080	6.080	0.000	87	958683	10.0	11.1	
45 Propionitrile	54	6.098	6.098	0.000	99	494787	200.0	197.8	
48 Methacrylonitrile	67	6.324	6.324	0.000	91	1186624	100.0	109.9	
49 Chlorobromomethane	128	6.397	6.397	0.000	90	265930	10.0	11.0	
50 Tetrahydrofuran	71	6.409	6.409	0.000	79	146511	50.0	52.5	
52 Chloroform	83	6.549	6.549	0.000	93	1052641	10.0	10.8	
\$ 53 Dibromofluoromethane (Surr)	113	6.763	6.763	0.000	93	514340	10.0	10.7	
54 1,1,1-Trichloroethane	97	6.781	6.781	0.000	98	971058	10.0	10.7	
55 Cyclohexane	56	6.879	6.879	0.000	89	941119	10.0	9.17	
56 1,1-Dichloropropene	75	6.994	6.994	0.000	96	845788	10.0	10.3	
57 Carbon tetrachloride	117	6.994	6.994	0.000	94	873566	10.0	11.2	
58 Isobutyl alcohol	41	7.122	7.122	0.000	93	273023	500.0	441.5	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.208	7.208	0.000	76	91422	10.0	10.4	M
60 Benzene	78	7.250	7.250	0.000	95	2445086	10.0	10.3	
62 1,2-Dichloroethane	62	7.317	7.317	0.000	98	598428	10.0	11.6	
64 Tert-amyl methyl ether	73	7.445	7.445	0.000	99	1316638	10.0	9.96	
* 65 Fluorobenzene (IS)	96	7.659	7.659	0.000	99	1907761	10.0	10.0	
66 n-Heptane	43	7.677	7.677	0.000	92	671269	10.0	7.95	
68 n-Butanol	56	8.006	8.006	0.000	89	421082	875.0	796.3	
69 Trichloroethene	95	8.134	8.134	0.000	98	671067	10.0	10.7	
70 Methylcyclohexane	83	8.445	8.445	0.000	92	987094	10.0	9.32	
71 1,2-Dichloropropane	63	8.464	8.464	0.000	86	604006	10.0	10.1	
72 2-ethoxy-2-methyl butane	87	8.476	8.476	0.000	92	890412	10.0	10.6	
74 Methyl methacrylate	69	8.543	8.543	0.000	90	224575	10.0	10.4	
73 1,4-Dioxane	88	8.555	8.555	0.000	32	34040	500.0	247.8	
75 Dibromomethane	93	8.573	8.573	0.000	95	255254	10.0	10.2	
77 Dichlorobromomethane	83	8.811	8.811	0.000	99	726143	10.0	10.8	
78 2-Nitropropane	41	9.073	9.073	0.000	99	317231	50.0	59.5	
80 1-Bromo-2-chloroethane	63	9.201	9.201	0.000	98	566229	10.0	10.3	
81 cis-1,3-Dichloropropene	75	9.360	9.360	0.000	96	889030	10.0	10.5	
83 4-Methyl-2-pentanone (MIBK)	43	9.524	9.524	0.000	96	2821093	100.0	106.7	
\$ 84 Toluene-d8 (Surr)	98	9.671	9.671	0.000	93	2194902	10.0	9.68	
85 Toluene	92	9.744	9.744	0.000	98	1564688	10.0	9.29	
86 trans-1,3-Dichloropropene	75	10.006	10.006	0.000	92	714540	10.0	9.96	
105 Ethyl methacrylate	69	10.067	10.067	0.000	89	479146	10.0	8.71	
106 1,1,2-Trichloroethane	97	10.207	10.207	0.000	91	374422	10.0	9.38	
107 Tetrachloroethene	166	10.299	10.299	0.000	98	801299	10.0	10.3	
108 1,3-Dichloropropane	76	10.366	10.366	0.000	90	638580	10.0	9.28	
109 2-Hexanone	43	10.421	10.421	0.000	96	1923381	100.0	109.6	
111 Chlorodibromomethane	129	10.585	10.585	0.000	90	510830	10.0	10.3	
112 Ethylene Dibromide	107	10.695	10.695	0.000	100	351178	10.0	9.61	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	84	1853167	10.0	10.0	
114 1-Chlorohexane	91	11.134	11.134	0.000	96	919742	10.0	8.84	
115 Chlorobenzene	112	11.152	11.152	0.000	95	1797656	10.0	10.0	
116 1,1,1,2-Tetrachloroethane	131	11.237	11.237	0.000	94	611706	10.0	9.94	
118 Ethylbenzene	91	11.237	11.237	0.000	98	3073405	10.0	9.34	
119 m-Xylene & p-Xylene	106	11.353	11.353	0.000	99	2489167	20.0	19.8	
120 o-Xylene	106	11.682	11.682	0.000	96	1183755	10.0	9.76	
121 Styrene	104	11.695	11.695	0.000	94	1889663	10.0	9.61	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
122 Bromoform	173	11.853	11.853	0.000	97	296348	10.0	10.4	
123 Isopropylbenzene	105	11.981	11.981	0.000	95	3086323	10.0	9.41	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.127	12.127	0.000	94	901659	10.0	9.80	
127 1,1,2,2-Tetrachloroethane	83	12.225	12.225	0.000	93	439943	10.0	8.37	
128 Bromobenzene	156	12.243	12.243	0.000	97	712447	10.0	9.06	
129 trans-1,4-Dichloro-2-butene	53	12.249	12.249	0.000	91	806032	100.0	88.2	
130 1,2,3-Trichloropropane	110	12.268	12.268	0.000	81	115132	10.0	8.73	
131 N-Propylbenzene	91	12.310	12.310	0.000	99	3752836	10.0	8.56	
132 2-Chlorotoluene	126	12.384	12.384	0.000	97	762910	10.0	9.04	
133 1,3,5-Trimethylbenzene	105	12.445	12.445	0.000	94	2635945	10.0	8.62	
134 4-Chlorotoluene	126	12.475	12.475	0.000	97	793128	10.0	9.36	
135 tert-Butylbenzene	134	12.682	12.682	0.000	93	579498	10.0	8.57	
136 Pentachloroethane	167	12.719	12.719	0.000	93	473902	10.0	9.97	
137 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	2717970	10.0	8.80	
138 sec-Butylbenzene	105	12.847	12.847	0.000	94	3398203	10.0	8.48	
139 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	1524637	10.0	9.36	
140 4-Isopropyltoluene	119	12.951	12.951	0.000	97	2966123	10.0	8.64	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1148352	10.0	10.0	
142 1,4-Dichlorobenzene	146	13.018	13.018	0.000	95	1434318	10.0	8.87	
143 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	98	1200694	10.0	9.12	
144 Benzyl chloride	126	13.097	13.097	0.000	98	214216	10.0	10.0	
145 p-Diethylbenzene	119	13.152	13.152	0.000	92	1760879	10.0	8.87	
146 n-Butylbenzene	92	13.243	13.243	0.000	97	1413190	10.0	8.15	
147 1,2-Dichlorobenzene	146	13.274	13.274	0.000	99	1340277	10.0	9.29	
149 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	88	59934	10.0	8.64	
150 1,3,5-Trichlorobenzene	180	13.944	13.944	0.000	98	1050892	10.0	8.29	
151 1,2,4-Trichlorobenzene	180	14.365	14.365	0.000	94	816103	10.0	7.65	
152 Hexachlorobutadiene	225	14.444	14.444	0.000	96	322832	10.0	6.23	
153 Naphthalene	128	14.542	14.542	0.000	97	1224980	10.0	7.11	
154 1,2,3-Trichlorobenzene	180	14.682	14.682	0.000	96	639791	10.0	7.06	
155 2-Methylnaphthalene	142	15.298	15.298	0.000	93	462680	10.0	4.46	
158 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#2_826_00074

Amount Added: 20.00

Units: uL

MSV_LL_#1_826_00067

Amount Added: 20.00

Units: uL

MSV_LL_GAS826_00138

Amount Added: 20.00

Units: uL

MSV_LLcentISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X05.D

Injection Date: 28-Feb-2023 11:42:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: CCVIS VSTD10

Worklist Smp#: 6

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

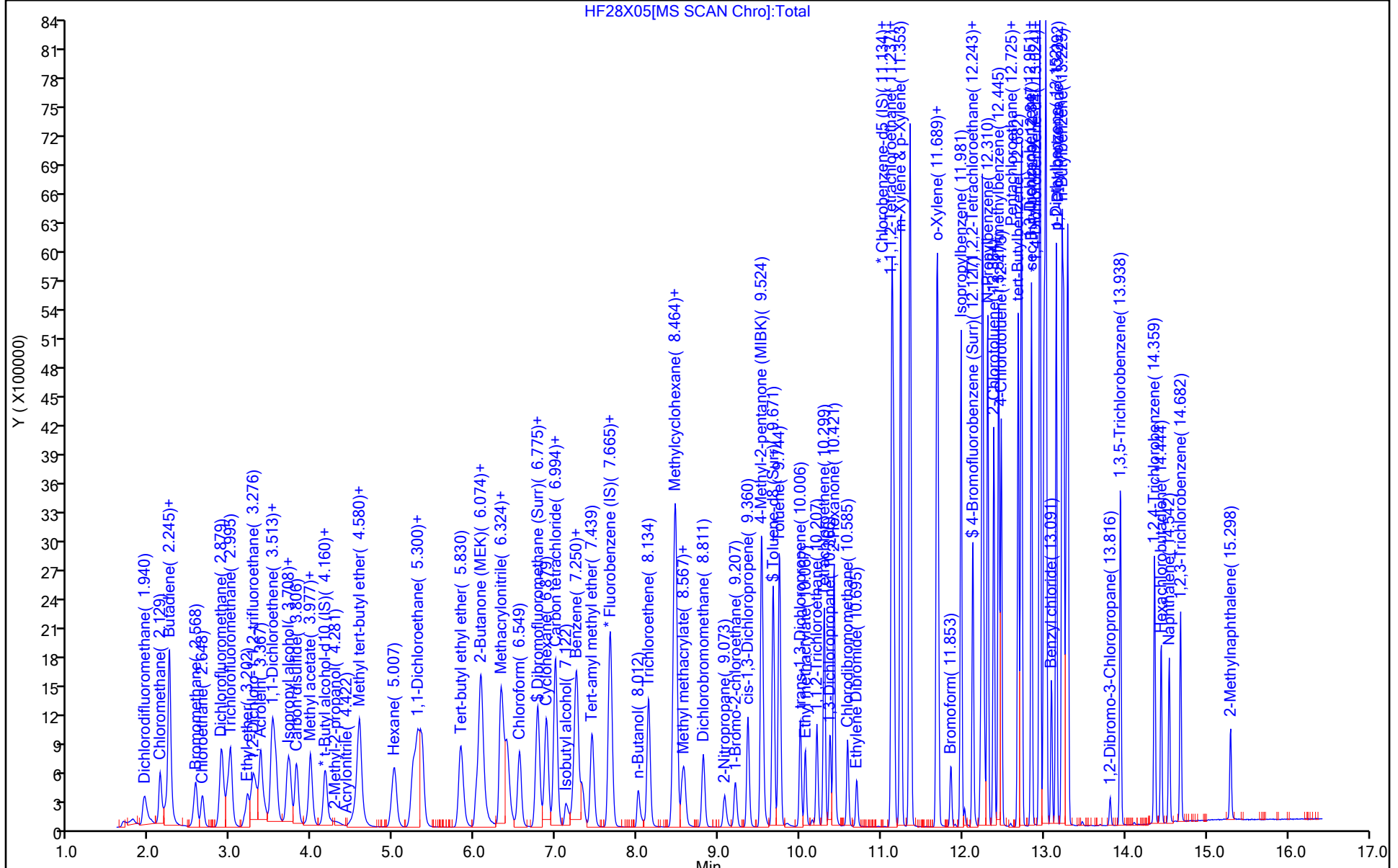
ALS Bottle#: 5

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC

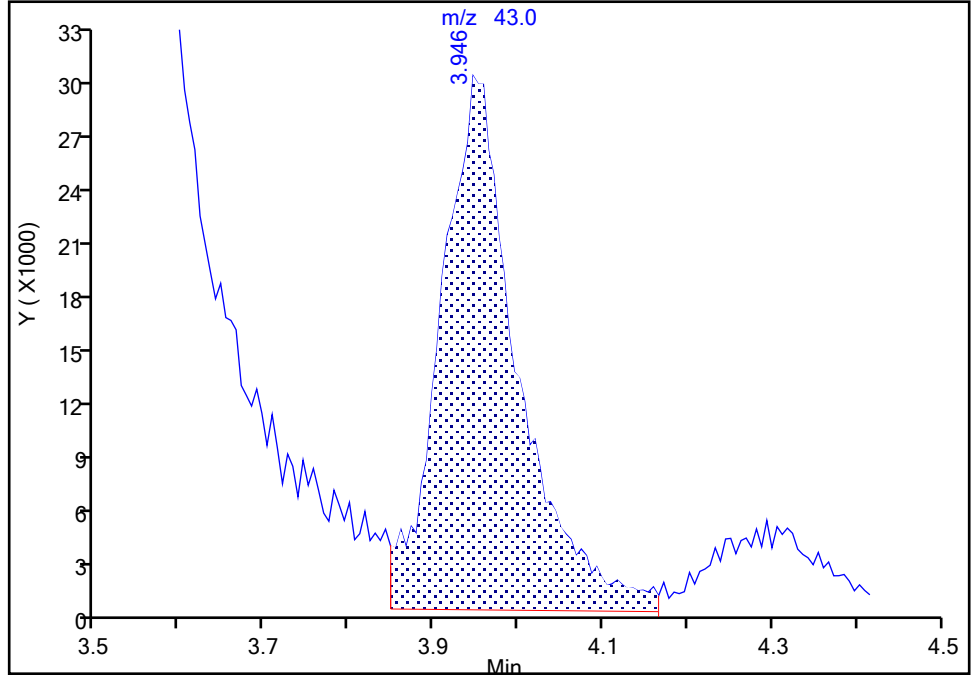
Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X05.D
Injection Date: 28-Feb-2023 11:42:30 Instrument ID: 19094
Lims ID: CCVIS VSTD10
Client ID:
Operator ID: knk41612 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

25 Methyl acetate, CAS: 79-20-9

Signal: 1

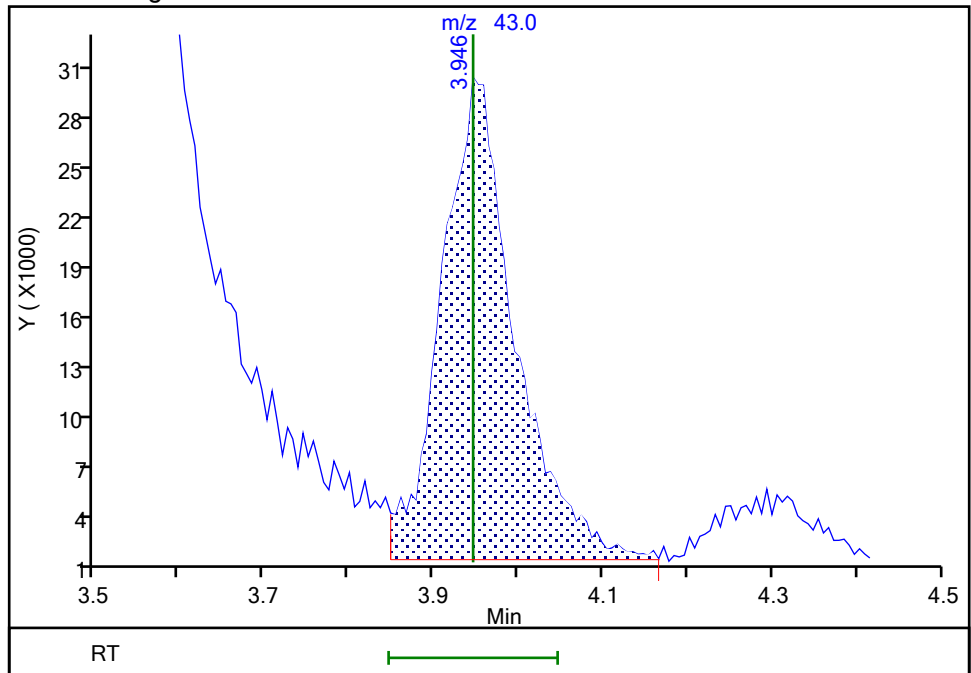
RT: 3.95
Area: 189125
Amount: 12.746690
Amount Units: ug/l

Processing Integration Results



RT: 3.95
Area: 172250
Amount: 11.609344
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 28-Feb-2023 12:06:32
Audit Action: Assigned New Baseline

Audit Reason: Incomplete Integration

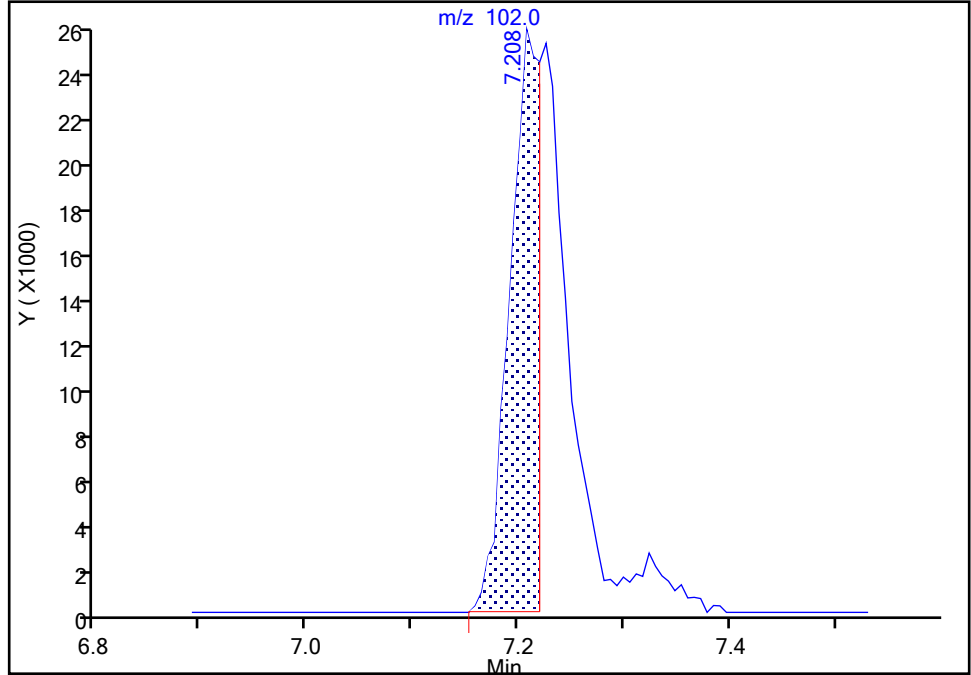
Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X05.D		
Injection Date:	28-Feb-2023 11:42:30	Instrument ID:	19094
Lims ID:	CCVIS VSTD10		
Client ID:			
Operator ID:	knk41612	ALS Bottle#:	5
Purge Vol:	25.000 mL	Dil. Factor:	1.0000
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D
Column:	Rxi-624Sil MS Capillary Column (0.25mm ID)	Detector:	MS Quad
		Worklist Smp#:	6

\$ 59 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0
Signal: 1

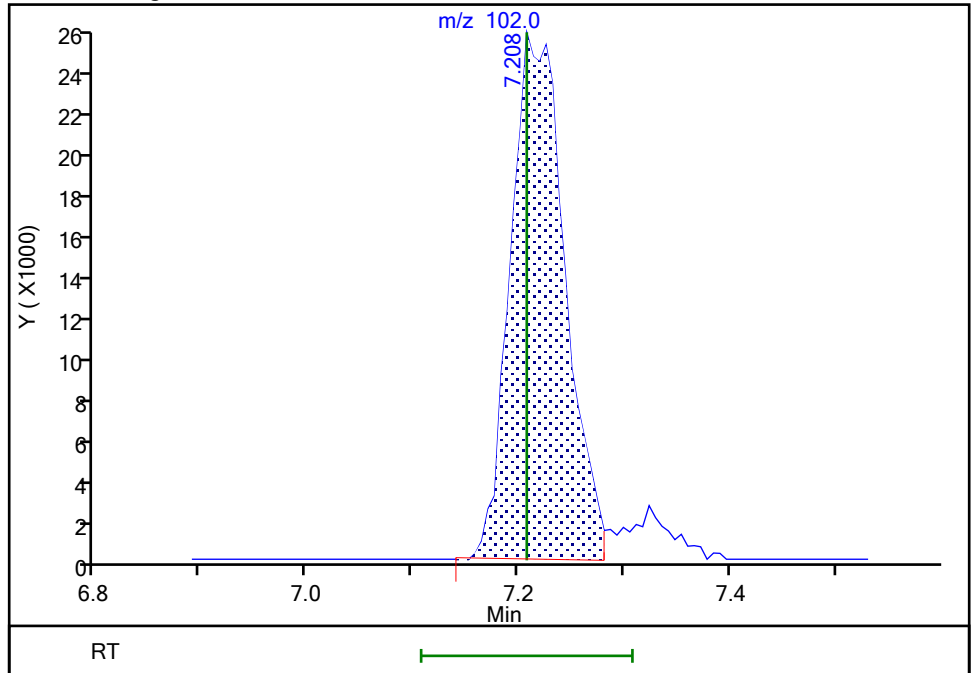
RT: 7.21
 Area: 51205
 Amount: 5.811412
 Amount Units: ug/l

Processing Integration Results



RT: 7.21
 Area: 91422
 Amount: 10.375762
 Amount Units: ug/l

Manual Integration Results



Eurofins Lancaster Laboratories Environment Testing, LLC
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11T03.D
 Lims ID: bfb
 Client ID:
 Sample Type: BFB
 Inject. Date: 11-Jul-2022 13:17:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 410-0061489-001
 Misc. Info.: BFB
 Operator ID: kas02648 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 12-Jul-2022 11:53:41 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1678

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----	-----------	---------------	---------------	---	----------	--------------	----------------	-------

\$ 165 BFB	95	5.154	5.154	0.000	91	142888	NR	NR	
------------	----	-------	-------	-------	----	--------	----	----	--

QC Flag Legend

Processing Flags
 NR - Missing Quant Standard

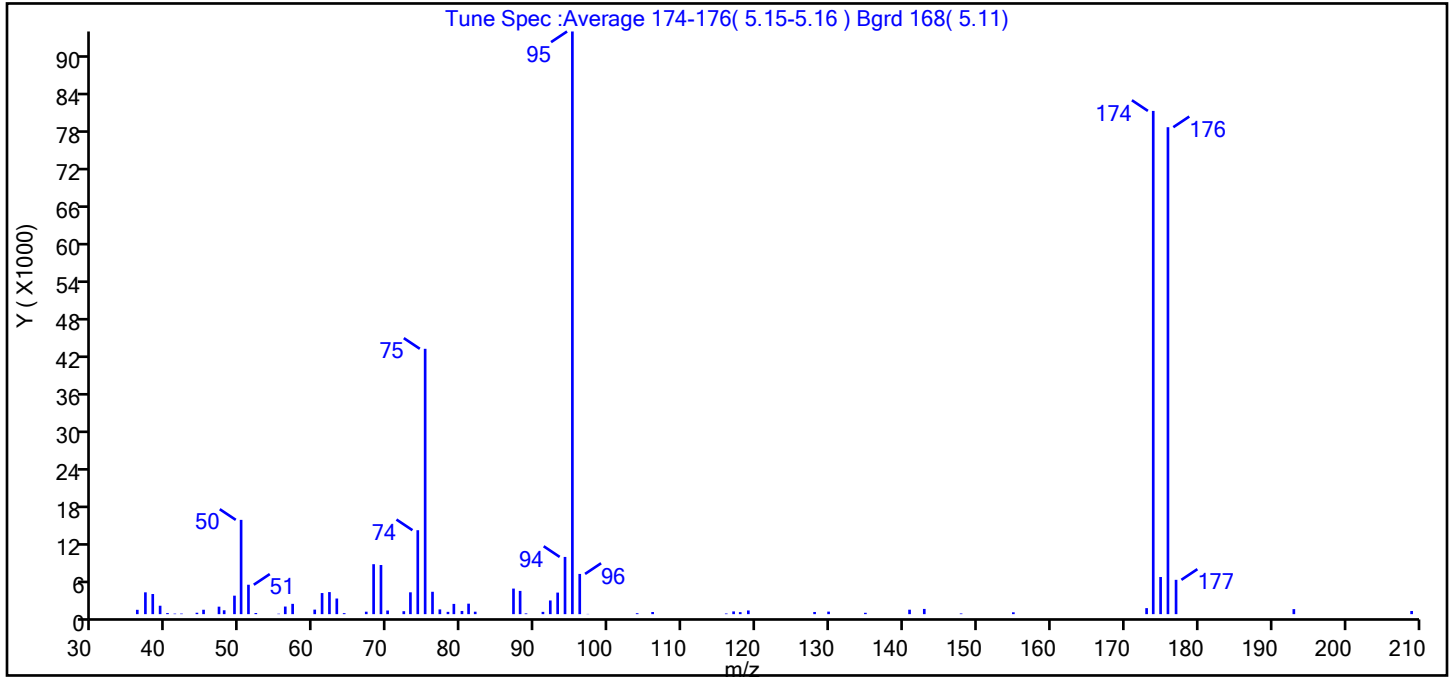
Reagents:

MSV_V_BFB_00008 Amount Added: 1.00 Units: uL

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11T03.D
 Injection Date: 11-Jul-2022 13:17:30 Instrument ID: 19094
 Lims ID: bfb
 Client ID:
 Operator ID: kas02648 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Tune Method: BFB Method 8260

\$ 165 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.2
75	30 to 60% of m/z 95	45.5
96	5 to 9% of m/z 95	6.9
173	Less than 2% of m/z 174	1.0 (1.2)
174	50 to 120% of m/z 95	86.4
175	5 to 9% of m/z 174	6.4 (7.4)
176	Greater than 95% but less than 101% of m/z 174	83.6 (96.8)
177	5 to 9% of m/z 176	5.9 (7.0)

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11T03.D\MSV_19094_25mL.rslt\spectra.d
 Injection Date: 11-Jul-2022 13:17:30
 Spectrum: Tune Spec :Average 174-176(5.15-5.16) Bgrd 168(5.11)
 Base Peak: 95.00
 Minimum % Base Peak: 0
 Number of Points: 68

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	695	57.00	1653	79.00	1645	117.00	438
37.00	3502	60.00	727	80.00	510	118.00	322
38.00	3232	61.00	3386	81.00	1681	119.00	588
39.00	1351	62.00	3541	82.00	393	128.00	347
40.00	173	63.00	2508	87.00	4103	130.00	405
41.00	83	64.00	160	88.00	3731	135.00	218
42.00	90	67.00	394	89.00	119	141.00	714
44.00	225	68.00	8019	91.00	368	143.00	839
45.00	706	69.00	7887	92.00	2197	148.00	109
47.00	1201	70.00	582	93.00	3461	155.00	296
48.00	623	72.00	470	94.00	9186	173.00	966
49.00	2967	73.00	3505	95.00	93544	174.00	80792
50.00	15136	74.00	13476	96.00	6457	175.00	5961
51.00	4721	75.00	42600	97.00	34	176.00	78176
52.00	181	76.00	3592	104.00	150	177.00	5509
55.00	69	77.00	760	106.00	344	193.00	809
56.00	1220	78.00	370	116.00	104	209.00	506

Data File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\HL11T03.D

Injection Date: 11-Jul-2022 13:17:30

Instrument ID: 19094

Operator ID: kas02648

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

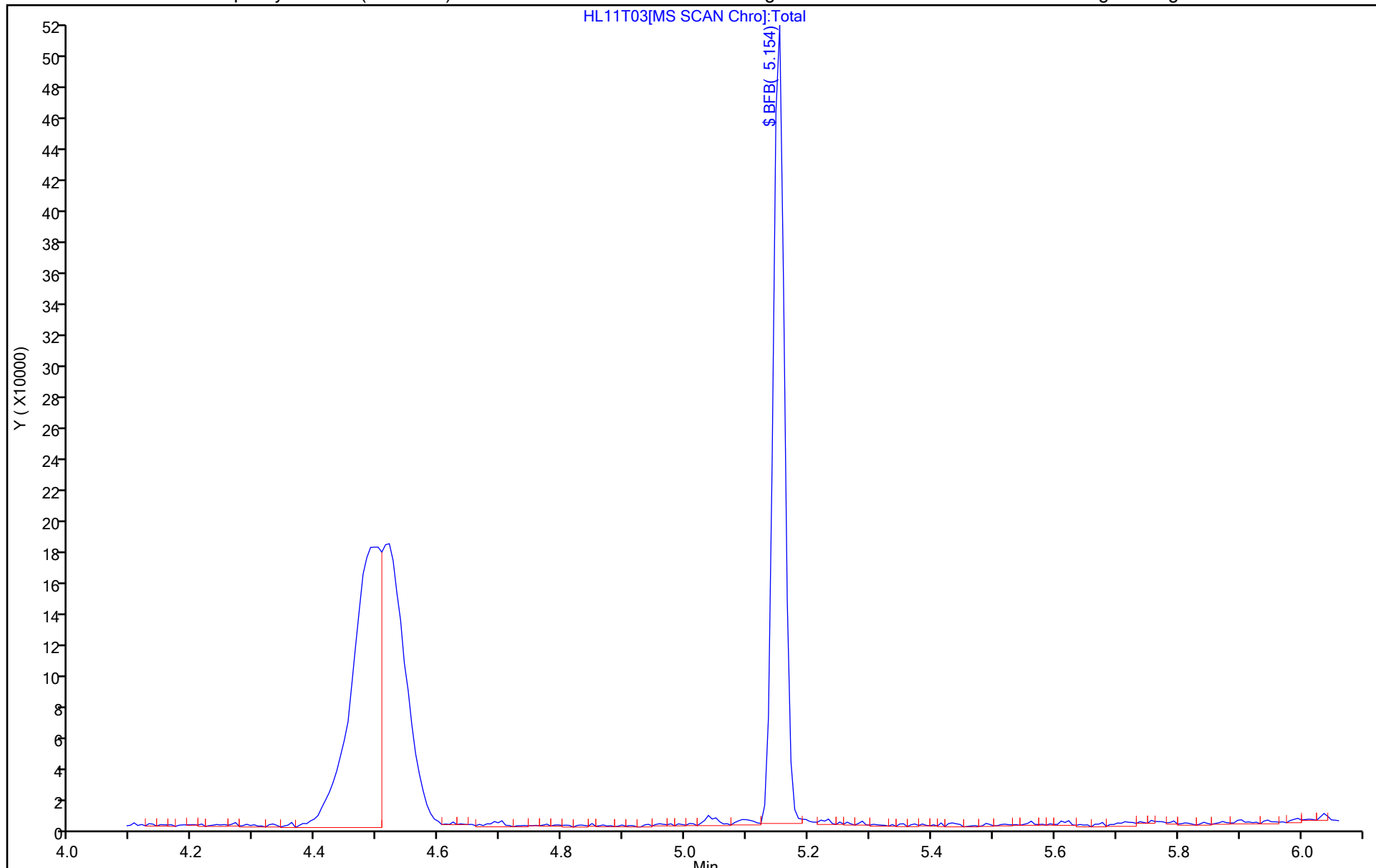
ALS Bottle#: 1

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20220714-61834.b\copy_HL14T01.D
 Lims ID: bfb
 Client ID:
 Sample Type: BFB
 Inject. Date: 14-Jul-2022 19:09:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info:
 Misc. Info.: BFB
 Operator ID: MEC29284 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20220714-61834.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 14-Jul-2022 20:50:16 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1670

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
\$ 165 BFB	95	5.148	5.148	0.000	87	217282	NR	NR	

QC Flag Legend

Processing Flags
 NR - Missing Quant Standard

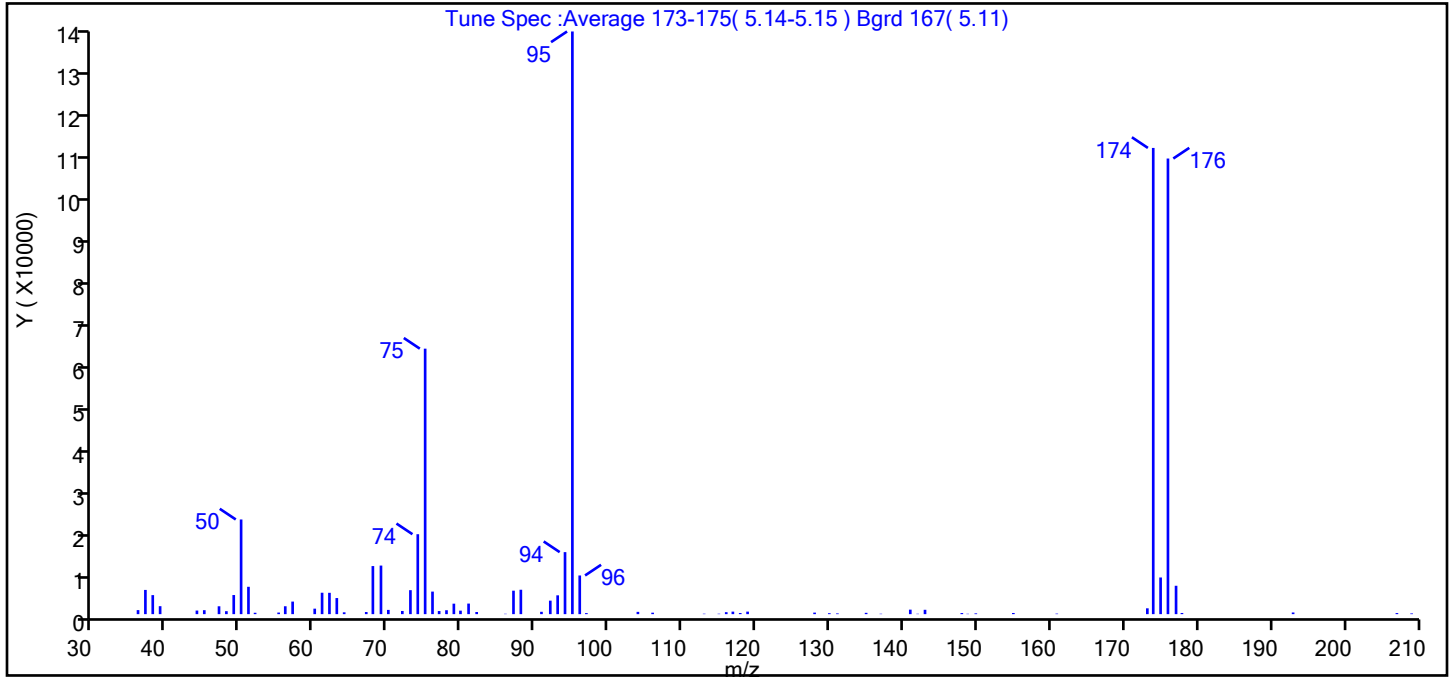
Reagents:

MSV_V_BFB_00008 Amount Added: 1.00 Units: uL

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20220714-61834.b\copy_HL14T01.D
 Injection Date: 14-Jul-2022 19:09:30 Instrument ID: 19094
 Lims ID: bfb
 Client ID:
 Operator ID: MEC29284 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Tune Method: BFB Method 8260

\$ 165 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.2
75	30 to 60% of m/z 95	45.6
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	1.0 (1.3)
174	50 to 120% of m/z 95	80.0
175	5 to 9% of m/z 174	6.3 (7.9)
176	Greater than 95% but less than 101% of m/z 174	78.2 (97.7)
177	5 to 9% of m/z 176	4.9 (6.2)

Data File: \\chromfs\Lancaster\ChromData\19094\20220714-61834.b\copy_HL14T01.D\MSV_19094_25mL.rsl\spec
 Injection Date: 14-Jul-2022 19:09:30
 Spectrum: Tune Spec :Average 173-175(5.14-5.15) Bgrd 167(5.11)
 Base Peak: 95.00
 Minimum % Base Peak: 0
 Number of Points: 75

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	949	64.00	430	91.00	552	137.00	93
37.00	5703	67.00	499	92.00	3178	141.00	1057
38.00	4480	68.00	11322	93.00	4431	142.00	88
39.00	1876	69.00	11439	94.00	14605	143.00	1023
44.00	845	70.00	999	95.00	137216	148.00	258
45.00	933	72.00	745	96.00	9108	149.00	85
47.00	1853	73.00	5647	97.00	244	150.00	181
48.00	699	74.00	18824	104.00	539	155.00	272
49.00	4499	75.00	62520	106.00	345	161.00	122
50.00	22296	76.00	5309	113.00	101	173.00	1373
51.00	6441	77.00	732	115.00	99	174.00	109792
52.00	325	78.00	920	116.00	465	175.00	8634
55.00	376	79.00	2467	117.00	593	176.00	107296
56.00	1858	80.00	822	118.00	264	177.00	6682
57.00	2957	81.00	2489	119.00	592	178.00	274
60.00	1291	82.00	506	128.00	361	193.00	390
61.00	5042	86.00	86	130.00	222	207.00	254
62.00	5025	87.00	5525	131.00	173	209.00	168
63.00	3790	88.00	5746	135.00	309		

Report Date: 14-Jul-2022 20:50:17

Chrom Revision: 2.3 08-Jul-2022 13:26:50

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20220714-61834.b\copy_HL14T01.D

Injection Date: 14-Jul-2022 19:09:30

Instrument ID: 19094

Operator ID: MEC29284

Lims ID: bfb

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

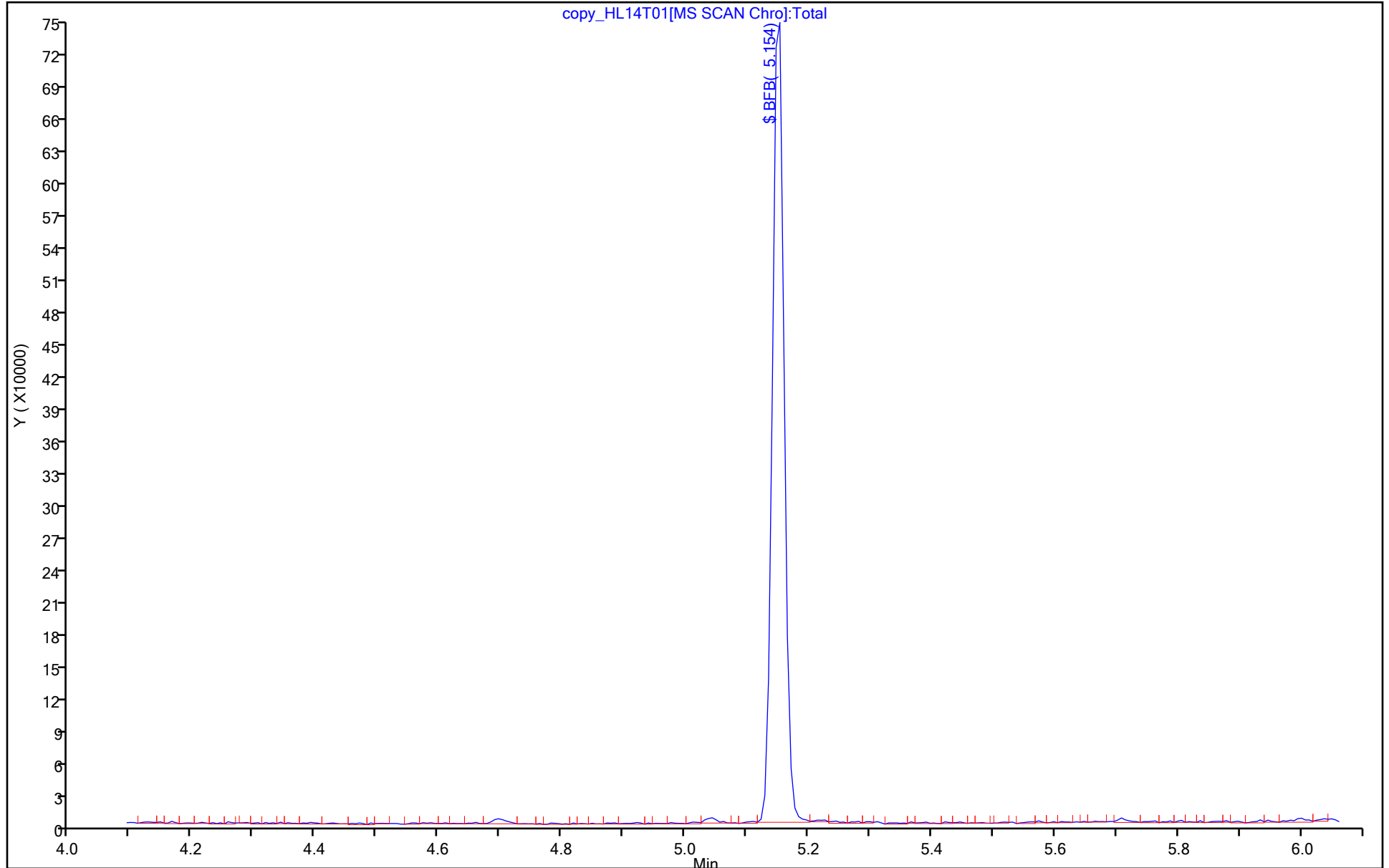
ALS Bottle#: 1

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27T01.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 27-Feb-2023 11:40:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info:
 Misc. Info.: BFB
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 27-Feb-2023 13:10:33 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1617

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----	-----------	---------------	---------------	---	----------	--------------	----------------	-------

\$ 167 BFB	95	5.129	5.129	0.000	94	261069	NR	NR	
------------	----	-------	-------	-------	----	--------	----	----	--

QC Flag Legend

Processing Flags
 NR - Missing Quant Standard

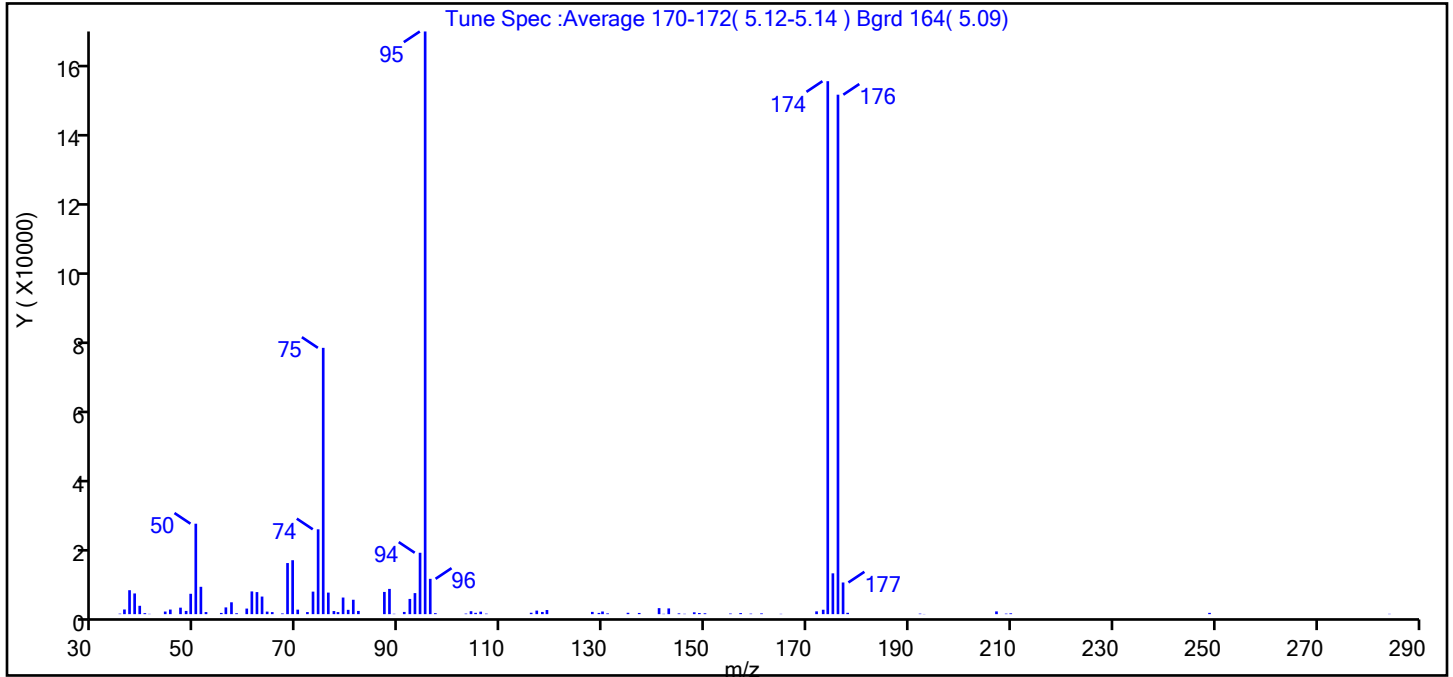
Reagents:

MSV_V_BFB_00011 Amount Added: 1.00 Units: uL

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27T01.D
 Injection Date: 27-Feb-2023 11:40:30 Instrument ID: 19094
 Lims ID: BFB
 Client ID:
 Operator ID: knk41612 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Tune Method: BFB Method 8260

\$ 167 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.5
75	30 to 60% of m/z 95	45.7
96	5 to 9% of m/z 95	6.1
173	Less than 2% of m/z 174	0.8 (0.8)
174	50 to 120% of m/z 95	91.5
175	5 to 9% of m/z 174	7.0 (7.7)
176	Greater than 95% but less than 101% of m/z 174	89.2 (97.5)
177	5 to 9% of m/z 176	5.4 (6.1)

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27T01.D\MSV_19094_25mL.rslt\spectra.d
Injection Date: 27-Feb-2023 11:40:30
Spectrum: Tune Spec :Average 170-172(5.12-5.14) Bgrd 164(5.09)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 92

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	136	64.00	721	94.00	17464	146.00	100
36.00	1327	65.00	582	95.00	165760	148.00	523
37.00	6808	67.00	198	96.00	10048	149.00	319
38.00	5886	68.00	14535	97.00	281	150.00	250
39.00	2375	69.00	15342	103.00	158	155.00	176
40.00	283	70.00	1281	104.00	835	157.00	303
41.00	83	72.00	591	105.00	377	159.00	145
44.00	739	73.00	6410	106.00	708	161.00	215
45.00	1304	74.00	24136	107.00	145	165.00	86
47.00	1845	75.00	75760	116.00	397	172.00	792
48.00	915	76.00	6129	117.00	1008	173.00	1256
49.00	5791	77.00	881	118.00	624	174.00	151616
50.00	25728	78.00	579	119.00	1171	175.00	11611
51.00	7777	79.00	4725	128.00	642	176.00	147776
52.00	594	80.00	1230	129.00	346	177.00	9009
55.00	346	81.00	4095	130.00	752	178.00	383
56.00	1917	82.00	912	131.00	224	192.00	143
57.00	3373	87.00	6318	135.00	388	193.00	47
58.00	252	88.00	7180	137.00	337	207.00	781
60.00	1585	89.00	100	141.00	1709	209.00	147
61.00	6462	91.00	630	142.00	93	210.00	240
62.00	6273	92.00	4330	143.00	1628	249.00	361
63.00	5002	93.00	5985	145.00	220	284.00	84

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27T01.D

Injection Date: 27-Feb-2023 11:40:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

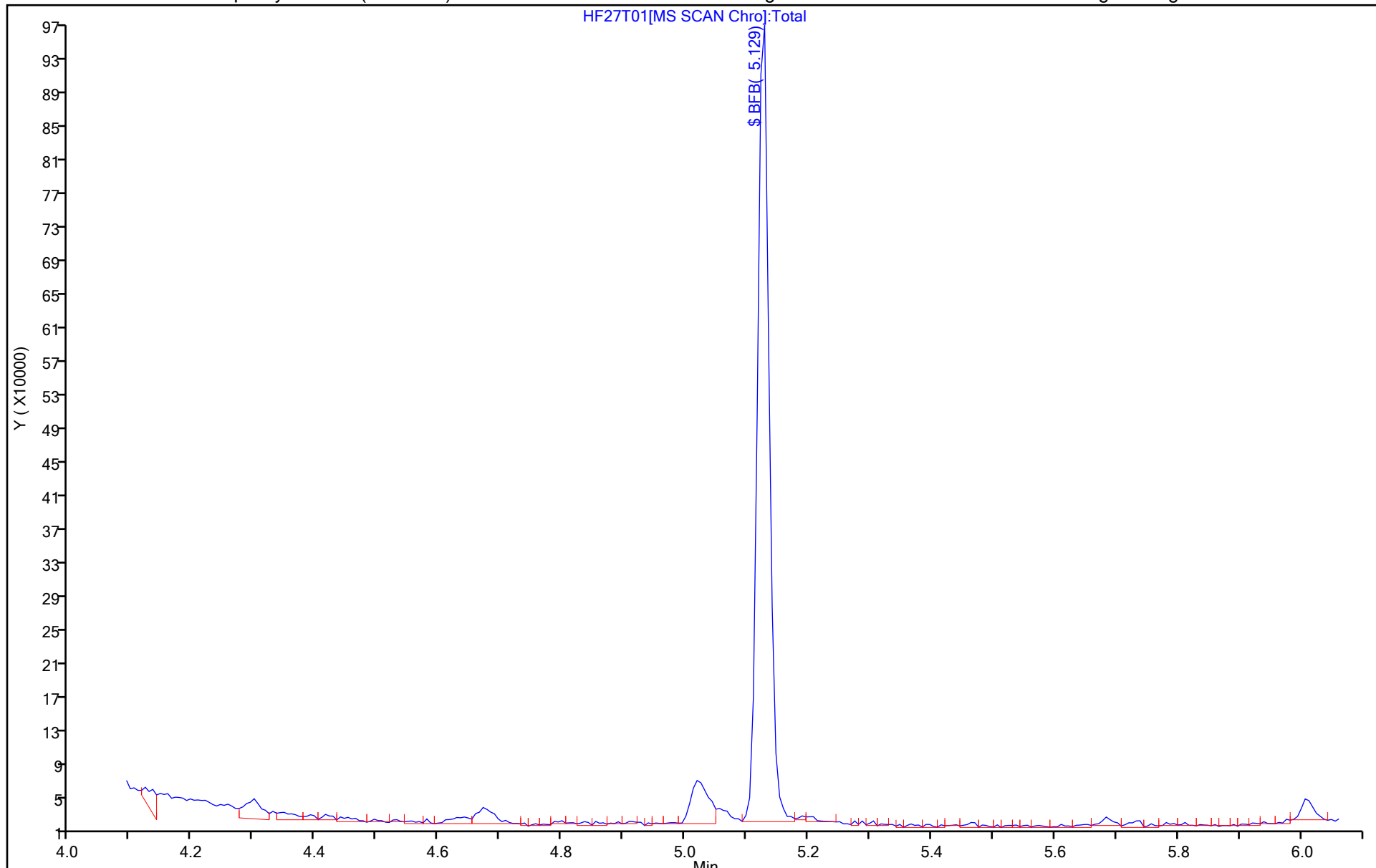
ALS Bottle#: 1

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28T01.D
 Lims ID: BFB
 Client ID:
 Sample Type: BFB
 Inject. Date: 28-Feb-2023 10:06:30 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Sample Info: 410-0077923-001
 Misc. Info.: BFB
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 13:07:15 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1673

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
----------	-----	-----------	---------------	---------------	---	----------	--------------	----------------	-------

\$ 167 BFB	95	5.129	5.129	0.000	91	162733	NR	NR	
------------	----	-------	-------	-------	----	--------	----	----	--

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

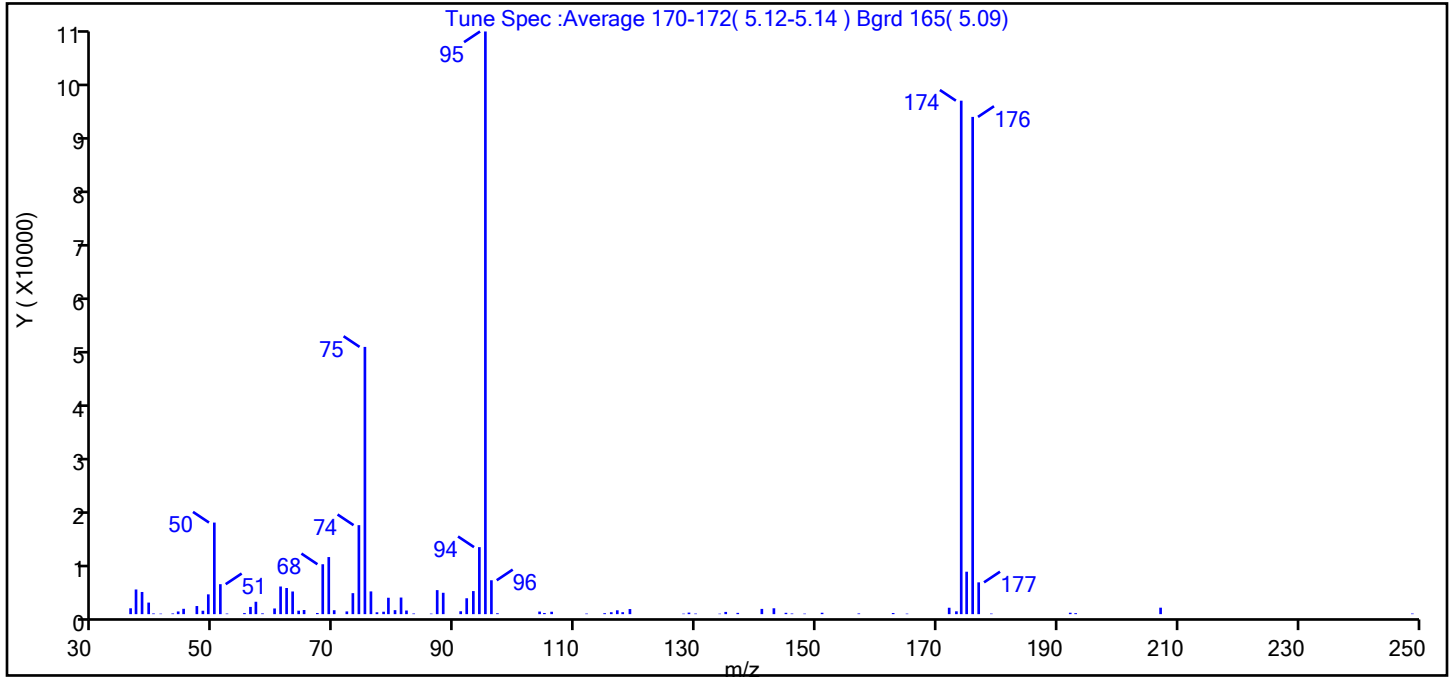
Reagents:

MSV_V_BFB_00011 Amount Added: 1.00 Units: uL

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28T01.D
 Injection Date: 28-Feb-2023 10:06:30 Instrument ID: 19094
 Lims ID: BFB
 Client ID:
 Operator ID: knk41612 ALS Bottle#: 1 Worklist Smp#: 1
 Injection Vol: 1.0 uL Dil. Factor: 1.0000
 Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
 Tune Method: BFB Method 8260

\$ 167 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.7
75	30 to 60% of m/z 95	45.9
96	5 to 9% of m/z 95	5.8
173	Less than 2% of m/z 174	0.5 (0.6)
174	50 to 120% of m/z 95	88.1
175	5 to 9% of m/z 174	7.3 (8.3)
176	Greater than 95% but less than 101% of m/z 174	85.3 (96.8)
177	5 to 9% of m/z 176	5.5 (6.4)

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28T01.D\MSV_19094_25mL.rslt\spectra.d
 Injection Date: 28-Feb-2023 10:06:30
 Spectrum: Tune Spec :Average 170-172(5.12-5.14) Bgrd 165(5.09)
 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	1053	63.00	4065	91.00	517	141.00	940
37.00	4426	64.00	621	92.00	2851	143.00	1053
38.00	3978	65.00	739	93.00	4137	145.00	240
39.00	2074	67.00	207	94.00	12023	146.00	115
40.00	124	68.00	8954	95.00	104552	148.00	92
41.00	90	69.00	10242	96.00	6080	151.00	249
43.00	126	70.00	704	97.00	160	157.00	128
44.00	481	72.00	489	104.00	463	163.00	199
45.00	960	73.00	3766	105.00	205	165.00	91
47.00	1455	74.00	15966	106.00	431	172.00	1149
48.00	612	75.00	47952	112.00	102	173.00	508
49.00	3553	76.00	4080	115.00	174	174.00	92136
50.00	16432	77.00	335	116.00	348	175.00	7615
51.00	5376	78.00	435	117.00	689	176.00	89224
52.00	104	79.00	2943	118.00	351	177.00	5704
55.00	191	80.00	716	119.00	914	179.00	101
56.00	1298	81.00	2980	128.00	88	191.00	3
57.00	2222	82.00	649	129.00	278	192.00	253
58.00	141	83.00	116	130.00	105	193.00	175
60.00	1019	86.00	93	134.00	84	207.00	1159
61.00	4959	87.00	4310	135.00	401	249.00	106
62.00	4692	88.00	3834	137.00	228		

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28T01.D

Injection Date: 28-Feb-2023 10:06:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 1.0 uL

Dil. Factor: 1.0000

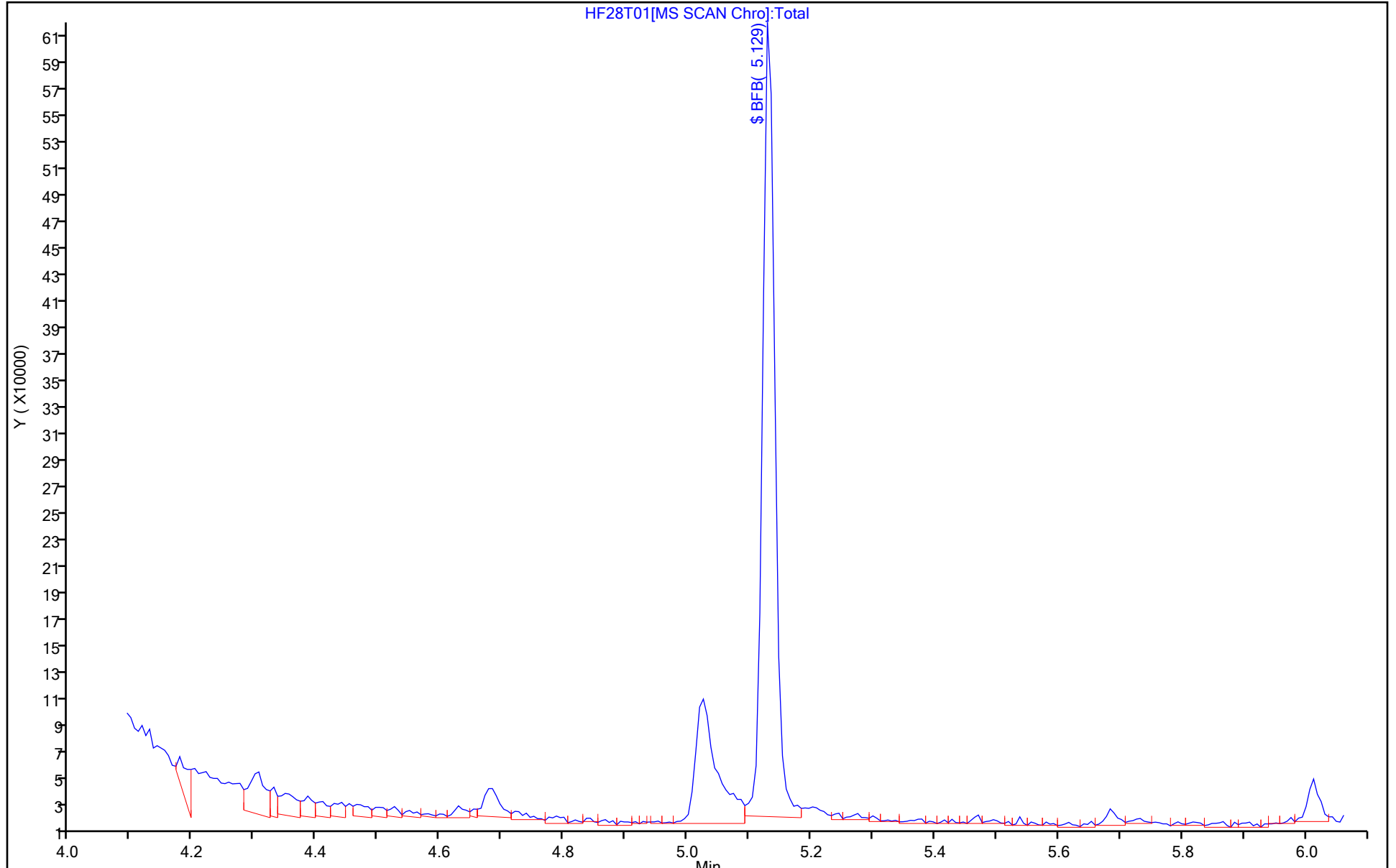
ALS Bottle#: 1

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

Client Sample ID:

Lab Sample ID: MB 410-348233/6

Matrix: Water

Lab File ID: HF27X05.D

Analysis Method: 8260D

Date Collected:

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 13:19

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	ND		5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1
Environment Testing, LLC

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: MB 410-348233/6

Matrix: Water Lab File ID: HF27X05.D

Analysis Method: 8260D Date Collected: _____

Sample wt/vol: 25 (mL) Date Analyzed: 02/27/2023 13:19

Soil Aliquot Vol: _____ Dilution Factor: 1

Soil Extract Vol.: _____ GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL) Heated Purge: (Y/N) N pH: _____

% Moisture: _____ % Solids: _____ Level: (low/med) Low

Analysis Batch No.: 348233 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	ND		0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	105		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X05.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 27-Feb-2023 13:19:30 ALS Bottle#: 5 Worklist Smp#: 6
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-006
 Misc. Info.: MB
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 10:44:17 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: DVW2 Date: 27-Feb-2023 14:07:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.886					ND	
3 Chlorodifluoromethane	51		1.934					ND	
2 Dichlorodifluoromethane	85		1.941					ND	
4 Dimethyl ether	45		2.001					ND	
5 Chloromethane	50		2.130					ND	
6 Butadiene	39		2.239					ND	7
7 Vinyl chloride	62		2.245					ND	
8 2-Chloro-1,1,1-Trifluoroethane	118		2.312					ND	
9 Bromomethane	94		2.568					ND	
10 Chloroethane	64		2.648					ND	
11 Dichlorofluoromethane	67		2.873					ND	
12 Trichlorofluoromethane	101		2.959					ND	
13 Ethanol	45		3.111					ND	
14 Ethyl ether	59		3.202					ND	
15 1,2-Dichloro-1,1,2-trifluoroethane	67		3.276					ND	
16 Acrolein	56		3.367					ND	
18 1,1-Dichloroethene	96		3.507					ND	
19 Acetone	43		3.532					ND	
20 1,1,2-Trichloro-1,2,2-trifluoroethane	101		3.544					ND	
21 Isopropyl alcohol	45		3.684					ND	
22 Iodomethane	142		3.702					ND	
23 Ethyl bromide	108		3.727					ND	
24 Carbon disulfide	76		3.806					ND	7
26 Acetonitrile	41		3.897					ND	
25 Methyl acetate	43		3.940					ND	
27 3-Chloro-1-propene	41		3.977					ND	
28 Methylene Chloride	84		4.160					ND	
* 29 t-Butyl alcohol-d10 (IS)	65	4.166	4.166	0.000	19	63511	50.0	50.0	
31 2-Methyl-2-propanol	59		4.275					ND	U
32 Acrylonitrile	53		4.483					ND	
33 Methyl tert-butyl ether	73		4.556					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 trans-1,2-Dichloroethene	96		4.580					ND	
35 Hexane	57		5.013					ND	
36 Vinyl acetate	43		5.214					ND	
37 1,1-Dichloroethane	63		5.233					ND	
38 Isopropyl ether	45		5.294					ND	
39 2-Chloro-1,3-butadiene	53		5.348					ND	
41 Tert-butyl ethyl ether	59		5.824					ND	
42 2-Butanone (MEK)	43		6.013					ND	
43 cis-1,2-Dichloroethene	96		6.068					ND	
44 2,2-Dichloropropane	77		6.074					ND	
46 Ethyl acetate	43		6.098					ND	7
45 Propionitrile	54		6.104					ND	
S 47 1,2-Dichloroethene, Total	100		6.155					ND	7
48 Methacrylonitrile	67		6.318					ND	
49 Chlorobromomethane	128		6.397					ND	
50 Tetrahydrofuran	71	6.397	6.409	-0.012	44	2500		1.24	
51 Methyl acrylate	55		6.482					ND	
52 Chloroform	83		6.543					ND	
\$ 53 Dibromofluoromethane (Surr)	113	6.757	6.763	-0.006	94	440832	10.0	10.5	
54 1,1,1-Trichloroethane	97		6.769					ND	
55 Cyclohexane	56		6.879					ND	
56 1,1-Dichloropropene	75		6.988					ND	
57 Carbon tetrachloride	117		6.988					ND	
58 Isobutyl alcohol	41		7.116					ND	7
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.202	7.220	-0.018	52	77254	10.0	10.1	
61 1-Chlorobutane	56		7.250					ND	
60 Benzene	78		7.250					ND	
62 1,2-Dichloroethane	62		7.324					ND	
63 Isopropyl acetate	43		7.324					ND	
64 Tert-amyl methyl ether	73		7.439					ND	
* 65 Fluorobenzene (IS)	96	7.653	7.653	0.000	99	1654932	10.0	10.0	
66 n-Heptane	43		7.671					ND	
67 t-Amyl alcohol	73		7.842					ND	
68 n-Butanol	56		8.006					ND	7
69 Trichloroethene	95		8.134					ND	
70 Methylcyclohexane	83		8.445					ND	
71 1,2-Dichloropropane	63		8.464					ND	
72 2-ethoxy-2-methyl butane	87		8.470					ND	
74 Methyl methacrylate	69		8.543					ND	
73 1,4-Dioxane	88		8.555					ND	
75 Dibromomethane	93		8.579					ND	
76 n-Propyl acetate	61		8.622					ND	
77 Dichlorobromomethane	83		8.805					ND	
78 2-Nitropropane	41		9.067					ND	
79 2-Chloroethyl vinyl ether	63		9.171					ND	
80 1-Bromo-2-chloroethane	63		9.195					ND	
81 cis-1,3-Dichloropropene	75		9.360					ND	
82 Chloroacetonitrile	75		9.427					ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.524					ND	
\$ 84 Toluene-d8 (Surr)	98	9.665	9.665	0.000	93	1890515	10.0	9.51	
85 Toluene	92		9.744					ND	
86 trans-1,3-Dichloropropene	75		10.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 104 1,3-Dichloropropene, Total	100		10.060					ND	7
105 Ethyl methacrylate	69		10.061					ND	
106 1,1,2-Trichloroethane	97		10.207					ND	7
107 Tetrachloroethene	166		10.293					ND	
108 1,3-Dichloropropane	76		10.366					ND	
109 2-Hexanone	43		10.414					ND	
110 n-Butyl acetate	43		10.530					ND	
111 Chlorodibromomethane	129		10.585					ND	
112 Ethylene Dibromide	107		10.695					ND	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	84	1624822	10.0	10.0	
114 1-Chlorohexane	91		11.134					ND	7
115 Chlorobenzene	112		11.152					ND	
116 1,1,1,2-Tetrachloroethane	131		11.231					ND	
118 Ethylbenzene	91		11.237					ND	
S 117 Xylenes, Total	106		11.245					ND	7
119 m-Xylene & p-Xylene	106		11.353					ND	
120 o-Xylene	106		11.676					ND	
121 Styrene	104		11.695					ND	
122 Bromoform	173		11.853					ND	
123 Isopropylbenzene	105		11.981					ND	
124 cis-1,4-Dichloro-2-butene	88		12.012					ND	
125 Cyclohexanone	55		12.042					ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.128	12.121	0.007	95	766703	10.0	9.50	
127 1,1,2,2-Tetrachloroethane	83		12.219					ND	
128 Bromobenzene	156		12.237					ND	
129 trans-1,4-Dichloro-2-butene	53		12.243					ND	
130 1,2,3-Trichloropropane	110		12.268					ND	
131 N-Propylbenzene	91		12.304					ND	7
132 2-Chlorotoluene	126		12.384					ND	
133 1,3,5-Trimethylbenzene	105		12.445					ND	
134 4-Chlorotoluene	126		12.475					ND	
135 tert-Butylbenzene	134		12.682					ND	
136 Pentachloroethane	167		12.713					ND	
137 1,2,4-Trimethylbenzene	105		12.725					ND	7
138 sec-Butylbenzene	105		12.847					ND	7
139 1,3-Dichlorobenzene	146		12.944					ND	7
140 4-Isopropyltoluene	119		12.951					ND	7
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	973274	10.0	10.0	
142 1,4-Dichlorobenzene	146		13.018					ND	7
143 1,2,3-Trimethylbenzene	120		13.030					ND	7
144 Benzyl chloride	126		13.091					ND	
145 p-Diethylbenzene	119	13.164	13.152	0.012	1	1661		0.009872	
146 n-Butylbenzene	92		13.243					ND	7
147 1,2-Dichlorobenzene	146		13.274					ND	7
148 Hexachloroethane	201		13.682					ND	
149 1,2-Dibromo-3-Chloropropane	155		13.816					ND	
150 1,3,5-Trichlorobenzene	180		13.938					ND	7
151 1,2,4-Trichlorobenzene	180		14.359					ND	7
152 Hexachlorobutadiene	225	14.444	14.444	0.000	84	2458		0.0560	
153 Naphthalene	128		14.542					ND	7
154 1,2,3-Trichlorobenzene	180	14.688	14.682	0.006	90	3077		0.0401	
155 2-Methylnaphthalene	142	15.310	15.298	0.012	77	5273		0.0600	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
156 tert-Butyl Formate	1		0.000					ND	
157 Dodecane	57		0.000					ND	
158 Pentane	43		0.000					ND	
159 1,1-Dichloroacetone	1		0.000					ND	
160 n-Decane	57		0.000					ND	
161 1-Bromo-3-Chloropropane	1		0.000					ND	
162 1-Chloropropane	1		0.000					ND	
163 Propene oxide	1		0.000					ND	
164 1,1-Dichloro-1-fluoroethane	1		0.000					ND	
165 Methylal	1		0.000					ND	
166 2-Bromo-1-chloropropane	1		0.000					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_LLcentISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X05.D

Injection Date: 27-Feb-2023 13:19:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: MB

Worklist Smp#: 6

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

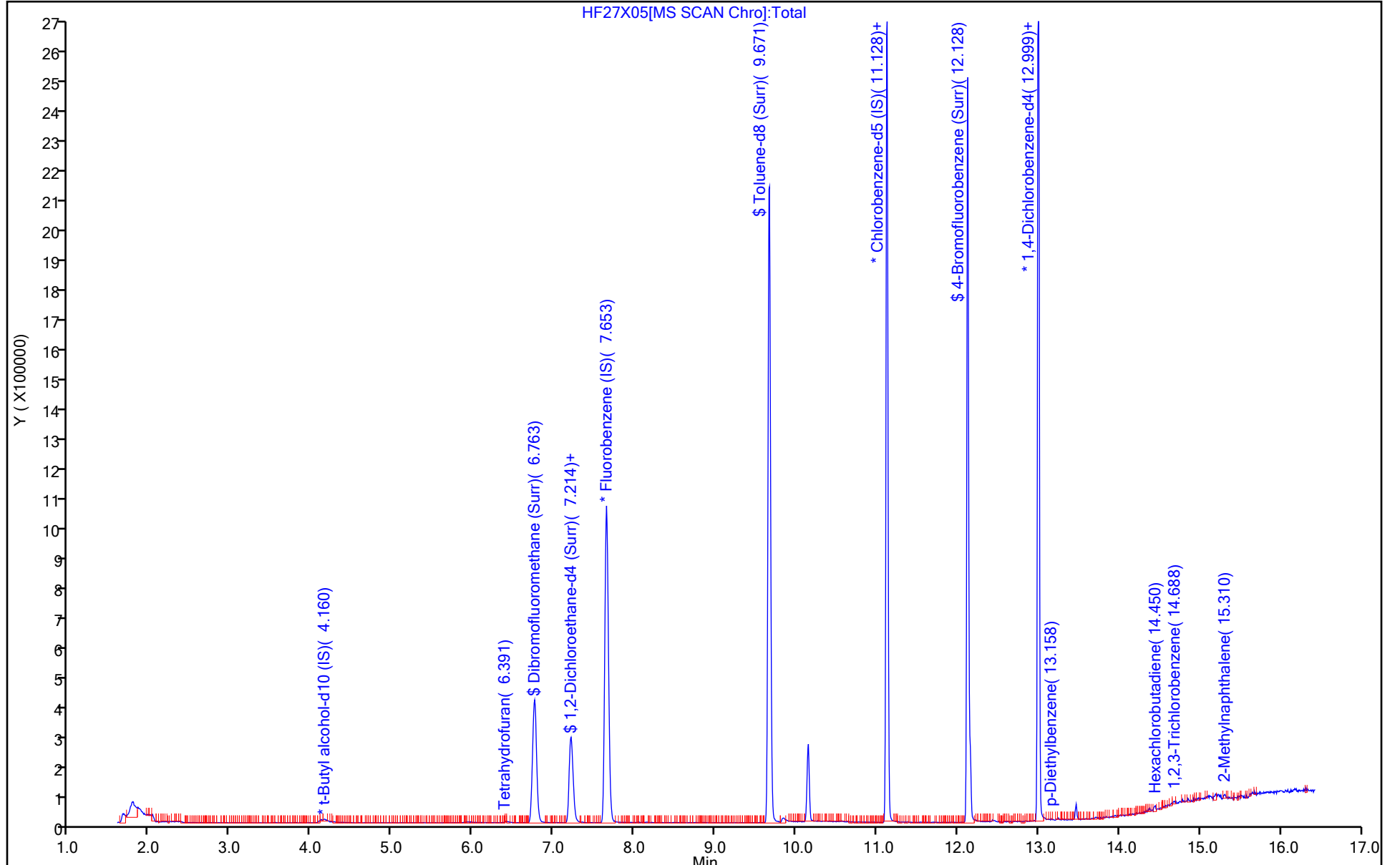
ALS Bottle#: 5

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X05.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 27-Feb-2023 13:19:30 ALS Bottle#: 5 Worklist Smp#: 6
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-006
 Misc. Info.: MB
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 10:44:17 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: DVW2

Date: 27-Feb-2023 14:07:49

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.5	105.24
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	101.07
\$ 84 Toluene-d8 (Surr)	10.0	9.51	95.11
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.50	95.01

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

Client Sample ID:

Lab Sample ID: MB 410-348577/13

Matrix: Water

Lab File ID: HF28X12.D

Analysis Method: 8260D

Date Collected:

Sample wt/vol: 25 (mL)

Date Analyzed: 02/28/2023 14:07

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.: 348577

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	ND		5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	0.150	J	1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1
Environment Testing, LLC

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: MB 410-348577/13

Matrix: Water Lab File ID: HF28X12.D

Analysis Method: 8260D Date Collected: _____

Sample wt/vol: 25 (mL) Date Analyzed: 02/28/2023 14:07

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.: 348577 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	ND		0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	109		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
 Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X12.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 28-Feb-2023 14:07:30 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077923-013
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Mar-2023 07:55:43 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1603

First Level Reviewer: DVW2 Date: 28-Feb-2023 14:31:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.886					ND	
2 Dichlorodifluoromethane	85		1.934					ND	
3 Chlorodifluoromethane	51		1.934					ND	
4 Dimethyl ether	45		2.001					ND	
5 Chloromethane	50		2.129					ND	
6 Butadiene	39		2.239					ND	7
7 Vinyl chloride	62		2.245					ND	
8 2-Chloro-1,1,1-Trifluoroethane	118		2.312					ND	
9 Bromomethane	94		2.568					ND	
10 Chloroethane	64		2.648					ND	
11 Dichlorofluoromethane	67		2.879					ND	
12 Trichlorofluoromethane	101		2.959					ND	
13 Ethanol	45		3.111					ND	
14 Ethyl ether	59		3.202					ND	
15 1,2-Dichloro-1,1,2-trifluoroethane	67		3.276					ND	
16 Acrolein	56		3.367					ND	
18 1,1-Dichloroethene	96		3.507					ND	
19 Acetone	43		3.532					ND	7
20 1,1,2-Trichloro-1,2,2-trifluoroethane	101		3.544					ND	
21 Isopropyl alcohol	45		3.660					ND	
22 Iodomethane	142		3.696					ND	
23 Ethyl bromide	108		3.727					ND	
24 Carbon disulfide	76	3.812	3.806	0.006	99	18506		0.1499	
26 Acetonitrile	41		3.897					ND	
25 Methyl acetate	43		3.946					ND	
27 3-Chloro-1-propene	41		3.977					ND	
* 29 t-Butyl alcohol-d10 (IS)	65	4.160	4.153	0.007	19	104698	50.0	50.0	
28 Methylene Chloride	84		4.160					ND	
31 2-Methyl-2-propanol	59		4.288					ND	U
32 Acrylonitrile	53		4.495					ND	
33 Methyl tert-butyl ether	73		4.562					ND	
34 trans-1,2-Dichloroethene	96		4.586					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
35 Hexane	57		5.007					ND	
36 Vinyl acetate	43		5.214					ND	
37 1,1-Dichloroethane	63		5.239					ND	
38 Isopropyl ether	45		5.300					ND	
39 2-Chloro-1,3-butadiene	53		5.348					ND	
41 Tert-butyl ethyl ether	59		5.830					ND	
42 2-Butanone (MEK)	43		6.019					ND	
43 cis-1,2-Dichloroethene	96		6.068					ND	
44 2,2-Dichloropropane	77		6.080					ND	
45 Propionitrile	54		6.098					ND	
46 Ethyl acetate	43		6.098					ND	
S 47 1,2-Dichloroethene, Total	100		6.155					ND	7
48 Methacrylonitrile	67		6.324					ND	
49 Chlorobromomethane	128		6.397					ND	
50 Tetrahydrofuran	71		6.409					ND	U
51 Methyl acrylate	55		6.482					ND	
52 Chloroform	83		6.549					ND	
\$ 53 Dibromofluoromethane (Surr)	113	6.757	6.763	-0.006	94	491367	10.0	10.9	
54 1,1,1-Trichloroethane	97		6.781					ND	
55 Cyclohexane	56		6.879					ND	
56 1,1-Dichloropropene	75		6.994					ND	
57 Carbon tetrachloride	117		6.994					ND	
58 Isobutyl alcohol	41		7.122					ND	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.208	7.208	0.000	52	88868	10.0	10.8	M
61 1-Chlorobutane	56		7.250					ND	
60 Benzene	78		7.250					ND	
62 1,2-Dichloroethane	62		7.317					ND	7
63 Isopropyl acetate	43		7.324					ND	
64 Tert-amyl methyl ether	73		7.445					ND	
* 65 Fluorobenzene (IS)	96	7.653	7.659	-0.006	99	1773499	10.0	10.0	
66 n-Heptane	43		7.677					ND	7
67 t-Amyl alcohol	73		7.842					ND	
68 n-Butanol	56		8.006					ND	
69 Trichloroethene	95		8.134					ND	
70 Methylcyclohexane	83		8.445					ND	
71 1,2-Dichloropropane	63		8.464					ND	
72 2-ethoxy-2-methyl butane	87		8.476					ND	
74 Methyl methacrylate	69		8.543					ND	
73 1,4-Dioxane	88		8.555					ND	
75 Dibromomethane	93		8.573					ND	
76 n-Propyl acetate	61		8.622					ND	
77 Dichlorobromomethane	83		8.811					ND	
78 2-Nitropropane	41		9.073					ND	
79 2-Chloroethyl vinyl ether	63		9.171					ND	
80 1-Bromo-2-chloroethane	63		9.201					ND	
81 cis-1,3-Dichloropropene	75		9.360					ND	
82 Chloroacetonitrile	75		9.427					ND	
83 4-Methyl-2-pentanone (MIBK)	43		9.524					ND	
\$ 84 Toluene-d8 (Surr)	98	9.665	9.671	-0.006	93	2008751	10.0	9.39	
85 Toluene	92		9.744					ND	7
86 trans-1,3-Dichloropropene	75		10.006					ND	
S 104 1,3-Dichloropropene, Total	100		10.060					ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 Ethyl methacrylate	69		10.067					ND	
106 1,1,2-Trichloroethane	97		10.207					ND	7
107 Tetrachloroethene	166		10.299					ND	
108 1,3-Dichloropropane	76		10.366					ND	
109 2-Hexanone	43		10.421					ND	
110 n-Butyl acetate	43		10.530					ND	
111 Chlorodibromomethane	129		10.585					ND	
112 Ethylene Dibromide	107		10.695					ND	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	85	1749269	10.0	10.0	
114 1-Chlorohexane	91		11.134					ND	7
115 Chlorobenzene	112		11.152					ND	7
116 1,1,1,2-Tetrachloroethane	131		11.237					ND	
118 Ethylbenzene	91		11.237					ND	
S 117 Xylenes, Total	106		11.245					ND	7
119 m-Xylene & p-Xylene	106		11.353					ND	
120 o-Xylene	106		11.682					ND	
121 Styrene	104		11.695					ND	
122 Bromoform	173		11.853					ND	
123 Isopropylbenzene	105		11.981					ND	
124 cis-1,4-Dichloro-2-butene	88		12.012					ND	
125 Cyclohexanone	55		12.042					ND	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.127	12.127	0.000	93	819751	10.0	9.44	
127 1,1,2,2-Tetrachloroethane	83		12.225					ND	
128 Bromobenzene	156		12.243					ND	
129 trans-1,4-Dichloro-2-butene	53		12.249					ND	
130 1,2,3-Trichloropropane	110		12.268					ND	
131 N-Propylbenzene	91		12.310					ND	
132 2-Chlorotoluene	126		12.384					ND	
133 1,3,5-Trimethylbenzene	105		12.445					ND	
134 4-Chlorotoluene	126		12.475					ND	
135 tert-Butylbenzene	134		12.682					ND	
136 Pentachloroethane	167		12.719					ND	
137 1,2,4-Trimethylbenzene	105		12.725					ND	
138 sec-Butylbenzene	105		12.847					ND	7
139 1,3-Dichlorobenzene	146		12.944					ND	7
140 4-Isopropyltoluene	119		12.951					ND	7
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1019735	10.0	10.0	
142 1,4-Dichlorobenzene	146		13.018					ND	7
143 1,2,3-Trimethylbenzene	120		13.030					ND	7
144 Benzyl chloride	126		13.097					ND	7
145 p-Diethylbenzene	119		13.152					ND	U
146 n-Butylbenzene	92		13.243					ND	7
147 1,2-Dichlorobenzene	146		13.274					ND	
148 Hexachloroethane	201		13.682					ND	
149 1,2-Dibromo-3-Chloropropane	155		13.816					ND	
150 1,3,5-Trichlorobenzene	180		13.944					ND	7
151 1,2,4-Trichlorobenzene	180		14.365					ND	7
152 Hexachlorobutadiene	225		14.444					ND	7
153 Naphthalene	128		14.542					ND	7
154 1,2,3-Trichlorobenzene	180		14.682					ND	7
155 2-Methylnaphthalene	142		15.298					ND	U
156 tert-Butyl Formate	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
157 Dodecane	57		0.000						ND
158 Pentane	43		0.000						ND
159 1,1-Dichloroacetone	1		0.000						ND
160 n-Decane	57		0.000						ND
161 1-Bromo-3-Chloropropane	1		0.000						ND
162 1-Chloropropane	1		0.000						ND
163 Propene oxide	1		0.000						ND
164 1,1-Dichloro-1-fluoroethane	1		0.000						ND
165 Methylal	1		0.000						ND
166 2-Bromo-1-chloropropane	1		0.000						ND

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

MSV_LLcentISS_00006

Amount Added: 5.00

Units: uL

Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X12.D

Injection Date: 28-Feb-2023 14:07:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: MB

Worklist Smp#: 13

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

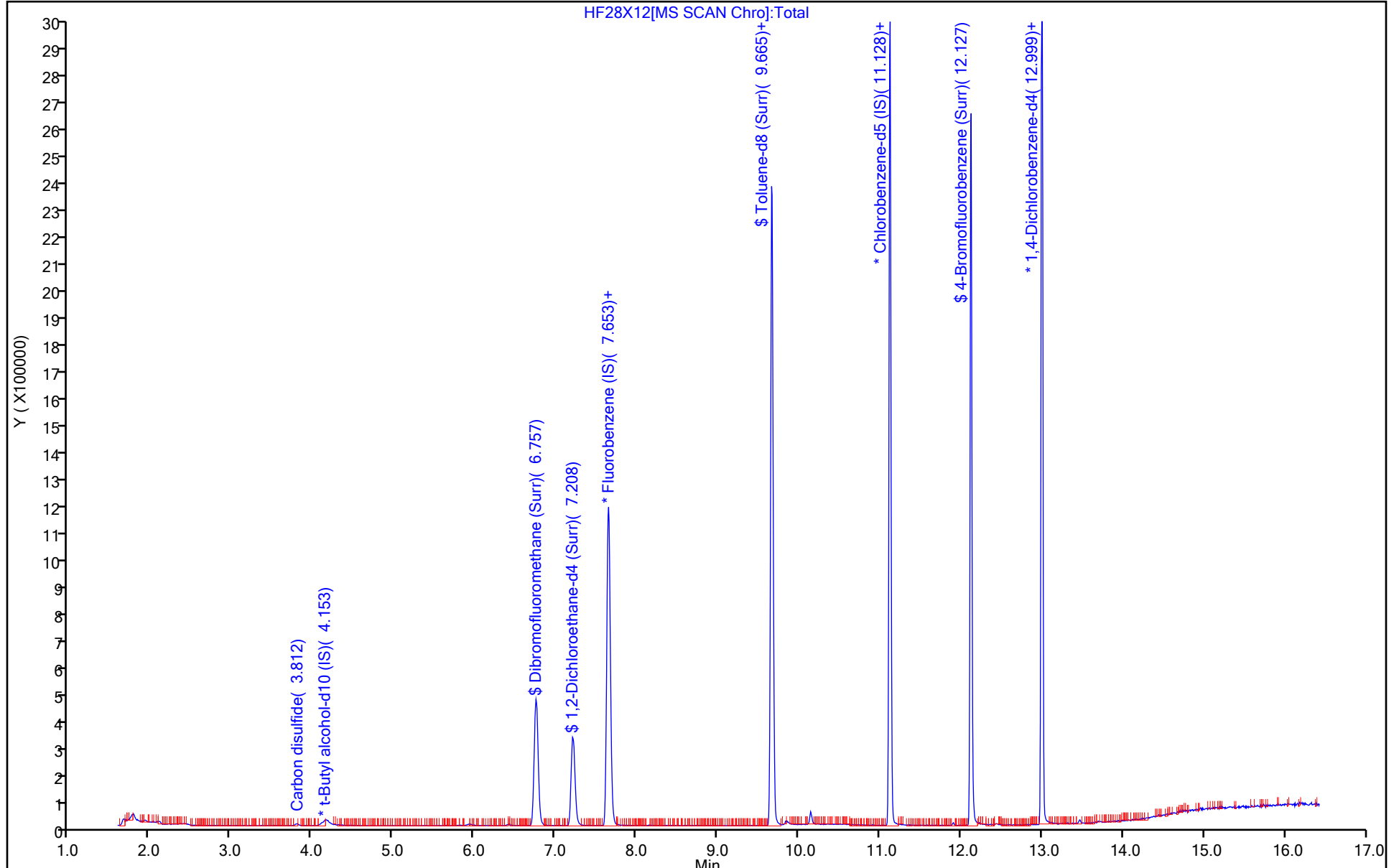
ALS Bottle#: 12

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X12.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 28-Feb-2023 14:07:30 ALS Bottle#: 12 Worklist Smp#: 13
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077923-013
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 01-Mar-2023 07:55:43 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1603

First Level Reviewer: DVW2

Date: 28-Feb-2023 14:31:05

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.9	109.46
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.8	108.49
\$ 84 Toluene-d8 (Surr)	10.0	9.39	93.87
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.44	94.36

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X12.D

Injection Date: 28-Feb-2023 14:07:30

Instrument ID: 19094

Lims ID: MB

Client ID:

Operator ID: knk41612

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

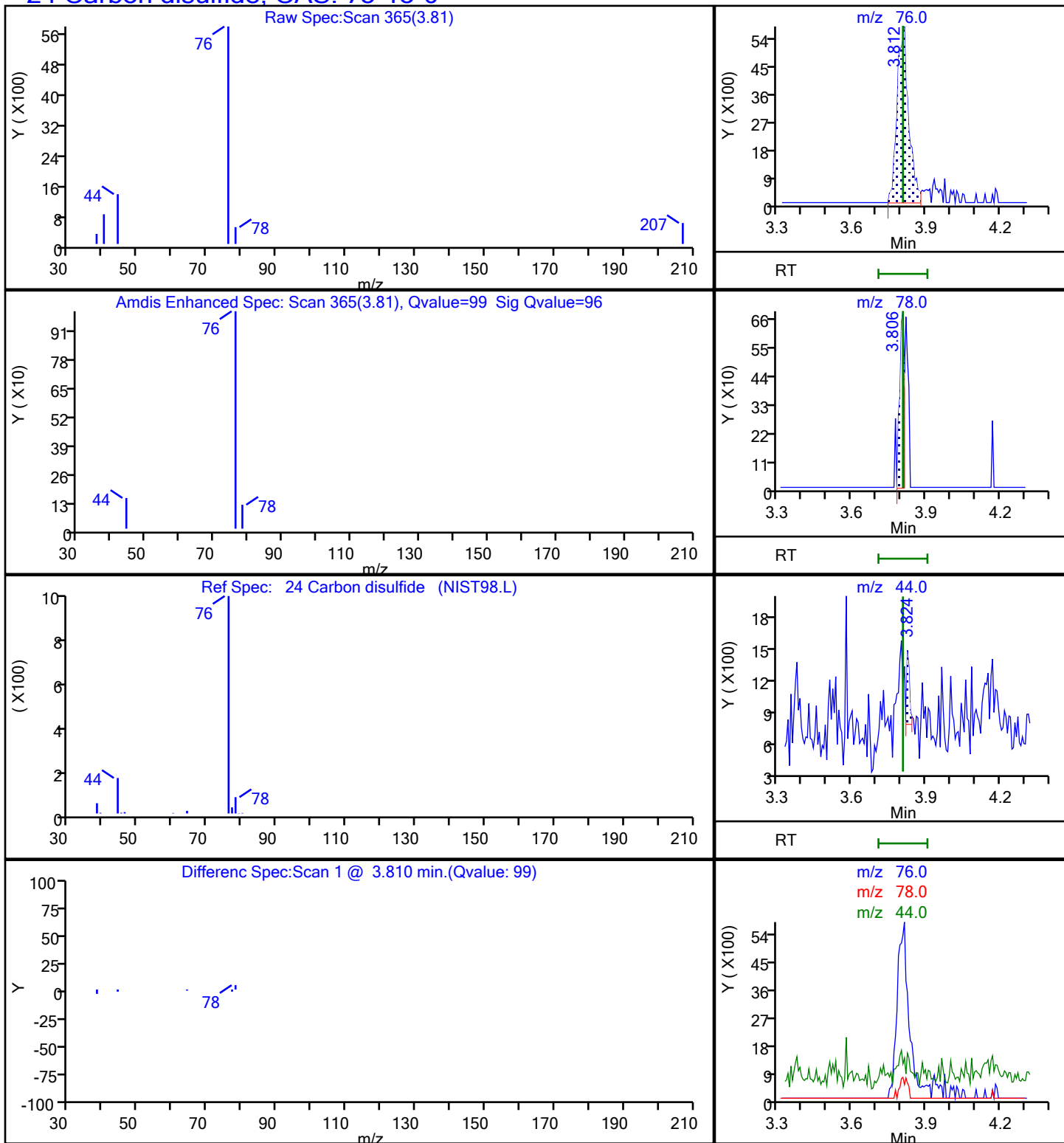
Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

MS Quad

24 Carbon disulfide, CAS: 75-15-0



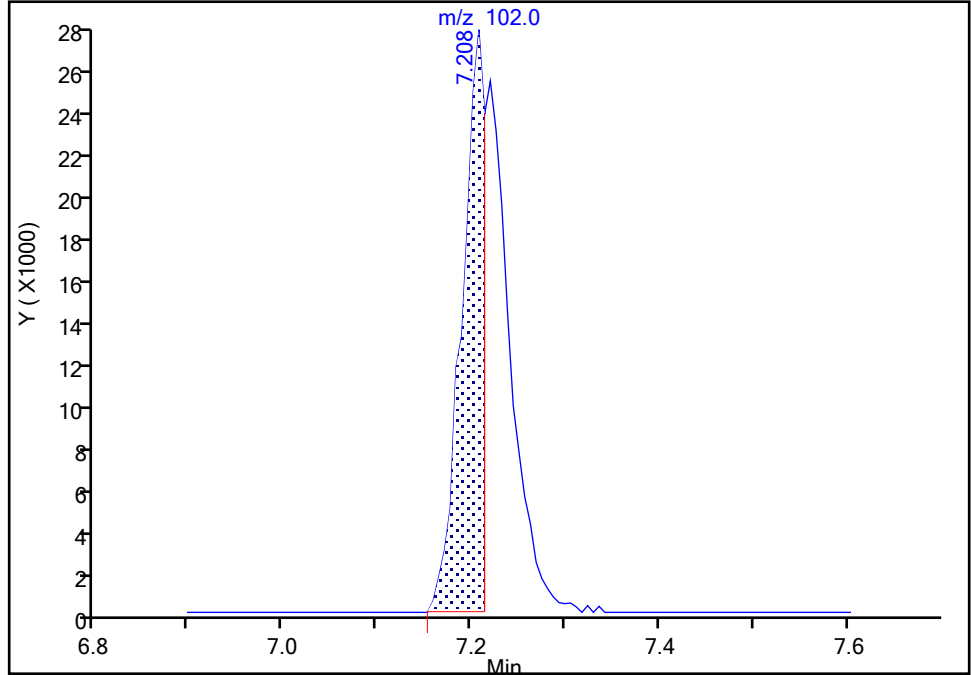
Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X12.D
Injection Date: 28-Feb-2023 14:07:30 Instrument ID: 19094
Lims ID: MB
Client ID:
Operator ID: knk41612 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

\$ 59 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0
Signal: 1

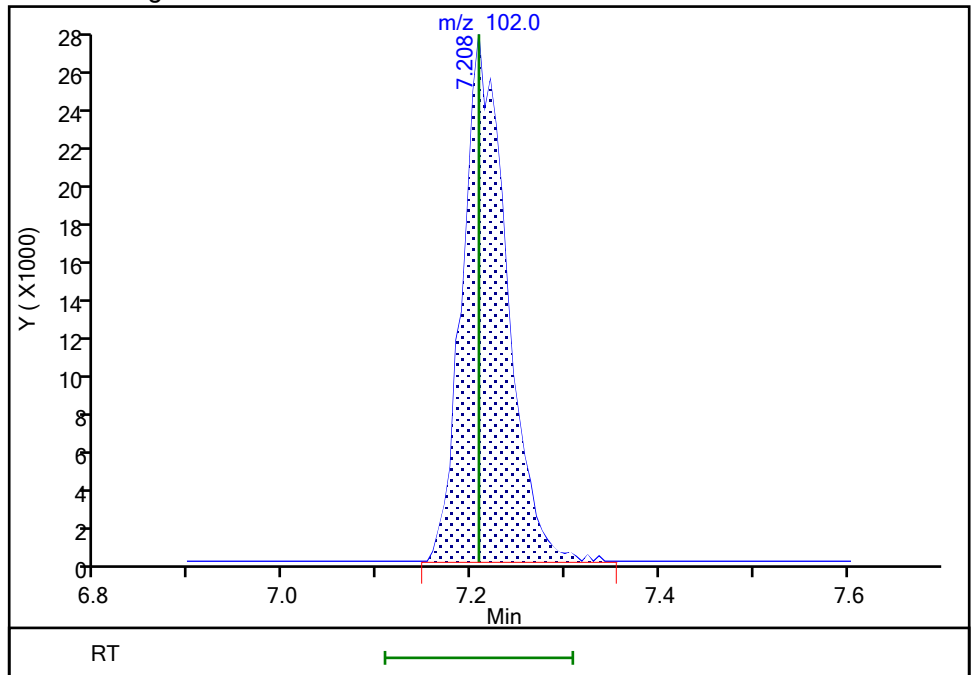
RT: 7.21
Area: 46695
Amount: 5.700759
Amount Units: ug/l

Processing Integration Results



RT: 7.21
Area: 88868
Amount: 10.849450
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 28-Feb-2023 14:30:38
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.: 410-116393-1

SDG No.:

Client Sample ID:

Lab Sample ID: LCS 410-348233/4

Matrix: Water

Lab File ID: HF27X03.D

Analysis Method: 8260D

Date Collected:

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 12:38

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.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.99		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.58		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	4.13		0.50	0.10
79-00-5	1,1,2-Trichloroethane	4.63		0.50	0.080
75-34-3	1,1-Dichloroethane	5.11		0.50	0.10
75-35-4	1,1-Dichloroethene	5.23		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	4.71		0.50	0.080
107-06-2	1,2-Dichloroethane	5.52		0.50	0.070
78-87-5	1,2-Dichloropropane	4.69		0.50	0.10
78-93-3	2-Butanone (MEK)	60.4		5.0	1.0
591-78-6	2-Hexanone	75.6		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	65.4		5.0	1.0
67-64-1	Acetone	55.2		5.0	1.0
71-43-2	Benzene	5.04		0.50	0.10
74-97-5	Bromochloromethane	5.53		0.50	0.080
75-27-4	Bromodichloromethane	5.32		0.50	0.080
75-25-2	Bromoform	4.87		1.0	0.30
74-83-9	Bromomethane	5.17		0.50	0.10
75-15-0	Carbon disulfide	5.90		1.0	0.10
56-23-5	Carbon tetrachloride	5.65		0.50	0.10
108-90-7	Chlorobenzene	4.87		0.50	0.070
75-00-3	Chloroethane	5.16		0.50	0.10
67-66-3	Chloroform	5.32		0.50	0.090
74-87-3	Chloromethane	5.28		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	5.31		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	5.13		0.50	0.10
124-48-1	Dibromochloromethane	5.02		0.50	0.080
100-41-4	Ethylbenzene	4.56		0.50	0.080
1634-04-4	Methyl tert-butyl ether	5.15		0.50	0.080
75-09-2	Methylene Chloride	5.06		0.50	0.10
100-42-5	Styrene	4.57		0.50	0.070
127-18-4	Tetrachloroethene	5.05		0.50	0.20
108-88-3	Toluene	4.73		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1
Environment Testing, LLC

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCS 410-348233/4

Matrix: Water Lab File ID: HF27X03.D

Analysis Method: 8260D Date Collected: _____

Sample wt/vol: 25 (mL) Date Analyzed: 02/27/2023 12:38

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.: 348233 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	5.49		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	4.93		0.50	0.080
79-01-6	Trichloroethene	5.13		0.50	0.080
75-01-4	Vinyl chloride	5.38		0.50	0.10
1330-20-7	Xylenes, Total	14.6		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		80-120
460-00-4	4-Bromofluorobenzene (Surr)	92		80-120
1868-53-7	Dibromofluoromethane (Surr)	107		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X03.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 27-Feb-2023 12:38:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-004
 Misc. Info.: LCS
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 27-Feb-2023 13:10:23 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1617

First Level Reviewer: DVW2

Date: 27-Feb-2023 13:10:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.922	1.941	-0.019	99	306834	5.00	5.76	
5 Chloromethane	50	2.117	2.130	-0.013	99	352857	5.00	5.28	
6 Butadiene	39	2.233	2.239	-0.006	90	298994	5.00	4.74	
7 Vinyl chloride	62	2.239	2.245	-0.006	87	355663	5.00	5.38	
9 Bromomethane	94	2.556	2.568	-0.012	91	240290	5.00	5.17	
10 Chloroethane	64	2.641	2.648	-0.007	99	207125	5.00	5.16	
11 Dichlorofluoromethane	67	2.867	2.873	-0.006	97	474226	5.00	5.33	
12 Trichlorofluoromethane	101	2.946	2.959	-0.013	98	409557	5.00	5.11	
14 Ethyl ether	59	3.190	3.202	-0.012	92	142214	4.99	4.25	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.276	3.276	0.000	91	299454	5.00	4.80	
18 1,1-Dichloroethene	96	3.501	3.507	-0.006	98	236865	5.00	5.23	
19 Acetone	43	3.525	3.532	-0.007	73	257228	62.5	55.2	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.538	3.544	-0.006	93	240466	5.00	5.45	
21 Isopropyl alcohol	45	3.702	3.684	0.018	25	29540	37.5	26.1	
22 Iodomethane	142	3.696	3.702	-0.006	98	457769	5.00	5.82	
24 Carbon disulfide	76	3.800	3.806	-0.006	99	714844	5.00	5.90	
25 Methyl acetate	43	3.946	3.940	0.006	98	67065	5.00	5.44	M
27 3-Chloro-1-propene	41	3.970	3.977	-0.007	90	349313	5.00	4.45	
28 Methylene Chloride	84	4.153	4.160	-0.007	90	236997	5.00	5.06	
* 29 t-Butyl alcohol-d10 (IS)	65	4.129	4.166	-0.037	97	72831	50.0	50.0	
31 2-Methyl-2-propanol	59	4.263	4.275	-0.012	98	73976	50.0	46.9	
32 Acrylonitrile	53	4.476	4.483	-0.007	98	166322	25.0	26.4	
33 Methyl tert-butyl ether	73	4.556	4.556	0.000	95	520705	5.00	5.15	
34 trans-1,2-Dichloroethene	96	4.580	4.580	0.000	100	275902	5.00	5.49	
35 Hexane	57	5.007	5.013	-0.006	91	352829	5.00	5.02	
37 1,1-Dichloroethane	63	5.226	5.233	-0.007	96	480371	5.00	5.11	
38 Isopropyl ether	45	5.287	5.294	-0.007	94	719452	5.00	4.50	
39 2-Chloro-1,3-butadiene	53	5.342	5.348	-0.006	90	401275	5.00	5.23	
41 Tert-butyl ethyl ether	59	5.818	5.824	-0.006	99	650915	5.00	4.60	
42 2-Butanone (MEK)	43	6.019	6.013	0.006	99	489643	62.5	60.4	
43 cis-1,2-Dichloroethene	96	6.062	6.068	-0.006	82	293252	5.00	5.31	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2,2-Dichloropropane	77	6.080	6.074	0.006	85	454845	5.00	5.78	
45 Propionitrile	54	6.116	6.104	0.012	55	72402	37.5	34.8	
48 Methacrylonitrile	67	6.318	6.318	0.000	89	354527	37.5	39.5	
49 Chlorobromomethane	128	6.391	6.397	-0.006	89	121977	5.00	5.53	
50 Tetrahydrofuran	71	6.397	6.409	-0.012	73	61644	25.0	26.6	
52 Chloroform	83	6.549	6.543	0.006	93	471343	5.00	5.32	
\$ 53 Dibromofluoromethane (Surr)	113	6.757	6.763	-0.006	94	472601	10.0	10.7	
54 1,1,1-Trichloroethane	97	6.775	6.769	0.006	98	460608	5.00	5.58	
55 Cyclohexane	56	6.878	6.879	-0.001	88	418080	5.00	4.47	
56 1,1-Dichloropropene	75	6.988	6.988	0.000	96	389617	5.00	5.22	
57 Carbon tetrachloride	117	6.988	6.988	0.000	96	403365	5.00	5.65	
58 Isobutyl alcohol	41	7.122	7.116	0.006	92	50653	125.0	98.6	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.214	7.220	-0.006	84	83369	10.0	10.4	
60 Benzene	78	7.250	7.250	0.000	96	1095454	5.00	5.04	
62 1,2-Dichloroethane	62	7.311	7.324	-0.013	96	260341	5.00	5.52	
64 Tert-amyl methyl ether	73	7.439	7.439	0.000	99	589866	5.00	4.89	
* 65 Fluorobenzene (IS)	96	7.653	7.653	0.000	99	1740341	10.0	10.0	
66 n-Heptane	43	7.665	7.671	-0.006	92	282481	5.00	3.67	
68 n-Butanol	56	8.006	8.006	0.000	86	104901	250.0	238.7	
69 Trichloroethene	95	8.134	8.134	0.000	97	293980	5.00	5.13	
70 Methylcyclohexane	83	8.445	8.445	0.000	91	444044	5.00	4.59	
71 1,2-Dichloropropane	63	8.464	8.464	0.000	90	255764	5.00	4.69	
72 2-ethoxy-2-methyl butane	87	8.470	8.470	0.000	93	386305	5.00	5.05	
74 Methyl methacrylate	69	8.549	8.543	0.006	87	86313	5.00	4.83	
73 1,4-Dioxane	88	8.549	8.555	-0.006	31	20426	125.0	178.9	M
75 Dibromomethane	93	8.573	8.579	-0.006	94	115188	5.00	5.07	
77 Dichlorobromomethane	83	8.805	8.805	0.000	99	326530	5.00	5.32	
78 2-Nitropropane	41	9.067	9.067	0.000	99	26064	5.00	5.88	
80 1-Bromo-2-chloroethane	63	9.201	9.195	0.006	98	249083	5.00	4.96	
81 cis-1,3-Dichloropropene	75	9.354	9.360	-0.006	97	395573	5.00	5.13	
83 4-Methyl-2-pentanone (MIBK)	43	9.524	9.524	0.000	96	1435762	62.5	65.4	
\$ 84 Toluene-d8 (Surr)	98	9.664	9.665	-0.001	93	2271952	10.0	9.72	
85 Toluene	92	9.744	9.744	0.000	99	821096	5.00	4.73	
86 trans-1,3-Dichloropropene	75	10.000	10.000	0.000	92	364498	5.00	4.93	
105 Ethyl methacrylate	69	10.067	10.061	0.006	89	225372	5.00	3.98	
106 1,1,2-Trichloroethane	97	10.201	10.207	-0.006	91	190492	5.00	4.63	
107 Tetrachloroethene	166	10.299	10.293	0.006	98	405083	5.00	5.05	
108 1,3-Dichloropropane	76	10.366	10.366	0.000	89	322976	5.00	4.55	
109 2-Hexanone	43	10.414	10.414	0.000	97	1101871	62.5	75.6	
111 Chlorodibromomethane	129	10.585	10.585	0.000	89	255406	5.00	5.02	
112 Ethylene Dibromide	107	10.695	10.695	0.000	100	177652	5.00	4.71	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	84	1910678	10.0	10.0	
114 1-Chlorohexane	91	11.134	11.134	0.000	95	459551	5.00	4.28	
115 Chlorobenzene	112	11.152	11.152	0.000	95	901804	5.00	4.87	
116 1,1,1,2-Tetrachloroethane	131	11.231	11.231	0.000	95	316772	5.00	4.99	
118 Ethylbenzene	91	11.237	11.237	0.000	98	1546853	5.00	4.56	
119 m-Xylene & p-Xylene	106	11.353	11.353	0.000	99	1274204	10.0	9.85	
120 o-Xylene	106	11.682	11.676	0.006	96	597628	5.00	4.78	
121 Styrene	104	11.695	11.695	0.000	94	927657	5.00	4.57	
122 Bromoform	173	11.853	11.853	0.000	97	142911	5.00	4.87	
123 Isopropylbenzene	105	11.981	11.981	0.000	95	1578269	5.00	4.67	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	94	872636	10.0	9.20	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,1,2,2-Tetrachloroethane	83	12.219	12.219	0.000	94	197167	5.00	4.13	
128 Bromobenzene	156	12.243	12.237	0.006	95	342407	5.00	4.80	
129 trans-1,4-Dichloro-2-butene	53	12.249	12.243	0.006	89	243846	25.0	32.1	
130 1,2,3-Trichloropropane	110	12.268	12.268	0.000	81	53309	5.00	4.45	
131 N-Propylbenzene	91	12.310	12.304	0.006	98	1705896	5.00	4.29	
132 2-Chlorotoluene	126	12.383	12.384	-0.001	98	344997	5.00	4.50	
133 1,3,5-Trimethylbenzene	105	12.444	12.445	-0.001	96	1173452	5.00	4.23	
134 4-Chlorotoluene	126	12.475	12.475	0.000	97	359964	5.00	4.68	
135 tert-Butylbenzene	134	12.682	12.682	0.000	92	254482	5.00	4.14	
137 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	1171071	5.00	4.18	
138 sec-Butylbenzene	105	12.847	12.847	0.000	94	1499195	5.00	4.12	
139 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	665374	5.00	4.50	
140 4-Isopropyltoluene	119	12.950	12.951	-0.001	97	1311656	5.00	4.21	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	93	1042176	10.0	10.0	
142 1,4-Dichlorobenzene	146	13.018	13.018	0.000	95	660101	5.00	4.50	
143 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	97	524943	5.00	4.39	
144 Benzyl chloride	126	13.097	13.091	0.006	98	85294	5.00	4.40	
145 p-Diethylbenzene	119	13.152	13.152	0.000	92	738735	5.00	4.10	
146 n-Butylbenzene	92	13.243	13.243	0.000	96	606512	5.00	3.85	
147 1,2-Dichlorobenzene	146	13.280	13.274	0.006	99	579339	5.00	4.42	
149 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	89	24885	5.00	3.95	
150 1,3,5-Trichlorobenzene	180	13.944	13.938	0.006	97	482872	5.00	4.20	
151 1,2,4-Trichlorobenzene	180	14.359	14.359	0.000	94	388605	5.00	4.01	
152 Hexachlorobutadiene	225	14.444	14.444	0.000	94	145080	5.00	3.09	
153 Naphthalene	128	14.542	14.542	0.000	96	565189	5.00	3.62	
154 1,2,3-Trichlorobenzene	180	14.682	14.682	0.000	96	312367	5.00	3.80	
155 2-Methylnaphthalene	142	15.298	15.298	0.000	93	244261	5.00	2.59	
158 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_QC_Gas826_00128	Amount Added: 12.50	Units: uL	
MSV_LCS_VOC#1_00097	Amount Added: 12.50	Units: uL	
MSV_LCS_EE_00004	Amount Added: 12.50	Units: uL	
MSV_LLcentISS_00006	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X03.D

Injection Date: 27-Feb-2023 12:38:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: LCS

Worklist Smp#: 4

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

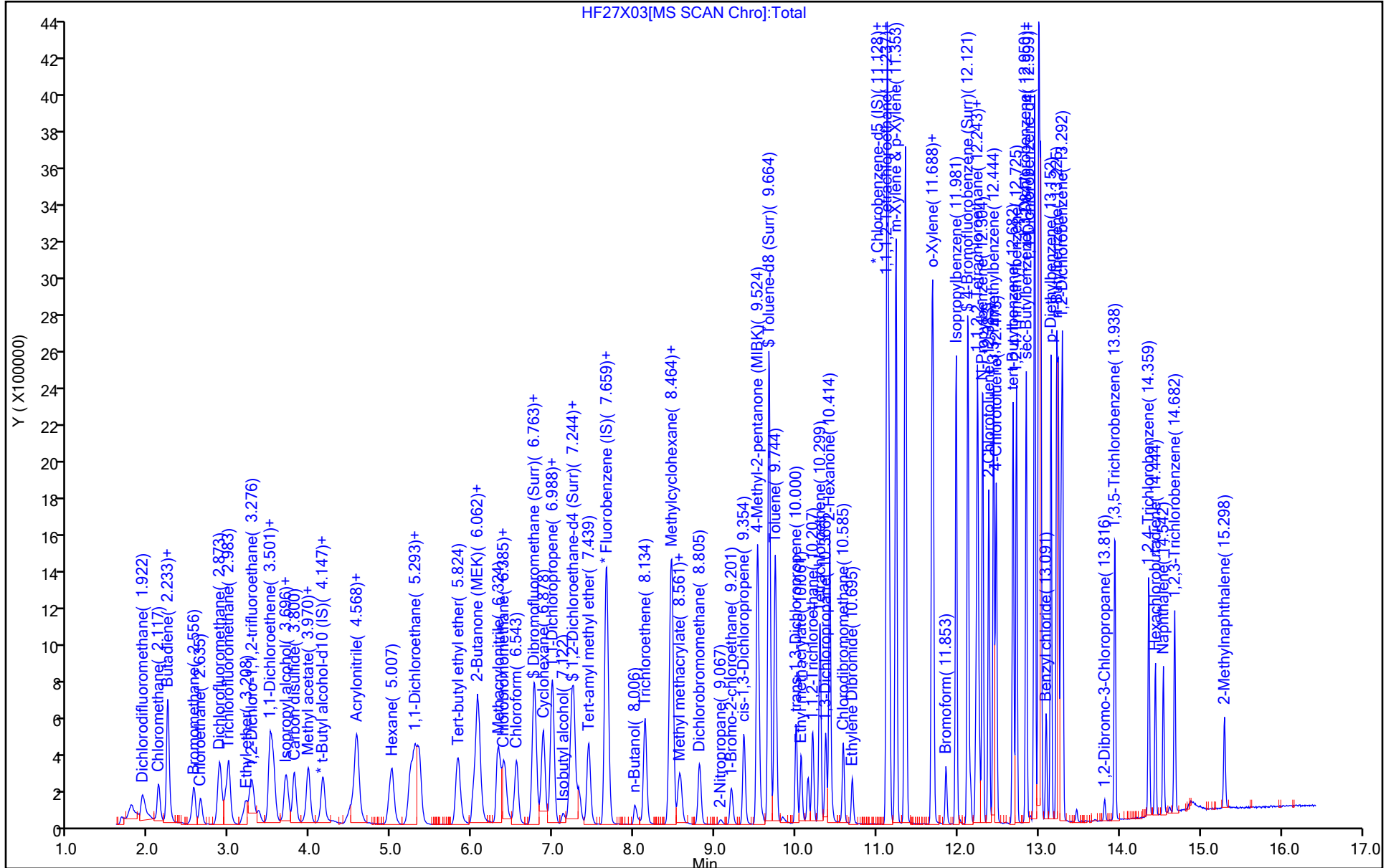
ALS Bottle#: 3

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



HF27X03[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X03.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 27-Feb-2023 12:38:30 ALS Bottle#: 3 Worklist Smp#: 4
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-004
 Misc. Info.: LCS
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 27-Feb-2023 13:10:23 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1617

First Level Reviewer: DVW2

Date: 27-Feb-2023 13:10:07

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.7	107.29
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	103.72
\$ 84 Toluene-d8 (Surr)	10.0	9.72	97.20
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.20	91.96

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

Client Sample ID:

Lab Sample ID: LCS 410-348577/8

Matrix: Water

Lab File ID: HF28X07.D

Analysis Method: 8260D

Date Collected:

Sample wt/vol: 25 (mL)

Date Analyzed: 02/28/2023 12:24

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.: 348577

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.32		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.75		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	4.60		0.50	0.10
79-00-5	1,1,2-Trichloroethane	4.91		0.50	0.080
75-34-3	1,1-Dichloroethane	5.47		0.50	0.10
75-35-4	1,1-Dichloroethene	5.42		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	5.12		0.50	0.080
107-06-2	1,2-Dichloroethane	6.10		0.50	0.070
78-87-5	1,2-Dichloropropane	5.32		0.50	0.10
78-93-3	2-Butanone (MEK)	63.1		5.0	1.0
591-78-6	2-Hexanone	64.7		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	62.9		5.0	1.0
67-64-1	Acetone	57.4		5.0	1.0
71-43-2	Benzene	5.48		0.50	0.10
74-97-5	Bromochloromethane	5.86		0.50	0.080
75-27-4	Bromodichloromethane	5.70		0.50	0.080
75-25-2	Bromoform	5.15		1.0	0.30
74-83-9	Bromomethane	5.28		0.50	0.10
75-15-0	Carbon disulfide	6.00		1.0	0.10
56-23-5	Carbon tetrachloride	5.78		0.50	0.10
108-90-7	Chlorobenzene	5.29		0.50	0.070
75-00-3	Chloroethane	5.25		0.50	0.10
67-66-3	Chloroform	5.65		0.50	0.090
74-87-3	Chloromethane	5.87		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	5.68		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	5.26		0.50	0.10
124-48-1	Dibromochloromethane	5.37		0.50	0.080
100-41-4	Ethylbenzene	4.87		0.50	0.080
1634-04-4	Methyl tert-butyl ether	5.29		0.50	0.080
75-09-2	Methylene Chloride	5.53		0.50	0.10
100-42-5	Styrene	5.01		0.50	0.070
127-18-4	Tetrachloroethene	5.18		0.50	0.20
108-88-3	Toluene	4.92		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1
Environment Testing, LLC

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCS 410-348577/8

Matrix: Water Lab File ID: HF28X07.D

Analysis Method: 8260D Date Collected: _____

Sample wt/vol: 25 (mL) Date Analyzed: 02/28/2023 12:24

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.: 348577 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	5.44		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	5.14		0.50	0.080
79-01-6	Trichloroethene	5.43		0.50	0.080
75-01-4	Vinyl chloride	5.42		0.50	0.10
1330-20-7	Xylenes, Total	15.5		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	107		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X07.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 28-Feb-2023 12:24:30 ALS Bottle#: 7 Worklist Smp#: 8
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077923-008
 Misc. Info.: LCSD SM
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 13:07:00 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1673

First Level Reviewer: DVW2

Date: 28-Feb-2023 13:04:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.934	1.934	0.000	99	334593	5.00	5.72	
5 Chloromethane	50	2.123	2.129	-0.006	99	429974	5.00	5.87	
6 Butadiene	39	2.239	2.239	0.000	91	406730	5.00	5.88	
7 Vinyl chloride	62	2.245	2.245	0.000	87	392968	5.00	5.42	
9 Bromomethane	94	2.568	2.568	0.000	91	268849	5.00	5.28	
10 Chloroethane	64	2.648	2.648	0.000	100	231039	5.00	5.25	
11 Dichlorofluoromethane	67	2.873	2.879	-0.006	97	556538	5.00	5.70	
12 Trichlorofluoromethane	101	2.965	2.959	0.006	96	440416	5.00	5.01	
14 Ethyl ether	59	3.202	3.202	0.000	91	163173	4.99	4.44	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.269	3.276	-0.007	92	350521	5.00	5.12	
18 1,1-Dichloroethene	96	3.501	3.507	-0.006	98	268817	5.00	5.42	
19 Acetone	43	3.532	3.532	0.000	85	346684	62.5	57.4	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.544	3.544	0.000	91	257297	5.00	5.32	
21 Isopropyl alcohol	45	3.678	3.660	0.018	25	28081	37.5	22.9	
22 Iodomethane	142	3.696	3.696	0.000	98	499861	5.00	5.79	
24 Carbon disulfide	76	3.806	3.806	0.000	99	796524	5.00	6.00	
25 Methyl acetate	43	3.940	3.946	-0.006	92	84765	5.00	5.30	
27 3-Chloro-1-propene	41	3.977	3.977	0.000	92	431538	5.00	5.01	
* 29 t-Butyl alcohol-d10 (IS)	65	4.172	4.153	0.019	99	94442	50.0	50.0	
28 Methylene Chloride	84	4.153	4.160	-0.007	92	284067	5.00	5.53	
31 2-Methyl-2-propanol	59	4.281	4.288	-0.007	89	87927	50.0	43.0	
32 Acrylonitrile	53	4.495	4.495	0.000	98	221720	25.0	27.2	
33 Methyl tert-butyl ether	73	4.562	4.562	0.000	94	587002	5.00	5.29	
34 trans-1,2-Dichloroethene	96	4.580	4.586	-0.006	98	300009	5.00	5.44	
35 Hexane	57	5.001	5.007	-0.006	92	335995	5.00	4.36	
37 1,1-Dichloroethane	63	5.239	5.239	0.000	96	563561	5.00	5.47	
38 Isopropyl ether	45	5.299	5.300	-0.001	95	856432	5.00	4.88	
39 2-Chloro-1,3-butadiene	53	5.348	5.348	0.000	90	450506	5.00	5.35	
41 Tert-butyl ethyl ether	59	5.824	5.830	-0.006	97	790380	5.00	5.09	
42 2-Butanone (MEK)	43	6.019	6.019	0.000	100	663331	62.5	63.1	
43 cis-1,2-Dichloroethene	96	6.068	6.068	0.000	82	344125	5.00	5.68	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2,2-Dichloropropane	77	6.080	6.080	0.000	86	520861	5.00	6.03	
45 Propionitrile	54	6.104	6.098	0.006	97	93671	37.5	34.8	
48 Methacrylonitrile	67	6.324	6.324	0.000	91	457033	37.5	39.3	
49 Chlorobromomethane	128	6.397	6.397	0.000	93	141846	5.00	5.86	
50 Tetrahydrofuran	71	6.409	6.409	0.000	75	83116	25.0	27.7	
52 Chloroform	83	6.549	6.549	0.000	93	548922	5.00	5.65	
\$ 53 Dibromofluoromethane (Surr)	113	6.763	6.763	0.000	94	518017	10.0	10.7	
54 1,1,1-Trichloroethane	97	6.775	6.781	-0.006	98	519901	5.00	5.75	
55 Cyclohexane	56	6.878	6.879	0.000	90	471436	5.00	4.59	
56 1,1-Dichloropropene	75	6.988	6.994	-0.006	96	452233	5.00	5.53	
57 Carbon tetrachloride	117	6.994	6.994	0.000	94	452110	5.00	5.78	
58 Isobutyl alcohol	41	7.122	7.122	0.000	94	79937	125.0	119.9	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.220	7.208	0.012	93	90728	10.0	10.3	
60 Benzene	78	7.250	7.250	0.000	97	1306659	5.00	5.48	
62 1,2-Dichloroethane	62	7.323	7.317	0.006	98	315418	5.00	6.10	
64 Tert-amyl methyl ether	73	7.439	7.445	-0.006	99	700895	5.00	5.30	
* 65 Fluorobenzene (IS)	96	7.653	7.659	-0.006	98	1908330	10.0	10.0	
66 n-Heptane	43	7.671	7.677	-0.006	90	333848	5.00	3.95	
68 n-Butanol	56	8.018	8.006	0.012	91	116376	250.0	204.2	
69 Trichloroethene	95	8.134	8.134	0.000	98	341085	5.00	5.43	
70 Methylcyclohexane	83	8.445	8.445	0.000	92	484110	5.00	4.57	
71 1,2-Dichloropropane	63	8.464	8.464	0.000	82	318349	5.00	5.32	
72 2-ethoxy-2-methyl butane	87	8.476	8.476	0.000	92	469164	5.00	5.59	
74 Methyl methacrylate	69	8.549	8.543	0.006	89	116107	5.00	5.01	
73 1,4-Dioxane	88	8.555	8.555	0.000	29	12235	125.0	82.7	
75 Dibromomethane	93	8.573	8.573	0.000	95	137587	5.00	5.52	
77 Dichlorobromomethane	83	8.805	8.811	-0.006	99	383802	5.00	5.70	
78 2-Nitropropane	41	9.073	9.073	0.000	98	33761	5.00	5.87	M
80 1-Bromo-2-chloroethane	63	9.201	9.201	0.000	99	286701	5.00	5.21	
81 cis-1,3-Dichloropropene	75	9.360	9.360	0.000	97	444504	5.00	5.26	
83 4-Methyl-2-pentanone (MIBK)	43	9.530	9.524	0.006	96	1793201	62.5	62.9	
\$ 84 Toluene-d8 (Surr)	98	9.664	9.671	-0.007	93	2191049	10.0	9.67	
85 Toluene	92	9.744	9.744	0.000	98	828686	5.00	4.92	
86 trans-1,3-Dichloropropene	75	10.000	10.006	-0.006	92	368318	5.00	5.14	
105 Ethyl methacrylate	69	10.061	10.067	-0.006	88	245455	5.00	4.47	
106 1,1,2-Trichloroethane	97	10.207	10.207	0.000	91	195640	5.00	4.91	
107 Tetrachloroethene	166	10.299	10.299	-0.001	97	402264	5.00	5.18	
108 1,3-Dichloropropane	76	10.372	10.366	0.006	88	342851	5.00	4.99	
109 2-Hexanone	43	10.420	10.421	0.000	97	1222545	62.5	64.7	
111 Chlorodibromomethane	129	10.585	10.585	0.000	90	265164	5.00	5.37	
112 Ethylene Dibromide	107	10.695	10.695	0.000	99	186830	5.00	5.12	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	85	1851890	10.0	10.0	
114 1-Chlorohexane	91	11.134	11.134	0.000	97	462429	5.00	4.45	
115 Chlorobenzene	112	11.152	11.152	0.000	96	948359	5.00	5.29	
116 1,1,1,2-Tetrachloroethane	131	11.231	11.237	-0.006	96	327456	5.00	5.32	
118 Ethylbenzene	91	11.237	11.237	0.000	98	1599673	5.00	4.87	
119 m-Xylene & p-Xylene	106	11.353	11.353	0.000	99	1311369	10.0	10.5	
120 o-Xylene	106	11.682	11.682	0.000	96	610744	5.00	5.04	
121 Styrene	104	11.695	11.695	0.000	95	984951	5.00	5.01	
122 Bromoform	173	11.859	11.853	0.006	98	146472	5.00	5.15	
123 Isopropylbenzene	105	11.981	11.981	0.000	95	1624963	5.00	4.96	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.127	12.127	0.000	94	899273	10.0	9.78	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,1,2,2-Tetrachloroethane	83	12.225	12.225	0.000	94	235101	5.00	4.60	
128 Bromobenzene	156	12.243	12.243	0.000	93	385223	5.00	5.03	
129 trans-1,4-Dichloro-2-butene	53	12.249	12.249	0.000	90	208672	25.0	21.2	
130 1,2,3-Trichloropropane	110	12.268	12.268	0.000	82	60320	5.00	4.70	
131 N-Propylbenzene	91	12.310	12.310	0.000	99	1934529	5.00	4.53	
132 2-Chlorotoluene	126	12.383	12.384	-0.001	97	390168	5.00	4.75	
133 1,3,5-Trimethylbenzene	105	12.444	12.445	0.000	95	1334470	5.00	4.48	
134 4-Chlorotoluene	126	12.475	12.475	0.000	97	400743	5.00	4.86	
135 tert-Butylbenzene	134	12.682	12.682	0.000	92	288531	5.00	4.38	
137 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	1360923	5.00	4.53	
138 sec-Butylbenzene	105	12.847	12.847	0.000	94	1698718	5.00	4.36	
139 1,3-Dichlorobenzene	146	12.944	12.944	0.000	99	760506	5.00	4.80	
140 4-Isopropyltoluene	119	12.950	12.951	0.000	97	1489065	5.00	4.45	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1117546	10.0	10.0	
142 1,4-Dichlorobenzene	146	13.017	13.018	-0.001	95	753431	5.00	4.79	
143 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	98	609247	5.00	4.76	
144 Benzyl chloride	126	13.091	13.097	-0.006	98	106916	5.00	5.14	
145 p-Diethylbenzene	119	13.152	13.152	0.000	91	848093	5.00	4.39	
146 n-Butylbenzene	92	13.243	13.243	0.000	97	690106	5.00	4.09	
147 1,2-Dichlorobenzene	146	13.274	13.274	0.000	99	669897	5.00	4.77	
149 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	87	29938	5.00	4.44	
150 1,3,5-Trichlorobenzene	180	13.944	13.944	0.000	98	517578	5.00	4.20	
151 1,2,4-Trichlorobenzene	180	14.359	14.365	-0.006	94	404399	5.00	3.90	
152 Hexachlorobutadiene	225	14.444	14.444	0.000	96	157608	5.00	3.13	
153 Naphthalene	128	14.542	14.542	0.000	96	595763	5.00	3.55	
154 1,2,3-Trichlorobenzene	180	14.682	14.682	0.000	96	310312	5.00	3.52	
155 2-Methylnaphthalene	142	15.298	15.298	0.000	92	177986	5.00	1.76	
158 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_QC_Gas826_00128	Amount Added: 12.50	Units: uL	
MSV_LCS_VOC#1_00097	Amount Added: 12.50	Units: uL	
MSV_LCS_EE_00004	Amount Added: 12.50	Units: uL	
MSV_LLcentISS_00006	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X07.D

Injection Date: 28-Feb-2023 12:24:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: LCS

Worklist Smp#: 8

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

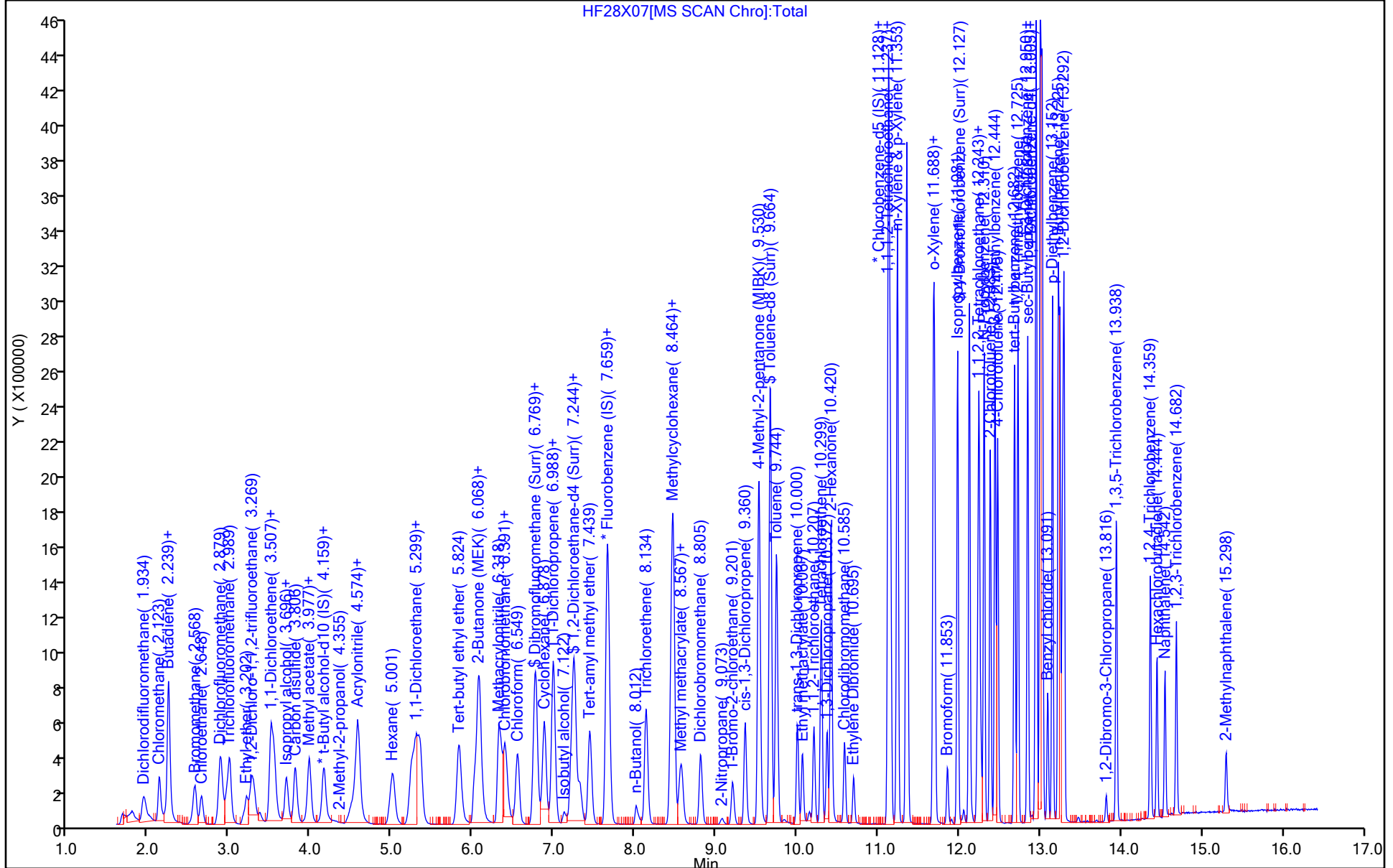
ALS Bottle#: 7

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



HF28X07[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X07.D
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 28-Feb-2023 12:24:30 ALS Bottle#: 7 Worklist Smp#: 8
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077923-008
 Misc. Info.: LCSD SM
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 13:07:00 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1673

First Level Reviewer: DVW2

Date: 28-Feb-2023 13:04:33

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.7	107.25
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	102.94
\$ 84 Toluene-d8 (Surr)	10.0	9.67	96.71
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.78	97.78

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

Client Sample ID:

Lab Sample ID: LCSD 410-348577/9

Matrix: Water

Lab File ID: HF28X08.D

Analysis Method: 8260D

Date Collected:

Sample wt/vol: 25 (mL)

Date Analyzed: 02/28/2023 12:45

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.: 348577

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.20		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.49		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	4.52		0.50	0.10
79-00-5	1,1,2-Trichloroethane	4.92		0.50	0.080
75-34-3	1,1-Dichloroethane	5.32		0.50	0.10
75-35-4	1,1-Dichloroethene	5.13		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	5.01		0.50	0.080
107-06-2	1,2-Dichloroethane	5.85		0.50	0.070
78-87-5	1,2-Dichloropropane	5.29		0.50	0.10
78-93-3	2-Butanone (MEK)	58.2		5.0	1.0
591-78-6	2-Hexanone	59.2		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	57.1		5.0	1.0
67-64-1	Acetone	55.6		5.0	1.0
71-43-2	Benzene	5.26		0.50	0.10
74-97-5	Bromochloromethane	5.65		0.50	0.080
75-27-4	Bromodichloromethane	5.53		0.50	0.080
75-25-2	Bromoform	5.03		1.0	0.30
74-83-9	Bromomethane	5.18		0.50	0.10
75-15-0	Carbon disulfide	5.79		1.0	0.10
56-23-5	Carbon tetrachloride	5.53		0.50	0.10
108-90-7	Chlorobenzene	5.14		0.50	0.070
75-00-3	Chloroethane	5.23		0.50	0.10
67-66-3	Chloroform	5.50		0.50	0.090
74-87-3	Chloromethane	5.78		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	5.43		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	5.20		0.50	0.10
124-48-1	Dibromochloromethane	5.25		0.50	0.080
100-41-4	Ethylbenzene	4.78		0.50	0.080
1634-04-4	Methyl tert-butyl ether	5.14		0.50	0.080
75-09-2	Methylene Chloride	5.29		0.50	0.10
100-42-5	Styrene	4.86		0.50	0.070
127-18-4	Tetrachloroethene	5.07		0.50	0.20
108-88-3	Toluene	4.77		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1
Environment Testing, LLC

SDG No.: _____

Client Sample ID: _____ Lab Sample ID: LCSD 410-348577/9

Matrix: Water Lab File ID: HF28X08.D

Analysis Method: 8260D Date Collected: _____

Sample wt/vol: 25 (mL) Date Analyzed: 02/28/2023 12:45

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.: 348577 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	5.24		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	5.08		0.50	0.080
79-01-6	Trichloroethene	5.17		0.50	0.080
75-01-4	Vinyl chloride	5.48		0.50	0.10
1330-20-7	Xylenes, Total	15.2		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	106		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X08.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 28-Feb-2023 12:45:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077923-009
 Misc. Info.: MRL
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 13:07:00 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1673

First Level Reviewer: DVW2

Date: 28-Feb-2023 13:05:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.928	1.934	-0.006	98	342551	5.00	5.64	
5 Chloromethane	50	2.117	2.129	-0.012	99	440003	5.00	5.78	
6 Butadiene	39	2.227	2.239	-0.012	91	422728	5.00	5.88	
7 Vinyl chloride	62	2.239	2.245	-0.006	83	412946	5.00	5.48	
9 Bromomethane	94	2.556	2.568	-0.012	90	274057	5.00	5.18	
10 Chloroethane	64	2.635	2.648	-0.013	99	238979	5.00	5.23	
11 Dichlorofluoromethane	67	2.867	2.879	-0.012	97	551758	5.00	5.44	
12 Trichlorofluoromethane	101	2.952	2.959	-0.007	98	450291	5.00	4.94	
14 Ethyl ether	59	3.196	3.202	-0.006	91	165135	4.99	4.33	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.269	3.276	-0.007	91	347929	5.00	4.90	
18 1,1-Dichloroethene	96	3.495	3.507	-0.012	98	264571	5.00	5.13	
19 Acetone	43	3.525	3.532	-0.007	98	380692	62.5	55.6	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.538	3.544	-0.006	91	264482	5.00	5.26	
21 Isopropyl alcohol	45	3.708	3.660	0.048	25	41357	37.5	31.6	
22 Iodomethane	142	3.684	3.696	-0.012	99	507844	5.00	5.67	
24 Carbon disulfide	76	3.794	3.806	-0.012	99	799666	5.00	5.79	
25 Methyl acetate	43	3.958	3.946	0.012	33	99970	5.00	5.52	
27 3-Chloro-1-propene	41	3.964	3.977	-0.013	93	430391	5.00	4.81	
* 29 t-Butyl alcohol-d10 (IS)	65	4.153	4.153	0.000	99	106948	50.0	50.0	a
28 Methylene Chloride	84	4.153	4.160	-0.007	93	282724	5.00	5.29	
31 2-Methyl-2-propanol	59	4.281	4.288	-0.007	97	98159	50.0	42.4	
32 Acrylonitrile	53	4.489	4.495	-0.006	99	232498	25.0	25.2	
33 Methyl tert-butyl ether	73	4.562	4.562	0.000	94	592704	5.00	5.14	
34 trans-1,2-Dichloroethene	96	4.574	4.586	-0.012	99	300306	5.00	5.24	
35 Hexane	57	4.995	5.007	-0.012	92	347335	5.00	4.34	
37 1,1-Dichloroethane	63	5.226	5.239	-0.013	96	569002	5.00	5.32	
38 Isopropyl ether	45	5.293	5.300	-0.007	97	860517	5.00	4.72	
39 2-Chloro-1,3-butadiene	53	5.342	5.348	-0.006	90	452809	5.00	5.18	
41 Tert-butyl ethyl ether	59	5.824	5.830	-0.006	97	796873	5.00	4.94	
42 2-Butanone (MEK)	43	6.019	6.019	0.000	100	692841	62.5	58.2	
43 cis-1,2-Dichloroethene	96	6.061	6.068	-0.007	82	341429	5.00	5.43	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 2,2-Dichloropropane	77	6.068	6.080	-0.012	87	524116	5.00	5.84	
45 Propionitrile	54	6.110	6.098	0.012	99	117418	37.5	38.5	
48 Methacrylonitrile	67	6.324	6.324	0.000	90	468930	37.5	35.6	
49 Chlorobromomethane	128	6.391	6.397	-0.006	93	141976	5.00	5.65	
50 Tetrahydrofuran	71	6.397	6.409	-0.012	77	84299	25.0	24.8	
52 Chloroform	83	6.543	6.549	-0.006	93	555731	5.00	5.50	
\$ 53 Dibromofluoromethane (Surr)	113	6.756	6.763	-0.007	94	532618	10.0	10.6	
54 1,1,1-Trichloroethane	97	6.769	6.781	-0.012	98	516085	5.00	5.49	
55 Cyclohexane	56	6.872	6.879	-0.006	90	474681	5.00	4.45	
56 1,1-Dichloropropene	75	6.988	6.994	-0.006	96	450613	5.00	5.30	
57 Carbon tetrachloride	117	6.988	6.994	-0.006	93	449496	5.00	5.53	
58 Isobutyl alcohol	41	7.116	7.122	-0.006	93	87882	125.0	116.4	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.214	7.208	0.006	84	94530	10.0	10.3	
60 Benzene	78	7.250	7.250	0.000	96	1303120	5.00	5.26	
62 1,2-Dichloroethane	62	7.317	7.317	0.000	97	313749	5.00	5.85	
64 Tert-amyl methyl ether	73	7.439	7.445	-0.006	99	713468	5.00	5.20	
* 65 Fluorobenzene (IS)	96	7.653	7.659	-0.006	98	1982228	10.0	10.0	
66 n-Heptane	43	7.671	7.677	-0.006	90	336843	5.00	3.84	
68 n-Butanol	56	8.012	8.006	0.006	90	132130	250.0	204.8	
69 Trichloroethene	95	8.134	8.134	0.000	97	337623	5.00	5.17	
70 Methylcyclohexane	83	8.445	8.445	0.000	92	496682	5.00	4.51	
71 1,2-Dichloropropane	63	8.457	8.464	-0.007	93	328707	5.00	5.29	
72 2-ethoxy-2-methyl butane	87	8.470	8.476	-0.006	93	464756	5.00	5.34	
74 Methyl methacrylate	69	8.549	8.543	0.006	89	112566	5.00	4.29	
73 1,4-Dioxane	88	8.549	8.555	-0.006	32	13454	125.0	80.3	M
75 Dibromomethane	93	8.573	8.573	0.000	94	143610	5.00	5.55	
77 Dichlorobromomethane	83	8.805	8.811	-0.006	99	386982	5.00	5.53	
78 2-Nitropropane	41	9.073	9.073	0.000	99	31859	5.00	4.89	
80 1-Bromo-2-chloroethane	63	9.201	9.201	0.000	98	292811	5.00	5.12	
81 cis-1,3-Dichloropropene	75	9.354	9.360	-0.006	96	456182	5.00	5.20	
83 4-Methyl-2-pentanone (MIBK)	43	9.524	9.524	0.000	96	1840880	62.5	57.1	
\$ 84 Toluene-d8 (Surr)	98	9.664	9.671	-0.007	93	2267947	10.0	9.68	
85 Toluene	92	9.744	9.744	0.000	98	830790	5.00	4.77	
86 trans-1,3-Dichloropropene	75	10.000	10.006	-0.006	92	376967	5.00	5.08	
105 Ethyl methacrylate	69	10.067	10.067	0.000	87	252892	5.00	4.45	
106 1,1,2-Trichloroethane	97	10.207	10.207	0.000	90	202975	5.00	4.92	
107 Tetrachloroethene	166	10.298	10.299	-0.001	98	407492	5.00	5.07	
108 1,3-Dichloropropane	76	10.366	10.366	0.000	89	346369	5.00	4.87	
109 2-Hexanone	43	10.414	10.421	-0.006	97	1267209	62.5	59.2	
111 Chlorodibromomethane	129	10.585	10.585	0.000	89	267803	5.00	5.25	
112 Ethylene Dibromide	107	10.695	10.695	0.000	98	189154	5.00	5.01	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	85	1915044	10.0	10.0	
114 1-Chlorohexane	91	11.134	11.134	0.000	97	457642	5.00	4.25	
115 Chlorobenzene	112	11.152	11.152	0.000	96	952793	5.00	5.14	
116 1,1,1,2-Tetrachloroethane	131	11.237	11.237	0.000	96	330962	5.00	5.20	
118 Ethylbenzene	91	11.237	11.237	0.000	98	1625506	5.00	4.78	
119 m-Xylene & p-Xylene	106	11.353	11.353	0.000	99	1315628	10.0	10.2	
120 o-Xylene	106	11.682	11.682	0.000	96	624974	5.00	4.99	
121 Styrene	104	11.695	11.695	-0.001	94	987873	5.00	4.86	
122 Bromoform	173	11.853	11.853	0.000	97	147951	5.00	5.03	
123 Isopropylbenzene	105	11.981	11.981	0.000	95	1647163	5.00	4.86	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.127	12.127	0.000	95	925249	10.0	9.73	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,1,2,2-Tetrachloroethane	83	12.225	12.225	0.000	93	241972	5.00	4.52	
128 Bromobenzene	156	12.243	12.243	0.000	94	387860	5.00	4.84	
129 trans-1,4-Dichloro-2-butene	53	12.249	12.249	0.000	90	199721	25.0	17.9	
130 1,2,3-Trichloropropane	110	12.268	12.268	0.000	82	63081	5.00	4.69	
131 N-Propylbenzene	91	12.304	12.310	-0.006	99	1938109	5.00	4.34	
132 2-Chlorotoluene	126	12.383	12.384	-0.001	97	403336	5.00	4.69	
133 1,3,5-Trimethylbenzene	105	12.444	12.445	0.000	97	1372364	5.00	4.40	
134 4-Chlorotoluene	126	12.475	12.475	0.000	97	411339	5.00	4.76	
135 tert-Butylbenzene	134	12.682	12.682	0.000	92	289847	5.00	4.21	
137 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	1379943	5.00	4.39	
138 sec-Butylbenzene	105	12.847	12.847	0.000	94	1738477	5.00	4.26	
139 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	775549	5.00	4.67	
140 4-Isopropyltoluene	119	12.950	12.951	0.000	97	1522939	5.00	4.35	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	93	1169726	10.0	10.0	
142 1,4-Dichlorobenzene	146	13.017	13.018	-0.001	95	783494	5.00	4.76	
143 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	98	611247	5.00	4.56	
144 Benzyl chloride	126	13.091	13.097	-0.006	98	113053	5.00	5.19	
145 p-Diethylbenzene	119	13.152	13.152	0.000	92	872525	5.00	4.31	
146 n-Butylbenzene	92	13.243	13.243	0.000	97	721060	5.00	4.08	
147 1,2-Dichlorobenzene	146	13.273	13.274	-0.001	99	683882	5.00	4.65	
149 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	88	31662	5.00	4.48	
150 1,3,5-Trichlorobenzene	180	13.938	13.944	-0.006	98	545999	5.00	4.23	
151 1,2,4-Trichlorobenzene	180	14.359	14.365	-0.006	94	438490	5.00	4.04	
152 Hexachlorobutadiene	225	14.444	14.444	0.000	95	173493	5.00	3.29	
153 Naphthalene	128	14.542	14.542	0.000	97	637303	5.00	3.63	
154 1,2,3-Trichlorobenzene	180	14.682	14.682	0.000	95	340205	5.00	3.69	
155 2-Methylnaphthalene	142	15.297	15.298	-0.001	91	231919	5.00	2.20	
158 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_QC_Gas826_00128	Amount Added: 12.50	Units: uL	
MSV_LCS_VOC#1_00097	Amount Added: 12.50	Units: uL	
MSV_LCS_EE_00004	Amount Added: 12.50	Units: uL	
MSV_LLcentISS_00006	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X08.D

Injection Date: 28-Feb-2023 12:45:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: LCSD

Worklist Smp#: 9

Client ID:

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

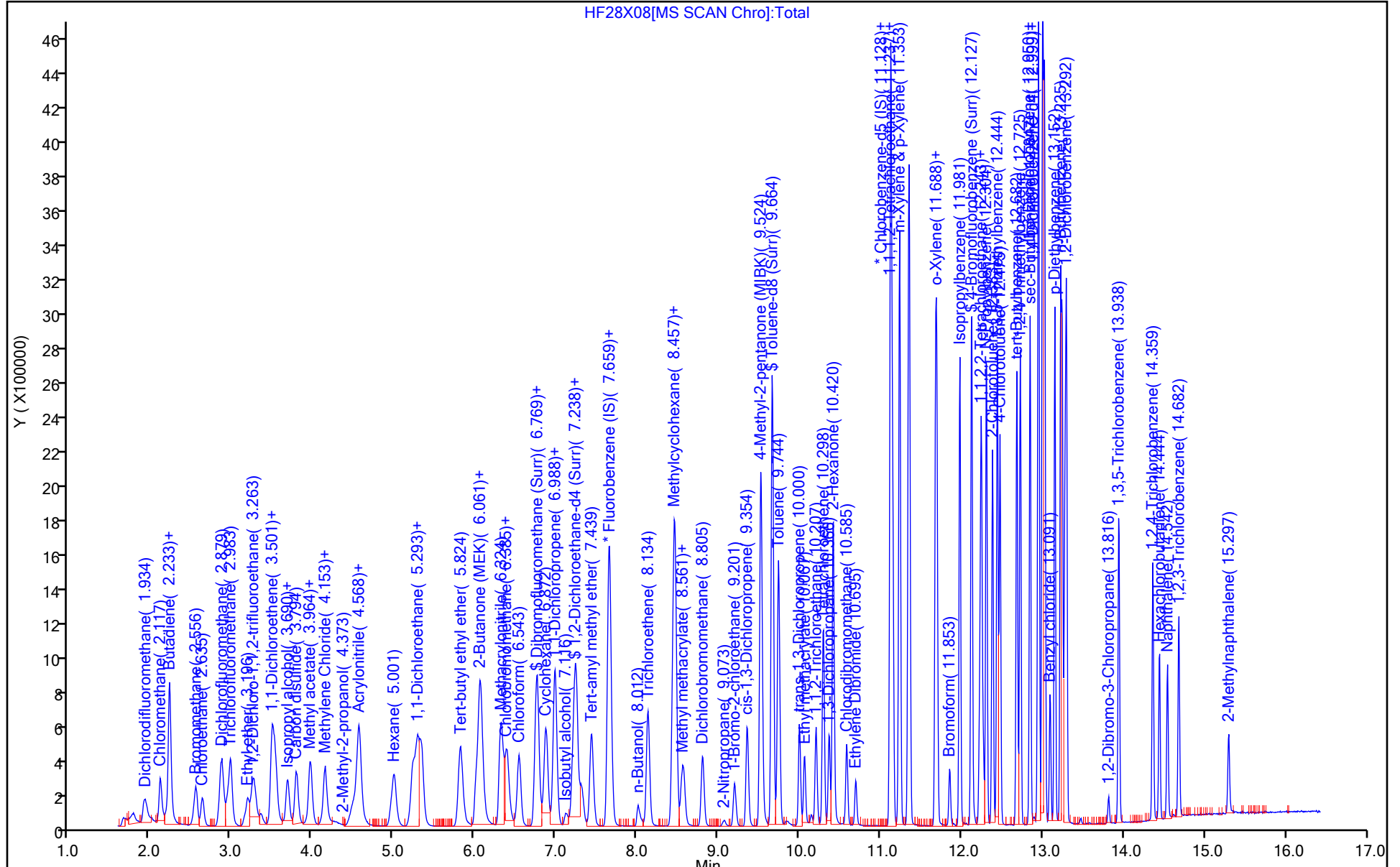
ALS Bottle#: 8

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X08.D
 Lims ID: LCSD
 Client ID:
 Sample Type: LCSD
 Inject. Date: 28-Feb-2023 12:45:30 ALS Bottle#: 8 Worklist Smp#: 9
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077923-009
 Misc. Info.: MRL
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 13:07:00 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1673

First Level Reviewer: DVW2 Date: 28-Feb-2023 13:05:57

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.6	106.16
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.25
\$ 84 Toluene-d8 (Surr)	10.0	9.68	96.80
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.73	97.28

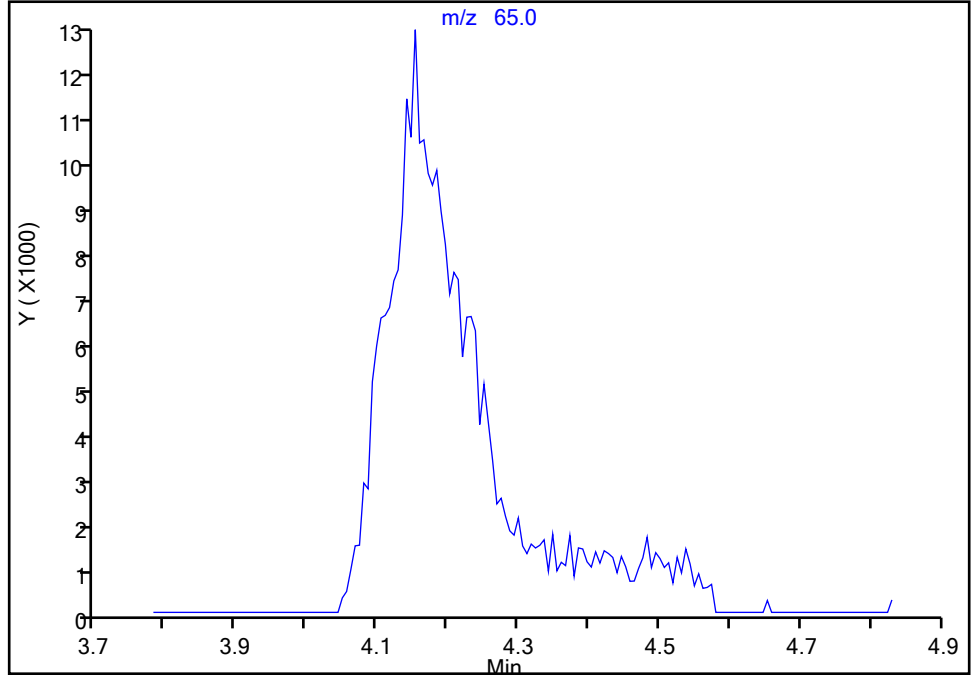
Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20230228-77923.b\HF28X08.D
Injection Date: 28-Feb-2023 12:45:30 Instrument ID: 19094
Lims ID: LCSD
Client ID:
Operator ID: knk41612 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm ID) Detector: MS Quad

* 29 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2
Signal: 1

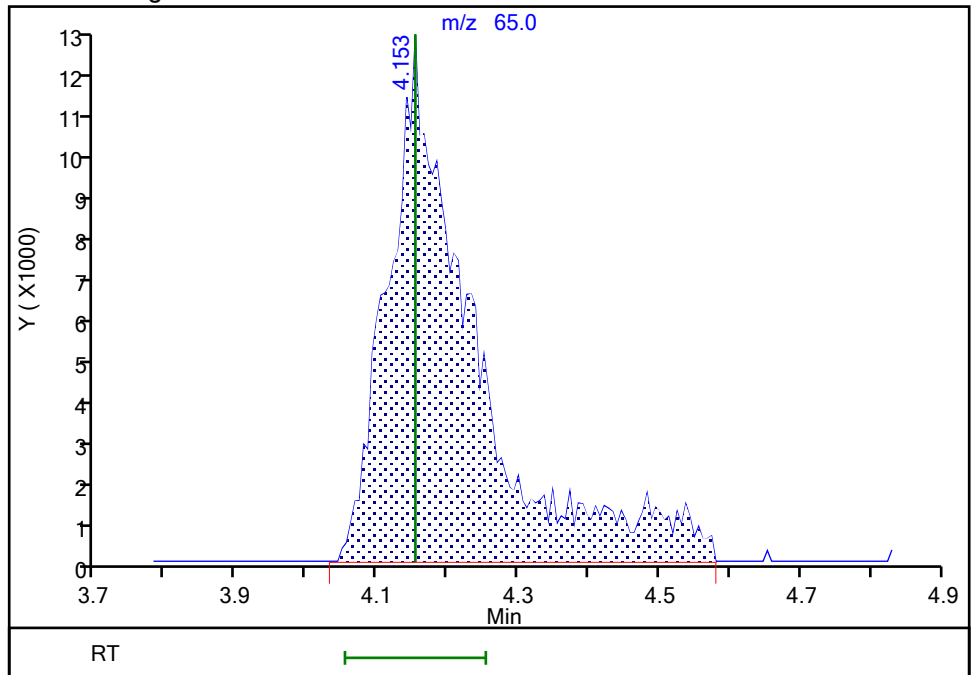
Not Detected
Expected RT: 4.15

Processing Integration Results



RT: 4.15
Area: 106948
Amount: 50.000000
Amount Units: ug/l

Manual Integration Results



Reviewer: DVW2, 28-Feb-2023 13:05:13
Audit Action: Assigned Compound ID

Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-6 MS

Matrix: Water

Lab File ID: HF27X14.D

Analysis Method: 8260D

Date Collected: 02/21/2023 11:08

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 17:00

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.60		0.50	0.070
71-55-6	1,1,1-Trichloroethane	7.54		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	4.26		0.50	0.10
79-00-5	1,1,2-Trichloroethane	4.95		0.50	0.080
75-34-3	1,1-Dichloroethane	5.69		0.50	0.10
75-35-4	1,1-Dichloroethene	6.40		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	4.90		0.50	0.080
107-06-2	1,2-Dichloroethane	6.09		0.50	0.070
78-87-5	1,2-Dichloropropane	5.18		0.50	0.10
78-93-3	2-Butanone (MEK)	80.9		5.0	1.0
591-78-6	2-Hexanone	81.0		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	81.9		5.0	1.0
67-64-1	Acetone	57.6		5.0	1.0
71-43-2	Benzene	5.49		0.50	0.10
74-97-5	Bromochloromethane	6.92		0.50	0.080
75-27-4	Bromodichloromethane	5.79		0.50	0.080
75-25-2	Bromoform	5.31		1.0	0.30
74-83-9	Bromomethane	5.85		0.50	0.10
75-15-0	Carbon disulfide	6.70		1.0	0.10
56-23-5	Carbon tetrachloride	6.92		0.50	0.10
108-90-7	Chlorobenzene	5.37		0.50	0.070
75-00-3	Chloroethane	5.62		0.50	0.10
67-66-3	Chloroform	7.20		0.50	0.090
74-87-3	Chloromethane	5.53		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	8.50		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	5.18		0.50	0.10
124-48-1	Dibromochloromethane	5.47		0.50	0.080
100-41-4	Ethylbenzene	5.05		0.50	0.080
1634-04-4	Methyl tert-butyl ether	5.20		0.50	0.080
75-09-2	Methylene Chloride	5.60		0.50	0.10
100-42-5	Styrene	5.02		0.50	0.070
127-18-4	Tetrachloroethene	12.4		0.50	0.20
108-88-3	Toluene	5.09		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-6 MS

Matrix: Water

Lab File ID: HF27X14.D

Analysis Method: 8260D

Date Collected: 02/21/2023 11:08

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 17:00

Soil Aliquot Vol:

Dilution Factor: 1

Soil Extract Vol.:

GC Column: R-624SilMS 30m ID: 0.25 (mm)

Purge Volume: 25.0 (mL)

Heated Purge: (Y/N) N pH:

% Moisture: % Solids:

Level: (low/med) Low

Analysis Batch No.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	5.95		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	5.21		0.50	0.080
79-01-6	Trichloroethene	7.70		0.50	0.080
75-01-4	Vinyl chloride	5.81		0.50	0.10
1330-20-7	Xylenes, Total	16.2		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103	cn	80-120
460-00-4	4-Bromofluorobenzene (Surr)	97	cn	80-120
1868-53-7	Dibromofluoromethane (Surr)	121	S1+ cn	80-120
2037-26-5	Toluene-d8 (Surr)	96	cn	80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X14.D
 Lims ID: 410-116393-A-6 MS
 Client ID: HD-COD-SW-15-0/1-0 MS
 Sample Type: MS
 Inject. Date: 27-Feb-2023 17:00:30 ALS Bottle#: 14 Worklist Smp#: 15
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-015
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:13:33 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp

Date: 28-Feb-2023 11:14:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.928	1.941	-0.013	99	353171	5.00	7.33	
5 Chloromethane	50	2.123	2.130	-0.007	99	333442	5.00	5.53	
6 Butadiene	39	2.233	2.239	-0.006	91	307940	5.00	5.40	
7 Vinyl chloride	62	2.239	2.245	-0.006	83	347118	5.00	5.81	
9 Bromomethane	94	2.556	2.568	-0.012	90	245482	5.00	5.85	
10 Chloroethane	64	2.641	2.648	-0.007	100	203847	5.00	5.62	
11 Dichlorofluoromethane	67	2.873	2.873	0.000	97	500702	5.00	6.23	
12 Trichlorofluoromethane	101	2.958	2.959	-0.001	97	460047	5.00	6.36	
14 Ethyl ether	59	3.196	3.202	-0.006	91	132112	4.99	4.37	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.275	3.276	-0.001	90	325240	5.00	5.77	
18 1,1-Dichloroethene	96	3.501	3.507	-0.006	98	261797	5.00	6.40	
19 Acetone	43	3.532	3.532	0.000	45	187659	62.6	57.6	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.538	3.544	-0.006	91	277622	5.00	6.96	
21 Isopropyl alcohol	45	3.690	3.684	0.006	25	7367	37.5	8.92	
22 Iodomethane	142	3.696	3.702	-0.006	98	456291	5.00	6.42	
24 Carbon disulfide	76	3.800	3.806	-0.006	99	733338	5.00	6.70	
25 Methyl acetate	43	3.958	3.940	0.018	93	38631	5.00	4.48	
27 3-Chloro-1-propene	41	3.970	3.977	-0.007	91	364020	5.00	5.13	
28 Methylene Chloride	84	4.159	4.160	-0.001	89	237176	5.00	5.60	
* 29 t-Butyl alcohol-d10 (IS)	65	4.190	4.166	0.024	97	50892	50.0	50.0	
31 2-Methyl-2-propanol	59	4.275	4.275	0.000	82	13479	50.0	12.2	
32 Acrylonitrile	53	4.501	4.483	0.018	98	131027	25.0	29.8	
33 Methyl tert-butyl ether	73	4.556	4.556	0.000	95	475147	5.00	5.20	
34 trans-1,2-Dichloroethene	96	4.580	4.580	0.000	99	270328	5.00	5.95	
35 Hexane	57	5.013	5.013	0.000	90	327733	5.00	5.16	
37 1,1-Dichloroethane	63	5.226	5.233	-0.007	96	482840	5.00	5.69	
38 Isopropyl ether	45	5.293	5.294	-0.001	94	651682	5.00	4.51	
39 2-Chloro-1,3-butadiene	53	5.348	5.348	0.000	91	400289	5.00	5.77	
41 Tert-butyl ethyl ether	59	5.824	5.824	0.000	97	680799	5.00	5.33	
42 2-Butanone (MEK)	43	6.025	6.013	0.012	99	458242	62.6	80.9	
43 cis-1,2-Dichloroethene	96	6.068	6.068	0.000	82	424106	5.00	8.50	
44 2,2-Dichloropropane	77	6.086	6.074	0.012	85	504991	5.00	7.10	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
45 Propionitrile	54	6.129	6.104	0.025	54	58575	37.5	40.3	
48 Methacrylonitrile	67	6.324	6.318	0.006	90	362039	37.5	57.7	
49 Chlorobromomethane	128	6.391	6.397	-0.006	91	137823	5.00	6.92	
50 Tetrahydrofuran	71	6.415	6.409	0.006	73	59322	25.0	36.6	
52 Chloroform	83	6.549	6.543	0.006	93	576920	5.00	7.20	
\$ 53 Dibromofluoromethane (Surr)	113	6.756	6.763	-0.007	94	481557	10.0	12.1	
54 1,1,1-Trichloroethane	97	6.781	6.769	0.012	98	562246	5.00	7.54	
55 Cyclohexane	56	6.878	6.879	-0.001	89	491014	5.00	5.81	
56 1,1-Dichloropropene	75	6.988	6.988	0.000	95	410191	5.00	6.09	
57 Carbon tetrachloride	117	6.988	6.988	0.000	96	446075	5.00	6.92	
58 Isobutyl alcohol	41	7.134	7.116	0.018	65	27701	125.1	77.1	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.214	7.220	-0.006	79	74844	10.0	10.3	
60 Benzene	78	7.250	7.250	0.000	96	1078648	5.00	5.49	
62 1,2-Dichloroethane	62	7.317	7.324	-0.007	98	259026	5.00	6.09	
64 Tert-amyl methyl ether	73	7.439	7.439	0.000	99	554073	5.00	5.09	
* 65 Fluorobenzene (IS)	96	7.653	7.653	0.000	98	1572115	10.0	10.0	
66 n-Heptane	43	7.665	7.671	-0.006	89	279663	5.00	4.02	
68 n-Butanol	56	8.055	8.006	0.049	81	33085	250.2	107.7	
69 Trichloroethene	95	8.134	8.134	0.000	96	398397	5.00	7.70	
70 Methylcyclohexane	83	8.445	8.445	0.000	91	469721	5.00	5.38	
71 1,2-Dichloropropane	63	8.463	8.464	-0.001	95	255306	5.00	5.18	
72 2-ethoxy-2-methyl butane	87	8.476	8.470	0.006	94	378223	5.00	5.47	
74 Methyl methacrylate	69	8.549	8.543	0.006	87	84409	5.00	6.76	
73 1,4-Dioxane	88	8.579	8.555	0.024	27	2552	125.1	32.0	
75 Dibromomethane	93	8.579	8.579	0.000	93	112672	5.00	5.49	
77 Dichlorobromomethane	83	8.811	8.805	0.006	99	321086	5.00	5.79	
78 2-Nitropropane	41	9.073	9.067	0.006	97	23052	5.00	7.44	
80 1-Bromo-2-chloroethane	63	9.201	9.195	0.006	99	229239	5.00	5.06	
81 cis-1,3-Dichloropropene	75	9.360	9.360	0.000	96	360654	5.00	5.18	
83 4-Methyl-2-pentanone (MIBK)	43	9.530	9.524	0.006	96	1257641	62.6	81.9	
\$ 84 Toluene-d8 (Surr)	98	9.671	9.665	0.006	93	1798009	10.0	9.59	
85 Toluene	92	9.744	9.744	0.000	98	709342	5.00	5.09	
86 trans-1,3-Dichloropropene	75	10.006	10.000	0.006	91	309350	5.00	5.21	
105 Ethyl methacrylate	69	10.067	10.061	0.006	87	185908	5.00	4.09	
106 1,1,2-Trichloroethane	97	10.207	10.207	0.000	90	163236	5.00	4.95	
107 Tetrachloroethene	166	10.298	10.293	0.005	98	800170	5.00	12.4	
108 1,3-Dichloropropane	76	10.366	10.366	0.000	88	277275	5.00	4.88	
109 2-Hexanone	43	10.420	10.414	0.006	96	825866	62.6	81.0	
111 Chlorodibromomethane	129	10.585	10.585	0.000	89	223213	5.00	5.47	
112 Ethylene Dibromide	107	10.695	10.695	0.000	99	148036	5.00	4.90	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	84	1532352	10.0	10.0	
114 1-Chlorohexane	91	11.134	11.134	0.000	94	413816	5.00	4.81	
115 Chlorobenzene	112	11.152	11.152	0.000	96	796906	5.00	5.37	
116 1,1,1,2-Tetrachloroethane	131	11.237	11.231	0.006	95	284924	5.00	5.60	
118 Ethylbenzene	91	11.237	11.237	0.000	98	1373888	5.00	5.05	
119 m-Xylene & p-Xylene	106	11.353	11.353	0.000	99	1127638	10.0	10.9	
120 o-Xylene	106	11.682	11.676	0.006	95	529457	5.00	5.28	
121 Styrene	104	11.695	11.695	0.000	94	816505	5.00	5.02	
122 Bromoform	173	11.859	11.853	0.006	98	125011	5.00	5.31	
123 Isopropylbenzene	105	11.981	11.981	0.000	95	1416774	5.00	5.23	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	96	734567	10.0	9.65	
127 1,1,2,2-Tetrachloroethane	83	12.225	12.219	0.006	94	184157	5.00	4.26	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
128 Bromobenzene	156	12.243	12.237	0.006	93	324509	5.00	5.02	
129 trans-1,4-Dichloro-2-butene	53	12.249	12.243	0.006	92	207098	25.0	39.0	
130 1,2,3-Trichloropropane	110	12.274	12.268	0.006	83	48573	5.00	4.48	
131 N-Propylbenzene	91	12.310	12.304	0.006	98	1606218	5.00	4.45	
132 2-Chlorotoluene	126	12.383	12.384	-0.001	97	338117	5.00	4.87	
133 1,3,5-Trimethylbenzene	105	12.444	12.445	-0.001	95	1150748	5.00	4.57	
134 4-Chlorotoluene	126	12.475	12.475	0.000	97	352782	5.00	5.06	
135 tert-Butylbenzene	134	12.682	12.682	0.000	92	247716	5.00	4.45	
137 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	1153435	5.00	4.54	
138 sec-Butylbenzene	105	12.847	12.847	0.000	94	1439925	5.00	4.37	
139 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	649386	5.00	4.85	
140 4-Isopropyltoluene	119	12.956	12.951	0.005	97	1262140	5.00	4.47	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	93	944310	10.0	10.0	
142 1,4-Dichlorobenzene	146	13.017	13.018	-0.001	95	646106	5.00	4.86	
143 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	98	516379	5.00	4.77	
144 Benzyl chloride	126	13.097	13.091	0.006	98	88204	5.00	5.02	
145 p-Diethylbenzene	119	13.152	13.152	0.000	92	726632	5.00	4.45	
146 n-Butylbenzene	92	13.243	13.243	0.000	97	575420	5.00	4.04	
147 1,2-Dichlorobenzene	146	13.274	13.274	0.000	99	572701	5.00	4.83	
149 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	90	22554	5.00	3.95	
150 1,3,5-Trichlorobenzene	180	13.944	13.938	0.006	97	441884	5.00	4.24	
151 1,2,4-Trichlorobenzene	180	14.359	14.359	0.000	94	341122	5.00	3.89	
152 Hexachlorobutadiene	225	14.444	14.444	0.000	96	127642	5.00	3.00	
153 Naphthalene	128	14.542	14.542	0.000	97	480824	5.00	3.39	
154 1,2,3-Trichlorobenzene	180	14.682	14.682	0.000	96	265844	5.00	3.57	
155 2-Methylnaphthalene	142	15.297	15.298	-0.001	94	143615	5.00	1.68	
158 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MSV_QC_Gas826_00128	Amount Added: 5.38	Units: uL	
MSV_LCS_VOC#1_00097	Amount Added: 5.38	Units: uL	
MSV_LCS_EE_00004	Amount Added: 5.38	Units: uL	
MSV_LLcentISS_00006	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X14.D

Injection Date: 27-Feb-2023 17:00:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: 410-116393-A-6 MS

Worklist Smp#: 15

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

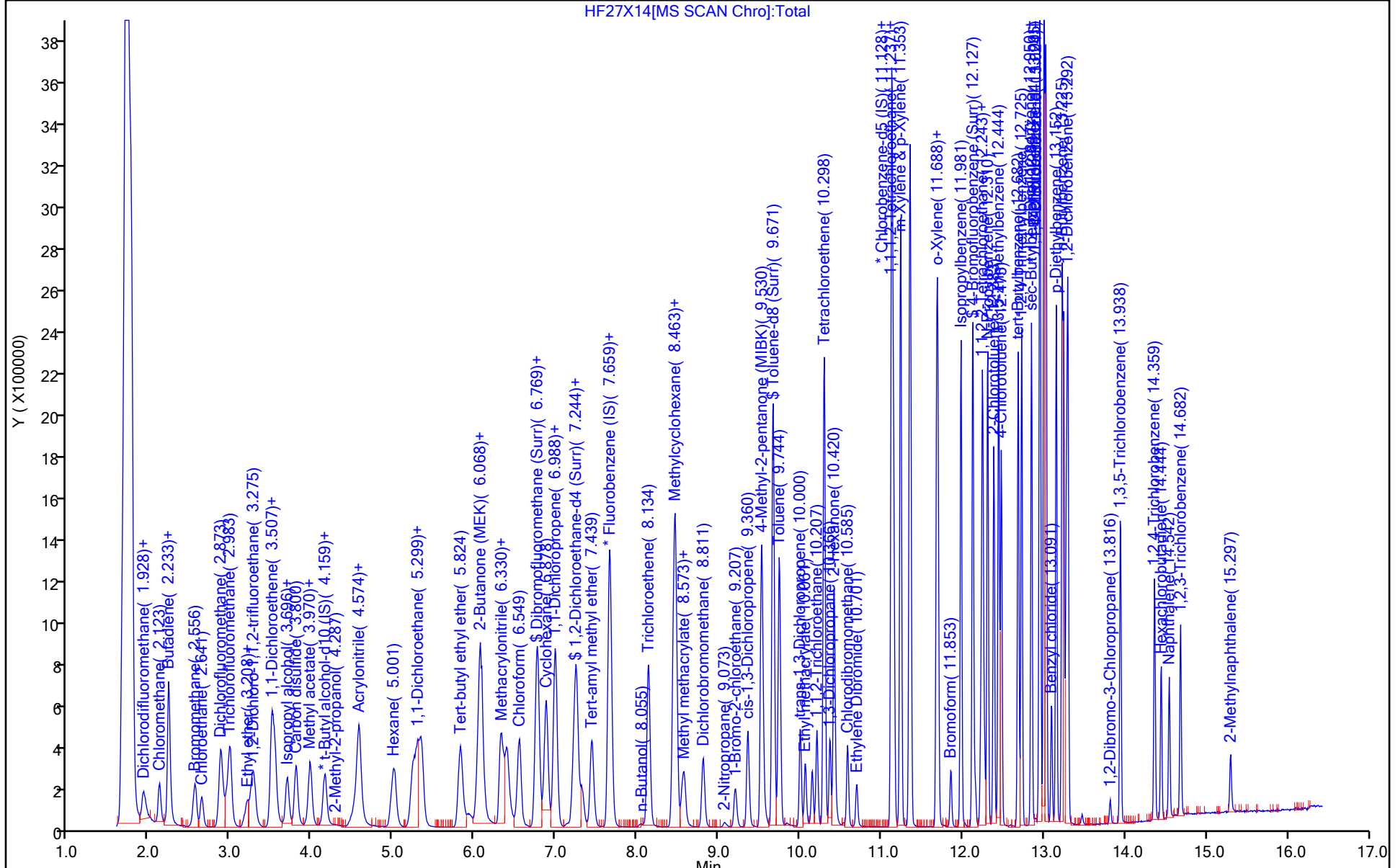
ALS Bottle#: 14

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



HF27X14[MS SCAN Chrom]:Total

Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X14.D
 Lims ID: 410-116393-A-6 MS
 Client ID: HD-COD-SW-15-0/1-0 MS
 Sample Type: MS
 Inject. Date: 27-Feb-2023 17:00:30 ALS Bottle#: 14 Worklist Smp#: 15
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-015
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:13:33 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp

Date: 28-Feb-2023 11:14:16

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	12.1	121.02
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.08
\$ 84 Toluene-d8 (Surr)	10.0	9.59	95.91
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.65	96.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories
Environment Testing, LLC

Job No.: 410-116393-1

SDG No.:

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

Lab Sample ID: 410-116393-6 MSD

Matrix: Water

Lab File ID: HF27X15.D

Analysis Method: 8260D

Date Collected: 02/21/2023 11:08

Sample wt/vol: 25 (mL)

Date Analyzed: 02/27/2023 17:21

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.: 348233

Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.68		0.50	0.070
71-55-6	1,1,1-Trichloroethane	6.86		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	4.55		0.50	0.10
79-00-5	1,1,2-Trichloroethane	5.12		0.50	0.080
75-34-3	1,1-Dichloroethane	5.90		0.50	0.10
75-35-4	1,1-Dichloroethene	6.74		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	5.24		0.50	0.080
107-06-2	1,2-Dichloroethane	6.27		0.50	0.070
78-87-5	1,2-Dichloropropane	5.66		0.50	0.10
78-93-3	2-Butanone (MEK)	67.0		5.0	1.0
591-78-6	2-Hexanone	74.2		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	72.8		5.0	1.0
67-64-1	Acetone	56.5		5.0	1.0
71-43-2	Benzene	5.87		0.50	0.10
74-97-5	Bromochloromethane	6.01		0.50	0.080
75-27-4	Bromodichloromethane	5.95		0.50	0.080
75-25-2	Bromoform	5.38		1.0	0.30
74-83-9	Bromomethane	6.28		0.50	0.10
75-15-0	Carbon disulfide	7.07		1.0	0.10
56-23-5	Carbon tetrachloride	6.73		0.50	0.10
108-90-7	Chlorobenzene	5.58		0.50	0.070
75-00-3	Chloroethane	6.38		0.50	0.10
67-66-3	Chloroform	6.41		0.50	0.090
74-87-3	Chloromethane	6.73		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	8.43		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	5.60		0.50	0.10
124-48-1	Dibromochloromethane	5.48		0.50	0.080
100-41-4	Ethylbenzene	5.24		0.50	0.080
1634-04-4	Methyl tert-butyl ether	5.39		0.50	0.080
75-09-2	Methylene Chloride	5.97		0.50	0.10
100-42-5	Styrene	5.17		0.50	0.070
127-18-4	Tetrachloroethene	12.8		0.50	0.20
108-88-3	Toluene	5.27		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1
 Environment Testing, LLC

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MSD Lab Sample ID: 410-116393-6 MSD
 MSD

Matrix: Water Lab File ID: HF27X15.D

Analysis Method: 8260D Date Collected: 02/21/2023 11:08

Sample wt/vol: 25 (mL) Date Analyzed: 02/27/2023 17:21

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.: 348233 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	6.15		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	5.38		0.50	0.080
79-01-6	Trichloroethene	7.90		0.50	0.080
75-01-4	Vinyl chloride	7.09		0.50	0.10
1330-20-7	Xylenes, Total	16.5		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	106		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X15.D
 Lims ID: 410-116393-A-6 MSD
 Client ID: HD-COD-SW-15-0/1-0 MSD
 Sample Type: MSD
 Inject. Date: 27-Feb-2023 17:21:30 ALS Bottle#: 15 Worklist Smp#: 16
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-016
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:13:33 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp

Date: 28-Feb-2023 11:15:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.946	1.941	0.005	99	458742	5.00	8.21	
5 Chloromethane	50	2.123	2.130	-0.007	99	470783	5.00	6.73	
6 Butadiene	39	2.239	2.239	0.000	91	443384	5.00	6.71	
7 Vinyl chloride	62	2.245	2.245	0.000	84	491781	5.00	7.09	
9 Bromomethane	94	2.562	2.568	-0.006	91	305568	5.00	6.28	
10 Chloroethane	64	2.647	2.648	-0.001	99	268536	5.00	6.38	
11 Dichlorofluoromethane	67	2.879	2.873	0.006	97	605474	5.00	6.49	
12 Trichlorofluoromethane	101	2.958	2.959	-0.001	97	542390	5.00	6.46	
14 Ethyl ether	59	3.202	3.202	0.000	93	167437	4.99	4.77	
15 1,2-Dichloro-1,1,2-trifluoroetha	67	3.282	3.276	0.006	93	405665	5.00	6.20	
18 1,1-Dichloroethene	96	3.507	3.507	0.000	97	319973	5.00	6.74	
19 Acetone	43	3.538	3.532	0.006	53	270924	62.6	56.5	
20 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.544	3.544	0.000	90	322787	5.00	6.98	
21 Isopropyl alcohol	45	3.678	3.684	-0.006	25	12281	37.5	11.7	
22 Iodomethane	142	3.696	3.702	-0.006	99	544645	5.00	6.60	
24 Carbon disulfide	76	3.806	3.806	0.000	99	897489	5.00	7.07	
25 Methyl acetate	43	3.946	3.940	0.006	96	59261	5.00	4.67	
27 3-Chloro-1-propene	41	3.983	3.977	0.006	92	457355	5.00	5.56	
28 Methylene Chloride	84	4.159	4.160	-0.001	92	293198	5.00	5.97	
* 29 t-Butyl alcohol-d10 (IS)	65	4.135	4.166	-0.031	99	75011	50.0	50.0	
31 2-Methyl-2-propanol	59	4.294	4.275	0.019	81	39655	50.0	24.4	
32 Acrylonitrile	53	4.495	4.483	0.012	98	184204	25.0	28.4	
33 Methyl tert-butyl ether	73	4.562	4.556	0.006	95	571809	5.00	5.39	
34 trans-1,2-Dichloroethene	96	4.586	4.580	0.006	99	324155	5.00	6.15	
35 Hexane	57	5.007	5.013	-0.006	93	412300	5.00	5.59	
37 1,1-Dichloroethane	63	5.238	5.233	0.005	96	580918	5.00	5.90	
38 Isopropyl ether	45	5.299	5.294	0.005	93	840542	5.00	5.01	
39 2-Chloro-1,3-butadiene	53	5.354	5.348	0.006	90	488563	5.00	6.07	
41 Tert-butyl ethyl ether	59	5.830	5.824	0.006	97	770519	5.00	5.20	
42 2-Butanone (MEK)	43	6.019	6.013	0.006	99	558965	62.6	67.0	
43 cis-1,2-Dichloroethene	96	6.068	6.068	0.000	82	488000	5.00	8.43	
44 2,2-Dichloropropane	77	6.080	6.074	0.006	87	550583	5.00	6.67	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
45 Propionitrile	54	6.104	6.104	0.000	95	81419	37.5	38.0	
48 Methacrylonitrile	67	6.324	6.318	0.006	90	404775	37.5	43.8	
49 Chlorobromomethane	128	6.403	6.397	0.006	92	139099	5.00	6.01	
50 Tetrahydrofuran	71	6.397	6.409	-0.012	70	65525	25.0	27.5	
52 Chloroform	83	6.549	6.543	0.006	93	595496	5.00	6.41	
\$ 53 Dibromofluoromethane (Surr)	113	6.763	6.763	0.000	93	490920	10.0	10.6	
54 1,1,1-Trichloroethane	97	6.781	6.769	0.012	99	593340	5.00	6.86	
55 Cyclohexane	56	6.878	6.879	-0.001	90	563277	5.00	5.74	
56 1,1-Dichloropropene	75	6.994	6.988	0.006	96	486566	5.00	6.22	
57 Carbon tetrachloride	117	6.994	6.988	0.006	95	503453	5.00	6.73	
58 Isobutyl alcohol	41	7.134	7.116	0.018	95	58063	125.1	109.7	
\$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.220	7.220	0.000	90	85134	10.0	10.1	
60 Benzene	78	7.256	7.250	0.006	96	1338673	5.00	5.87	
62 1,2-Dichloroethane	62	7.323	7.324	-0.001	97	309711	5.00	6.27	
64 Tert-amyl methyl ether	73	7.439	7.439	0.000	99	681705	5.00	5.39	
* 65 Fluorobenzene (IS)	96	7.659	7.653	0.006	99	1824203	10.0	10.0	
66 n-Heptane	43	7.671	7.671	0.000	90	363256	5.00	4.50	
68 n-Butanol	56	8.018	8.006	0.012	91	91643	250.2	202.5	
69 Trichloroethene	95	8.134	8.134	0.000	97	474259	5.00	7.90	
70 Methylcyclohexane	83	8.451	8.445	0.006	92	571412	5.00	5.64	
71 1,2-Dichloropropane	63	8.463	8.464	-0.001	96	323908	5.00	5.66	
72 2-ethoxy-2-methyl butane	87	8.476	8.470	0.006	97	458249	5.00	5.72	
74 Methyl methacrylate	69	8.555	8.543	0.012	87	103039	5.00	5.60	
73 1,4-Dioxane	88	8.567	8.555	0.012	28	9507	125.1	80.9	
75 Dibromomethane	93	8.573	8.579	-0.006	95	137037	5.00	5.75	
77 Dichlorobromomethane	83	8.811	8.805	0.006	99	382875	5.00	5.95	
78 2-Nitropropane	41	9.079	9.067	0.012	98	24614	5.00	5.39	
80 1-Bromo-2-chloroethane	63	9.207	9.195	0.012	98	292001	5.00	5.55	
81 cis-1,3-Dichloropropene	75	9.360	9.360	0.000	97	452519	5.00	5.60	
83 4-Methyl-2-pentanone (MIBK)	43	9.530	9.524	0.006	96	1647324	62.6	72.8	
\$ 84 Toluene-d8 (Surr)	98	9.671	9.665	0.005	93	2104829	10.0	9.73	
85 Toluene	92	9.744	9.744	0.000	98	847478	5.00	5.27	
86 trans-1,3-Dichloropropene	75	10.006	10.000	0.006	92	368231	5.00	5.38	
105 Ethyl methacrylate	69	10.067	10.061	0.006	89	233151	5.00	4.44	
106 1,1,2-Trichloroethane	97	10.207	10.207	0.000	90	194935	5.00	5.12	
107 Tetrachloroethene	166	10.298	10.293	0.005	98	946805	5.00	12.8	
108 1,3-Dichloropropane	76	10.372	10.366	0.006	90	338376	5.00	5.16	
109 2-Hexanone	43	10.420	10.414	0.006	96	1113987	62.6	74.2	
111 Chlorodibromomethane	129	10.585	10.585	0.000	89	258479	5.00	5.48	
112 Ethylene Dibromide	107	10.695	10.695	0.000	99	182937	5.00	5.24	
* 113 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	85	1768447	10.0	10.0	
114 1-Chlorohexane	91	11.134	11.134	0.000	96	489535	5.00	4.93	
115 Chlorobenzene	112	11.152	11.152	0.000	96	956406	5.00	5.58	
116 1,1,1,2-Tetrachloroethane	131	11.231	11.231	0.000	95	333446	5.00	5.68	
118 Ethylbenzene	91	11.237	11.237	0.000	98	1644163	5.00	5.24	
119 m-Xylene & p-Xylene	106	11.353	11.353	0.000	99	1329319	10.0	11.1	
120 o-Xylene	106	11.682	11.676	0.006	96	623356	5.00	5.39	
121 Styrene	104	11.695	11.695	-0.001	95	969476	5.00	5.17	
122 Bromoform	173	11.853	11.853	0.000	97	146143	5.00	5.38	
123 Isopropylbenzene	105	11.981	11.981	0.000	95	1659693	5.00	5.31	
\$ 126 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	93	851331	10.0	9.69	
127 1,1,2,2-Tetrachloroethane	83	12.225	12.219	0.006	93	226357	5.00	4.55	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
128 Bromobenzene	156	12.243	12.237	0.006	95	378494	5.00	5.09	
129 trans-1,4-Dichloro-2-butene	53	12.249	12.243	0.006	89	250474	25.0	32.0	
130 1,2,3-Trichloropropane	110	12.268	12.268	0.000	82	59536	5.00	4.77	
131 N-Propylbenzene	91	12.310	12.304	0.006	99	1942373	5.00	4.68	
132 2-Chlorotoluene	126	12.383	12.384	-0.001	97	398200	5.00	4.99	
133 1,3,5-Trimethylbenzene	105	12.444	12.445	-0.001	95	1341798	5.00	4.64	
134 4-Chlorotoluene	126	12.475	12.475	0.000	97	407888	5.00	5.09	
135 tert-Butylbenzene	134	12.682	12.682	0.000	92	290535	5.00	4.54	
137 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	1355080	5.00	4.64	
138 sec-Butylbenzene	105	12.847	12.847	0.000	94	1723644	5.00	4.55	
139 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	756743	5.00	4.91	
140 4-Isopropyltoluene	119	12.956	12.951	0.005	97	1477909	5.00	4.55	
* 141 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1086390	10.0	10.0	
142 1,4-Dichlorobenzene	146	13.017	13.018	-0.001	96	765405	5.00	5.00	
143 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	98	608672	5.00	4.89	
144 Benzyl chloride	126	13.097	13.091	0.006	98	99178	5.00	4.91	
145 p-Diethylbenzene	119	13.152	13.152	0.000	92	858247	5.00	4.57	
146 n-Butylbenzene	92	13.243	13.243	0.000	97	675609	5.00	4.12	
147 1,2-Dichlorobenzene	146	13.273	13.274	-0.001	99	658071	5.00	4.82	
149 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	89	28734	5.00	4.38	
150 1,3,5-Trichlorobenzene	180	13.944	13.938	0.006	98	515646	5.00	4.30	
151 1,2,4-Trichlorobenzene	180	14.359	14.359	0.000	93	411798	5.00	4.08	
152 Hexachlorobutadiene	225	14.444	14.444	0.000	95	155510	5.00	3.17	
153 Naphthalene	128	14.542	14.542	0.000	96	607745	5.00	3.73	
154 1,2,3-Trichlorobenzene	180	14.682	14.682	0.000	96	330120	5.00	3.85	
155 2-Methylnaphthalene	142	15.297	15.298	-0.001	92	230097	5.00	2.34	
158 Pentane	43		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MSV_QC_Gas826_00128	Amount Added: 5.38	Units: uL	
MSV_LCS_VOC#1_00097	Amount Added: 5.38	Units: uL	
MSV_LCS_EE_00004	Amount Added: 5.38	Units: uL	
MSV_LLcentISS_00006	Amount Added: 5.00	Units: uL	Run Reagent

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X15.D

Injection Date: 27-Feb-2023 17:21:30

Instrument ID: 19094

Operator ID: knk41612

Lims ID: 410-116393-A-6 MSD

Worklist Smp#: 16

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

Purge Vol: 25.000 mL

Dil. Factor: 1.0000

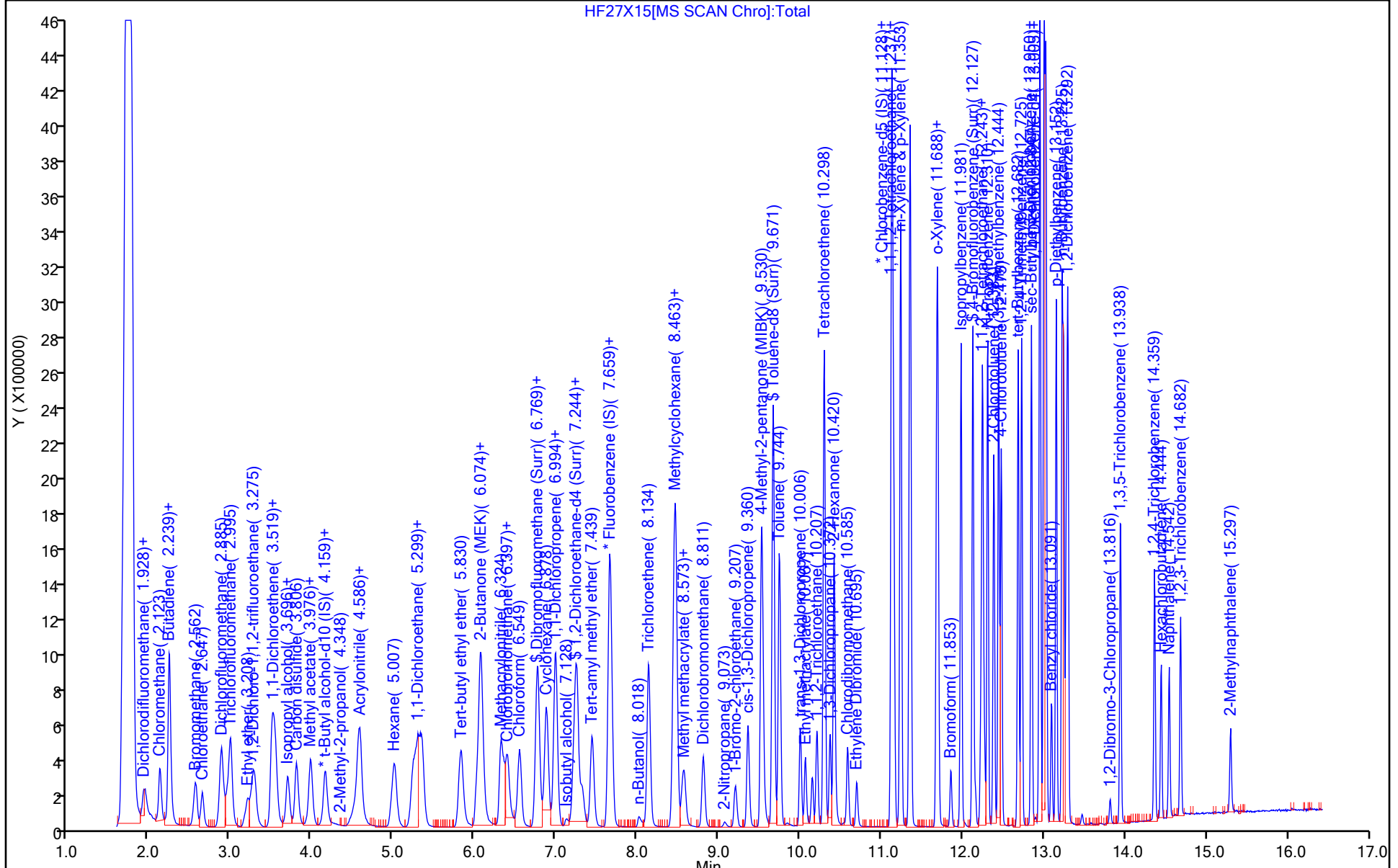
ALS Bottle#: 15

Method: MSV_19094_25mL

Limit Group: MSV - 8260C_D

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

Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Environment Testing, LLC
Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\HF27X15.D
 Lims ID: 410-116393-A-6 MSD
 Client ID: HD-COD-SW-15-0/1-0 MSD
 Sample Type: MSD
 Inject. Date: 27-Feb-2023 17:21:30 ALS Bottle#: 15 Worklist Smp#: 16
 Purge Vol: 25.000 mL Dil. Factor: 1.0000
 Sample Info: 410-0077854-016
 Operator ID: knk41612 Instrument ID: 19094
 Method: \\chromfs\Lancaster\ChromData\19094\20230227-77854.b\MSV_19094_25mL.m
 Limit Group: MSV - 8260C_D
 Last Update: 28-Feb-2023 11:13:33 Calib Date: 11-Jul-2022 18:52:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromfs\Lancaster\ChromData\19094\20220711-61489.b\Copy_HL11X18.D
 Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
 Process Host: CTX1615

First Level Reviewer: kaewrungrueangp

Date: 28-Feb-2023 11:15:29

Compound	Amount Added	Amount Recovered	% Rec.
\$ 53 Dibromofluoromethane (Surr)	10.0	10.6	106.32
\$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	101.05
\$ 84 Toluene-d8 (Surr)	10.0	9.73	97.29
\$ 126 4-Bromofluorobenzene (Surr)	10.0	9.69	96.93

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-116393-1

SDG No.: _____

Instrument ID: 19094Start Date: 07/11/2022 13:17Analysis Batch Number: 274149End Date: 07/11/2022 20:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-274149/1		07/11/2022 13:17	1	HL11T03.D	R-624Si1MS 30m 0.25 (mm)
IC 410-274149/3		07/11/2022 13:50	1		R-624Si1MS 30m 0.25 (mm)
IC 410-274149/4		07/11/2022 14:10	1		R-624Si1MS 30m 0.25 (mm)
CCV 410-274149/1004		07/11/2022 14:10	1		R-624Si1MS 30m 0.25 (mm)
IC 410-274149/5		07/11/2022 14:30	1		R-624Si1MS 30m 0.25 (mm)
IC 410-274149/6		07/11/2022 14:50	1		R-624Si1MS 30m 0.25 (mm)
IC 410-274149/7		07/11/2022 15:10	1		R-624Si1MS 30m 0.25 (mm)
IC 410-274149/8		07/11/2022 15:30	1		R-624Si1MS 30m 0.25 (mm)
IC 410-274149/9		07/11/2022 15:51	1		R-624Si1MS 30m 0.25 (mm)
ICV 410-274149/10		07/11/2022 16:11	1		R-624Si1MS 30m 0.25 (mm)
IC 410-274149/12		07/11/2022 16:51	1	HL11X12.D	R-624Si1MS 30m 0.25 (mm)
ICIS 410-274149/13		07/11/2022 17:11	1	HL11X13.D	R-624Si1MS 30m 0.25 (mm)
CCVIS 410-274149/1013		07/11/2022 17:11	1		R-624Si1MS 30m 0.25 (mm)
IC 410-274149/14		07/11/2022 17:31	1	HL11X14.D	R-624Si1MS 30m 0.25 (mm)
IC 410-274149/15		07/11/2022 17:51	1	HL11X15.D	R-624Si1MS 30m 0.25 (mm)
IC 410-274149/16		07/11/2022 18:11	1	HL11X16.D	R-624Si1MS 30m 0.25 (mm)
IC 410-274149/17		07/11/2022 18:32	1	HL11X17.D	R-624Si1MS 30m 0.25 (mm)
IC 410-274149/18		07/11/2022 18:52	1	Copy_HL11X18.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		07/11/2022 19:52	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		07/11/2022 20:12	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		07/11/2022 20:32	1		R-624Si1MS 30m 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-116393-1

SDG No.: _____

Instrument ID: 19094 Start Date: 07/14/2022 19:09

Analysis Batch Number: 275687 End Date: 07/14/2022 20:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-275687/1		07/14/2022 19:09	1	copy_HL14T01.D	R-624Si1MS 30m 0.25 (mm)
CCVIS 410-275687/3		07/14/2022 19:44	1		R-624Si1MS 30m 0.25 (mm)
ICV 410-275687/4		07/14/2022 20:04	1	copy_HL14X03.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		07/14/2022 20:04	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		07/14/2022 20:24	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		07/14/2022 20:44	1		R-624Si1MS 30m 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-116393-1

SDG No.: _____

Instrument ID: 19094 Start Date: 02/27/2023 11:40

Analysis Batch Number: 348233 End Date: 02/27/2023 22:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-348233/1		02/27/2023 11:40	1	HF27T01.D	R-624Si1MS 30m 0.25 (mm)
CCVIS 410-348233/3		02/27/2023 12:18	1	HF27X02.D	R-624Si1MS 30m 0.25 (mm)
LCS 410-348233/4		02/27/2023 12:38	1	HF27X03.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/27/2023 12:59	1		R-624Si1MS 30m 0.25 (mm)
MB 410-348233/6		02/27/2023 13:19	1	HF27X05.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/27/2023 14:15	1		R-624Si1MS 30m 0.25 (mm)
410-116393-14	HD-QC1-0/1-2	02/27/2023 14:35	1	HF27X07.D	R-624Si1MS 30m 0.25 (mm)
410-116393-1	HD-COD-SW-6-0/1-0	02/27/2023 14:56	1	HF27X08.D	R-624Si1MS 30m 0.25 (mm)
410-116393-2	HD-COD-SW-7-0/1-0	02/27/2023 15:17	1	HF27X09.D	R-624Si1MS 30m 0.25 (mm)
410-116393-3	HD-COD-SW-8-0/1-0	02/27/2023 15:37	1	HF27X10.D	R-624Si1MS 30m 0.25 (mm)
410-116393-4	HD-COD-SW-9-0/1-0	02/27/2023 15:58	1	HF27X11.D	R-624Si1MS 30m 0.25 (mm)
410-116393-5	HD-COD-SW-13-0/1-0	02/27/2023 16:19	1	HF27X12.D	R-624Si1MS 30m 0.25 (mm)
410-116393-6	HD-COD-SW-15-0/1-0	02/27/2023 16:39	1	HF27X13.D	R-624Si1MS 30m 0.25 (mm)
410-116393-6 MS	HD-COD-SW-15-0/1-0 MS MS	02/27/2023 17:00	1	HF27X14.D	R-624Si1MS 30m 0.25 (mm)
410-116393-6 MSD	HD-COD-SW-15-0/1-0 MSD MSD	02/27/2023 17:21	1	HF27X15.D	R-624Si1MS 30m 0.25 (mm)
410-116393-7	HD-COD-SW-16-0/1-0	02/27/2023 17:41	1	HF27X16.D	R-624Si1MS 30m 0.25 (mm)
410-116393-8	HD-COD-SW-17-0/1-0	02/27/2023 18:02	1	HF27X17.D	R-624Si1MS 30m 0.25 (mm)
410-116393-9	HD-COD-SW-26-0/1-0	02/27/2023 18:23	1	HF27X18.D	R-624Si1MS 30m 0.25 (mm)
410-116393-10	HD-COD-SW-27-0/1-0	02/27/2023 18:43	1	HF27X19.D	R-624Si1MS 30m 0.25 (mm)
410-116393-11	HD-COD-SW-28-0/1-0	02/27/2023 19:04	1	HF27X20.D	R-624Si1MS 30m 0.25 (mm)
410-116393-12	HD-COD-SW-29-0/1-0	02/27/2023 19:25	1	HF27X21.D	R-624Si1MS 30m 0.25 (mm)
410-116393-13	HD-QC1-0/1-1	02/27/2023 19:46	1	HF27X22.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/27/2023 20:06	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/27/2023 20:27	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/27/2023 20:48	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/27/2023 21:08	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/27/2023 21:29	20		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/27/2023 21:50	20		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/27/2023 22:10	20		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/27/2023 22:31	200		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/27/2023 22:52	20		R-624Si1MS 30m 0.25 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-116393-1

SDG No.: _____

Instrument ID: 19094 Start Date: 02/28/2023 10:06

Analysis Batch Number: 348577 End Date: 02/28/2023 21:42

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-348577/1		02/28/2023 10:06	1	HF28T01.D	R-624Si1MS 30m 0.25 (mm)
CCVIS 410-348577/6		02/28/2023 11:42	1	HF28X05.D	R-624Si1MS 30m 0.25 (mm)
CCV 410-348577/7		02/28/2023 12:03	1		R-624Si1MS 30m 0.25 (mm)
LCS 410-348577/8		02/28/2023 12:24	1	HF28X07.D	R-624Si1MS 30m 0.25 (mm)
LCSD 410-348577/9		02/28/2023 12:45	1	HF28X08.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 13:05	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 13:26	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 13:47	1		R-624Si1MS 30m 0.25 (mm)
MB 410-348577/13		02/28/2023 14:07	1	HF28X12.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 14:28	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 14:49	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 15:09	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 15:30	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 15:51	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 16:11	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 16:32	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 16:52	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 17:13	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 17:34	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 17:54	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 18:15	1		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 18:36	10		R-624Si1MS 30m 0.25 (mm)
410-116393-8 DL	HD-COD-SW-17-0/1-0 DL	02/28/2023 18:56	10	HF28X26.D	R-624Si1MS 30m 0.25 (mm)
410-116393-13 DL	HD-QC1-0/1-1 DL	02/28/2023 19:17	10	HF28X27.D	R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 19:38	2		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 19:58	20		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 20:19	2		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 20:40	20		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 21:00	5		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 21:21	50		R-624Si1MS 30m 0.25 (mm)
ZZZZZ		02/28/2023 21:42	100		R-624Si1MS 30m 0.25 (mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1

SDG No.: _____

Batch Number: 274149 Batch Start Date: 07/11/22 13:17 Batch Analyst: Sposito, Kevin A

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Lot#Vial	MSV_LL #1_826 00049	MSV_LL #2_826 00053	MSV_LL GAS826 00101
BFB 410-274149/1		8260D		1 uL	1 uL				
IC 410-274149/12		8260D		25 mL	25 mL	2646	25 uL	25 uL	25 uL
ICIS 410-274149/13		8260D		25 mL	25 mL	2646	10 uL	10 uL	10 uL
IC 410-274149/14		8260D		25 mL	25 mL	2646	5 uL	5 uL	5 uL
IC 410-274149/15		8260D		25 mL	25 mL	2646	2 uL	2 uL	2 uL
IC 410-274149/16		8260D		25 mL	25 mL	2646	2 uL	2 uL	2 uL
IC 410-274149/17		8260D		25 mL	25 mL	2646	2 uL	2 uL	2 uL
IC 410-274149/18		8260D		25 mL	25 mL	2646	2 uL	2 uL	2 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LLcentISS 00005	MSV_V_BFB 00008				
BFB 410-274149/1		8260D			1 uL				
IC 410-274149/12		8260D		5 uL					
ICIS 410-274149/13		8260D		5 uL					
IC 410-274149/14		8260D		5 uL					
IC 410-274149/15		8260D		5 uL					
IC 410-274149/16		8260D		5 uL					
IC 410-274149/17		8260D		5 uL					
IC 410-274149/18		8260D		5 uL					

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1

SDG No.: _____

Batch Number: 274149 Batch Start Date: 07/11/22 13:17 Batch Analyst: Sposito, Kevin A

Batch Method: 8260D Batch End Date: _____

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1

SDG No.: _____

Batch Number: 275687 Batch Start Date: 07/14/22 19:09 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Lot#Vial	LCS_ETBR 00003	MSV_LCS_ACROL 00066	MSV_LCS_EE 00003
BFB 410-275687/1		8260D		1 uL	1 uL				
ICV 410-275687/4		8260D		25 mL	25 mL	2646	12.5 uL	12.5 uL	12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LCS_Penta 00017	MSV_LCS_VOC#1 00063	MSV_LLcentISS 00005	MSV_QC_Gas826 00089	MSV_V_BFB 00008
BFB 410-275687/1		8260D						1 uL
ICV 410-275687/4		8260D		12.5 uL	12.5 uL	5 uL	12.5 uL	

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1

SDG No.: _____

Batch Number: 348233 Batch Start Date: 02/27/23 11:40 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloChe ck	Headspace	Lot#Vial
BFB 410-348233/1		8260D		1 uL	1 uL				
CCVIS 410-348233/3		8260D		25 mL	25 mL				2672
LCS 410-348233/4		8260D		25 mL	25 mL				2672
MB 410-348233/6		8260D		25 mL	25 mL				2672
410-116393-A-14	HD-QC1-0/1-2	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-116393-A-1	HD-COD-SW-6-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-116393-A-2	HD-COD-SW-7-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-116393-A-3	HD-COD-SW-8-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-116393-A-4	HD-COD-SW-9-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-116393-A-5	HD-COD-SW-13-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-116393-A-6	HD-COD-SW-15-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-116393-A-6 MS	HD-COD-SW-15-0/1-0 MS	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-116393-A-6 MSD	HD-COD-SW-15-0/1-0 MSD	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-116393-A-7	HD-COD-SW-16-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-116393-A-8	HD-COD-SW-17-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-116393-A-9	HD-COD-SW-26-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-116393-A-10	HD-COD-SW-27-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-116393-A-11	HD-COD-SW-28-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-116393-A-12	HD-COD-SW-29-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-116393-A-13	HD-QC1-0/1-1	8260D	T	25 mL	25 mL	<2 SU	N	N	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LCS_EE 00004	MSV_LCS_VOC#1 00097	MSV_LL_#1_826 00067	MSV_LL_#2_826 00074	MSV_LL_GAS826 00138	MSV_LLcentISS 00006

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1

SDG No.: _____

Batch Number: 348233 Batch Start Date: 02/27/23 11:40 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV LCS_EE 00004	MSV LCS_VOC#1 00097	MSV_LL #1_826 00067	MSV_LL #2_826 00074	MSV_LL_GAS826 00138	MSV_LLcentISS 00006
BFB 410-348233/1		8260D							
CCVIS 410-348233/3		8260D				20 uL	20 uL	20 uL	5 uL
LCS 410-348233/4		8260D		12.5 uL	12.5 uL				5 uL
MB 410-348233/6		8260D							5 uL
410-116393-A-14	HD-QC1-0/1-2	8260D	T						5 uL
410-116393-A-1	HD-COD-SW-6-0/1-0	8260D	T						5 uL
410-116393-A-2	HD-COD-SW-7-0/1-0	8260D	T						5 uL
410-116393-A-3	HD-COD-SW-8-0/1-0	8260D	T						5 uL
410-116393-A-4	HD-COD-SW-9-0/1-0	8260D	T						5 uL
410-116393-A-5	HD-COD-SW-13-0/1-0	8260D	T						5 uL
410-116393-A-6	HD-COD-SW-15-0/1-0	8260D	T						5 uL
410-116393-A-6 MS	HD-COD-SW-15-0/1-0 MS	8260D	T	5.38 uL	5.38 uL				5 uL
410-116393-A-6 MSD	HD-COD-SW-15-0/1-0 MSD	8260D	T	5.38 uL	5.38 uL				5 uL
410-116393-A-7	HD-COD-SW-16-0/1-0	8260D	T						5 uL
410-116393-A-8	HD-COD-SW-17-0/1-0	8260D	T						5 uL
410-116393-A-9	HD-COD-SW-26-0/1-0	8260D	T						5 uL
410-116393-A-10	HD-COD-SW-27-0/1-0	8260D	T						5 uL
410-116393-A-11	HD-COD-SW-28-0/1-0	8260D	T						5 uL
410-116393-A-12	HD-COD-SW-29-0/1-0	8260D	T						5 uL
410-116393-A-13	HD-QC1-0/1-1	8260D	T						5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QC_Gas826 00128	MSV_V_BFB 00011				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1

SDG No.: _____

Batch Number: 348233 Batch Start Date: 02/27/23 11:40 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QC_Gas826 00128	MSV_V_BFB 00011				
BFB 410-348233/1		8260D			1 uL				
CCVIS 410-348233/3		8260D							
LCS 410-348233/4		8260D		12.5 uL					
MB 410-348233/6		8260D							
410-116393-A-14	HD-QC1-0/1-2	8260D	T						
410-116393-A-1	HD-COD-SW-6-0/1-0	8260D	T						
410-116393-A-2	HD-COD-SW-7-0/1-0	8260D	T						
410-116393-A-3	HD-COD-SW-8-0/1-0	8260D	T						
410-116393-A-4	HD-COD-SW-9-0/1-0	8260D	T						
410-116393-A-5	HD-COD-SW-13-0/1-0	8260D	T						
410-116393-A-6	HD-COD-SW-15-0/1-0	8260D	T						
410-116393-A-6 MS	HD-COD-SW-15-0/1-0 MS	8260D	T	5.38 uL					
410-116393-A-6 MSD	HD-COD-SW-15-0/1-0 MSD	8260D	T	5.38 uL					
410-116393-A-7	HD-COD-SW-16-0/1-0	8260D	T						
410-116393-A-8	HD-COD-SW-17-0/1-0	8260D	T						
410-116393-A-9	HD-COD-SW-26-0/1-0	8260D	T						
410-116393-A-10	HD-COD-SW-27-0/1-0	8260D	T						
410-116393-A-11	HD-COD-SW-28-0/1-0	8260D	T						
410-116393-A-12	HD-COD-SW-29-0/1-0	8260D	T						
410-116393-A-13	HD-QC1-0/1-1	8260D	T						

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1

SDG No.: _____

Batch Number: 348233 Batch Start Date: 02/27/23 11:40 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date: _____

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1

SDG No.: _____

Batch Number: 348577 Batch Start Date: 02/28/23 10:06 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloChe ck	Headspace	Lot#Vial
BFB 410-348577/1		8260D		1 uL	1 uL				
CCVIS 410-348577/6		8260D		25 mL	25 mL				2672
LCS 410-348577/8		8260D		25 mL	25 mL				2672
LCSD 410-348577/9		8260D		25 mL	25 mL				2672
MB 410-348577/13		8260D		25 mL	25 mL				2672
410-116393-B-8	HD-COD-SW-17-0/1 -0	8260D	T	25 mL	25 mL	<2 SU	N	N	2672
410-116393-B-13	HD-QC1-0/1-1	8260D	T	25 mL	25 mL	<2 SU	N	N	2672

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LCS_EE 00004	MSV_LCS_VOC#1 00097	MSV_LL_#1_826 00067	MSV_LL_#2_826 00074	MSV_LL_GAS826 00138	MSV_LLcentISS 00006
BFB 410-348577/1		8260D							
CCVIS 410-348577/6		8260D				20 uL	20 uL	20 uL	5 uL
LCS 410-348577/8		8260D		12.5 uL	12.5 uL				5 uL
LCSD 410-348577/9		8260D		12.5 uL	12.5 uL				5 uL
MB 410-348577/13		8260D							5 uL
410-116393-B-8	HD-COD-SW-17-0/1 -0	8260D	T						5 uL
410-116393-B-13	HD-QC1-0/1-1	8260D	T						5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QC_Gas826 00128	MSV_V_BFB 00011				
BFB 410-348577/1		8260D			1 uL				
CCVIS 410-348577/6		8260D							
LCS 410-348577/8		8260D		12.5 uL					
LCSD 410-348577/9		8260D		12.5 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-116393-1

SDG No.: _____

Batch Number: 348577 Batch Start Date: 02/28/23 10:06 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QC_Gas826 00128	MSV_V_BFB 00011				
MB 410-348577/13		8260D							
410-116393-B-8	HD-COD-SW-17-0/1 -0	8260D	T						
410-116393-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



410-116393 Chain of Custody

70472 Environmental Analysis Request/Chain of Custody

SBURG PA

page 1 of 2

Acct. # _____ Group # _____ Sample # _____

Client: Groundwater Sciences Corporation				Matrix			Analyses Requested								For Lab Use Only							
Project Name/#: FYNOP Monthly Surface Water		Site ID #: FYNOP, York PA		<input type="checkbox"/> Tissue	<input type="checkbox"/> Ground	<input checked="" type="checkbox"/> Surface	Preservation Codes								SF #: _____							
Project Manager: Chris O'Neil		P.O. #: 10012.51		<input type="checkbox"/> Potable	<input type="checkbox"/> NPDES										SCR #: _____							
Sampler: Casey Littlefield / Lucas Grimm		PWSID #: N/A		<input type="checkbox"/> Soil	<input type="checkbox"/> Water	<input type="checkbox"/> Other:	Total # of Containers	Aqueous VOCs via 8260D (low level - 25 ml purge)									Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ P = H ₃ PO ₄ O = Other					
Phone #: (717) 901-8176 / (717) 756-1246		Quote #:															Remarks					
State where samples were collected: York, PA		For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>															All samples preserved on ice.					
Sample Identification		Collection		Grab	Composite																	
		Date	Time																			
HD-COD-SW-6-0/1-0		2/21/23	1015	X		X					3	X										
HD-COD-SW-7-0/1-0			1050	X		X					3	X										
HD-COD-SW-8-0/1-0			0900	X		X					3	X										
HD-COD-SW-9-0/1-0			1210	X		X					3	X										
HD-COD-SW-13-0/1-0			0915	X		X					3	X										
HD-COD-SW-15-0/1-0			1108	X		X			3	X												
HD-COD-SW-15-0/1-0 MS			1108	X		X			3	X												
HD-COD-SW-15-0/1-0 MSD			1108	X		X			3	X												
HD-COD-SW-16-0/1-0			0947	X		X			3	X												
HD-COD-SW-17-0/1-0			0955	X		X			3	X												
Turnaround Time Requested (TAT) (please check): Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> (Rush TAT is subject to laboratory approval and surcharges.)				Relinquished by:		Date	Time	Received by:		Date	Time											
				<i>[Signature]</i>		2/21/23	1333	<i>[Signature]</i>		2/21/23	1533											
Date results are needed: STANDARD				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>		2/22/23	0925	<i>[Signature]</i>		2/22/23	0925											
E-mail Address: <i>on file</i>				Relinquished by:		Date	Time	Received by:		Date	Time											
Phone:				<i>[Signature]</i>		2/22/23	1057															
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>		2/22/23	1057											
NJ DKQP	<input type="checkbox"/>	NYSDEC Category	<input type="checkbox"/> A or <input type="checkbox"/> B	Relinquished by Commercial Carrier:																		
EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, format: _____ List _____ <small>CLP Like Deliverables, Project Specific Analyte</small>				UPS _____ FedEx _____ Other <input checked="" type="checkbox"/>						Temperature upon receipt <u>1.1</u> °C												

Environmental Analysis Request/Chain of Custody

370472

page 2 of 2.



Lancaster Laboratories
Environmental

Acct # _____ Group # _____ Sample # **HARRISBURG PA**

Client: Groundwater Sciences Corporation				Matrix			Analyses Requested						For Lab Use Only									
Project Name/#: FYNOP Monthly Surface Water		Site ID #: FYNOP, York PA		<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. #: 10012.51		<input type="checkbox"/> Soil	<input type="checkbox"/> Water	<input type="checkbox"/> NPDES	<input type="checkbox"/> Other: Trip Blank	H						SCR #: _____								
Sampler: Casey Littlefield / Lucas Grimm		PWSID #: N/A		Total # of Containers				Aqueous VOCs via B260D (low level - 25 ml purge)						Preservation Codes								
Phone #: (717) 901-8176 / (717) 756-1246		Quote #:												H = HCl		T = Thiosulfate						
State where samples were collected: York, PA		For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		S = H ₂ SO ₄		P = H ₃ PO ₄								Remarks								
				O = Other																		
Sample Identification		Collection		Grab	Composite																	
Date	Time																					
HD-COD-SW-26-0/1-0	2/21/23	1033	X			X			3	X											All samples preserved on ice	
HD-COD-SW-27-0/1-0		1105	X			X			3	X												
HD-COD-SW-28-0/1-0		1230	X			X			3	X												
HD-COD-SW-29-0/1-0		0845	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:		Date	Time	Received by:		Date	Time									
(Rush TAT is subject to laboratory approval and surcharges.)						<i>[Signature]</i>		2/21/23	1333	<i>[Signature]</i>		2/21/23	1333									
Date results are needed: STANDARD						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>		2/22/23	0925	<i>[Signature]</i>		2/22/23	0925									
E-mail Address: On File						Relinquished by:		Date	Time	Received by:		Date	Time									
Phone:						<i>[Signature]</i>		2/22/23	1057	<i>[Signature]</i>												
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>		2/22/23	1057									
NJ DKQP	<input type="checkbox"/>	NYSDEC Category	<input type="checkbox"/>	A or	<input type="checkbox"/>	B	Relinquished by Commercial Carrier:															
EDD Required?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, format:			CLP Like Deliverables, Project Specific Analyte List		UPS _____ FedEx _____ Other <input checked="" type="checkbox"/>		Temperature upon receipt <u>1.1</u> °C													

MB

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 410-116393-1

Login Number: 116393

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 1

Creator: Reiff, Nicole L

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, 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	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 410-116393-1

Login Number: 116393

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

Creator: Reiff, Nicole L

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.		