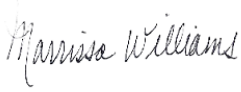
ANALYTICAL REPORT

Job Number: 410-77437-1

Job Description: fYNOP Monthly Surface Water

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

Attention: Christopher O'Neil



Approved for release.
Marrissa C Williams
Project Manager
3/29/2022 12:59 PM

Marrissa C Williams, Project Manager
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03/29/2022

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

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

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
410-77437-1

Receipt
The samples were received on 3/24/2022 3:42 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.9°C

GC/MS VOA
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: 410-77437-1

Client Sample ID: HD-COD-SW-6-0/1-0 — Lab Sample ID: 410-77437-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.7	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.070	J	0.50	0.050	ug/L	1		8260D	Total/NA
Trichloroethene	0.088	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-7-0/1-0 — Lab Sample ID: 410-77437-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.6	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.10	J	0.50	0.050	ug/L	1		8260D	Total/NA
Trichloroethene	0.13	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-8-0/1-0 — Lab Sample ID: 410-77437-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.8	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.11	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.41	J	0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.12	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-28-0/1-0 — Lab Sample ID: 410-77437-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.8	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.11	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.20	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.12	J	0.50	0.070	ug/L	1		8260D	Total/NA
Trichloroethene	0.13	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-13-0/1-0 — Lab Sample ID: 410-77437-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.7	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.11	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.42	J	0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.13	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-15-0/1-0 — Lab Sample ID: 410-77437-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.28	J	0.50	0.060	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	0.13	J	0.50	0.070	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.17	J	0.50	0.060	ug/L	1		8260D	Total/NA
Chloroform	0.27	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	1.7		0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	6.5		0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	1.7		0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-16-0/1-0 — Lab Sample ID: 410-77437-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.061	J	0.50	0.060	ug/L	1		8260D	Total/NA
Acetone	1.8	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.12	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.88		0.50	0.060	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HD-COD-SW-16-0/1-0 (Continued) — Lab Sample ID: 410-77437-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.14	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-17-0/1-0 — Lab Sample ID: 410-77437-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	7.5		0.50	0.060	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	1.2		0.50	0.070	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.61		0.50	0.060	ug/L	1		8260D	Total/NA
Chloroform	0.24	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	4.2		0.50	0.050	ug/L	1		8260D	Total/NA
Trichloroethene	5.0		0.50	0.060	ug/L	1		8260D	Total/NA
Tetrachloroethene - DL	88		5.0	0.60	ug/L	10		8260D	Total/NA

Client Sample ID: HD-COD-SW-26-0/1-0 — Lab Sample ID: 410-77437-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.097	J	0.50	0.060	ug/L	1		8260D	Total/NA
Acetone	0.90	J	5.0	0.90	ug/L	1		8260D	Total/NA
Chloroform	0.41	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.074	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	2.3		0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.14	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-27-0/1-0 — Lab Sample ID: 410-77437-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.5	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.10	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.082	J	0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.14	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-9-0/1-0 — Lab Sample ID: 410-77437-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.2	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.11	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.22	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.097	J	0.50	0.070	ug/L	1		8260D	Total/NA
Trichloroethene	0.12	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-29-0/1-0 — Lab Sample ID: 410-77437-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.9	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.10	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.25	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.074	J	0.50	0.070	ug/L	1		8260D	Total/NA
Trichloroethene	0.12	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-QC1-0/1-1 — Lab Sample ID: 410-77437-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	7.4		0.50	0.060	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	1.2		0.50	0.070	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HD-QC1-0/1-1 (Continued)
Lab Sample ID: 410-77437-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.61		0.50	0.060	ug/L	1		8260D	Total/NA
Chloroform	0.23	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	4.2		0.50	0.050	ug/L	1		8260D	Total/NA
Trichloroethene	5.0		0.50	0.060	ug/L	1		8260D	Total/NA
Tetrachloroethene - DL	87		5.0	0.60	ug/L	10		8260D	Total/NA

Client Sample ID: HD-QC1-0/1-2
Lab Sample ID: 410-77437-14

No Detections.

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

Date Collected: 03/24/22 10:10
Date Received: 03/24/22 15:42

Lab Sample ID: 410-77437-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 12:45	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 12:45	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 12:45	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 12:45	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/27/22 12:45	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 12:45	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/27/22 12:45	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/27/22 12:45	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/27/22 12:45	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/27/22 12:45	1
2-Hexanone	ND		5.0	0.60	ug/L			03/27/22 12:45	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/27/22 12:45	1
Acetone	**1.7**	**J**	5.0	0.90	ug/L			03/27/22 12:45	1
Benzene	ND		0.50	0.050	ug/L			03/27/22 12:45	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/27/22 12:45	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/27/22 12:45	1
Bromoform	ND		1.0	0.30	ug/L			03/27/22 12:45	1
Bromomethane	ND		0.50	0.070	ug/L			03/27/22 12:45	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/27/22 12:45	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/27/22 12:45	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/27/22 12:45	1
Chloroethane	ND		0.50	0.070	ug/L			03/27/22 12:45	1
Chloroform	ND		0.50	0.090	ug/L			03/27/22 12:45	1
Chloromethane	ND		0.50	0.060	ug/L			03/27/22 12:45	1
cis-1,2-Dichloroethene	**0.070**	**J**	0.50	0.050	ug/L			03/27/22 12:45	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/27/22 12:45	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/27/22 12:45	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/27/22 12:45	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/27/22 12:45	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/27/22 12:45	1
Styrene	ND		0.50	0.050	ug/L			03/27/22 12:45	1
Tetrachloroethene	ND		0.50	0.060	ug/L			03/27/22 12:45	1
Toluene	ND		0.50	0.070	ug/L			03/27/22 12:45	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 12:45	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/27/22 12:45	1
Trichloroethene	**0.088**	**J**	0.50	0.060	ug/L			03/27/22 12:45	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/27/22 12:45	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/27/22 12:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*		*03/27/22 12:45*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*03/27/22 12:45*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*03/27/22 12:45*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/27/22 12:45*	*1*

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

Date Collected: 03/24/22 11:05
Date Received: 03/24/22 15:42

Lab Sample ID: 410-77437-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 13:06	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 13:06	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 13:06	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 13:06	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/27/22 13:06	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 13:06	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/27/22 13:06	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/27/22 13:06	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/27/22 13:06	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/27/22 13:06	1
2-Hexanone	ND		5.0	0.60	ug/L			03/27/22 13:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/27/22 13:06	1
Acetone	**1.6**	**J**	5.0	0.90	ug/L			03/27/22 13:06	1
Benzene	ND		0.50	0.050	ug/L			03/27/22 13:06	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/27/22 13:06	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/27/22 13:06	1
Bromoform	ND		1.0	0.30	ug/L			03/27/22 13:06	1
Bromomethane	ND		0.50	0.070	ug/L			03/27/22 13:06	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/27/22 13:06	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/27/22 13:06	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/27/22 13:06	1
Chloroethane	ND		0.50	0.070	ug/L			03/27/22 13:06	1
Chloroform	ND		0.50	0.090	ug/L			03/27/22 13:06	1
Chloromethane	ND		0.50	0.060	ug/L			03/27/22 13:06	1
cis-1,2-Dichloroethene	**0.10**	**J**	0.50	0.050	ug/L			03/27/22 13:06	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/27/22 13:06	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/27/22 13:06	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/27/22 13:06	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/27/22 13:06	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/27/22 13:06	1
Styrene	ND		0.50	0.050	ug/L			03/27/22 13:06	1
Tetrachloroethene	ND		0.50	0.060	ug/L			03/27/22 13:06	1
Toluene	ND		0.50	0.070	ug/L			03/27/22 13:06	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 13:06	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/27/22 13:06	1
Trichloroethene	**0.13**	**J**	0.50	0.060	ug/L			03/27/22 13:06	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/27/22 13:06	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/27/22 13:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*		*03/27/22 13:06*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*03/27/22 13:06*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*03/27/22 13:06*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/27/22 13:06*	*1*

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

Date Collected: 03/24/22 09:05
Date Received: 03/24/22 15:42

Lab Sample ID: 410-77437-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 13:27	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 13:27	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 13:27	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 13:27	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/27/22 13:27	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 13:27	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/27/22 13:27	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/27/22 13:27	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/27/22 13:27	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/27/22 13:27	1
2-Hexanone	ND		5.0	0.60	ug/L			03/27/22 13:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/27/22 13:27	1
Acetone	**1.8**	**J**	5.0	0.90	ug/L			03/27/22 13:27	1
Benzene	ND		0.50	0.050	ug/L			03/27/22 13:27	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/27/22 13:27	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/27/22 13:27	1
Bromoform	ND		1.0	0.30	ug/L			03/27/22 13:27	1
Bromomethane	ND		0.50	0.070	ug/L			03/27/22 13:27	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/27/22 13:27	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/27/22 13:27	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/27/22 13:27	1
Chloroethane	ND		0.50	0.070	ug/L			03/27/22 13:27	1
Chloroform	ND		0.50	0.090	ug/L			03/27/22 13:27	1
Chloromethane	ND		0.50	0.060	ug/L			03/27/22 13:27	1
cis-1,2-Dichloroethene	**0.11**	**J**	0.50	0.050	ug/L			03/27/22 13:27	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/27/22 13:27	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/27/22 13:27	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/27/22 13:27	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/27/22 13:27	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/27/22 13:27	1
Styrene	ND		0.50	0.050	ug/L			03/27/22 13:27	1
Tetrachloroethene	**0.41**	**J**	0.50	0.060	ug/L			03/27/22 13:27	1
Toluene	ND		0.50	0.070	ug/L			03/27/22 13:27	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 13:27	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/27/22 13:27	1
Trichloroethene	**0.12**	**J**	0.50	0.060	ug/L			03/27/22 13:27	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/27/22 13:27	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/27/22 13:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*		*03/27/22 13:27*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*03/27/22 13:27*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*03/27/22 13:27*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/27/22 13:27*	*1*

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

Date Collected: 03/24/22 12:10
Date Received: 03/24/22 15:42

Lab Sample ID: 410-77437-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 13:48	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 13:48	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 13:48	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 13:48	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/27/22 13:48	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 13:48	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/27/22 13:48	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/27/22 13:48	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/27/22 13:48	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/27/22 13:48	1
2-Hexanone	ND		5.0	0.60	ug/L			03/27/22 13:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/27/22 13:48	1
Acetone	**1.8**	**J**	5.0	0.90	ug/L			03/27/22 13:48	1
Benzene	ND		0.50	0.050	ug/L			03/27/22 13:48	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/27/22 13:48	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/27/22 13:48	1
Bromoform	ND		1.0	0.30	ug/L			03/27/22 13:48	1
Bromomethane	ND		0.50	0.070	ug/L			03/27/22 13:48	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/27/22 13:48	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/27/22 13:48	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/27/22 13:48	1
Chloroethane	ND		0.50	0.070	ug/L			03/27/22 13:48	1
Chloroform	ND		0.50	0.090	ug/L			03/27/22 13:48	1
Chloromethane	ND		0.50	0.060	ug/L			03/27/22 13:48	1
cis-1,2-Dichloroethene	**0.11**	**J**	0.50	0.050	ug/L			03/27/22 13:48	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/27/22 13:48	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/27/22 13:48	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/27/22 13:48	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/27/22 13:48	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/27/22 13:48	1
Styrene	ND		0.50	0.050	ug/L			03/27/22 13:48	1
Tetrachloroethene	**0.20**	**J**	0.50	0.060	ug/L			03/27/22 13:48	1
Toluene	**0.12**	**J**	0.50	0.070	ug/L			03/27/22 13:48	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 13:48	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/27/22 13:48	1
Trichloroethene	**0.13**	**J**	0.50	0.060	ug/L			03/27/22 13:48	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/27/22 13:48	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/27/22 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*80 - 120*		*03/27/22 13:48*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*03/27/22 13:48*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*03/27/22 13:48*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/27/22 13:48*	*1*

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

Date Collected: 03/24/22 09:20
Date Received: 03/24/22 15:42

Lab Sample ID: 410-77437-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 14:09	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 14:09	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 14:09	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 14:09	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/27/22 14:09	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 14:09	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/27/22 14:09	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/27/22 14:09	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/27/22 14:09	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/27/22 14:09	1
2-Hexanone	ND		5.0	0.60	ug/L			03/27/22 14:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/27/22 14:09	1
Acetone	**1.7**	**J**	5.0	0.90	ug/L			03/27/22 14:09	1
Benzene	ND		0.50	0.050	ug/L			03/27/22 14:09	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/27/22 14:09	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/27/22 14:09	1
Bromoform	ND		1.0	0.30	ug/L			03/27/22 14:09	1
Bromomethane	ND		0.50	0.070	ug/L			03/27/22 14:09	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/27/22 14:09	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/27/22 14:09	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/27/22 14:09	1
Chloroethane	ND		0.50	0.070	ug/L			03/27/22 14:09	1
Chloroform	ND		0.50	0.090	ug/L			03/27/22 14:09	1
Chloromethane	ND		0.50	0.060	ug/L			03/27/22 14:09	1
cis-1,2-Dichloroethene	**0.11**	**J**	0.50	0.050	ug/L			03/27/22 14:09	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/27/22 14:09	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/27/22 14:09	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/27/22 14:09	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/27/22 14:09	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/27/22 14:09	1
Styrene	ND		0.50	0.050	ug/L			03/27/22 14:09	1
Tetrachloroethene	**0.42**	**J**	0.50	0.060	ug/L			03/27/22 14:09	1
Toluene	ND		0.50	0.070	ug/L			03/27/22 14:09	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 14:09	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/27/22 14:09	1
Trichloroethene	**0.13**	**J**	0.50	0.060	ug/L			03/27/22 14:09	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/27/22 14:09	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/27/22 14:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*03/27/22 14:09*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*03/27/22 14:09*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*03/27/22 14:09*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/27/22 14:09*	*1*

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

Date Collected: 03/24/22 11:30
Date Received: 03/24/22 15:42

Lab Sample ID: 410-77437-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 14:31	1
1,1,1-Trichloroethane	**0.28**	**J**	0.50	0.060	ug/L			03/27/22 14:31	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 14:31	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 14:31	1
1,1-Dichloroethane	**0.13**	**J**	0.50	0.070	ug/L			03/27/22 14:31	1
1,1-Dichloroethene	**0.17**	**J**	0.50	0.060	ug/L			03/27/22 14:31	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/27/22 14:31	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/27/22 14:31	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/27/22 14:31	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/27/22 14:31	1
2-Hexanone	ND		5.0	0.60	ug/L			03/27/22 14:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/27/22 14:31	1
Acetone	ND		5.0	0.90	ug/L			03/27/22 14:31	1
Benzene	ND		0.50	0.050	ug/L			03/27/22 14:31	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/27/22 14:31	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/27/22 14:31	1
Bromoform	ND		1.0	0.30	ug/L			03/27/22 14:31	1
Bromomethane	ND		0.50	0.070	ug/L			03/27/22 14:31	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/27/22 14:31	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/27/22 14:31	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/27/22 14:31	1
Chloroethane	ND		0.50	0.070	ug/L			03/27/22 14:31	1
Chloroform	**0.27**	**J**	0.50	0.090	ug/L			03/27/22 14:31	1
Chloromethane	ND		0.50	0.060	ug/L			03/27/22 14:31	1
cis-1,2-Dichloroethene	**1.7**		0.50	0.050	ug/L			03/27/22 14:31	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/27/22 14:31	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/27/22 14:31	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/27/22 14:31	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/27/22 14:31	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/27/22 14:31	1
Styrene	ND		0.50	0.050	ug/L			03/27/22 14:31	1
Tetrachloroethene	**6.5**		0.50	0.060	ug/L			03/27/22 14:31	1
Toluene	ND		0.50	0.070	ug/L			03/27/22 14:31	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 14:31	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/27/22 14:31	1
Trichloroethene	**1.7**		0.50	0.060	ug/L			03/27/22 14:31	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/27/22 14:31	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/27/22 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*80 - 120*		*03/27/22 14:31*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*03/27/22 14:31*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*03/27/22 14:31*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/27/22 14:31*	*1*

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

Date Collected: 03/24/22 09:40
Date Received: 03/24/22 15:42

Lab Sample ID: 410-77437-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 15:56	1
1,1,1-Trichloroethane	**0.061**	**J**	0.50	0.060	ug/L			03/27/22 15:56	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 15:56	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 15:56	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/27/22 15:56	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 15:56	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/27/22 15:56	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/27/22 15:56	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/27/22 15:56	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/27/22 15:56	1
2-Hexanone	ND		5.0	0.60	ug/L			03/27/22 15:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/27/22 15:56	1
Acetone	**1.8**	**J**	5.0	0.90	ug/L			03/27/22 15:56	1
Benzene	ND		0.50	0.050	ug/L			03/27/22 15:56	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/27/22 15:56	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/27/22 15:56	1
Bromoform	ND		1.0	0.30	ug/L			03/27/22 15:56	1
Bromomethane	ND		0.50	0.070	ug/L			03/27/22 15:56	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/27/22 15:56	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/27/22 15:56	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/27/22 15:56	1
Chloroethane	ND		0.50	0.070	ug/L			03/27/22 15:56	1
Chloroform	ND		0.50	0.090	ug/L			03/27/22 15:56	1
Chloromethane	ND		0.50	0.060	ug/L			03/27/22 15:56	1
cis-1,2-Dichloroethene	**0.12**	**J**	0.50	0.050	ug/L			03/27/22 15:56	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/27/22 15:56	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/27/22 15:56	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/27/22 15:56	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/27/22 15:56	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/27/22 15:56	1
Styrene	ND		0.50	0.050	ug/L			03/27/22 15:56	1
Tetrachloroethene	**0.88**		0.50	0.060	ug/L			03/27/22 15:56	1
Toluene	ND		0.50	0.070	ug/L			03/27/22 15:56	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 15:56	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/27/22 15:56	1
Trichloroethene	**0.14**	**J**	0.50	0.060	ug/L			03/27/22 15:56	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/27/22 15:56	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/27/22 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*80 - 120*		*03/27/22 15:56*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*03/27/22 15:56*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*03/27/22 15:56*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/27/22 15:56*	*1*

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

Date Collected: 03/24/22 09:55
Date Received: 03/24/22 15:42

Lab Sample ID: 410-77437-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 16:17	1
1,1,1-Trichloroethane	**7.5**		0.50	0.060	ug/L			03/27/22 16:17	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 16:17	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 16:17	1
1,1-Dichloroethane	**1.2**		0.50	0.070	ug/L			03/27/22 16:17	1
1,1-Dichloroethene	**0.61**		0.50	0.060	ug/L			03/27/22 16:17	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/27/22 16:17	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/27/22 16:17	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/27/22 16:17	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/27/22 16:17	1
2-Hexanone	ND		5.0	0.60	ug/L			03/27/22 16:17	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/27/22 16:17	1
Acetone	ND		5.0	0.90	ug/L			03/27/22 16:17	1
Benzene	ND		0.50	0.050	ug/L			03/27/22 16:17	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/27/22 16:17	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/27/22 16:17	1
Bromoform	ND		1.0	0.30	ug/L			03/27/22 16:17	1
Bromomethane	ND		0.50	0.070	ug/L			03/27/22 16:17	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/27/22 16:17	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/27/22 16:17	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/27/22 16:17	1
Chloroethane	ND		0.50	0.070	ug/L			03/27/22 16:17	1
Chloroform	**0.24**	**J**	0.50	0.090	ug/L			03/27/22 16:17	1
Chloromethane	ND		0.50	0.060	ug/L			03/27/22 16:17	1
cis-1,2-Dichloroethene	**4.2**		0.50	0.050	ug/L			03/27/22 16:17	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/27/22 16:17	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/27/22 16:17	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/27/22 16:17	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/27/22 16:17	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/27/22 16:17	1
Styrene	ND		0.50	0.050	ug/L			03/27/22 16:17	1
Toluene	ND		0.50	0.070	ug/L			03/27/22 16:17	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 16:17	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/27/22 16:17	1
Trichloroethene	**5.0**		0.50	0.060	ug/L			03/27/22 16:17	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/27/22 16:17	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/27/22 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*80 - 120*		*03/27/22 16:17*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*03/27/22 16:17*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*03/27/22 16:17*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/27/22 16:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**88**		5.0	0.60	ug/L			03/28/22 18:34	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*80 - 120*		*03/28/22 18:34*	*10*

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

Lab Sample ID: 410-77437-8

Date Collected: 03/24/22 09:55
Matrix: Water
Date Received: 03/24/22 15:42

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*03/28/22 18:34*	*10*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*03/28/22 18:34*	*10*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/28/22 18:34*	*10*

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

Lab Sample ID: 410-77437-9

Date Collected: 03/24/22 10:25
Matrix: Water
Date Received: 03/24/22 15:42

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 16:38	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 16:38	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 16:38	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 16:38	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/27/22 16:38	1
1,1-Dichloroethene	**0.097**	**J**	0.50	0.060	ug/L			03/27/22 16:38	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/27/22 16:38	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/27/22 16:38	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/27/22 16:38	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/27/22 16:38	1
2-Hexanone	ND		5.0	0.60	ug/L			03/27/22 16:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/27/22 16:38	1
Acetone	**0.90**	**J**	5.0	0.90	ug/L			03/27/22 16:38	1
Benzene	ND		0.50	0.050	ug/L			03/27/22 16:38	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/27/22 16:38	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/27/22 16:38	1
Bromoform	ND		1.0	0.30	ug/L			03/27/22 16:38	1
Bromomethane	ND		0.50	0.070	ug/L			03/27/22 16:38	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/27/22 16:38	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/27/22 16:38	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/27/22 16:38	1
Chloroethane	ND		0.50	0.070	ug/L			03/27/22 16:38	1
Chloroform	**0.41**	**J**	0.50	0.090	ug/L			03/27/22 16:38	1
Chloromethane	ND		0.50	0.060	ug/L			03/27/22 16:38	1
cis-1,2-Dichloroethene	**0.074**	**J**	0.50	0.050	ug/L			03/27/22 16:38	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/27/22 16:38	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/27/22 16:38	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/27/22 16:38	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/27/22 16:38	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/27/22 16:38	1
Styrene	ND		0.50	0.050	ug/L			03/27/22 16:38	1
Tetrachloroethene	**2.3**		0.50	0.060	ug/L			03/27/22 16:38	1
Toluene	ND		0.50	0.070	ug/L			03/27/22 16:38	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 16:38	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/27/22 16:38	1
Trichloroethene	**0.14**	**J**	0.50	0.060	ug/L			03/27/22 16:38	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/27/22 16:38	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/27/22 16:38	1

Client Sample ID: HD-COD-SW-26-0/1-0
Lab Sample ID: 410-77437-9

Date Collected: 03/24/22 10:25
Matrix: Water
Date Received: 03/24/22 15:42

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		80 - 120		03/27/22 16:38	1
4-Bromofluorobenzene (Surr)	93		80 - 120		03/27/22 16:38	1
Dibromofluoromethane (Surr)	103		80 - 120		03/27/22 16:38	1
Toluene-d8 (Surr)	100		80 - 120		03/27/22 16:38	1

Client Sample ID: HD-COD-SW-27-0/1-0
Lab Sample ID: 410-77437-10

Date Collected: 03/24/22 11:20
Matrix: Water
Date Received: 03/24/22 15:42

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 16:59	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 16:59	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 16:59	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 16:59	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/27/22 16:59	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 16:59	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/27/22 16:59	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/27/22 16:59	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/27/22 16:59	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/27/22 16:59	1
2-Hexanone	ND		5.0	0.60	ug/L			03/27/22 16:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/27/22 16:59	1
Acetone	**1.5**	**J**	5.0	0.90	ug/L			03/27/22 16:59	1
Benzene	ND		0.50	0.050	ug/L			03/27/22 16:59	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/27/22 16:59	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/27/22 16:59	1
Bromoform	ND		1.0	0.30	ug/L			03/27/22 16:59	1
Bromomethane	ND		0.50	0.070	ug/L			03/27/22 16:59	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/27/22 16:59	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/27/22 16:59	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/27/22 16:59	1
Chloroethane	ND		0.50	0.070	ug/L			03/27/22 16:59	1
Chloroform	ND		0.50	0.090	ug/L			03/27/22 16:59	1
Chloromethane	ND		0.50	0.060	ug/L			03/27/22 16:59	1
cis-1,2-Dichloroethene	**0.10**	**J**	0.50	0.050	ug/L			03/27/22 16:59	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/27/22 16:59	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/27/22 16:59	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/27/22 16:59	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/27/22 16:59	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/27/22 16:59	1
Styrene	ND		0.50	0.050	ug/L			03/27/22 16:59	1
Tetrachloroethene	**0.082**	**J**	0.50	0.060	ug/L			03/27/22 16:59	1
Toluene	ND		0.50	0.070	ug/L			03/27/22 16:59	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 16:59	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/27/22 16:59	1
Trichloroethene	**0.14**	**J**	0.50	0.060	ug/L			03/27/22 16:59	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/27/22 16:59	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/27/22 16:59	1

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

Lab Sample ID: 410-77437-10

Date Collected: 03/24/22 11:20
Matrix: Water
Date Received: 03/24/22 15:42

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*80 - 120*		*03/27/22 16:59*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*03/27/22 16:59*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*03/27/22 16:59*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/27/22 16:59*	*1*

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

Lab Sample ID: 410-77437-11

Date Collected: 03/24/22 12:00
Matrix: Water
Date Received: 03/24/22 15:42

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 17:20	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 17:20	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 17:20	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 17:20	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/27/22 17:20	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 17:20	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/27/22 17:20	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/27/22 17:20	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/27/22 17:20	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/27/22 17:20	1
2-Hexanone	ND		5.0	0.60	ug/L			03/27/22 17:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/27/22 17:20	1
Acetone	**2.2**	**J**	5.0	0.90	ug/L			03/27/22 17:20	1
Benzene	ND		0.50	0.050	ug/L			03/27/22 17:20	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/27/22 17:20	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/27/22 17:20	1
Bromoform	ND		1.0	0.30	ug/L			03/27/22 17:20	1
Bromomethane	ND		0.50	0.070	ug/L			03/27/22 17:20	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/27/22 17:20	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/27/22 17:20	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/27/22 17:20	1
Chloroethane	ND		0.50	0.070	ug/L			03/27/22 17:20	1
Chloroform	ND		0.50	0.090	ug/L			03/27/22 17:20	1
Chloromethane	ND		0.50	0.060	ug/L			03/27/22 17:20	1
cis-1,2-Dichloroethene	**0.11**	**J**	0.50	0.050	ug/L			03/27/22 17:20	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/27/22 17:20	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/27/22 17:20	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/27/22 17:20	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/27/22 17:20	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/27/22 17:20	1
Styrene	ND		0.50	0.050	ug/L			03/27/22 17:20	1
Tetrachloroethene	**0.22**	**J**	0.50	0.060	ug/L			03/27/22 17:20	1
Toluene	**0.097**	**J**	0.50	0.070	ug/L			03/27/22 17:20	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 17:20	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/27/22 17:20	1
Trichloroethene	**0.12**	**J**	0.50	0.060	ug/L			03/27/22 17:20	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/27/22 17:20	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/27/22 17:20	1

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

Lab Sample ID: 410-77437-11

Date Collected: 03/24/22 12:00
Matrix: Water
Date Received: 03/24/22 15:42

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*80 - 120*		*03/27/22 17:20*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*03/27/22 17:20*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*03/27/22 17:20*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/27/22 17:20*	*1*

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

Lab Sample ID: 410-77437-12

Date Collected: 03/24/22 08:55
Matrix: Water
Date Received: 03/24/22 15:42

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 17:41	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 17:41	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 17:41	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 17:41	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/27/22 17:41	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 17:41	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/27/22 17:41	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/27/22 17:41	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/27/22 17:41	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/27/22 17:41	1
2-Hexanone	ND		5.0	0.60	ug/L			03/27/22 17:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/27/22 17:41	1
Acetone	**1.9**	**J**	5.0	0.90	ug/L			03/27/22 17:41	1
Benzene	ND		0.50	0.050	ug/L			03/27/22 17:41	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/27/22 17:41	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/27/22 17:41	1
Bromoform	ND		1.0	0.30	ug/L			03/27/22 17:41	1
Bromomethane	ND		0.50	0.070	ug/L			03/27/22 17:41	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/27/22 17:41	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/27/22 17:41	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/27/22 17:41	1
Chloroethane	ND		0.50	0.070	ug/L			03/27/22 17:41	1
Chloroform	ND		0.50	0.090	ug/L			03/27/22 17:41	1
Chloromethane	ND		0.50	0.060	ug/L			03/27/22 17:41	1
cis-1,2-Dichloroethene	**0.10**	**J**	0.50	0.050	ug/L			03/27/22 17:41	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/27/22 17:41	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/27/22 17:41	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/27/22 17:41	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/27/22 17:41	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/27/22 17:41	1
Styrene	ND		0.50	0.050	ug/L			03/27/22 17:41	1
Tetrachloroethene	**0.25**	**J**	0.50	0.060	ug/L			03/27/22 17:41	1
Toluene	**0.074**	**J**	0.50	0.070	ug/L			03/27/22 17:41	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 17:41	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/27/22 17:41	1
Trichloroethene	**0.12**	**J**	0.50	0.060	ug/L			03/27/22 17:41	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/27/22 17:41	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/27/22 17:41	1

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

Lab Sample ID: 410-77437-12

Date Collected: 03/24/22 08:55
Matrix: Water
Date Received: 03/24/22 15:42

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*		*03/27/22 17:41*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*03/27/22 17:41*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*03/27/22 17:41*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/27/22 17:41*	*1*

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

Lab Sample ID: 410-77437-13

Date Collected: 03/24/22 12:00
Matrix: Water
Date Received: 03/24/22 15:42

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 18:02	1
1,1,1-Trichloroethane	**7.4**		0.50	0.060	ug/L			03/27/22 18:02	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 18:02	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 18:02	1
1,1-Dichloroethane	**1.2**		0.50	0.070	ug/L			03/27/22 18:02	1
1,1-Dichloroethene	**0.61**		0.50	0.060	ug/L			03/27/22 18:02	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/27/22 18:02	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/27/22 18:02	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/27/22 18:02	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/27/22 18:02	1
2-Hexanone	ND		5.0	0.60	ug/L			03/27/22 18:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/27/22 18:02	1
Acetone	ND		5.0	0.90	ug/L			03/27/22 18:02	1
Benzene	ND		0.50	0.050	ug/L			03/27/22 18:02	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/27/22 18:02	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/27/22 18:02	1
Bromoform	ND		1.0	0.30	ug/L			03/27/22 18:02	1
Bromomethane	ND		0.50	0.070	ug/L			03/27/22 18:02	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/27/22 18:02	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/27/22 18:02	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/27/22 18:02	1
Chloroethane	ND		0.50	0.070	ug/L			03/27/22 18:02	1
Chloroform	**0.23**	**J**	0.50	0.090	ug/L			03/27/22 18:02	1
Chloromethane	ND		0.50	0.060	ug/L			03/27/22 18:02	1
cis-1,2-Dichloroethene	**4.2**		0.50	0.050	ug/L			03/27/22 18:02	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/27/22 18:02	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/27/22 18:02	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/27/22 18:02	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/27/22 18:02	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/27/22 18:02	1
Styrene	ND		0.50	0.050	ug/L			03/27/22 18:02	1
Toluene	ND		0.50	0.070	ug/L			03/27/22 18:02	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 18:02	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/27/22 18:02	1
Trichloroethene	**5.0**		0.50	0.060	ug/L			03/27/22 18:02	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/27/22 18:02	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/27/22 18:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*03/27/22 18:02*	*1*

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

Date Collected: 03/24/22 12:00
Date Received: 03/24/22 15:42

Lab Sample ID: 410-77437-13

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*03/27/22 18:02*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 120*		*03/27/22 18:02*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*03/27/22 18:02*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**87**		5.0	0.60	ug/L			03/28/22 18:55	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*80 - 120*		*03/28/22 18:55*	*10*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*03/28/22 18:55*	*10*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*03/28/22 18:55*	*10*
Toluene-d8 (Surr)	*99*		*80 - 120*		*03/28/22 18:55*	*10*

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

Date Collected: 03/23/22 00:00
Date Received: 03/24/22 15:42

Lab Sample ID: 410-77437-14

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 10:59	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 10:59	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 10:59	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 10:59	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/27/22 10:59	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 10:59	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/27/22 10:59	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/27/22 10:59	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/27/22 10:59	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/27/22 10:59	1
2-Hexanone	ND		5.0	0.60	ug/L			03/27/22 10:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/27/22 10:59	1
Acetone	ND		5.0	0.90	ug/L			03/27/22 10:59	1
Benzene	ND		0.50	0.050	ug/L			03/27/22 10:59	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/27/22 10:59	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/27/22 10:59	1
Bromoform	ND		1.0	0.30	ug/L			03/27/22 10:59	1
Bromomethane	ND		0.50	0.070	ug/L			03/27/22 10:59	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/27/22 10:59	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/27/22 10:59	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/27/22 10:59	1
Chloroethane	ND		0.50	0.070	ug/L			03/27/22 10:59	1
Chloroform	ND		0.50	0.090	ug/L			03/27/22 10:59	1
Chloromethane	ND		0.50	0.060	ug/L			03/27/22 10:59	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			03/27/22 10:59	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/27/22 10:59	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/27/22 10:59	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/27/22 10:59	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/27/22 10:59	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/27/22 10:59	1

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

Job ID: 410-77437-1

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

Date Collected: 03/23/22 00:00
Date Received: 03/24/22 15:42

Lab Sample ID: 410-77437-14

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		0.50	0.050	ug/L			03/27/22 10:59	1
Tetrachloroethene	ND		0.50	0.060	ug/L			03/27/22 10:59	1
Toluene	ND		0.50	0.070	ug/L			03/27/22 10:59	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 10:59	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/27/22 10:59	1
Trichloroethene	ND		0.50	0.060	ug/L			03/27/22 10:59	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/27/22 10:59	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/27/22 10:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*		*03/27/22 10:59*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*03/27/22 10:59*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*03/27/22 10:59*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/27/22 10:59*	*1*

Default Detection Limits

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

Job ID: 410-77437-1

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

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

Surrogate Summary

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

Job ID: 410-77437-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-77437-1	HD-COD-SW-6-0/1-0	105	94	102	101
410-77437-2	HD-COD-SW-7-0/1-0	105	93	102	101
410-77437-3	HD-COD-SW-8-0/1-0	105	95	103	101
410-77437-4	HD-COD-SW-28-0/1-0	109	93	104	101
410-77437-5	HD-COD-SW-13-0/1-0	103	93	104	100
410-77437-6	HD-COD-SW-15-0/1-0	107	94	103	101
410-77437-6 MS	HD-COD-SW-15-0/1-0	107	94	104	101
410-77437-6 MSD	HD-COD-SW-15-0/1-0	106	96	104	102
410-77437-7	HD-COD-SW-16-0/1-0	111	93	104	100
410-77437-8	HD-COD-SW-17-0/1-0	107	93	104	100
410-77437-8 - DL	HD-COD-SW-17-0/1-0	107	94	102	101
410-77437-9	HD-COD-SW-26-0/1-0	106	93	103	100
410-77437-10	HD-COD-SW-27-0/1-0	107	96	103	101
410-77437-11	HD-COD-SW-9-0/1-0	108	94	104	100
410-77437-12	HD-COD-SW-29-0/1-0	106	93	104	101
410-77437-13	HD-QC1-0/1-1	104	93	104	99
410-77437-13 - DL	HD-QC1-0/1-1	107	91	103	99
410-77437-14	HD-QC1-0/1-2	105	92	101	100
LCS 410-237993/4	Lab Control Sample	102	93	101	102
LCS 410-238139/4	Lab Control Sample	105	95	102	101
LCSD 410-237993/5	Lab Control Sample Dup	105	94	101	102
LCSD 410-238139/5	Lab Control Sample Dup	105	94	102	101
MB 410-237993/7	Method Blank	106	92	101	101
MB 410-238139/7	Method Blank	104	93	102	101

Surrogate Legend

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

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

Lab Sample ID: MB 410-237993/7
Matrix: Water
Analysis Batch: 237993

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 10:37	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 10:37	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/27/22 10:37	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/27/22 10:37	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/27/22 10:37	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 10:37	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/27/22 10:37	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/27/22 10:37	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/27/22 10:37	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/27/22 10:37	1
2-Hexanone	ND		5.0	0.60	ug/L			03/27/22 10:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/27/22 10:37	1
Acetone	ND		5.0	0.90	ug/L			03/27/22 10:37	1
Benzene	ND		0.50	0.050	ug/L			03/27/22 10:37	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/27/22 10:37	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/27/22 10:37	1
Bromoform	ND		1.0	0.30	ug/L			03/27/22 10:37	1
Bromomethane	ND		0.50	0.070	ug/L			03/27/22 10:37	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/27/22 10:37	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/27/22 10:37	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/27/22 10:37	1
Chloroethane	ND		0.50	0.070	ug/L			03/27/22 10:37	1
Chloroform	ND		0.50	0.090	ug/L			03/27/22 10:37	1
Chloromethane	ND		0.50	0.060	ug/L			03/27/22 10:37	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			03/27/22 10:37	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/27/22 10:37	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/27/22 10:37	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/27/22 10:37	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/27/22 10:37	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/27/22 10:37	1
Styrene	ND		0.50	0.050	ug/L			03/27/22 10:37	1
Tetrachloroethene	ND		0.50	0.060	ug/L			03/27/22 10:37	1
Toluene	ND		0.50	0.070	ug/L			03/27/22 10:37	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/27/22 10:37	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/27/22 10:37	1
Trichloroethene	ND		0.50	0.060	ug/L			03/27/22 10:37	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/27/22 10:37	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/27/22 10:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*		*03/27/22 10:37*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*03/27/22 10:37*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*03/27/22 10:37*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/27/22 10:37*	*1*

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

Lab Sample ID: LCS 410-237993/4
Matrix: Water
Analysis Batch: 237993

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	5.07		ug/L		101	71 - 134
1,1,1-Trichloroethane	5.00	4.67		ug/L		93	78 - 126
1,1,2,2-Tetrachloroethane	5.00	5.32		ug/L		106	75 - 123
1,1,2-Trichloroethane	5.00	5.18		ug/L		104	80 - 120
1,1-Dichloroethane	5.00	4.45		ug/L		89	74 - 120
1,1-Dichloroethene	5.00	4.93		ug/L		99	80 - 131
1,2-Dibromoethane (EDB)	5.00	5.35		ug/L		107	80 - 120
1,2-Dichloroethane	5.00	4.74		ug/L		95	69 - 122
1,2-Dichloropropane	5.00	4.76		ug/L		95	80 - 120
2-Butanone (MEK)	62.5	64.3		ug/L		103	59 - 141
2-Hexanone	62.5	68.4		ug/L		109	52 - 140
4-Methyl-2-pentanone (MIBK)	62.5	63.3		ug/L		101	55 - 140
Acetone	62.5	63.0		ug/L		101	60 - 146
Benzene	5.00	4.64		ug/L		93	80 - 120
Bromochloromethane	5.00	5.03		ug/L		101	80 - 120
Bromodichloromethane	5.00	4.98		ug/L		100	73 - 124
Bromoform	5.00	5.77		ug/L		115	49 - 144
Bromomethane	5.00	4.48		ug/L		90	60 - 136
Carbon disulfide	5.00	5.09		ug/L		102	67 - 130
Carbon tetrachloride	5.00	4.78		ug/L		96	64 - 141
Chlorobenzene	5.00	4.91		ug/L		98	80 - 120
Chloroethane	5.00	4.57		ug/L		91	63 - 120
Chloroform	5.00	4.63		ug/L		93	80 - 120
Chloromethane	5.00	4.25		ug/L		85	56 - 124
cis-1,2-Dichloroethene	5.00	4.73		ug/L		95	80 - 122
cis-1,3-Dichloropropene	5.00	4.68		ug/L		94	67 - 121
Dibromochloromethane	5.00	5.33		ug/L		107	64 - 138
Ethylbenzene	5.00	4.79		ug/L		96	80 - 120
Methyl tert-butyl ether	5.00	4.74		ug/L		95	69 - 120
Methylene Chloride	5.00	4.73		ug/L		95	80 - 120
Styrene	5.00	4.85		ug/L		97	80 - 120
Tetrachloroethene	5.00	4.98		ug/L		100	80 - 120
Toluene	5.00	4.77		ug/L		95	80 - 120
trans-1,2-Dichloroethene	5.00	4.63		ug/L		93	80 - 122
trans-1,3-Dichloropropene	5.00	5.16		ug/L		103	61 - 129
Trichloroethene	5.00	4.62		ug/L		92	80 - 120
Vinyl chloride	5.00	4.25		ug/L		85	60 - 125
Xylenes, Total	15.0	14.5		ug/L		96	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*

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

Lab Sample ID: LCSD 410-237993/5
Matrix: Water
Analysis Batch: 237993

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			5.00	5.16		ug/L		103	71 - 134	2	30
1,1,1-Trichloroethane			5.00	4.72		ug/L		94	78 - 126	1	30
1,1,2,2-Tetrachloroethane			5.00	5.33		ug/L		107	75 - 123	0	30
1,1,2-Trichloroethane			5.00	5.11		ug/L		102	80 - 120	1	30
1,1-Dichloroethane			5.00	4.54		ug/L		91	74 - 120	2	30
1,1-Dichloroethene			5.00	4.98		ug/L		100	80 - 131	1	30
1,2-Dibromoethane (EDB)			5.00	5.43		ug/L		109	80 - 120	2	30
1,2-Dichloroethane			5.00	4.76		ug/L		95	69 - 122	0	30
1,2-Dichloropropane			5.00	4.69		ug/L		94	80 - 120	2	30
2-Butanone (MEK)			62.5	64.8		ug/L		104	59 - 141	1	30
2-Hexanone			62.5	68.7		ug/L		110	52 - 140	0	30
4-Methyl-2-pentanone (MIBK)			62.5	63.4		ug/L		102	55 - 140	0	30
Acetone			62.5	62.1		ug/L		99	60 - 146	1	30
Benzene			5.00	4.73		ug/L		95	80 - 120	2	30
Bromochloromethane			5.00	5.14		ug/L		103	80 - 120	2	30
Bromodichloromethane			5.00	4.93		ug/L		99	73 - 124	1	30
Bromoform			5.00	5.79		ug/L		116	49 - 144	0	30
Bromomethane			5.00	4.48		ug/L		90	60 - 136	0	30
Carbon disulfide			5.00	5.07		ug/L		101	67 - 130	0	30
Carbon tetrachloride			5.00	4.79		ug/L		96	64 - 141	0	30
Chlorobenzene			5.00	4.96		ug/L		99	80 - 120	1	30
Chloroethane			5.00	4.52		ug/L		90	63 - 120	1	30
Chloroform			5.00	4.74		ug/L		95	80 - 120	2	30
Chloromethane			5.00	4.26		ug/L		85	56 - 124	0	30
cis-1,2-Dichloroethene			5.00	4.76		ug/L		95	80 - 122	1	30
cis-1,3-Dichloropropene			5.00	4.72		ug/L		94	67 - 121	1	30
Dibromochloromethane			5.00	5.38		ug/L		108	64 - 138	1	30
Ethylbenzene			5.00	4.88		ug/L		98	80 - 120	2	30
Methyl tert-butyl ether			5.00	4.80		ug/L		96	69 - 120	1	30
Methylene Chloride			5.00	4.78		ug/L		96	80 - 120	1	30
Styrene			5.00	4.93		ug/L		99	80 - 120	2	30
Tetrachloroethene			5.00	4.98		ug/L		100	80 - 120	0	30
Toluene			5.00	4.86		ug/L		97	80 - 120	2	30
trans-1,2-Dichloroethene			5.00	4.68		ug/L		94	80 - 122	1	30
trans-1,3-Dichloropropene			5.00	5.24		ug/L		105	61 - 129	2	30
Trichloroethene			5.00	4.69		ug/L		94	80 - 120	2	30
Vinyl chloride			5.00	4.20		ug/L		84	60 - 125	1	30
Xylenes, Total			15.0	14.7		ug/L		98	80 - 120	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*

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

Lab Sample ID: 410-77437-6 MS
Matrix: Water
Analysis Batch: 237993

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		5.00	5.30		ug/L		106	71 - 134
1,1,1-Trichloroethane	0.28	J	5.00	5.43		ug/L		103	78 - 126
1,1,2,2-Tetrachloroethane	ND		5.00	5.22		ug/L		104	75 - 123
1,1,2-Trichloroethane	ND		5.00	5.31		ug/L		106	80 - 120
1,1-Dichloroethane	0.13	J	5.00	4.95		ug/L		96	74 - 120
1,1-Dichloroethene	0.17	J	5.00	5.82		ug/L		113	80 - 131
1,2-Dibromoethane (EDB)	ND		5.00	5.42		ug/L		108	80 - 120
1,2-Dichloroethane	ND		5.00	4.89		ug/L		98	69 - 122
1,2-Dichloropropane	ND		5.00	4.93		ug/L		99	80 - 120
2-Butanone (MEK)	ND		62.6	52.7		ug/L		84	59 - 141
2-Hexanone	ND		62.6	54.0		ug/L		86	52 - 140
4-Methyl-2-pentanone (MIBK)	ND		62.6	51.2		ug/L		82	55 - 140
Acetone	ND		62.6	51.0		ug/L		82	60 - 146
Benzene	ND		5.00	5.06		ug/L		101	80 - 120
Bromochloromethane	ND		5.00	5.40		ug/L		108	80 - 120
Bromodichloromethane	ND		5.00	5.07		ug/L		101	73 - 124
Bromoform	ND		5.00	5.37		ug/L		107	49 - 144
Bromomethane	ND		5.00	4.78		ug/L		96	60 - 136
Carbon disulfide	ND		5.00	5.69		ug/L		114	67 - 130
Carbon tetrachloride	ND		5.00	5.42		ug/L		108	64 - 141
Chlorobenzene	ND		5.00	5.17		ug/L		103	80 - 120
Chloroethane	ND		5.00	4.82		ug/L		96	63 - 120
Chloroform	0.27	J	5.00	5.21		ug/L		99	80 - 120
Chloromethane	ND		5.00	4.36		ug/L		87	80 - 120
cis-1,2-Dichloroethene	1.7		5.00	6.87		ug/L		103	80 - 122
cis-1,3-Dichloropropene	ND		5.00	4.73		ug/L		95	67 - 121
Dibromochloromethane	ND		5.00	5.27		ug/L		105	64 - 138
Ethylbenzene	ND		5.00	5.09		ug/L		102	80 - 120
Methyl tert-butyl ether	ND		5.00	4.95		ug/L		99	69 - 120
Methylene Chloride	ND		5.00	5.12		ug/L		102	80 - 120
Styrene	ND		5.00	5.05		ug/L		101	80 - 120
Tetrachloroethene	6.5		5.00	12.0		ug/L		110	80 - 120
Toluene	ND		5.00	5.11		ug/L		102	80 - 120
trans-1,2-Dichloroethene	ND		5.00	5.19		ug/L		104	80 - 122
trans-1,3-Dichloropropene	ND		5.00	5.19		ug/L		104	61 - 129
Trichloroethene	1.7		5.00	6.76		ug/L		102	80 - 120
Vinyl chloride	ND		5.00	4.45		ug/L		89	60 - 125
Xylenes, Total	ND		15.0	15.3		ug/L		102	80 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*80 - 120*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

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

Lab Sample ID: 410-77437-6 MSD
Matrix: Water
Analysis Batch: 237993

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		5.00	5.44		ug/L		109	71 - 134	2	30
1,1,1-Trichloroethane	0.28	J	5.00	5.45		ug/L		103	78 - 126	0	30
1,1,2,2-Tetrachloroethane	ND		5.00	5.26		ug/L		105	75 - 123	1	30
1,1,2-Trichloroethane	ND		5.00	5.42		ug/L		108	80 - 120	2	30
1,1-Dichloroethane	0.13	J	5.00	4.99		ug/L		97	74 - 120	1	30
1,1-Dichloroethene	0.17	J	5.00	5.88		ug/L		114	80 - 131	1	30
1,2-Dibromoethane (EDB)	ND		5.00	5.51		ug/L		110	80 - 120	2	30
1,2-Dichloroethane	ND		5.00	4.92		ug/L		98	69 - 122	1	30
1,2-Dichloropropane	ND		5.00	5.08		ug/L		102	80 - 120	3	30
2-Butanone (MEK)	ND		62.6	54.3		ug/L		87	59 - 141	3	30
2-Hexanone	ND		62.6	56.4		ug/L		90	52 - 140	4	30
4-Methyl-2-pentanone (MIBK)	ND		62.6	52.6		ug/L		84	55 - 140	3	30
Acetone	ND		62.6	55.4		ug/L		89	60 - 146	8	30
Benzene	ND		5.00	5.09		ug/L		102	80 - 120	1	30
Bromochloromethane	ND		5.00	5.36		ug/L		107	80 - 120	1	30
Bromodichloromethane	ND		5.00	5.20		ug/L		104	73 - 124	3	30
Bromoform	ND		5.00	5.57		ug/L		111	49 - 144	4	30
Bromomethane	ND		5.00	5.00		ug/L		100	60 - 136	4	30
Carbon disulfide	ND		5.00	5.77		ug/L		115	67 - 130	1	30
Carbon tetrachloride	ND		5.00	5.47		ug/L		109	64 - 141	1	30
Chlorobenzene	ND		5.00	5.30		ug/L		106	80 - 120	2	30
Chloroethane	ND		5.00	5.14		ug/L		103	63 - 120	6	30
Chloroform	0.27	J	5.00	5.29		ug/L		100	80 - 120	2	30
Chloromethane	ND		5.00	4.44		ug/L		89	80 - 120	2	30
cis-1,2-Dichloroethene	1.7		5.00	6.92		ug/L		104	80 - 122	1	30
cis-1,3-Dichloropropene	ND		5.00	4.81		ug/L		96	67 - 121	2	30
Dibromochloromethane	ND		5.00	5.36		ug/L		107	64 - 138	2	30
Ethylbenzene	ND		5.00	5.24		ug/L		105	80 - 120	3	30
Methyl tert-butyl ether	ND		5.00	5.02		ug/L		100	69 - 120	1	30
Methylene Chloride	ND		5.00	5.22		ug/L		104	80 - 120	2	30
Styrene	ND		5.00	5.18		ug/L		103	80 - 120	2	30
Tetrachloroethene	6.5		5.00	12.3		ug/L		115	80 - 120	2	30
Toluene	ND		5.00	5.21		ug/L		104	80 - 120	2	30
trans-1,2-Dichloroethene	ND		5.00	5.15		ug/L		103	80 - 122	1	30
trans-1,3-Dichloropropene	ND		5.00	5.27		ug/L		105	61 - 129	2	30
Trichloroethene	1.7		5.00	6.83		ug/L		104	80 - 120	1	30
Vinyl chloride	ND		5.00	4.71		ug/L		94	60 - 125	6	30
Xylenes, Total	ND		15.0	15.6		ug/L		104	80 - 120	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*104*		*80 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*

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

Lab Sample ID: MB 410-238139/7
Matrix: Water
Analysis Batch: 238139

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/28/22 10:47	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			03/28/22 10:47	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			03/28/22 10:47	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			03/28/22 10:47	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			03/28/22 10:47	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			03/28/22 10:47	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			03/28/22 10:47	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			03/28/22 10:47	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			03/28/22 10:47	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			03/28/22 10:47	1
2-Hexanone	ND		5.0	0.60	ug/L			03/28/22 10:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			03/28/22 10:47	1
Acetone	ND		5.0	0.90	ug/L			03/28/22 10:47	1
Benzene	ND		0.50	0.050	ug/L			03/28/22 10:47	1
Bromochloromethane	ND		0.50	0.050	ug/L			03/28/22 10:47	1
Bromodichloromethane	ND		0.50	0.050	ug/L			03/28/22 10:47	1
Bromoform	ND		1.0	0.30	ug/L			03/28/22 10:47	1
Bromomethane	ND		0.50	0.070	ug/L			03/28/22 10:47	1
Carbon disulfide	ND		1.0	0.060	ug/L			03/28/22 10:47	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			03/28/22 10:47	1
Chlorobenzene	ND		0.50	0.060	ug/L			03/28/22 10:47	1
Chloroethane	ND		0.50	0.070	ug/L			03/28/22 10:47	1
Chloroform	ND		0.50	0.090	ug/L			03/28/22 10:47	1
Chloromethane	ND		0.50	0.060	ug/L			03/28/22 10:47	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			03/28/22 10:47	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			03/28/22 10:47	1
Dibromochloromethane	ND		0.50	0.070	ug/L			03/28/22 10:47	1
Ethylbenzene	ND		0.50	0.060	ug/L			03/28/22 10:47	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			03/28/22 10:47	1
Methylene Chloride	ND		0.50	0.070	ug/L			03/28/22 10:47	1
Styrene	ND		0.50	0.050	ug/L			03/28/22 10:47	1
Tetrachloroethene	ND		0.50	0.060	ug/L			03/28/22 10:47	1
Toluene	ND		0.50	0.070	ug/L			03/28/22 10:47	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			03/28/22 10:47	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			03/28/22 10:47	1
Trichloroethene	ND		0.50	0.060	ug/L			03/28/22 10:47	1
Vinyl chloride	ND		0.50	0.10	ug/L			03/28/22 10:47	1
Xylenes, Total	ND		1.0	0.15	ug/L			03/28/22 10:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*03/28/22 10:47*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*03/28/22 10:47*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*03/28/22 10:47*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/28/22 10:47*	*1*

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

Lab Sample ID: LCS 410-238139/4
Matrix: Water
Analysis Batch: 238139

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	5.30		ug/L		106	71 - 134
1,1,1-Trichloroethane	5.00	4.91		ug/L		98	78 - 126
1,1,2,2-Tetrachloroethane	5.00	5.32		ug/L		106	75 - 123
1,1,2-Trichloroethane	5.00	5.24		ug/L		105	80 - 120
1,1-Dichloroethane	5.00	4.73		ug/L		95	74 - 120
1,1-Dichloroethene	5.00	5.20		ug/L		104	80 - 131
1,2-Dibromoethane (EDB)	5.00	5.51		ug/L		110	80 - 120
1,2-Dichloroethane	5.00	5.03		ug/L		101	69 - 122
1,2-Dichloropropane	5.00	4.95		ug/L		99	80 - 120
2-Butanone (MEK)	62.5	54.4		ug/L		87	59 - 141
2-Hexanone	62.5	55.5		ug/L		89	52 - 140
4-Methyl-2-pentanone (MIBK)	62.5	52.7		ug/L		84	55 - 140
Acetone	62.5	55.8		ug/L		89	60 - 146
Benzene	5.00	4.95		ug/L		99	80 - 120
Bromochloromethane	5.00	5.41		ug/L		108	80 - 120
Bromodichloromethane	5.00	5.17		ug/L		103	73 - 124
Bromoform	5.00	5.74		ug/L		115	49 - 144
Bromomethane	5.00	4.69		ug/L		94	60 - 136
Carbon disulfide	5.00	5.45		ug/L		109	67 - 130
Carbon tetrachloride	5.00	5.07		ug/L		101	64 - 141
Chlorobenzene	5.00	5.11		ug/L		102	80 - 120
Chloroethane	5.00	4.71		ug/L		94	63 - 120
Chloroform	5.00	4.88		ug/L		98	80 - 120
Chloromethane	5.00	4.18		ug/L		84	56 - 124
cis-1,2-Dichloroethene	5.00	4.97		ug/L		99	80 - 122
cis-1,3-Dichloropropene	5.00	4.91		ug/L		98	67 - 121
Dibromochloromethane	5.00	5.40		ug/L		108	64 - 138
Ethylbenzene	5.00	5.03		ug/L		101	80 - 120
Methyl tert-butyl ether	5.00	5.00		ug/L		100	69 - 120
Methylene Chloride	5.00	5.09		ug/L		102	80 - 120
Styrene	5.00	5.13		ug/L		103	80 - 120
Tetrachloroethene	5.00	5.22		ug/L		104	80 - 120
Toluene	5.00	5.05		ug/L		101	80 - 120
trans-1,2-Dichloroethene	5.00	4.87		ug/L		97	80 - 122
trans-1,3-Dichloropropene	5.00	5.48		ug/L		110	61 - 129
Trichloroethene	5.00	4.92		ug/L		98	80 - 120
Vinyl chloride	5.00	4.37		ug/L		87	60 - 125
Xylenes, Total	15.0	15.2		ug/L		101	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

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

Lab Sample ID: LCSD 410-238139/5
Matrix: Water
Analysis Batch: 238139

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			5.00	5.24		ug/L		105	71 - 134	1	30
1,1,1-Trichloroethane			5.00	4.83		ug/L		97	78 - 126	2	30
1,1,2,2-Tetrachloroethane			5.00	5.23		ug/L		105	75 - 123	2	30
1,1,2-Trichloroethane			5.00	5.33		ug/L		107	80 - 120	2	30
1,1-Dichloroethane			5.00	4.67		ug/L		93	74 - 120	1	30
1,1-Dichloroethene			5.00	5.23		ug/L		105	80 - 131	0	30
1,2-Dibromoethane (EDB)			5.00	5.42		ug/L		108	80 - 120	2	30
1,2-Dichloroethane			5.00	5.09		ug/L		102	69 - 122	1	30
1,2-Dichloropropane			5.00	4.94		ug/L		99	80 - 120	0	30
2-Butanone (MEK)			62.5	55.6		ug/L		89	59 - 141	2	30
2-Hexanone			62.5	56.7		ug/L		91	52 - 140	2	30
4-Methyl-2-pentanone (MIBK)			62.5	53.3		ug/L		85	55 - 140	1	30
Acetone			62.5	54.6		ug/L		87	60 - 146	2	30
Benzene			5.00	4.93		ug/L		99	80 - 120	0	30
Bromochloromethane			5.00	5.21		ug/L		104	80 - 120	4	30
Bromodichloromethane			5.00	5.13		ug/L		103	73 - 124	1	30
Bromoform			5.00	5.56		ug/L		111	49 - 144	3	30
Bromomethane			5.00	4.67		ug/L		93	60 - 136	0	30
Carbon disulfide			5.00	5.45		ug/L		109	67 - 130	0	30
Carbon tetrachloride			5.00	4.93		ug/L		99	64 - 141	3	30
Chlorobenzene			5.00	5.09		ug/L		102	80 - 120	1	30
Chloroethane			5.00	4.74		ug/L		95	63 - 120	1	30
Chloroform			5.00	4.89		ug/L		98	80 - 120	0	30
Chloromethane			5.00	4.01		ug/L		80	56 - 124	4	30
cis-1,2-Dichloroethene			5.00	4.83		ug/L		97	80 - 122	3	30
cis-1,3-Dichloropropene			5.00	4.77		ug/L		95	67 - 121	3	30
Dibromochloromethane			5.00	5.24		ug/L		105	64 - 138	3	30
Ethylbenzene			5.00	5.03		ug/L		101	80 - 120	0	30
Methyl tert-butyl ether			5.00	4.94		ug/L		99	69 - 120	1	30
Methylene Chloride			5.00	4.99		ug/L		100	80 - 120	2	30
Styrene			5.00	5.05		ug/L		101	80 - 120	2	30
Tetrachloroethene			5.00	5.19		ug/L		104	80 - 120	1	30
Toluene			5.00	5.03		ug/L		101	80 - 120	0	30
trans-1,2-Dichloroethene			5.00	4.85		ug/L		97	80 - 122	0	30
trans-1,3-Dichloropropene			5.00	5.26		ug/L		105	61 - 129	4	30
Trichloroethene			5.00	4.87		ug/L		97	80 - 120	1	30
Vinyl chloride			5.00	4.27		ug/L		85	60 - 125	2	30
Xylenes, Total			15.0	15.0		ug/L		100	80 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

QC Association Summary

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

Job ID: 410-77437-1

GC/MS VOA

Analysis Batch: 237993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-77437-1	HD-COD-SW-6-0/1-0	Total/NA	Water	8260D	
410-77437-2	HD-COD-SW-7-0/1-0	Total/NA	Water	8260D	
410-77437-3	HD-COD-SW-8-0/1-0	Total/NA	Water	8260D	
410-77437-4	HD-COD-SW-28-0/1-0	Total/NA	Water	8260D	
410-77437-5	HD-COD-SW-13-0/1-0	Total/NA	Water	8260D	
410-77437-6	HD-COD-SW-15-0/1-0	Total/NA	Water	8260D	
410-77437-7	HD-COD-SW-16-0/1-0	Total/NA	Water	8260D	
410-77437-8	HD-COD-SW-17-0/1-0	Total/NA	Water	8260D	
410-77437-9	HD-COD-SW-26-0/1-0	Total/NA	Water	8260D	
410-77437-10	HD-COD-SW-27-0/1-0	Total/NA	Water	8260D	
410-77437-11	HD-COD-SW-9-0/1-0	Total/NA	Water	8260D	
410-77437-12	HD-COD-SW-29-0/1-0	Total/NA	Water	8260D	
410-77437-13	HD-QC1-0/1-1	Total/NA	Water	8260D	
410-77437-14	HD-QC1-0/1-2	Total/NA	Water	8260D	
MB 410-237993/7	Method Blank	Total/NA	Water	8260D	
LCS 410-237993/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-237993/5	Lab Control Sample Dup	Total/NA	Water	8260D	
410-77437-6 MS	HD-COD-SW-15-0/1-0	Total/NA	Water	8260D	
410-77437-6 MSD	HD-COD-SW-15-0/1-0	Total/NA	Water	8260D	

Analysis Batch: 238139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-77437-8 - DL	HD-COD-SW-17-0/1-0	Total/NA	Water	8260D	
410-77437-13 - DL	HD-QC1-0/1-1	Total/NA	Water	8260D	
MB 410-238139/7	Method Blank	Total/NA	Water	8260D	
LCS 410-238139/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-238139/5	Lab Control Sample Dup	Total/NA	Water	8260D	

Client Sample ID: HD-COD-SW-6-0/1-0
Lab Sample ID: 410-77437-1
Date Collected: 03/24/22 10:10
Matrix: Water
Date Received: 03/24/22 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	237993	03/27/22 12:45	DVW2	ELLE

Client Sample ID: HD-COD-SW-7-0/1-0
Lab Sample ID: 410-77437-2
Date Collected: 03/24/22 11:05
Matrix: Water
Date Received: 03/24/22 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	237993	03/27/22 13:06	DVW2	ELLE

Client Sample ID: HD-COD-SW-8-0/1-0
Lab Sample ID: 410-77437-3
Date Collected: 03/24/22 09:05
Matrix: Water
Date Received: 03/24/22 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	237993	03/27/22 13:27	DVW2	ELLE

Client Sample ID: HD-COD-SW-28-0/1-0
Lab Sample ID: 410-77437-4
Date Collected: 03/24/22 12:10
Matrix: Water
Date Received: 03/24/22 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	237993	03/27/22 13:48	DVW2	ELLE

Client Sample ID: HD-COD-SW-13-0/1-0
Lab Sample ID: 410-77437-5
Date Collected: 03/24/22 09:20
Matrix: Water
Date Received: 03/24/22 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	237993	03/27/22 14:09	DVW2	ELLE

Client Sample ID: HD-COD-SW-15-0/1-0
Lab Sample ID: 410-77437-6
Date Collected: 03/24/22 11:30
Matrix: Water
Date Received: 03/24/22 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	237993	03/27/22 14:31	DVW2	ELLE

Client Sample ID: HD-COD-SW-16-0/1-0
Lab Sample ID: 410-77437-7
Date Collected: 03/24/22 09:40
Matrix: Water
Date Received: 03/24/22 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	237993	03/27/22 15:56	DVW2	ELLE

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

Lab Sample ID: 410-77437-8

Date Collected: 03/24/22 09:55

Matrix: Water

Date Received: 03/24/22 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	237993	03/27/22 16:17	DVW2	ELLE
Total/NA	Analysis	8260D	DL	10	238139	03/28/22 18:34	DVW2	ELLE

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

Lab Sample ID: 410-77437-9

Date Collected: 03/24/22 10:25

Matrix: Water

Date Received: 03/24/22 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	237993	03/27/22 16:38	DVW2	ELLE

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

Lab Sample ID: 410-77437-10

Date Collected: 03/24/22 11:20

Matrix: Water

Date Received: 03/24/22 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	237993	03/27/22 16:59	DVW2	ELLE

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

Lab Sample ID: 410-77437-11

Date Collected: 03/24/22 12:00

Matrix: Water

Date Received: 03/24/22 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	237993	03/27/22 17:20	DVW2	ELLE

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

Lab Sample ID: 410-77437-12

Date Collected: 03/24/22 08:55

Matrix: Water

Date Received: 03/24/22 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	237993	03/27/22 17:41	DVW2	ELLE

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

Lab Sample ID: 410-77437-13

Date Collected: 03/24/22 12:00

Matrix: Water

Date Received: 03/24/22 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	237993	03/27/22 18:02	DVW2	ELLE
Total/NA	Analysis	8260D	DL	10	238139	03/28/22 18:55	DVW2	ELLE

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

Lab Sample ID: 410-77437-14

Date Collected: 03/23/22 00:00

Matrix: Water

Date Received: 03/24/22 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	237993	03/27/22 10:59	DVW2	ELLE

Lab Chronicle

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

Job ID: 410-77437-1

Laboratory References:

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

Accreditation/Certification Summary

Client: Groundwater Sciences Corporation
Job ID: 410-77437-1
Project/Site: fYNOP Monthly Surface Water

Laboratory: Eurofins Lancaster Laboratories Env, LLC

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

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

Method Summary

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

Job ID: 410-77437-1

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 Env, 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: 410-77437-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-77437-1	HD-COD-SW-6-0/1-0	Water	03/24/22 10:10	03/24/22 15:42
410-77437-2	HD-COD-SW-7-0/1-0	Water	03/24/22 11:05	03/24/22 15:42
410-77437-3	HD-COD-SW-8-0/1-0	Water	03/24/22 09:05	03/24/22 15:42
410-77437-4	HD-COD-SW-28-0/1-0	Water	03/24/22 12:10	03/24/22 15:42
410-77437-5	HD-COD-SW-13-0/1-0	Water	03/24/22 09:20	03/24/22 15:42
410-77437-6	HD-COD-SW-15-0/1-0	Water	03/24/22 11:30	03/24/22 15:42
410-77437-7	HD-COD-SW-16-0/1-0	Water	03/24/22 09:40	03/24/22 15:42
410-77437-8	HD-COD-SW-17-0/1-0	Water	03/24/22 09:55	03/24/22 15:42
410-77437-9	HD-COD-SW-26-0/1-0	Water	03/24/22 10:25	03/24/22 15:42
410-77437-10	HD-COD-SW-27-0/1-0	Water	03/24/22 11:20	03/24/22 15:42
410-77437-11	HD-COD-SW-9-0/1-0	Water	03/24/22 12:00	03/24/22 15:42
410-77437-12	HD-COD-SW-29-0/1-0	Water	03/24/22 08:55	03/24/22 15:42
410-77437-13	HD-QC1-0/1-1	Water	03/24/22 12:00	03/24/22 15:42
410-77437-14	HD-QC1-0/1-2	Water	03/23/22 00:00	03/24/22 15:42

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-77437-1

SDG No.:

Instrument ID: 19930 Analysis Batch Number: 233459

Lab Sample ID: IC 410-233459/12 Client Sample ID:

Date Analyzed: 03/15/22 01:15 Lab File ID: IM14I31.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	4.01	Incomplete Integration	kephartk	03/16/22 08:17
t-Butyl alcohol-d10 (IS)	4.23	Incomplete Integration	kephartk	03/16/22 08:17

Lab Sample ID: ICIS 410-233459/13 Client Sample ID:

Date Analyzed: 03/15/22 01:36 Lab File ID: IM14I32.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	4.00	Baseline	kephartk	03/16/22 08:18
t-Butyl alcohol-d10 (IS)	4.23	Baseline	kephartk	03/16/22 08:18

Lab Sample ID: IC 410-233459/14 Client Sample ID:

Date Analyzed: 03/15/22 01:58 Lab File ID: IM14I33.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.57	Incomplete Integration	kephartk	03/16/22 08:20
Methyl acetate	4.01	Incomplete Integration	kephartk	03/16/22 08:20
t-Butyl alcohol-d10 (IS)	4.21	Incomplete Integration	kephartk	03/16/22 08:20

Lab Sample ID: IC 410-233459/15 Client Sample ID:

Date Analyzed: 03/15/22 02:19 Lab File ID: IM14I34.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	4.01	Incomplete Integration	kephartk	03/16/22 08:23
t-Butyl alcohol-d10 (IS)	4.21	Incomplete Integration	kephartk	03/16/22 08:24
1,4-Dioxane	8.60	Incomplete Integration	kephartk	03/16/22 08:24

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-77437-1

SDG No.:

Instrument ID: 19930 Analysis Batch Number: 233459

Lab Sample ID: IC 410-233459/16 Client Sample ID:

Date Analyzed: 03/15/22 02:40 Lab File ID: IM14I35.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.58	Incomplete Integration	kephartk	03/16/22 08:25
Methyl acetate	4.01	Incomplete Integration	kephartk	03/16/22 08:26
t-Butyl alcohol-d10 (IS)	4.23	Incomplete Integration	kephartk	03/16/22 08:26
1,4-Dioxane	8.62	Incomplete Integration	kephartk	03/16/22 08:26

Lab Sample ID: IC 410-233459/17 Client Sample ID:

Date Analyzed: 03/15/22 03:01 Lab File ID: IM14I36.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
t-Butyl alcohol-d10 (IS)	4.23	Incomplete Integration	kephartk	03/16/22 08:27
Acrylonitrile	4.57	Incomplete Integration	kephartk	03/16/22 08:27
1,4-Dioxane	8.63	Incomplete Integration	kephartk	03/16/22 08:27

Lab Sample ID: IC 410-233459/18 Client Sample ID:

Date Analyzed: 03/15/22 03:22 Lab File ID: IM14I37.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl iodide	3.75	Incomplete Integration	kephartk	03/16/22 08:28
Acrylonitrile	4.60	Incomplete Integration	kephartk	03/16/22 08:28
trans-1,2-Dichloroethene	4.65	Incomplete Integration	kephartk	03/16/22 08:28
cis-1,2-Dichloroethene	6.14	Incomplete Integration	kephartk	03/16/22 08:28
Methacrylonitrile	6.40	Incomplete Integration	kephartk	03/16/22 08:28
Bromochloromethane	6.46	Incomplete Integration	kephartk	03/16/22 08:28
Trichloroethene	8.18	Incomplete Integration	kephartk	03/16/22 08:29
Methyl methacrylate	8.60	Incomplete Integration	kephartk	03/16/22 08:29
1,4-Dioxane	8.63	Incomplete Integration	kephartk	03/16/22 08:29

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-77437-1

SDG No.:

Instrument ID: 19930 Analysis Batch Number: 233459

Lab Sample ID: ICV 410-233459/19 Client Sample ID:

Date Analyzed: 03/15/22 03:43 Lab File ID: IM14V01.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrolein	3.40	Incomplete Integration	kephartk	03/16/22 08:30
Methyl acetate	4.00	Incomplete Integration	kephartk	03/16/22 08:30
1,4-Dioxane	8.60	Incomplete Integration	kephartk	03/16/22 08:31

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-77437-1

SDG No.:

Instrument ID: 19930 Analysis Batch Number: 237993

Lab Sample ID: CCVIS 410-237993/3 Client Sample ID:

Date Analyzed: 03/27/22 09:13 Lab File ID: IM27X02.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.59	Incomplete Integration	kephartk	03/27/22 09:50
Methyl acetate	4.01	Incomplete Integration	kephartk	03/27/22 09:50
1,2-Dichloroethane-d4 (Surr)	7.28	Incomplete Integration	kephartk	03/27/22 09:51
1,4-Dioxane	8.60	Incomplete Integration	kephartk	03/27/22 09:51

Lab Sample ID: 410-77437-1 Client Sample ID: HD-COD-SW-6-0/1-0

Date Analyzed: 03/27/22 12:45 Lab File ID: IM27X12.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	6.14	Incomplete Integration	kaewrungrueangp	03/28/22 09:39
Tetrachloroethene	10.34	Incomplete Integration	kaewrungrueangp	03/28/22 09:40

Lab Sample ID: 410-77437-3 Client Sample ID: HD-COD-SW-8-0/1-0

Date Analyzed: 03/27/22 13:27 Lab File ID: IM27X14.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1-Trichloroethane	6.83	Peak assignment corrected	kaewrungrueangp	03/28/22 09:48

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-77437-1

SDG No.:

Instrument ID: 19930 Analysis Batch Number: 237993

Lab Sample ID: 410-77437-4 Client Sample ID: HD-COD-SW-28-0/1-0

Date Analyzed: 03/27/22 13:48 Lab File ID: IM27X15.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichloroethene	8.18	Incomplete Integration	kaewrungrueangp	03/28/22 09:50
Chloromethane		Invalid Compound ID	kaewrungrueangp	03/28/22 09:49
Chlorobenzene	11.19	Incomplete Integration	kaewrungrueangp	03/28/22 09:50

Lab Sample ID: 410-77437-6 Client Sample ID: HD-COD-SW-15-0/1-0

Date Analyzed: 03/27/22 14:31 Lab File ID: IM27X17.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1-Dichloroethane	5.29	Peak assignment corrected	kaewrungrueangp	03/28/22 09:51

Lab Sample ID: 410-77437-7 Client Sample ID: HD-COD-SW-16-0/1-0

Date Analyzed: 03/27/22 15:56 Lab File ID: IM27X21.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichloroethene	8.18	Incomplete Integration	kaewrungrueangp	03/28/22 09:57

Lab Sample ID: 410-77437-8 Client Sample ID: HD-COD-SW-17-0/1-0

Date Analyzed: 03/27/22 16:17 Lab File ID: IM27X22.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
trans-1,2-Dichloroethene	4.65	Peak assignment corrected	kaewrungrueangp	03/28/22 09:57
Carbon tetrachloride	7.05	Peak assignment corrected	kaewrungrueangp	03/28/22 09:58

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-77437-1

SDG No.:

Instrument ID: 19930 Analysis Batch Number: 237993

Lab Sample ID: 410-77437-11 Client Sample ID: HD-COD-SW-9-0/1-0

Date Analyzed: 03/27/22 17:20 Lab File ID: IM27X25.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane-d4 (Surr)	7.28	Incomplete Integration	kaewrungrueangp	03/28/22 10:01
Chlorobenzene	11.18	Peak assignment corrected	kaewrungrueangp	03/28/22 10:03

Lab Sample ID: 410-77437-12 Client Sample ID: HD-COD-SW-29-0/1-0

Date Analyzed: 03/27/22 17:41 Lab File ID: IM27X26.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.86	Incomplete Integration	kaewrungrueangp	03/28/22 10:04

Lab Sample ID: 410-77437-13 Client Sample ID: HD-QC1-0/1-1

Date Analyzed: 03/27/22 18:02 Lab File ID: IM27X27.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane-d4 (Surr)	7.28	Incomplete Integration	kaewrungrueangp	03/28/22 10:05
1,1,2-Trichloroethane		Invalid Compound ID	kaewrungrueangp	03/28/22 10:06
Acetone		Invalid Compound ID	kaewrungrueangp	03/28/22 10:05

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-77437-1

SDG No.:

Instrument ID: 19930 Analysis Batch Number: 238139

Lab Sample ID: CCVIS 410-238139/3 Client Sample ID:

Date Analyzed: 03/28/22 09:23 Lab File ID: IM28X02.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.60	Incomplete Integration	kephartk	03/28/22 10:00
1,4-Dioxane	8.60	Incomplete Integration	kephartk	03/28/22 10:00

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1

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_00044	04/13/22	03/14/22	Methanol, Lot EB679	25 mL	MSV_M_MIX1SEC_00048	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_00054	1 mL	Carbon disulfide	40 ug/mL
							Methyl tert-butyl ether	40 ug/mL
					MSV_Q_Ketones_00053	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_00048	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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1

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_00054	04/30/24		Restek, Lot A0171837		(Purchased Reagent)		Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
.MSV_Q_Ketones_00053	01/31/24		Restek, Lot A0167987		(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_00045	04/20/22	03/21/22	Methanol, Lot EB679	25 mL	MSV_M_MIX1SEC_00050	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_00055	1 mL	Carbon disulfide	40 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1

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_00054	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_00050	04/30/24		Restek, Lot A0171815		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							Benzene	1000 ug/mL
							Bromochloromethane	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Methylene Chloride	1000 ug/mL
							Styrene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
.MSV_M_MIX2SEC_00055	04/30/24		Restek, Lot A0171837		(Purchased Reagent)		Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
.MSV_Q_Ketones_00054	01/31/24		Restek, Lot A0167987		(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_00046	04/27/22	03/28/22	Methanol, Lot EB679	25 mL	MSV_M_MIX1SEC_00056	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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00056	1 mL	Carbon disulfide	40 ug/mL
							Methyl tert-butyl ether	40 ug/mL
					MSV_Q_Ketones_00055	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_00056	04/30/24		Restek, Lot A0171815		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							Benzene	1000 ug/mL
							Bromochloromethane	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Methylene Chloride	1000 ug/mL
							Styrene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
.MSV_M_MIX2SEC_00056	04/30/24		Restek, Lot A0171837		(Purchased Reagent)		Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
.MSV_Q_Ketones_00055	01/31/24		Restek, Lot A0167987		(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_00038	04/09/22	03/14/22	Methanol, Lot EB679	1 mL	MSV_CCV_VOC#1_00056	50 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane (EDB)	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Benzene	50 ug/mL
							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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	100 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1,4-Dioxane	2500 ug/mL
							1-Chlorohexane	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							2-Nitropropane	250 ug/mL
							3-Chloro-1-propene	50 ug/mL
							Acrylonitrile	125 ug/mL
							Benzyl chloride	50 ug/mL
							Carbon disulfide	50 ug/mL
							Cyclohexane	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Isopropyl ether	50 ug/mL
							Methacrylonitrile	500 ug/mL
							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_00055	200 uL	Acrolein	2500.15 ug/mL
							2-Butanone (MEK)	500 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Hexanone	500 ug/mL
							4-Methyl-2-pentanone (MIBK)	500 ug/mL
							Acetone	500 ug/mL
					MSV_V_VOA2_00131	150 uL	1,4-Dioxane	2500 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	4375 ug/mL
							Propionitrile	1000 ug/mL
							trans-1,4-Dichloro-2-butene	500 ug/mL
.MSV_CCV_VOC#1_00056	04/13/22	03/14/22	Methanol, Lot EB679	5 mL	MSV_MegaMIX#1_00055	1 mL	1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,1-Dichloropropene	1000 ug/mL
							1,2,3-Trichlorobenzene	1000 ug/mL
							1,2,3-Trichloropropane	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2,4-Trimethylbenzene	1000 ug/mL
							1,2-Dibromo-3-Chloropropane	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							1,3,5-Trimethylbenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dichloropropane	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							2,2-Dichloropropane	1000 ug/mL
							2-Chlorotoluene	1000 ug/mL
							4-Chlorotoluene	1000 ug/mL
							4-Isopropyltoluene	1000 ug/mL
							Benzene	1000 ug/mL
							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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00054	1 mL	1,1,2-Trichloro-1,2,2-trifluoroethane	1000 ug/mL
							1,2,3-Trimethylbenzene	1000 ug/mL
							1,3,5-Trichlorobenzene	1000 ug/mL
							1,4-Dioxane	12500 ug/mL
							1-Chlorohexane	1000 ug/mL
							2-Chloro-1,3-butadiene	1000 ug/mL
							2-Methyl-2-propanol	5000 ug/mL
							2-Nitropropane	5000 ug/mL
							3-Chloro-1-propene	1000 ug/mL
							Acrylonitrile	2500 ug/mL
							Benzyl chloride	1000 ug/mL
							Carbon disulfide	1000 ug/mL
							Cyclohexane	1000 ug/mL
							Ethyl methacrylate	1000 ug/mL
							Hexane	1000 ug/mL
							Iodomethane	1000 ug/mL
							Isobutyl alcohol	12500 ug/mL
							Isopropyl ether	1000 ug/mL
							Methacrylonitrile	2500 ug/mL
							Methyl acetate	1000 ug/mL
							Methyl methacrylate	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
							Methylcyclohexane	1000 ug/mL
							n-Butanol	12500 ug/mL
							n-Heptane	1000 ug/mL
							Propionitrile	5000 ug/mL
							Tert-amyl methyl ether	1000 ug/mL
							Tert-butyl ethyl ether	1000 ug/mL
							Tetrahydrofuran	5000 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
..MSV_MegaMIX#1_00055	04/13/22		Restek, Lot A0171634		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	5000 ug/mL
							1,1,1-Trichloroethane	5000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2,2-Tetrachloroethane	5000 ug/mL
							1,1,2-Trichloroethane	5000 ug/mL
							1,1-Dichloroethane	5000 ug/mL
							1,1-Dichloroethene	5000 ug/mL
							1,1-Dichloropropene	5000 ug/mL
							1,2,3-Trichlorobenzene	5000 ug/mL
							1,2,3-Trichloropropane	5000 ug/mL
							1,2,4-Trichlorobenzene	5000 ug/mL
							1,2,4-Trimethylbenzene	5000 ug/mL
							1,2-Dibromo-3-Chloropropane	5000 ug/mL
							1,2-Dibromoethane (EDB)	5000 ug/mL
							1,2-Dichlorobenzene	5000 ug/mL
							1,2-Dichloroethane	5000 ug/mL
							1,2-Dichloropropane	5000 ug/mL
							1,3,5-Trimethylbenzene	5000 ug/mL
							1,3-Dichlorobenzene	5000 ug/mL
							1,3-Dichloropropane	5000 ug/mL
							1,4-Dichlorobenzene	5000 ug/mL
							2,2-Dichloropropane	5000 ug/mL
							2-Chlorotoluene	5000 ug/mL
							4-Chlorotoluene	5000 ug/mL
							4-Isopropyltoluene	5000 ug/mL
							Benzene	5000 ug/mL
							Bromobenzene	5000 ug/mL
							Bromochloromethane	5000 ug/mL
							Bromodichloromethane	5000 ug/mL
							Bromoform	5000 ug/mL
							Carbon tetrachloride	5000 ug/mL
							Chlorobenzene	5000 ug/mL
							Chloroform	5000 ug/mL
							cis-1,2-Dichloroethene	5000 ug/mL
							cis-1,3-Dichloropropene	5000 ug/mL
							Dibromochloromethane	5000 ug/mL
							Dibromomethane	5000 ug/mL
							Ethylbenzene	5000 ug/mL
							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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,2-Dichloroethene	5000 ug/mL
							trans-1,3-Dichloropropene	5000 ug/mL
							Trichloroethene	5000 ug/mL
..MSV_MegaMix#2_00054	04/13/22	Restek, Lot A0173454			(Purchased Reagent)		1,1,2-Trichloro-1,2,2-trifluoroethane	5000 ug/mL
							1,2,3-Trimethylbenzene	5000 ug/mL
							1,3,5-Trichlorobenzene	5000 ug/mL
							1,4-Dioxane	62500 ug/mL
							1-Chlorohexane	5000 ug/mL
							2-Chloro-1,3-butadiene	5000 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							2-Nitropropane	25000 ug/mL
							3-Chloro-1-propene	5000 ug/mL
							Acrylonitrile	12500 ug/mL
							Benzyl chloride	5000 ug/mL
							Carbon disulfide	5000 ug/mL
							Cyclohexane	5000 ug/mL
							Ethyl methacrylate	5000 ug/mL
							Hexane	5000 ug/mL
							Iodomethane	5000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropyl ether	5000 ug/mL
							Methacrylonitrile	12500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
							Methylcyclohexane	5000 ug/mL
							n-Butanol	62500 ug/mL
							n-Heptane	5000 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	5000 ug/mL
							Tert-butyl ethyl ether	5000 ug/mL
							Tetrahydrofuran	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL
.MSV_CCV_VOC#3_00055	04/09/22	03/14/22	Methanol, Lot EB679	5 mL	MSV_CCV_ACR_00002	0.5 mL	Acrolein	12500.8 ug/mL
					MSV_V_Ketones_00053	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_00002	04/09/22	02/08/22	Methanol, Lot EB679	10 mL	MSV_VACR_STK_00024	9.222 mL	Acrolein	125008 ug/mL
...MSV_VACR_STK_00024	04/09/22	02/08/22	Methanol, Lot EB679	10 mL	MSV_ACROLEIN_00017	1.456 g	Acrolein	135554 ug/mL
....MSV_ACROLEIN_00017	11/30/22	Chem Service, Lot 12671800			(Purchased Reagent)		Acrolein	0.931 g/g
..MSV_V_Ketones_00053	01/31/24	Restek, Lot A0174287			(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MSV_V_VOA2_00131	04/13/22	03/14/22	Methanol, Lot EB679	5 mL	MSV_V#2B_00260	1 mL	1,4-Dioxane	12500 ug/mL
							2-Methyl-2-propanol	5000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00260	04/30/22		Restek, Lot A0171518		(Purchased Reagent)		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_#2_826_00042	03/24/22	03/14/22	Methanol, Lot EB679	1 mL	MSV_CCV_EE_00001	50 uL	Ethyl ether	49.9999 ug/mL
					MSV_V_PentaCL_00013	10 uL	Pentachloroethane	50 ug/mL
.MSV_CCV_EE_00001	05/29/22	11/29/21	Methanol, Lot EB679	50 mL	MSV_EE_MISCSK_00009	0.999 mL	Ethyl ether	999.999 ug/mL
..MSV_EE_MISCSK_00009	05/29/22	11/29/21	Methanol, Lot EB679	10 mL	MSV_EE_Neat_00006	0.5005 g	Ethyl ether	50050 ug/mL
...MSV_EE_Neat_00006	12/31/25		Chem Service, Lot 12123300		(Purchased Reagent)		Ethyl ether	1 g/g
.MSV_V_PentaCL_00013	04/02/22		Restek, Lot A0171341		(Purchased Reagent)		Pentachloroethane	5000 ug/mL
MSV_LL_GAS826_00072	03/21/22	03/14/22	Methanol, Lot EB679	1 mL	MSV_CCV_GASES_00158	25 uL	1,2-Dichloro-1,1,2-trifluoroethane	50 ug/mL
							Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_CCV_GASES_00158	03/21/22		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_00073	03/28/22	03/21/22	Methanol, Lot EB679	1 mL	MSV_CCV_GASES_00164	25 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_CCV_GASES_00164	03/28/22		Restek, Lot A0172364		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_LLcentISS_00004	08/22/22	02/22/22	Methanol, Lot EB679	50 mL	MSV_8260_SS_00592	1 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
					MSV_Cus826_IS_00415	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_00592	08/22/22		Restek, Lot A0171410		(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_00415	08/22/22		Restek, Lot A0178373		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5 (IS)	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_QC_Gas826_00070	03/21/22	03/14/22	Methanol, Lot EB679	1 mL	MSV_QC_2K_GAS_00079	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_QC_2K_GAS_00079	03/21/22		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_00071	03/28/22	03/21/22	Methanol, Lot EB679	1 mL	MSV_QC_2K_GAS_00080	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_QC_2K_GAS_00080	03/28/22		Restek, Lot A0172021		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_V_BFB_00007							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Xylenes, Total	
					MSV_VBFB_STK_00007	0.116 mL	BFB	50.0099 ug/mL
.MSV_VBFB_STK_00007	06/29/22	12/29/21	Methanol, Lot EB679	10 mL	MSV_4BFB_NEAT_00005	1.0778 g	BFB	107780 ug/mL
..MSV_4BFB_NEAT_00005	02/28/25		Chem Service, Lot 11130200		(Purchased Reagent)		BFB	1 g/g

Reagent

MSV_4BFB_NEAT_00005

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CERTIFICATE OF ANALYSIS

4-Bromofluorobenzene

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

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

LLR 2032
2-16-21

COA Form
Revision 3 (3/2015)

PJLA Testing

Print Date: 06/07/21

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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

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Testing

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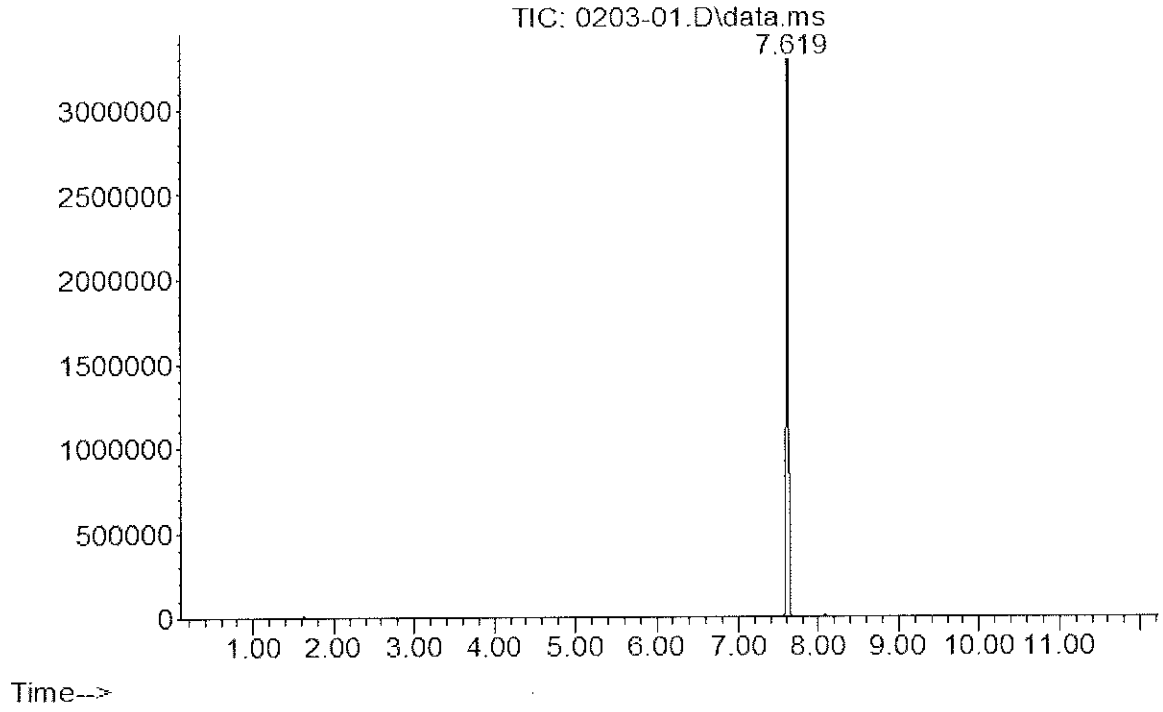
CERTIFICATE OF ANALYSIS

Analysis Method:

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



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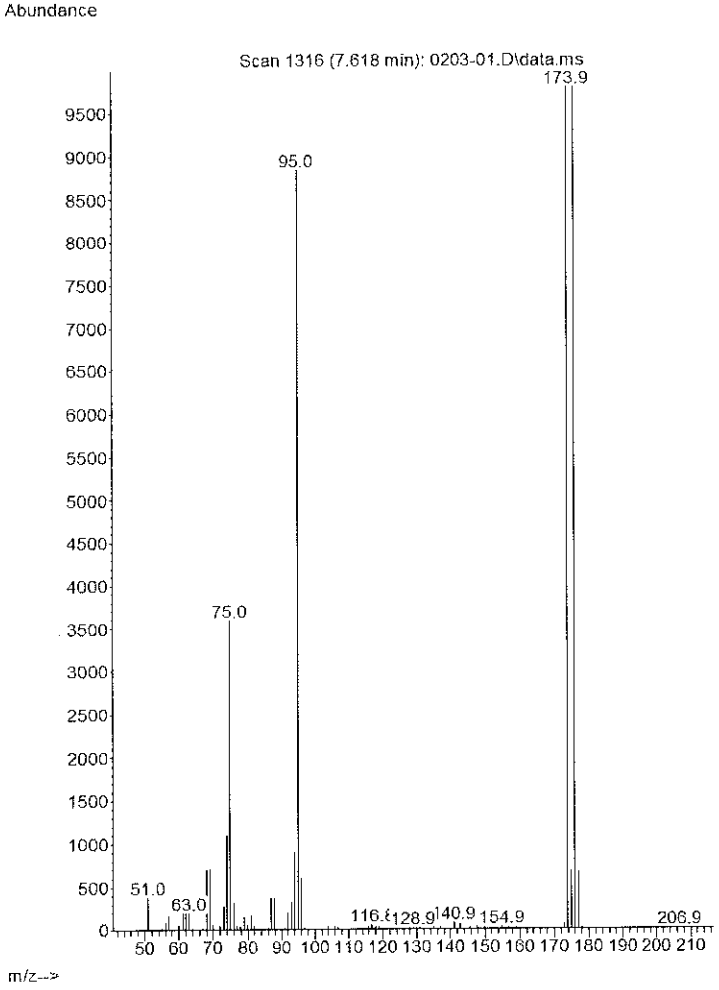
CERTIFICATE OF ANALYSIS

Analysis Method:

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



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CERTIFICATE OF ANALYSIS

Analysis Method:

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

Chem Service Inc Area Percent Report

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

Integration Parameters: autoint1.e
Integrator: ChemStation

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

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

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

Sum of corrected areas: 65045319

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

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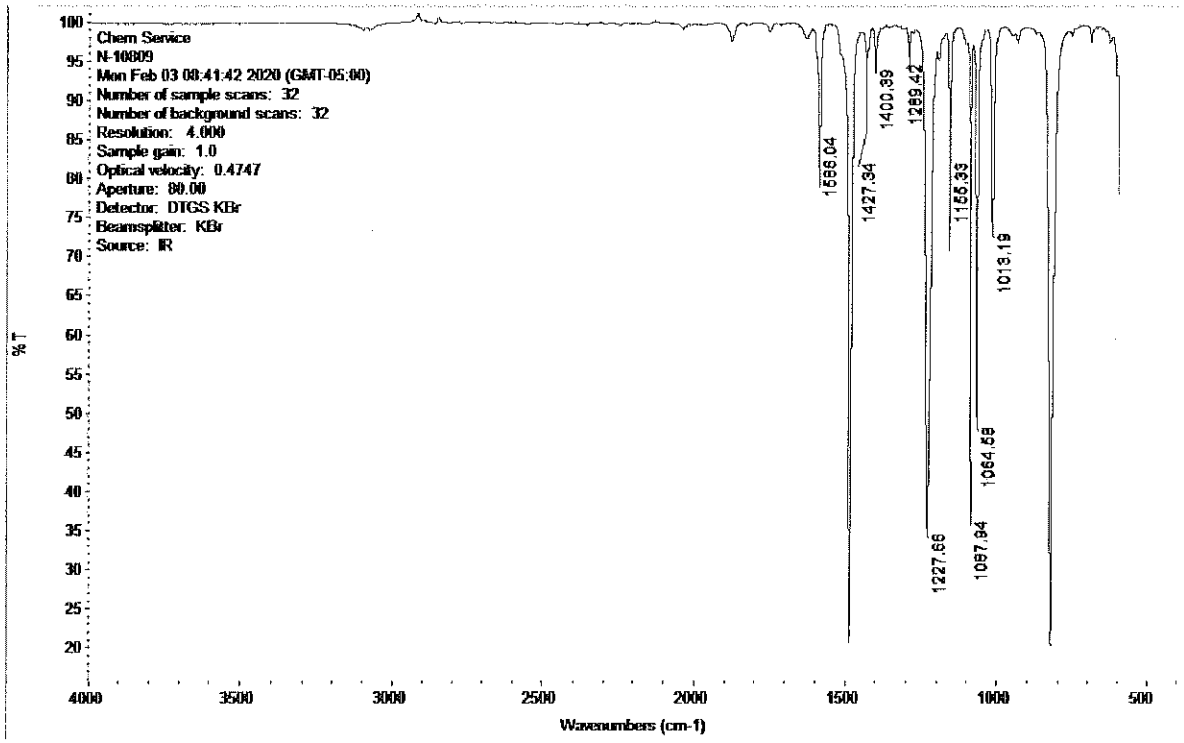
CERTIFICATE OF ANALYSIS

Analysis Method:

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



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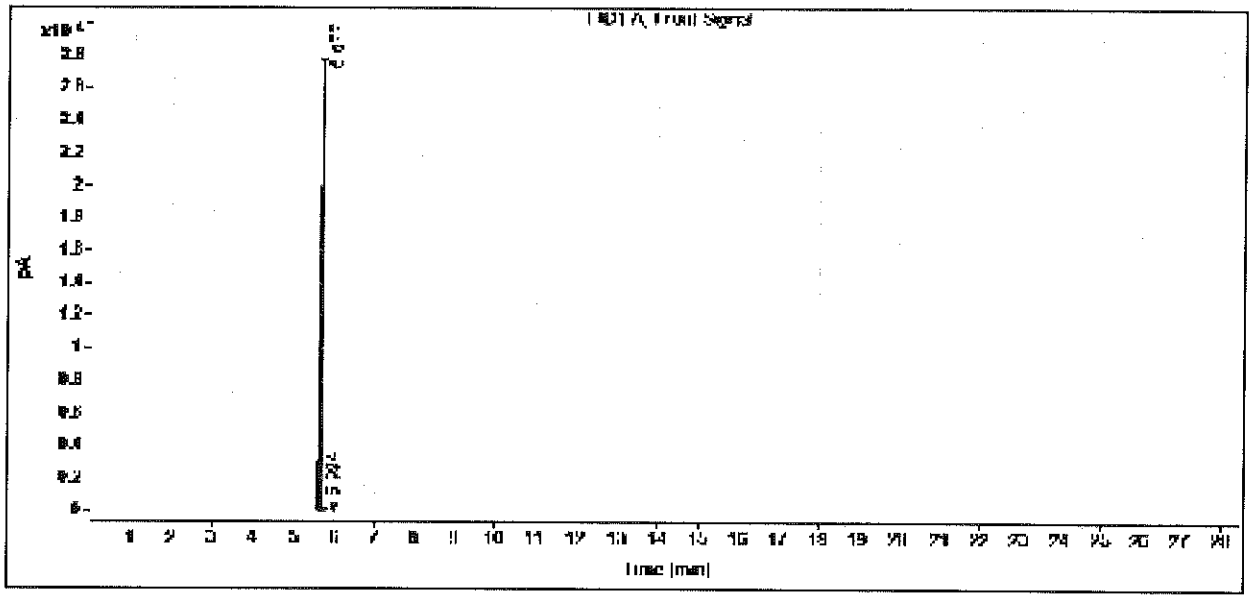
CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\CHEM32\1\DATA\2020 DATA\0220\013120 2020-01-31 16-11-28\141F0404.D

Sample name: N-10809

Instrument:	GC 1	**Sample type:**	Sample
Injection date:	1/31/2020 10:29:42 PM	**Location:**	Vial 141
Acq. method:	SCREEN.M	**Injection volume:**	1.0uL
Column name:	Rxl-624Sil (30m x 0.32mm x 1.8um)		



Signal: FID1 A, Front Signal

RT [min]	Type	Width [min]	Area	Height	Area%
5.677	BB S	0.0413	82400.6016	27241.2129	99.7369
5.994	VB	0.0296	217.3697	117.5844	0.2631
		Sum	82617.9712		

PJLA Testing

Reagent

MSV_8260_SS_00592

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 8260A Surrogate Mix

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

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

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

Ship: Ambient

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane **CAS #** 1868-53-7 (Lot 0012016) **Purity** 99%	2,509.0 µg/mL	+/- 14.7242 µg/mL +/- 140.6914 µg/mL +/- 143.9827 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-29377) **Purity** 99%	2,503.0 µg/mL	+/- 14.6890 µg/mL +/- 140.3549 µg/mL +/- 143.6384 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-31750) **Purity** 99%	2,501.5 µg/mL	+/- 14.6802 µg/mL +/- 140.2708 µg/mL +/- 143.5523 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KO) **Purity** 99%	2,520.0 µg/mL	+/- 14.7888 µg/mL +/- 141.3082 µg/mL +/- 144.6140 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)

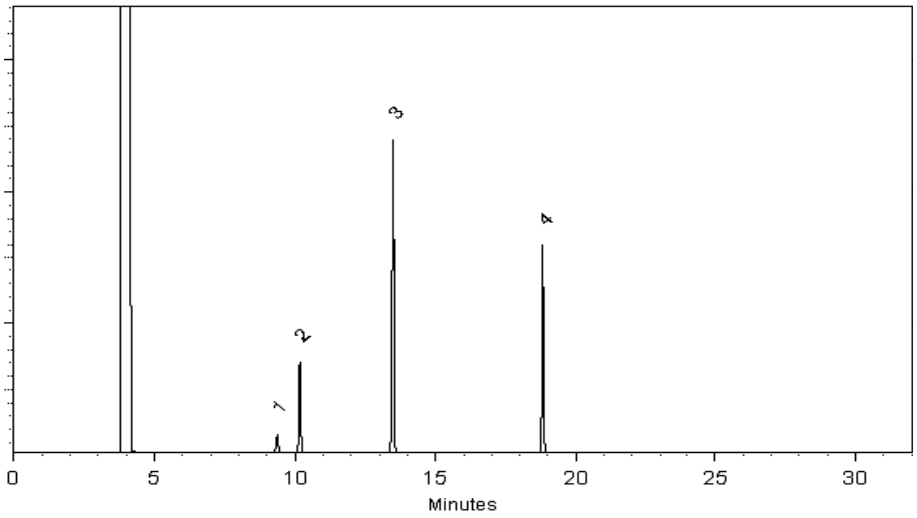
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Sam Moodler - Operations Tech I

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

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:

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

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

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -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_00017

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

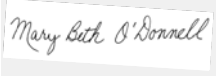
Acrolein

CATALOG NUMBER	RPN-11030-1G
LOT NUMBER	12671800
DATE CERTIFIED	11/30/21
EXPIRATION DATE	11/30/22
CAS NUMBER	107-02-8
MOLECULAR FORMULA	C3H4O
MOLECULAR WEIGHT	56.06
STORAGE	Refrigerator storage (2 - 8 °C)
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.
NOTES	Contains water and hydroquinone as an inhibitor.

Analytical Test	Value
% PURITY (GC/TCD)	93.1
% WATER (KARL FISCHER)	3.7

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

Certified By:



Mary Beth O'Donnell
CSM/TC

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

PJLA Testing

PJLA Reference Material Producer

COA Form
Revision 3 (3/2015)

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CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\CHEM32\1\DATA\2021 DATA\1121\SIG2022966.D

Sample name: Acrolein

Instrument:	GC 1	**Sample type:**	Sample
Injection date:	11/30/2021 8:07:19 AM	**Location:**	Vial 1
Acq. method:	N-10129-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%
1.894	BB	0.0219	75.2808	55.4051	3.7452
2.128	BB	0.0203	27.3468	20.9134	1.3605
3.116	BB	0.0328	1873.1121	917.3733	93.1873
9.648	BB	0.0286	23.4982	12.6856	1.1690
15.638	BB	0.0274	10.8118	6.1875	0.5379
		Sum	2010.0498		

Reagent

MSV_CCV_GASES_00158

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

Catalog No. : 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)

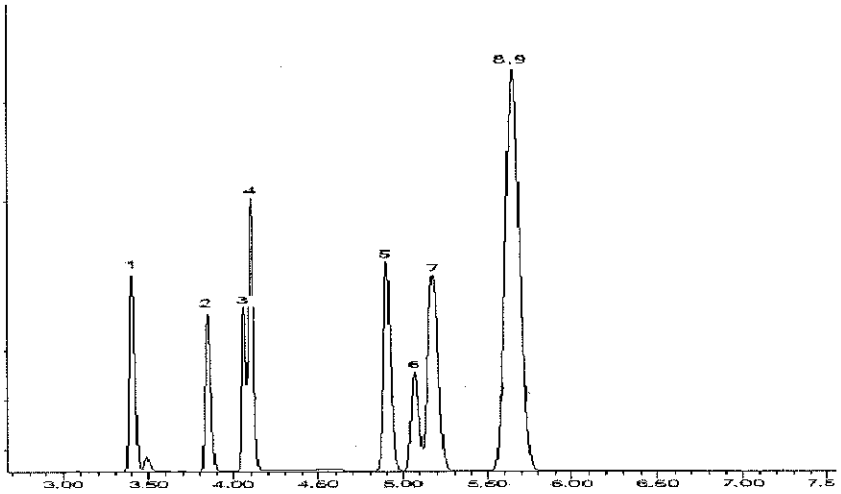
Carrier Gas:
helium-constant flow 2.0 mL/min.

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.

Tom Suckar - Mix Technician

Date Mixed: 13-May-2021 **Balance:** B251644995

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:

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

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

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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

Reagent

MSV_CCV_GASES_00164

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CERTIFIED REFERENCE MATERIAL

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

Catalog No. : 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.

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Rtx-502.2 (cat.#10916)

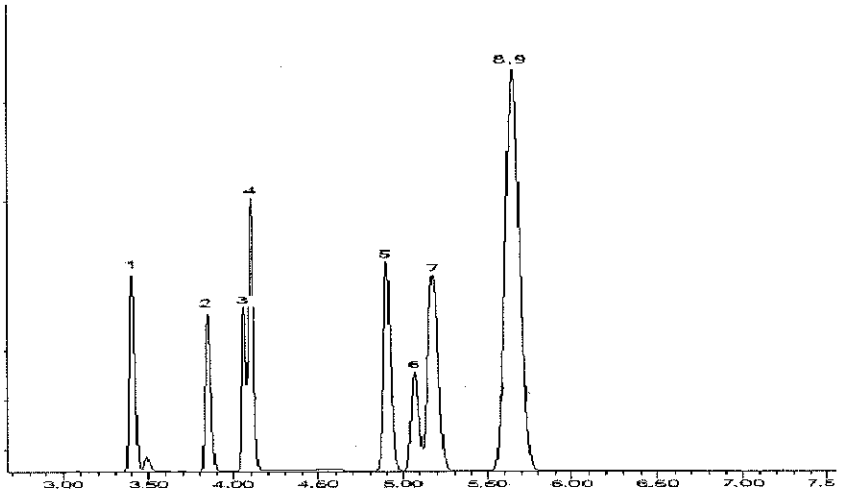
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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Tom Suckar - Mix Technician

Date Mixed: 13-May-2021 **Balance:** B251644995

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

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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

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Reagent

MSV_Cus826_IS_00415

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Catalog No. : 558267 **Lot No.:** A0178373

Description : Custom 8260A IS Mix

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

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

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

Ship: Ambient

C E R T I F I E D V A L U E S

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Methyl-2-propanol-d10		12,494.0 µg/mL	+/- 73.3218 µg/mL		Gravimetric
	CAS # 53001-22-2	(Lot I-433)		+/- 267.6837 µg/mL		Unstressed
	Purity 99%			+/- 275.4550 µg/mL		Stressed
2	Fluorobenzene		2,508.0 µg/mL	+/- 14.8968 µg/mL		Gravimetric
	CAS # 462-06-6	(Lot BCBZ5549)		+/- 53.7830 µg/mL		Unstressed
	Purity 99%			+/- 55.3416 µg/mL		Stressed
3	Chlorobenzene-d5		2,514.0 µg/mL	+/- 14.9324 µg/mL		Gravimetric
	CAS # 3114-55-4	(Lot PR-29571)		+/- 53.9117 µg/mL		Unstressed
	Purity 99%			+/- 55.4740 µg/mL		Stressed
4	1,4-Dichlorobenzene-d4		2,488.0 µg/mL	+/- 14.7780 µg/mL		Gravimetric
	CAS # 3855-82-1	(Lot PR-30447)		+/- 53.3541 µg/mL		Unstressed
	Purity 99%			+/- 54.9003 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)

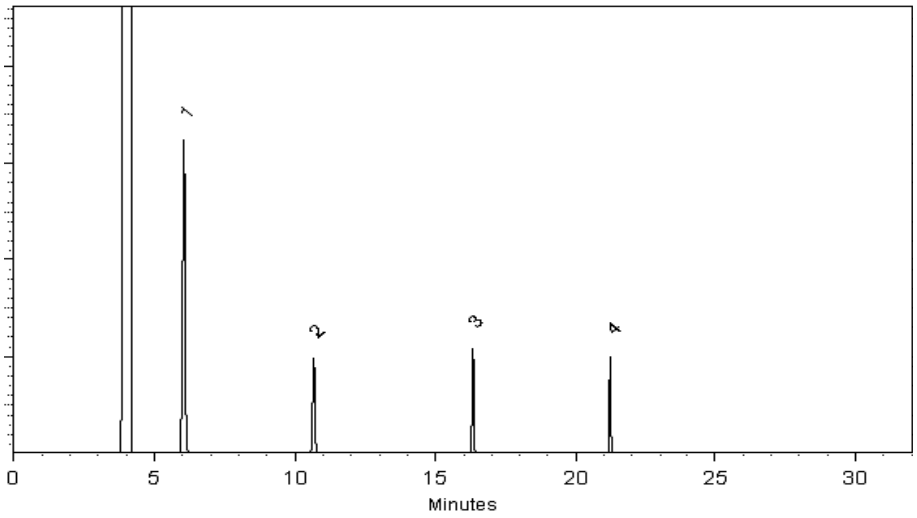
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Morgan Craighead - Mix Technician

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

Clara Windle - Operations Technician I

Date Passed: 12-Nov-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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

Reagent

MSV_EE_Neat_00006

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

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.

Analytical Test	Value
% 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)

PJLA Testing
Accreditation #63520

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
1-800-452-9994 • 1-610-692-3026 • Fax 1-610-692-8729
info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\CHEM32\1\DATA\2020 DATA\1220\SIG2022771.D

Sample name: Ethylether

Instrument: GC 1
Injection date: 12/4/2020 10:52:03 AM
Acq. method: TCD SCREEN.M
Column name: DB-624 (30m x 0.53mm x 3.0um)

Sample type: Sample
Location: Vial 21
Injection volume: 1.0uL

Signal: TCD2 B, Back Signal

RT [min]	Type	Width [min]	Area	Height	Area%
1.206	BB	0.0364	16.2548	6.6698	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		

PJLA Testing

Reagent

MSV_M_MIX1SEC_00048

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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

C E R T I F I E D V A L U E S

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		1,000.1	µg/mL	+/-	7.1033	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 8529200)			+/-	56.2242	µg/mL	Unstressed
	Purity 99%				+/-	57.5330	µg/mL	Stressed
9	1,1,1-trichloroethane		1,000.3	µg/mL	+/-	7.1383	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot 190123CG)			+/-	56.2391	µg/mL	Unstressed
	Purity 98%				+/-	57.5479	µg/mL	Stressed
10	1,1-Dichloropropene		1,002.5	µg/mL	+/-	7.1204	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 8541600)			+/-	56.3597	µg/mL	Unstressed
	Purity 95%				+/-	57.6716	µg/mL	Stressed
11	Carbon tetrachloride		1,000.8	µg/mL	+/-	7.1414	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)			+/-	56.2636	µg/mL	Unstressed
	Purity 99%				+/-	57.5731	µg/mL	Stressed
12	1,2-Dichloroethane		1,000.6	µg/mL	+/-	7.1407	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot 00016165)			+/-	56.2576	µg/mL	Unstressed
	Purity 99%				+/-	57.5669	µg/mL	Stressed
13	Benzene		1,000.1	µg/mL	+/-	7.1031	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)			+/-	56.2228	µg/mL	Unstressed
	Purity 99%				+/-	57.5315	µg/mL	Stressed
14	Trichloroethene		1,000.9	µg/mL	+/-	7.1423	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)			+/-	56.2708	µg/mL	Unstressed
	Purity 99%				+/-	57.5804	µg/mL	Stressed
15	1,2-Dichloropropane		1,000.1	µg/mL	+/-	7.1371	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot ERRBI-RH)			+/-	56.2293	µg/mL	Unstressed
	Purity 99%				+/-	57.5380	µg/mL	Stressed
16	Bromodichloromethane		1,000.8	µg/mL	+/-	7.1418	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 13780)			+/-	56.2662	µg/mL	Unstressed
	Purity 99%				+/-	57.5757	µg/mL	Stressed
17	Dibromomethane		1,000.1	µg/mL	+/-	7.1033	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot MOKKJ)			+/-	56.2242	µg/mL	Unstressed
	Purity 99%				+/-	57.5330	µg/mL	Stressed
18	cis-1,3-Dichloropropene		1,000.9	µg/mL	+/-	7.1425	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 487OA)			+/-	56.2723	µg/mL	Unstressed
	Purity 98%				+/-	57.5819	µg/mL	Stressed
19	Toluene		1,000.0	µg/mL	+/-	7.1026	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)			+/-	56.2193	µg/mL	Unstressed
	Purity 99%				+/-	57.5279	µg/mL	Stressed
20	trans-1,3-Dichloropropene		1,002.1	µg/mL	+/-	7.1513	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot ZDMSL)			+/-	56.3417	µg/mL	Unstressed
	Purity 96%				+/-	57.6530	µg/mL	Stressed
21	1,1,2-Trichloroethane		1,001.3	µg/mL	+/-	7.1450	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 7871500)			+/-	56.2917	µg/mL	Unstressed
	Purity 99%				+/-	57.6018	µg/mL	Stressed
22	1,3-Dichloropropane		1,000.1	µg/mL	+/-	7.1031	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot AGN01-EFPC)			+/-	56.2228	µg/mL	Unstressed
	Purity 99%				+/-	57.5315	µg/mL	Stressed
23	Tetrachloroethene		1,000.2	µg/mL	+/-	7.1378	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)			+/-	56.2350	µg/mL	Unstressed
	Purity 99%				+/-	57.5437	µg/mL	Stressed

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

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

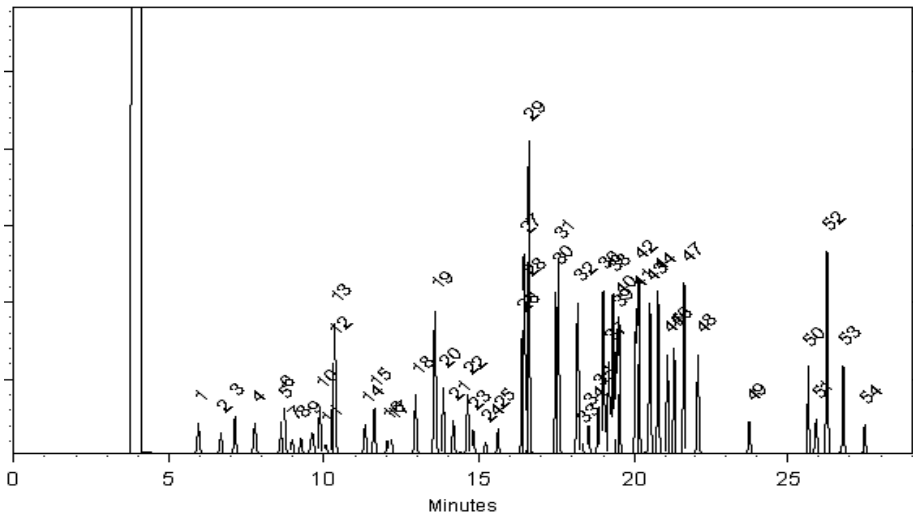
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Bradley Meyer - Mix Technician

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

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:

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

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

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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

Reagent

MSV_M_MIX1SEC_00050

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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

C E R T I F I E D V A L U E S

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		1,000.1	µg/mL	+/-	7.1033	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 8529200)			+/-	56.2242	µg/mL	Unstressed
	Purity 99%				+/-	57.5330	µg/mL	Stressed
9	1,1,1-trichloroethane		1,000.3	µg/mL	+/-	7.1383	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot 190123CG)			+/-	56.2391	µg/mL	Unstressed
	Purity 98%				+/-	57.5479	µg/mL	Stressed
10	1,1-Dichloropropene		1,002.5	µg/mL	+/-	7.1204	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 8541600)			+/-	56.3597	µg/mL	Unstressed
	Purity 95%				+/-	57.6716	µg/mL	Stressed
11	Carbon tetrachloride		1,000.8	µg/mL	+/-	7.1414	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)			+/-	56.2636	µg/mL	Unstressed
	Purity 99%				+/-	57.5731	µg/mL	Stressed
12	1,2-Dichloroethane		1,000.6	µg/mL	+/-	7.1407	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot 00016165)			+/-	56.2576	µg/mL	Unstressed
	Purity 99%				+/-	57.5669	µg/mL	Stressed
13	Benzene		1,000.1	µg/mL	+/-	7.1031	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)			+/-	56.2228	µg/mL	Unstressed
	Purity 99%				+/-	57.5315	µg/mL	Stressed
14	Trichloroethene		1,000.9	µg/mL	+/-	7.1423	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)			+/-	56.2708	µg/mL	Unstressed
	Purity 99%				+/-	57.5804	µg/mL	Stressed
15	1,2-Dichloropropane		1,000.1	µg/mL	+/-	7.1371	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot ERRBI-RH)			+/-	56.2293	µg/mL	Unstressed
	Purity 99%				+/-	57.5380	µg/mL	Stressed
16	Bromodichloromethane		1,000.8	µg/mL	+/-	7.1418	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 13780)			+/-	56.2662	µg/mL	Unstressed
	Purity 99%				+/-	57.5757	µg/mL	Stressed
17	Dibromomethane		1,000.1	µg/mL	+/-	7.1033	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot MOKKJ)			+/-	56.2242	µg/mL	Unstressed
	Purity 99%				+/-	57.5330	µg/mL	Stressed
18	cis-1,3-Dichloropropene		1,000.9	µg/mL	+/-	7.1425	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 487OA)			+/-	56.2723	µg/mL	Unstressed
	Purity 98%				+/-	57.5819	µg/mL	Stressed
19	Toluene		1,000.0	µg/mL	+/-	7.1026	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)			+/-	56.2193	µg/mL	Unstressed
	Purity 99%				+/-	57.5279	µg/mL	Stressed
20	trans-1,3-Dichloropropene		1,002.1	µg/mL	+/-	7.1513	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot ZDMSL)			+/-	56.3417	µg/mL	Unstressed
	Purity 96%				+/-	57.6530	µg/mL	Stressed
21	1,1,2-Trichloroethane		1,001.3	µg/mL	+/-	7.1450	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 7871500)			+/-	56.2917	µg/mL	Unstressed
	Purity 99%				+/-	57.6018	µg/mL	Stressed
22	1,3-Dichloropropane		1,000.1	µg/mL	+/-	7.1031	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot AGN01-EFPC)			+/-	56.2228	µg/mL	Unstressed
	Purity 99%				+/-	57.5315	µg/mL	Stressed
23	Tetrachloroethene		1,000.2	µg/mL	+/-	7.1378	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)			+/-	56.2350	µg/mL	Unstressed
	Purity 99%				+/-	57.5437	µg/mL	Stressed

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

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

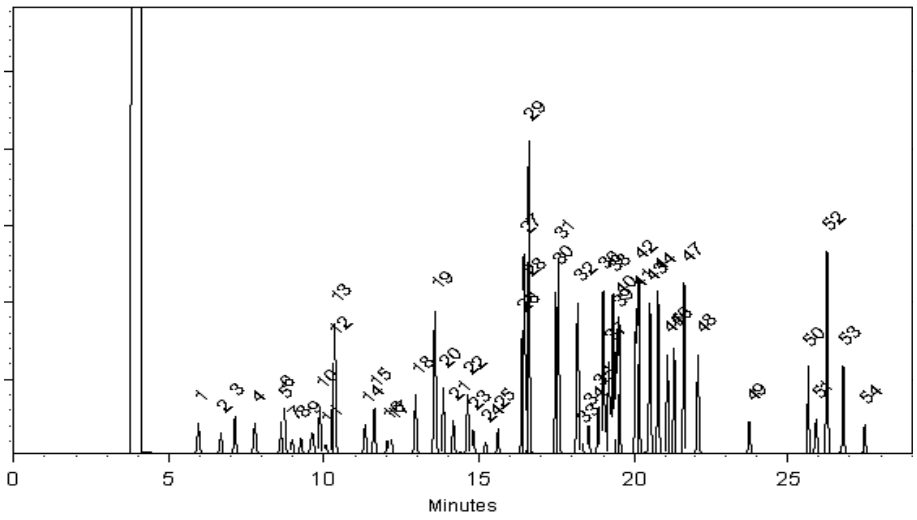
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Bradley Meyer - Mix Technician

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

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:

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

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

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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

Reagent

MSV_M_MIX1SEC_00056

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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

C E R T I F I E D V A L U E S

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

8	Bromochloromethane		1,000.1	µg/mL	+/-	7.1033	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 8529200)			+/-	56.2242	µg/mL	Unstressed
	Purity 99%				+/-	57.5330	µg/mL	Stressed
9	1,1,1-trichloroethane		1,000.3	µg/mL	+/-	7.1383	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot 190123CG)			+/-	56.2391	µg/mL	Unstressed
	Purity 98%				+/-	57.5479	µg/mL	Stressed
10	1,1-Dichloropropene		1,002.5	µg/mL	+/-	7.1204	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 8541600)			+/-	56.3597	µg/mL	Unstressed
	Purity 95%				+/-	57.6716	µg/mL	Stressed
11	Carbon tetrachloride		1,000.8	µg/mL	+/-	7.1414	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)			+/-	56.2636	µg/mL	Unstressed
	Purity 99%				+/-	57.5731	µg/mL	Stressed
12	1,2-Dichloroethane		1,000.6	µg/mL	+/-	7.1407	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot 00016165)			+/-	56.2576	µg/mL	Unstressed
	Purity 99%				+/-	57.5669	µg/mL	Stressed
13	Benzene		1,000.1	µg/mL	+/-	7.1031	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)			+/-	56.2228	µg/mL	Unstressed
	Purity 99%				+/-	57.5315	µg/mL	Stressed
14	Trichloroethene		1,000.9	µg/mL	+/-	7.1423	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)			+/-	56.2708	µg/mL	Unstressed
	Purity 99%				+/-	57.5804	µg/mL	Stressed
15	1,2-Dichloropropane		1,000.1	µg/mL	+/-	7.1371	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot ERRBI-RH)			+/-	56.2293	µg/mL	Unstressed
	Purity 99%				+/-	57.5380	µg/mL	Stressed
16	Bromodichloromethane		1,000.8	µg/mL	+/-	7.1418	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 13780)			+/-	56.2662	µg/mL	Unstressed
	Purity 99%				+/-	57.5757	µg/mL	Stressed
17	Dibromomethane		1,000.1	µg/mL	+/-	7.1033	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot MOKKJ)			+/-	56.2242	µg/mL	Unstressed
	Purity 99%				+/-	57.5330	µg/mL	Stressed
18	cis-1,3-Dichloropropene		1,000.9	µg/mL	+/-	7.1425	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 487OA)			+/-	56.2723	µg/mL	Unstressed
	Purity 98%				+/-	57.5819	µg/mL	Stressed
19	Toluene		1,000.0	µg/mL	+/-	7.1026	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)			+/-	56.2193	µg/mL	Unstressed
	Purity 99%				+/-	57.5279	µg/mL	Stressed
20	trans-1,3-Dichloropropene		1,002.1	µg/mL	+/-	7.1513	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot ZDMSL)			+/-	56.3417	µg/mL	Unstressed
	Purity 96%				+/-	57.6530	µg/mL	Stressed
21	1,1,2-Trichloroethane		1,001.3	µg/mL	+/-	7.1450	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 7871500)			+/-	56.2917	µg/mL	Unstressed
	Purity 99%				+/-	57.6018	µg/mL	Stressed
22	1,3-Dichloropropane		1,000.1	µg/mL	+/-	7.1031	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot AGN01-EFPC)			+/-	56.2228	µg/mL	Unstressed
	Purity 99%				+/-	57.5315	µg/mL	Stressed
23	Tetrachloroethene		1,000.2	µg/mL	+/-	7.1378	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)			+/-	56.2350	µg/mL	Unstressed
	Purity 99%				+/-	57.5437	µg/mL	Stressed

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

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

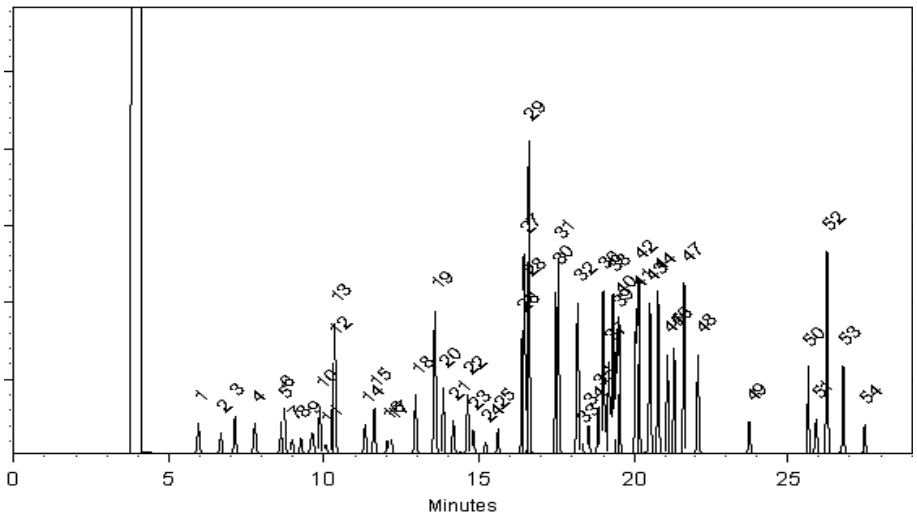
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Bradley Meyer - Mix Technician

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

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:

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

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

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -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_00054

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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

C E R T I F I E D V A L U E S

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

8	Carbon disulfide		1,001.5	µg/mL	+/-	5.8774	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	49.5485	µg/mL	Unstressed
	Purity 99%				+/-	50.7802	µg/mL	Stressed
9	Acrylonitrile		5,000.5	µg/mL	+/-	29.2790	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot V54AD)			+/-	247.3882	µg/mL	Unstressed
	Purity 99%				+/-	253.5386	µg/mL	Stressed
10	Methyl-tert-butyl ether (MTBE)		1,001.5	µg/mL	+/-	5.8774	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZHKYA)			+/-	49.5485	µg/mL	Unstressed
	Purity 99%				+/-	50.7802	µg/mL	Stressed
11	n-Hexane (C6)		1,001.0	µg/mL	+/-	5.8744	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot 10188491)			+/-	49.5238	µg/mL	Unstressed
	Purity 99%				+/-	50.7549	µg/mL	Stressed
12	Diisopropyl ether (DIPE)		1,003.0	µg/mL	+/-	5.8862	µg/mL	Gravimetric
	CAS # 108-20-3.SEC	(Lot LL7TN-SH)			+/-	49.6227	µg/mL	Unstressed
	Purity 99%				+/-	50.8563	µg/mL	Stressed
13	Chloroprene (2-chloro-1,3-butadiene)		1,001.5	µg/mL	+/-	5.8774	µg/mL	Gravimetric
	CAS # 126-99-8	(Lot 210413JLM)			+/-	49.5485	µg/mL	Unstressed
	Purity 99%				+/-	50.7802	µg/mL	Stressed
14	Ethyl-tert-butyl ether (ETBE)		1,002.1	µg/mL	+/-	5.8806	µg/mL	Gravimetric
	CAS # 637-92-3.SEC	(Lot UCI5B)			+/-	49.5757	µg/mL	Unstressed
	Purity 98%				+/-	50.8081	µg/mL	Stressed
15	Propionitrile		7,501.5	µg/mL	+/-	43.9229	µg/mL	Gravimetric
	CAS # 107-12-0.SEC	(Lot N44LF)			+/-	371.1195	µg/mL	Unstressed
	Purity 99%				+/-	380.3459	µg/mL	Stressed
16	Methacrylonitrile		7,501.5	µg/mL	+/-	43.9229	µg/mL	Gravimetric
	CAS # 126-98-7	(Lot 1012014)			+/-	371.1195	µg/mL	Unstressed
	Purity 99%				+/-	380.3459	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		25,001.0	µg/mL	+/-	146.3864	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot YNG3K)			+/-	1,236.8670	µg/mL	Unstressed
	Purity 99%				+/-	1,267.6168	µg/mL	Stressed
18	Tetrahydrofuran		5,000.5	µg/mL	+/-	29.2790	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot 3NYHE)			+/-	247.3882	µg/mL	Unstressed
	Purity 99%				+/-	253.5386	µg/mL	Stressed
19	Cyclohexane		1,000.0	µg/mL	+/-	5.8686	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	49.4743	µg/mL	Unstressed
	Purity 99%				+/-	50.7042	µg/mL	Stressed
20	1-Butanol		50,004.5	µg/mL	+/-	292.7722	µg/mL	Gravimetric
	CAS # 71-36-3.SEC	(Lot 6B6UL)			+/-	2,473.8558	µg/mL	Unstressed
	Purity 99%				+/-	2,535.3586	µg/mL	Stressed
21	tert-Amyl methyl ether (TAME)		1,001.0	µg/mL	+/-	5.8744	µg/mL	Gravimetric
	CAS # 994-05-8.SEC	(Lot 11010100)			+/-	49.5238	µg/mL	Unstressed
	Purity 99%				+/-	50.7549	µg/mL	Stressed
22	n-Heptane (C7)		1,002.5	µg/mL	+/-	5.8832	µg/mL	Gravimetric
	CAS # 142-82-5.SEC	(Lot TFHUC)			+/-	49.5980	µg/mL	Unstressed
	Purity 99%				+/-	50.8309	µg/mL	Stressed
23	tert-Amyl ethyl ether (TAEE)		1,000.5	µg/mL	+/-	5.8715	µg/mL	Gravimetric
	CAS # 919-94-8.SEC	(Lot 11370700)			+/-	49.4990	µg/mL	Unstressed
	Purity 99%				+/-	50.7295	µg/mL	Stressed

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

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

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

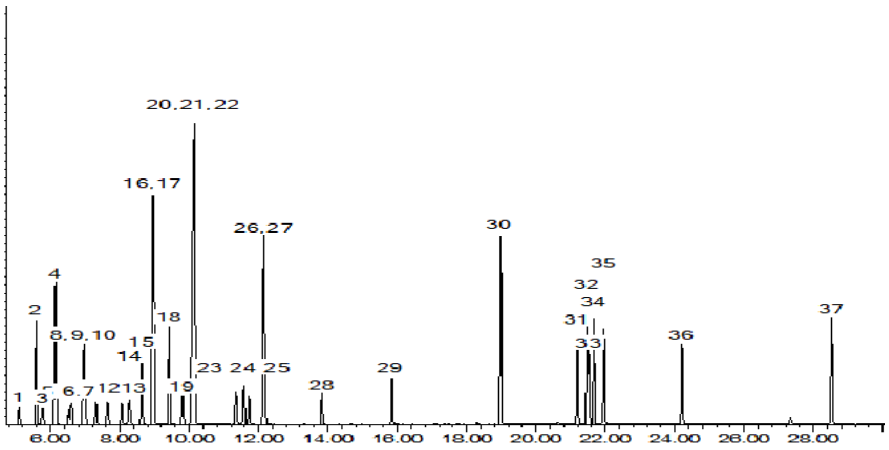
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 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.

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

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:

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

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

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -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_00055

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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

C E R T I F I E D V A L U E S

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		1,001.5	µg/mL	+/-	5.8774	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	49.5485	µg/mL	Unstressed
	Purity 99%				+/-	50.7802	µg/mL	Stressed
9	Acrylonitrile		5,000.5	µg/mL	+/-	29.2790	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot V54AD)			+/-	247.3882	µg/mL	Unstressed
	Purity 99%				+/-	253.5386	µg/mL	Stressed
10	Methyl-tert-butyl ether (MTBE)		1,001.5	µg/mL	+/-	5.8774	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZHKYA)			+/-	49.5485	µg/mL	Unstressed
	Purity 99%				+/-	50.7802	µg/mL	Stressed
11	n-Hexane (C6)		1,001.0	µg/mL	+/-	5.8744	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot 10188491)			+/-	49.5238	µg/mL	Unstressed
	Purity 99%				+/-	50.7549	µg/mL	Stressed
12	Diisopropyl ether (DIPE)		1,003.0	µg/mL	+/-	5.8862	µg/mL	Gravimetric
	CAS # 108-20-3.SEC	(Lot LL7TN-SH)			+/-	49.6227	µg/mL	Unstressed
	Purity 99%				+/-	50.8563	µg/mL	Stressed
13	Chloroprene (2-chloro-1,3-butadiene)		1,001.5	µg/mL	+/-	5.8774	µg/mL	Gravimetric
	CAS # 126-99-8	(Lot 210413JLM)			+/-	49.5485	µg/mL	Unstressed
	Purity 99%				+/-	50.7802	µg/mL	Stressed
14	Ethyl-tert-butyl ether (ETBE)		1,002.1	µg/mL	+/-	5.8806	µg/mL	Gravimetric
	CAS # 637-92-3.SEC	(Lot UCI5B)			+/-	49.5757	µg/mL	Unstressed
	Purity 98%				+/-	50.8081	µg/mL	Stressed
15	Propionitrile		7,501.5	µg/mL	+/-	43.9229	µg/mL	Gravimetric
	CAS # 107-12-0.SEC	(Lot N44LF)			+/-	371.1195	µg/mL	Unstressed
	Purity 99%				+/-	380.3459	µg/mL	Stressed
16	Methacrylonitrile		7,501.5	µg/mL	+/-	43.9229	µg/mL	Gravimetric
	CAS # 126-98-7	(Lot 1012014)			+/-	371.1195	µg/mL	Unstressed
	Purity 99%				+/-	380.3459	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		25,001.0	µg/mL	+/-	146.3864	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot YNG3K)			+/-	1,236.8670	µg/mL	Unstressed
	Purity 99%				+/-	1,267.6168	µg/mL	Stressed
18	Tetrahydrofuran		5,000.5	µg/mL	+/-	29.2790	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot 3NYHE)			+/-	247.3882	µg/mL	Unstressed
	Purity 99%				+/-	253.5386	µg/mL	Stressed
19	Cyclohexane		1,000.0	µg/mL	+/-	5.8686	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	49.4743	µg/mL	Unstressed
	Purity 99%				+/-	50.7042	µg/mL	Stressed
20	1-Butanol		50,004.5	µg/mL	+/-	292.7722	µg/mL	Gravimetric
	CAS # 71-36-3.SEC	(Lot 6B6UL)			+/-	2,473.8558	µg/mL	Unstressed
	Purity 99%				+/-	2,535.3586	µg/mL	Stressed
21	tert-Amyl methyl ether (TAME)		1,001.0	µg/mL	+/-	5.8744	µg/mL	Gravimetric
	CAS # 994-05-8.SEC	(Lot 11010100)			+/-	49.5238	µg/mL	Unstressed
	Purity 99%				+/-	50.7549	µg/mL	Stressed
22	n-Heptane (C7)		1,002.5	µg/mL	+/-	5.8832	µg/mL	Gravimetric
	CAS # 142-82-5.SEC	(Lot TFHUC)			+/-	49.5980	µg/mL	Unstressed
	Purity 99%				+/-	50.8309	µg/mL	Stressed
23	tert-Amyl ethyl ether (TAEE)		1,000.5	µg/mL	+/-	5.8715	µg/mL	Gravimetric
	CAS # 919-94-8.SEC	(Lot 11370700)			+/-	49.4990	µg/mL	Unstressed
	Purity 99%				+/-	50.7295	µg/mL	Stressed

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

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

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

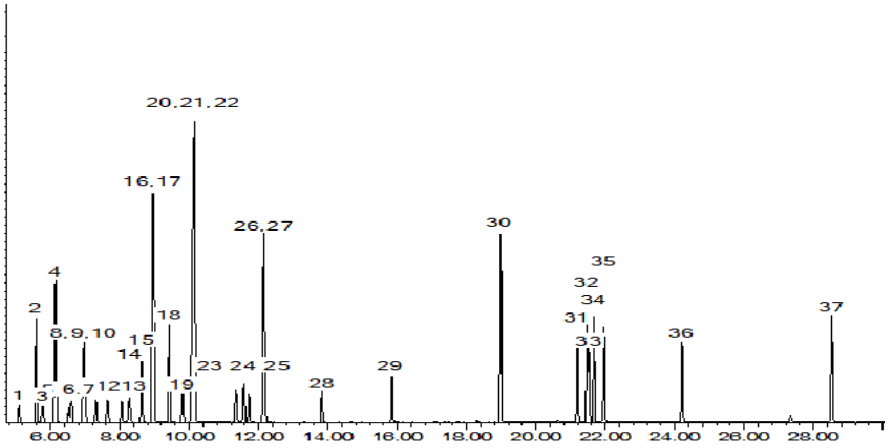
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 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.

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

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:

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

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

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -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_00056

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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

C E R T I F I E D V A L U E S

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		1,001.5	µg/mL	+/-	5.8774	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	49.5485	µg/mL	Unstressed
	Purity 99%				+/-	50.7802	µg/mL	Stressed
9	Acrylonitrile		5,000.5	µg/mL	+/-	29.2790	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot V54AD)			+/-	247.3882	µg/mL	Unstressed
	Purity 99%				+/-	253.5386	µg/mL	Stressed
10	Methyl-tert-butyl ether (MTBE)		1,001.5	µg/mL	+/-	5.8774	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZHKYA)			+/-	49.5485	µg/mL	Unstressed
	Purity 99%				+/-	50.7802	µg/mL	Stressed
11	n-Hexane (C6)		1,001.0	µg/mL	+/-	5.8744	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot 10188491)			+/-	49.5238	µg/mL	Unstressed
	Purity 99%				+/-	50.7549	µg/mL	Stressed
12	Diisopropyl ether (DIPE)		1,003.0	µg/mL	+/-	5.8862	µg/mL	Gravimetric
	CAS # 108-20-3.SEC	(Lot LL7TN-SH)			+/-	49.6227	µg/mL	Unstressed
	Purity 99%				+/-	50.8563	µg/mL	Stressed
13	Chloroprene (2-chloro-1,3-butadiene)		1,001.5	µg/mL	+/-	5.8774	µg/mL	Gravimetric
	CAS # 126-99-8	(Lot 210413JLM)			+/-	49.5485	µg/mL	Unstressed
	Purity 99%				+/-	50.7802	µg/mL	Stressed
14	Ethyl-tert-butyl ether (ETBE)		1,002.1	µg/mL	+/-	5.8806	µg/mL	Gravimetric
	CAS # 637-92-3.SEC	(Lot UCI5B)			+/-	49.5757	µg/mL	Unstressed
	Purity 98%				+/-	50.8081	µg/mL	Stressed
15	Propionitrile		7,501.5	µg/mL	+/-	43.9229	µg/mL	Gravimetric
	CAS # 107-12-0.SEC	(Lot N44LF)			+/-	371.1195	µg/mL	Unstressed
	Purity 99%				+/-	380.3459	µg/mL	Stressed
16	Methacrylonitrile		7,501.5	µg/mL	+/-	43.9229	µg/mL	Gravimetric
	CAS # 126-98-7	(Lot 1012014)			+/-	371.1195	µg/mL	Unstressed
	Purity 99%				+/-	380.3459	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		25,001.0	µg/mL	+/-	146.3864	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot YNG3K)			+/-	1,236.8670	µg/mL	Unstressed
	Purity 99%				+/-	1,267.6168	µg/mL	Stressed
18	Tetrahydrofuran		5,000.5	µg/mL	+/-	29.2790	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot 3NYHE)			+/-	247.3882	µg/mL	Unstressed
	Purity 99%				+/-	253.5386	µg/mL	Stressed
19	Cyclohexane		1,000.0	µg/mL	+/-	5.8686	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	49.4743	µg/mL	Unstressed
	Purity 99%				+/-	50.7042	µg/mL	Stressed
20	1-Butanol		50,004.5	µg/mL	+/-	292.7722	µg/mL	Gravimetric
	CAS # 71-36-3.SEC	(Lot 6B6UL)			+/-	2,473.8558	µg/mL	Unstressed
	Purity 99%				+/-	2,535.3586	µg/mL	Stressed
21	tert-Amyl methyl ether (TAME)		1,001.0	µg/mL	+/-	5.8744	µg/mL	Gravimetric
	CAS # 994-05-8.SEC	(Lot 11010100)			+/-	49.5238	µg/mL	Unstressed
	Purity 99%				+/-	50.7549	µg/mL	Stressed
22	n-Heptane (C7)		1,002.5	µg/mL	+/-	5.8832	µg/mL	Gravimetric
	CAS # 142-82-5.SEC	(Lot TFHUC)			+/-	49.5980	µg/mL	Unstressed
	Purity 99%				+/-	50.8309	µg/mL	Stressed
23	tert-Amyl ethyl ether (TAEE)		1,000.5	µg/mL	+/-	5.8715	µg/mL	Gravimetric
	CAS # 919-94-8.SEC	(Lot 11370700)			+/-	49.4990	µg/mL	Unstressed
	Purity 99%				+/-	50.7295	µg/mL	Stressed

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

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

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

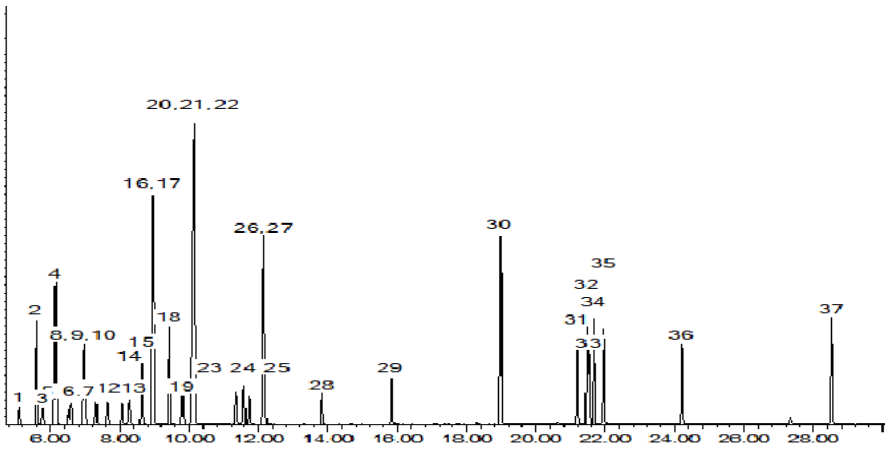
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 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.

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

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:

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

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

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -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_00055

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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		5,000.9	µg/mL	+/-	31.8976	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)			+/-	280.7022	µg/mL	Unstressed
	Purity 99%				+/-	287.2560	µg/mL	Stressed
9	1,1,1-trichloroethane		5,000.1	µg/mL	+/-	31.7041	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot 190123CG)			+/-	280.6383	µg/mL	Unstressed
	Purity 98%				+/-	287.1917	µg/mL	Stressed
10	1,1-Dichloropropene		5,000.9	µg/mL	+/-	31.8976	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 201106JLM)			+/-	280.7022	µg/mL	Unstressed
	Purity 99%				+/-	287.2560	µg/mL	Stressed
11	carbon tetrachloride		5,000.5	µg/mL	+/-	31.7063	µg/mL	Gravimetric
	CAS # 56-23-5	(Lot SHBJ2110)			+/-	280.6583	µg/mL	Unstressed
	Purity 99%				+/-	287.2122	µg/mL	Stressed
12	1,2-Dichloroethane		5,000.4	µg/mL	+/-	31.7059	µg/mL	Gravimetric
	CAS # 107-06-2	(Lot MKCM8716)			+/-	280.6548	µg/mL	Unstressed
	Purity 99%				+/-	287.2086	µg/mL	Stressed
13	Benzene		5,001.0	µg/mL	+/-	31.8982	µg/mL	Gravimetric
	CAS # 71-43-2	(Lot SHBM3620)			+/-	280.7078	µg/mL	Unstressed
	Purity 99%				+/-	287.2618	µg/mL	Stressed
14	Trichloroethene		5,000.8	µg/mL	+/-	31.7079	µg/mL	Gravimetric
	CAS # 79-01-6	(Lot SHBL5816)			+/-	280.6723	µg/mL	Unstressed
	Purity 99%				+/-	287.2265	µg/mL	Stressed
15	1,2-Dichloropropane		5,001.1	µg/mL	+/-	31.7099	µg/mL	Gravimetric
	CAS # 78-87-5	(Lot BCBR0882V)			+/-	280.6899	µg/mL	Unstressed
	Purity 99%				+/-	287.2445	µg/mL	Stressed
16	bromodichloromethane		5,000.2	µg/mL	+/-	31.7043	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCK3742)			+/-	280.6408	µg/mL	Unstressed
	Purity 99%				+/-	287.1942	µg/mL	Stressed
17	Dibromomethane		5,000.2	µg/mL	+/-	31.8931	µg/mL	Gravimetric
	CAS # 74-95-3	(Lot 10215970)			+/-	280.6629	µg/mL	Unstressed
	Purity 99%				+/-	287.2158	µg/mL	Stressed
18	cis-1,3-Dichloropropene		5,001.9	µg/mL	+/-	31.7154	µg/mL	Gravimetric
	CAS # 10061-01-5	(Lot D26147-1217)			+/-	280.7390	µg/mL	Unstressed
	Purity 99%				+/-	287.2947	µg/mL	Stressed
19	Toluene		5,001.3	µg/mL	+/-	31.9001	µg/mL	Gravimetric
	CAS # 108-88-3	(Lot SHBM6128)			+/-	280.7246	µg/mL	Unstressed
	Purity 99%				+/-	287.2790	µg/mL	Stressed
20	trans-1,3-Dichloropropene		5,000.5	µg/mL	+/-	31.7063	µg/mL	Gravimetric
	CAS # 10061-02-6	(Lot RP201030)			+/-	280.6583	µg/mL	Unstressed
	Purity 99%				+/-	287.2122	µg/mL	Stressed
21	1,1,2-Trichloroethane		5,000.9	µg/mL	+/-	31.7087	µg/mL	Gravimetric
	CAS # 79-00-5	(Lot FGB01)			+/-	280.6794	µg/mL	Unstressed
	Purity 99%				+/-	287.2337	µg/mL	Stressed
22	1,3-Dichloropropane		5,000.5	µg/mL	+/-	31.8950	µg/mL	Gravimetric
	CAS # 142-28-9	(Lot BCBC6265)			+/-	280.6797	µg/mL	Unstressed
	Purity 99%				+/-	287.2331	µg/mL	Stressed
23	Tetrachloroethene		5,000.8	µg/mL	+/-	31.7079	µg/mL	Gravimetric
	CAS # 127-18-4	(Lot SHBJ7422)			+/-	280.6723	µg/mL	Unstressed
	Purity 99%				+/-	287.2265	µg/mL	Stressed

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

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

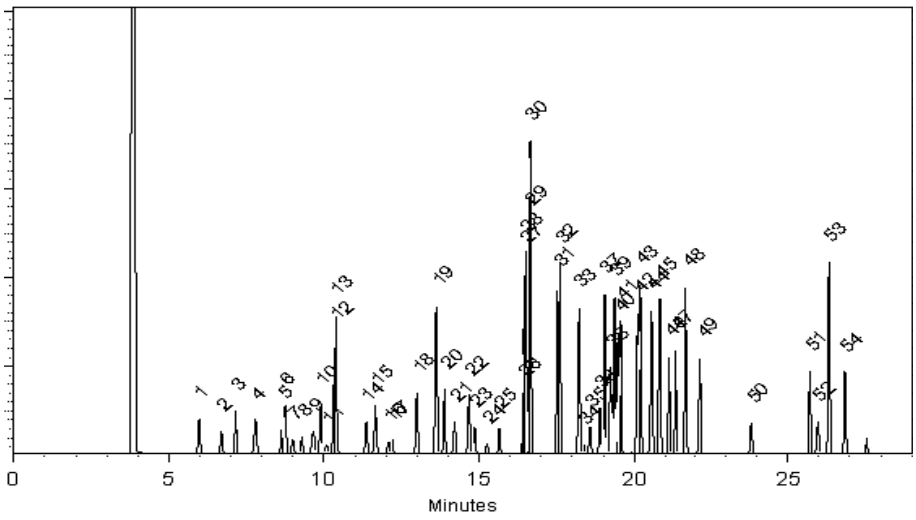
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

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:

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

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

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -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_00054

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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

C E R T I F I E D V A L U E S

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

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

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

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

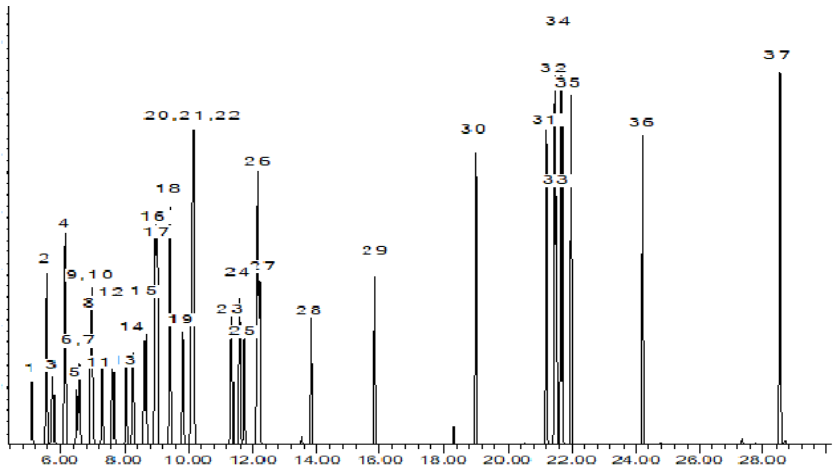
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 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:

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Purity Notes:

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- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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

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

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

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -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_00053

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569721.SEC **Lot No.:** A0167987

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

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

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

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

Ship: Ambient

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone	12,567.5 µg/mL	+/- 73.5855 µg/mL	Gravimetric
	CAS # 67-64-1.SEC (Lot S25F025)		+/- 758.3030 µg/mL	Unstressed
	Purity 99%		+/- 760.1031 µg/mL	Stressed
2	2-Butanone (MEK)	12,553.0 µg/mL	+/- 73.5006 µg/mL	Gravimetric
	CAS # 78-93-3.SEC (Lot RGZ2A)		+/- 757.4280 µg/mL	Unstressed
	Purity 99%		+/- 759.2261 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,563.5 µg/mL	+/- 73.5621 µg/mL	Gravimetric
	CAS # 108-10-1.SEC (Lot E29T040)		+/- 758.0616 µg/mL	Unstressed
	Purity 99%		+/- 759.8611 µg/mL	Stressed
4	2-Hexanone	12,527.8 µg/mL	+/- 73.3532 µg/mL	Gravimetric
	CAS # 591-78-6.SEC (Lot Y3TUO)		+/- 755.9093 µg/mL	Unstressed
	Purity 98%		+/- 757.7037 µg/mL	Stressed

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

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

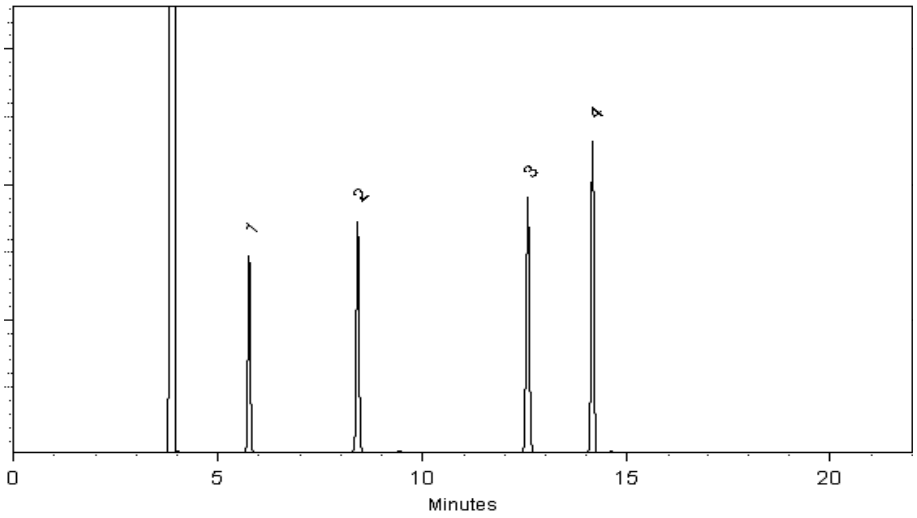
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Cory Meyer - Operations Tech I

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

Marlina Cowan - Operations Tech I

Date Passed: 14-Jan-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -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_00054

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569721.SEC **Lot No.:** A0167987

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

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

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

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

Ship: Ambient

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone	12,567.5 µg/mL	+/- 73.5855 µg/mL	Gravimetric
	CAS # 67-64-1.SEC (Lot S25F025)		+/- 758.3030 µg/mL	Unstressed
	Purity 99%		+/- 760.1031 µg/mL	Stressed
2	2-Butanone (MEK)	12,553.0 µg/mL	+/- 73.5006 µg/mL	Gravimetric
	CAS # 78-93-3.SEC (Lot RGZ2A)		+/- 757.4280 µg/mL	Unstressed
	Purity 99%		+/- 759.2261 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,563.5 µg/mL	+/- 73.5621 µg/mL	Gravimetric
	CAS # 108-10-1.SEC (Lot E29T040)		+/- 758.0616 µg/mL	Unstressed
	Purity 99%		+/- 759.8611 µg/mL	Stressed
4	2-Hexanone	12,527.8 µg/mL	+/- 73.3532 µg/mL	Gravimetric
	CAS # 591-78-6.SEC (Lot Y3TUO)		+/- 755.9093 µg/mL	Unstressed
	Purity 98%		+/- 757.7037 µg/mL	Stressed

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

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

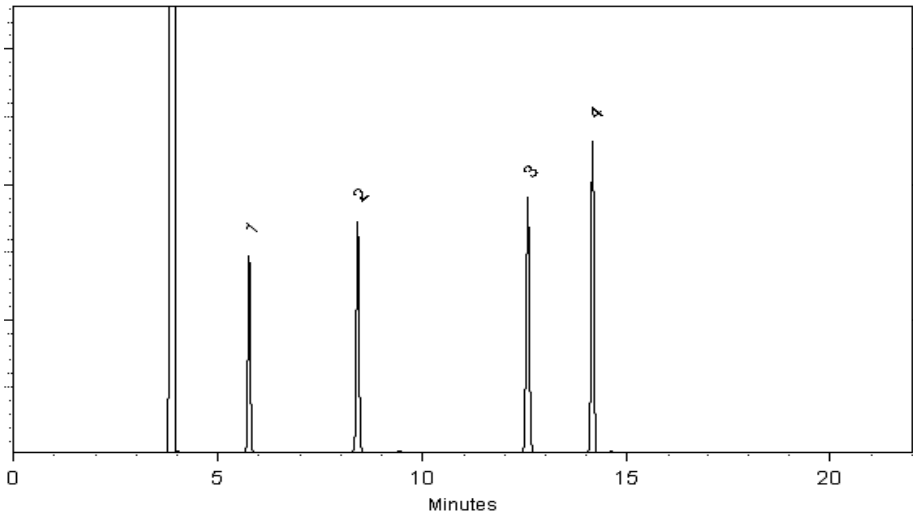
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Cory Meyer - Operations Tech I

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

Marlina Cowan - Operations Tech I

Date Passed: 14-Jan-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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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_00055

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569721.SEC **Lot No.:** A0167987

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

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

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

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

Ship: Ambient

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone	12,567.5 µg/mL	+/- 73.5855 µg/mL	Gravimetric
	CAS # 67-64-1.SEC (Lot S25F025)		+/- 758.3030 µg/mL	Unstressed
	Purity 99%		+/- 760.1031 µg/mL	Stressed
2	2-Butanone (MEK)	12,553.0 µg/mL	+/- 73.5006 µg/mL	Gravimetric
	CAS # 78-93-3.SEC (Lot RGZ2A)		+/- 757.4280 µg/mL	Unstressed
	Purity 99%		+/- 759.2261 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,563.5 µg/mL	+/- 73.5621 µg/mL	Gravimetric
	CAS # 108-10-1.SEC (Lot E29T040)		+/- 758.0616 µg/mL	Unstressed
	Purity 99%		+/- 759.8611 µg/mL	Stressed
4	2-Hexanone	12,527.8 µg/mL	+/- 73.3532 µg/mL	Gravimetric
	CAS # 591-78-6.SEC (Lot Y3TUO)		+/- 755.9093 µg/mL	Unstressed
	Purity 98%		+/- 757.7037 µg/mL	Stressed

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

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

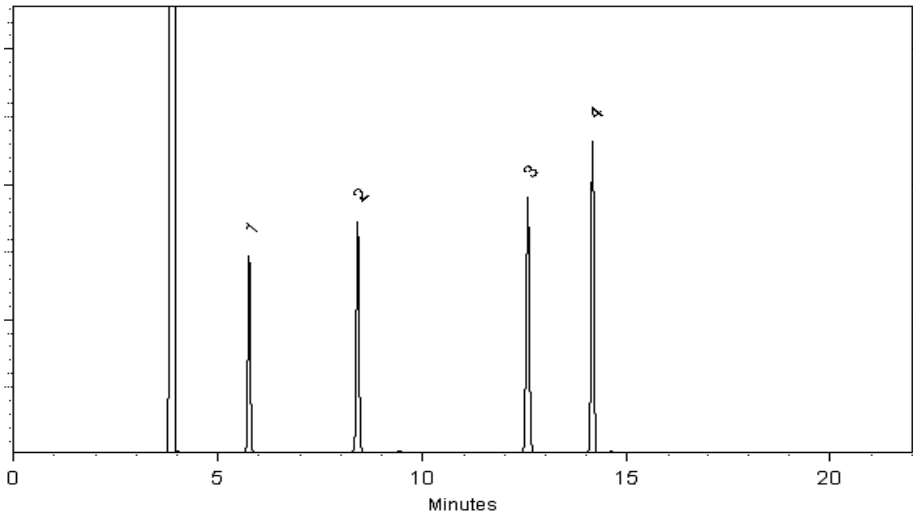
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Cory Meyer - Operations Tech I

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

Marlina Cowan - Operations Tech I

Date Passed: 14-Jan-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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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
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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_00079

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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

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

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

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

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

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

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

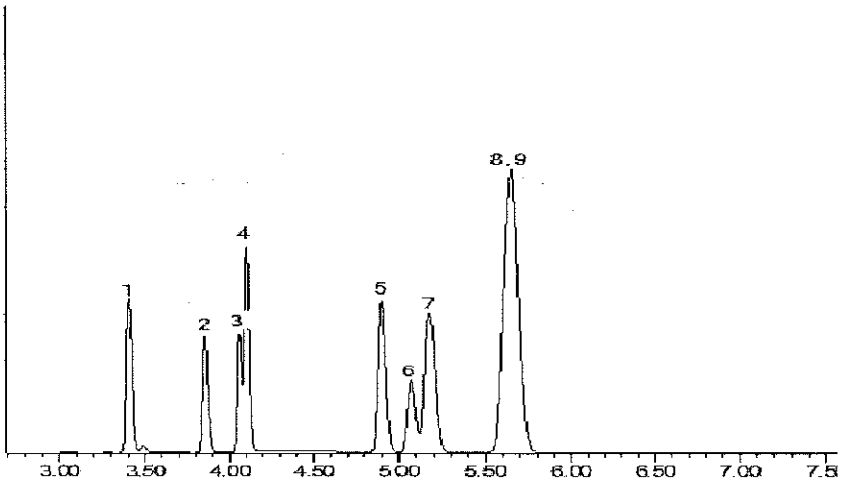
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Lane Kibe - Mix Technician

Date Mixed: 04-May-2021 **Balance:** 1127510105

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:

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

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

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -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_00080

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Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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

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

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

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

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

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

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

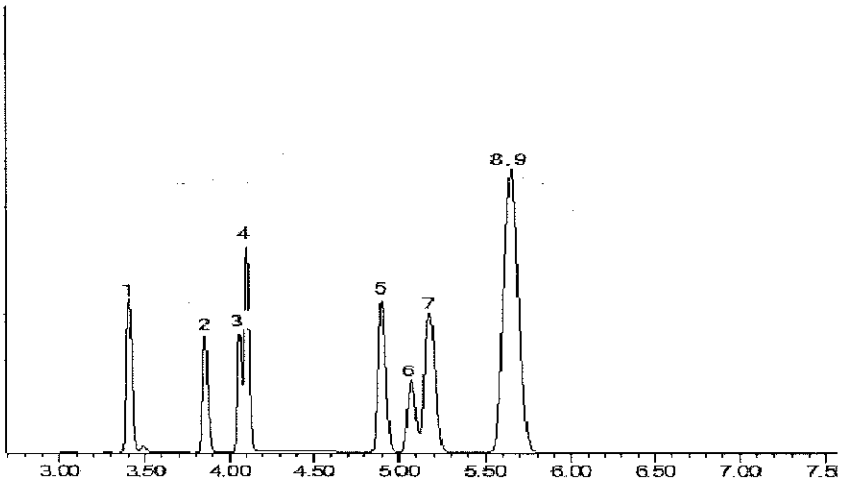
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Lane Kibe - Mix Technician

Date Mixed: 04-May-2021 **Balance:** 1127510105

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:

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

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

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -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_00260

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 56734 **Lot No.:** A0171518

Description : Custom V # 2B Standard

Custom V #2B Standard 12,500-125,000µg/mL, P&T Methanol, 1mL/ampul

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

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

Ship: Ambient

Elution Order	Compound	CAS #	Percent Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2-Propanol (isopropanol)	67-63-0	99%	25,038.0 µg/mL	+/- 146.6030 µg/mL
2	tert-Butanol (TBA)	75-65-0	99%	25,047.0 µg/mL	+/- 146.6557 µg/mL
3	Propionitrile	107-12-0	99%	25,015.0 µg/mL	+/- 146.4683 µg/mL
4	Methacrylonitrile	126-98-7	99%	12,515.0 µg/mL	+/- 73.2781 µg/mL
5	Isobutanol (2-Methyl-1-propanol)	78-83-1	99%	62,529.0 µg/mL	+/- 366.1210 µg/mL
6	1-Butanol	71-36-3	99%	125,072.0 µg/mL	+/- 732.2863 µg/mL
7	1,4-Dioxane	123-91-1	99%	62,509.0 µg/mL	+/- 366.0039 µg/mL
8	trans-1,4-dichloro-2-butene	110-57-6	95%	12,504.9 µg/mL	+/- 73.2186 µg/mL
Solvent:	P&T Methanol	67-56-1	99%		

Specific Reference Material Notes:

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

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

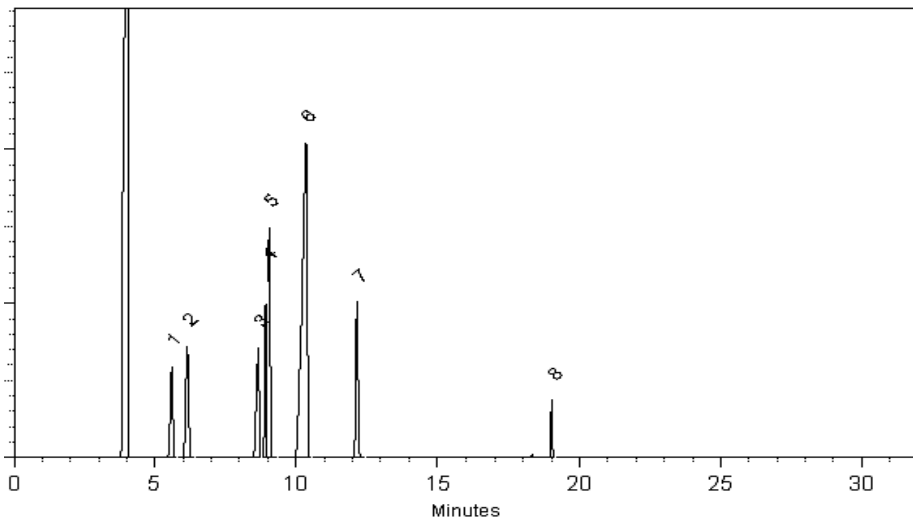
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Erik Strommer - Operations Tech I

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

Marlina Cowan - Operations Tech I

Date Passed: 23-Apr-2021

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

General Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

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_00053

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

C E R T I F I E D V A L U E S

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)

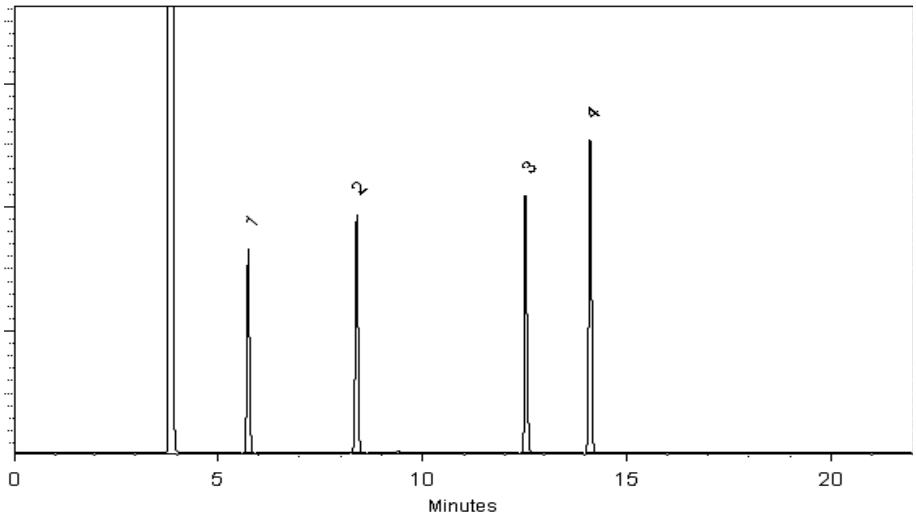
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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 - Operations Tech I

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

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:

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

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

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -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_00013

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CERTIFIED REFERENCE MATERIAL

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Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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

C E R T I F I E D V A L U E S

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

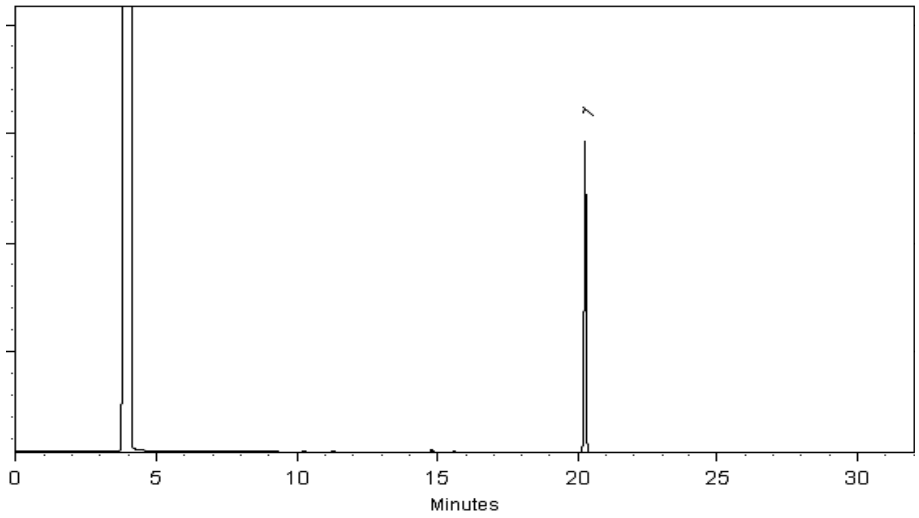
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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:

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

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

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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

Method 8260D Low Level

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

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-77437-1

SDG No.:

Matrix: Water Level: Low

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

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
HD-COD-SW-6-0/1-0	410-77437-1	102	105	101	94
HD-COD-SW-7-0/1-0	410-77437-2	102	105	101	93
HD-COD-SW-8-0/1-0	410-77437-3	103	105	101	95
HD-COD-SW-28-0/1-0	410-77437-4	104	109	101	93
HD-COD-SW-13-0/1-0	410-77437-5	104	103	100	93
HD-COD-SW-15-0/1-0	410-77437-6	103	107	101	94
HD-COD-SW-16-0/1-0	410-77437-7	104	111	100	93
HD-COD-SW-17-0/1-0	410-77437-8	104	107	100	93
HD-COD-SW-17-0/1-0 DL	410-77437-8 DL	102	107	101	94
HD-COD-SW-26-0/1-0	410-77437-9	103	106	100	93
HD-COD-SW-27-0/1-0	410-77437-10	103	107	101	96
HD-COD-SW-9-0/1-0	410-77437-11	104	108	100	94
HD-COD-SW-29-0/1-0	410-77437-12	104	106	101	93
HD-QC1-0/1-1	410-77437-13	104	104	99	93
HD-QC1-0/1-1 DL	410-77437-13 DL	103	107	99	91
HD-QC1-0/1-2	410-77437-14	101	105	100	92
	MB 410-237993/7	101	106	101	92
	MB 410-238139/7	102	104	101	93
	LCS 410-237993/4	101	102	102	93
	LCS 410-238139/4	102	105	101	95
	LCSD 410-237993/5	101	105	102	94
	LCSD 410-238139/5	102	105	101	94
HD-COD-SW-15-0/1-0 MS	410-77437-6 MS	104	107	101	94
HD-COD-SW-15-0/1-0 MSD	410-77437-6 MSD	104	106	102	96

	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 Env, LLC Job No.: 410-77437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: IM27X03.D

Lab ID: LCS 410-237993/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	5.07	101	71-134	
1,1,1-Trichloroethane	5.00	4.67	93	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.32	106	75-123	
1,1,2-Trichloroethane	5.00	5.18	104	80-120	
1,1-Dichloroethane	5.00	4.45	89	74-120	
1,1-Dichloroethene	5.00	4.93	99	80-131	
1,2-Dibromoethane (EDB)	5.00	5.35	107	80-120	
1,2-Dichloroethane	5.00	4.74	95	69-122	
1,2-Dichloropropane	5.00	4.76	95	80-120	
2-Butanone (MEK)	62.5	64.3	103	59-141	
2-Hexanone	62.5	68.4	109	52-140	
4-Methyl-2-pentanone (MIBK)	62.5	63.3	101	55-140	
Acetone	62.5	63.0	101	60-146	
Benzene	5.00	4.64	93	80-120	
Bromochloromethane	5.00	5.03	101	80-120	
Bromodichloromethane	5.00	4.98	100	73-124	
Bromoform	5.00	5.77	115	49-144	
Bromomethane	5.00	4.48	90	60-136	
Carbon disulfide	5.00	5.09	102	67-130	
Carbon tetrachloride	5.00	4.78	96	64-141	
Chlorobenzene	5.00	4.91	98	80-120	
Chloroethane	5.00	4.57	91	63-120	
Chloroform	5.00	4.63	93	80-120	
Chloromethane	5.00	4.25	85	56-124	
cis-1,2-Dichloroethene	5.00	4.73	95	80-122	
cis-1,3-Dichloropropene	5.00	4.68	94	67-121	
Dibromochloromethane	5.00	5.33	107	64-138	
Ethylbenzene	5.00	4.79	96	80-120	
Methyl tert-butyl ether	5.00	4.74	95	69-120	
Methylene Chloride	5.00	4.73	95	80-120	
Styrene	5.00	4.85	97	80-120	
Tetrachloroethene	5.00	4.98	100	80-120	
Toluene	5.00	4.77	95	80-120	
trans-1,2-Dichloroethene	5.00	4.63	93	80-122	
trans-1,3-Dichloropropene	5.00	5.16	103	61-129	
Trichloroethene	5.00	4.62	92	80-120	
Vinyl chloride	5.00	4.25	85	60-125	
Xylenes, Total	15.0	14.5	96	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Env, LLC Job No.: 410-77437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: IM28X03.D

Lab ID: LCS 410-238139/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	5.30	106	71-134	
1,1,1-Trichloroethane	5.00	4.91	98	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.32	106	75-123	
1,1,2-Trichloroethane	5.00	5.24	105	80-120	
1,1-Dichloroethane	5.00	4.73	95	74-120	
1,1-Dichloroethene	5.00	5.20	104	80-131	
1,2-Dibromoethane (EDB)	5.00	5.51	110	80-120	
1,2-Dichloroethane	5.00	5.03	101	69-122	
1,2-Dichloropropane	5.00	4.95	99	80-120	
2-Butanone (MEK)	62.5	54.4	87	59-141	
2-Hexanone	62.5	55.5	89	52-140	
4-Methyl-2-pentanone (MIBK)	62.5	52.7	84	55-140	
Acetone	62.5	55.8	89	60-146	
Benzene	5.00	4.95	99	80-120	
Bromochloromethane	5.00	5.41	108	80-120	
Bromodichloromethane	5.00	5.17	103	73-124	
Bromoform	5.00	5.74	115	49-144	
Bromomethane	5.00	4.69	94	60-136	
Carbon disulfide	5.00	5.45	109	67-130	
Carbon tetrachloride	5.00	5.07	101	64-141	
Chlorobenzene	5.00	5.11	102	80-120	
Chloroethane	5.00	4.71	94	63-120	
Chloroform	5.00	4.88	98	80-120	
Chloromethane	5.00	4.18	84	56-124	
cis-1,2-Dichloroethene	5.00	4.97	99	80-122	
cis-1,3-Dichloropropene	5.00	4.91	98	67-121	
Dibromochloromethane	5.00	5.40	108	64-138	
Ethylbenzene	5.00	5.03	101	80-120	
Methyl tert-butyl ether	5.00	5.00	100	69-120	
Methylene Chloride	5.00	5.09	102	80-120	
Styrene	5.00	5.13	103	80-120	
Tetrachloroethene	5.00	5.22	104	80-120	
Toluene	5.00	5.05	101	80-120	
trans-1,2-Dichloroethene	5.00	4.87	97	80-122	
trans-1,3-Dichloropropene	5.00	5.48	110	61-129	
Trichloroethene	5.00	4.92	98	80-120	
Vinyl chloride	5.00	4.37	87	60-125	
Xylenes, Total	15.0	15.2	101	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Env, LLC Job No.: 410-77437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: IM27X04.D

Lab ID: LCSD 410-237993/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	5.16	103	2	30	71-134	
1,1,1-Trichloroethane	5.00	4.72	94	1	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.33	107	0	30	75-123	
1,1,2-Trichloroethane	5.00	5.11	102	1	30	80-120	
1,1-Dichloroethane	5.00	4.54	91	2	30	74-120	
1,1-Dichloroethene	5.00	4.98	100	1	30	80-131	
1,2-Dibromoethane (EDB)	5.00	5.43	109	2	30	80-120	
1,2-Dichloroethane	5.00	4.76	95	0	30	69-122	
1,2-Dichloropropane	5.00	4.69	94	2	30	80-120	
2-Butanone (MEK)	62.5	64.8	104	1	30	59-141	
2-Hexanone	62.5	68.7	110	0	30	52-140	
4-Methyl-2-pentanone (MIBK)	62.5	63.4	102	0	30	55-140	
Acetone	62.5	62.1	99	1	30	60-146	
Benzene	5.00	4.73	95	2	30	80-120	
Bromochloromethane	5.00	5.14	103	2	30	80-120	
Bromodichloromethane	5.00	4.93	99	1	30	73-124	
Bromoform	5.00	5.79	116	0	30	49-144	
Bromomethane	5.00	4.48	90	0	30	60-136	
Carbon disulfide	5.00	5.07	101	0	30	67-130	
Carbon tetrachloride	5.00	4.79	96	0	30	64-141	
Chlorobenzene	5.00	4.96	99	1	30	80-120	
Chloroethane	5.00	4.52	90	1	30	63-120	
Chloroform	5.00	4.74	95	2	30	80-120	
Chloromethane	5.00	4.26	85	0	30	56-124	
cis-1,2-Dichloroethene	5.00	4.76	95	1	30	80-122	
cis-1,3-Dichloropropene	5.00	4.72	94	1	30	67-121	
Dibromochloromethane	5.00	5.38	108	1	30	64-138	
Ethylbenzene	5.00	4.88	98	2	30	80-120	
Methyl tert-butyl ether	5.00	4.80	96	1	30	69-120	
Methylene Chloride	5.00	4.78	96	1	30	80-120	
Styrene	5.00	4.93	99	2	30	80-120	
Tetrachloroethene	5.00	4.98	100	0	30	80-120	
Toluene	5.00	4.86	97	2	30	80-120	
trans-1,2-Dichloroethene	5.00	4.68	94	1	30	80-122	
trans-1,3-Dichloropropene	5.00	5.24	105	2	30	61-129	
Trichloroethene	5.00	4.69	94	2	30	80-120	
Vinyl chloride	5.00	4.20	84	1	30	60-125	
Xylenes, Total	15.0	14.7	98	2	30	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Env, LLC Job No.: 410-77437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: IM28X04.D

Lab ID: LCSD 410-238139/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	5.24	105	1	30	71-134	
1,1,1-Trichloroethane	5.00	4.83	97	2	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.23	105	2	30	75-123	
1,1,2-Trichloroethane	5.00	5.33	107	2	30	80-120	
1,1-Dichloroethane	5.00	4.67	93	1	30	74-120	
1,1-Dichloroethene	5.00	5.23	105	0	30	80-131	
1,2-Dibromoethane (EDB)	5.00	5.42	108	2	30	80-120	
1,2-Dichloroethane	5.00	5.09	102	1	30	69-122	
1,2-Dichloropropane	5.00	4.94	99	0	30	80-120	
2-Butanone (MEK)	62.5	55.6	89	2	30	59-141	
2-Hexanone	62.5	56.7	91	2	30	52-140	
4-Methyl-2-pentanone (MIBK)	62.5	53.3	85	1	30	55-140	
Acetone	62.5	54.6	87	2	30	60-146	
Benzene	5.00	4.93	99	0	30	80-120	
Bromochloromethane	5.00	5.21	104	4	30	80-120	
Bromodichloromethane	5.00	5.13	103	1	30	73-124	
Bromoform	5.00	5.56	111	3	30	49-144	
Bromomethane	5.00	4.67	93	0	30	60-136	
Carbon disulfide	5.00	5.45	109	0	30	67-130	
Carbon tetrachloride	5.00	4.93	99	3	30	64-141	
Chlorobenzene	5.00	5.09	102	1	30	80-120	
Chloroethane	5.00	4.74	95	1	30	63-120	
Chloroform	5.00	4.89	98	0	30	80-120	
Chloromethane	5.00	4.01	80	4	30	56-124	
cis-1,2-Dichloroethene	5.00	4.83	97	3	30	80-122	
cis-1,3-Dichloropropene	5.00	4.77	95	3	30	67-121	
Dibromochloromethane	5.00	5.24	105	3	30	64-138	
Ethylbenzene	5.00	5.03	101	0	30	80-120	
Methyl tert-butyl ether	5.00	4.94	99	1	30	69-120	
Methylene Chloride	5.00	4.99	100	2	30	80-120	
Styrene	5.00	5.05	101	2	30	80-120	
Tetrachloroethene	5.00	5.19	104	1	30	80-120	
Toluene	5.00	5.03	101	0	30	80-120	
trans-1,2-Dichloroethene	5.00	4.85	97	0	30	80-122	
trans-1,3-Dichloropropene	5.00	5.26	105	4	30	61-129	
Trichloroethene	5.00	4.87	97	1	30	80-120	
Vinyl chloride	5.00	4.27	85	2	30	60-125	
Xylenes, Total	15.0	15.0	100	1	30	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Env, LLC Job No.: 410-77437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: IM27X18.D

Lab ID: 410-77437-6 MS Client ID: HD-COD-SW-15-0/1-0 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	ND	5.30	106	71-134	
1,1,1-Trichloroethane	5.00	0.28 J	5.43	103	78-126	
1,1,2,2-Tetrachloroethane	5.00	ND	5.22	104	75-123	
1,1,2-Trichloroethane	5.00	ND	5.31	106	80-120	
1,1-Dichloroethane	5.00	0.13 J	4.95	96	74-120	
1,1-Dichloroethene	5.00	0.17 J	5.82	113	80-131	
1,2-Dibromoethane (EDB)	5.00	ND	5.42	108	80-120	
1,2-Dichloroethane	5.00	ND	4.89	98	69-122	
1,2-Dichloropropane	5.00	ND	4.93	99	80-120	
2-Butanone (MEK)	62.6	ND	52.7	84	59-141	
2-Hexanone	62.6	ND	54.0	86	52-140	
4-Methyl-2-pentanone (MIBK)	62.6	ND	51.2	82	55-140	
Acetone	62.6	ND	51.0	82	60-146	
Benzene	5.00	ND	5.06	101	80-120	
Bromochloromethane	5.00	ND	5.40	108	80-120	
Bromodichloromethane	5.00	ND	5.07	101	73-124	
Bromoform	5.00	ND	5.37	107	49-144	
Bromomethane	5.00	ND	4.78	96	60-136	
Carbon disulfide	5.00	ND	5.69	114	67-130	
Carbon tetrachloride	5.00	ND	5.42	108	64-141	
Chlorobenzene	5.00	ND	5.17	103	80-120	
Chloroethane	5.00	ND	4.82	96	63-120	
Chloroform	5.00	0.27 J	5.21	99	80-120	
Chloromethane	5.00	ND	4.36	87	80-120	
cis-1,2-Dichloroethene	5.00	1.7	6.87	103	80-122	
cis-1,3-Dichloropropene	5.00	ND	4.73	95	67-121	
Dibromochloromethane	5.00	ND	5.27	105	64-138	
Ethylbenzene	5.00	ND	5.09	102	80-120	
Methyl tert-butyl ether	5.00	ND	4.95	99	69-120	
Methylene Chloride	5.00	ND	5.12	102	80-120	
Styrene	5.00	ND	5.05	101	80-120	
Tetrachloroethene	5.00	6.5	12.0	110	80-120	
Toluene	5.00	ND	5.11	102	80-120	
trans-1,2-Dichloroethene	5.00	ND	5.19	104	80-122	
trans-1,3-Dichloropropene	5.00	ND	5.19	104	61-129	
Trichloroethene	5.00	1.7	6.76	102	80-120	
Vinyl chloride	5.00	ND	4.45	89	60-125	
Xylenes, Total	15.0	ND	15.3	102	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Env, LLC Job No.: 410-77437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: IM27X19.D

Lab ID: 410-77437-6 MSD Client ID: HD-COD-SW-15-0/1-0 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	5.44	109	2	30	71-134	
1,1,1-Trichloroethane	5.00	5.45	103	0	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.26	105	1	30	75-123	
1,1,2-Trichloroethane	5.00	5.42	108	2	30	80-120	
1,1-Dichloroethane	5.00	4.99	97	1	30	74-120	
1,1-Dichloroethene	5.00	5.88	114	1	30	80-131	
1,2-Dibromoethane (EDB)	5.00	5.51	110	2	30	80-120	
1,2-Dichloroethane	5.00	4.92	98	1	30	69-122	
1,2-Dichloropropane	5.00	5.08	102	3	30	80-120	
2-Butanone (MEK)	62.6	54.3	87	3	30	59-141	
2-Hexanone	62.6	56.4	90	4	30	52-140	
4-Methyl-2-pentanone (MIBK)	62.6	52.6	84	3	30	55-140	
Acetone	62.6	55.4	89	8	30	60-146	
Benzene	5.00	5.09	102	1	30	80-120	
Bromochloromethane	5.00	5.36	107	1	30	80-120	
Bromodichloromethane	5.00	5.20	104	3	30	73-124	
Bromoform	5.00	5.57	111	4	30	49-144	
Bromomethane	5.00	5.00	100	4	30	60-136	
Carbon disulfide	5.00	5.77	115	1	30	67-130	
Carbon tetrachloride	5.00	5.47	109	1	30	64-141	
Chlorobenzene	5.00	5.30	106	2	30	80-120	
Chloroethane	5.00	5.14	103	6	30	63-120	
Chloroform	5.00	5.29	100	2	30	80-120	
Chloromethane	5.00	4.44	89	2	30	80-120	
cis-1,2-Dichloroethene	5.00	6.92	104	1	30	80-122	
cis-1,3-Dichloropropene	5.00	4.81	96	2	30	67-121	
Dibromochloromethane	5.00	5.36	107	2	30	64-138	
Ethylbenzene	5.00	5.24	105	3	30	80-120	
Methyl tert-butyl ether	5.00	5.02	100	1	30	69-120	
Methylene Chloride	5.00	5.22	104	2	30	80-120	
Styrene	5.00	5.18	103	2	30	80-120	
Tetrachloroethene	5.00	12.3	115	2	30	80-120	
Toluene	5.00	5.21	104	2	30	80-120	
trans-1,2-Dichloroethene	5.00	5.15	103	1	30	80-122	
trans-1,3-Dichloropropene	5.00	5.27	105	2	30	61-129	
Trichloroethene	5.00	6.83	104	1	30	80-120	
Vinyl chloride	5.00	4.71	94	6	30	60-125	
Xylenes, Total	15.0	15.6	104	2	30	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env, LLC Job No.: 410-77437-1

SDG No.:

Lab File ID: IM27X06.D Lab Sample ID: MB 410-237993/7

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

Instrument ID: 19930 Date Analyzed: 03/27/2022 10:37

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 410-237993/4	IM27X03.D	03/27/2022 09:34
	LCSD 410-237993/5	IM27X04.D	03/27/2022 09:55
HD-QC1-0/1-2	410-77437-14	IM27X07.D	03/27/2022 10:59
HD-COD-SW-6-0/1-0	410-77437-1	IM27X12.D	03/27/2022 12:45
HD-COD-SW-7-0/1-0	410-77437-2	IM27X13.D	03/27/2022 13:06
HD-COD-SW-8-0/1-0	410-77437-3	IM27X14.D	03/27/2022 13:27
HD-COD-SW-28-0/1-0	410-77437-4	IM27X15.D	03/27/2022 13:48
HD-COD-SW-13-0/1-0	410-77437-5	IM27X16.D	03/27/2022 14:09
HD-COD-SW-15-0/1-0	410-77437-6	IM27X17.D	03/27/2022 14:31
HD-COD-SW-15-0/1-0 MS	410-77437-6 MS	IM27X18.D	03/27/2022 14:52
HD-COD-SW-15-0/1-0 MSD	410-77437-6 MSD	IM27X19.D	03/27/2022 15:13
HD-COD-SW-16-0/1-0	410-77437-7	IM27X21.D	03/27/2022 15:56
HD-COD-SW-17-0/1-0	410-77437-8	IM27X22.D	03/27/2022 16:17
HD-COD-SW-26-0/1-0	410-77437-9	IM27X23.D	03/27/2022 16:38
HD-COD-SW-27-0/1-0	410-77437-10	IM27X24.D	03/27/2022 16:59
HD-COD-SW-9-0/1-0	410-77437-11	IM27X25.D	03/27/2022 17:20
HD-COD-SW-29-0/1-0	410-77437-12	IM27X26.D	03/27/2022 17:41
HD-QC1-0/1-1	410-77437-13	IM27X27.D	03/27/2022 18:02

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env, LLC Job No.: 410-77437-1

SDG No.:

Lab File ID: IM28X06.D Lab Sample ID: MB 410-238139/7

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

Instrument ID: 19930 Date Analyzed: 03/28/2022 10:47

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 410-238139/4	IM28X03.D	03/28/2022 09:44
	LCSD 410-238139/5	IM28X04.D	03/28/2022 10:05
HD-COD-SW-17-0/1-0 DL	410-77437-8 DL	IM28X28.D	03/28/2022 18:34
HD-QC1-0/1-1 DL	410-77437-13 DL	IM28X29.D	03/28/2022 18:55

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Lab File ID: IM14T01.D BFB Injection Date: 03/14/2022

Instrument ID: 19930 BFB Injection Time: 21:24

Analysis Batch No.: 233459

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.1	
75	30.0 - 60.0 % of mass 95	47.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.9	
173	Less than 2.0 % of mass 174	1.6	(1.6) 1
174	Greater than 50% of mass 95	100.6	
175	5.0 - 9.0 % of mass 174	7.4	(7.4) 1
176	95.0 - 101.0 % of mass 174	98.2	(97.6) 1
177	5.0 - 9.0 % of mass 176	6.9	(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 410-233459/12	IM14I31.D	03/15/2022	1:15
	ICIS 410-233459/13	IM14I32.D	03/15/2022	1:36
	IC 410-233459/14	IM14I33.D	03/15/2022	1:58
	IC 410-233459/15	IM14I34.D	03/15/2022	2:19
	IC 410-233459/16	IM14I35.D	03/15/2022	2:40
	IC 410-233459/17	IM14I36.D	03/15/2022	3:01
	IC 410-233459/18	IM14I37.D	03/15/2022	3:22
	ICV 410-233459/19	IM14V01.D	03/15/2022	3:43

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Lab File ID: IM27T01.D BFB Injection Date: 03/27/2022

Instrument ID: 19930 BFB Injection Time: 08:37

Analysis Batch No.: 237993

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	46.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.5	
173	Less than 2.0 % of mass 174	2.1	(2.0) 1
174	Greater than 50% of mass 95	107.4	
175	5.0 - 9.0 % of mass 174	9.2	(8.5) 1
176	95.0 - 101.0 % of mass 174	106.6	(99.2) 1
177	5.0 - 9.0 % of mass 176	7.3	(6.8) 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 410-237993/3	IM27X02.D	03/27/2022	9:13
	LCS 410-237993/4	IM27X03.D	03/27/2022	9:34
	LCSD 410-237993/5	IM27X04.D	03/27/2022	9:55
	MB 410-237993/7	IM27X06.D	03/27/2022	10:37
HD-QC1-0/1-2	410-77437-14	IM27X07.D	03/27/2022	10:59
HD-COD-SW-6-0/1-0	410-77437-1	IM27X12.D	03/27/2022	12:45
HD-COD-SW-7-0/1-0	410-77437-2	IM27X13.D	03/27/2022	13:06
HD-COD-SW-8-0/1-0	410-77437-3	IM27X14.D	03/27/2022	13:27
HD-COD-SW-28-0/1-0	410-77437-4	IM27X15.D	03/27/2022	13:48
HD-COD-SW-13-0/1-0	410-77437-5	IM27X16.D	03/27/2022	14:09
HD-COD-SW-15-0/1-0	410-77437-6	IM27X17.D	03/27/2022	14:31
HD-COD-SW-15-0/1-0 MS	410-77437-6 MS	IM27X18.D	03/27/2022	14:52
HD-COD-SW-15-0/1-0 MSD	410-77437-6 MSD	IM27X19.D	03/27/2022	15:13
HD-COD-SW-16-0/1-0	410-77437-7	IM27X21.D	03/27/2022	15:56
HD-COD-SW-17-0/1-0	410-77437-8	IM27X22.D	03/27/2022	16:17
HD-COD-SW-26-0/1-0	410-77437-9	IM27X23.D	03/27/2022	16:38
HD-COD-SW-27-0/1-0	410-77437-10	IM27X24.D	03/27/2022	16:59
HD-COD-SW-9-0/1-0	410-77437-11	IM27X25.D	03/27/2022	17:20
HD-COD-SW-29-0/1-0	410-77437-12	IM27X26.D	03/27/2022	17:41
HD-QC1-0/1-1	410-77437-13	IM27X27.D	03/27/2022	18:02

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Lab File ID: IM28T01.D BFB Injection Date: 03/28/2022

Instrument ID: 19930 BFB Injection Time: 08:48

Analysis Batch No.: 238139

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.9	
75	30.0 - 60.0 % of mass 95	46.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	2.0	(1.8) 1
174	Greater than 50% of mass 95	110.4	
175	5.0 - 9.0 % of mass 174	8.2	(7.5) 1
176	95.0 - 101.0 % of mass 174	111.2	(100.7) 1
177	5.0 - 9.0 % of mass 176	7.5	(6.7) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-238139/3	IM28X02.D	03/28/2022	9:23
	LCS 410-238139/4	IM28X03.D	03/28/2022	9:44
	LCSD 410-238139/5	IM28X04.D	03/28/2022	10:05
	MB 410-238139/7	IM28X06.D	03/28/2022	10:47
HD-COD-SW-17-0/1-0 DL	410-77437-8 DL	IM28X28.D	03/28/2022	18:34
HD-QC1-0/1-1 DL	410-77437-13 DL	IM28X29.D	03/28/2022	18:55

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Sample No.: ICIS 410-233459/13 Date Analyzed: 03/15/2022 01:36

Instrument ID: 19930 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): IM14I32.D Heated Purge: (Y/N) N

Calibration ID: 36162

		TBAd10		FB		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		147286	4.23	2018353	7.70	1700909	11.16
UPPER LIMIT		294572	4.73	4036706	8.20	3401818	11.66
LOWER LIMIT		73643	3.73	1009177	7.20	850455	10.66
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-233459/19		172755	4.22	2024993	7.70	1696187	11.16
CCVIS 410-237993/3		153769	4.24	2060454	7.70	1685037	11.16
CCVIS 410-238139/3		160650	4.25	1943850	7.71	1619171	11.16

TBAd10 = t-Butyl alcohol-d10 (IS)
FB = Fluorobenzene (IS)
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260D

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Sample No.: ICIS 410-233459/13 Date Analyzed: 03/15/2022 01:36

Instrument ID: 19930 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): IM14I32.D Heated Purge: (Y/N) N

Calibration ID: 36162

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		1049716	13.04				
UPPER LIMIT		2099432	13.54				
LOWER LIMIT		524858	12.54				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-233459/19		1033998	13.04				
CCVIS 410-237993/3		1030133	13.04				
CCVIS 410-238139/3		1002286	13.04				

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 8260D

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Sample No.: CCVIS 410-237993/3 Date Analyzed: 03/27/2022 09:13

Instrument ID: 19930 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): IM27X02.D Heated Purge: (Y/N) N

Calibration ID: 36162

		TBAd10		FB		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		153769	4.24	2060454	7.70	1685037	11.16
UPPER LIMIT		307538	4.74	4120908	8.20	3370074	11.66
LOWER LIMIT		76885	3.74	1030227	7.20	842519	10.66
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-237993/4		136346	4.24	1933062	7.71	1565908	11.16
LCSD 410-237993/5		137051	4.24	1911886	7.71	1547013	11.16
MB 410-237993/7		157821	4.25	1905478	7.70	1536431	11.16
410-77437-14	HD-QC1-0/1-2	151330	4.24	1861852	7.70	1526870	11.16
410-77437-1	HD-COD-SW-6-0/1-0	147591	4.24	1802758	7.70	1467981	11.16
410-77437-2	HD-COD-SW-7-0/1-0	140001	4.25	1790141	7.70	1450285	11.16
410-77437-3	HD-COD-SW-8-0/1-0	147104	4.25	1740706	7.70	1410234	11.16
410-77437-4	HD-COD-SW-28-0/1-0	153319	4.24	1778499	7.70	1447992	11.16
410-77437-5	HD-COD-SW-13-0/1-0	149801	4.25	1784278	7.70	1459310	11.16
410-77437-6	HD-COD-SW-15-0/1-0	148721	4.24	1769619	7.70	1454077	11.16
410-77437-6 MS	HD-COD-SW-15-0/1-0 MS	158188	4.25	1829943	7.70	1496832	11.16
410-77437-6 MSD	HD-COD-SW-15-0/1-0 MSD	153603	4.24	1824848	7.70	1489884	11.16
410-77437-7	HD-COD-SW-16-0/1-0	143331	4.25	1794709	7.71	1478714	11.16
410-77437-8	HD-COD-SW-17-0/1-0	156467	4.24	1775044	7.71	1473926	11.16
410-77437-9	HD-COD-SW-26-0/1-0	145964	4.25	1759805	7.71	1457750	11.16
410-77437-10	HD-COD-SW-27-0/1-0	144242	4.25	1775050	7.71	1438469	11.16
410-77437-11	HD-COD-SW-9-0/1-0	132246	4.25	1750943	7.70	1449629	11.16
410-77437-12	HD-COD-SW-29-0/1-0	138968	4.23	1748159	7.70	1436818	11.16
410-77437-13	HD-QC1-0/1-1	145019	4.25	1750692	7.71	1462828	11.16

TBAd10 = t-Butyl alcohol-d10 (IS)
FB = Fluorobenzene (IS)
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260D

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Sample No.: CCVIS 410-237993/3 Date Analyzed: 03/27/2022 09:13

Instrument ID: 19930 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): IM27X02.D Heated Purge: (Y/N) N

Calibration ID: 36162

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		1030133	13.04				
UPPER LIMIT		2060266	13.54				
LOWER LIMIT		515067	12.54				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-237993/4		946897	13.04				
LCSD 410-237993/5		939267	13.04				
MB 410-237993/7		905273	13.04				
410-77437-14	HD-QC1-0/1-2	913113	13.04				
410-77437-1	HD-COD-SW-6-0/1-0	888075	13.04				
410-77437-2	HD-COD-SW-7-0/1-0	858787	13.04				
410-77437-3	HD-COD-SW-8-0/1-0	846067	13.04				
410-77437-4	HD-COD-SW-28-0/1-0	864023	13.04				
410-77437-5	HD-COD-SW-13-0/1-0	872145	13.04				
410-77437-6	HD-COD-SW-15-0/1-0	866075	13.04				
410-77437-6 MS	HD-COD-SW-15-0/1-0 MS	908011	13.04				
410-77437-6 MSD	HD-COD-SW-15-0/1-0 MSD	918125	13.04				
410-77437-7	HD-COD-SW-16-0/1-0	883447	13.04				
410-77437-8	HD-COD-SW-17-0/1-0	863823	13.04				
410-77437-9	HD-COD-SW-26-0/1-0	858300	13.04				
410-77437-10	HD-COD-SW-27-0/1-0	860062	13.04				
410-77437-11	HD-COD-SW-9-0/1-0	867425	13.04				
410-77437-12	HD-COD-SW-29-0/1-0	855845	13.04				
410-77437-13	HD-QC1-0/1-1	850523	13.04				

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 8260D

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Sample No.: CCVIS 410-238139/3 Date Analyzed: 03/28/2022 09:23

Instrument ID: 19930 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): IM28X02.D Heated Purge: (Y/N) N

Calibration ID: 36162

		TBAd10		FB		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		160650	4.25	1943850	7.71	1619171	11.16
UPPER LIMIT		321300	4.75	3887700	8.21	3238342	11.66
LOWER LIMIT		80325	3.75	971925	7.21	809586	10.66
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-238139/4		161366	4.25	1811368	7.70	1486505	11.16
LCSD 410-238139/5		156791	4.23	1831413	7.70	1494337	11.16
MB 410-238139/7		154884	4.25	1804144	7.71	1464798	11.16
410-77437-8 DL	HD-COD-SW-17-0/1-0 DL	137232	4.23	1739323	7.70	1429441	11.16
410-77437-13 DL	HD-QC1-0/1-1 DL	141381	4.25	1729907	7.71	1440634	11.16

TBAd10 = t-Butyl alcohol-d10 (IS)
FB = Fluorobenzene (IS)
CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260D

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Sample No.: CCVIS 410-238139/3 Date Analyzed: 03/28/2022 09:23

Instrument ID: 19930 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): IM28X02.D Heated Purge: (Y/N) N

Calibration ID: 36162

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		1002286	13.04				
UPPER LIMIT		2004572	13.54				
LOWER LIMIT		501143	12.54				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-238139/4		925704	13.04				
LCSD 410-238139/5		917227	13.04				
MB 410-238139/7		876933	13.04				
410-77437-8 DL	HD-COD-SW-17-0/1-0 DL	868511	13.04				
410-77437-13 DL	HD-QC1-0/1-1 DL	843879	13.04				

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 8260D

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 410-77437-1

Matrix: Water Lab File ID: IM27X12.D

Analysis Method: 8260D Date Collected: 03/24/2022 10:10

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 12:45

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.7	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.070	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.088	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 410-77437-1

Matrix: Water Lab File ID: IM27X12.D

Analysis Method: 8260D Date Collected: 03/24/2022 10:10

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 12:45

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-120
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X12.D
Lims ID: 410-77437-A-1
Client ID: HD-COD-SW-6-0/1-0
Sample Type: Client
Inject. Date: 27-Mar-2022 12:45:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-013
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 09:40:24 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 09:40:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50		2.154				ND	7
5 Vinyl chloride	62		2.270				ND	
7 Bromomethane	94		2.605				ND	
8 Chloroethane	64		2.684				ND	
14 1,1-Dichloroethene	96		3.556				ND	
15 Acetone	43	3.586	3.586	0.000	99	13591	1.70	
19 Carbon disulfide	76		3.855				ND	7
23 Methylene Chloride	84		4.214				ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.239	4.239	0.000	23	147591	50.0	
27 Methyl tert-butyl ether	73		4.623				ND	
28 trans-1,2-Dichloroethene	96		4.641				ND	
31 1,1-Dichloroethane	63		5.300				ND	
36 2-Butanone (MEK)	43		6.080				ND	7
37 cis-1,2-Dichloroethene	96	6.135	6.123	0.012	73	4265	0.0696	M
43 Chlorobromomethane	128		6.458				ND	
45 Chloroform	83	6.604	6.598	0.006	89	4400	0.0445	
$ 46 Dibromofluoromethane (Surr)	113	6.817	6.811	0.006	94	497932	10.2	
47 1,1,1-Trichloroethane	97		6.830				ND	
50 Carbon tetrachloride	117		7.043				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.268	7.275	-0.007	69	91315	10.5	
54 Benzene	78		7.299				ND	7
56 1,2-Dichloroethane	62		7.366				ND	
* 58 Fluorobenzene (IS)	96	7.701	7.702	-0.001	99	1802758	10.0	
61 Trichloroethene	95	8.177	8.177	0.000	91	5382	0.0882	
63 1,2-Dichloropropane	63		8.512				ND	
68 Dichlorobromomethane	83		8.854				ND	7
73 cis-1,3-Dichloropropene	75		9.396				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.567				ND	7
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1806873	10.1	
76 Toluene	92	9.774	9.780	-0.006	97	5564	0.0402	
78 trans-1,3-Dichloropropene	75		10.036				ND	
80 1,1,2-Trichloroethane	97		10.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166	10.335	10.329	0.006	92	2705	0.0340	M
83 2-Hexanone	43		10.451				ND	
85 Chlorodibromomethane	129		10.616				ND	
86 Ethylene Dibromide	107		10.725				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	83	1467981	10.0	
90 Chlorobenzene	112		11.183				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.268				ND	
92 Ethylbenzene	91		11.268				ND	7
93 m-Xylene & p-Xylene	106		11.384				ND	7
94 o-Xylene	106		11.713				ND	7
95 Styrene	104		11.725				ND	
96 Bromoform	173		11.884				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	652317	9.42	
101 1,1,2,2-Tetrachloroethane	83		12.256				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	92	888075	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSV_LLcentISS_00004 Amount Added: 5.00 Units: uL Run Reagent

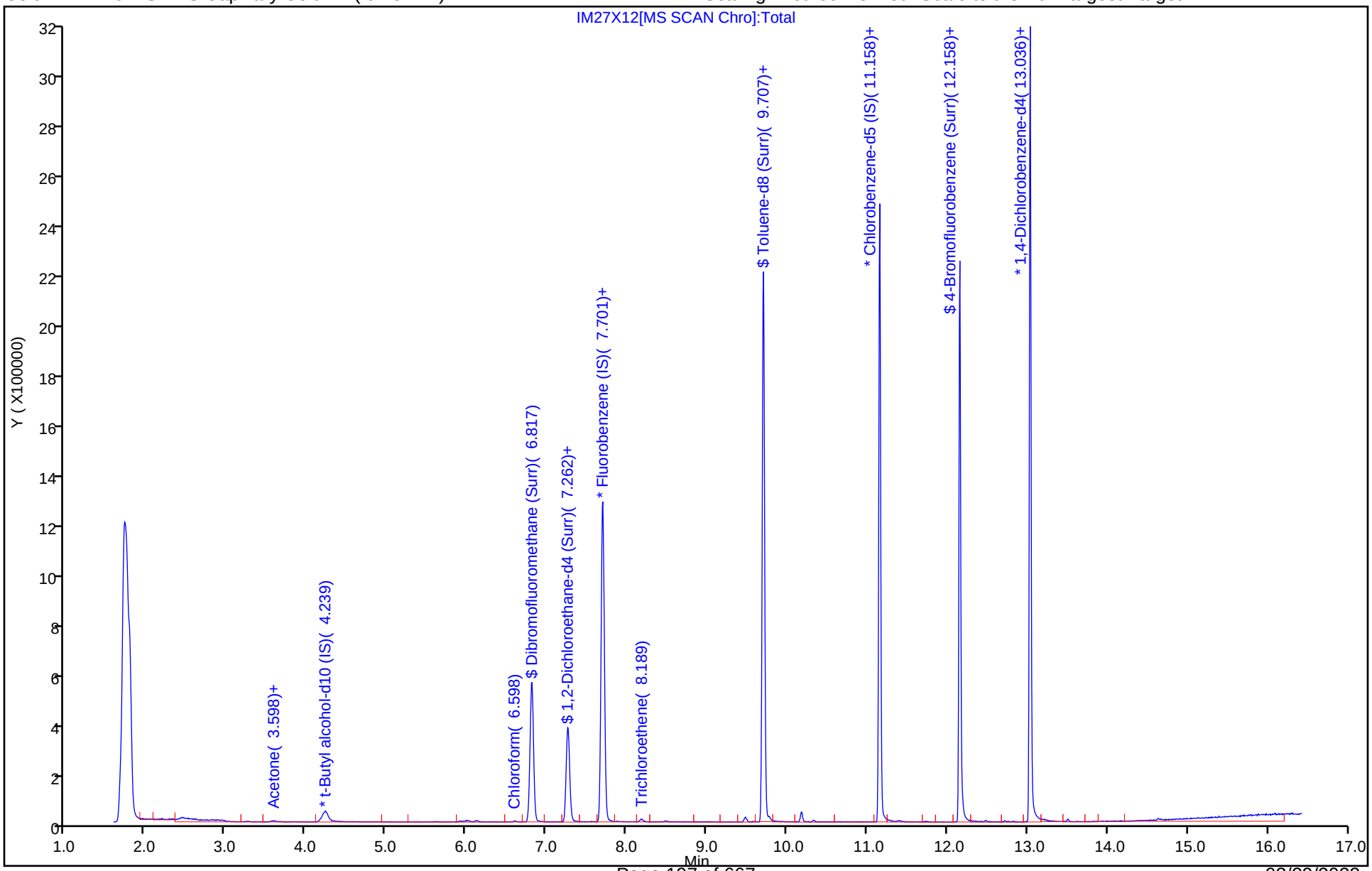
Report Date: 28-Mar-2022 09:40:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X12.D

Injection Date:	27-Mar-2022 12:45:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	410-77437-A-1	Lab Sample ID:	410-77437-1	Worklist Smp#:	13
Client ID:	HD-COD-SW-6-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X12.D				
Lims ID:	410-77437-A-1				
Client ID:	HD-COD-SW-6-0/1-0				
Sample Type:	Client				
Inject. Date:	27-Mar-2022 12:45:30	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0053417-013				
Operator ID:	KNK41612	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	28-Mar-2022 09:40:24	Calib Date:	15-Mar-2022 03:22:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1659				

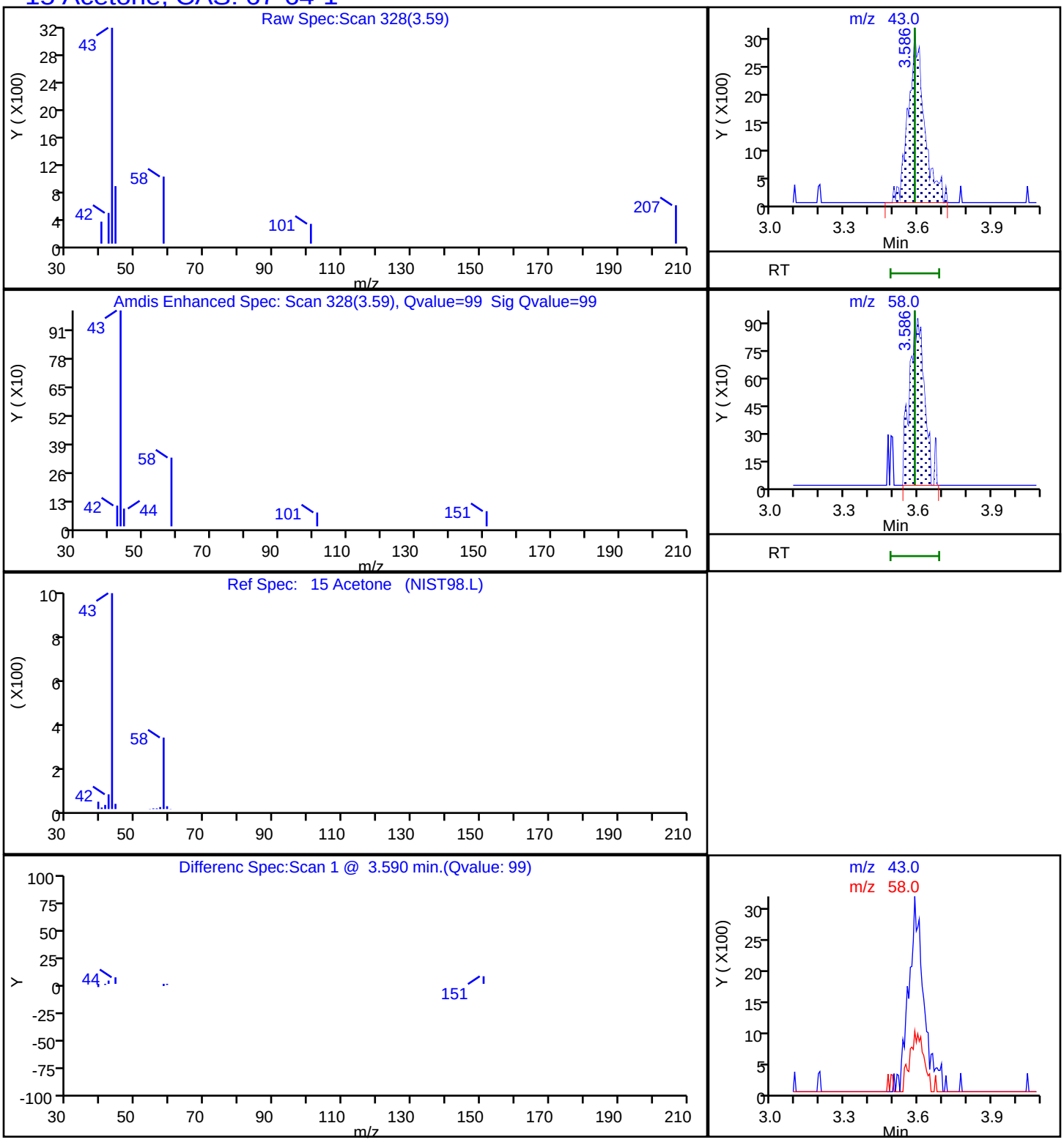
First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 09:40:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.2	102.03
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	105.04
$ 75 Toluene-d8 (Surr)	10.0	10.1	101.14
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.42	94.16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X12.D				
Injection Date:	27-Mar-2022 12:45:30	Instrument ID:	19930		
Lims ID:	410-77437-A-1	Lab Sample ID:	410-77437-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

15 Acetone, CAS: 67-64-1



Report Date: 28-Mar-2022 09:40:24 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X12.D

Injection Date: 27-Mar-2022 12:45:30 Instrument ID: 19930

Lims ID: 410-77437-A-1 Lab Sample ID: 410-77437-1

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

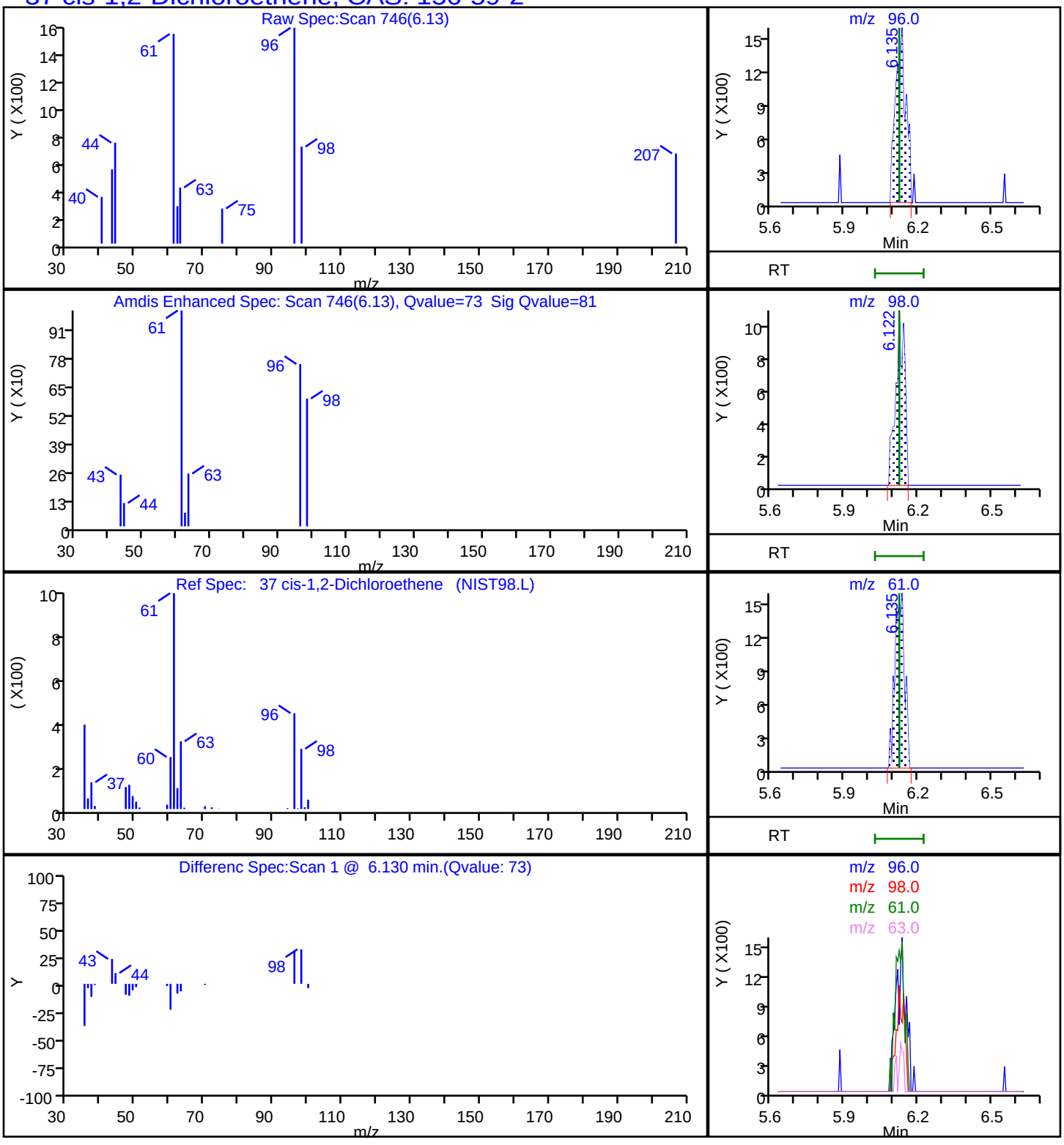
Operator ID: KNK41612 ALS Bottle#: 12 Worklist Smp#: 13

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D

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

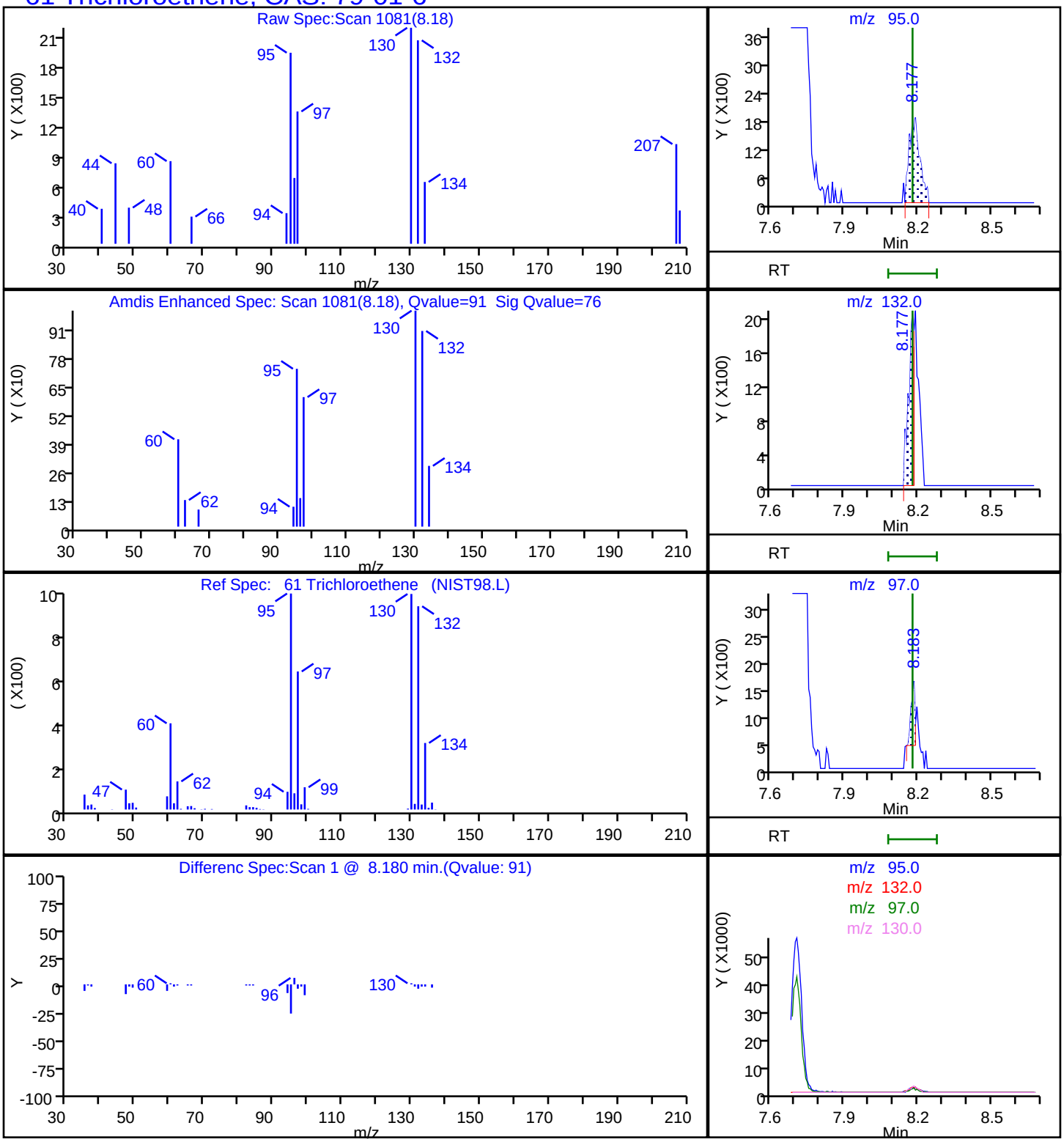
37 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X12.D				
Injection Date:	27-Mar-2022 12:45:30	Instrument ID:	19930		
Lims ID:	410-77437-A-1	Lab Sample ID:	410-77437-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

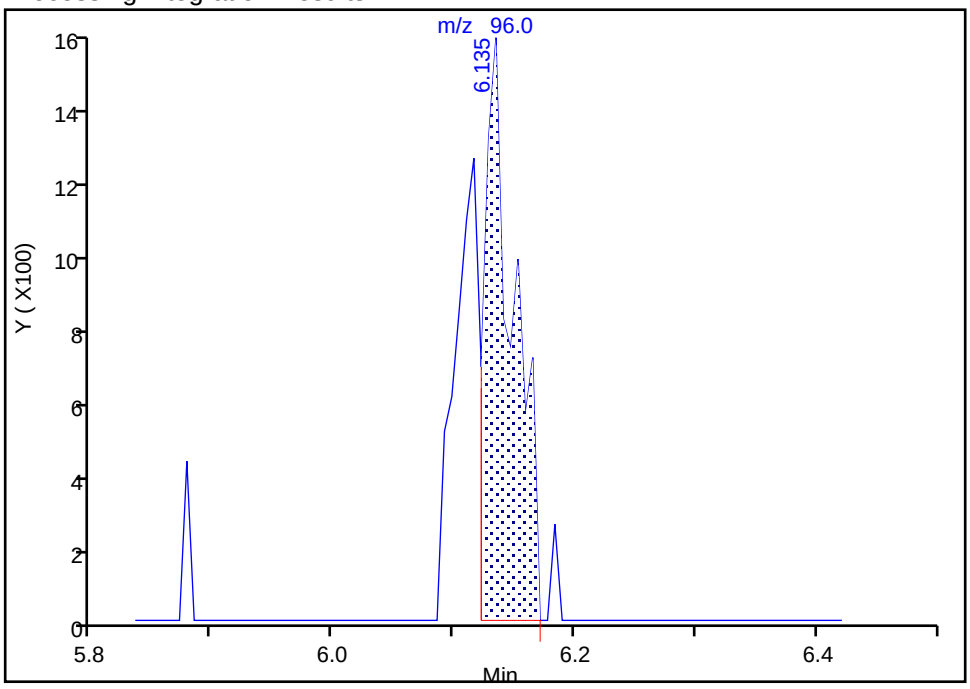
Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X12.D				
Injection Date:	27-Mar-2022 12:45:30	Instrument ID:	19930		
Lims ID:	410-77437-A-1	Lab Sample ID:	410-77437-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

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

Signal: 1

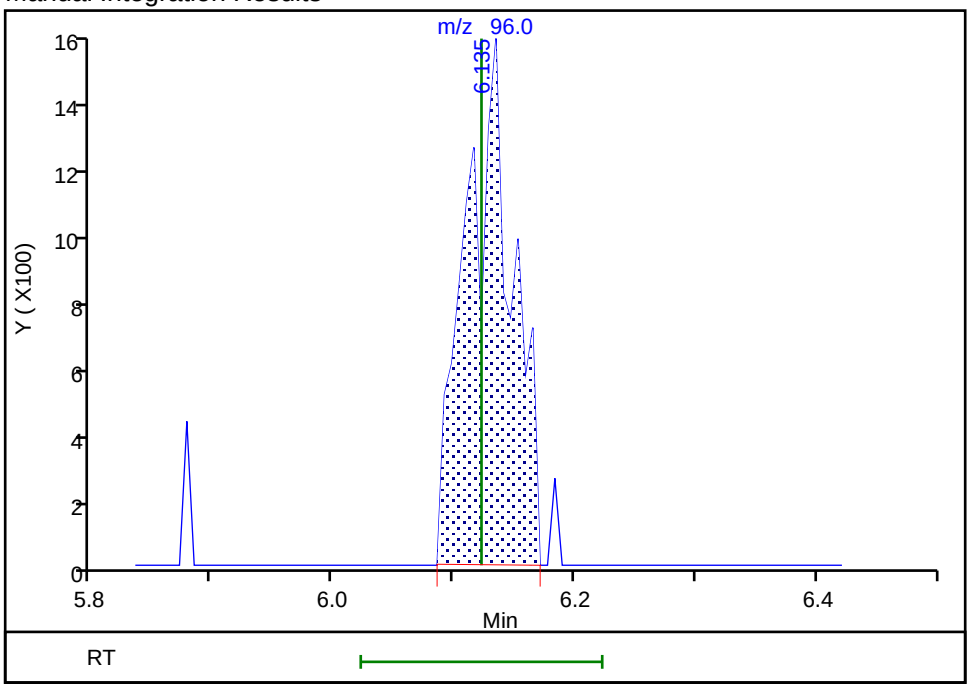
Processing Integration Results

RT: 6.13
Area: 2700
Amount: 0.044062
Amount Units: ug/l



Manual Integration Results

RT: 6.13
Area: 4265
Amount: 0.069601
Amount Units: ug/l



Reviewer: kaewrungrueangp, 28-Mar-2022 09:39:31

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

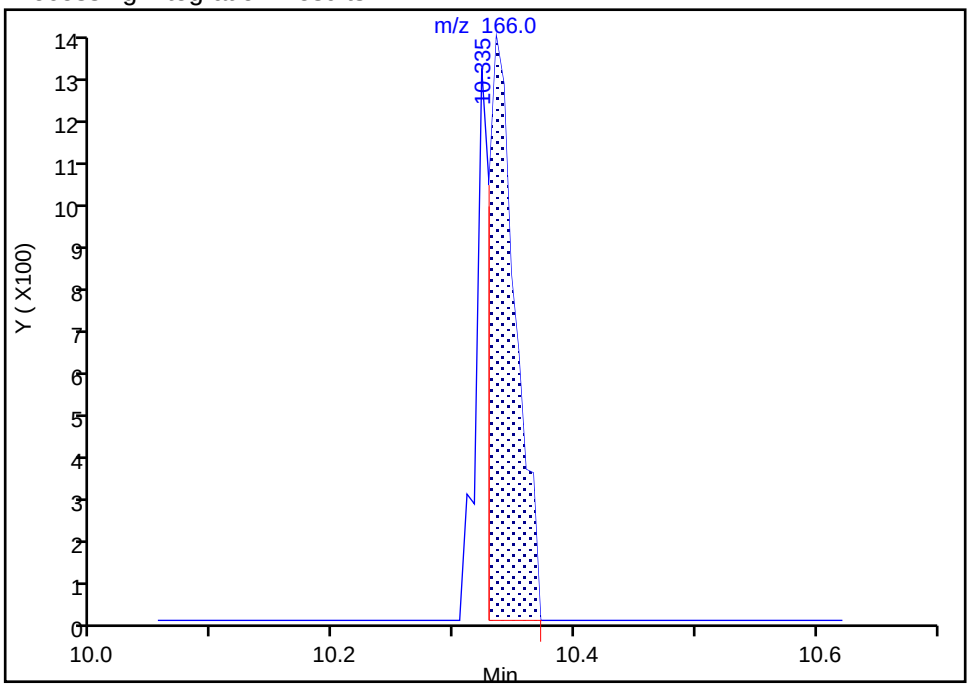
Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X12.D				
Injection Date:	27-Mar-2022 12:45:30	Instrument ID:	19930		
Lims ID:	410-77437-A-1	Lab Sample ID:	410-77437-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

81 Tetrachloroethene, CAS: 127-18-4

Signal: 1

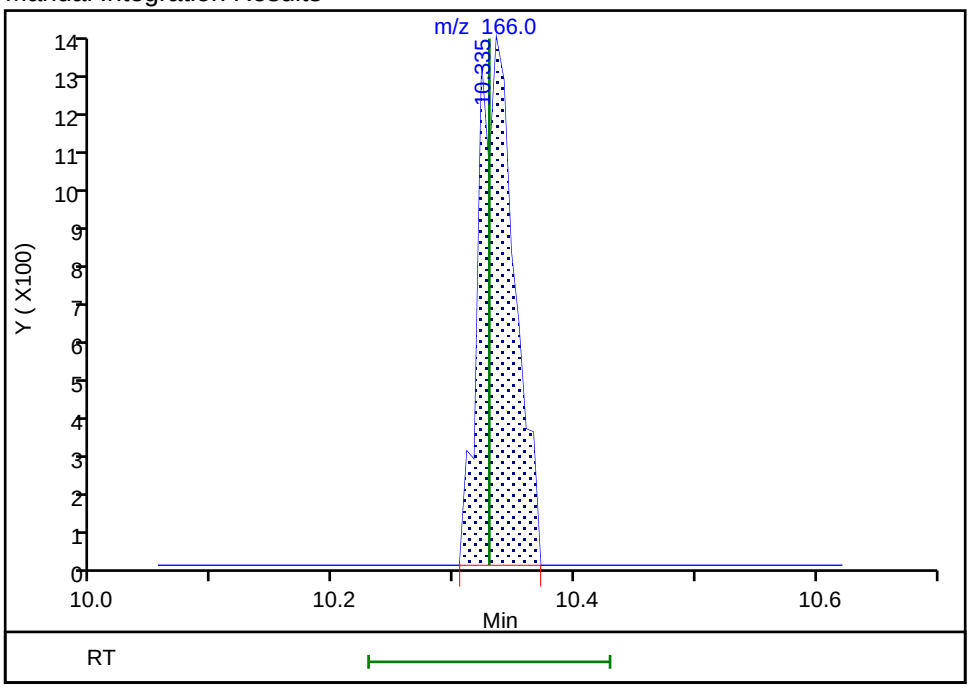
Processing Integration Results

RT: 10.33
Area: 2047
Amount: 0.025705
Amount Units: ug/l



Manual Integration Results

RT: 10.33
Area: 2705
Amount: 0.033968
Amount Units: ug/l



Reviewer: kaewrungrueangp, 28-Mar-2022 09:40:12

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 410-77437-2

Matrix: Water Lab File ID: IM27X13.D

Analysis Method: 8260D Date Collected: 03/24/2022 11:05

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 13:06

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.6	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.10	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.13	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 410-77437-2

Matrix: Water Lab File ID: IM27X13.D

Analysis Method: 8260D Date Collected: 03/24/2022 11:05

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 13:06

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-120
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X13.D
Lims ID: 410-77437-A-2
Client ID: HD-COD-SW-7-0/1-0
Sample Type: Client
Inject. Date: 27-Mar-2022 13:06:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-014
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 09:40:24 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 09:47:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50		2.154				ND	7
5 Vinyl chloride	62		2.270				ND	7
7 Bromomethane	94		2.605				ND	
8 Chloroethane	64		2.684				ND	
14 1,1-Dichloroethene	96		3.556				ND	
15 Acetone	43	3.592	3.586	0.006	95	11891	1.57	
19 Carbon disulfide	76	3.855	3.855	0.000	94	3808	0.0362	
23 Methylene Chloride	84		4.214				ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.251	4.239	0.012	28	140001	50.0	
27 Methyl tert-butyl ether	73		4.623				ND	
28 trans-1,2-Dichloroethene	96		4.641				ND	
31 1,1-Dichloroethane	63		5.300				ND	
36 2-Butanone (MEK)	43		6.080				ND	7
37 cis-1,2-Dichloroethene	96	6.135	6.123	0.012	66	6221	0.1022	
43 Chlorobromomethane	128		6.458				ND	
45 Chloroform	83	6.610	6.598	0.012	65	5743	0.0585	
$ 46 Dibromofluoromethane (Surr)	113	6.817	6.811	0.006	94	492316	10.2	
47 1,1,1-Trichloroethane	97		6.830				ND	
50 Carbon tetrachloride	117		7.043				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.269	7.275	-0.006	67	90820	10.5	
54 Benzene	78		7.299				ND	
56 1,2-Dichloroethane	62		7.366				ND	
* 58 Fluorobenzene (IS)	96	7.701	7.702	-0.001	99	1790141	10.0	
61 Trichloroethene	95	8.189	8.177	0.012	93	7906	0.1305	
63 1,2-Dichloropropane	63		8.512				ND	
68 Dichlorobromomethane	83		8.854				ND	7
73 cis-1,3-Dichloropropene	75		9.396				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.567				ND	7
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1781688	10.1	
76 Toluene	92	9.786	9.780	0.006	96	5161	0.0377	
78 trans-1,3-Dichloropropene	75		10.036				ND	
80 1,1,2-Trichloroethane	97		10.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166	10.335	10.329	0.006	94	4278	0.0544	
83 2-Hexanone	43		10.451				ND	
85 Chlorodibromomethane	129		10.616				ND	
86 Ethylene Dibromide	107		10.725				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	83	1450285	10.0	
90 Chlorobenzene	112		11.183				ND	7
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.268				ND	
92 Ethylbenzene	91		11.268				ND	7
93 m-Xylene & p-Xylene	106		11.384				ND	7
94 o-Xylene	106		11.713				ND	
95 Styrene	104		11.725				ND	
96 Bromoform	173		11.884				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	635395	9.28	
101 1,1,2,2-Tetrachloroethane	83		12.256				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	93	858787	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_LLcentISS_00004 Amount Added: 5.00 Units: uL Run Reagent

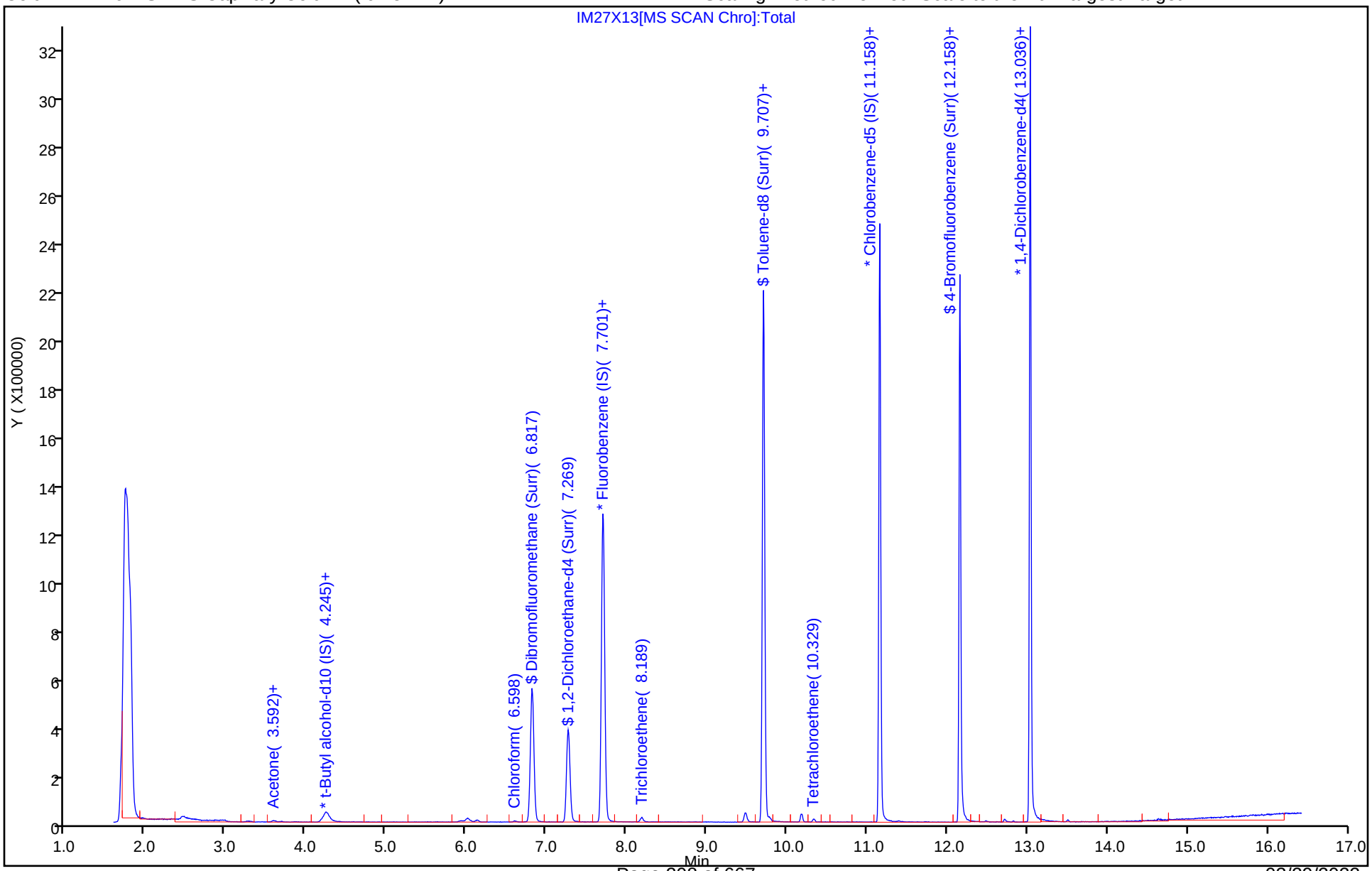
Report Date: 28-Mar-2022 09:47:25 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X13.D

Injection Date:	27-Mar-2022 13:06:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	410-77437-A-2	Lab Sample ID:	410-77437-2	Worklist Smp#:	14
Client ID:	HD-COD-SW-7-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X13.D
Lims ID: 410-77437-A-2
Client ID: HD-COD-SW-7-0/1-0
Sample Type: Client
Inject. Date: 27-Mar-2022 13:06:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-014
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 09:40:24 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

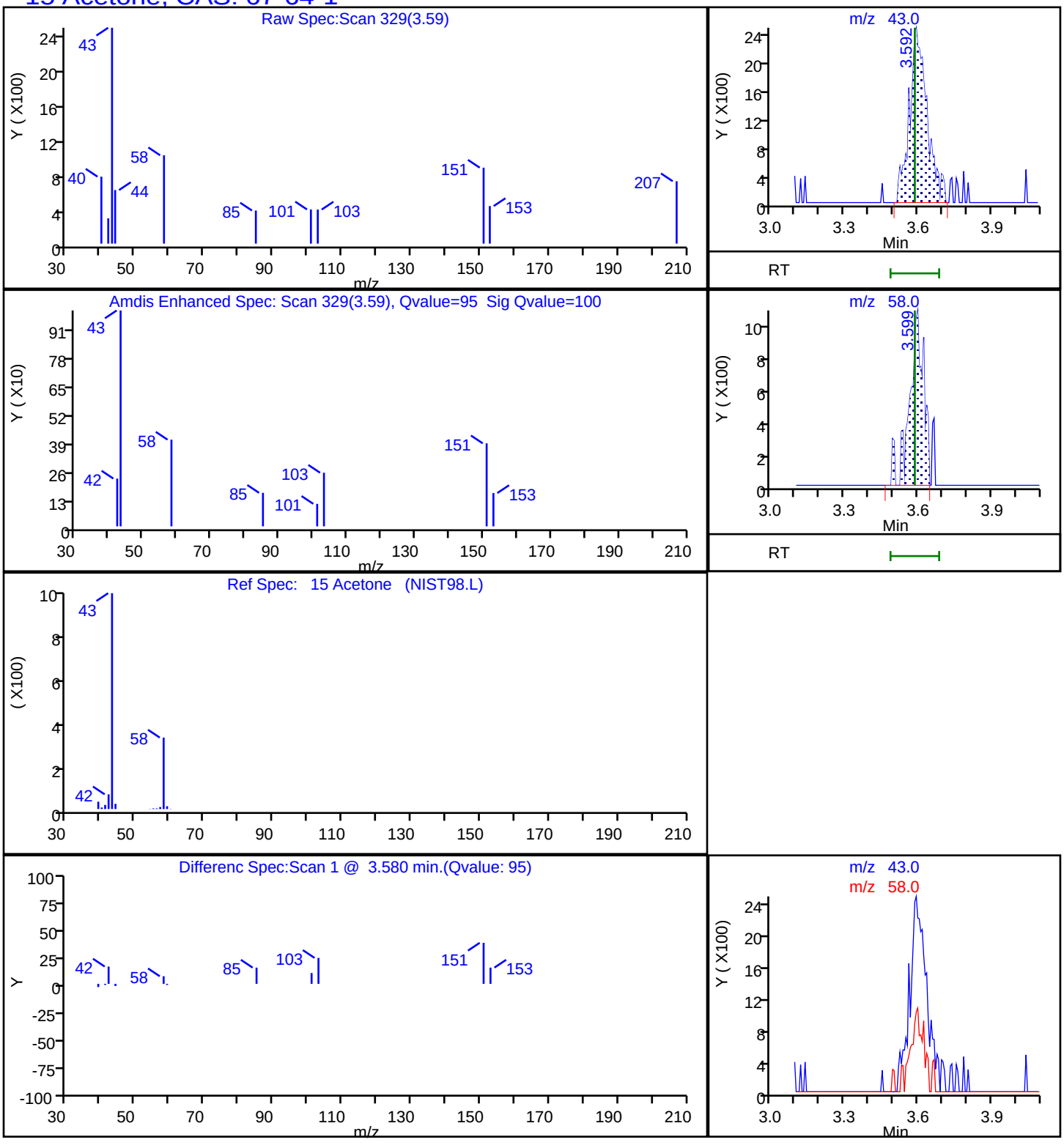
First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 09:47:25

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.2	101.59
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	105.21
$ 75 Toluene-d8 (Surr)	10.0	10.1	100.95
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.28	92.83

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X13.D				
Injection Date:	27-Mar-2022 13:06:30	Instrument ID:	19930		
Lims ID:	410-77437-A-2	Lab Sample ID:	410-77437-2		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

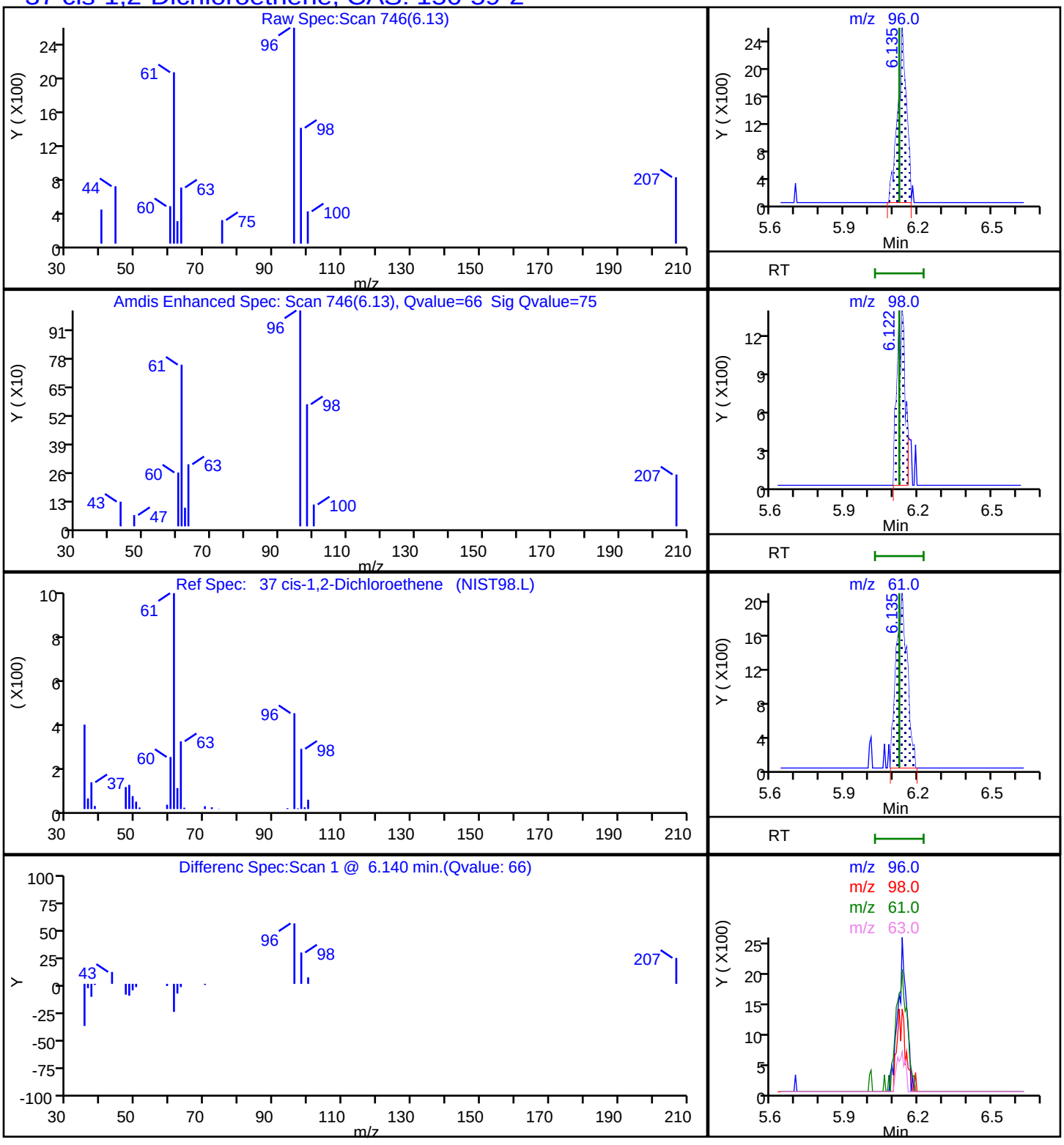
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X13.D				
Injection Date:	27-Mar-2022 13:06:30	Instrument ID:	19930		
Lims ID:	410-77437-A-2	Lab Sample ID:	410-77437-2		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

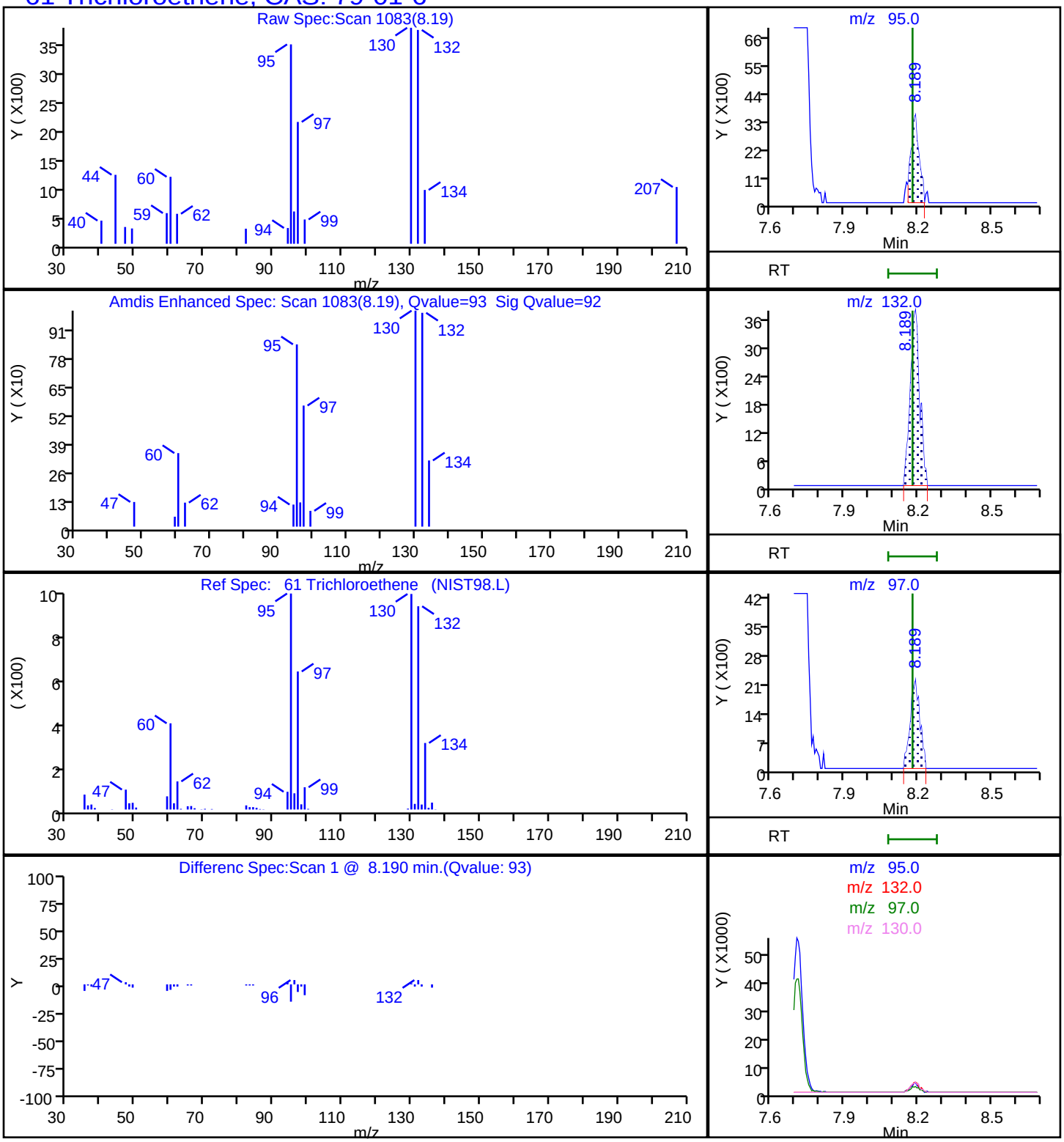
37 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X13.D				
Injection Date:	27-Mar-2022 13:06:30	Instrument ID:	19930		
Lims ID:	410-77437-A-2	Lab Sample ID:	410-77437-2		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 410-77437-3

Matrix: Water Lab File ID: IM27X14.D

Analysis Method: 8260D Date Collected: 03/24/2022 09:05

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 13:27

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.8	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.11	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.41	J	0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.12	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 410-77437-3

Matrix: Water Lab File ID: IM27X14.D

Analysis Method: 8260D Date Collected: 03/24/2022 09:05

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 13:27

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X14.D
Lims ID: 410-77437-A-3
Client ID: HD-COD-SW-8-0/1-0
Sample Type: Client
Inject. Date: 27-Mar-2022 13:27:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-015
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 09:48:41 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 09:48:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50		2.154				ND	7
5 Vinyl chloride	62		2.270				ND	
7 Bromomethane	94		2.605				ND	
8 Chloroethane	64		2.684				ND	
14 1,1-Dichloroethene	96		3.556				ND	
15 Acetone	43	3.605	3.586	0.019	96	14339	1.80	
19 Carbon disulfide	76		3.855				ND	7
23 Methylene Chloride	84		4.214				ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.251	4.239	0.012	23	147104	50.0	
27 Methyl tert-butyl ether	73		4.623				ND	
28 trans-1,2-Dichloroethene	96		4.641				ND	
31 1,1-Dichloroethane	63		5.300				ND	
36 2-Butanone (MEK)	43		6.080				ND	7
37 cis-1,2-Dichloroethene	96	6.135	6.123	0.012	67	6445	0.1089	
43 Chlorobromomethane	128		6.458				ND	
45 Chloroform	83	6.592	6.598	-0.006	10	3783	0.0396	
$ 46 Dibromofluoromethane (Surr)	113	6.817	6.811	0.006	94	485352	10.3	
47 1,1,1-Trichloroethane	97	6.830	6.830	0.000	56	2871	0.0310	a
50 Carbon tetrachloride	117		7.043				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.269	7.275	-0.006	67	88334	10.5	
54 Benzene	78		7.299				ND	7
56 1,2-Dichloroethane	62		7.366				ND	
* 58 Fluorobenzene (IS)	96	7.701	7.702	-0.001	99	1740706	10.0	
61 Trichloroethene	95	8.189	8.177	0.012	94	7110	0.1207	
63 1,2-Dichloropropane	63		8.512				ND	
68 Dichlorobromomethane	83		8.854				ND	7
73 cis-1,3-Dichloropropene	75		9.396				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.567				ND	7
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1737900	10.1	
76 Toluene	92	9.786	9.780	0.006	97	6236	0.0469	
78 trans-1,3-Dichloropropene	75		10.036				ND	
80 1,1,2-Trichloroethane	97		10.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166	10.335	10.329	0.006	95	31435	0.4109	
83 2-Hexanone	43		10.451				ND	7
85 Chlorodibromomethane	129		10.616				ND	
86 Ethylene Dibromide	107		10.725				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	83	1410234	10.0	
90 Chlorobenzene	112		11.183				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.268				ND	
92 Ethylbenzene	91		11.268				ND	7
93 m-Xylene & p-Xylene	106		11.384				ND	7
94 o-Xylene	106		11.713				ND	7
95 Styrene	104		11.725				ND	
96 Bromoform	173		11.884				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	630377	9.47	
101 1,1,2,2-Tetrachloroethane	83		12.256				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	92	846067	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

a - User Assigned ID

Reagents:

MSV_LLcentISS_00004 Amount Added: 5.00 Units: uL Run Reagent

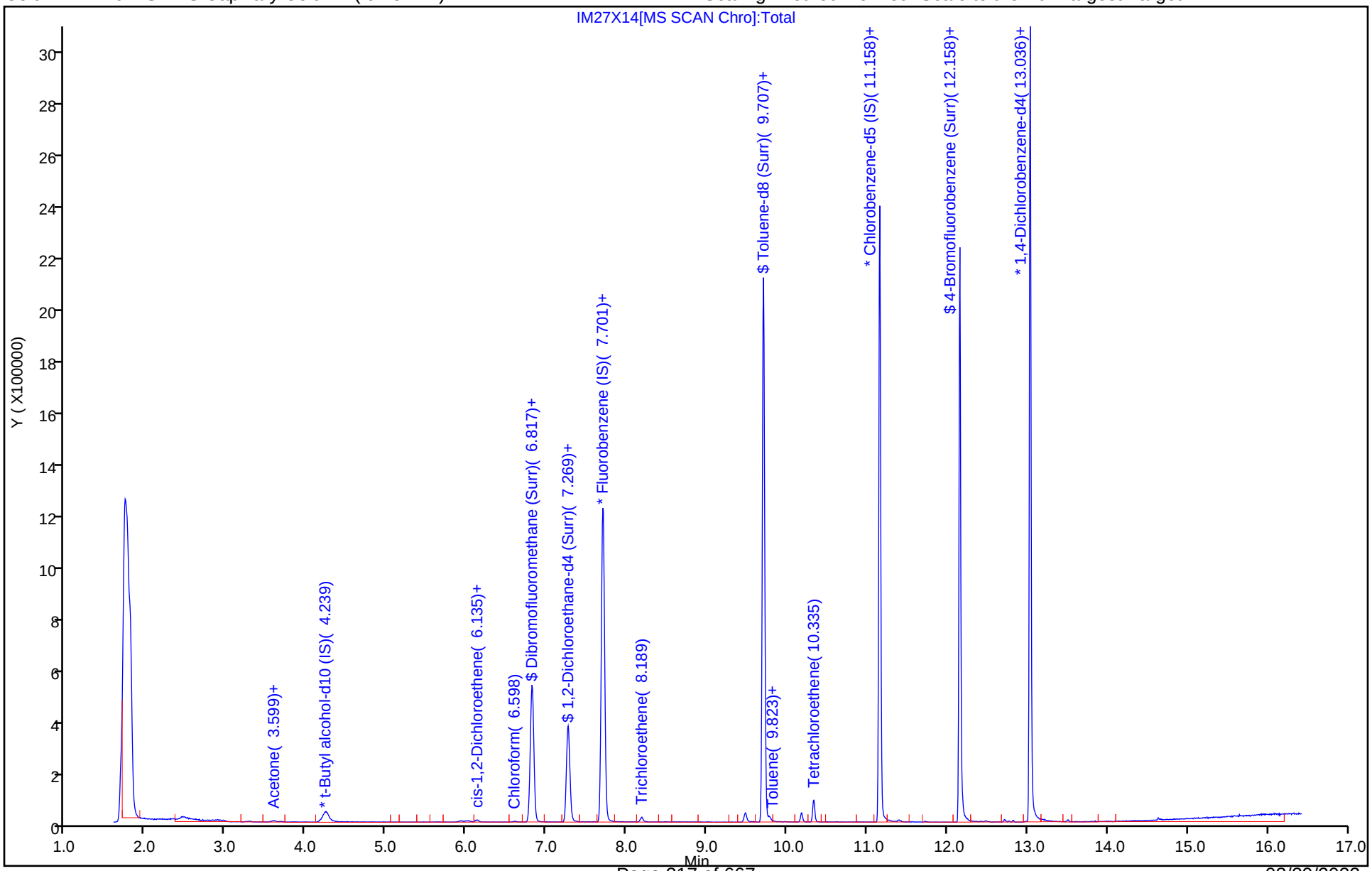
Report Date: 28-Mar-2022 09:48:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X14.D

Injection Date:	27-Mar-2022 13:27:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	410-77437-A-3	Lab Sample ID:	410-77437-3	Worklist Smp#:	15
Client ID:	HD-COD-SW-8-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X14.D				
Lims ID:	410-77437-A-3				
Client ID:	HD-COD-SW-8-0/1-0				
Sample Type:	Client				
Inject. Date:	27-Mar-2022 13:27:30	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0053417-015				
Operator ID:	KNK41612	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	28-Mar-2022 09:48:41	Calib Date:	15-Mar-2022 03:22:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1659				

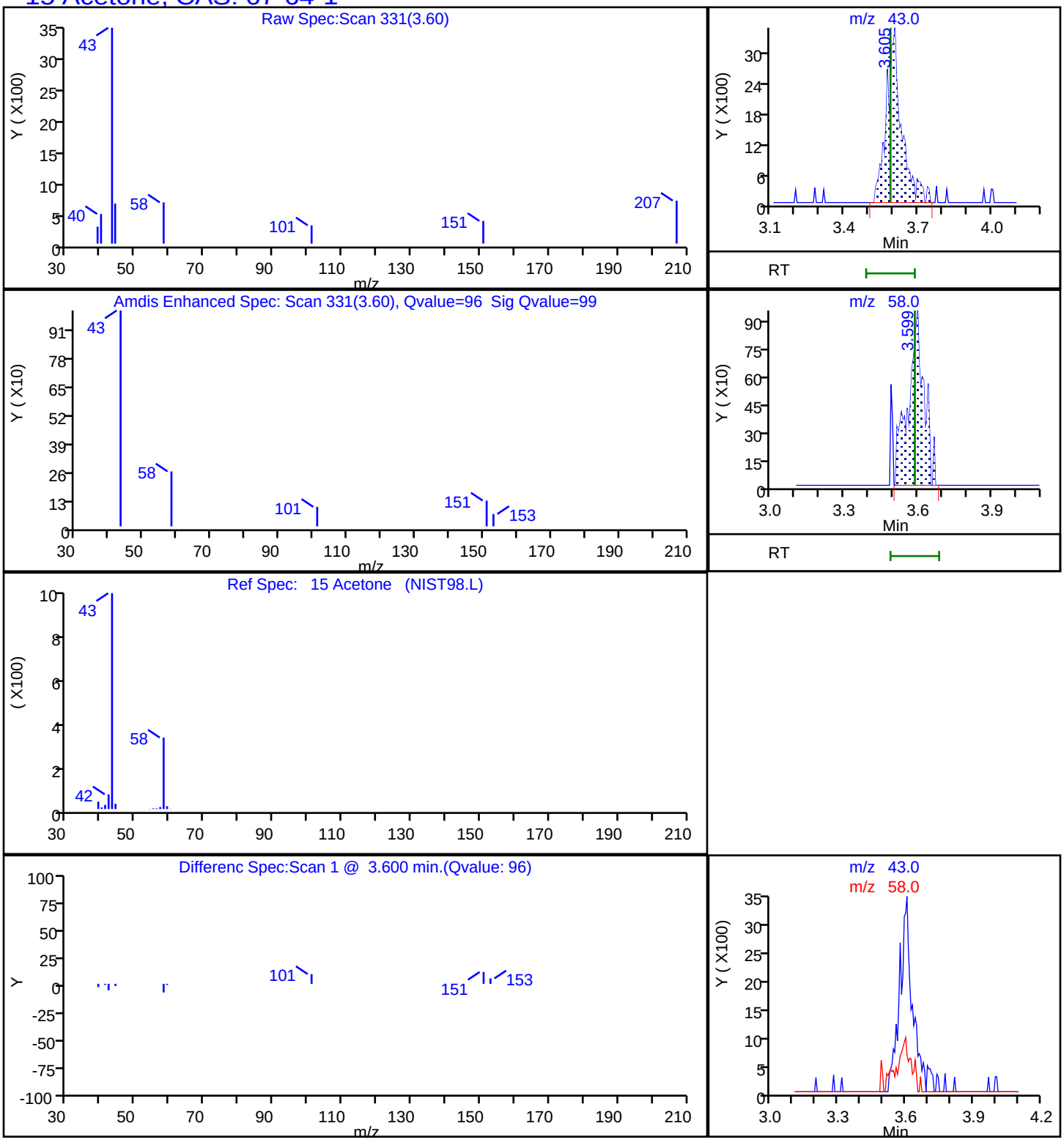
First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 09:48:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.3	103.00
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	105.24
$ 75 Toluene-d8 (Surr)	10.0	10.1	101.27
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.47	94.72

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X14.D				
Injection Date:	27-Mar-2022 13:27:30	Instrument ID:	19930		
Lims ID:	410-77437-A-3	Lab Sample ID:	410-77437-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

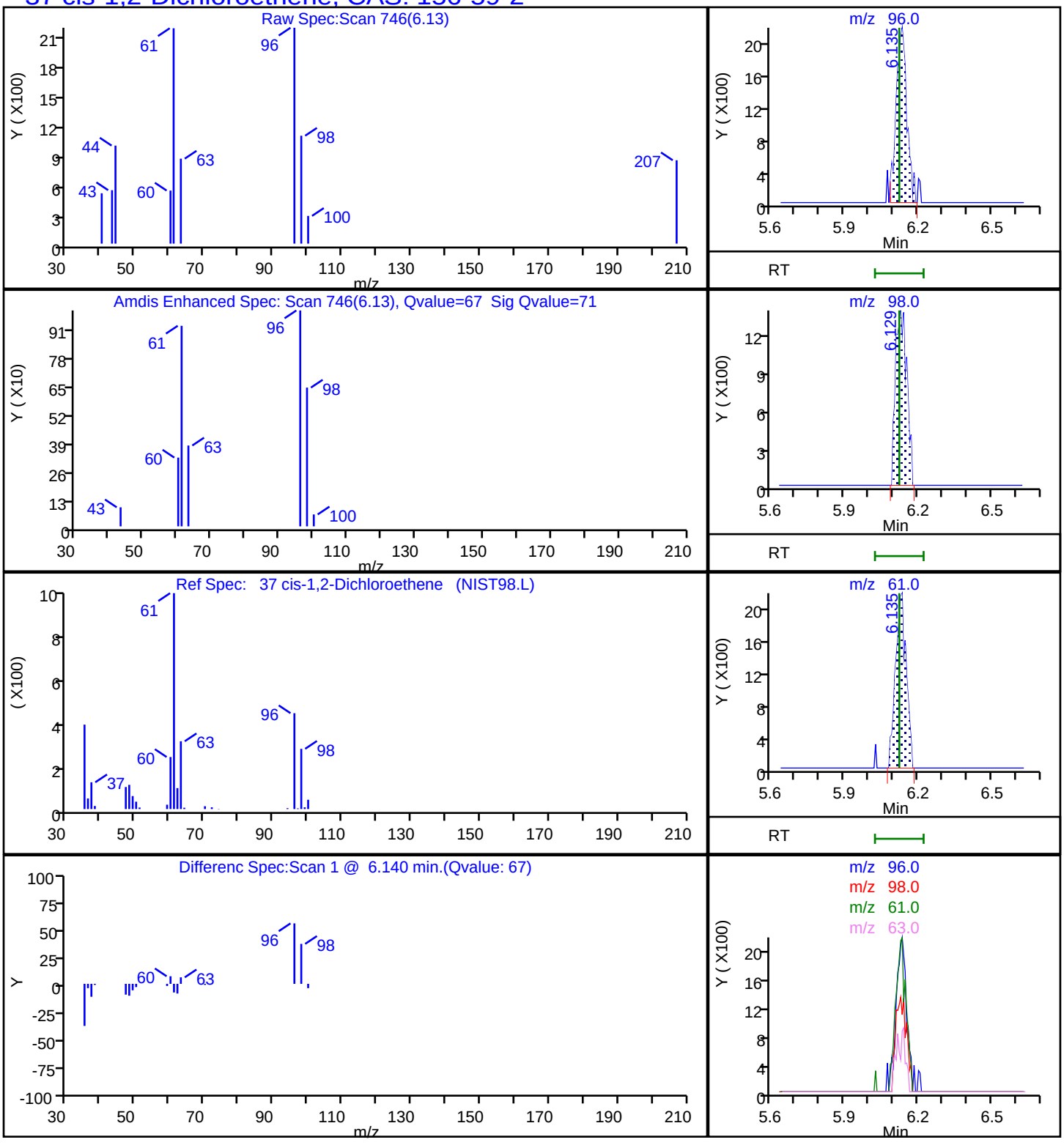
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X14.D
Injection Date: 27-Mar-2022 13:27:30 Instrument ID: 19930
Lims ID: 410-77437-A-3 Lab Sample ID: 410-77437-3
Client ID: HD-COD-SW-8-0/1-0
Operator ID: KNK41612 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

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



Report Date: 28-Mar-2022 09:48:42 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X14.D

Injection Date: 27-Mar-2022 13:27:30 Instrument ID: 19930

Lims ID: 410-77437-A-3 Lab Sample ID: 410-77437-3

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

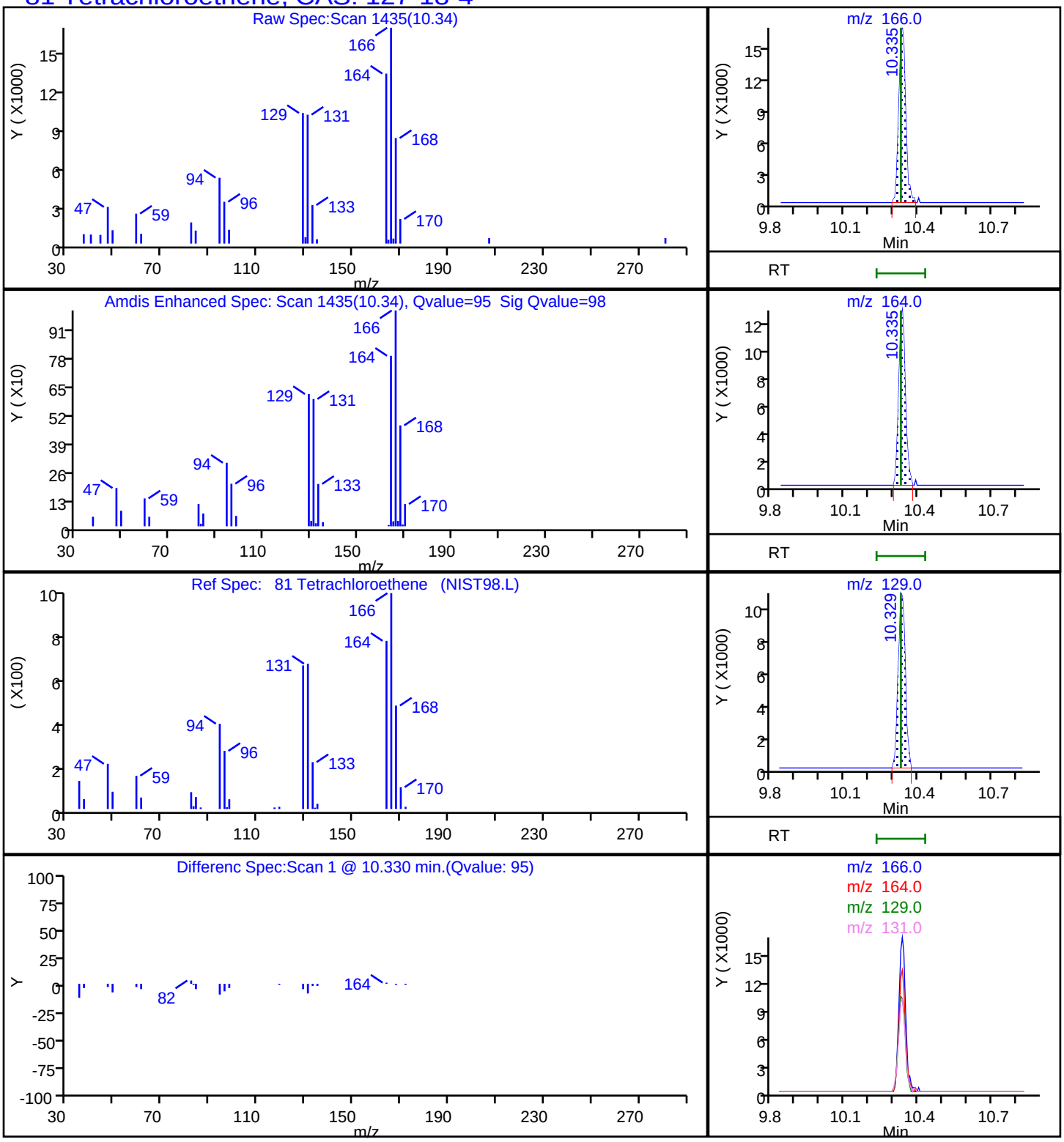
Operator ID: KNK41612 ALS Bottle#: 14 Worklist Smp#: 15

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D

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

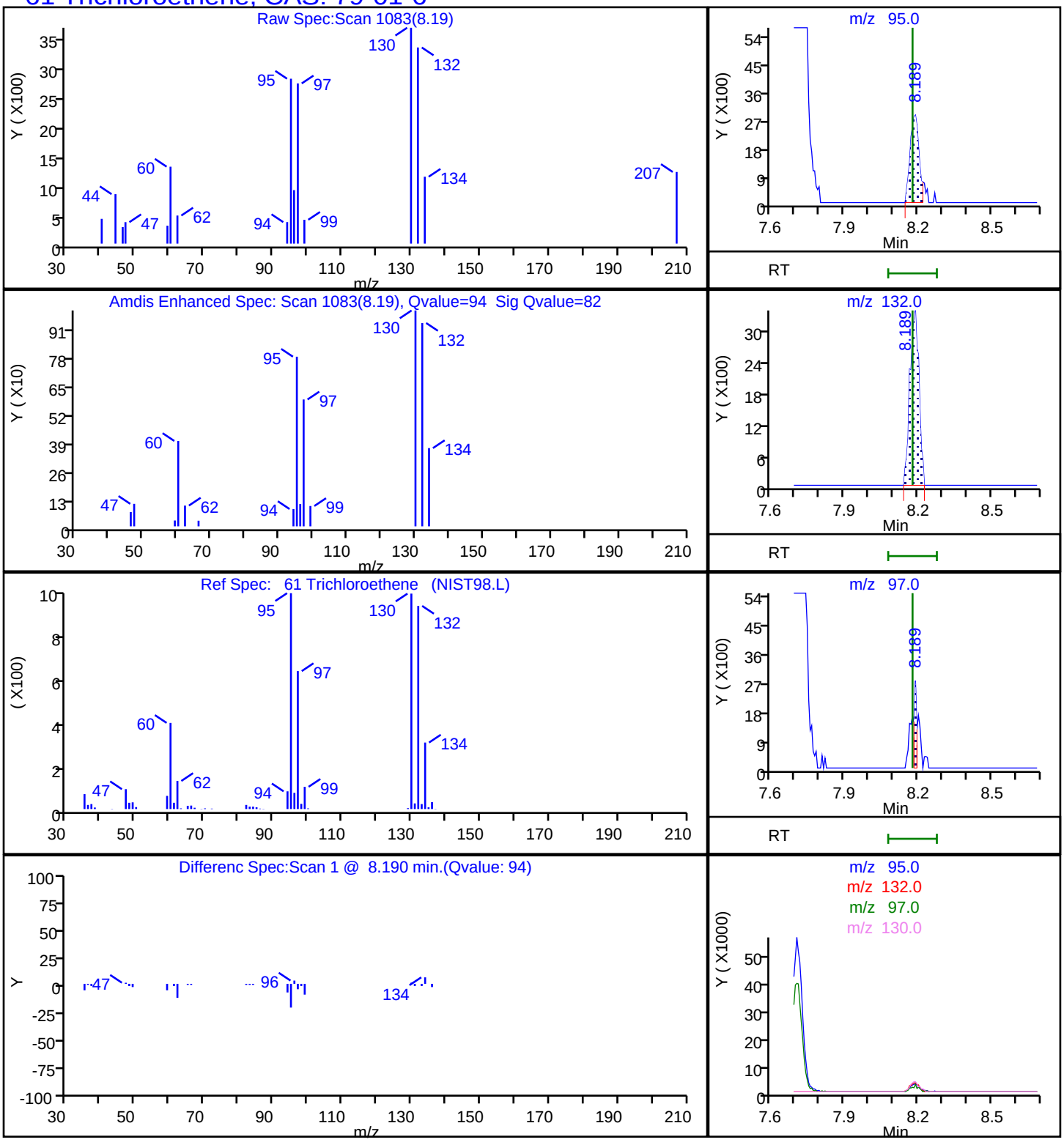
81 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X14.D				
Injection Date:	27-Mar-2022 13:27:30	Instrument ID:	19930		
Lims ID:	410-77437-A-3	Lab Sample ID:	410-77437-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

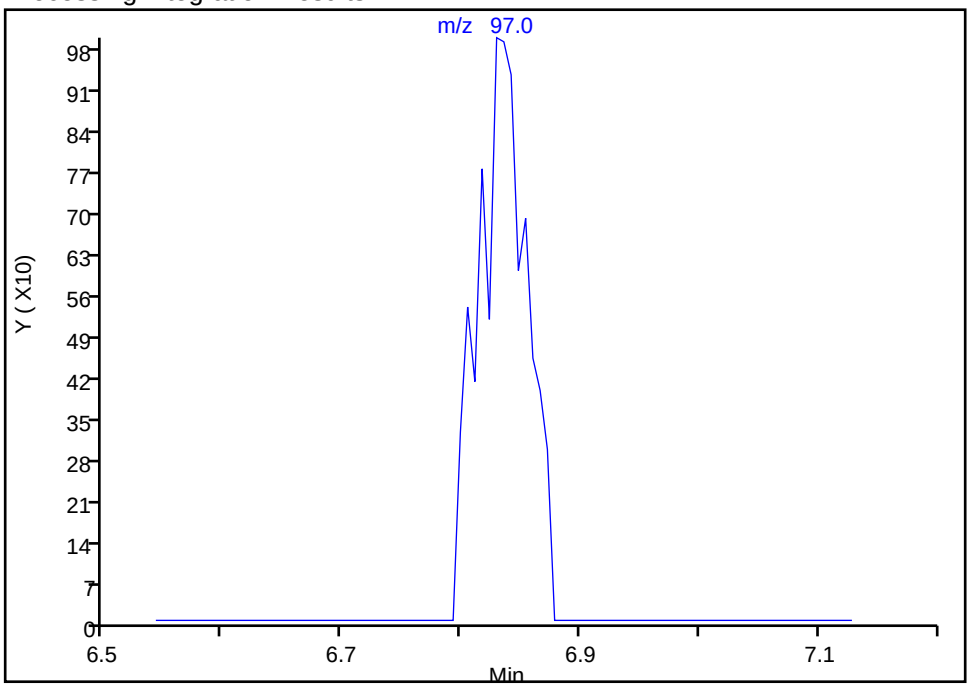
Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X14.D				
Injection Date:	27-Mar-2022 13:27:30	Instrument ID:	19930		
Lims ID:	410-77437-A-3	Lab Sample ID:	410-77437-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

47 1,1,1-Trichloroethane, CAS: 71-55-6

Signal: 1

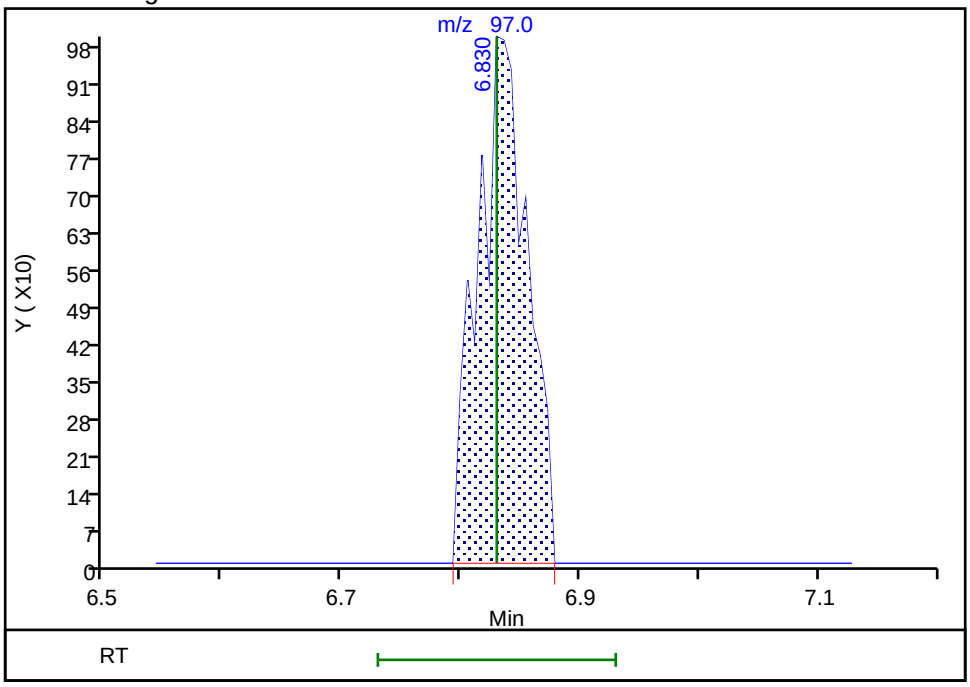
Not Detected
Expected RT: 6.83

Processing Integration Results



RT: 6.83
Area: 2871
Amount: 0.031009
Amount Units: ug/l

Manual Integration Results



Reviewer: kaewrungrueangp, 28-Mar-2022 09:48:14
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 410-77437-4

Matrix: Water Lab File ID: IM27X15.D

Analysis Method: 8260D Date Collected: 03/24/2022 12:10

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 13:48

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.8	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.11	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.20	J	0.50	0.060
108-88-3	Toluene	0.12	J	0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.13	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 410-77437-4

Matrix: Water Lab File ID: IM27X15.D

Analysis Method: 8260D Date Collected: 03/24/2022 12:10

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 13:48

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	104		80-120
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X15.D
Lims ID: 410-77437-A-4
Client ID: HD-COD-SW-9-0/1-0
Sample Type: Client
Inject. Date: 27-Mar-2022 13:48:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-016
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 09:50:46 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 09:50:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50		2.154				ND	U
5 Vinyl chloride	62		2.270				ND	
7 Bromomethane	94		2.605				ND	
8 Chloroethane	64		2.684				ND	
14 1,1-Dichloroethene	96		3.556				ND	
15 Acetone	43	3.599	3.586	0.013	89	15379	1.85	
19 Carbon disulfide	76	3.855	3.855	0.000	94	3613	0.0345	
23 Methylene Chloride	84	4.227	4.214	0.013	31	1535	0.0315	
* 24 t-Butyl alcohol-d10 (IS)	65	4.239	4.239	0.000	25	153319	50.0	
27 Methyl tert-butyl ether	73		4.623				ND	7
28 trans-1,2-Dichloroethene	96		4.641				ND	
31 1,1-Dichloroethane	63		5.300				ND	
36 2-Butanone (MEK)	43		6.080				ND	7
37 cis-1,2-Dichloroethene	96	6.123	6.123	0.000	75	6901	0.1142	
43 Chlorobromomethane	128		6.458				ND	
45 Chloroform	83	6.604	6.598	0.006	92	5307	0.0544	
$ 46 Dibromofluoromethane (Surr)	113	6.818	6.811	0.007	94	499568	10.4	
47 1,1,1-Trichloroethane	97		6.830				ND	
50 Carbon tetrachloride	117		7.043				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.269	7.275	-0.006	67	93746	10.9	
54 Benzene	78		7.299				ND	7
56 1,2-Dichloroethane	62		7.366				ND	
* 58 Fluorobenzene (IS)	96	7.702	7.702	0.000	100	1778499	10.0	
61 Trichloroethene	95	8.183	8.177	0.006	96	7790	0.1294	M
63 1,2-Dichloropropane	63		8.512				ND	
68 Dichlorobromomethane	83		8.854				ND	7
73 cis-1,3-Dichloropropene	75		9.396				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.567				ND	7
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1775410	10.1	
76 Toluene	92	9.786	9.780	0.006	99	16762	0.1227	
78 trans-1,3-Dichloropropene	75		10.036				ND	
80 1,1,2-Trichloroethane	97		10.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166	10.329	10.329	0.000	97	15760	0.2006	
83 2-Hexanone	43		10.451				ND	7
85 Chlorodibromomethane	129		10.616				ND	
86 Ethylene Dibromide	107		10.725				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	83	1447992	10.0	
90 Chlorobenzene	112	11.189	11.183	0.006	80	3560	0.0220	a
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.268				ND	
92 Ethylbenzene	91		11.268				ND	7
93 m-Xylene & p-Xylene	106	11.396	11.384	0.012	96	5035	0.0455	
94 o-Xylene	106		11.713				ND	7
95 Styrene	104		11.725				ND	
96 Bromoform	173		11.884				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	636024	9.31	
101 1,1,2,2-Tetrachloroethane	83		12.256				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	93	864023	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

MSV_LLcentISS_00004 Amount Added: 5.00 Units: uL Run Reagent

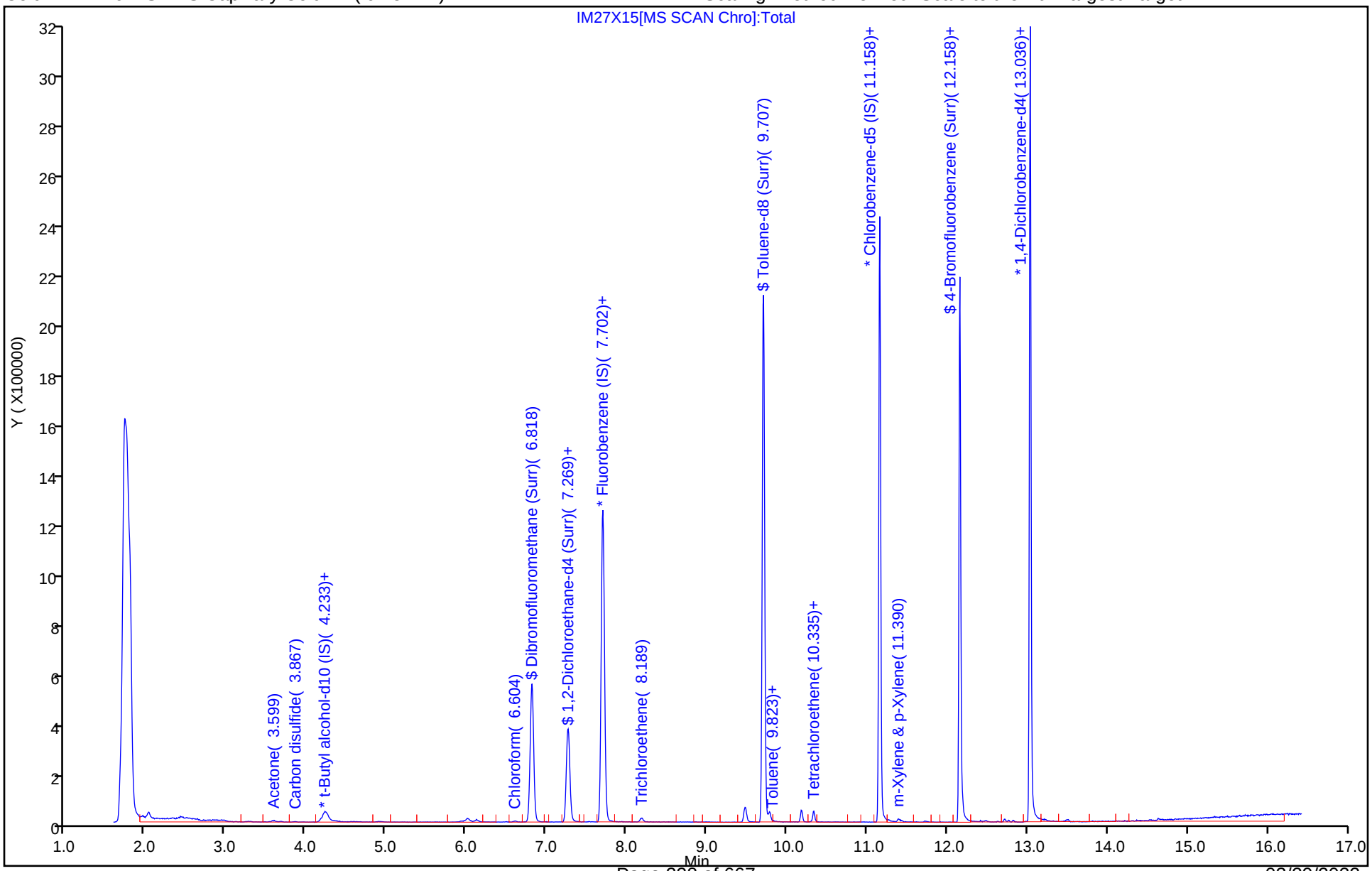
Report Date: 28-Mar-2022 09:50:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X15.D

Injection Date:	27-Mar-2022 13:48:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	410-77437-A-4	Lab Sample ID:	410-77437-4	Worklist Smp#:	16
Client ID:	HD-COD-SW-9-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X15.D				
Lims ID:	410-77437-A-4				
Client ID:	HD-COD-SW-9-0/1-0				
Sample Type:	Client				
Inject. Date:	27-Mar-2022 13:48:30	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0053417-016				
Operator ID:	KNK41612	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	28-Mar-2022 09:50:46	Calib Date:	15-Mar-2022 03:22:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1659				

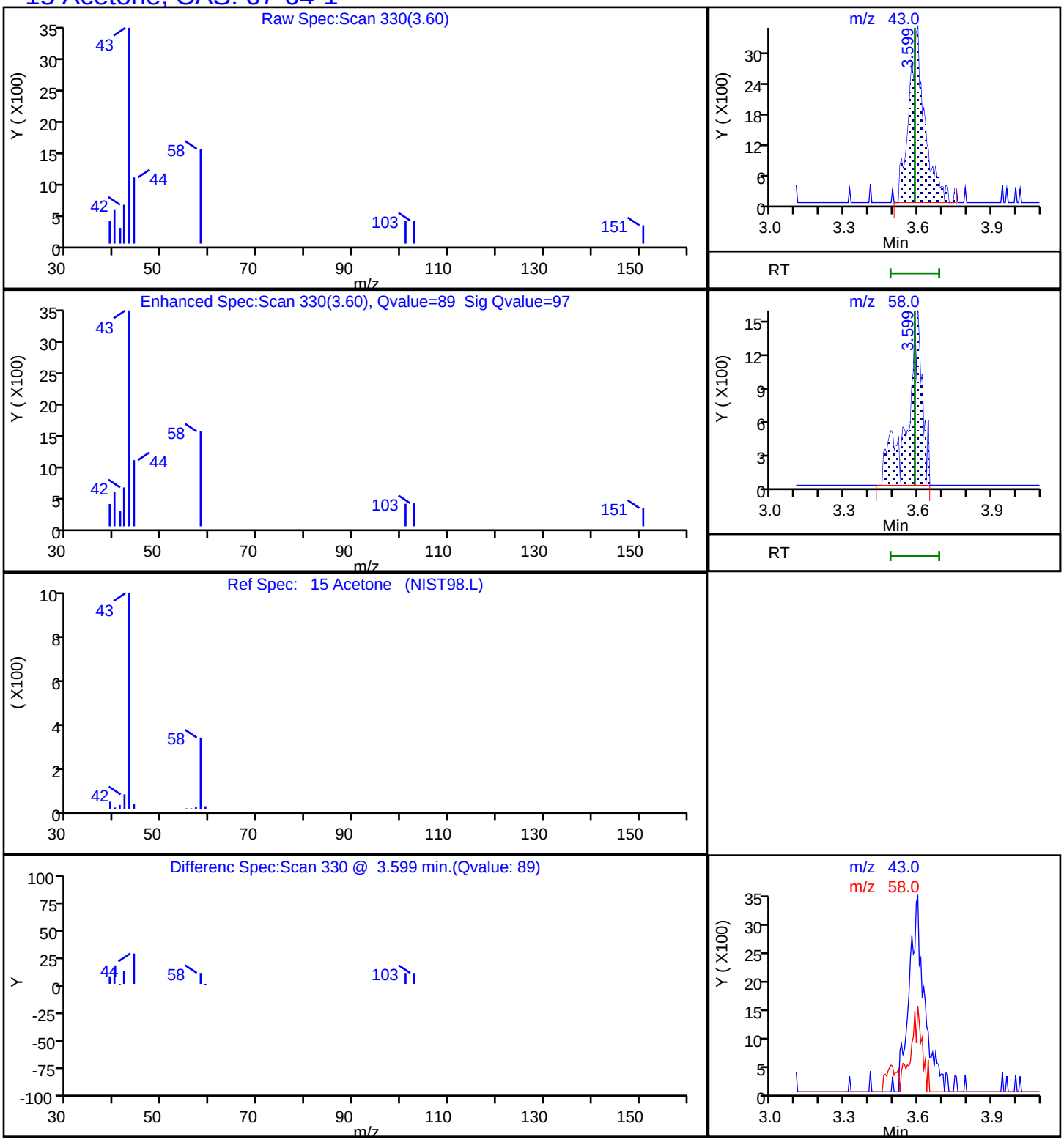
First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 09:50:46

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.4	103.77
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.9	109.31
$ 75 Toluene-d8 (Surr)	10.0	10.1	100.75
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.31	93.07

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X15.D				
Injection Date:	27-Mar-2022 13:48:30	Instrument ID:	19930		
Lims ID:	410-77437-A-4	Lab Sample ID:	410-77437-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

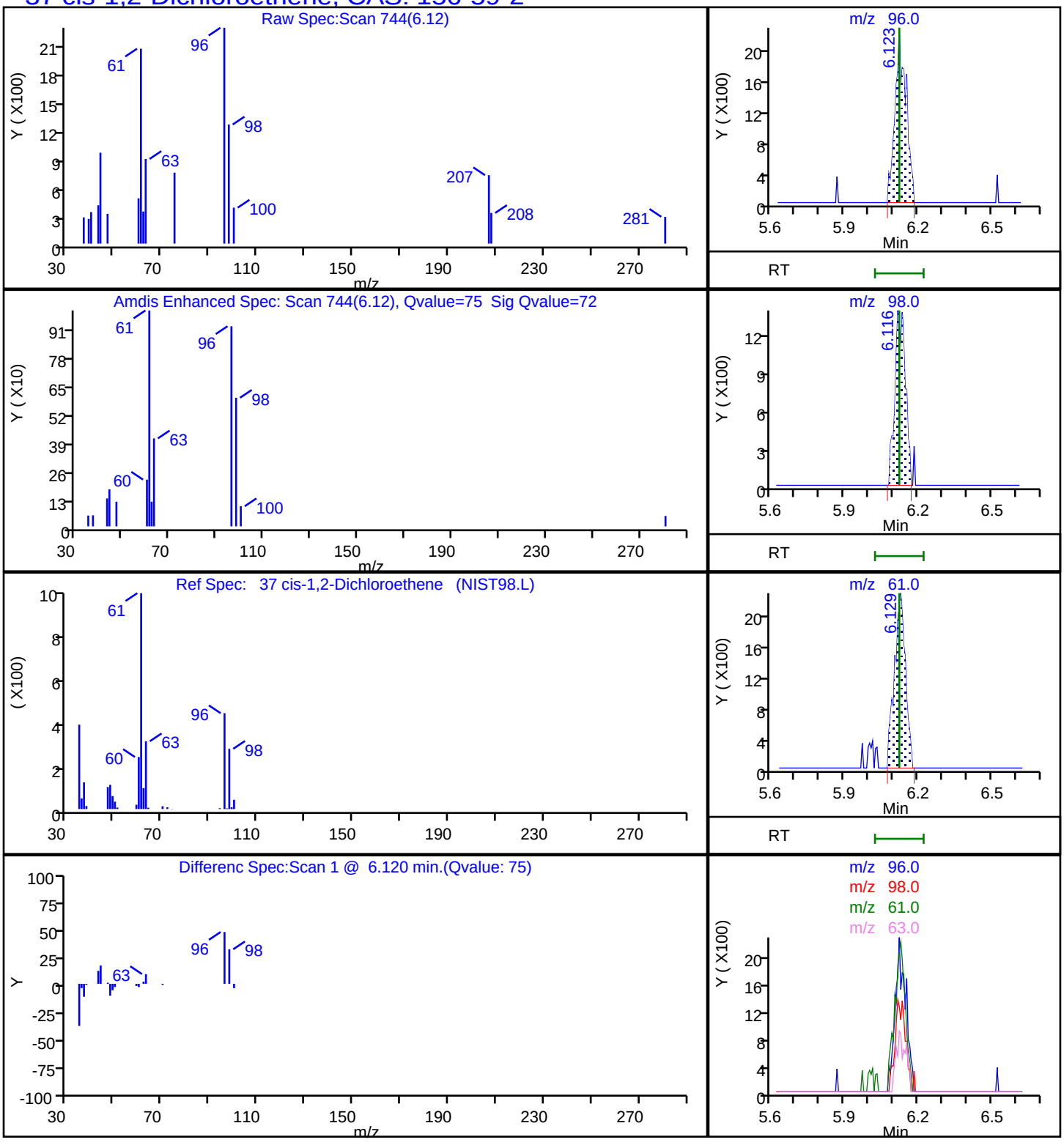
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X15.D				
Injection Date:	27-Mar-2022 13:48:30	Instrument ID:	19930		
Lims ID:	410-77437-A-4	Lab Sample ID:	410-77437-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

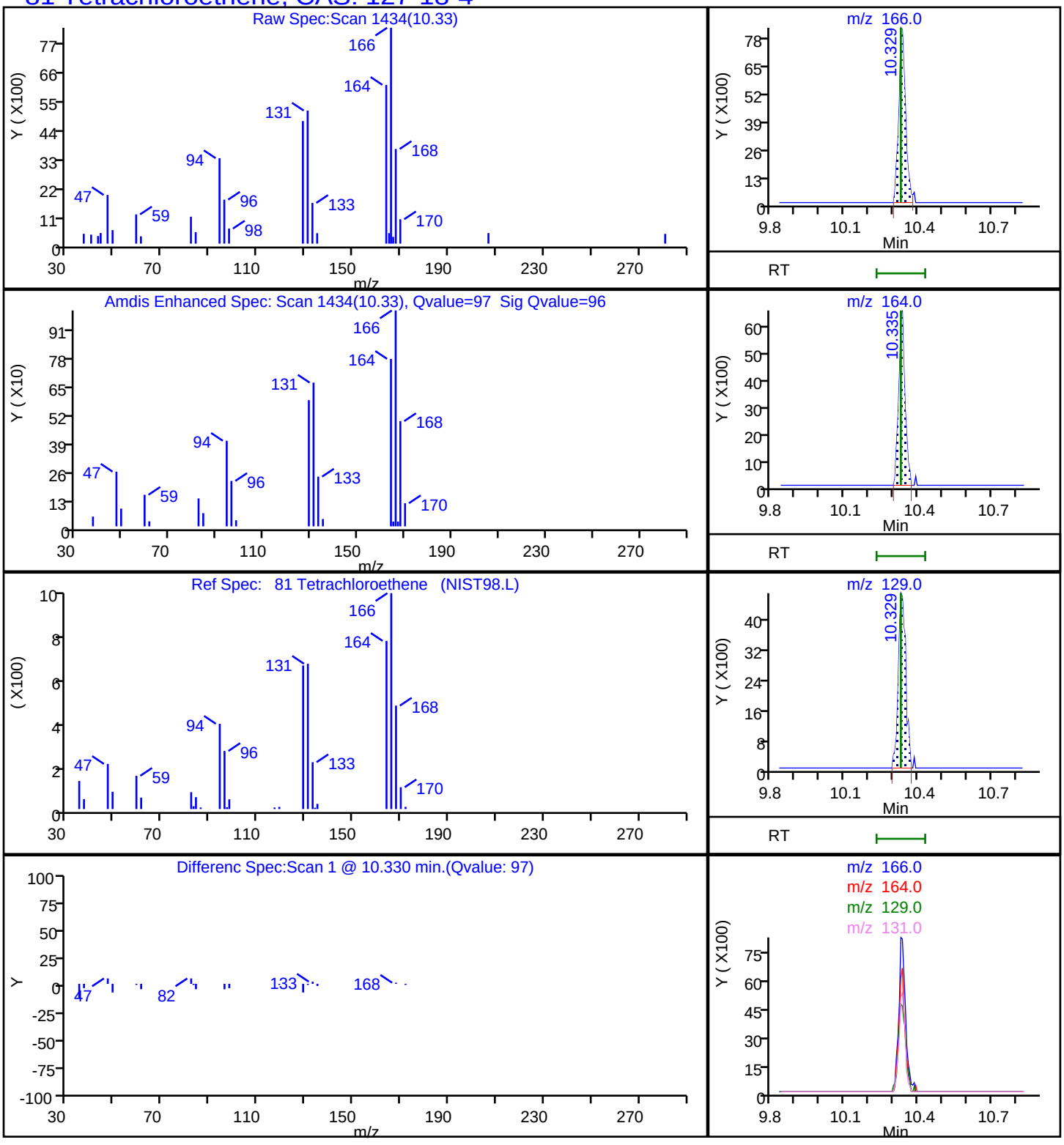
37 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X15.D
Injection Date: 27-Mar-2022 13:48:30 Instrument ID: 19930
Lims ID: 410-77437-A-4 Lab Sample ID: 410-77437-4
Client ID: HD-COD-SW-9-0/1-0
Operator ID: KNK41612 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

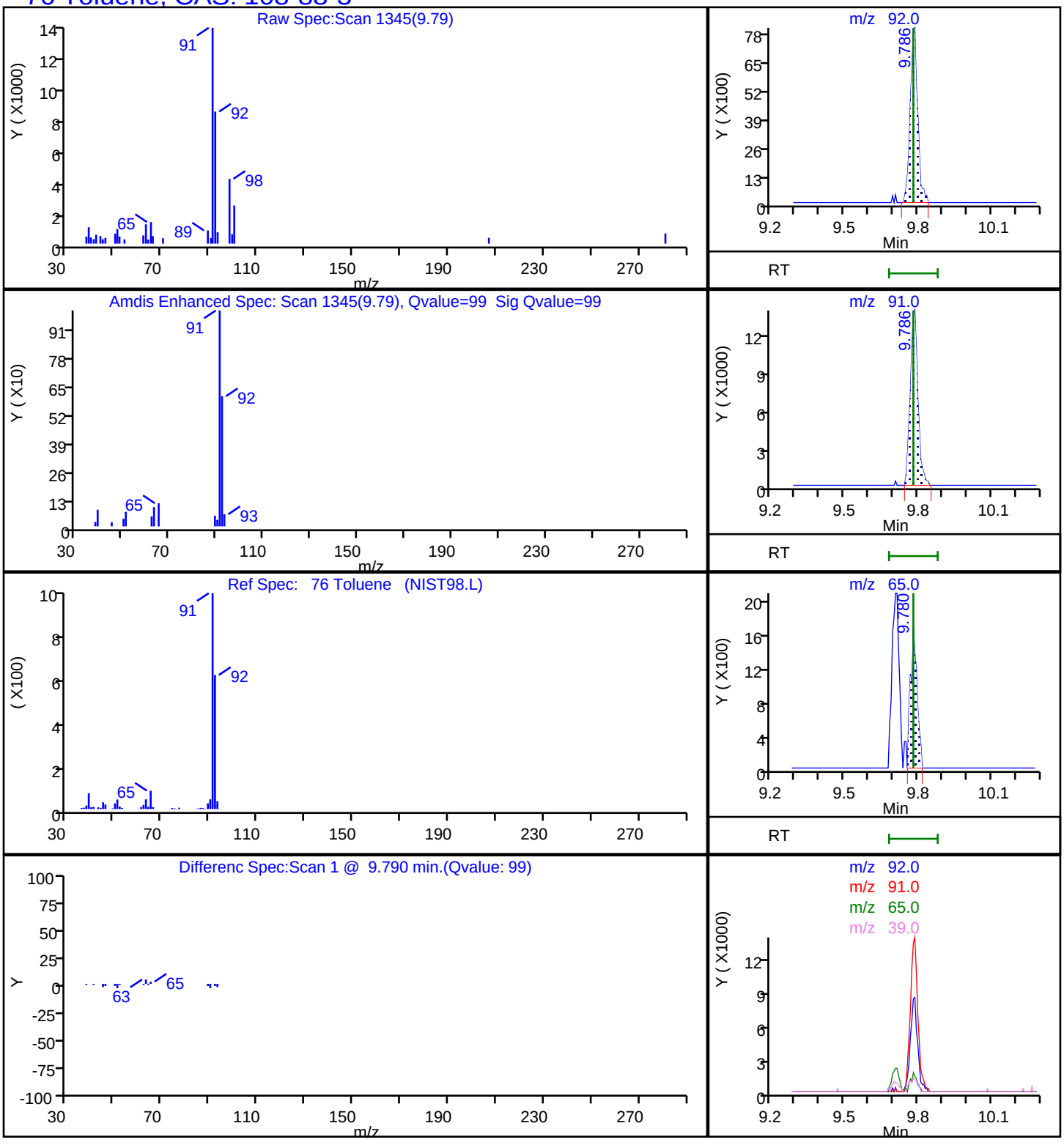
81 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X15.D
Injection Date: 27-Mar-2022 13:48:30 Instrument ID: 19930
Lims ID: 410-77437-A-4 Lab Sample ID: 410-77437-4
Client ID: HD-COD-SW-9-0/1-0
Operator ID: KNK41612 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

76 Toluene, CAS: 108-88-3



Report Date: 28-Mar-2022 09:50:46 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X15.D

Injection Date: 27-Mar-2022 13:48:30 Instrument ID: 19930

Lims ID: 410-77437-A-4 Lab Sample ID: 410-77437-4

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

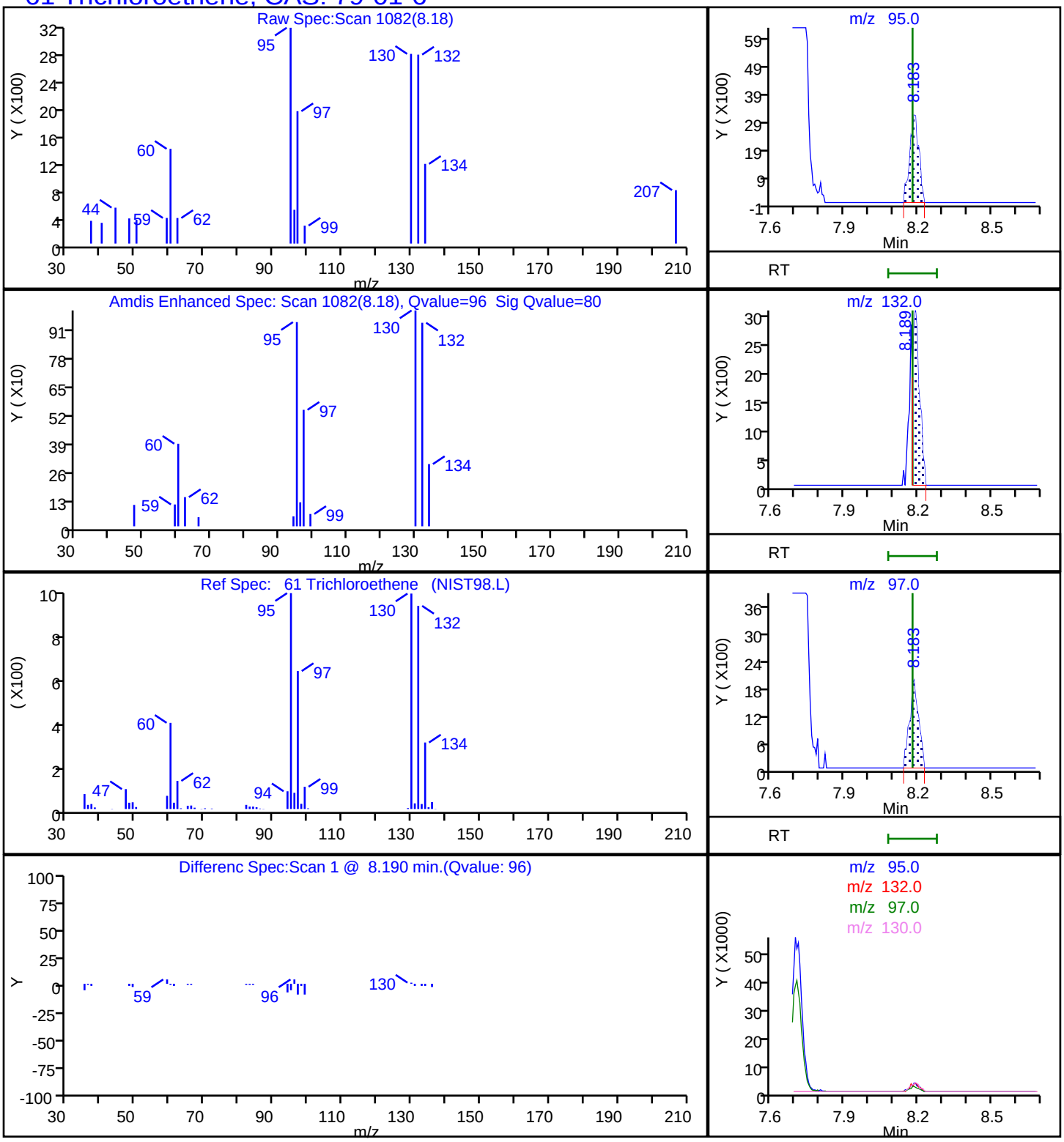
Operator ID: KNK41612 ALS Bottle#: 15 Worklist Smp#: 16

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D

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

61 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

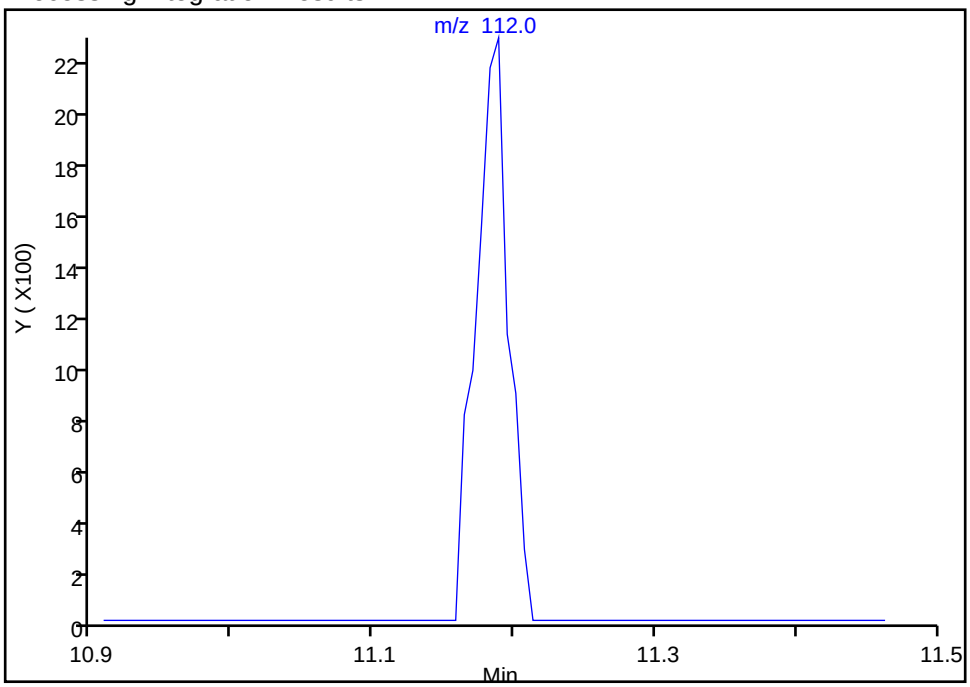
Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X15.D				
Injection Date:	27-Mar-2022 13:48:30	Instrument ID:	19930		
Lims ID:	410-77437-A-4	Lab Sample ID:	410-77437-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

90 Chlorobenzene, CAS: 108-90-7

Signal: 1

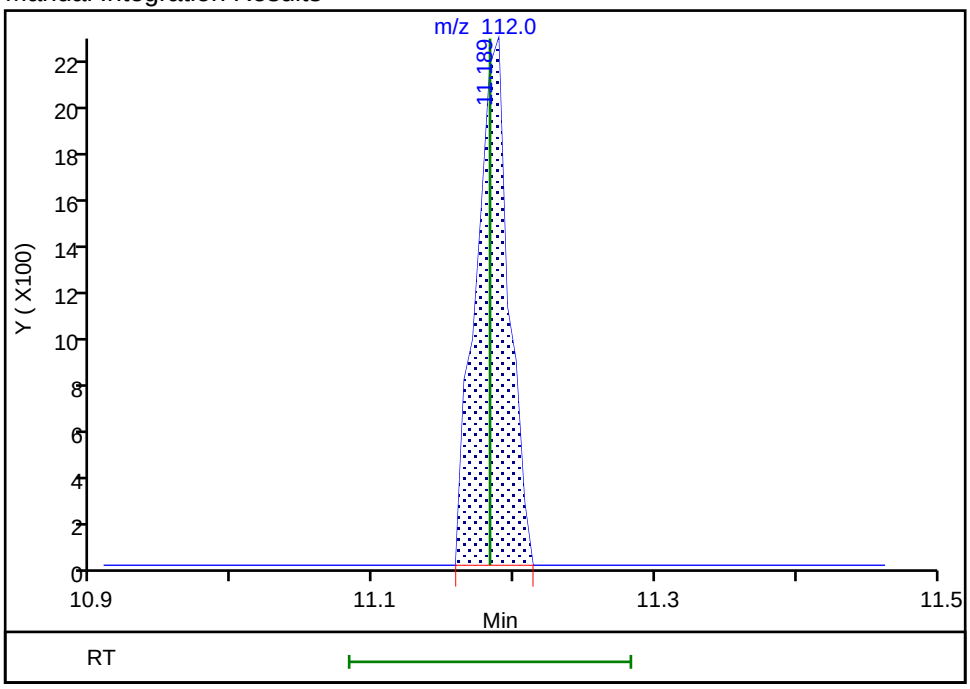
Not Detected
Expected RT: 11.18

Processing Integration Results



Manual Integration Results

RT: 11.19
Area: 3560
Amount: 0.022020
Amount Units: ug/l



Reviewer: kaewrungrueangp, 28-Mar-2022 09:50:35
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

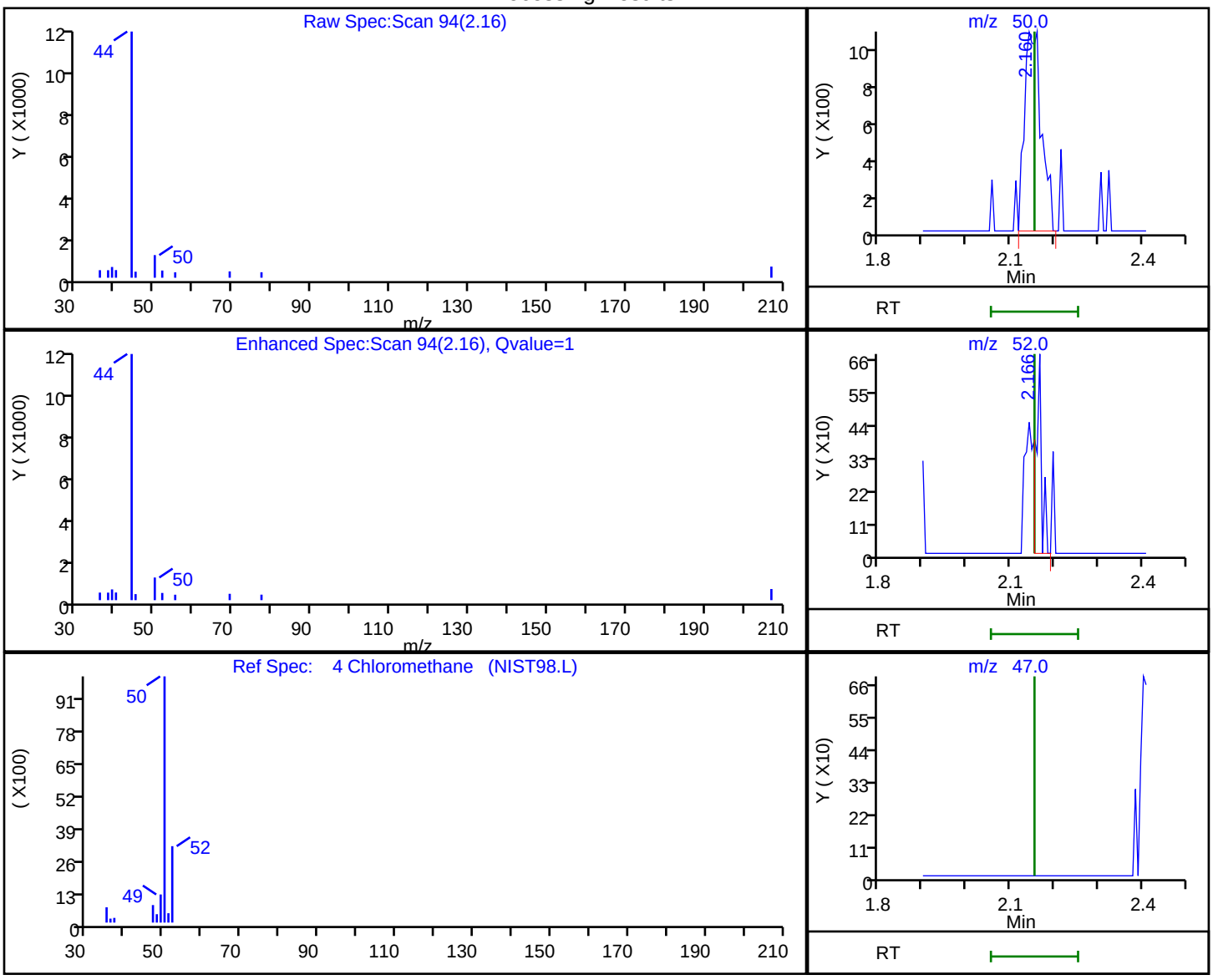
User Disabled Compound Report

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X15.D				
Injection Date:	27-Mar-2022 13:48:30	Instrument ID:	19930		
Lims ID:	410-77437-A-4	Lab Sample ID:	410-77437-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

4 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
2.16	50.00	2896	0.042336
2.17	52.00	606	
2.15	47.00	0	

Reviewer: kaewrungrueangp, 28-Mar-2022 09:49:06

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

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

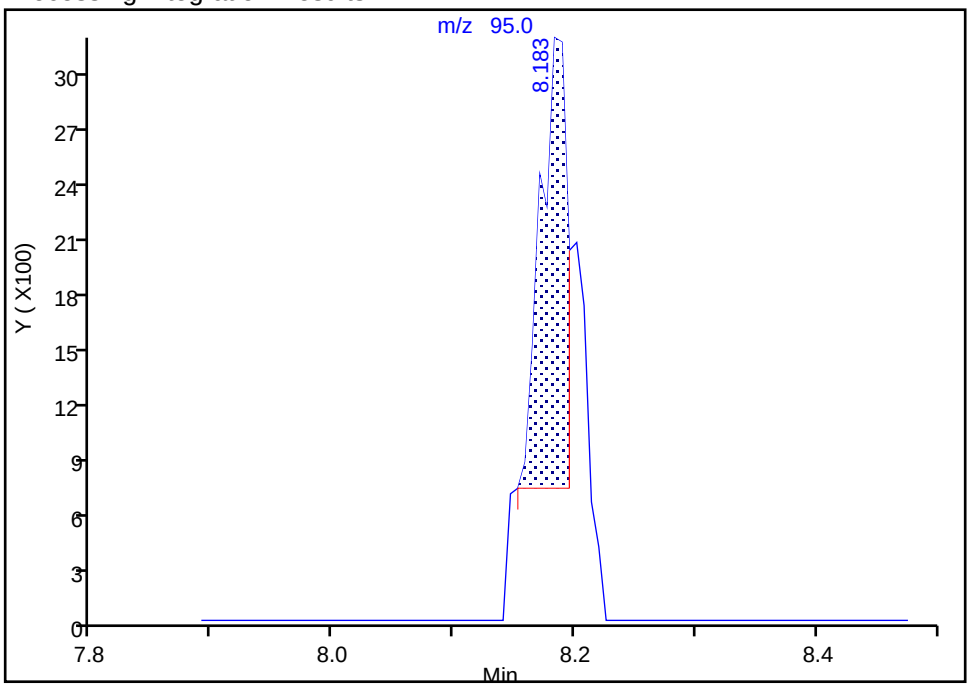
Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X15.D				
Injection Date:	27-Mar-2022 13:48:30	Instrument ID:	19930		
Lims ID:	410-77437-A-4	Lab Sample ID:	410-77437-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6

Signal: 1

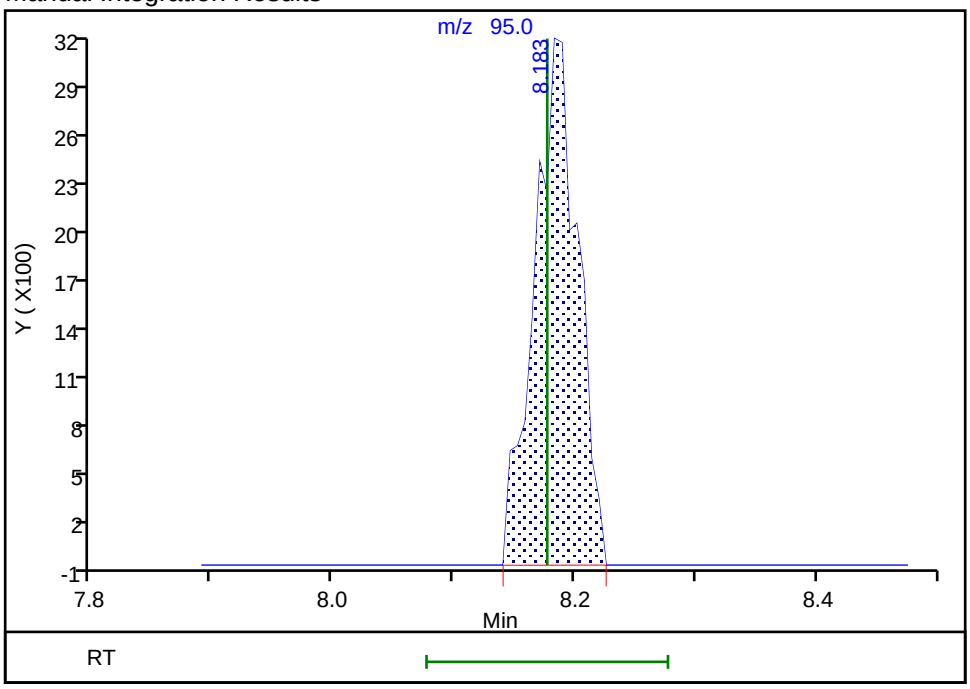
Processing Integration Results

RT: 8.18
Area: 3722
Amount: 0.061819
Amount Units: ug/l



Manual Integration Results

RT: 8.18
Area: 7790
Amount: 0.129385
Amount Units: ug/l



Reviewer: kaewrungrueangp, 28-Mar-2022 09:50:10

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 410-77437-5

Matrix: Water Lab File ID: IM27X16.D

Analysis Method: 8260D Date Collected: 03/24/2022 09:20

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 14:09

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.7	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.11	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.42	J	0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.13	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 410-77437-5

Matrix: Water Lab File ID: IM27X16.D

Analysis Method: 8260D Date Collected: 03/24/2022 09:20

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 14:09

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	104		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X16.D
Lims ID: 410-77437-A-5
Client ID: HD-COD-SW-13-0/1-0
Sample Type: Client
Inject. Date: 27-Mar-2022 14:09:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-017
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 09:50:46 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 09:51:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50		2.154				ND	
5 Vinyl chloride	62		2.270				ND	
7 Bromomethane	94		2.605				ND	
8 Chloroethane	64		2.684				ND	
14 1,1-Dichloroethene	96		3.556				ND	
15 Acetone	43	3.580	3.586	-0.006	99	13884	1.71	
19 Carbon disulfide	76		3.855				ND	7
23 Methylene Chloride	84		4.214				ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.245	4.239	0.006	29	149801	50.0	
27 Methyl tert-butyl ether	73		4.623				ND	
28 trans-1,2-Dichloroethene	96		4.641				ND	
31 1,1-Dichloroethane	63		5.300				ND	
36 2-Butanone (MEK)	43		6.080				ND	7
37 cis-1,2-Dichloroethene	96	6.122	6.123	-0.001	71	6415	0.1058	
43 Chlorobromomethane	128		6.458				ND	
45 Chloroform	83	6.598	6.598	0.000	74	3680	0.0376	
$ 46 Dibromofluoromethane (Surr)	113	6.817	6.811	0.006	94	500634	10.4	
47 1,1,1-Trichloroethane	97		6.830				ND	7
50 Carbon tetrachloride	117		7.043				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.262	7.275	-0.013	67	88321	10.3	
54 Benzene	78		7.299				ND	
56 1,2-Dichloroethane	62		7.366				ND	
* 58 Fluorobenzene (IS)	96	7.701	7.702	-0.001	99	1784278	10.0	
61 Trichloroethene	95	8.189	8.177	0.012	91	8076	0.1337	
63 1,2-Dichloropropane	63		8.512				ND	
68 Dichlorobromomethane	83		8.854				ND	
73 cis-1,3-Dichloropropene	75		9.396				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.567				ND	7
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1781608	10.0	
76 Toluene	92	9.786	9.780	0.006	94	6500	0.0472	
78 trans-1,3-Dichloropropene	75		10.036				ND	
80 1,1,2-Trichloroethane	97		10.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166	10.335	10.329	0.006	98	33623	0.4247	
83 2-Hexanone	43		10.451				ND	
85 Chlorodibromomethane	129		10.616				ND	
86 Ethylene Dibromide	107		10.725				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	83	1459310	10.0	
90 Chlorobenzene	112		11.183				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.268				ND	
92 Ethylbenzene	91		11.268				ND	
93 m-Xylene & p-Xylene	106		11.384				ND	7
94 o-Xylene	106		11.713				ND	7
95 Styrene	104		11.725				ND	
96 Bromoform	173		11.884				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	640137	9.29	
101 1,1,2,2-Tetrachloroethane	83		12.256				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	93	872145	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_LLcentISS_00004 Amount Added: 5.00 Units: uL Run Reagent

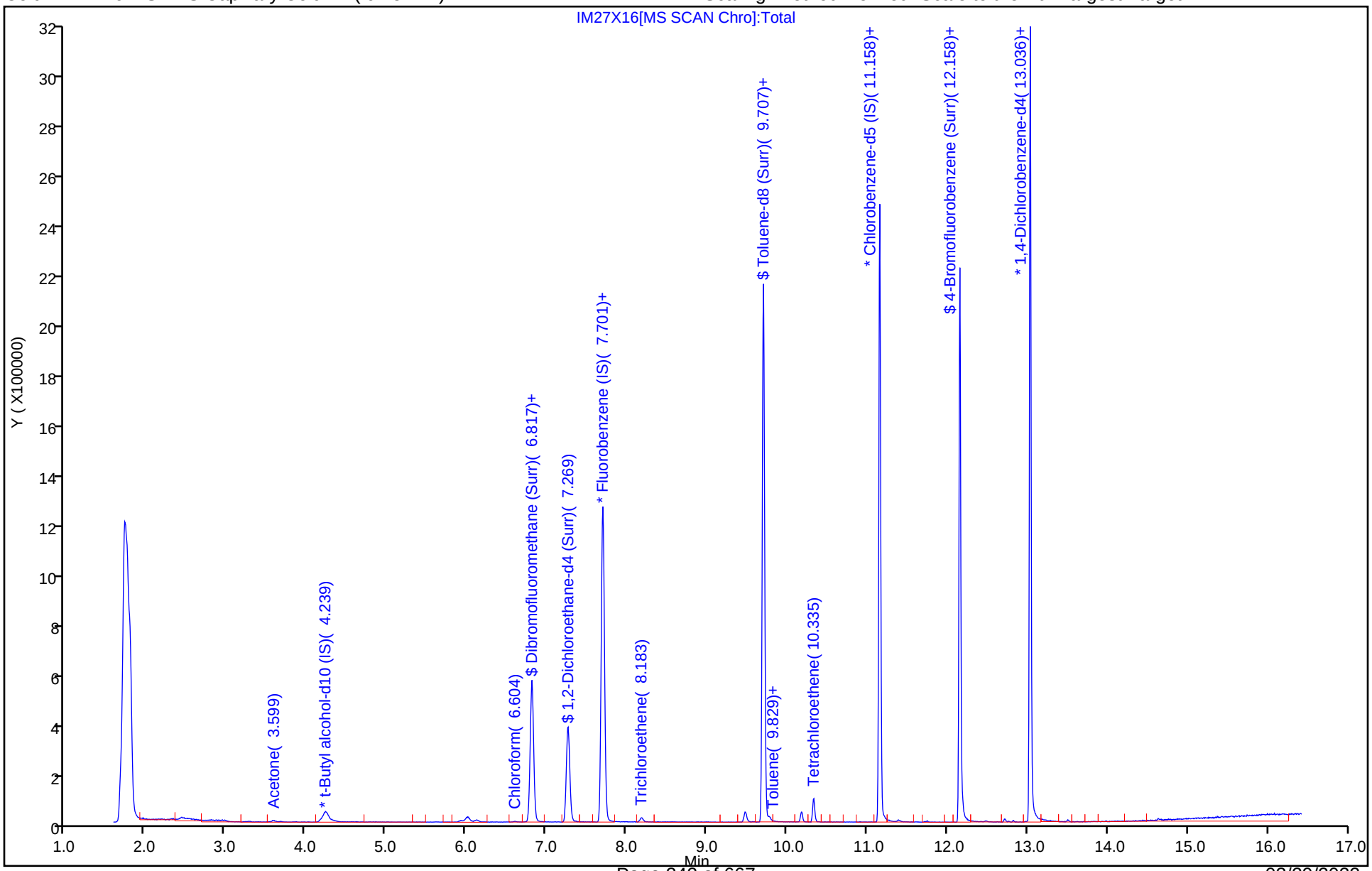
Report Date: 28-Mar-2022 09:51:26 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X16.D

Injection Date:	27-Mar-2022 14:09:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	410-77437-A-5	Lab Sample ID:	410-77437-5	Worklist Smp#:	17
Client ID:	HD-COD-SW-13-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X16.D				
Lims ID:	410-77437-A-5				
Client ID:	HD-COD-SW-13-0/1-0				
Sample Type:	Client				
Inject. Date:	27-Mar-2022 14:09:30	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0053417-017				
Operator ID:	KNK41612	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	28-Mar-2022 09:50:46	Calib Date:	15-Mar-2022 03:22:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1659				

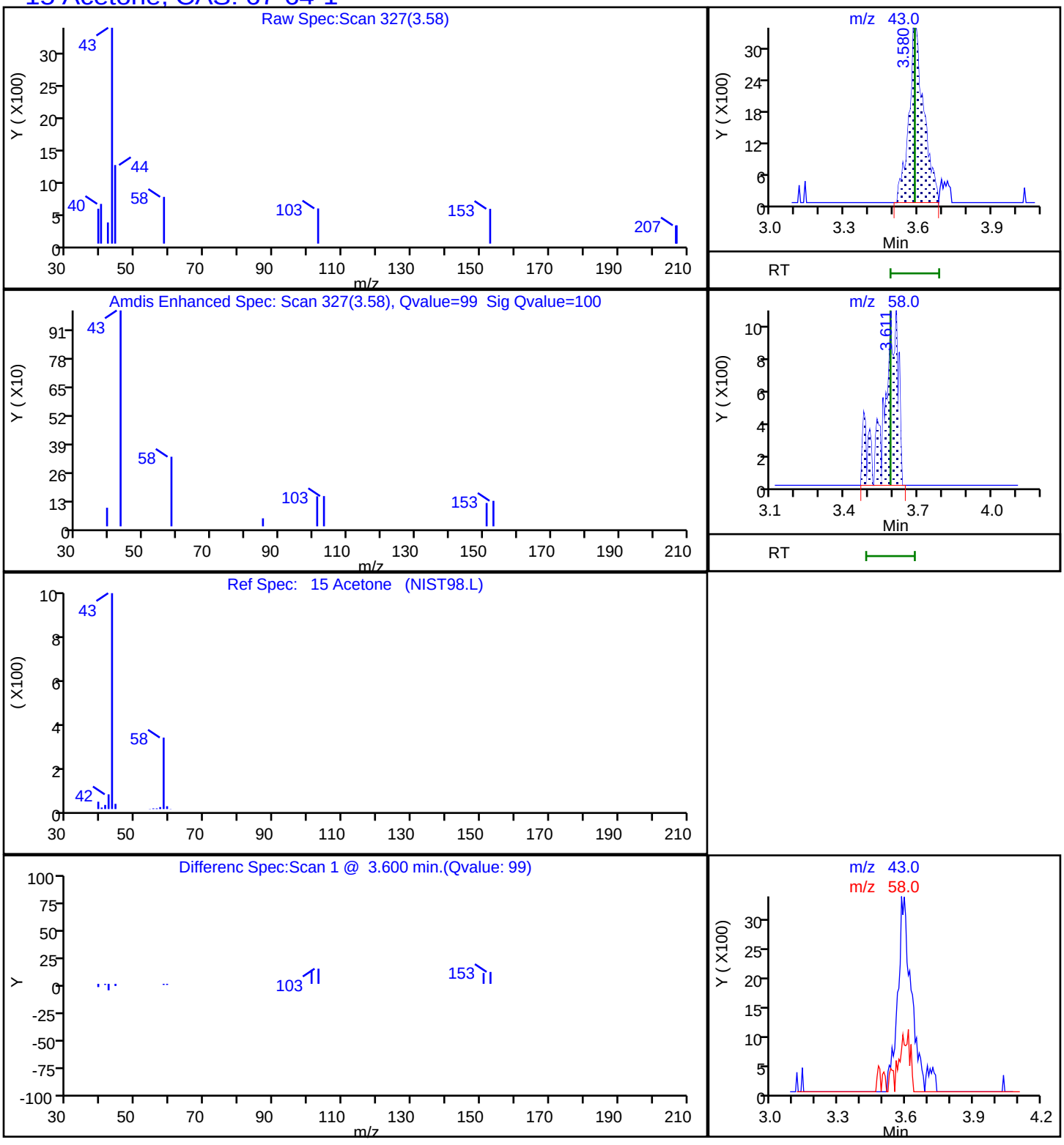
First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 09:51:26

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.4	103.65
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	102.65
$ 75 Toluene-d8 (Surr)	10.0	10.0	100.32
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.29	92.95

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X16.D				
Injection Date:	27-Mar-2022 14:09:30	Instrument ID:	19930		
Lims ID:	410-77437-A-5	Lab Sample ID:	410-77437-5		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

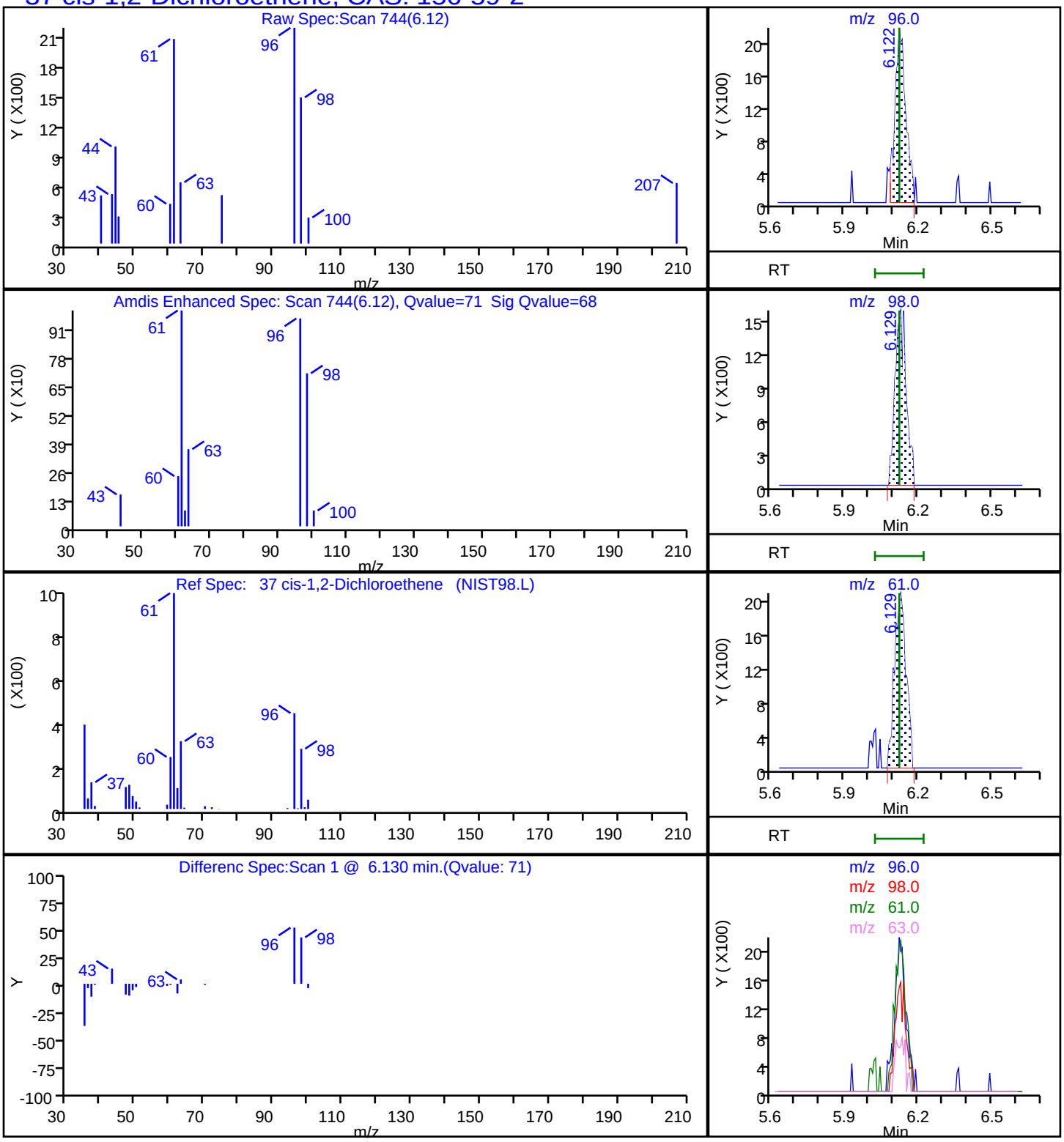
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X16.D				
Injection Date:	27-Mar-2022 14:09:30	Instrument ID:	19930		
Lims ID:	410-77437-A-5	Lab Sample ID:	410-77437-5		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

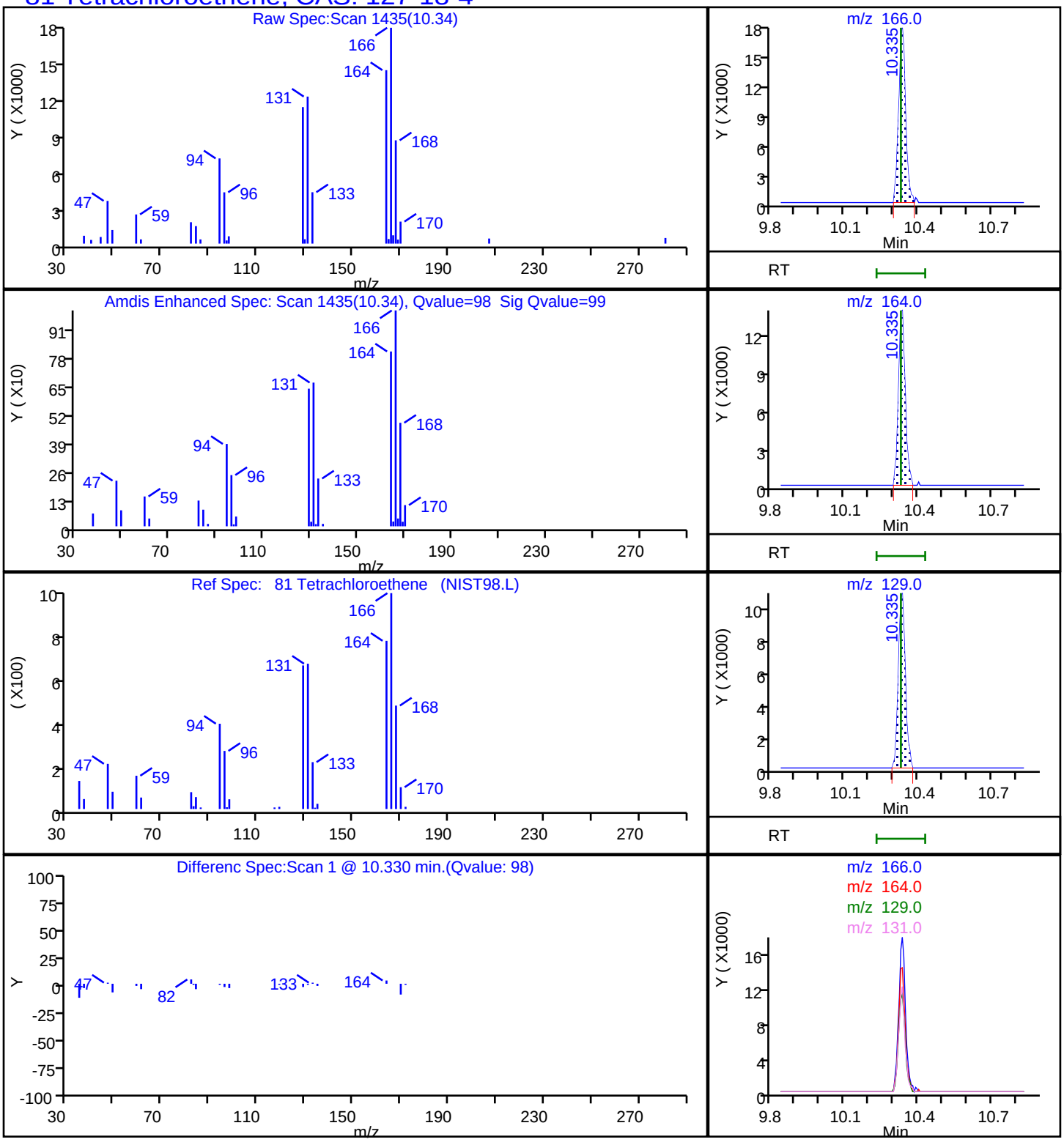
37 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X16.D
Injection Date: 27-Mar-2022 14:09:30 Instrument ID: 19930
Lims ID: 410-77437-A-5 Lab Sample ID: 410-77437-5
Client ID: HD-COD-SW-13-0/1-0
Operator ID: KNK41612 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

81 Tetrachloroethene, CAS: 127-18-4



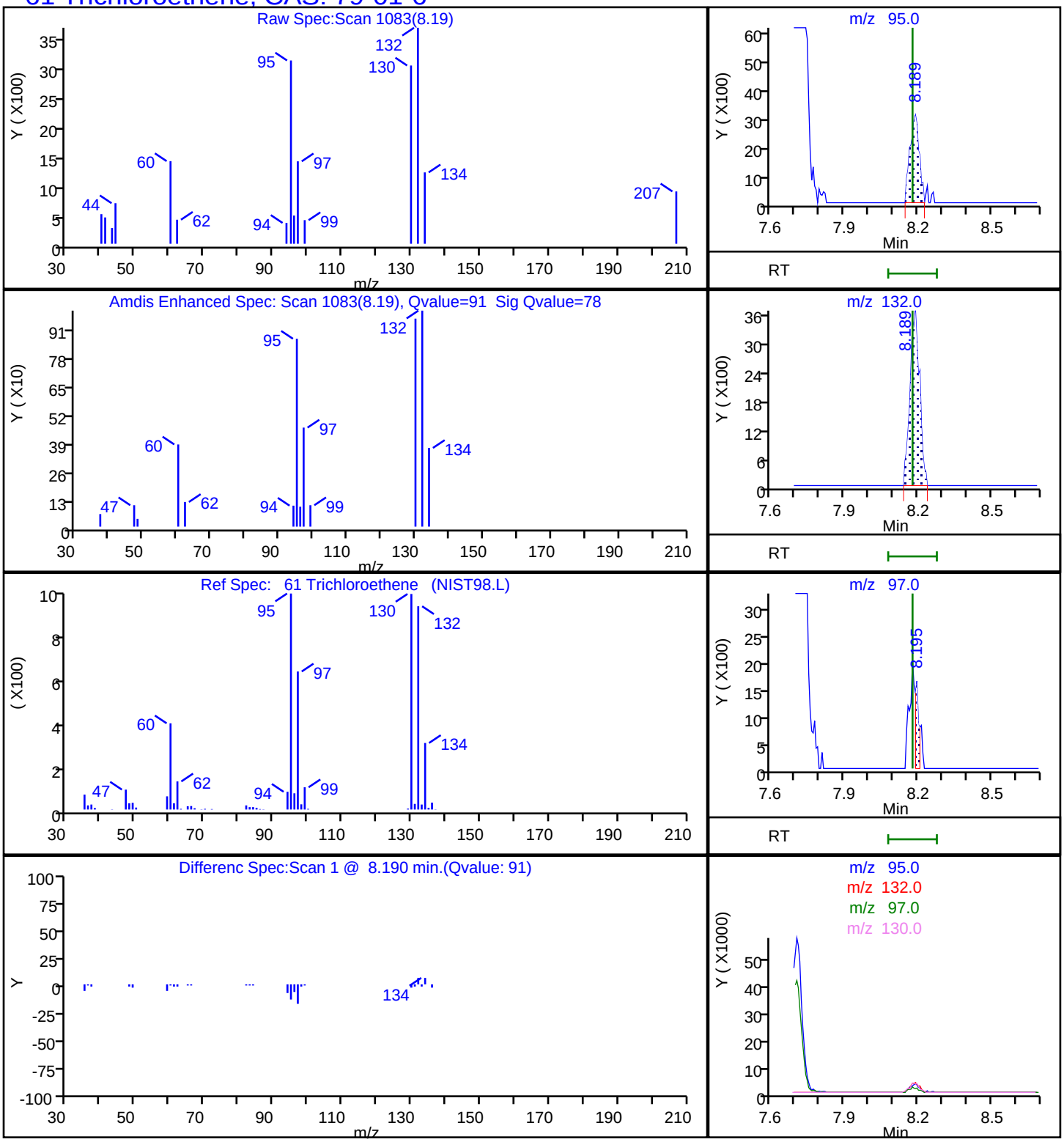
Report Date: 28-Mar-2022 09:51:26 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X16.D

Injection Date:	27-Mar-2022 14:09:30	Instrument ID:	19930		
Lims ID:	410-77437-A-5	Lab Sample ID:	410-77437-5		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 410-77437-6

Matrix: Water Lab File ID: IM27X17.D

Analysis Method: 8260D Date Collected: 03/24/2022 11:30

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 14:31

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 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	0.28	J	0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	0.13	J	0.50	0.070
75-35-4	1,1-Dichloroethene	0.17	J	0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	ND		5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	0.27	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	1.7		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	6.5		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	1.7		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 410-77437-6

Matrix: Water Lab File ID: IM27X17.D

Analysis Method: 8260D Date Collected: 03/24/2022 11:30

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 14:31

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X17.D
Lims ID: 410-77437-A-6
Client ID: HD-COD-SW-15-0/1-0
Sample Type: Client
Inject. Date: 27-Mar-2022 14:31:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-018
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 09:53:34 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 09:53:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85		1.959				ND	
2 Chlorodifluoromethane	51		1.971				ND	
3 Dimethyl ether	45		2.044				ND	
4 Chloromethane	50		2.154				ND	
5 Vinyl chloride	62		2.270				ND	
6 Butadiene	39		2.276				ND	7
7 Bromomethane	94		2.605				ND	
8 Chloroethane	64		2.684				ND	
9 Dichlorofluoromethane	67		2.928				ND	7
10 Trichlorofluoromethane	101		2.934				ND	
11 Ethyl ether	59		3.245				ND	
T 200 Ethanol TIC	45		3.288				ND	7
12 1,2-Dichloro-1,1,2-trifluoroetha	67		3.318				ND	
13 Acrolein	56		3.416				ND	7
14 1,1-Dichloroethene	96	3.544	3.556	-0.012	94	7747	0.1669	
15 Acetone	43	3.592	3.586	0.006	48	4046	0.5015	
16 112TCTFE	101		3.593				ND	
17 Iodomethane	142		3.751				ND	
18 Ethyl bromide	108		3.775				ND	
19 Carbon disulfide	76		3.855				ND	
20 Acetonitrile	41		4.001				ND	
21 Methyl acetate	43		4.007				ND	
22 3-Chloro-1-propene	41		4.031				ND	
23 Methylene Chloride	84		4.214				ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.239	4.239	0.000	23	148721	50.0	
25 2-Methyl-2-propanol	59		4.361				ND	7
26 Acrylonitrile	53		4.556				ND	
27 Methyl tert-butyl ether	73	4.617	4.623	-0.006	61	5893	0.0486	
28 trans-1,2-Dichloroethene	96		4.641				ND	
29 Hexane	57		5.056				ND	
30 Vinyl acetate	43		5.299				ND	
31 1,1-Dichloroethane	63	5.287	5.300	-0.013	94	11353	0.1260	a

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
T 208 Vinyl acetate (TIC)	43		5.336				ND	
32 Isopropyl ether	45		5.361				ND	
33 2-Chloro-1,3-butadiene	53		5.403				ND	
34 Tert-butyl ethyl ether	59		5.885				ND	7
36 2-Butanone (MEK)	43		6.080				ND	
37 cis-1,2-Dichloroethene	96	6.116	6.123	-0.007	77	104112	1.73	
38 2,2-Dichloropropane	77		6.135				ND	
S 35 1,2-Dichloroethene, Total	100				0		1.73	
39 Ethyl acetate	43		6.165				ND	
40 Propionitrile	54		6.171				ND	
41 Methyl acrylate	55		6.220				ND	
42 Methacrylonitrile	67		6.385				ND	
43 Chlorobromomethane	128		6.458				ND	
44 Tetrahydrofuran	71		6.470				ND	
45 Chloroform	83	6.604	6.598	0.006	93	25753	0.2654	
$ 46 Dibromofluoromethane (Surr)	113	6.811	6.811	0.000	94	493570	10.3	
47 1,1,1-Trichloroethane	97	6.824	6.830	-0.006	37	26666	0.2833	
48 Cyclohexane	56		6.927				ND	
49 1-Chlorobutane	56		7.019				ND	
51 1,1-Dichloropropene	75		7.037				ND	
50 Carbon tetrachloride	117	7.043	7.043	0.000	85	3665	0.0421	
52 Isobutyl alcohol	41		7.183				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.269	7.275	-0.006	67	91197	10.7	
54 Benzene	78		7.299				ND	
56 1,2-Dichloroethane	62		7.366				ND	
55 Isopropyl acetate	43		7.390				ND	
57 Tert-amyl methyl ether	73		7.488				ND	
* 58 Fluorobenzene (IS)	96	7.701	7.702	-0.001	99	1769619	10.0	
59 n-Heptane	43		7.714				ND	
60 n-Butanol	56		8.061				ND	
61 Trichloroethene	95	8.183	8.177	0.006	94	99018	1.65	
62 Methylcyclohexane	83		8.494				ND	
63 1,2-Dichloropropane	63		8.512				ND	
64 Methyl methacrylate	69		8.592				ND	
65 1,4-Dioxane	88		8.604				ND	
66 Dibromomethane	93		8.616				ND	
67 n-Propyl acetate	43		8.677				ND	
68 Dichlorobromomethane	83		8.854				ND	
69 2-Nitropropane	41		9.116				ND	
71 2-Chloroethyl vinyl ether	63		9.219				ND	
70 Chloroacetonitrile	75		9.226				ND	
72 1-Bromo-2-chloroethane	63		9.244				ND	
73 cis-1,3-Dichloropropene	75		9.396				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.567				ND	
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1785383	10.1	
76 Toluene	92	9.786	9.780	0.006	95	4817	0.0351	
T 157 3-Chloro-1,2-propanediol TIC	44		10.000				ND	
T 146 2,3-Dibromo-1-propanol TIC	57		10.000				ND	
T 147 2-Bromoethanol TIC	45		10.000				ND	U
T 156 2,3-Dibromopropene TIC	119		10.000				ND	U
T 149 2-Chloroethanol TIC	44		10.000				ND	U
T 151 Chloroacetaldehyde TIC	50		10.000				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
T 148 Monochloroacetic acid TIC	50		10.000				ND	U
T 154 2-Bromo-3-chloropropene TIC	75		10.000				ND	U
T 153 Epichlorohydrin TIC	57		10.000				ND	U
T 155 Ethylene oxide TIC	44		10.000				ND	
T 152 Vinyl bromide TIC	106		10.000				ND	U
T 150 Epibromohydrin TIC	57		10.000				ND	U
78 trans-1,3-Dichloropropene	75		10.036				ND	
S 77 1,3-Dichloropropene, Total	100		10.060				ND	7
79 Ethyl methacrylate	69		10.097				ND	
80 1,1,2-Trichloroethane	97		10.238				ND	
81 Tetrachloroethene	166	10.329	10.329	0.000	97	514563	6.52	
82 1,3-Dichloropropane	76		10.402				ND	
83 2-Hexanone	43		10.451				ND	
84 n-Butyl acetate	43		10.579				ND	
85 Chlorodibromomethane	129		10.616				ND	
86 Ethylene Dibromide	107		10.725				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	83	1454077	10.0	
88 1-Chlorohexane	91		11.164				ND	7
90 Chlorobenzene	112		11.183				ND	7
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.268				ND	
92 Ethylbenzene	91		11.268				ND	7
93 m-Xylene & p-Xylene	106		11.384				ND	7
94 o-Xylene	106		11.713				ND	
95 Styrene	104		11.725				ND	
96 Bromoform	173		11.884				ND	
97 Isopropylbenzene	105		12.012				ND	
98 cis-1,4-Dichloro-2-butene	88		12.060				ND	
99 Cyclohexanone	55		12.097				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	643148	9.37	
101 1,1,2,2-Tetrachloroethane	83		12.256				ND	
102 Bromobenzene	156		12.274				ND	
103 trans-1,4-Dichloro-2-butene	53		12.280				ND	
104 1,2,3-Trichloropropane	110		12.298				ND	
105 N-Propylbenzene	91		12.341				ND	
106 2-Chlorotoluene	126		12.414				ND	
107 1,3,5-Trimethylbenzene	105		12.475				ND	
108 4-Chlorotoluene	126		12.505				ND	
109 tert-Butylbenzene	134		12.719				ND	
110 Pentachloroethane	167		12.749				ND	
111 1,2,4-Trimethylbenzene	105		12.755				ND	7
112 sec-Butylbenzene	105		12.877				ND	
113 1,3-Dichlorobenzene	146		12.981				ND	7
114 4-Isopropyltoluene	119		12.987				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	92	866075	10.0	
116 1,4-Dichlorobenzene	146		13.054				ND	7
117 1,2,3-Trimethylbenzene	120		13.060				ND	7
118 Benzyl chloride	126		13.127				ND	
119 n-Butylbenzene	92		13.280				ND	
120 1,2-Dichlorobenzene	146		13.310				ND	
121 Hexachloroethane	117		13.542				ND	
122 1,2-Dibromo-3-Chloropropane	155		13.853				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
123 1,3,5-Trichlorobenzene	180		13.981				ND	
124 1,2,4-Trichlorobenzene	180		14.401				ND	
125 Hexachlorobutadiene	225		14.487				ND	
126 Naphthalene	128		14.584				ND	
127 1,2,3-Trichlorobenzene	180		14.725				ND	
128 Dodecane	57		0.000				ND	
202 1,3-Dichloro-2-propanol TIC	1		0.000				ND	
138 1,1-Dichloro-1-fluoroethane	1		0.000				ND	
137 2-Methylnaphthalene	142		0.000				ND	
135 p-Diethylbenzene	1		0.000				ND	
136 2-Chloro-1,1,1-Trifluoroethane	1		0.000				ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	
205 1,1-Dichloroacetone	1		0.000				ND	
T 211 Nitrobenzene TIC	77		0.000				ND	
143 n-Decane	57		0.000				ND	
139 1-Bromo-3-Chloropropane	1		0.000				ND	
210 Hexachloroethane TIC	1		0.000				ND	
T 209 Decamethylcyclopentasiloxane TIC	355		0.000				ND	
203 Propargyl alcohol TIC	1		0.000				ND	
206 Pentachloroethane TIC	1		0.000				ND	
204 Pentane	43		0.000				ND	
T 212 Octamethylcyclotetrasiloxane TIC	281		0.000				ND	
130 Chlorotrifluoroethene	1		0.000				ND	
207 Acetonitrile TIC	1		0.000				ND	
129 Propene oxide	1		0.000				ND	
141 1-Chloropropane	1		0.000				ND	
134 Isopropyl alcohol	45		0.000				ND	
T 201 Isopropyl alcohol TIC	45		0.000				ND	U
133 t-Amyl alcohol	1		0.000				ND	
132 Methylal	1		0.000				ND	
131 tert-Butyl Formate	1		0.000				ND	
142 2-Bromo-1-chloropropane	1		0.000				ND	
140 Ethanol	45		3.269				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

MSV_LLcentISS_00004 Amount Added: 5.00 Units: uL Run Reagent

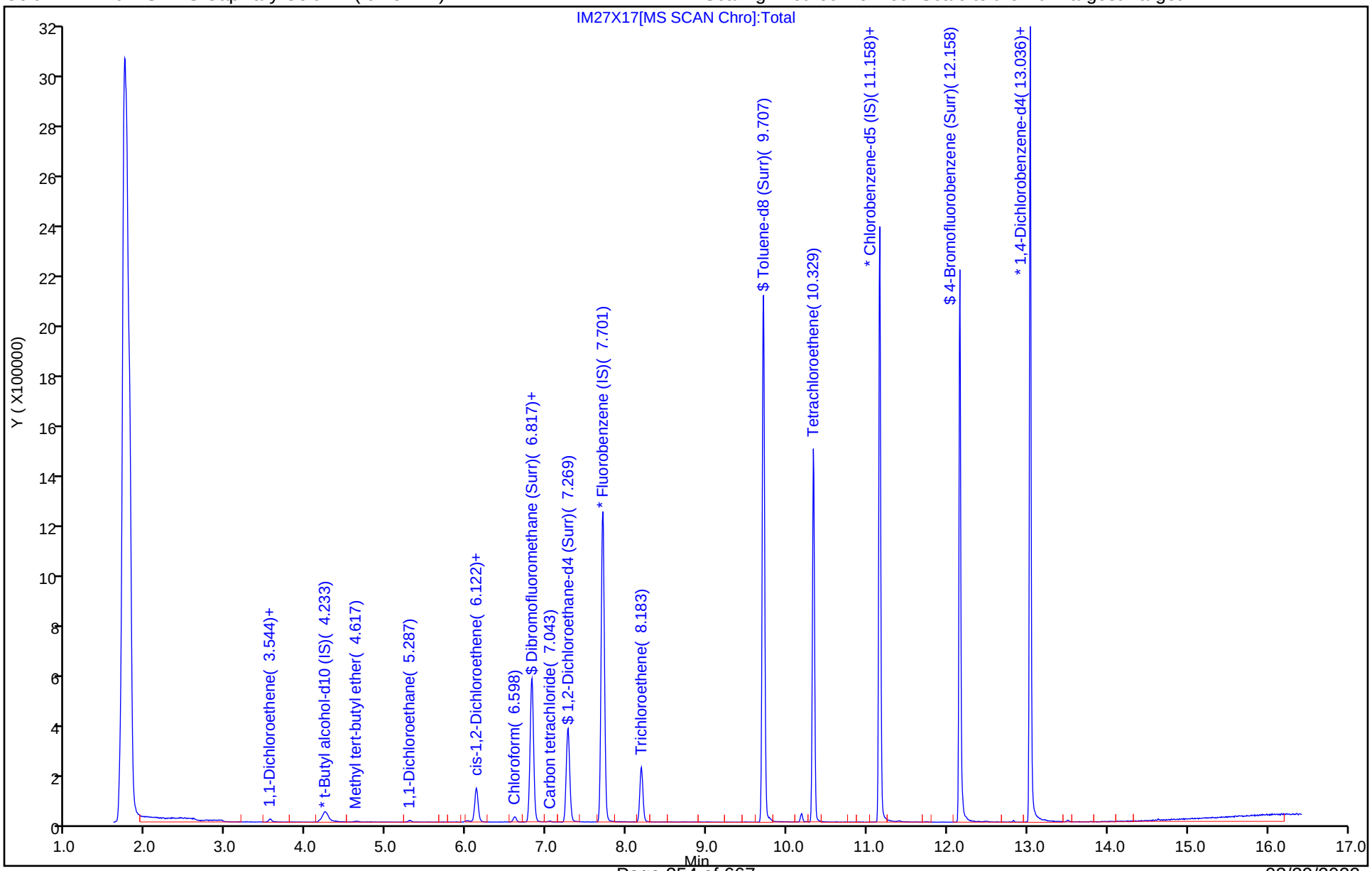
Report Date: 28-Mar-2022 09:53:34 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X17.D

Injection Date:	27-Mar-2022 14:31:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	410-77437-A-6	Lab Sample ID:	410-77437-6	Worklist Smp#:	18
Client ID:	HD-COD-SW-15-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X17.D				
Lims ID:	410-77437-A-6				
Client ID:	HD-COD-SW-15-0/1-0				
Sample Type:	Client				
Inject. Date:	27-Mar-2022 14:31:30	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0053417-018				
Operator ID:	KNK41612	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	28-Mar-2022 09:53:34	Calib Date:	15-Mar-2022 03:22:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1659				

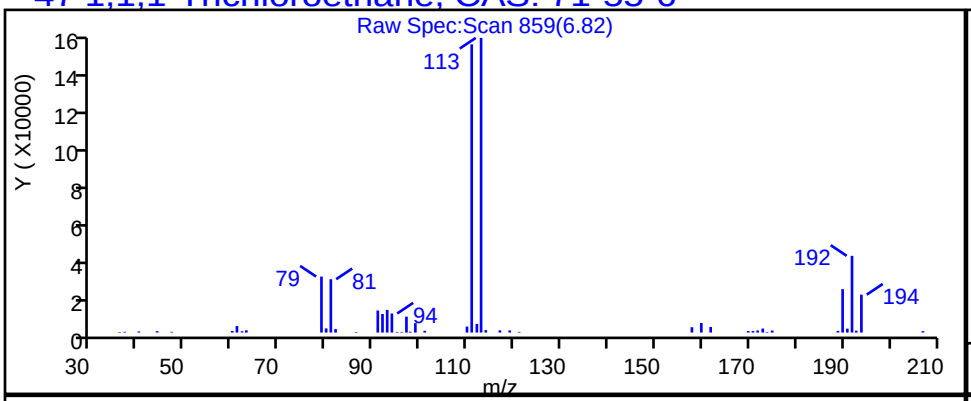
First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 09:53:34

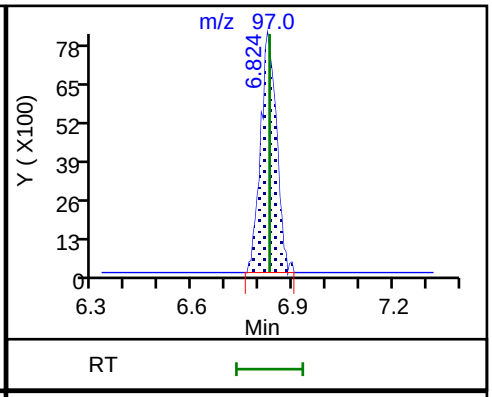
Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.3	103.03
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.7	106.87
$ 75 Toluene-d8 (Surr)	10.0	10.1	100.90
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.37	93.72

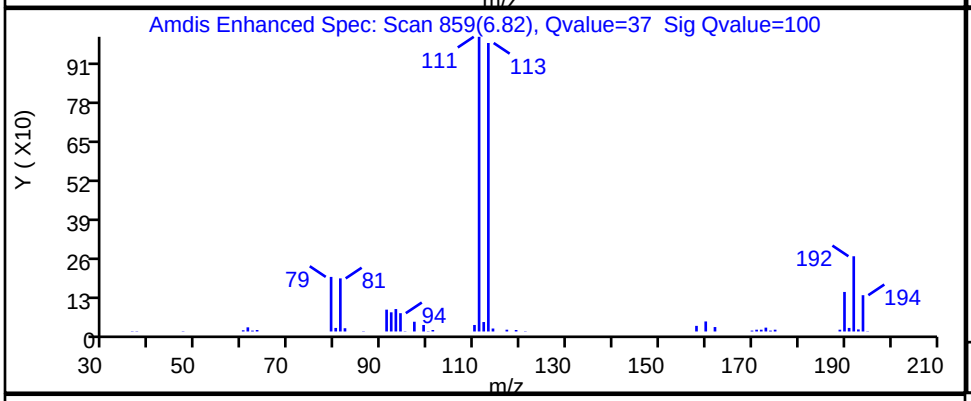
Eurofins Lancaster Laboratories Env, LLC

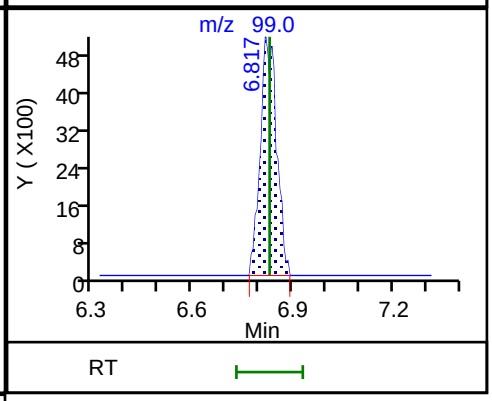
Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X17.D
Injection Date: 27-Mar-2022 14:31:30 Instrument ID: 19930
Lims ID: 410-77437-A-6 Lab Sample ID: 410-77437-6
Client ID: HD-COD-SW-15-0/1-0
Operator ID: KNK41612 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

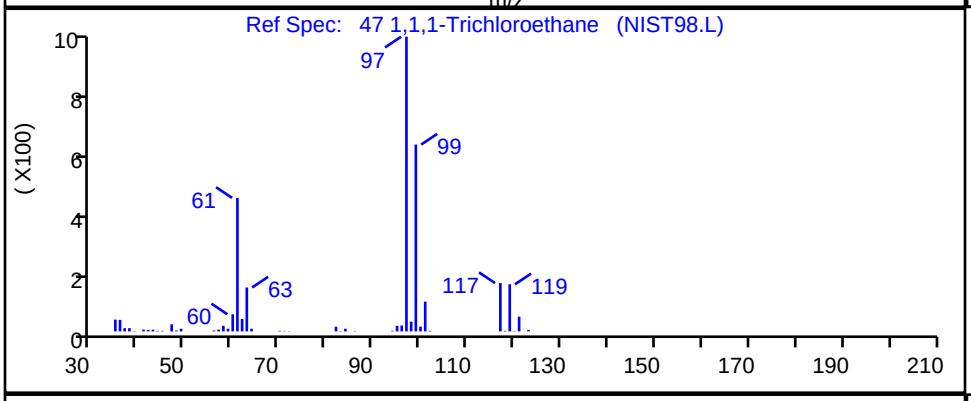
47 1,1,1-Trichloroethane, CAS: 71-55-6

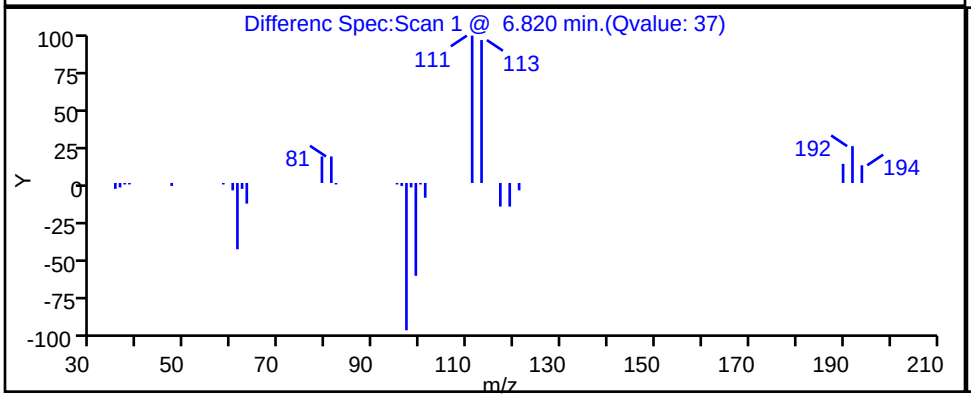


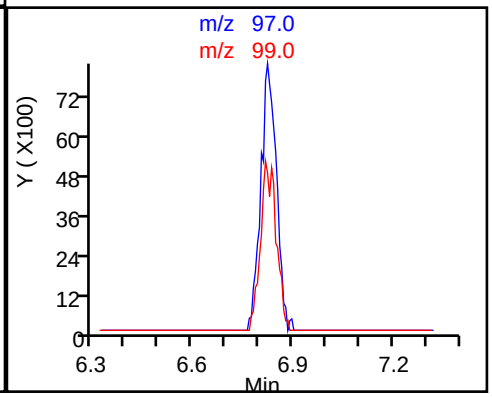








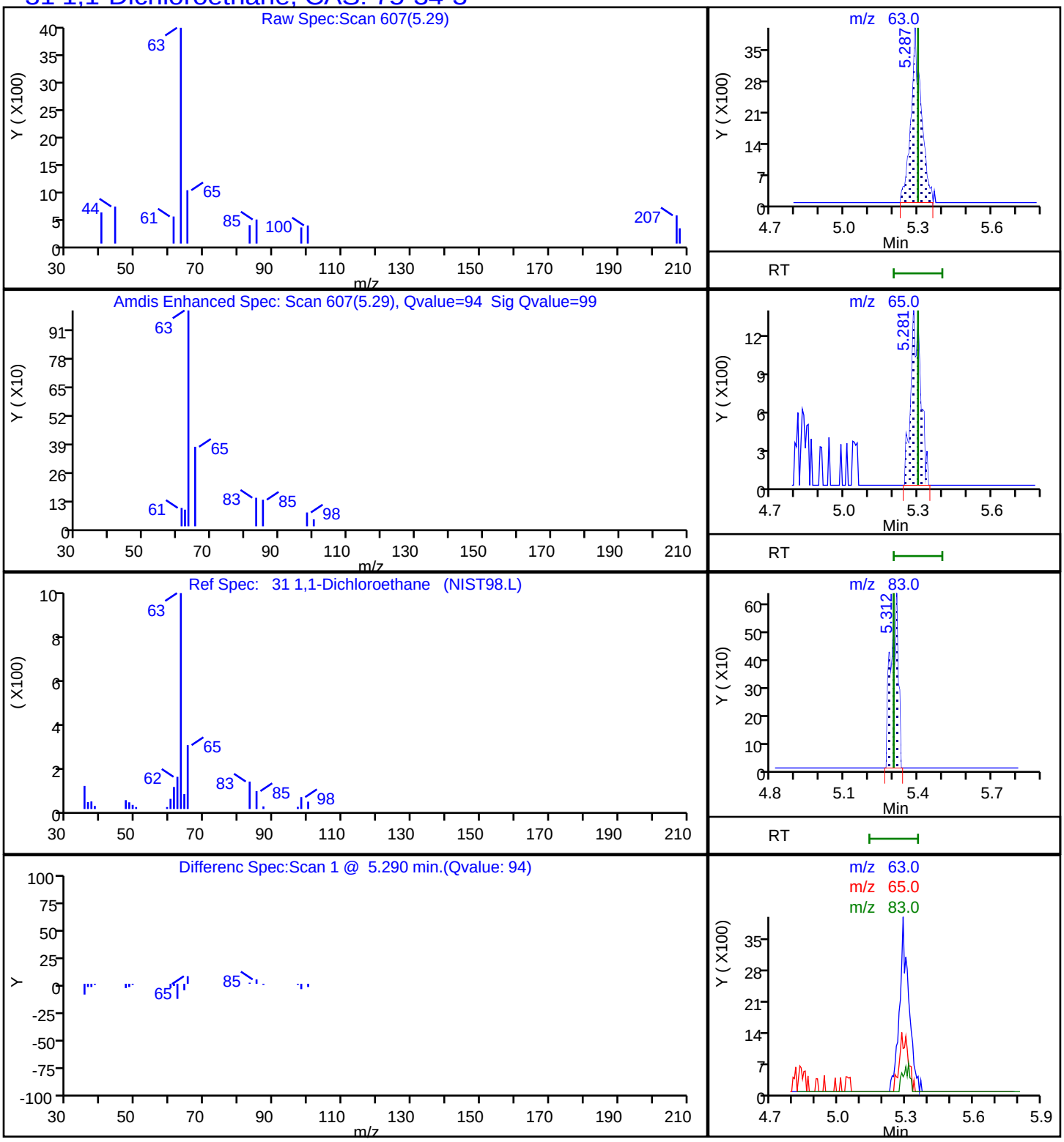




Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X17.D
Injection Date: 27-Mar-2022 14:31:30 Instrument ID: 19930
Lims ID: 410-77437-A-6 Lab Sample ID: 410-77437-6
Client ID: HD-COD-SW-15-0/1-0
Operator ID: KNK41612 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

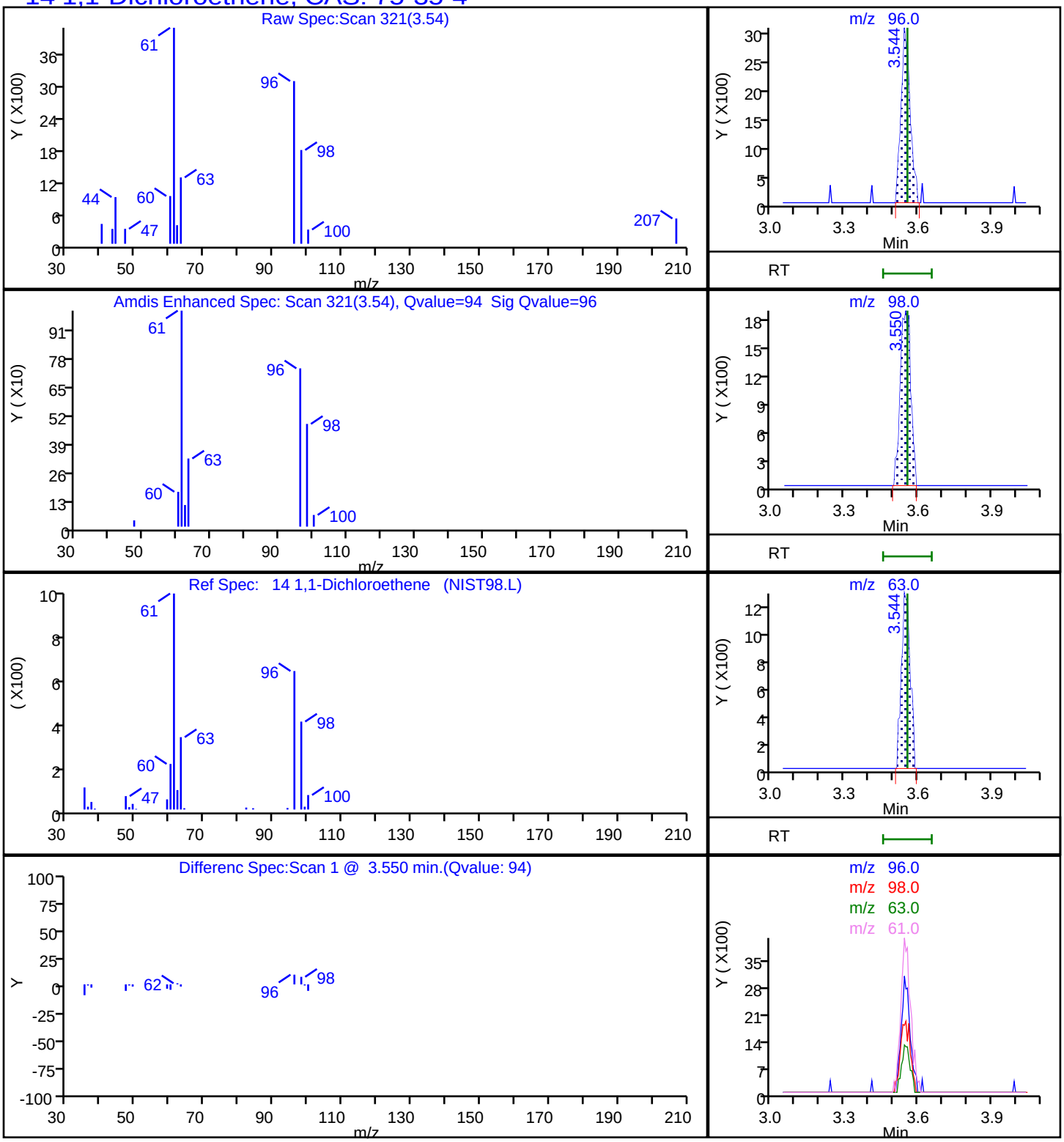
31 1,1-Dichloroethane, CAS: 75-34-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X17.D				
Injection Date:	27-Mar-2022 14:31:30	Instrument ID:	19930		
Lims ID:	410-77437-A-6	Lab Sample ID:	410-77437-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

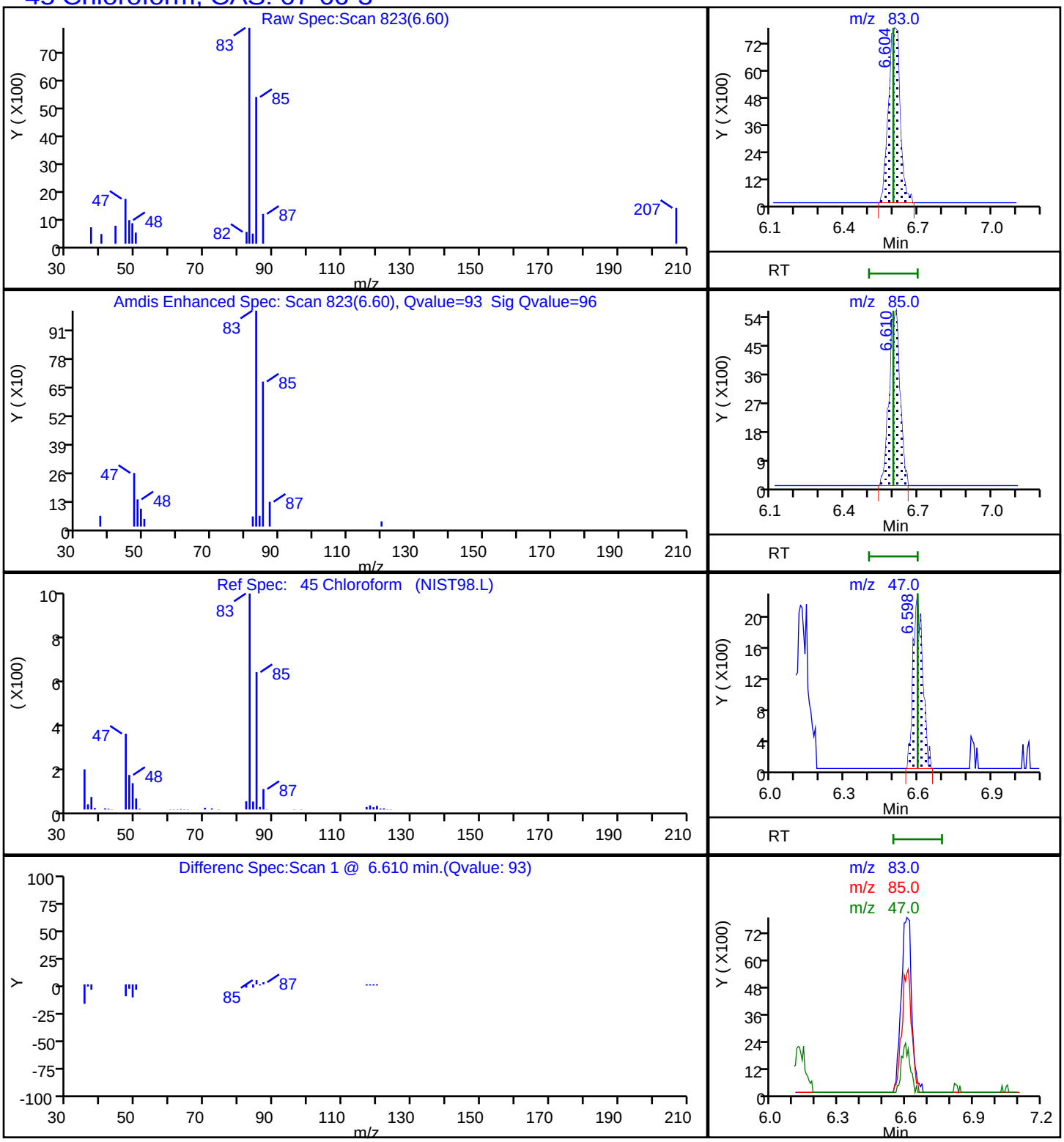
14 1,1-Dichloroethene, CAS: 75-35-4



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X17.D				
Injection Date:	27-Mar-2022 14:31:30	Instrument ID:	19930		
Lims ID:	410-77437-A-6	Lab Sample ID:	410-77437-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

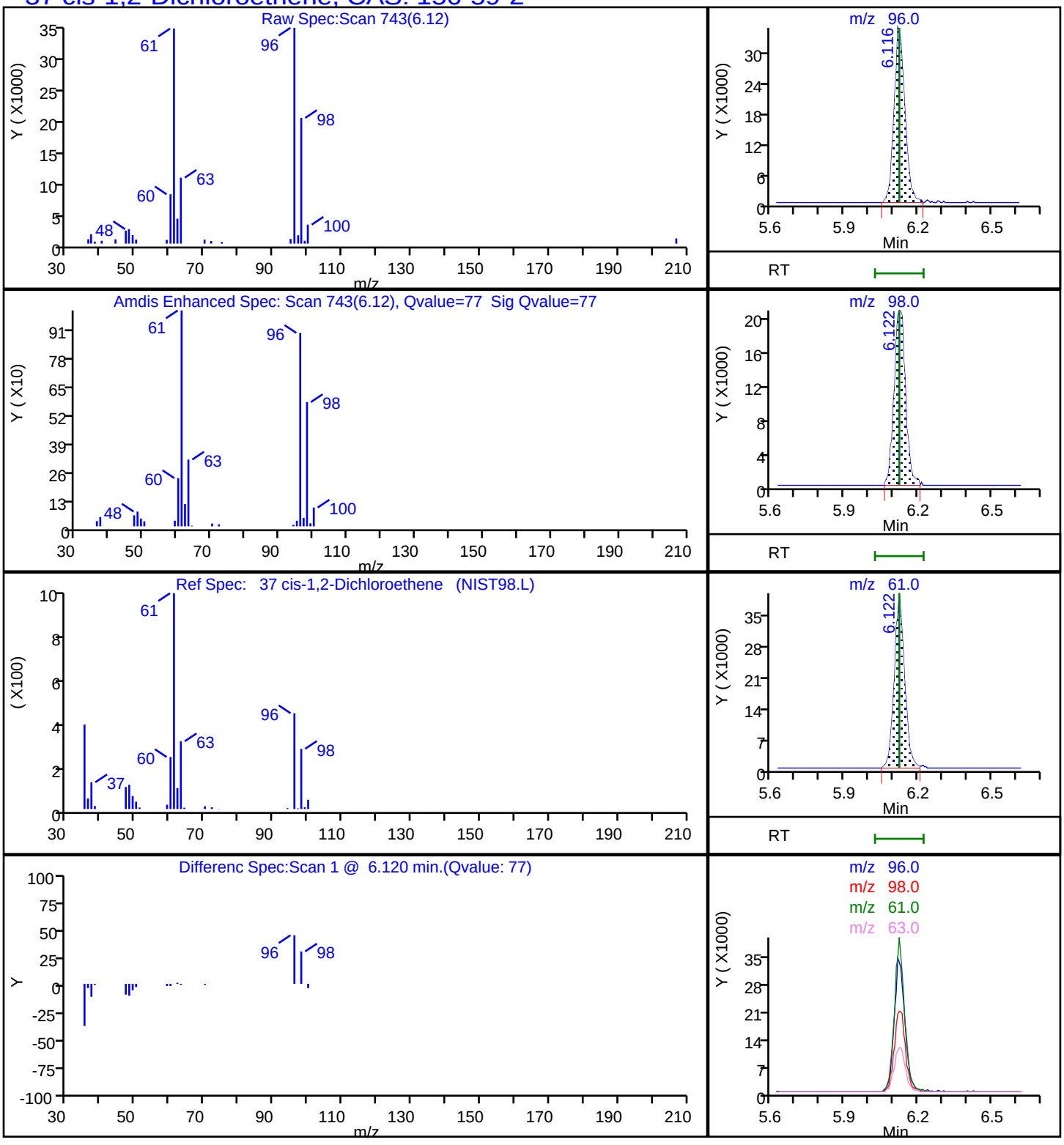
45 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X17.D				
Injection Date:	27-Mar-2022 14:31:30	Instrument ID:	19930		
Lims ID:	410-77437-A-6	Lab Sample ID:	410-77437-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

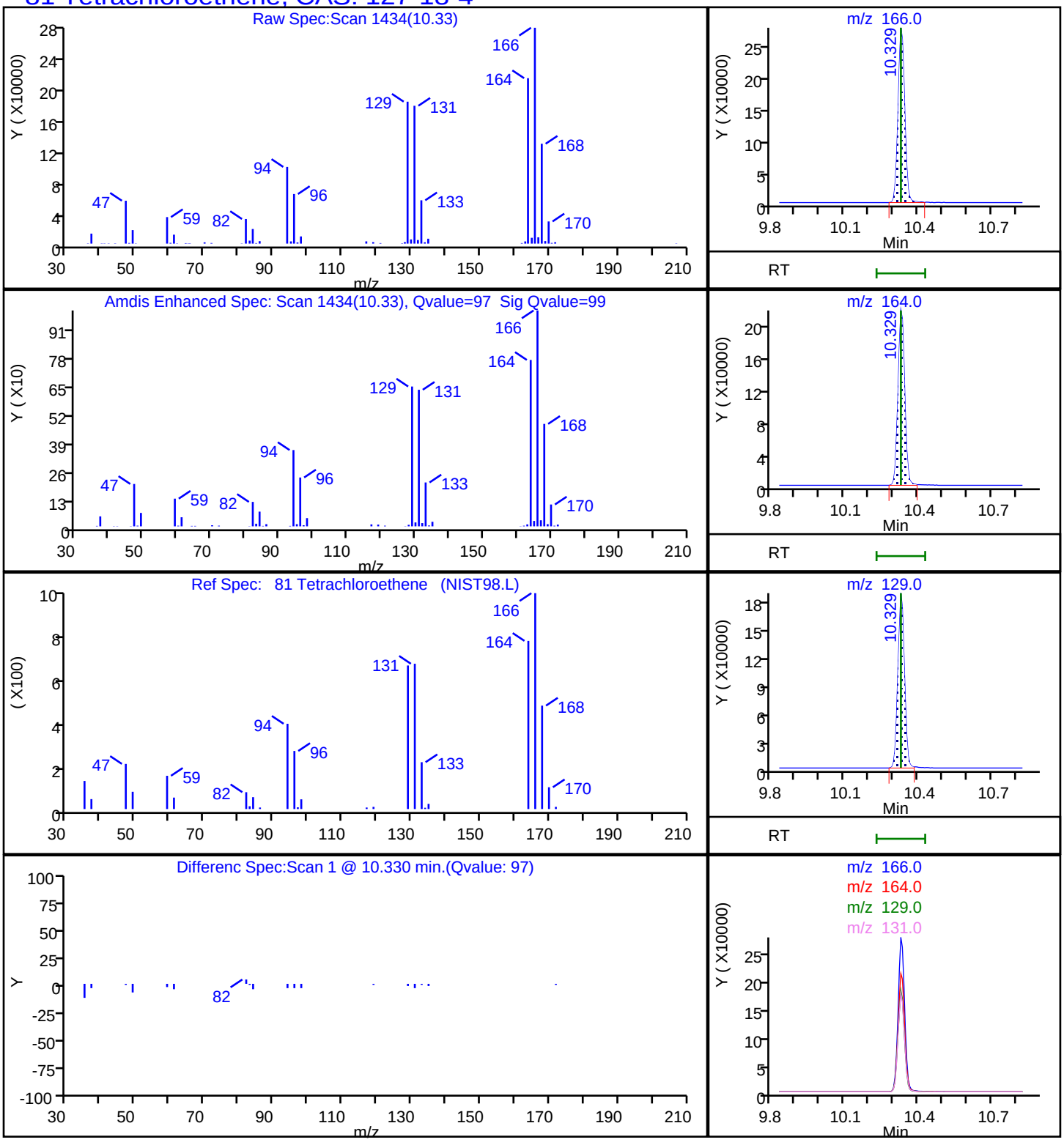
37 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X17.D				
Injection Date:	27-Mar-2022 14:31:30	Instrument ID:	19930		
Lims ID:	410-77437-A-6	Lab Sample ID:	410-77437-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

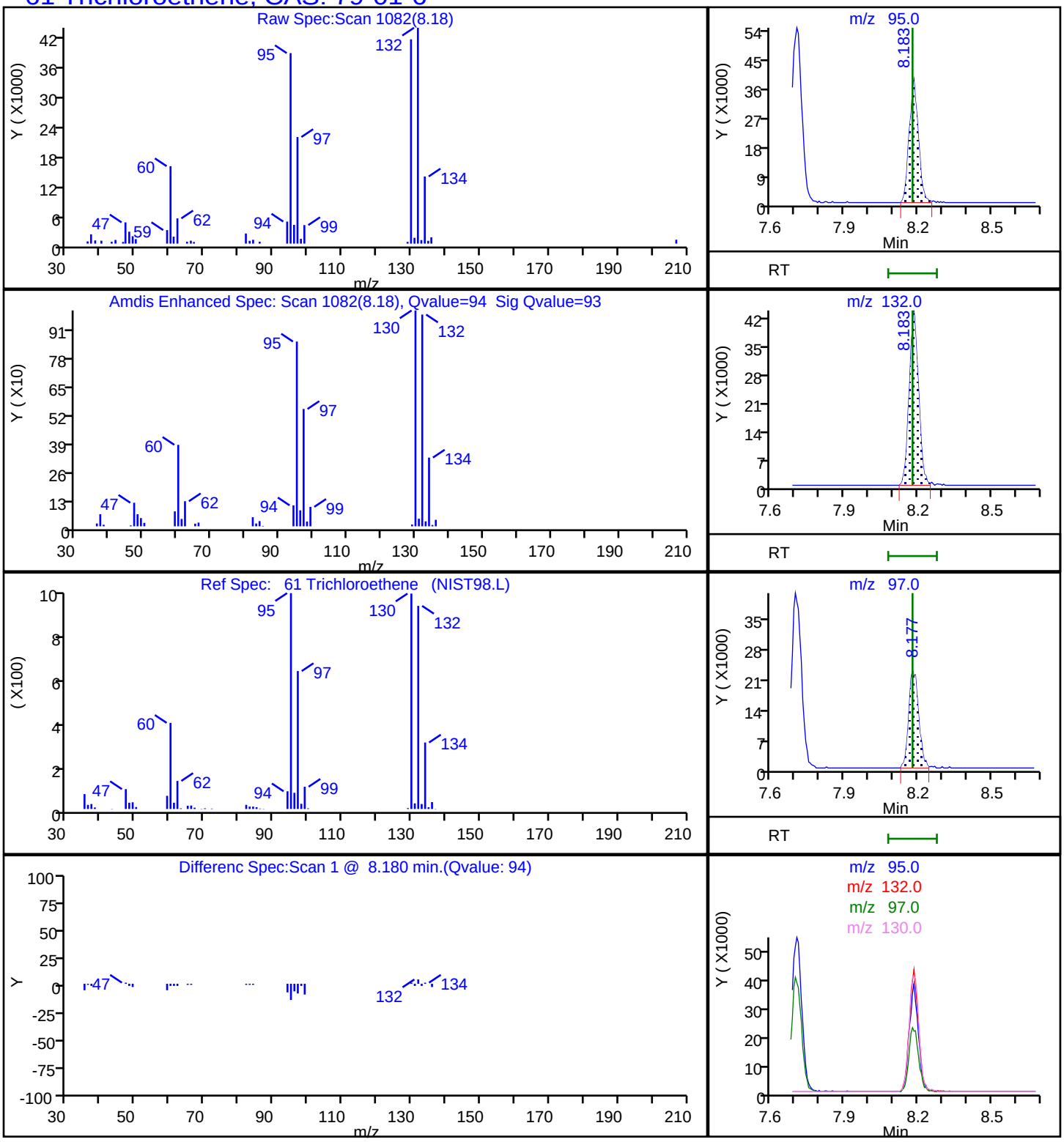
81 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X17.D				
Injection Date:	27-Mar-2022 14:31:30	Instrument ID:	19930		
Lims ID:	410-77437-A-6	Lab Sample ID:	410-77437-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

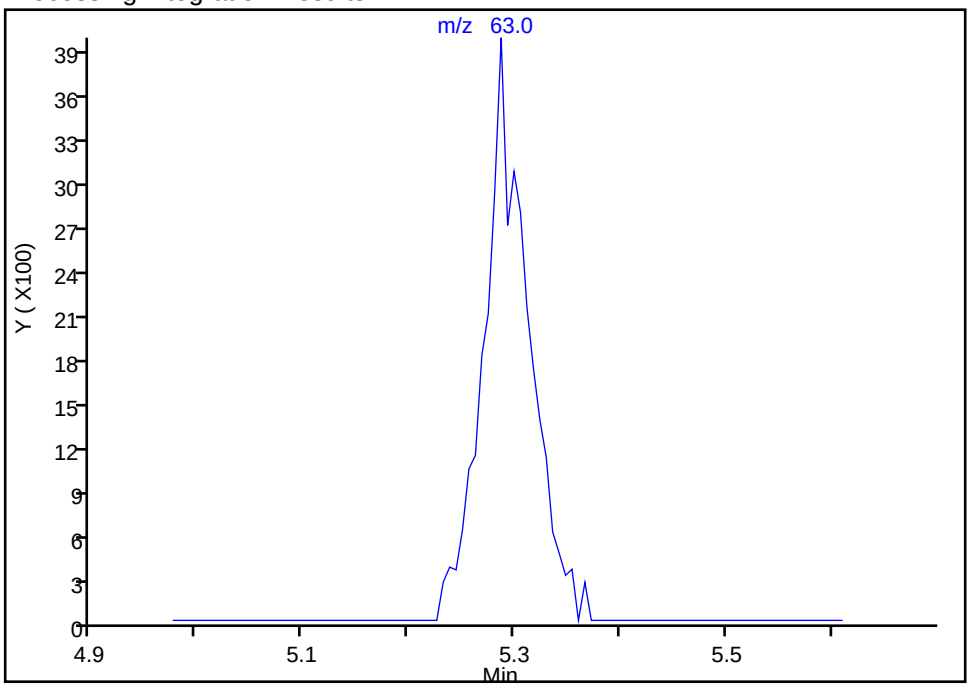
Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X17.D				
Injection Date:	27-Mar-2022 14:31:30	Instrument ID:	19930		
Lims ID:	410-77437-A-6	Lab Sample ID:	410-77437-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

31 1,1-Dichloroethane, CAS: 75-34-3

Signal: 1

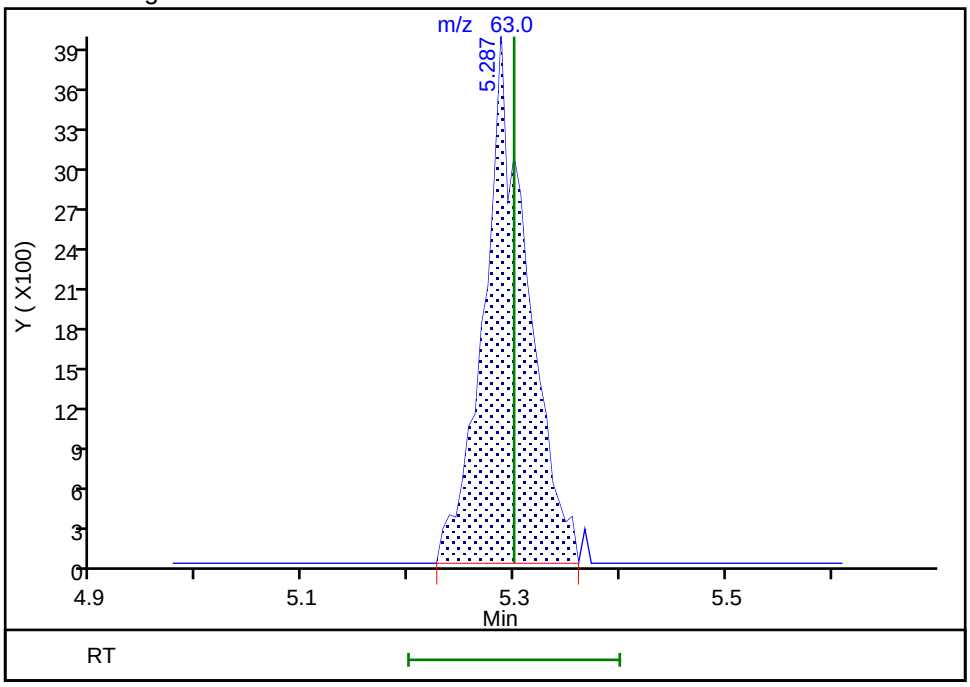
Not Detected
Expected RT: 5.30

Processing Integration Results



Manual Integration Results

RT: 5.29
Area: 11353
Amount: 0.125987
Amount Units: ug/l



Reviewer: kaewrungrueangp, 28-Mar-2022 09:51:59
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 410-77437-7

Matrix: Water Lab File ID: IM27X21.D

Analysis Method: 8260D Date Collected: 03/24/2022 09:40

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 15:56

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 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	0.061	J	0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.8	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.12	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.88		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.14	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 410-77437-7

Matrix: Water Lab File ID: IM27X21.D

Analysis Method: 8260D Date Collected: 03/24/2022 09:40

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 15:56

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	104		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X21.D
Lims ID: 410-77437-A-7
Client ID: HD-COD-SW-16-0/1-0
Sample Type: Client
Inject. Date: 27-Mar-2022 15:56:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-022
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 09:57:38 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 09:57:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50		2.154				ND	7
5 Vinyl chloride	62		2.270				ND	
7 Bromomethane	94		2.605				ND	
8 Chloroethane	64		2.684				ND	
14 1,1-Dichloroethene	96		3.556				ND	
15 Acetone	43	3.592	3.586	0.006	99	13675	1.76	
19 Carbon disulfide	76	3.873	3.855	0.018	55	4066	0.0385	
23 Methylene Chloride	84		4.214				ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.245	4.239	0.006	24	143331	50.0	
27 Methyl tert-butyl ether	73		4.623				ND	
28 trans-1,2-Dichloroethene	96		4.641				ND	
31 1,1-Dichloroethane	63		5.300				ND	
36 2-Butanone (MEK)	43		6.080				ND	7
37 cis-1,2-Dichloroethene	96	6.122	6.123	-0.001	71	7573	0.1241	
43 Chlorobromomethane	128		6.458				ND	
45 Chloroform	83	6.622	6.598	0.024	79	3577	0.0363	
$ 46 Dibromofluoromethane (Surr)	113	6.823	6.811	0.012	94	506841	10.4	
47 1,1,1-Trichloroethane	97	6.842	6.830	0.012	36	5856	0.0613	
50 Carbon tetrachloride	117		7.043				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.269	7.275	-0.006	67	95658	11.1	
54 Benzene	78		7.299				ND	7
56 1,2-Dichloroethane	62		7.366				ND	
* 58 Fluorobenzene (IS)	96	7.707	7.702	0.005	99	1794709	10.0	
61 Trichloroethene	95	8.183	8.177	0.006	89	8780	0.1445	M
63 1,2-Dichloropropane	63		8.512				ND	
68 Dichlorobromomethane	83		8.854				ND	7
73 cis-1,3-Dichloropropene	75		9.396				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.567				ND	7
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1799443	10.0	
76 Toluene	92	9.786	9.780	0.006	95	6329	0.0454	
78 trans-1,3-Dichloropropene	75		10.036				ND	
80 1,1,2-Trichloroethane	97		10.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166	10.335	10.329	0.006	96	70489	0.8787	
83 2-Hexanone	43		10.451				ND	
85 Chlorodibromomethane	129		10.616				ND	
86 Ethylene Dibromide	107		10.725				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	83	1478714	10.0	
90 Chlorobenzene	112		11.183				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.268				ND	
92 Ethylbenzene	91		11.268				ND	7
93 m-Xylene & p-Xylene	106		11.384				ND	7
94 o-Xylene	106		11.713				ND	
95 Styrene	104		11.725				ND	
96 Bromoform	173		11.884				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	651219	9.33	
101 1,1,2,2-Tetrachloroethane	83		12.256				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	92	883447	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSV_LLcentISS_00004 Amount Added: 5.00 Units: uL Run Reagent

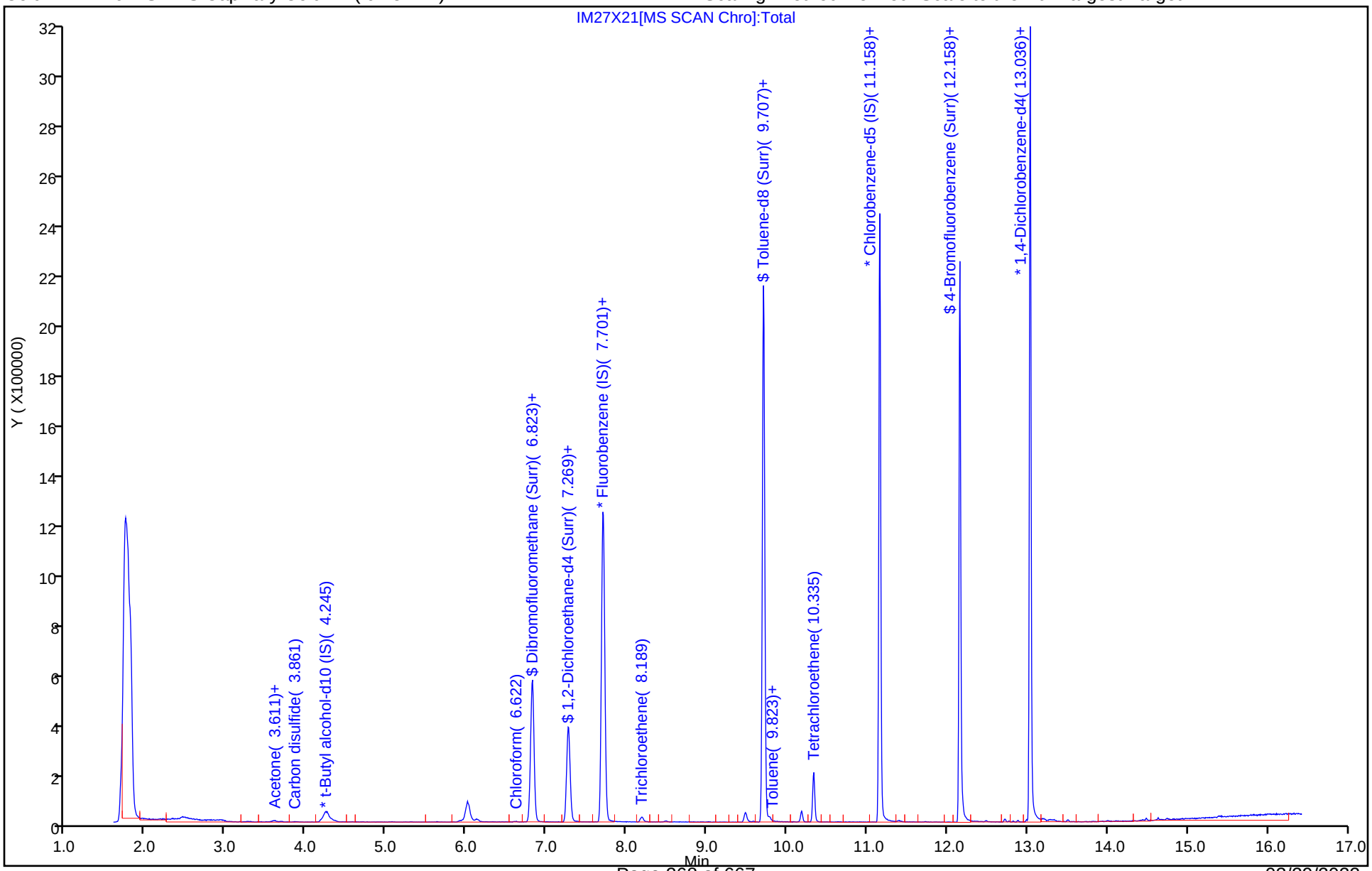
Report Date: 28-Mar-2022 09:57:38 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X21.D

Injection Date:	27-Mar-2022 15:56:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	410-77437-A-7	Lab Sample ID:	410-77437-7	Worklist Smp#:	22
Client ID:	HD-COD-SW-16-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X21.D				
Lims ID:	410-77437-A-7				
Client ID:	HD-COD-SW-16-0/1-0				
Sample Type:	Client				
Inject. Date:	27-Mar-2022 15:56:30	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0053417-022				
Operator ID:	KNK41612	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	28-Mar-2022 09:57:38	Calib Date:	15-Mar-2022 03:22:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1659				

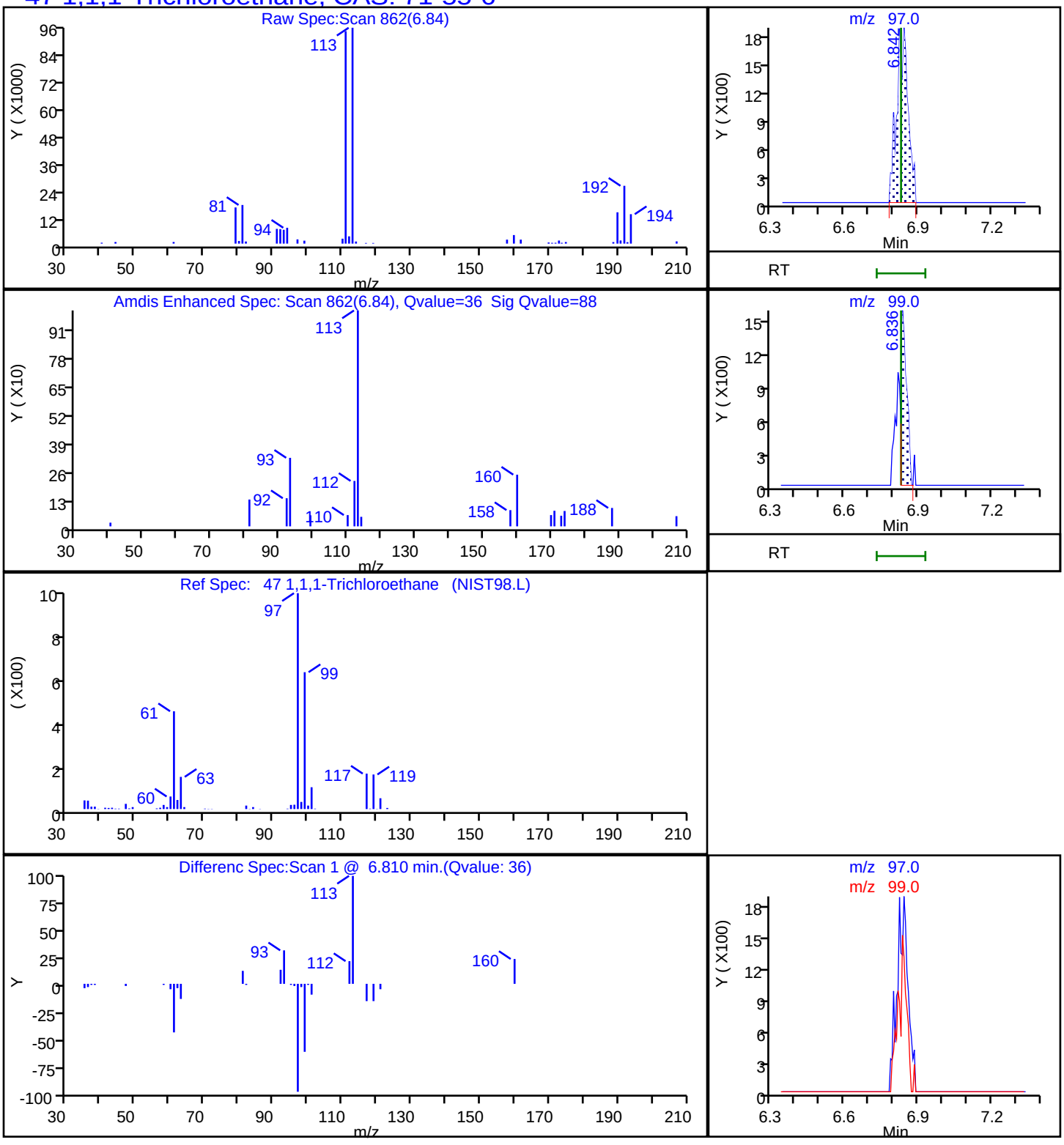
First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 09:57:38

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.4	104.33
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	11.1	110.53
$ 75 Toluene-d8 (Surr)	10.0	10.0	100.00
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.33	93.32

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X21.D
Injection Date: 27-Mar-2022 15:56:30 Instrument ID: 19930
Lims ID: 410-77437-A-7 Lab Sample ID: 410-77437-7
Client ID: HD-COD-SW-16-0/1-0
Operator ID: KNK41612 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

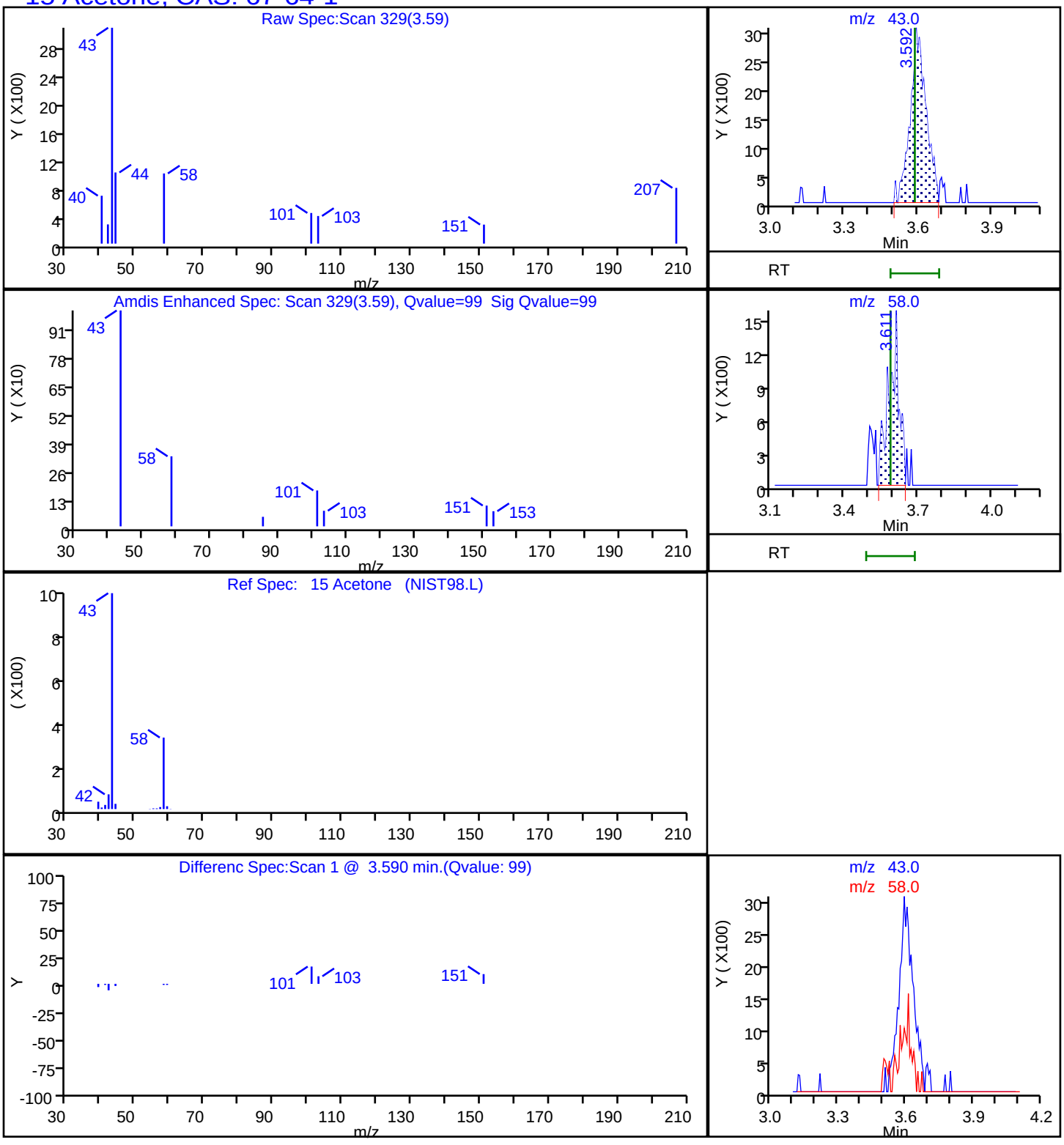
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X21.D				
Injection Date:	27-Mar-2022 15:56:30	Instrument ID:	19930		
Lims ID:	410-77437-A-7	Lab Sample ID:	410-77437-7		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

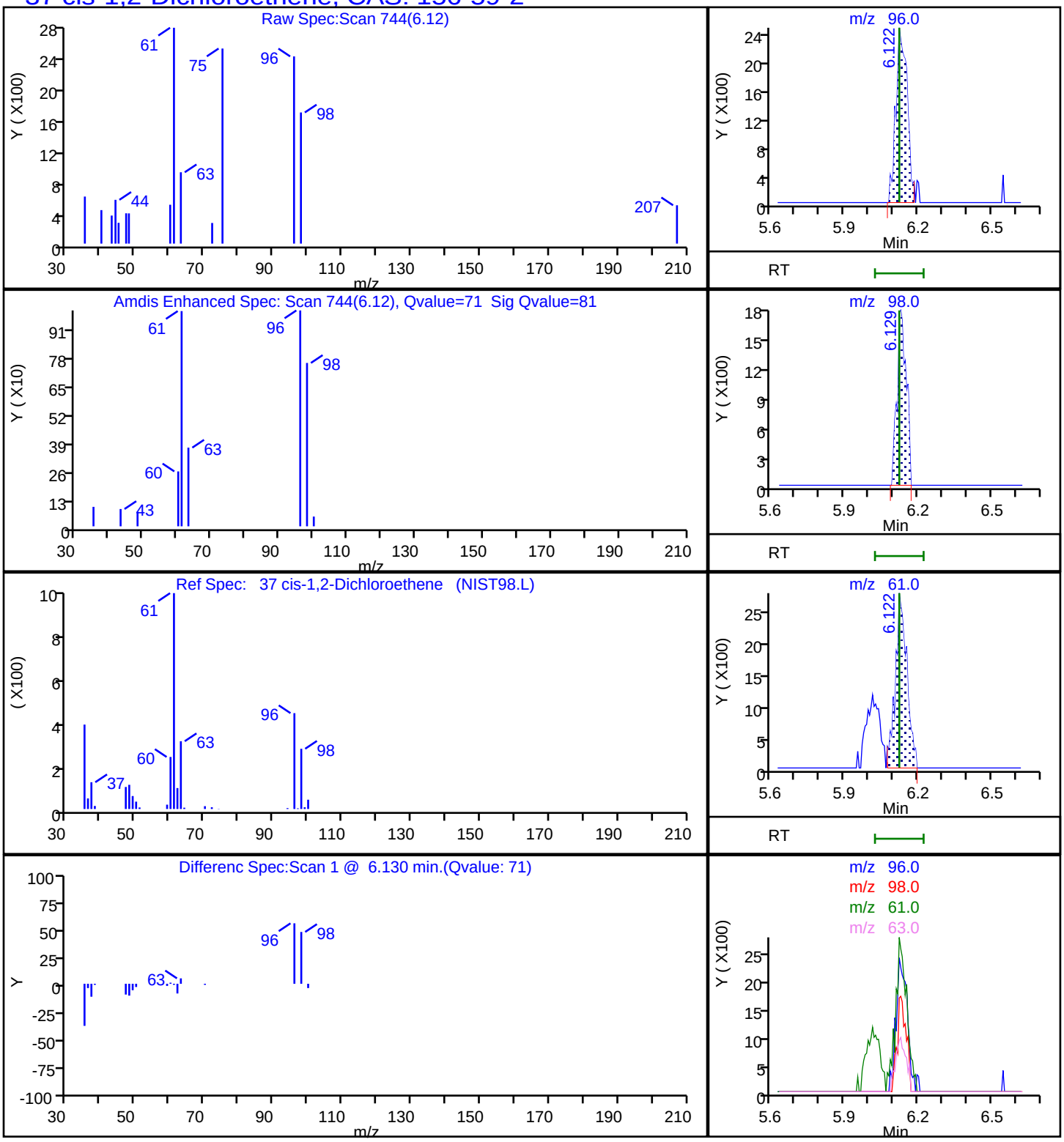
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X21.D				
Injection Date:	27-Mar-2022 15:56:30	Instrument ID:	19930		
Lims ID:	410-77437-A-7	Lab Sample ID:	410-77437-7		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

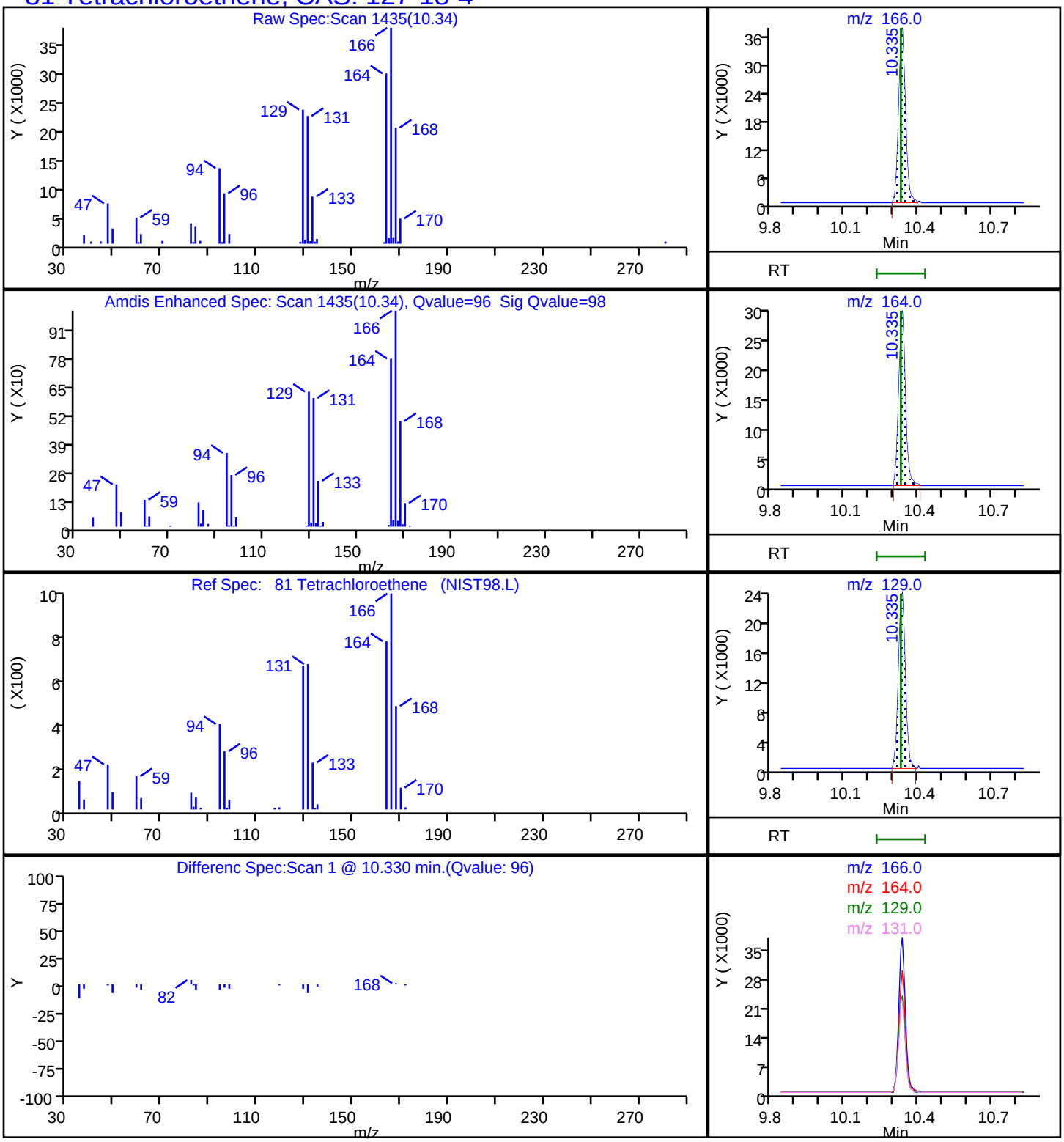
37 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X21.D				
Injection Date:	27-Mar-2022 15:56:30	Instrument ID:	19930		
Lims ID:	410-77437-A-7	Lab Sample ID:	410-77437-7		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

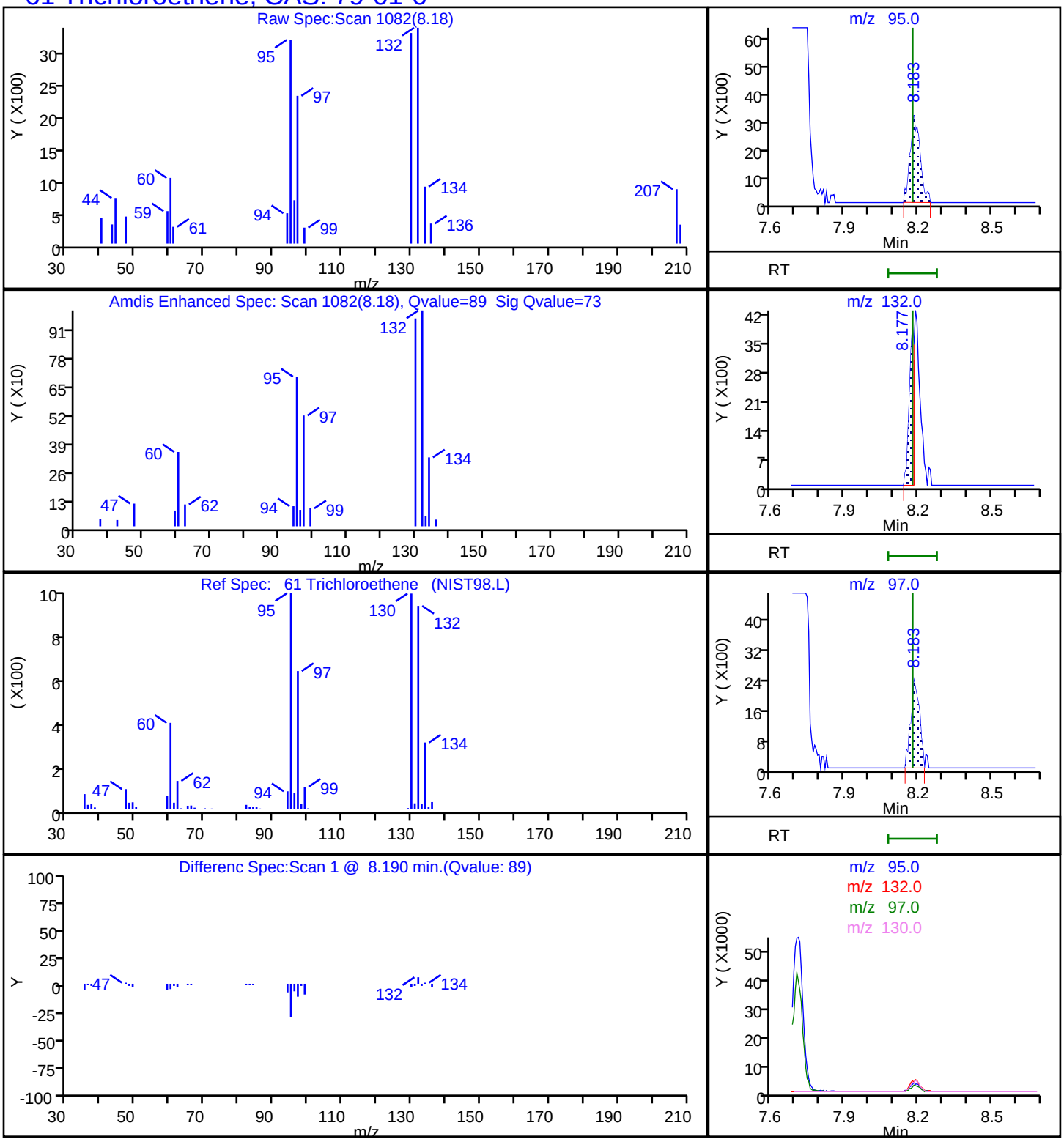
81 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X21.D				
Injection Date:	27-Mar-2022 15:56:30	Instrument ID:	19930		
Lims ID:	410-77437-A-7	Lab Sample ID:	410-77437-7		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

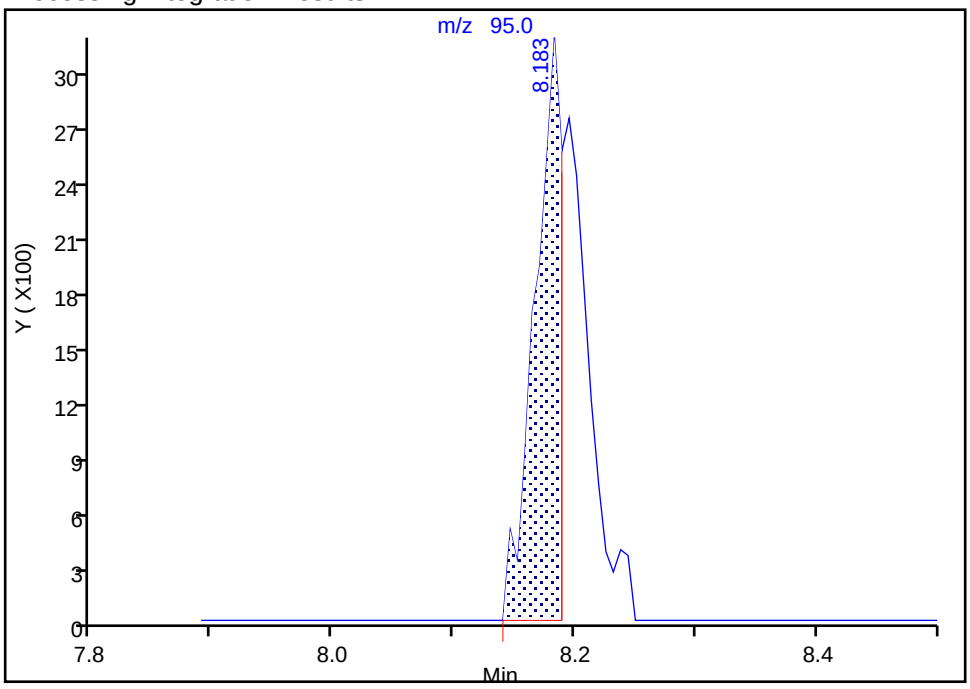
Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X21.D				
Injection Date:	27-Mar-2022 15:56:30	Instrument ID:	19930		
Lims ID:	410-77437-A-7	Lab Sample ID:	410-77437-7		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6

Signal: 1

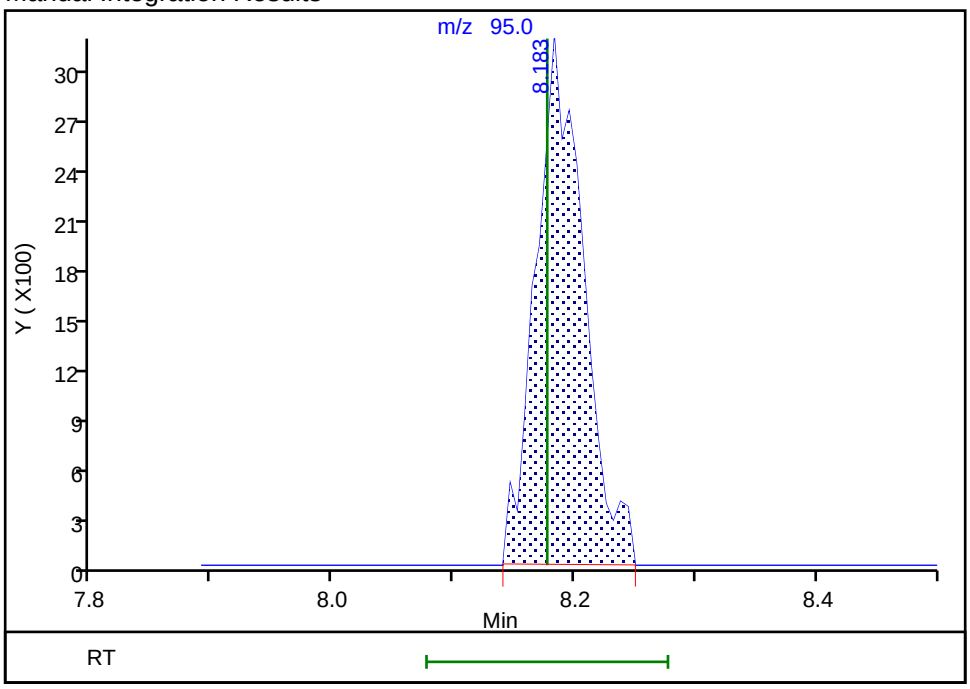
Processing Integration Results

RT: 8.18
Area: 5017
Amount: 0.082575
Amount Units: ug/l



Manual Integration Results

RT: 8.18
Area: 8780
Amount: 0.144511
Amount Units: ug/l



Reviewer: kaewrungrueangp, 28-Mar-2022 09:57:16

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 410-77437-8

Matrix: Water Lab File ID: IM27X22.D

Analysis Method: 8260D Date Collected: 03/24/2022 09:55

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 16:17

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 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	7.5		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	1.2		0.50	0.070
75-35-4	1,1-Dichloroethene	0.61		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	ND		5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	0.24	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	4.2		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	5.0		0.50	0.060
75-01-4	Vinyl chloride	ND		0.50	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 410-77437-8

Matrix: Water Lab File ID: IM27X22.D

Analysis Method: 8260D Date Collected: 03/24/2022 09:55

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 16:17

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	104		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X22.D
Lims ID: 410-77437-A-8
Client ID: HD-COD-SW-17-0/1-0
Sample Type: Client
Inject. Date: 27-Mar-2022 16:17:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-023
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 09:59:29 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 09:59:29

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
	4 Chloromethane	50		2.154				ND	
	5 Vinyl chloride	62		2.270				ND	7
	7 Bromomethane	94		2.605				ND	
	8 Chloroethane	64		2.684				ND	
	14 1,1-Dichloroethene	96	3.562	3.556	0.006	96	28403	0.6099	
	15 Acetone	43		3.586				ND	7
	19 Carbon disulfide	76		3.855				ND	7
	23 Methylene Chloride	84		4.214				ND	
*	24 t-Butyl alcohol-d10 (IS)	65	4.239	4.239	0.000	30	156467	50.0	
	27 Methyl tert-butyl ether	73	4.641	4.623	0.018	80	4645	0.0382	
	28 trans-1,2-Dichloroethene	96	4.653	4.641	0.012	87	2088	0.0395	a
	31 1,1-Dichloroethane	63	5.305	5.300	0.005	97	107588	1.19	
	36 2-Butanone (MEK)	43		6.080				ND	
	37 cis-1,2-Dichloroethene	96	6.135	6.123	0.012	77	253660	4.20	
	43 Chlorobromomethane	128		6.458				ND	
	45 Chloroform	83	6.604	6.598	0.006	93	22880	0.2351	
$	46 Dibromofluoromethane (Surr)	113	6.823	6.811	0.012	94	500045	10.4	
	47 1,1,1-Trichloroethane	97	6.836	6.830	0.006	97	704669	7.46	
	50 Carbon tetrachloride	117	7.049	7.043	0.006	32	3788	0.0434	a
$	53 1,2-Dichloroethane-d4 (Surr)	102	7.269	7.275	-0.007	68	91974	10.7	
	54 Benzene	78		7.299				ND	
	56 1,2-Dichloroethane	62		7.366				ND	
*	58 Fluorobenzene (IS)	96	7.707	7.702	0.005	99	1775044	10.0	
	61 Trichloroethene	95	8.183	8.177	0.006	94	303104	5.04	
	63 1,2-Dichloropropane	63		8.512				ND	
	68 Dichlorobromomethane	83		8.854				ND	
	73 cis-1,3-Dichloropropene	75		9.396				ND	
	74 4-Methyl-2-pentanone (MIBK)	43		9.567				ND	
$	75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1789830	9.98	
	76 Toluene	92	9.786	9.780	0.006	97	4363	0.0314	
	78 trans-1,3-Dichloropropene	75		10.036				ND	
	80 1,1,2-Trichloroethane	97		10.238				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166	10.329	10.329	0.000	98	8720154	109.1	E
83 2-Hexanone	43		10.451				ND	
85 Chlorodibromomethane	129		10.616				ND	
86 Ethylene Dibromide	107		10.725				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	83	1473926	10.0	
90 Chlorobenzene	112		11.183				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.268				ND	
92 Ethylbenzene	91		11.268				ND	7
93 m-Xylene & p-Xylene	106		11.384				ND	7
94 o-Xylene	106		11.713				ND	
95 Styrene	104		11.725				ND	
96 Bromoform	173		11.884				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	648681	9.33	
101 1,1,2,2-Tetrachloroethane	83		12.256				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	92	863823	10.0	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

7 - Failed Limit of Detection

Review Flags

a - User Assigned ID

Reagents:

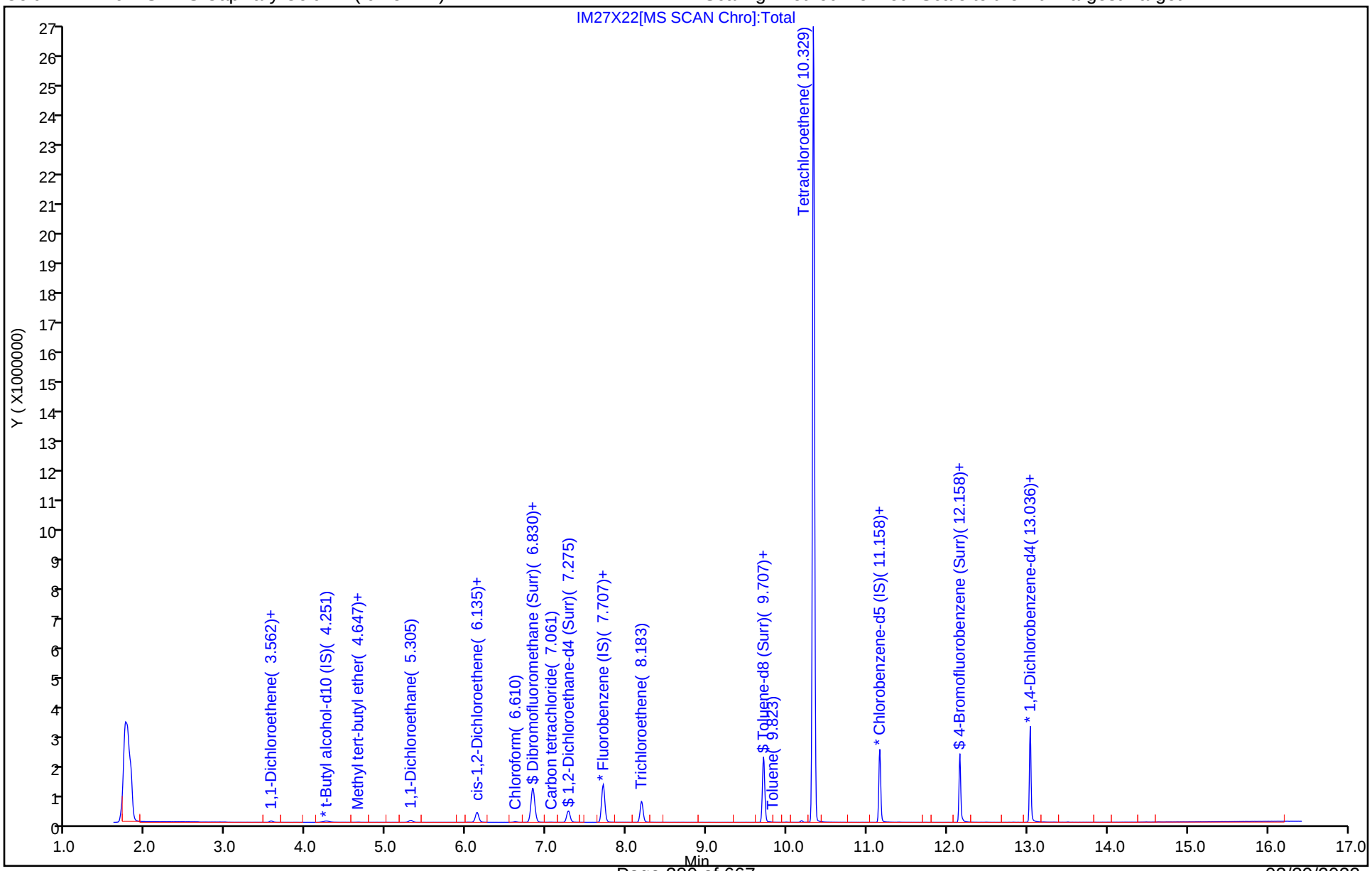
MSV_LLcentISS_00004 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 28-Mar-2022 09:59:29 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X22.D				
Injection Date:	27-Mar-2022 16:17:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	410-77437-A-8	Lab Sample ID:	410-77437-8	Worklist Smp#:	23
Client ID:	HD-COD-SW-17-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X22.D				
Lims ID:	410-77437-A-8				
Client ID:	HD-COD-SW-17-0/1-0				
Sample Type:	Client				
Inject. Date:	27-Mar-2022 16:17:30	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0053417-023				
Operator ID:	KNK41612	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	28-Mar-2022 09:59:29	Calib Date:	15-Mar-2022 03:22:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1659				

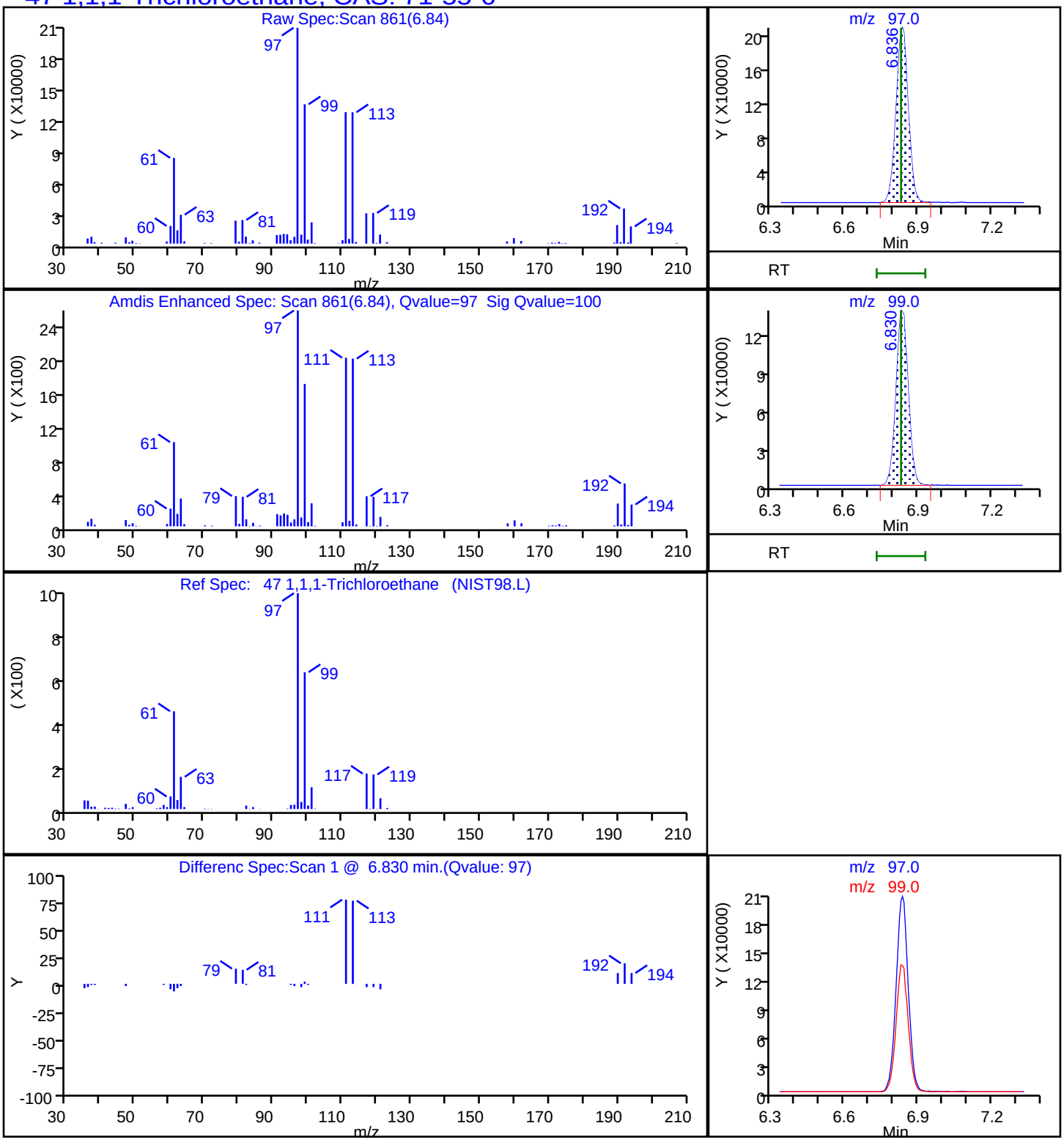
First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 09:59:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.4	104.07
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.7	107.45
$ 75 Toluene-d8 (Surr)	10.0	9.98	99.78
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.33	93.25

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X22.D				
Injection Date:	27-Mar-2022 16:17:30	Instrument ID:	19930		
Lims ID:	410-77437-A-8	Lab Sample ID:	410-77437-8		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

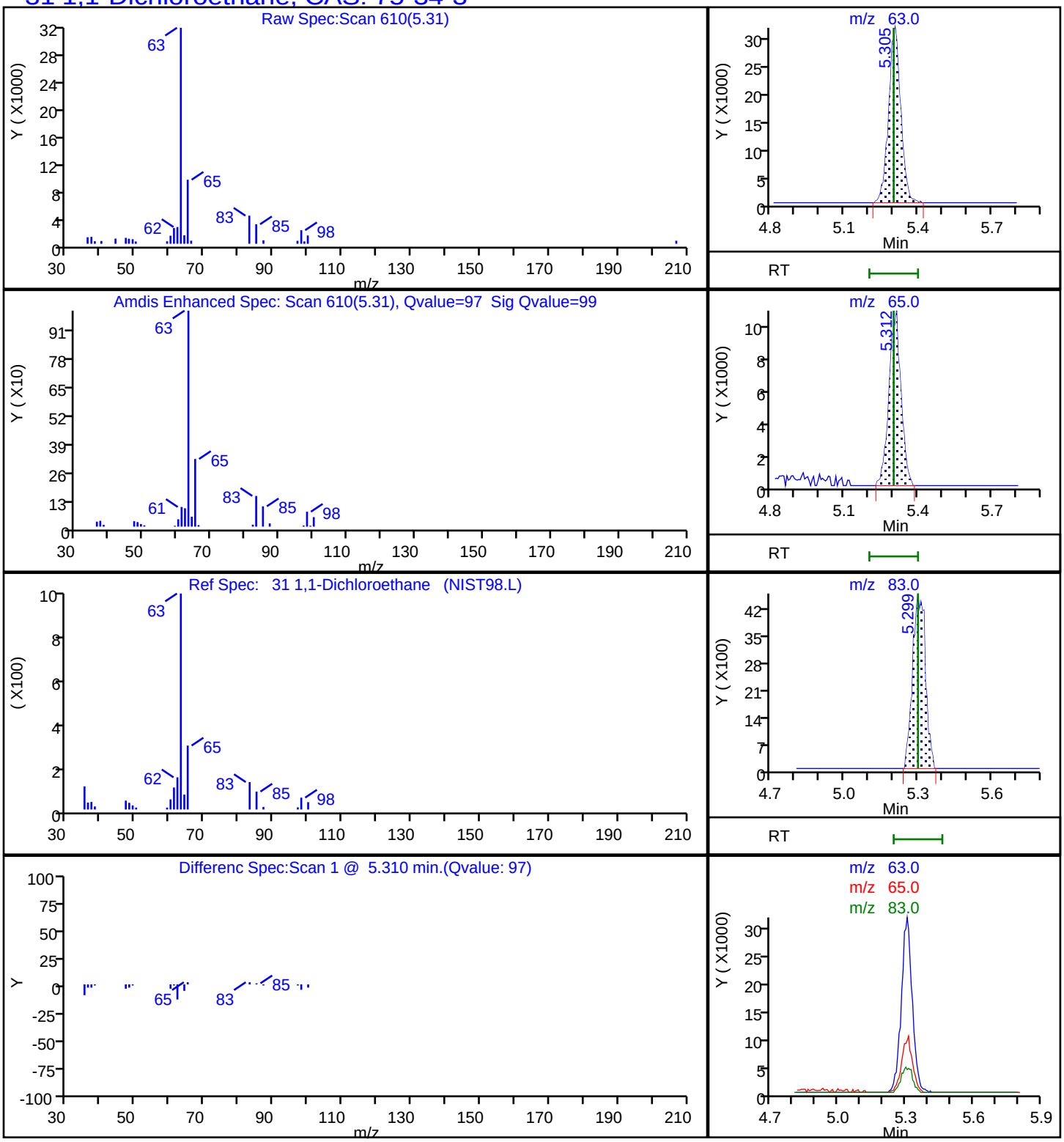
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X22.D				
Injection Date:	27-Mar-2022 16:17:30	Instrument ID:	19930		
Lims ID:	410-77437-A-8	Lab Sample ID:	410-77437-8		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

31 1,1-Dichloroethane, CAS: 75-34-3



Report Date: 28-Mar-2022 09:59:29 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X22.D

Injection Date: 27-Mar-2022 16:17:30 Instrument ID: 19930

Lims ID: 410-77437-A-8 Lab Sample ID: 410-77437-8

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

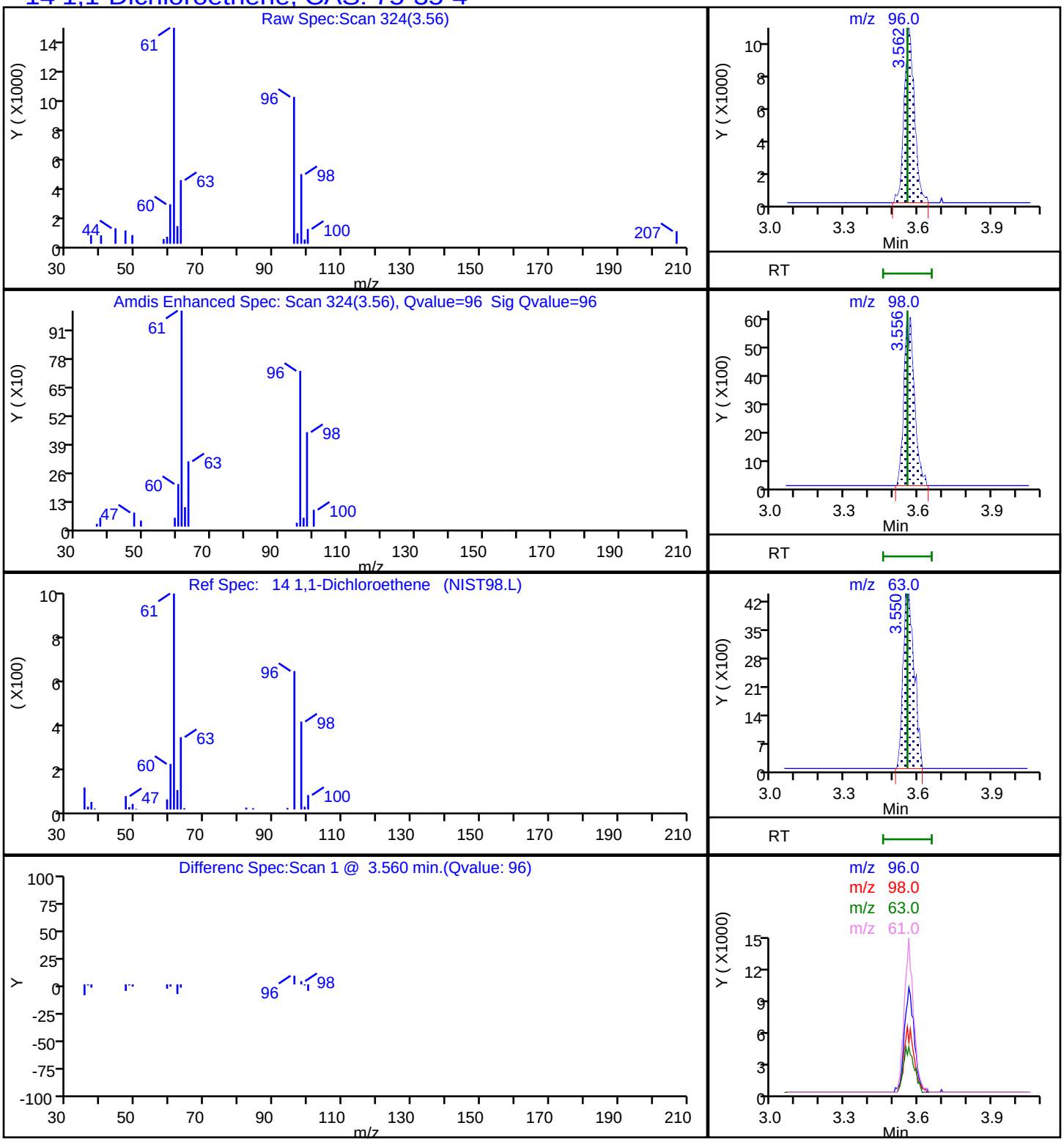
Operator ID: KNK41612 ALS Bottle#: 22 Worklist Smp#: 23

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D

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

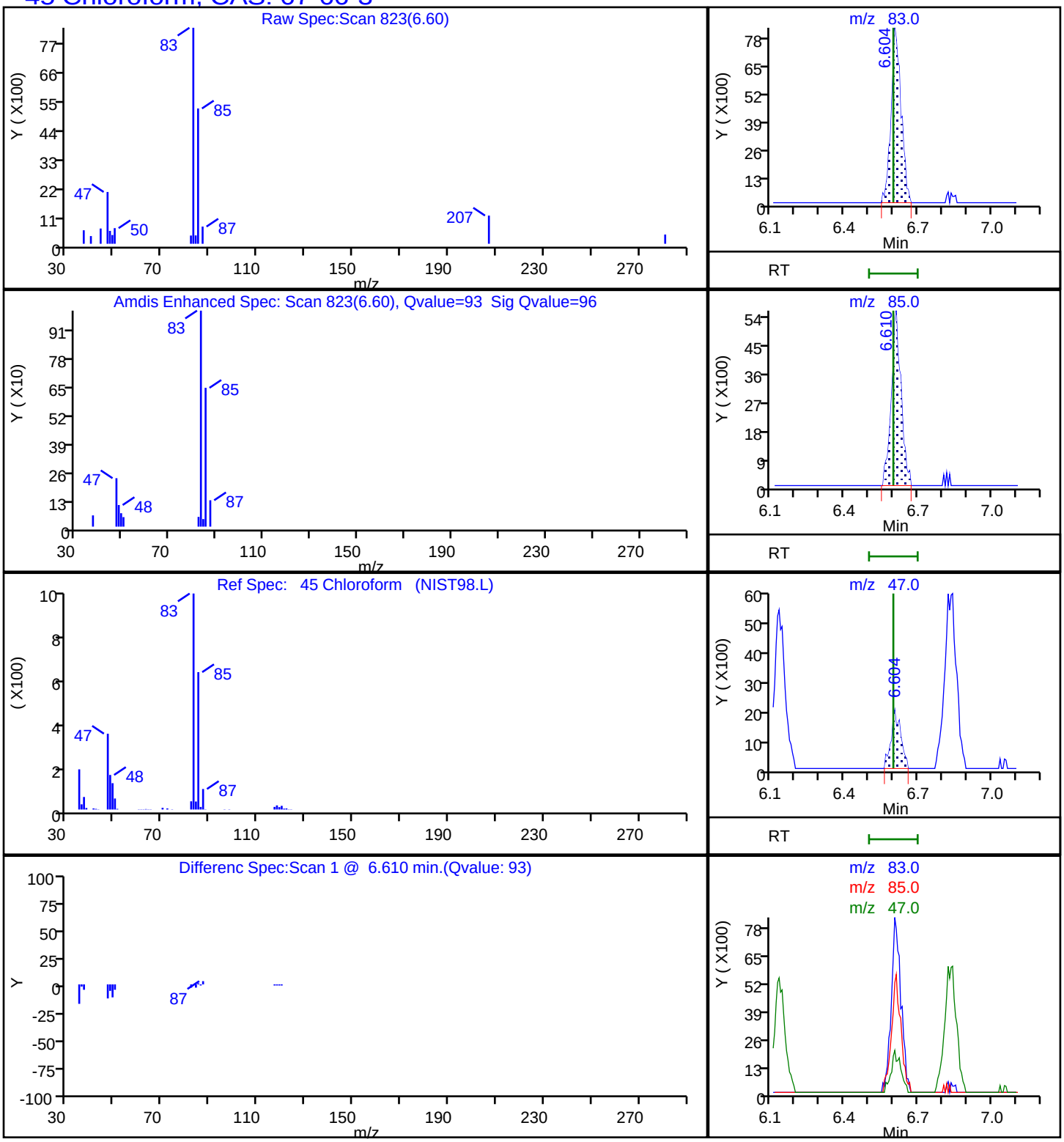
14 1,1-Dichloroethene, CAS: 75-35-4



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X22.D				
Injection Date:	27-Mar-2022 16:17:30	Instrument ID:	19930		
Lims ID:	410-77437-A-8	Lab Sample ID:	410-77437-8		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

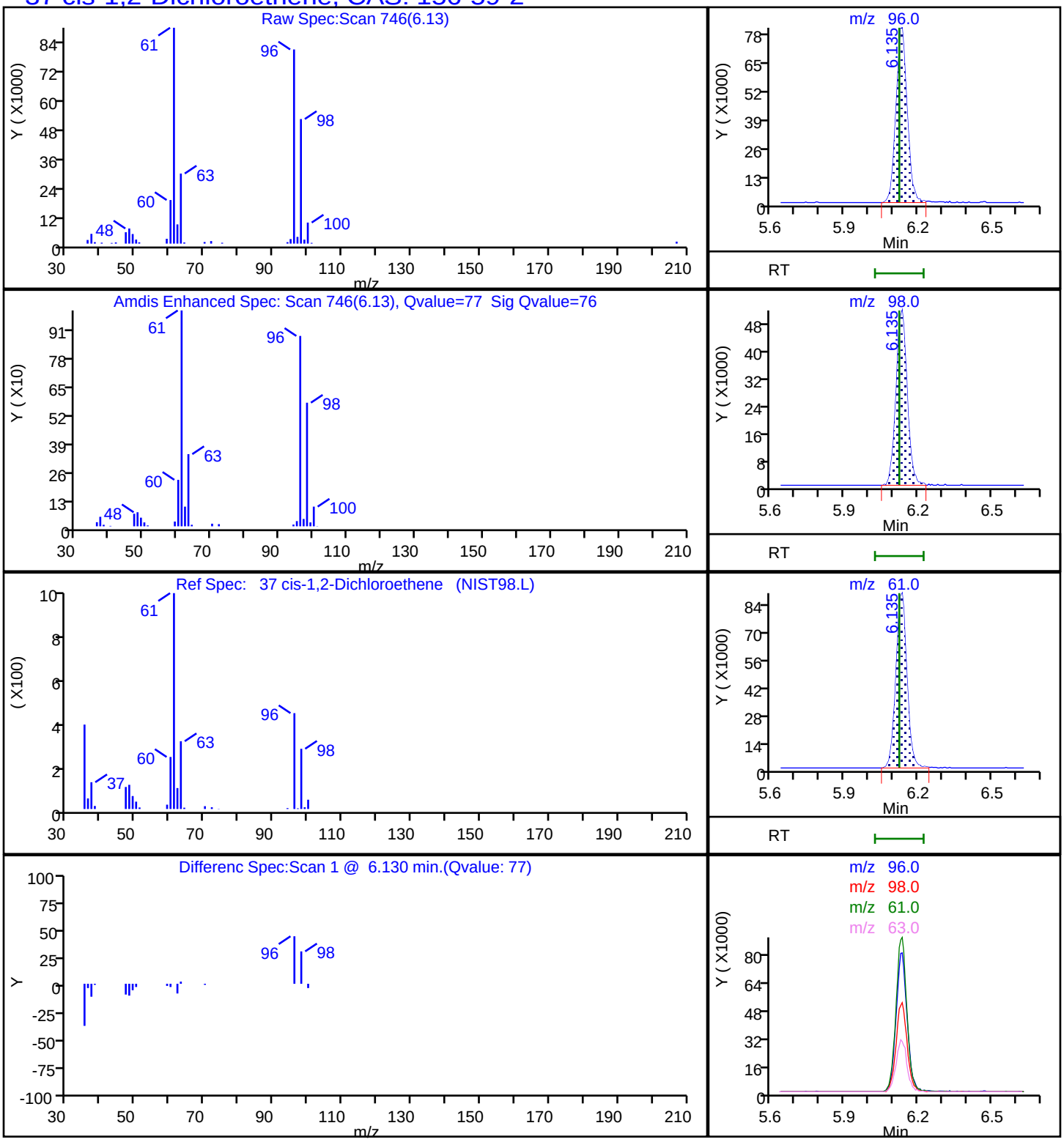
45 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X22.D				
Injection Date:	27-Mar-2022 16:17:30	Instrument ID:	19930		
Lims ID:	410-77437-A-8	Lab Sample ID:	410-77437-8		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

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



Report Date: 28-Mar-2022 09:59:29 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X22.D

Injection Date: 27-Mar-2022 16:17:30 Instrument ID: 19930

Lims ID: 410-77437-A-8 Lab Sample ID: 410-77437-8

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

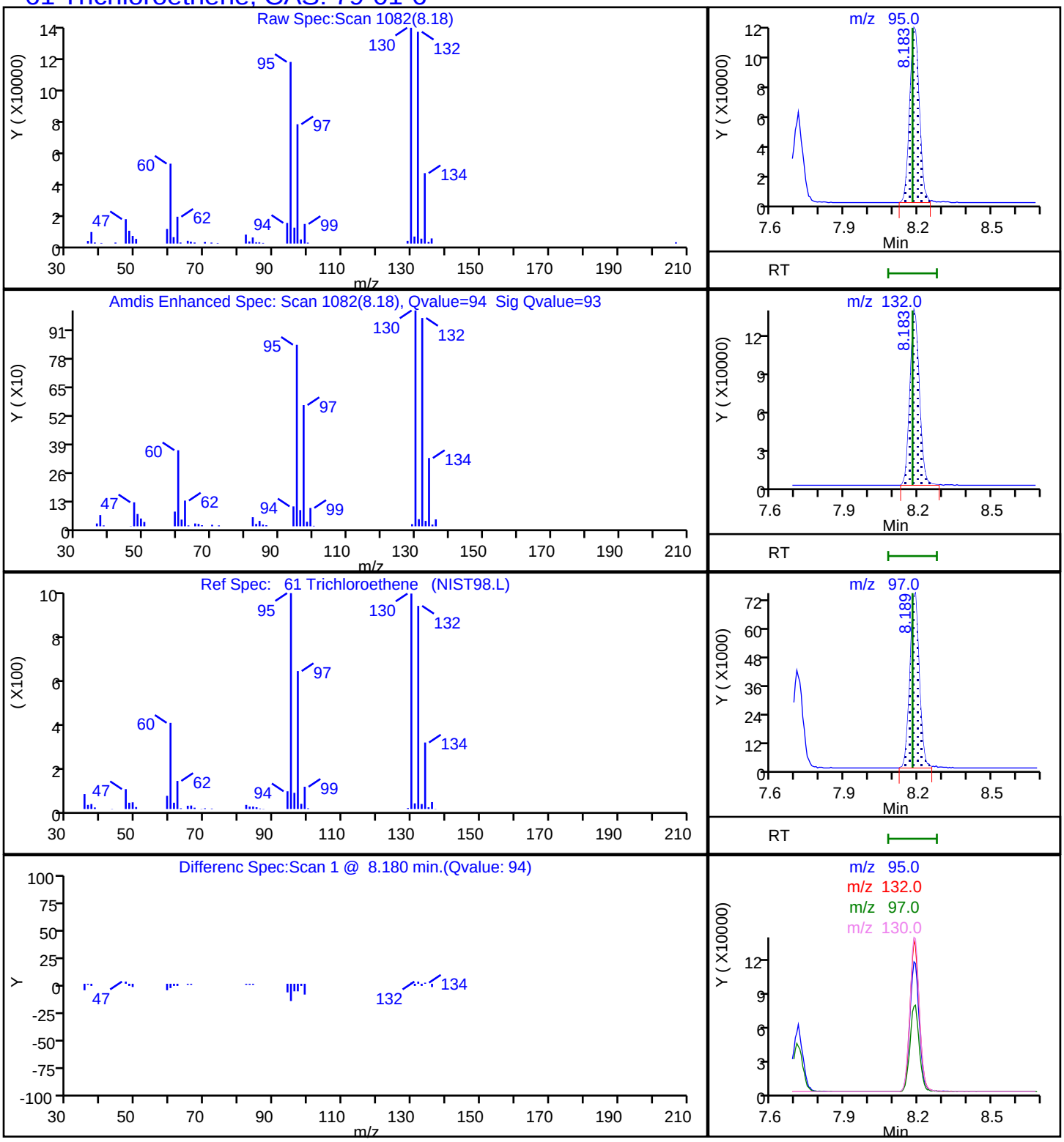
Operator ID: KNK41612 ALS Bottle#: 22 Worklist Smp#: 23

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D

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

61 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

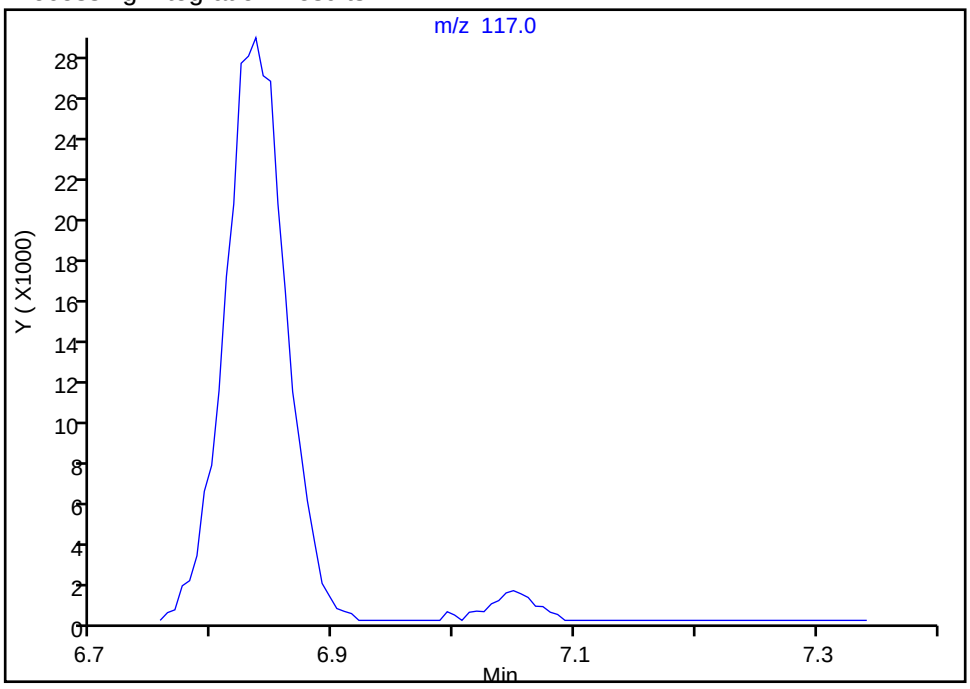
Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X22.D				
Injection Date:	27-Mar-2022 16:17:30	Instrument ID:	19930		
Lims ID:	410-77437-A-8	Lab Sample ID:	410-77437-8		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

50 Carbon tetrachloride, CAS: 56-23-5

Signal: 1

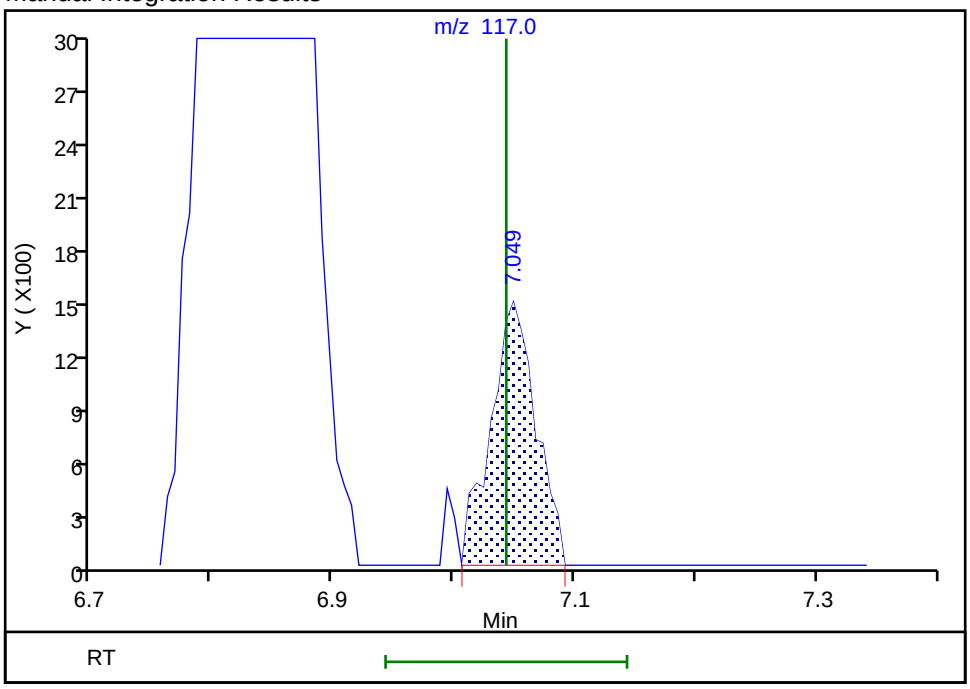
Not Detected
Expected RT: 7.04

Processing Integration Results



Manual Integration Results

RT: 7.05
Area: 3788
Amount: 0.043384
Amount Units: ug/l



Reviewer: kaewrungrueangp, 28-Mar-2022 09:58:56
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

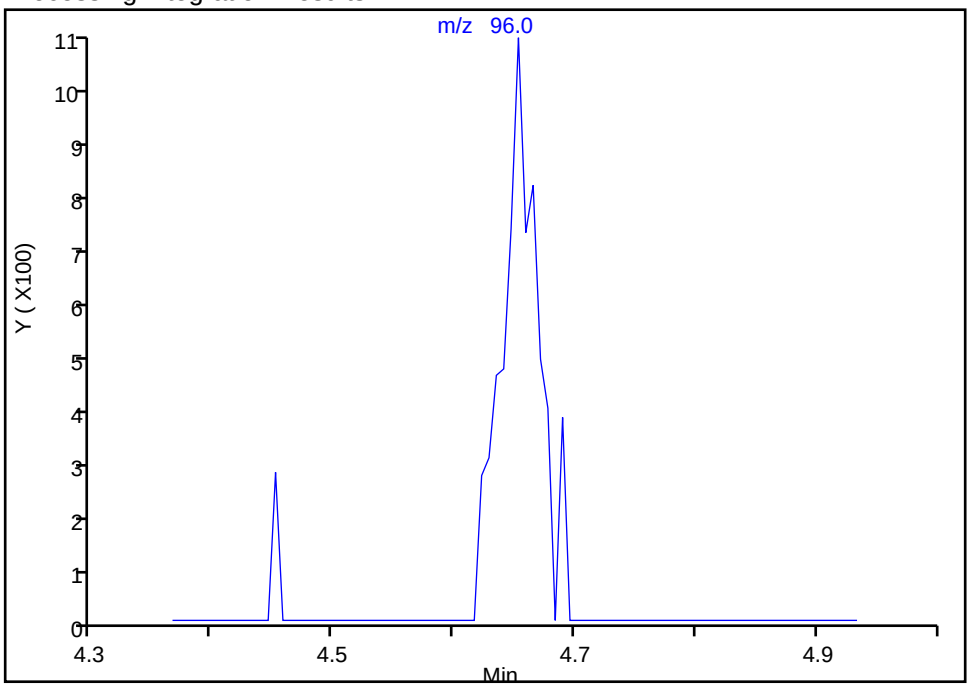
Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X22.D				
Injection Date:	27-Mar-2022 16:17:30	Instrument ID:	19930		
Lims ID:	410-77437-A-8	Lab Sample ID:	410-77437-8		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

28 trans-1,2-Dichloroethene, CAS: 156-60-5

Signal: 1

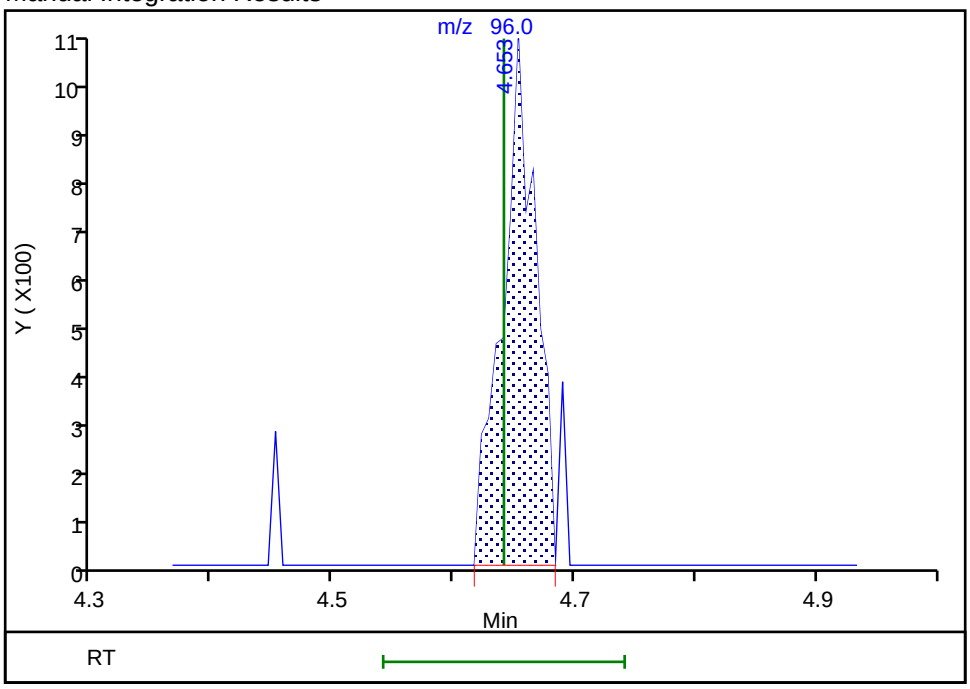
Not Detected
Expected RT: 4.64

Processing Integration Results



Manual Integration Results

RT: 4.65
Area: 2088
Amount: 0.039538
Amount Units: ug/l



Reviewer: kaewrungrueangp, 28-Mar-2022 09:57:57
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 DL Lab Sample ID: 410-77437-8 DL

Matrix: Water Lab File ID: IM28X28.D

Analysis Method: 8260D Date Collected: 03/24/2022 09:55

Sample wt/vol: 25(mL) Date Analyzed: 03/28/2022 18:34

Soil Aliquot Vol: Dilution Factor: 10

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 238139 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	88		5.0	0.60

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)	102		80-120
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X28.D
Lims ID: 410-77437-B-8 DL
Client ID: HD-COD-SW-17-0/1-0
Sample Type: Client
Inject. Date: 28-Mar-2022 18:34:30 ALS Bottle#: 28 Worklist Smp#: 29
Purge Vol: 25.000 mL Dil. Factor: 10.0000
Sample Info: 410-0053457-029
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 20:12:04 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1618

First Level Reviewer: beckerk Date: 28-Mar-2022 20:08:56

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
	4 Chloromethane	50		2.166				ND	
	5 Vinyl chloride	62		2.282				ND	
	7 Bromomethane	94		2.617				ND	
	8 Chloroethane	64		2.696				ND	
	14 1,1-Dichloroethene	96	3.556	3.562	-0.006	34	1878	0.0412	
	15 Acetone	43		3.599				ND	7
	19 Carbon disulfide	76		3.867				ND	
	23 Methylene Chloride	84		4.233				ND	
*	24 t-Butyl alcohol-d10 (IS)	65	4.233	4.251	-0.018	23	137232	50.0	
	27 Methyl tert-butyl ether	73		4.635				ND	
	28 trans-1,2-Dichloroethene	96		4.647				ND	
	31 1,1-Dichloroethane	63	5.299	5.299	0.000	93	9178	0.1036	
	36 2-Butanone (MEK)	43		6.092				ND	
	37 cis-1,2-Dichloroethene	96	6.135	6.129	0.006	76	21994	0.3720	
	43 Chlorobromomethane	128		6.458				ND	
	45 Chloroform	83	6.610	6.610	0.000	1	2521	0.0264	
$	46 Dibromofluoromethane (Surr)	113	6.817	6.824	-0.007	94	479269	10.2	
	47 1,1,1-Trichloroethane	97	6.836	6.836	0.000	91	57559	0.6222	
	50 Carbon tetrachloride	117		7.043				ND	
$	53 1,2-Dichloroethane-d4 (Surr)	102	7.275	7.275	0.000	67	89469	10.7	
	54 Benzene	78		7.305				ND	
	56 1,2-Dichloroethane	62		7.378				ND	
*	58 Fluorobenzene (IS)	96	7.701	7.708	-0.007	99	1739323	10.0	
	61 Trichloroethene	95	8.183	8.183	0.000	94	26142	0.4440	
	63 1,2-Dichloropropane	63		8.512				ND	
	68 Dichlorobromomethane	83		8.860				ND	
	73 cis-1,3-Dichloropropene	75		9.396				ND	
	74 4-Methyl-2-pentanone (MIBK)	43		9.567				ND	
$	75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1758107	10.1	
	76 Toluene	92		9.780				ND	
	78 trans-1,3-Dichloropropene	75		10.036				ND	
	80 1,1,2-Trichloroethane	97		10.244				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166	10.329	10.329	0.000	97	683700	8.82	
83 2-Hexanone	43		10.451				ND	
85 Chlorodibromomethane	129		10.616				ND	
86 Ethylene Dibromide	107		10.731				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	83	1429441	10.0	
90 Chlorobenzene	112		11.182				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.268				ND	
92 Ethylbenzene	91		11.268				ND	
93 m-Xylene & p-Xylene	106		11.384				ND	
94 o-Xylene	106		11.713				ND	
95 Styrene	104		11.725				ND	
96 Bromoform	173		11.884				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	97	632688	9.38	
101 1,1,2,2-Tetrachloroethane	83		12.255				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	92	868511	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_LLcentISS_00004 Amount Added: 5.00 Units: uL Run Reagent

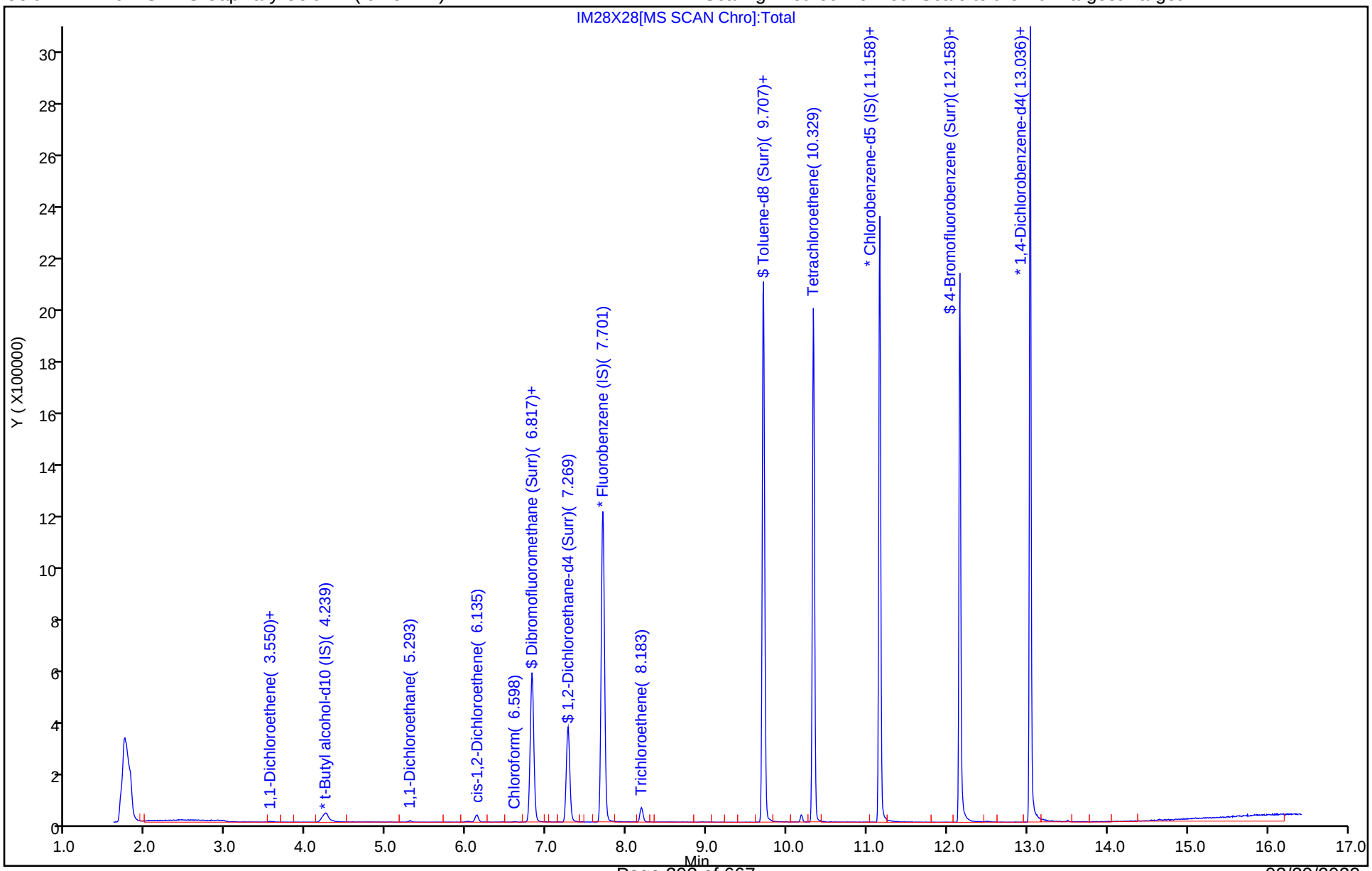
Report Date: 28-Mar-2022 20:12:13 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X28.D

Injection Date:	28-Mar-2022 18:34:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	410-77437-B-8 DL	Lab Sample ID:	410-77437-8	Worklist Smp#:	29
Client ID:	HD-COD-SW-17-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	28
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X28.D
Lims ID: 410-77437-B-8 DL
Client ID: HD-COD-SW-17-0/1-0
Sample Type: Client
Inject. Date: 28-Mar-2022 18:34:30 ALS Bottle#: 28 Worklist Smp#: 29
Purge Vol: 25.000 mL Dil. Factor: 10.0000
Sample Info: 410-0053457-029
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 20:12:04 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1618

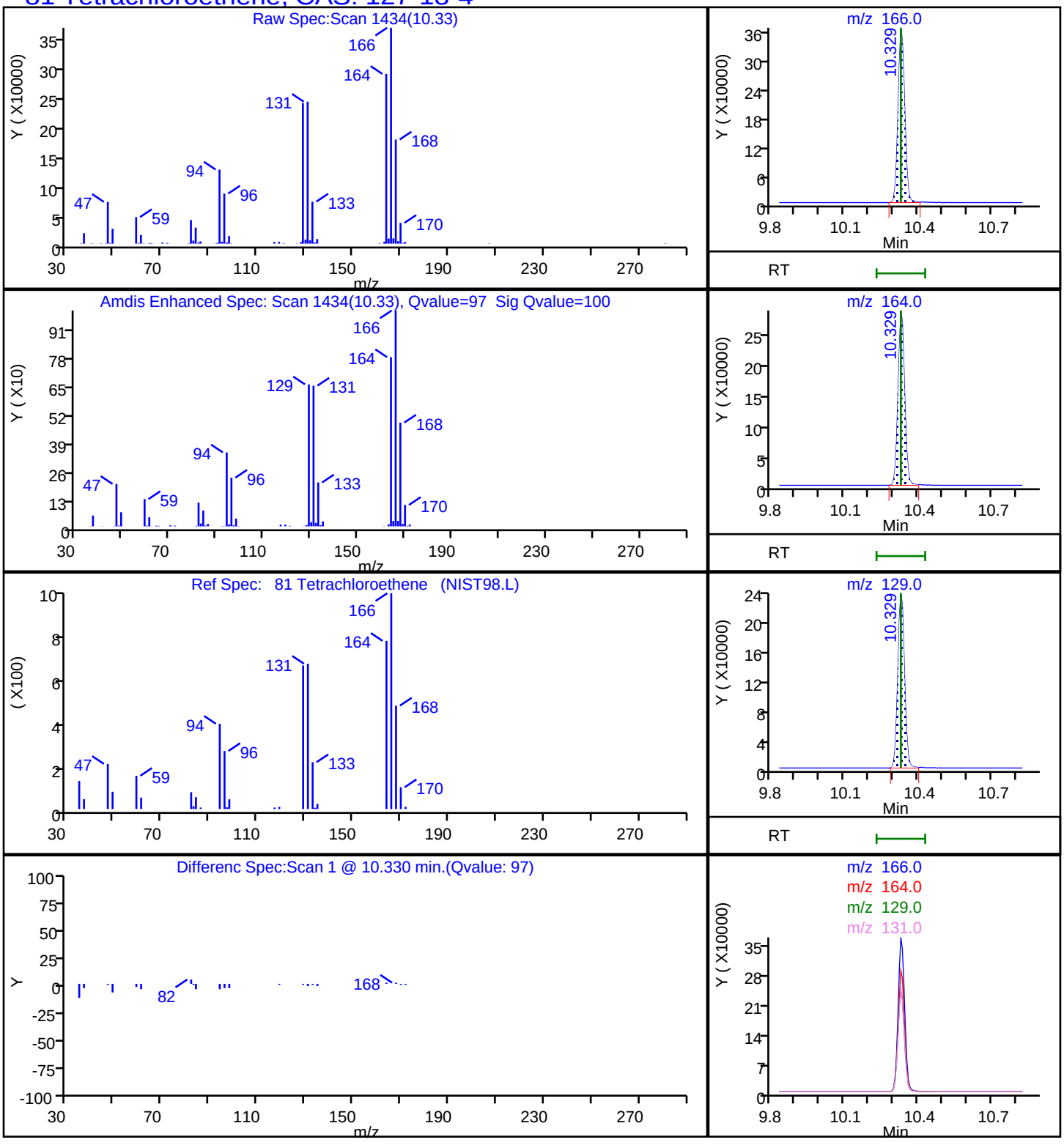
First Level Reviewer: beckerk Date: 28-Mar-2022 20:08:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.2	101.79
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.7	106.67
$ 75 Toluene-d8 (Surr)	10.0	10.1	101.07
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.38	93.79

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X28.D				
Injection Date:	28-Mar-2022 18:34:30	Instrument ID:	19930		
Lims ID:	410-77437-B-8 DL	Lab Sample ID:	410-77437-8		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	28	Worklist Smp#:	29
Purge Vol:	25.000 mL	Dil. Factor:	10.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

81 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 410-77437-9

Matrix: Water Lab File ID: IM27X23.D

Analysis Method: 8260D Date Collected: 03/24/2022 10:25

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 16:38

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	0.097	J	0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	0.90	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	0.41	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.074	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	2.3		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.14	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 410-77437-9

Matrix: Water Lab File ID: IM27X23.D

Analysis Method: 8260D Date Collected: 03/24/2022 10:25

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 16:38

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		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)	100		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X23.D
Lims ID: 410-77437-A-9
Client ID: HD-COD-SW-26-0/1-0
Sample Type: Client
Inject. Date: 27-Mar-2022 16:38:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-024
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 09:59:29 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 10:00:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50		2.154				ND	
5 Vinyl chloride	62		2.270				ND	
7 Bromomethane	94		2.605				ND	
8 Chloroethane	64		2.684				ND	
14 1,1-Dichloroethene	96	3.556	3.556	0.000	91	4457	0.0965	
15 Acetone	43	3.605	3.586	0.019	73	7159	0.9042	
19 Carbon disulfide	76		3.855				ND	7
23 Methylene Chloride	84		4.214				ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.245	4.239	0.006	30	145964	50.0	
27 Methyl tert-butyl ether	73		4.623				ND	
28 trans-1,2-Dichloroethene	96		4.641				ND	
31 1,1-Dichloroethane	63		5.300				ND	
36 2-Butanone (MEK)	43		6.080				ND	
37 cis-1,2-Dichloroethene	96	6.135	6.123	0.012	76	4454	0.0745	
43 Chlorobromomethane	128		6.458				ND	
45 Chloroform	83	6.604	6.598	0.006	92	39894	0.4134	
$ 46 Dibromofluoromethane (Surr)	113	6.818	6.811	0.007	94	489000	10.3	
47 1,1,1-Trichloroethane	97		6.830				ND	7
50 Carbon tetrachloride	117		7.043				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.275	7.275	0.000	67	89690	10.6	
54 Benzene	78		7.299				ND	7
56 1,2-Dichloroethane	62		7.366				ND	
* 58 Fluorobenzene (IS)	96	7.708	7.702	0.006	99	1759805	10.0	
61 Trichloroethene	95	8.183	8.177	0.006	91	8595	0.1443	
63 1,2-Dichloropropane	63		8.512				ND	
68 Dichlorobromomethane	83		8.854				ND	7
73 cis-1,3-Dichloropropene	75		9.396				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.567				ND	7
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1776481	10.0	
76 Toluene	92	9.793	9.780	0.013	94	4862	0.0354	
78 trans-1,3-Dichloropropene	75		10.036				ND	
80 1,1,2-Trichloroethane	97		10.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166	10.335	10.329	0.006	98	180475	2.28	
83 2-Hexanone	43		10.451				ND	
85 Chlorodibromomethane	129		10.616				ND	
86 Ethylene Dibromide	107		10.725				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	83	1457750	10.0	
90 Chlorobenzene	112		11.183				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.268				ND	
92 Ethylbenzene	91		11.268				ND	
93 m-Xylene & p-Xylene	106		11.384				ND	7
94 o-Xylene	106		11.713				ND	
95 Styrene	104		11.725				ND	
96 Bromoform	173		11.884				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	95	643032	9.35	
101 1,1,2,2-Tetrachloroethane	83		12.256				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	92	858300	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_LLcentISS_00004 Amount Added: 5.00 Units: uL Run Reagent

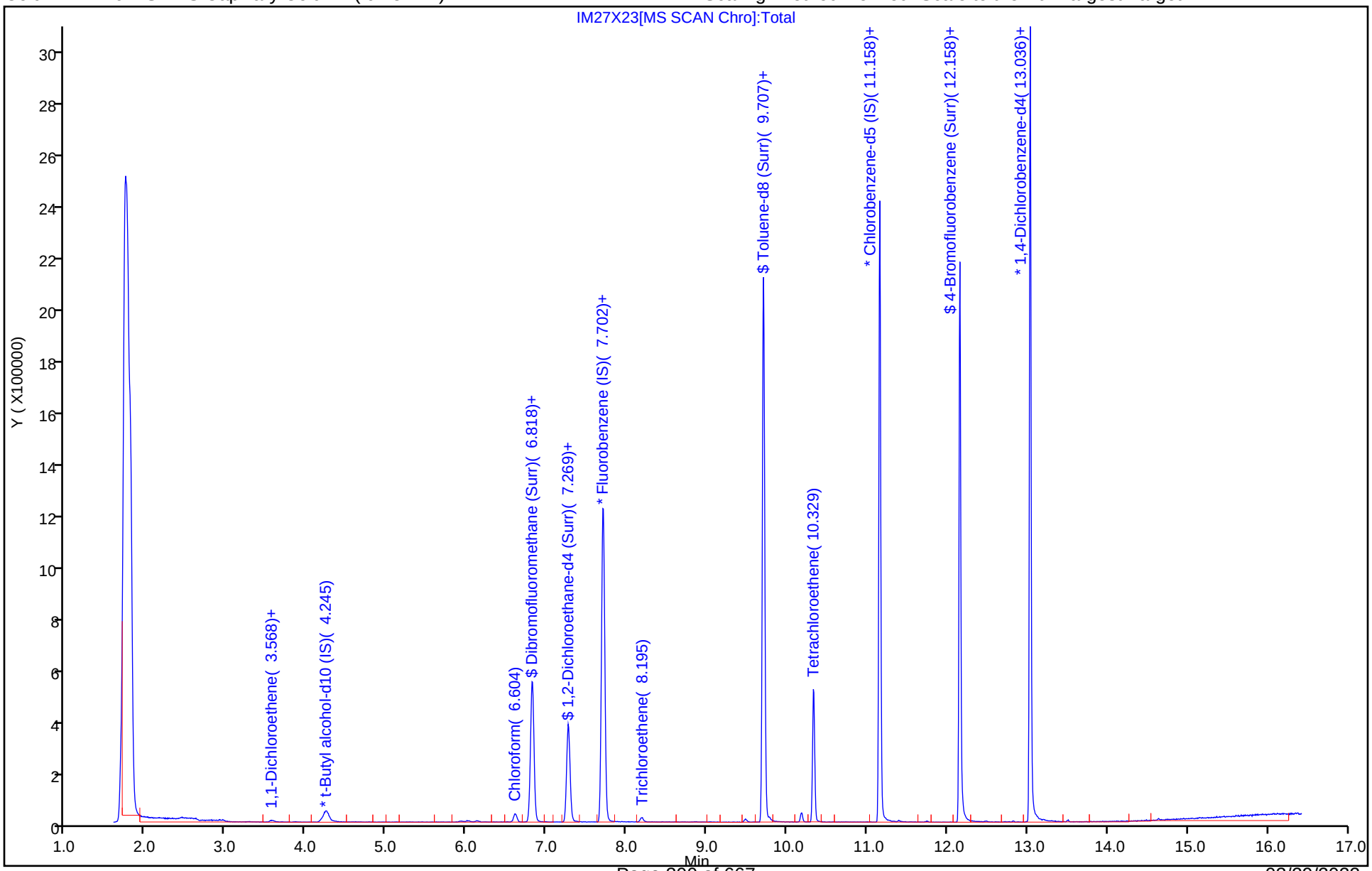
Report Date: 28-Mar-2022 10:00:09 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X23.D

Injection Date:	27-Mar-2022 16:38:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	410-77437-A-9	Lab Sample ID:	410-77437-9	Worklist Smp#:	24
Client ID:	HD-COD-SW-26-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X23.D				
Lims ID:	410-77437-A-9				
Client ID:	HD-COD-SW-26-0/1-0				
Sample Type:	Client				
Inject. Date:	27-Mar-2022 16:38:30	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0053417-024				
Operator ID:	KNK41612	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	28-Mar-2022 09:59:29	Calib Date:	15-Mar-2022 03:22:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1659				

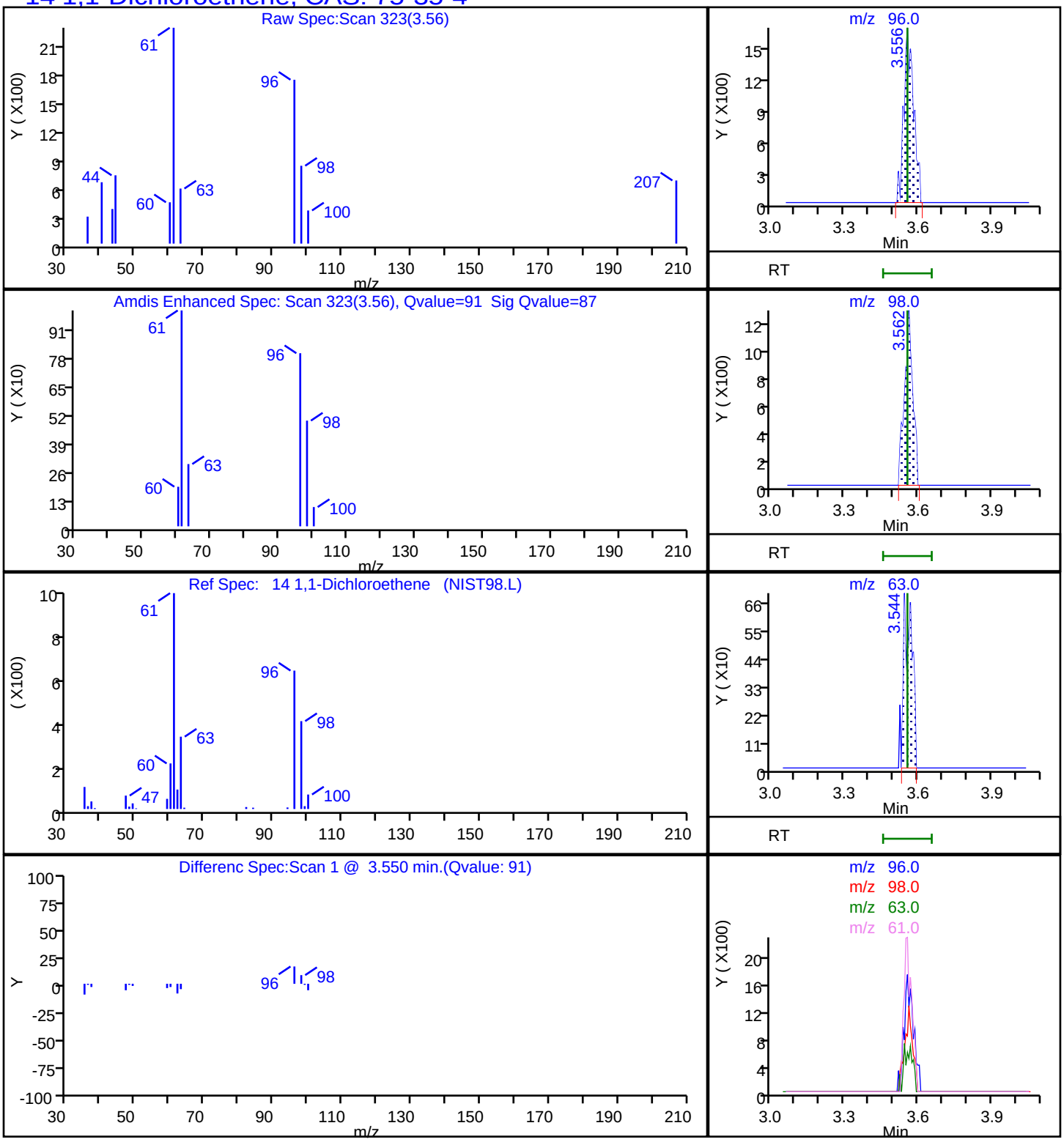
First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 10:00:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.3	102.65
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.6	105.69
$ 75 Toluene-d8 (Surr)	10.0	10.0	100.14
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.35	93.47

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X23.D				
Injection Date:	27-Mar-2022 16:38:30	Instrument ID:	19930		
Lims ID:	410-77437-A-9	Lab Sample ID:	410-77437-9		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

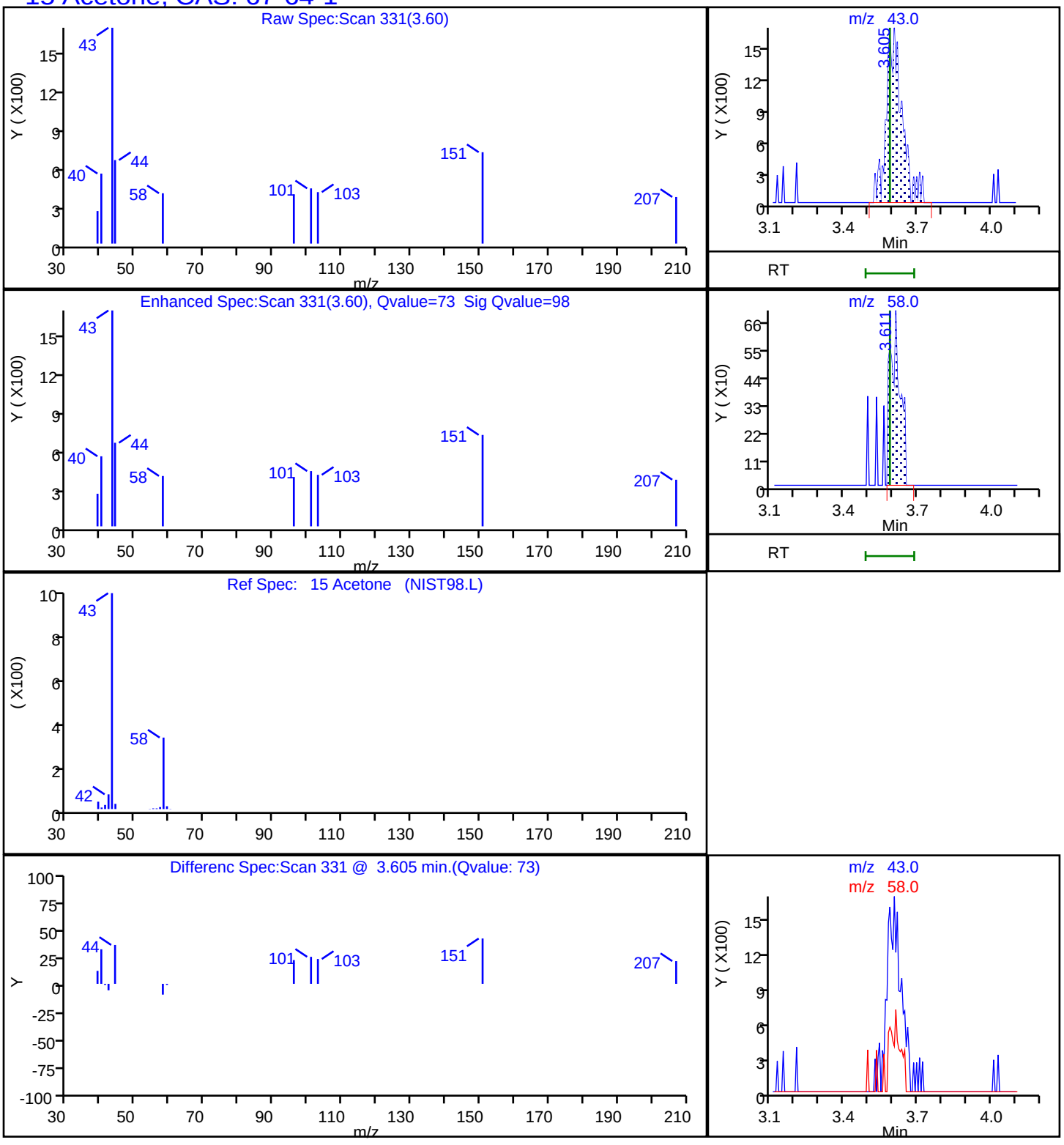
14 1,1-Dichloroethene, CAS: 75-35-4



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X23.D				
Injection Date:	27-Mar-2022 16:38:30	Instrument ID:	19930		
Lims ID:	410-77437-A-9	Lab Sample ID:	410-77437-9		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

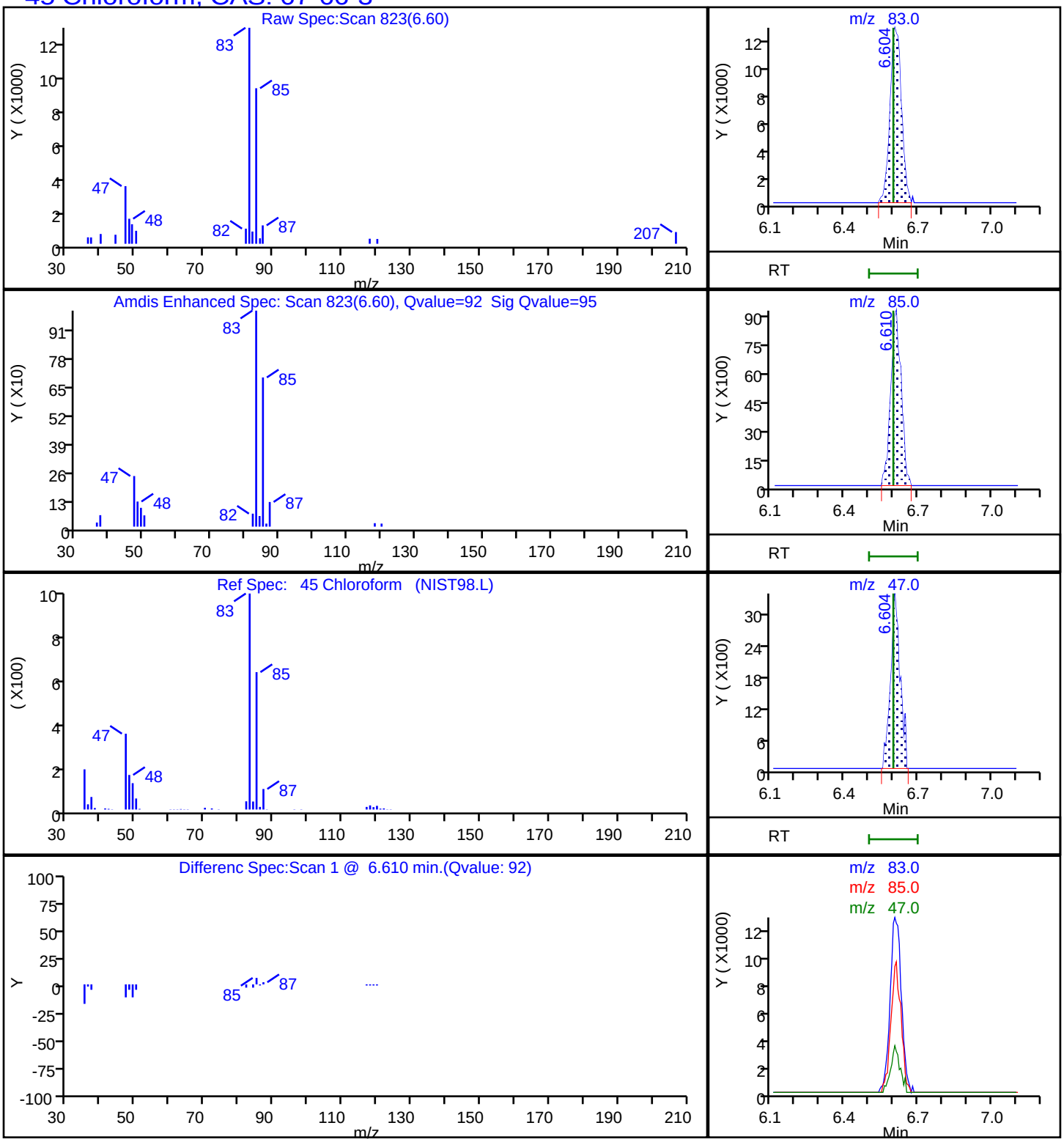
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X23.D				
Injection Date:	27-Mar-2022 16:38:30	Instrument ID:	19930		
Lims ID:	410-77437-A-9	Lab Sample ID:	410-77437-9		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

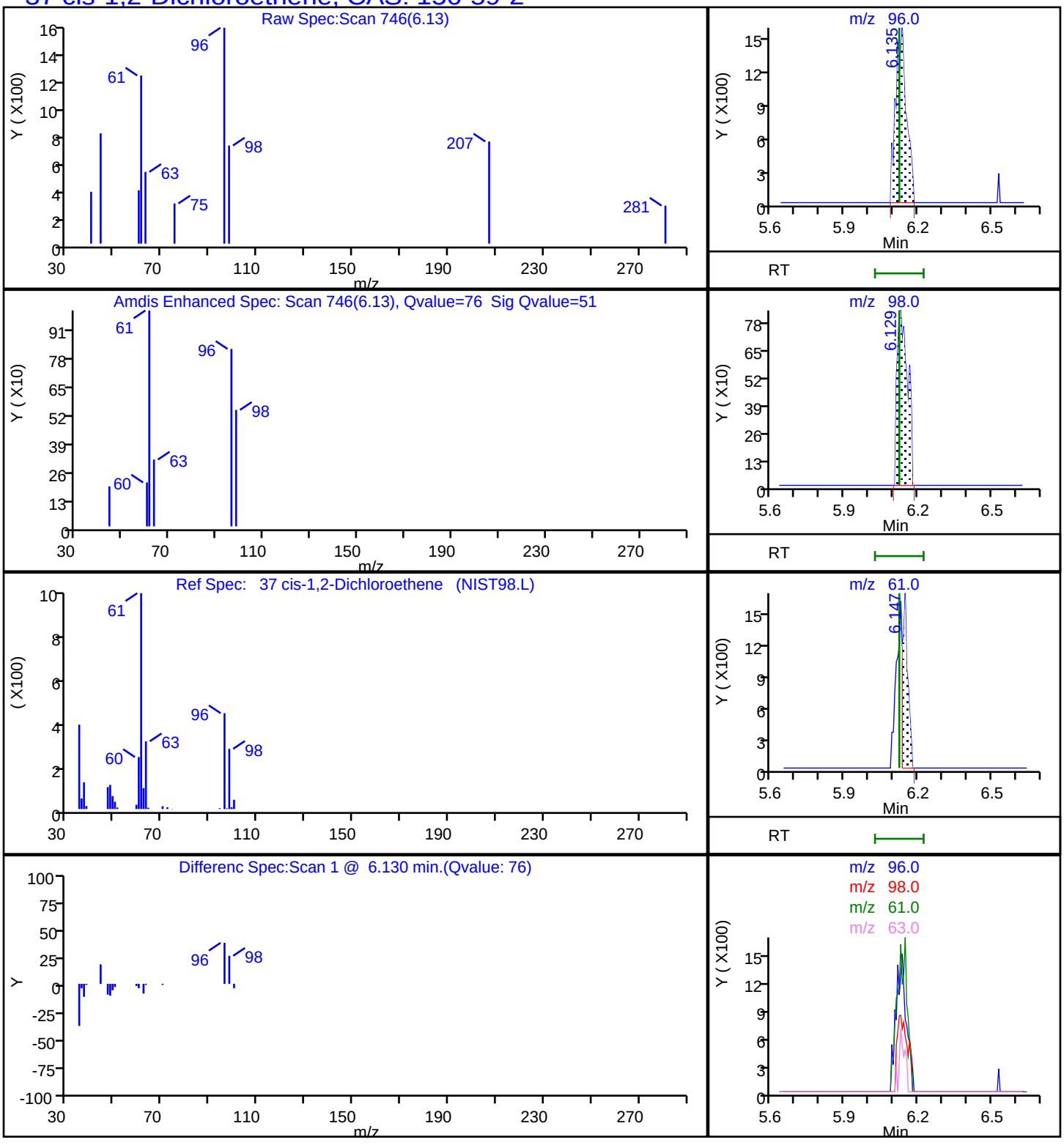
45 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X23.D				
Injection Date:	27-Mar-2022 16:38:30	Instrument ID:	19930		
Lims ID:	410-77437-A-9	Lab Sample ID:	410-77437-9		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

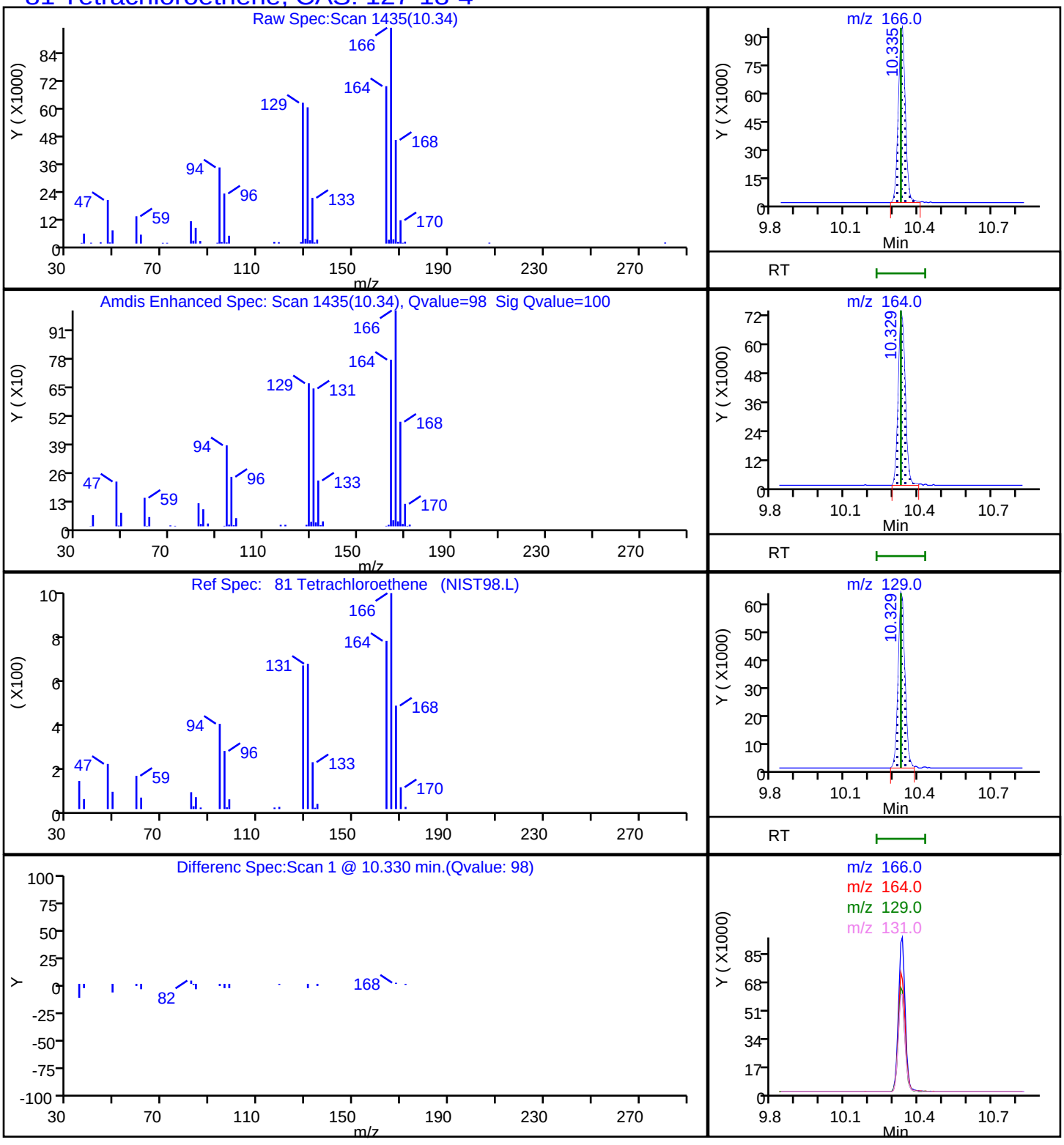
37 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X23.D				
Injection Date:	27-Mar-2022 16:38:30	Instrument ID:	19930		
Lims ID:	410-77437-A-9	Lab Sample ID:	410-77437-9		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

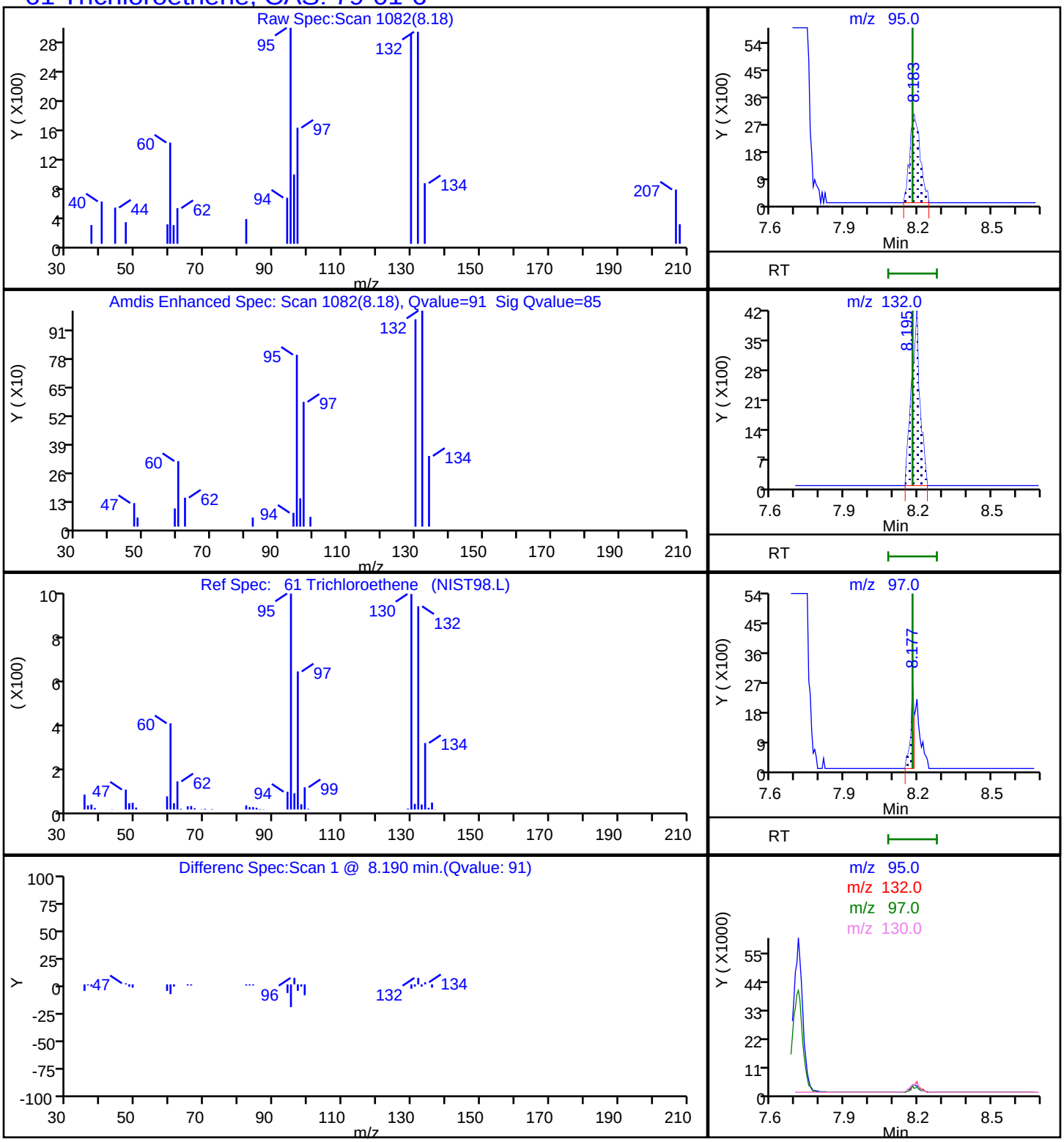
81 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X23.D				
Injection Date:	27-Mar-2022 16:38:30	Instrument ID:	19930		
Lims ID:	410-77437-A-9	Lab Sample ID:	410-77437-9		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 410-77437-10

Matrix: Water Lab File ID: IM27X24.D

Analysis Method: 8260D Date Collected: 03/24/2022 11:20

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 16:59

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.5	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.10	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.082	J	0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.14	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 410-77437-10

Matrix: Water Lab File ID: IM27X24.D

Analysis Method: 8260D Date Collected: 03/24/2022 11:20

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 16:59

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X24.D
Lims ID: 410-77437-A-10
Client ID: HD-COD-SW-27-0/1-0
Sample Type: Client
Inject. Date: 27-Mar-2022 16:59:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-025
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 09:59:29 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 10:00:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50		2.154				ND	
5 Vinyl chloride	62		2.270				ND	
7 Bromomethane	94		2.605				ND	
8 Chloroethane	64		2.684				ND	
14 1,1-Dichloroethene	96		3.556				ND	
15 Acetone	43	3.599	3.586	0.013	95	11804	1.51	
19 Carbon disulfide	76	3.867	3.855	0.012	46	4949	0.0474	
23 Methylene Chloride	84		4.214				ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.245	4.239	0.006	24	144242	50.0	
27 Methyl tert-butyl ether	73		4.623				ND	7
28 trans-1,2-Dichloroethene	96		4.641				ND	
31 1,1-Dichloroethane	63		5.300				ND	
36 2-Butanone (MEK)	43		6.080				ND	
37 cis-1,2-Dichloroethene	96	6.129	6.123	0.006	72	6220	0.1031	
43 Chlorobromomethane	128		6.458				ND	
45 Chloroform	83	6.610	6.598	0.012	89	4772	0.0490	
$ 46 Dibromofluoromethane (Surr)	113	6.818	6.811	0.007	94	493633	10.3	
47 1,1,1-Trichloroethane	97		6.830				ND	
50 Carbon tetrachloride	117		7.043				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.275	7.275	0.000	67	91299	10.7	
54 Benzene	78		7.299				ND	7
56 1,2-Dichloroethane	62		7.366				ND	
* 58 Fluorobenzene (IS)	96	7.708	7.702	0.006	99	1775050	10.0	
61 Trichloroethene	95	8.183	8.177	0.006	94	8204	0.1365	
63 1,2-Dichloropropane	63		8.512				ND	
68 Dichlorobromomethane	83		8.854				ND	
73 cis-1,3-Dichloropropene	75		9.396				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.567				ND	7
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1770006	10.1	
76 Toluene	92	9.787	9.780	0.007	98	5681	0.0419	
78 trans-1,3-Dichloropropene	75		10.036				ND	
80 1,1,2-Trichloroethane	97		10.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166	10.335	10.329	0.006	97	6414	0.0822	
83 2-Hexanone	43		10.451				ND	
85 Chlorodibromomethane	129		10.616				ND	
86 Ethylene Dibromide	107		10.725				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	83	1438469	10.0	
90 Chlorobenzene	112		11.183				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.268				ND	
92 Ethylbenzene	91		11.268				ND	7
93 m-Xylene & p-Xylene	106		11.384				ND	7
94 o-Xylene	106		11.713				ND	
95 Styrene	104		11.725				ND	
96 Bromoform	173		11.884				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	97	649431	9.57	
101 1,1,2,2-Tetrachloroethane	83		12.256				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	92	860062	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_LLcentISS_00004 Amount Added: 5.00 Units: uL Run Reagent

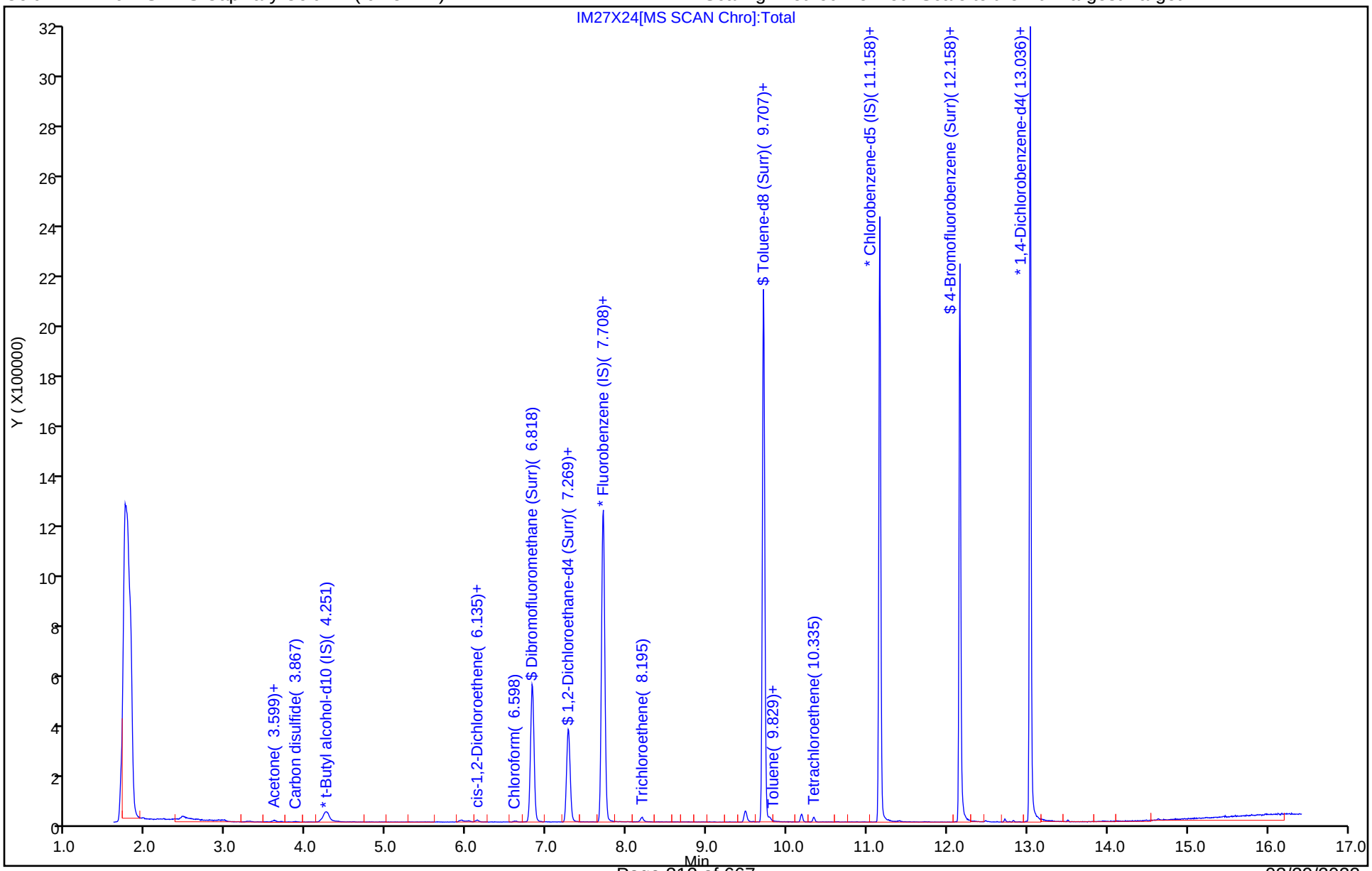
Report Date: 28-Mar-2022 10:00:48 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X24.D

Injection Date:	27-Mar-2022 16:59:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	410-77437-A-10	Lab Sample ID:	410-77437-10	Worklist Smp#:	25
Client ID:	HD-COD-SW-27-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X24.D
Lims ID: 410-77437-A-10
Client ID: HD-COD-SW-27-0/1-0
Sample Type: Client
Inject. Date: 27-Mar-2022 16:59:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-025
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 09:59:29 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

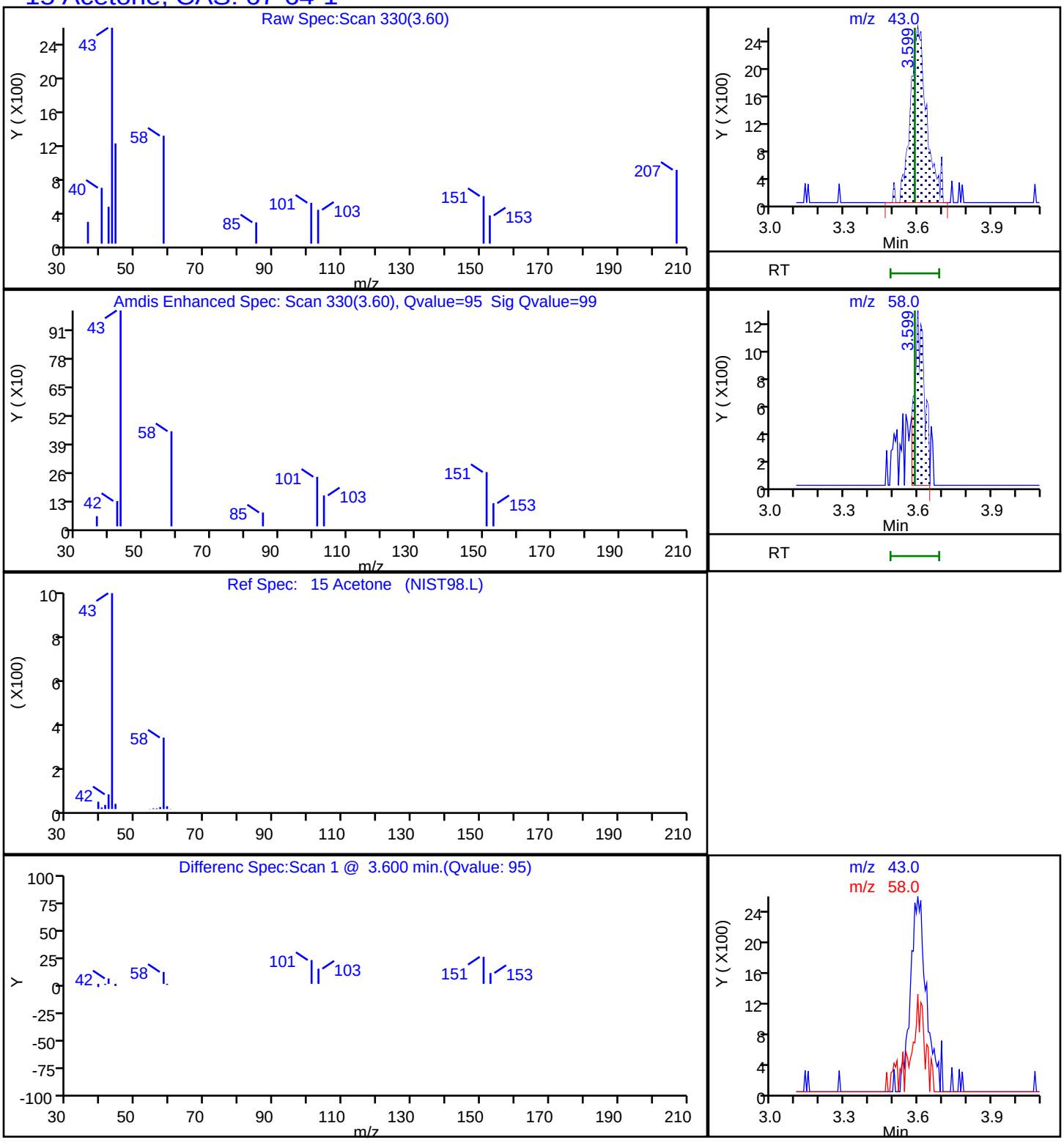
First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 10:00:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.3	102.73
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.7	106.66
$ 75 Toluene-d8 (Surr)	10.0	10.1	101.11
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.57	95.66

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X24.D				
Injection Date:	27-Mar-2022 16:59:30	Instrument ID:	19930		
Lims ID:	410-77437-A-10	Lab Sample ID:	410-77437-10		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

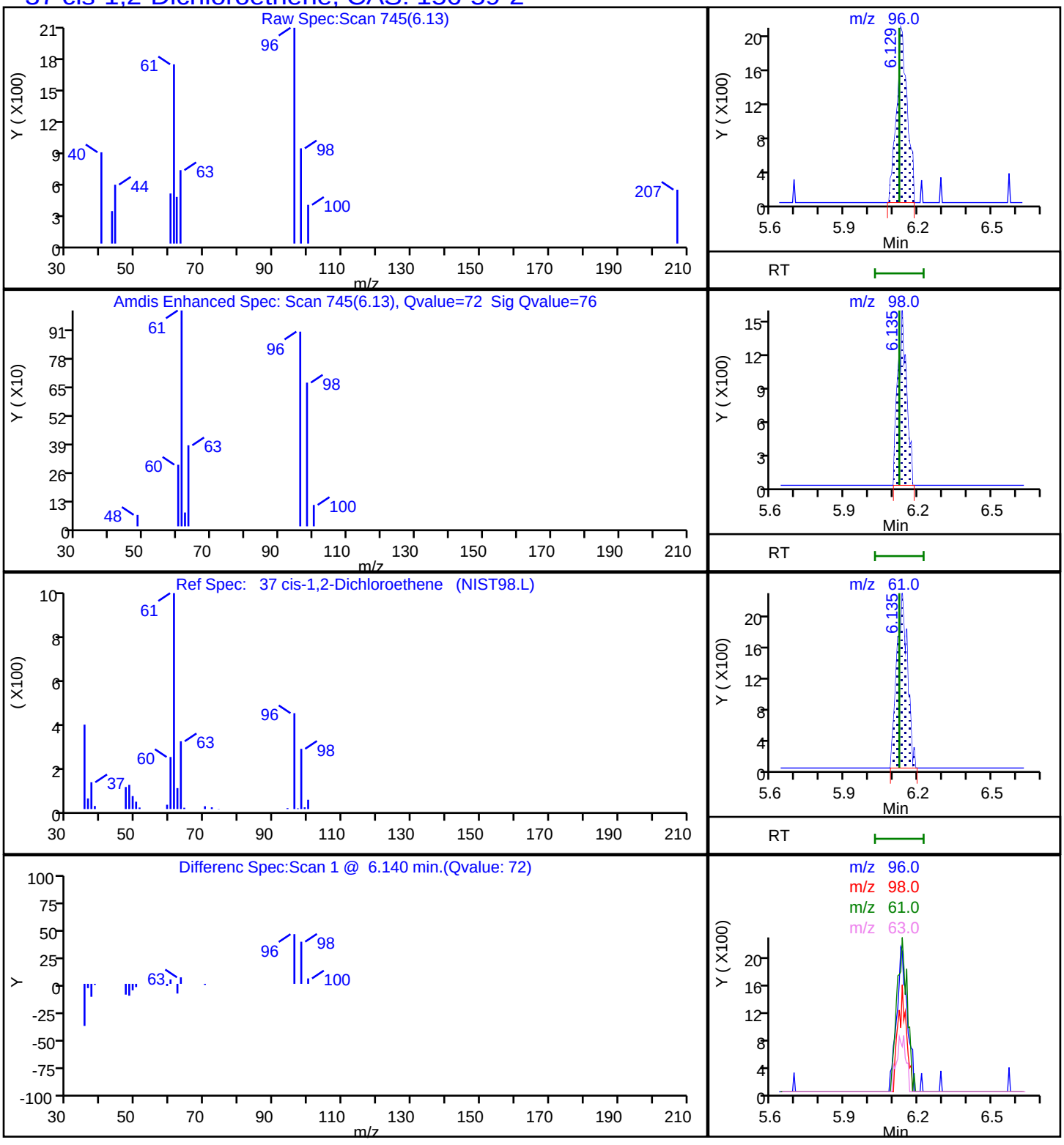
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X24.D				
Injection Date:	27-Mar-2022 16:59:30	Instrument ID:	19930		
Lims ID:	410-77437-A-10	Lab Sample ID:	410-77437-10		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

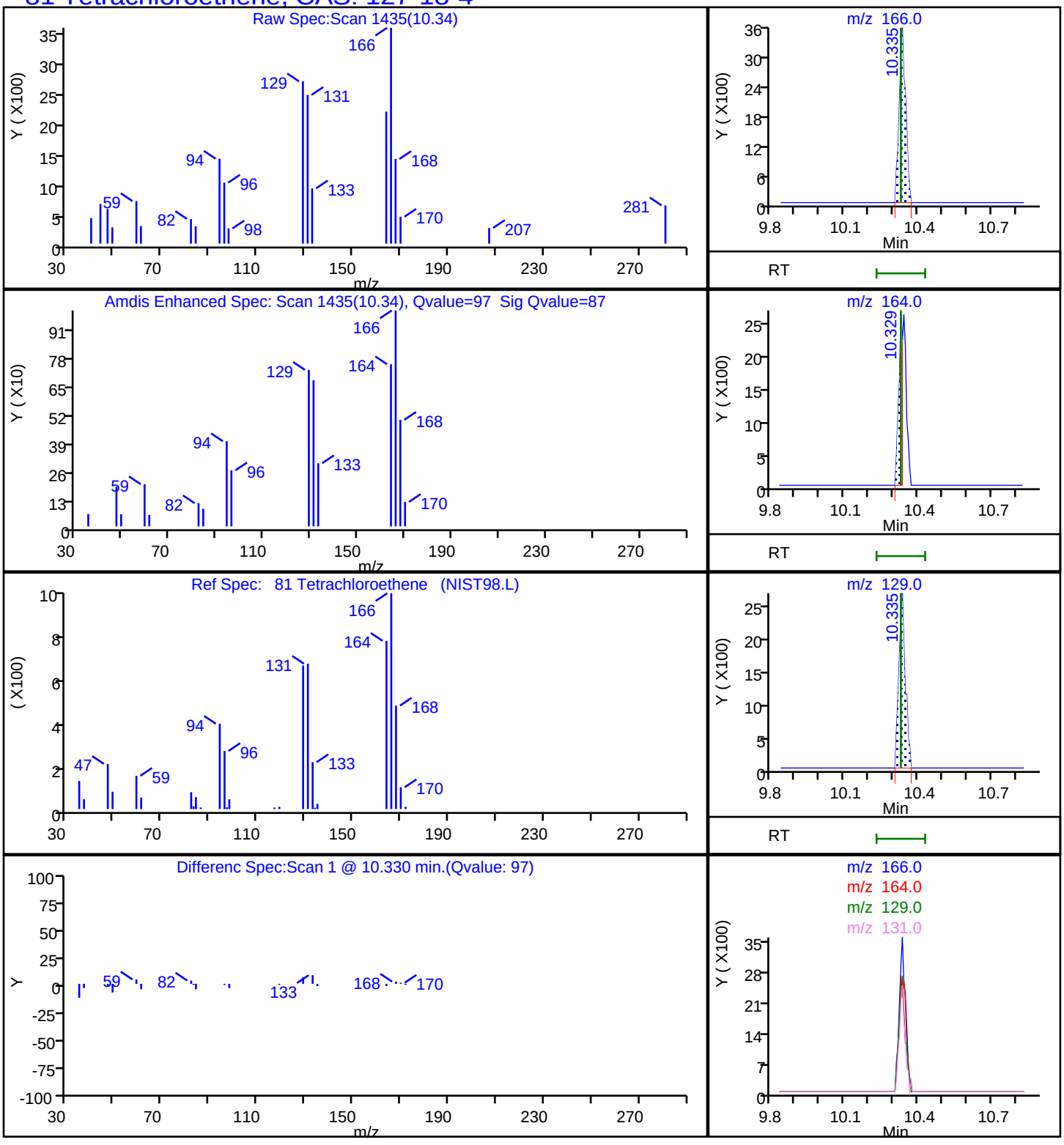
37 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X24.D
Injection Date: 27-Mar-2022 16:59:30 Instrument ID: 19930
Lims ID: 410-77437-A-10 Lab Sample ID: 410-77437-10
Client ID: HD-COD-SW-27-0/1-0
Operator ID: KNK41612 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

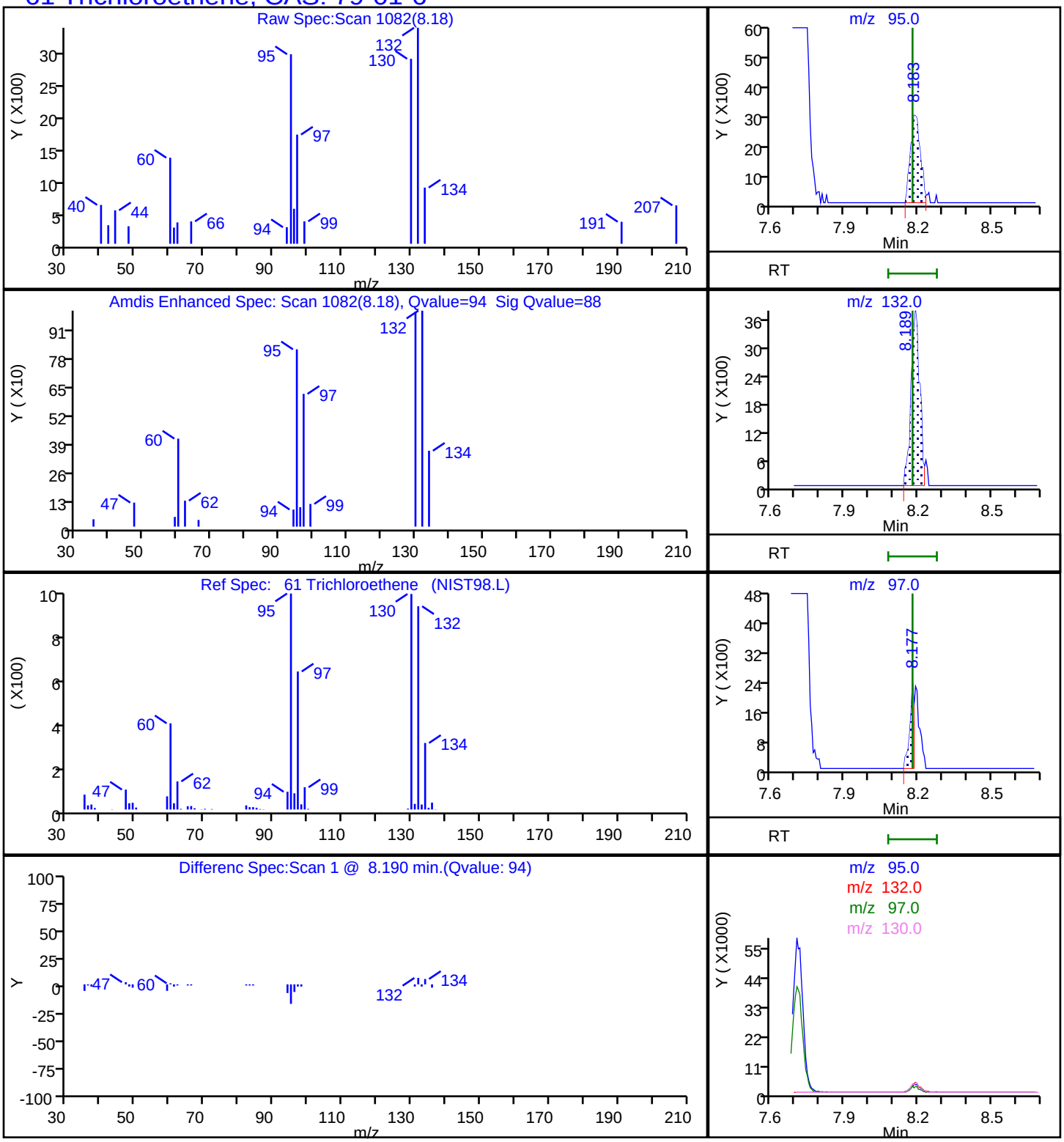
81 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X24.D				
Injection Date:	27-Mar-2022 16:59:30	Instrument ID:	19930		
Lims ID:	410-77437-A-10	Lab Sample ID:	410-77437-10		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 410-77437-11

Matrix: Water Lab File ID: IM27X25.D

Analysis Method: 8260D Date Collected: 03/24/2022 12:00

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 17:20

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.2	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.11	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.22	J	0.50	0.060
108-88-3	Toluene	0.097	J	0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.12	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 410-77437-11

Matrix: Water Lab File ID: IM27X25.D

Analysis Method: 8260D Date Collected: 03/24/2022 12:00

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 17:20

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	104		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X25.D
Lims ID: 410-77437-A-11
Client ID: HD-COD-SW-28-0/1-0
Sample Type: Client
Inject. Date: 27-Mar-2022 17:20:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-026
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 10:03:15 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 10:03:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.148	2.154	-0.006	1	3229	0.0479	
5 Vinyl chloride	62		2.270				ND	
7 Bromomethane	94		2.605				ND	
8 Chloroethane	64		2.684				ND	
14 1,1-Dichloroethene	96		3.556				ND	
15 Acetone	43	3.587	3.586	0.001	99	15552	2.17	
19 Carbon disulfide	76	3.855	3.855	0.000	94	4151	0.0403	
23 Methylene Chloride	84	4.221	4.214	0.007	72	1595	0.0332	
* 24 t-Butyl alcohol-d10 (IS)	65	4.245	4.239	0.006	58	132246	50.0	
27 Methyl tert-butyl ether	73		4.623				ND	
28 trans-1,2-Dichloroethene	96		4.641				ND	
31 1,1-Dichloroethane	63		5.300				ND	
36 2-Butanone (MEK)	43		6.080				ND	7
37 cis-1,2-Dichloroethene	96	6.129	6.123	0.006	79	6367	0.1070	
43 Chlorobromomethane	128		6.458				ND	
45 Chloroform	83	6.610	6.598	0.012	90	6262	0.0652	
$ 46 Dibromofluoromethane (Surr)	113	6.818	6.811	0.007	94	490620	10.4	
47 1,1,1-Trichloroethane	97		6.830				ND	
50 Carbon tetrachloride	117		7.043				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.275	7.275	0.000	67	91042	10.8	M
54 Benzene	78		7.299				ND	7
56 1,2-Dichloroethane	62		7.366				ND	
* 58 Fluorobenzene (IS)	96	7.702	7.702	0.000	99	1750943	10.0	
61 Trichloroethene	95	8.183	8.177	0.006	88	7116	0.1201	
63 1,2-Dichloropropane	63		8.512				ND	
68 Dichlorobromomethane	83		8.854				ND	
73 cis-1,3-Dichloropropene	75		9.396				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.567				ND	7
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1766547	10.0	
76 Toluene	92	9.780	9.780	0.000	97	13320	0.0974	
78 trans-1,3-Dichloropropene	75		10.036				ND	
80 1,1,2-Trichloroethane	97		10.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166	10.335	10.329	0.006	96	17635	0.2243	
83 2-Hexanone	43		10.451				ND	7
85 Chlorodibromomethane	129		10.616				ND	
86 Ethylene Dibromide	107		10.725				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	83	1449629	10.0	
90 Chlorobenzene	112	11.183	11.183	0.000	83	3776	0.0233	a
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.268				ND	
92 Ethylbenzene	91		11.268				ND	7
93 m-Xylene & p-Xylene	106		11.384				ND	7
94 o-Xylene	106		11.713				ND	7
95 Styrene	104		11.725				ND	
96 Bromoform	173		11.884				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	640073	9.36	
101 1,1,2,2-Tetrachloroethane	83		12.256				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	92	867425	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_LLcentISS_00004 Amount Added: 5.00 Units: uL Run Reagent

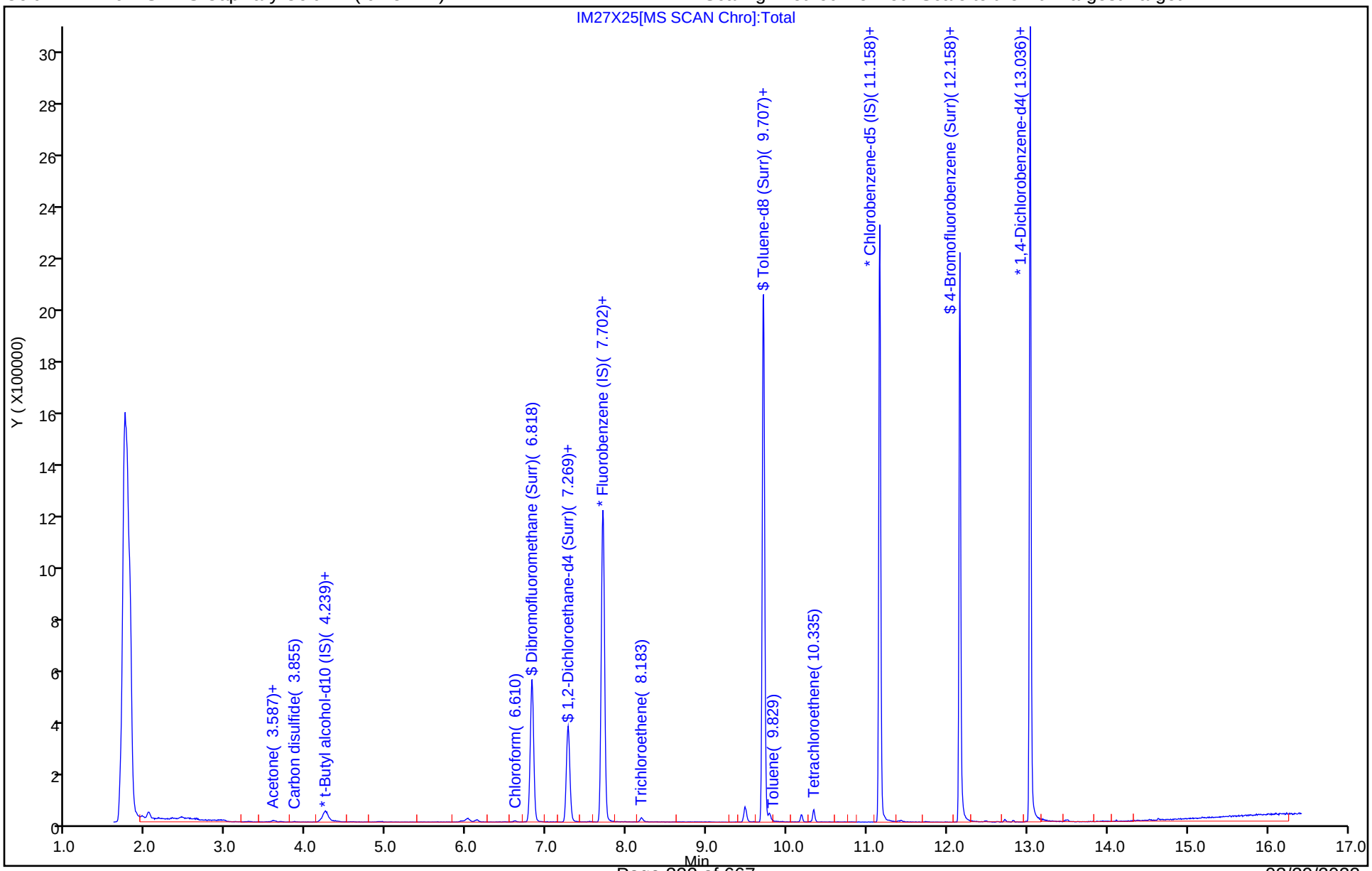
Report Date: 28-Mar-2022 10:03:16 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X25.D

Injection Date:	27-Mar-2022 17:20:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	410-77437-A-11	Lab Sample ID:	410-77437-11	Worklist Smp#:	26
Client ID:	HD-COD-SW-28-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X25.D
Lims ID: 410-77437-A-11
Client ID: HD-COD-SW-28-0/1-0
Sample Type: Client
Inject. Date: 27-Mar-2022 17:20:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-026
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 10:03:15 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

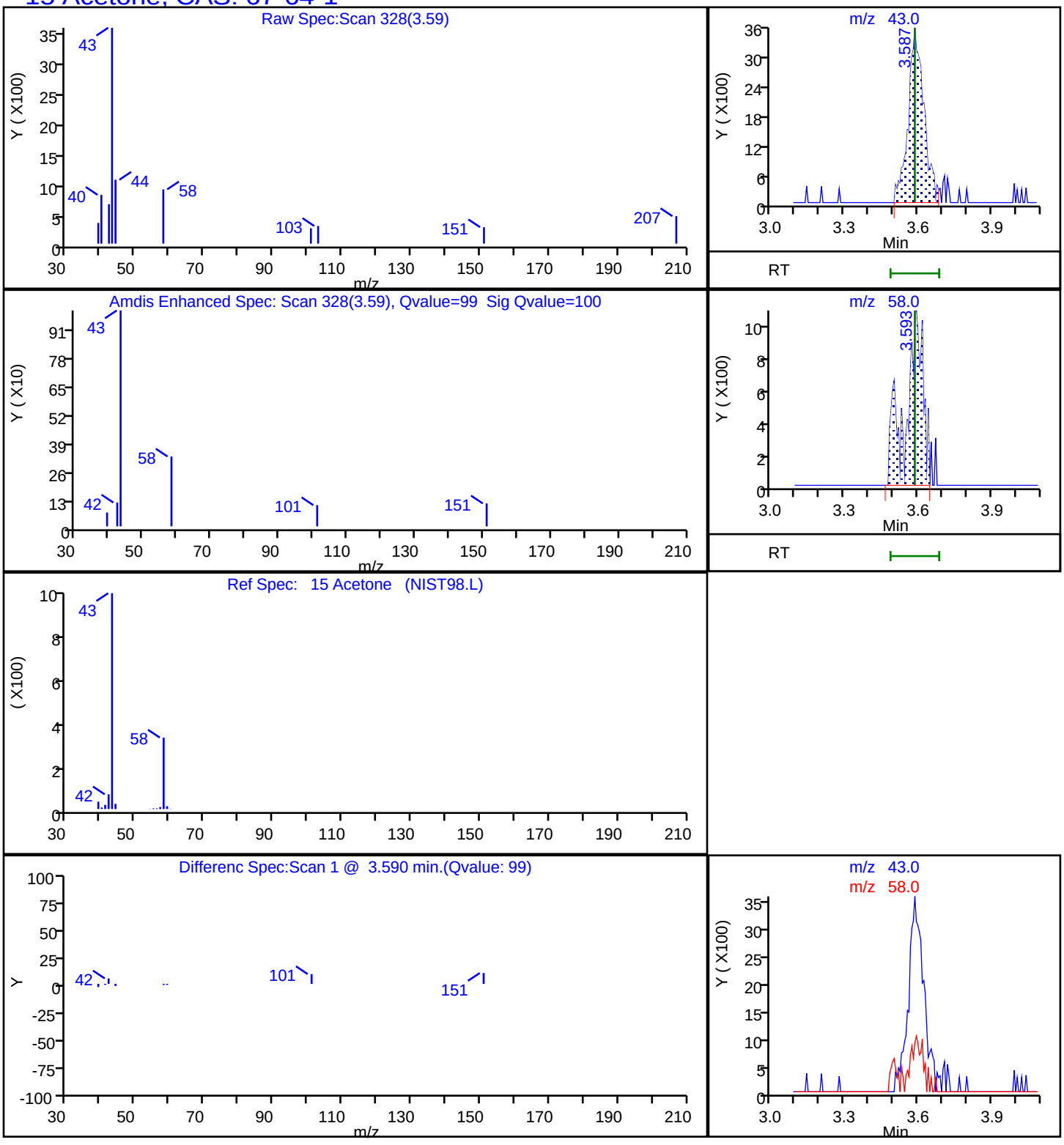
First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 10:03:15

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.4	103.51
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.8	107.83
$ 75 Toluene-d8 (Surr)	10.0	10.0	100.14
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.36	93.56

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X25.D				
Injection Date:	27-Mar-2022 17:20:30	Instrument ID:	19930		
Lims ID:	410-77437-A-11	Lab Sample ID:	410-77437-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

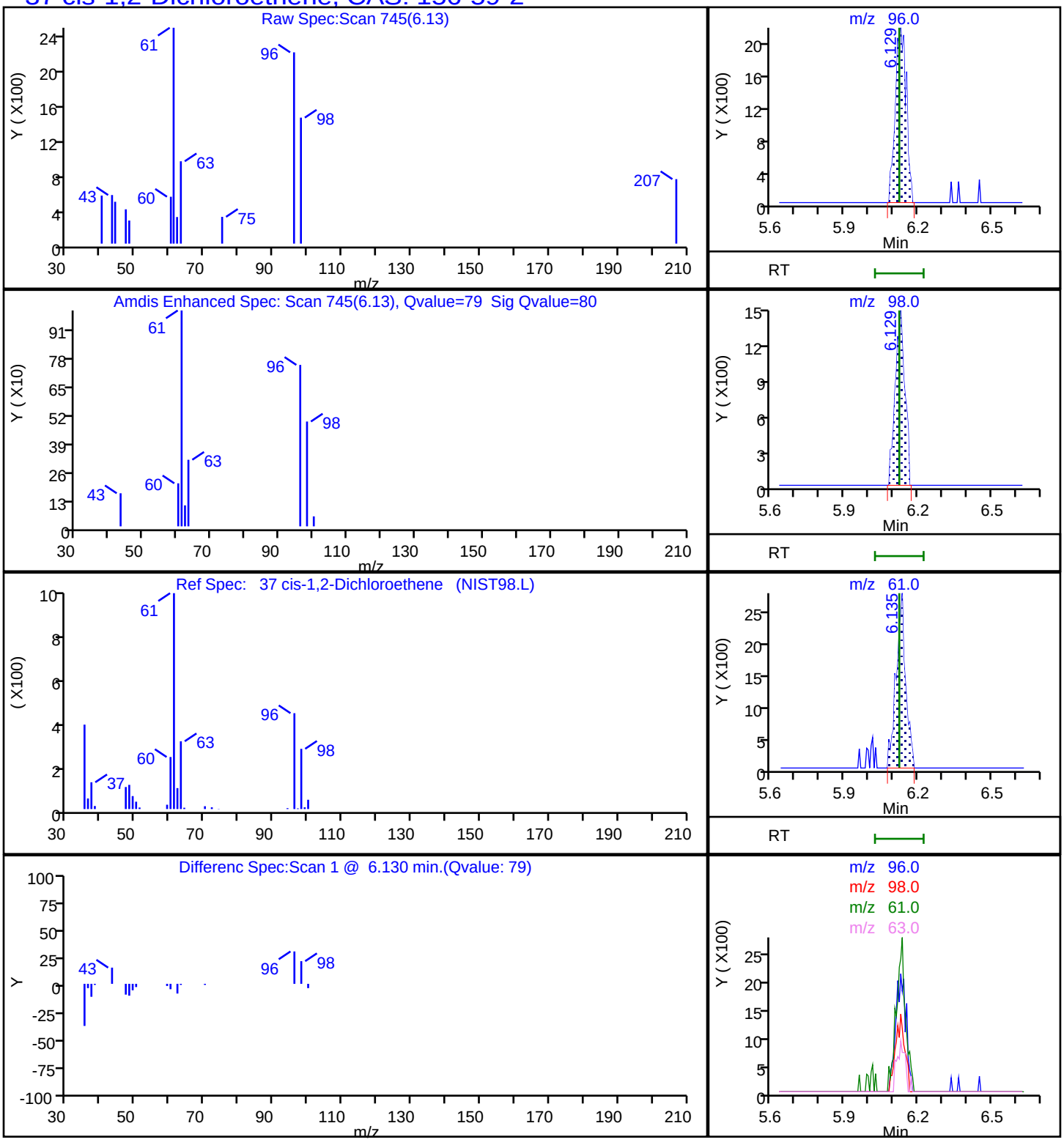
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X25.D				
Injection Date:	27-Mar-2022 17:20:30	Instrument ID:	19930		
Lims ID:	410-77437-A-11	Lab Sample ID:	410-77437-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

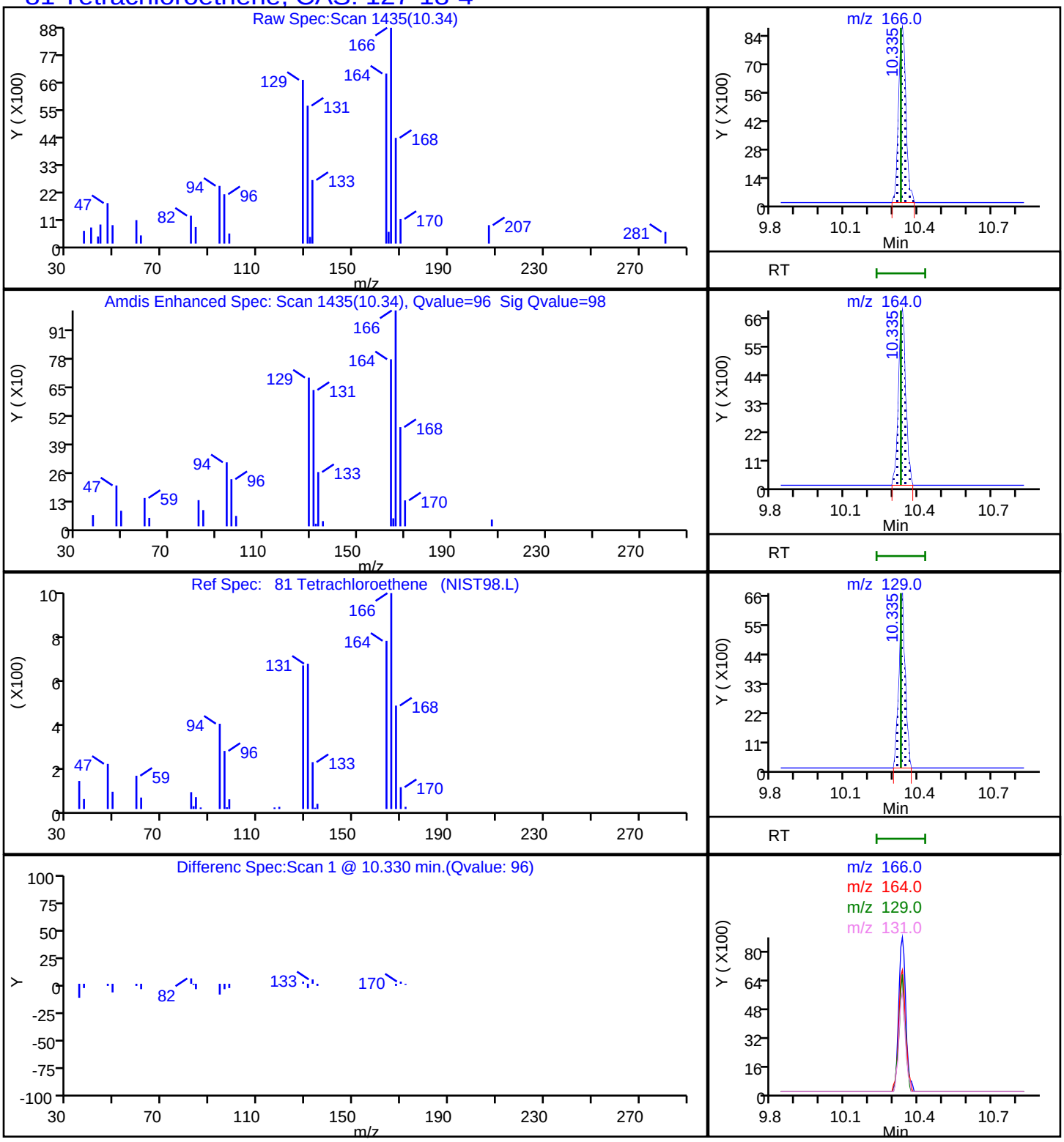
37 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X25.D				
Injection Date:	27-Mar-2022 17:20:30	Instrument ID:	19930		
Lims ID:	410-77437-A-11	Lab Sample ID:	410-77437-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

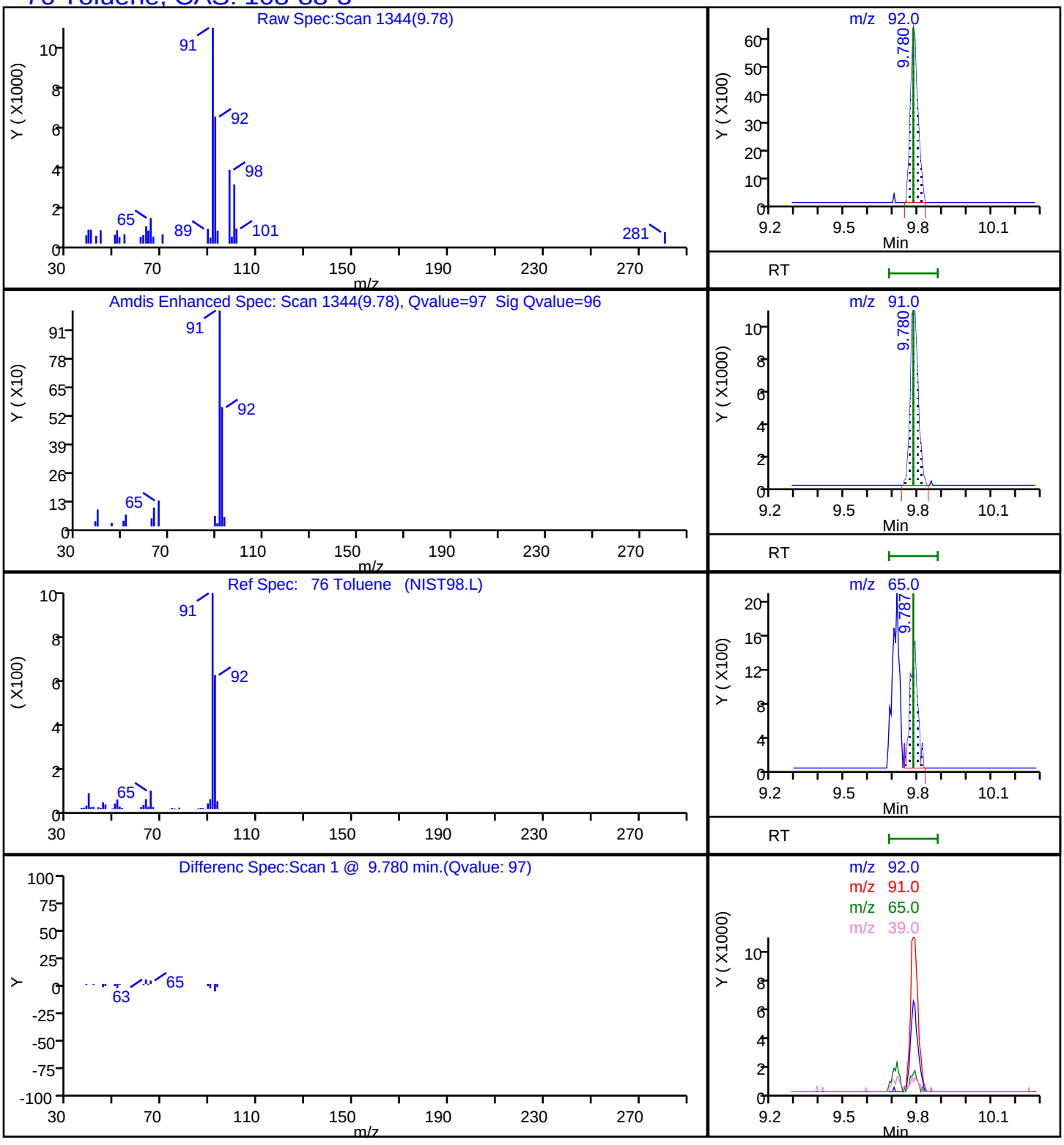
81 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X25.D
Injection Date: 27-Mar-2022 17:20:30 Instrument ID: 19930
Lims ID: 410-77437-A-11 Lab Sample ID: 410-77437-11
Client ID: HD-COD-SW-28-0/1-0
Operator ID: KNK41612 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

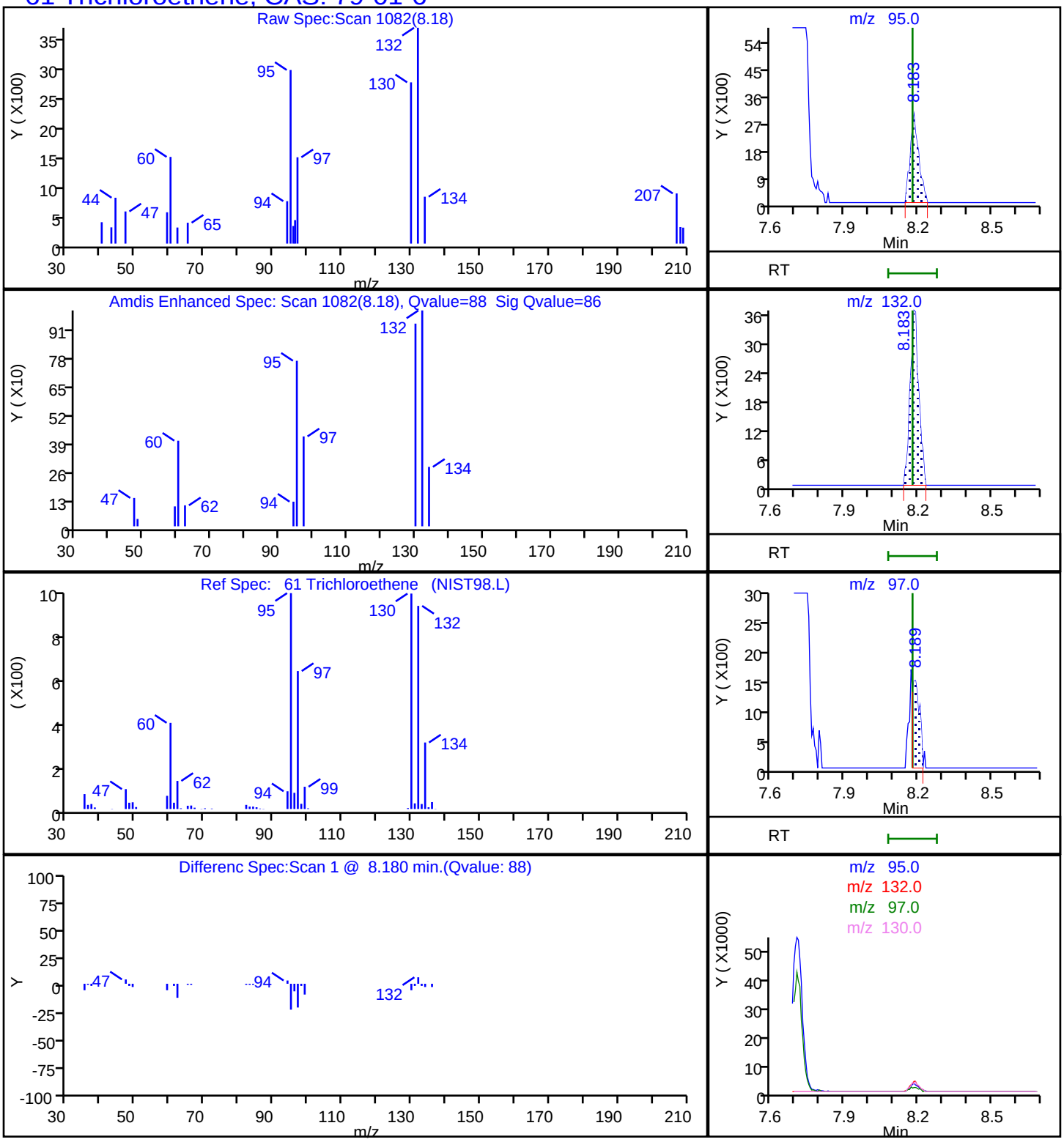
76 Toluene, CAS: 108-88-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X25.D				
Injection Date:	27-Mar-2022 17:20:30	Instrument ID:	19930		
Lims ID:	410-77437-A-11	Lab Sample ID:	410-77437-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6



Eurofins Lancaster Laboratories Env, LLC

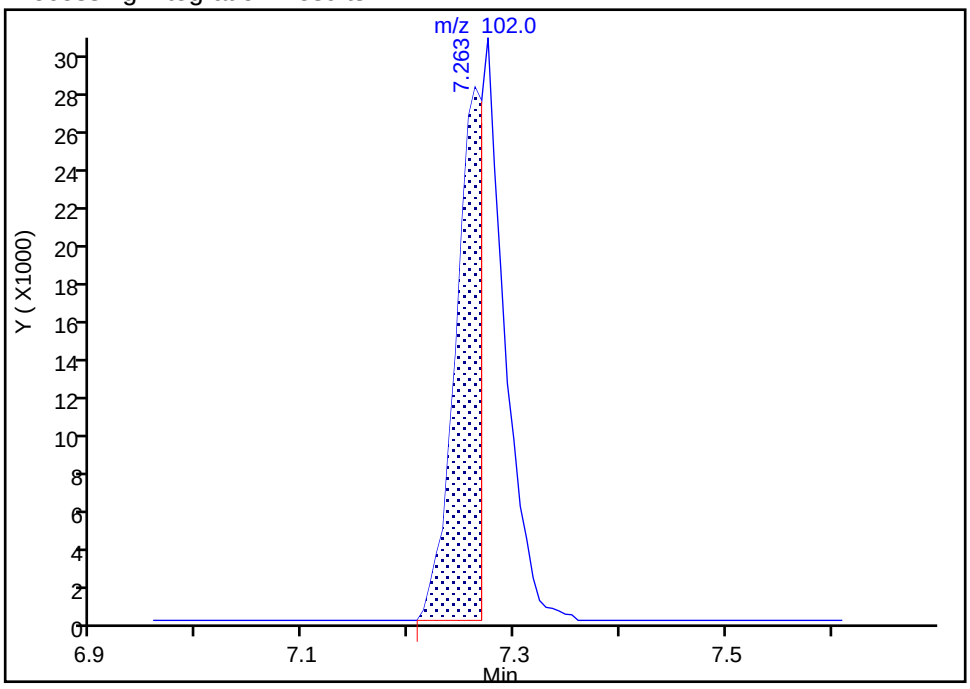
Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X25.D				
Injection Date:	27-Mar-2022 17:20:30	Instrument ID:	19930		
Lims ID:	410-77437-A-11	Lab Sample ID:	410-77437-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

$ 53 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

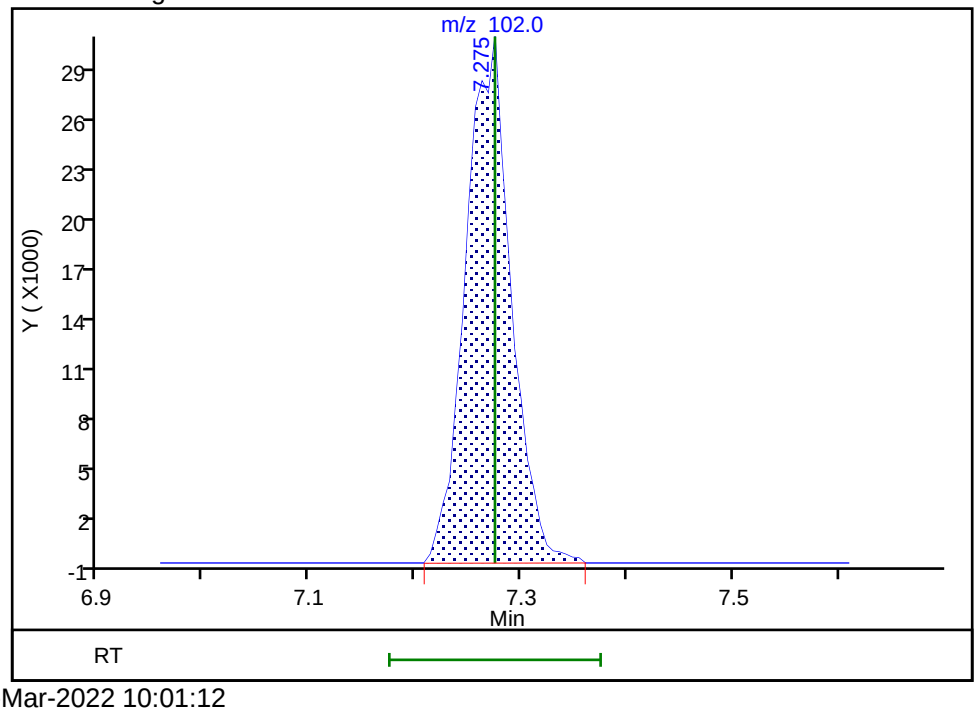
Processing Integration Results

RT: 7.26
Area: 50377
Amount: 5.966512
Amount Units: ug/l



Manual Integration Results

RT: 7.27
Area: 91042
Amount: 10.782762
Amount Units: ug/l



Reviewer: kaewrungrueangp, 28-Mar-2022 10:01:12
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

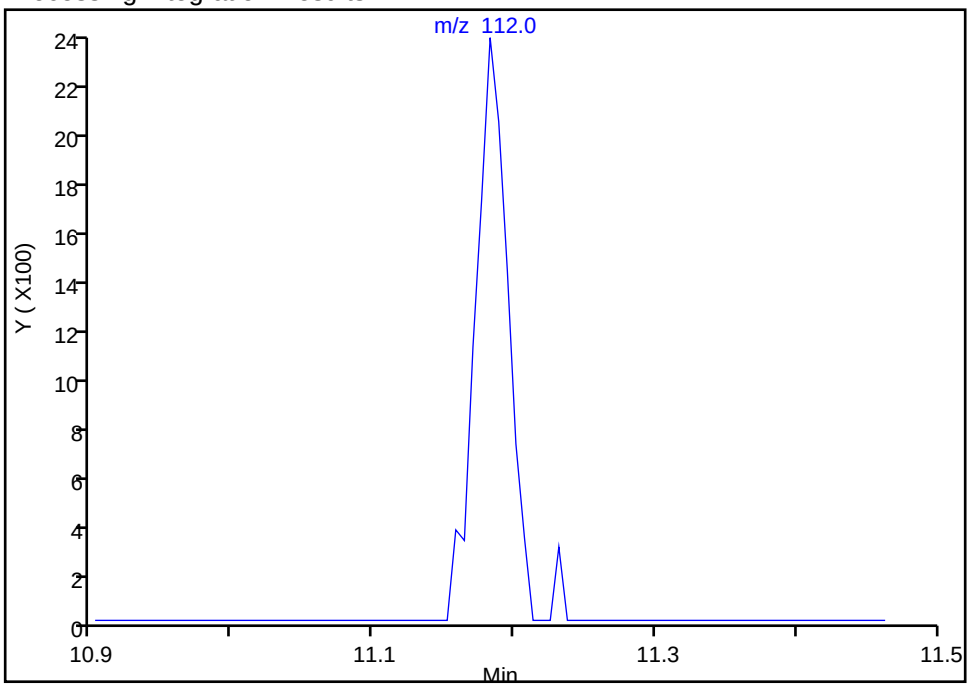
Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X25.D				
Injection Date:	27-Mar-2022 17:20:30	Instrument ID:	19930		
Lims ID:	410-77437-A-11	Lab Sample ID:	410-77437-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

90 Chlorobenzene, CAS: 108-90-7

Signal: 1

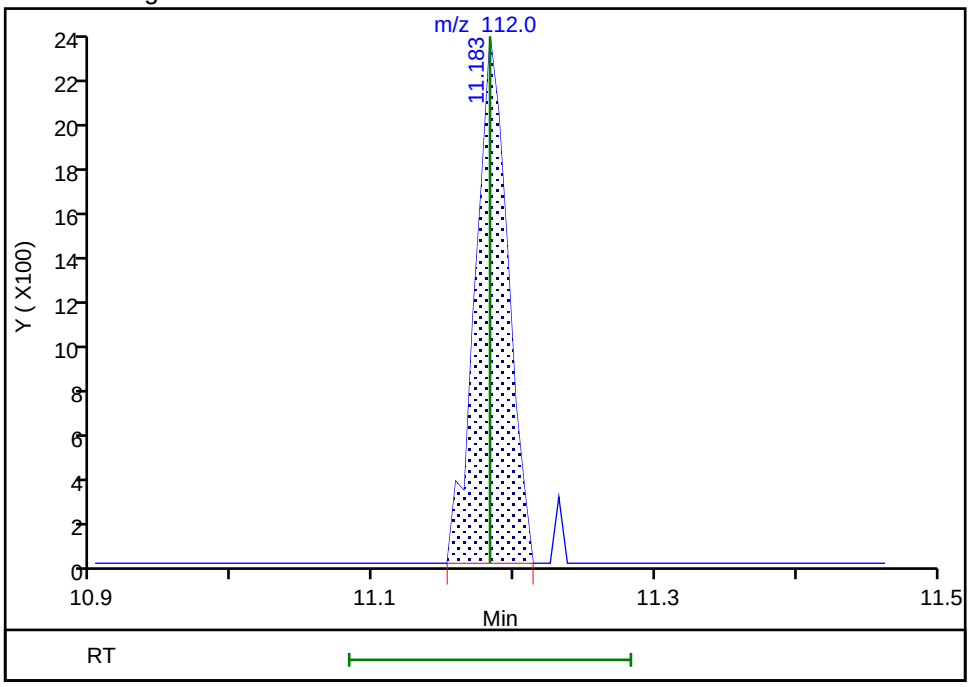
Not Detected
Expected RT: 11.18

Processing Integration Results



Manual Integration Results

RT: 11.18
Area: 3776
Amount: 0.023329
Amount Units: ug/l



Reviewer: kaewrungrueangp, 28-Mar-2022 10:03:07
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 410-77437-12

Matrix: Water Lab File ID: IM27X26.D

Analysis Method: 8260D Date Collected: 03/24/2022 08:55

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 17:41

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.9	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.10	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.25	J	0.50	0.060
108-88-3	Toluene	0.074	J	0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.12	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 410-77437-12

Matrix: Water Lab File ID: IM27X26.D

Analysis Method: 8260D Date Collected: 03/24/2022 08:55

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 17:41

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	104		80-120
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X26.D
Lims ID: 410-77437-A-12
Client ID: HD-COD-SW-29-0/1-0
Sample Type: Client
Inject. Date: 27-Mar-2022 17:41:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-027
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 10:04:30 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 10:04:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50		2.154				ND	7
5 Vinyl chloride	62		2.270				ND	
7 Bromomethane	94		2.605				ND	
8 Chloroethane	64		2.684				ND	
14 1,1-Dichloroethene	96		3.556				ND	
15 Acetone	43	3.593	3.586	0.007	96	14097	1.87	
19 Carbon disulfide	76	3.855	3.855	0.000	52	4394	0.0427	M
23 Methylene Chloride	84		4.214				ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.233	4.239	-0.006	23	138968	50.0	
27 Methyl tert-butyl ether	73		4.623				ND	
28 trans-1,2-Dichloroethene	96		4.641				ND	
31 1,1-Dichloroethane	63		5.300				ND	
36 2-Butanone (MEK)	43		6.080				ND	7
37 cis-1,2-Dichloroethene	96	6.123	6.123	0.000	74	6085	0.1024	
43 Chlorobromomethane	128		6.458				ND	
45 Chloroform	83	6.598	6.598	0.000	78	4110	0.0429	
$ 46 Dibromofluoromethane (Surr)	113	6.818	6.811	0.007	94	489815	10.4	
47 1,1,1-Trichloroethane	97		6.830				ND	7
50 Carbon tetrachloride	117		7.043				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.263	7.275	-0.012	67	88969	10.6	
54 Benzene	78		7.299				ND	
56 1,2-Dichloroethane	62		7.366				ND	
* 58 Fluorobenzene (IS)	96	7.702	7.702	0.000	99	1748159	10.0	
61 Trichloroethene	95	8.177	8.177	0.000	93	7344	0.1241	
63 1,2-Dichloropropane	63		8.512				ND	
68 Dichlorobromomethane	83		8.854				ND	
73 cis-1,3-Dichloropropene	75		9.396				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.567				ND	7
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1769432	10.1	
76 Toluene	92	9.787	9.780	0.007	98	9983	0.0736	
78 trans-1,3-Dichloropropene	75		10.036				ND	
80 1,1,2-Trichloroethane	97		10.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166	10.329	10.329	0.000	97	19538	0.2507	
83 2-Hexanone	43		10.451				ND	
85 Chlorodibromomethane	129		10.616				ND	
86 Ethylene Dibromide	107		10.725				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	83	1436818	10.0	
90 Chlorobenzene	112		11.183				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.268				ND	
92 Ethylbenzene	91		11.268				ND	7
93 m-Xylene & p-Xylene	106		11.384				ND	7
94 o-Xylene	106		11.713				ND	
95 Styrene	104		11.725				ND	
96 Bromoform	173		11.884				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	627471	9.25	
101 1,1,2,2-Tetrachloroethane	83		12.256				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	92	855845	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSV_LLcentISS_00004 Amount Added: 5.00 Units: uL Run Reagent

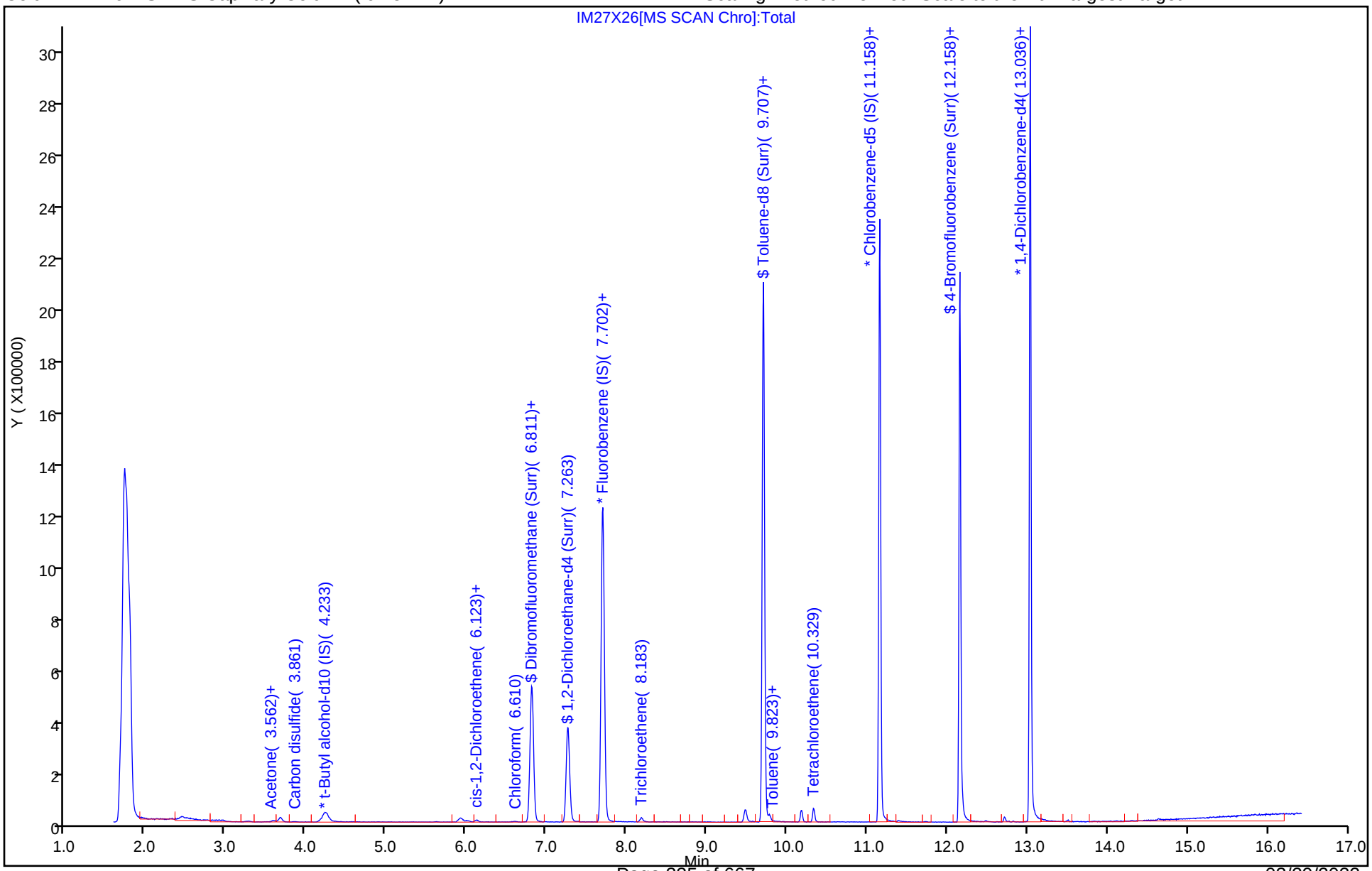
Report Date: 28-Mar-2022 10:04:31 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X26.D

Injection Date:	27-Mar-2022 17:41:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	410-77437-A-12	Lab Sample ID:	410-77437-12	Worklist Smp#:	27
Client ID:	HD-COD-SW-29-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X26.D
Lims ID: 410-77437-A-12
Client ID: HD-COD-SW-29-0/1-0
Sample Type: Client
Inject. Date: 27-Mar-2022 17:41:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-027
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 10:04:30 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

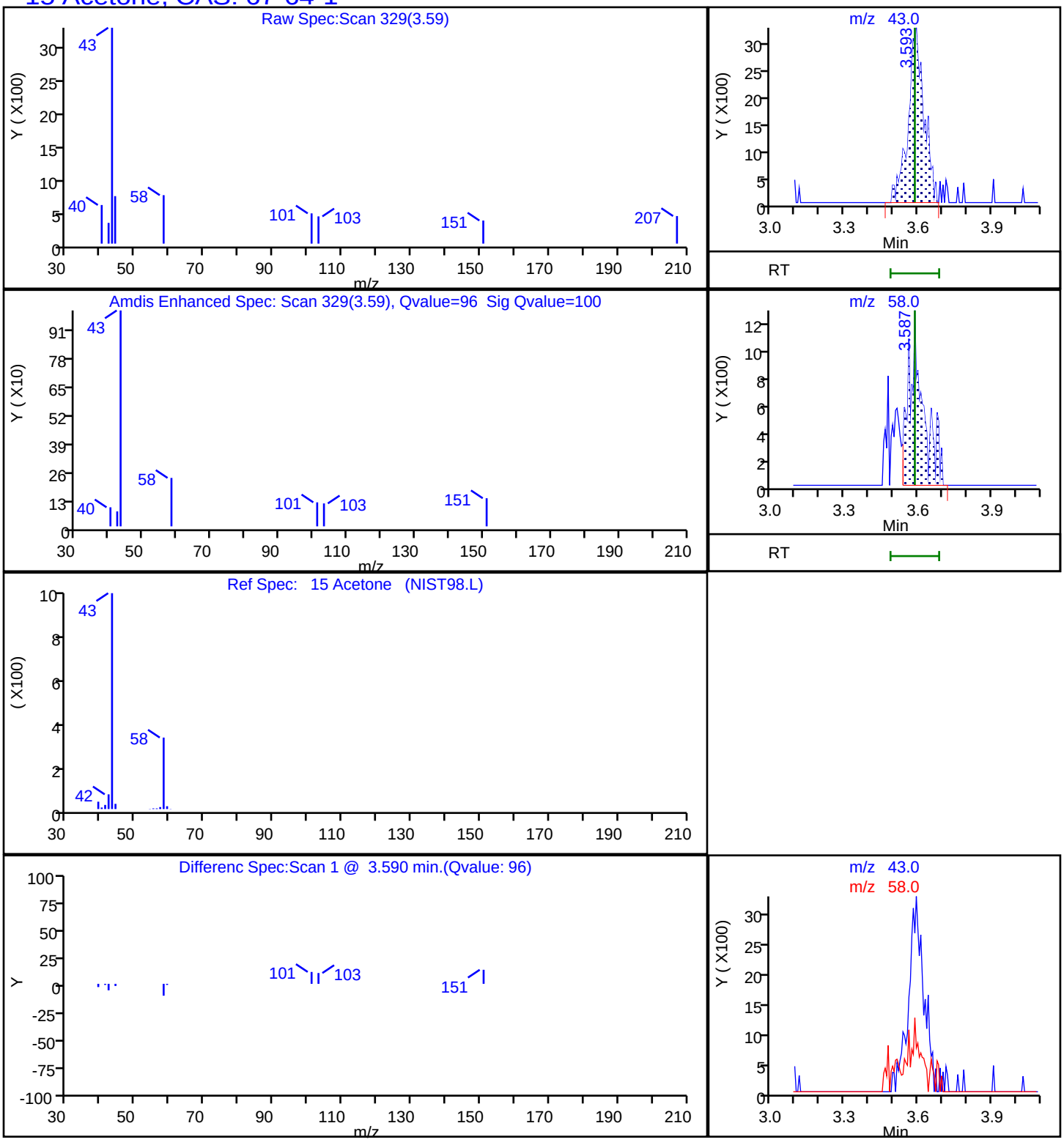
First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 10:04:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.4	103.51
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.6	105.54
$ 75 Toluene-d8 (Surr)	10.0	10.1	101.20
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.25	92.54

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X26.D				
Injection Date:	27-Mar-2022 17:41:30	Instrument ID:	19930		
Lims ID:	410-77437-A-12	Lab Sample ID:	410-77437-12		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

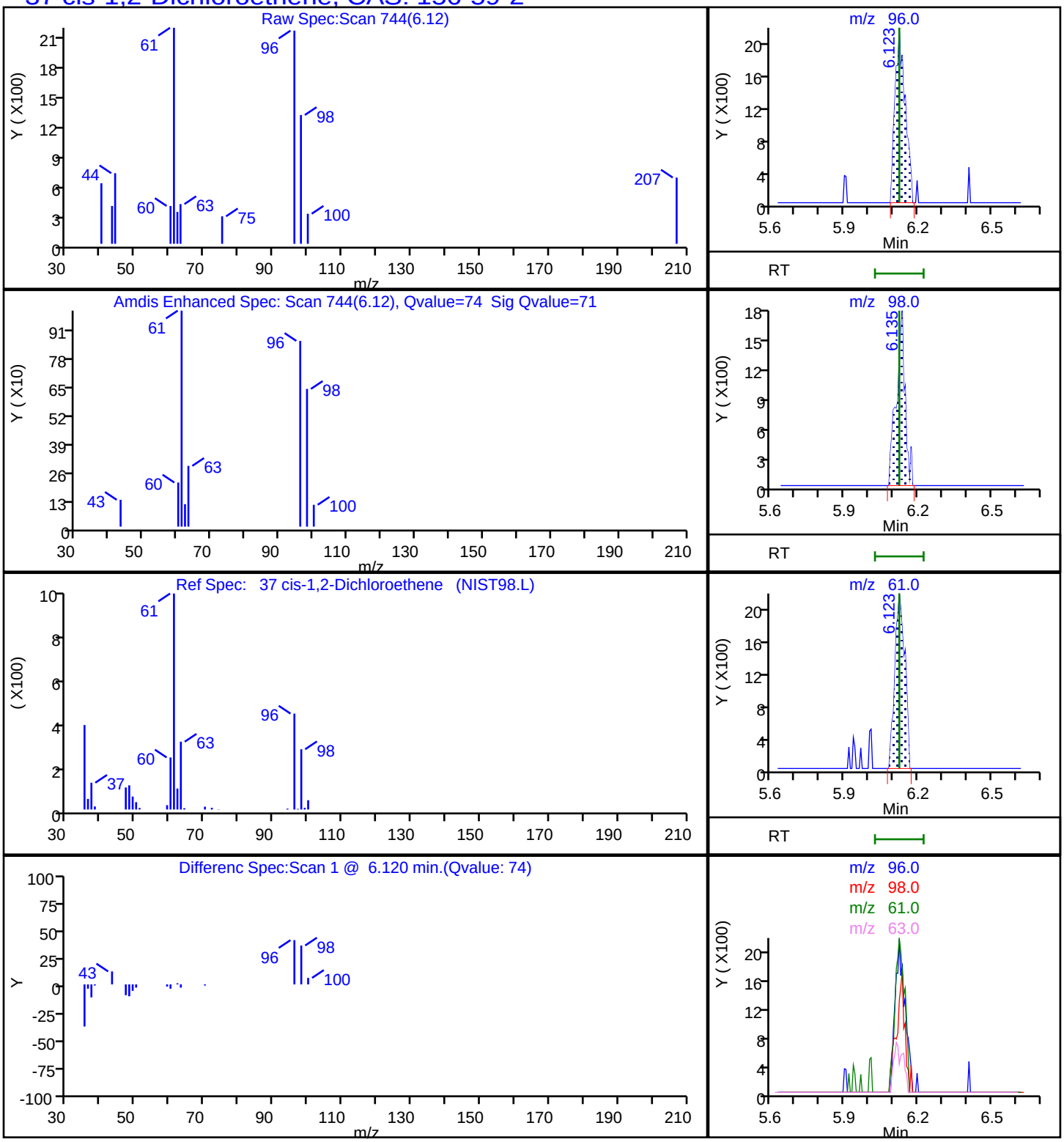
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X26.D				
Injection Date:	27-Mar-2022 17:41:30	Instrument ID:	19930		
Lims ID:	410-77437-A-12	Lab Sample ID:	410-77437-12		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

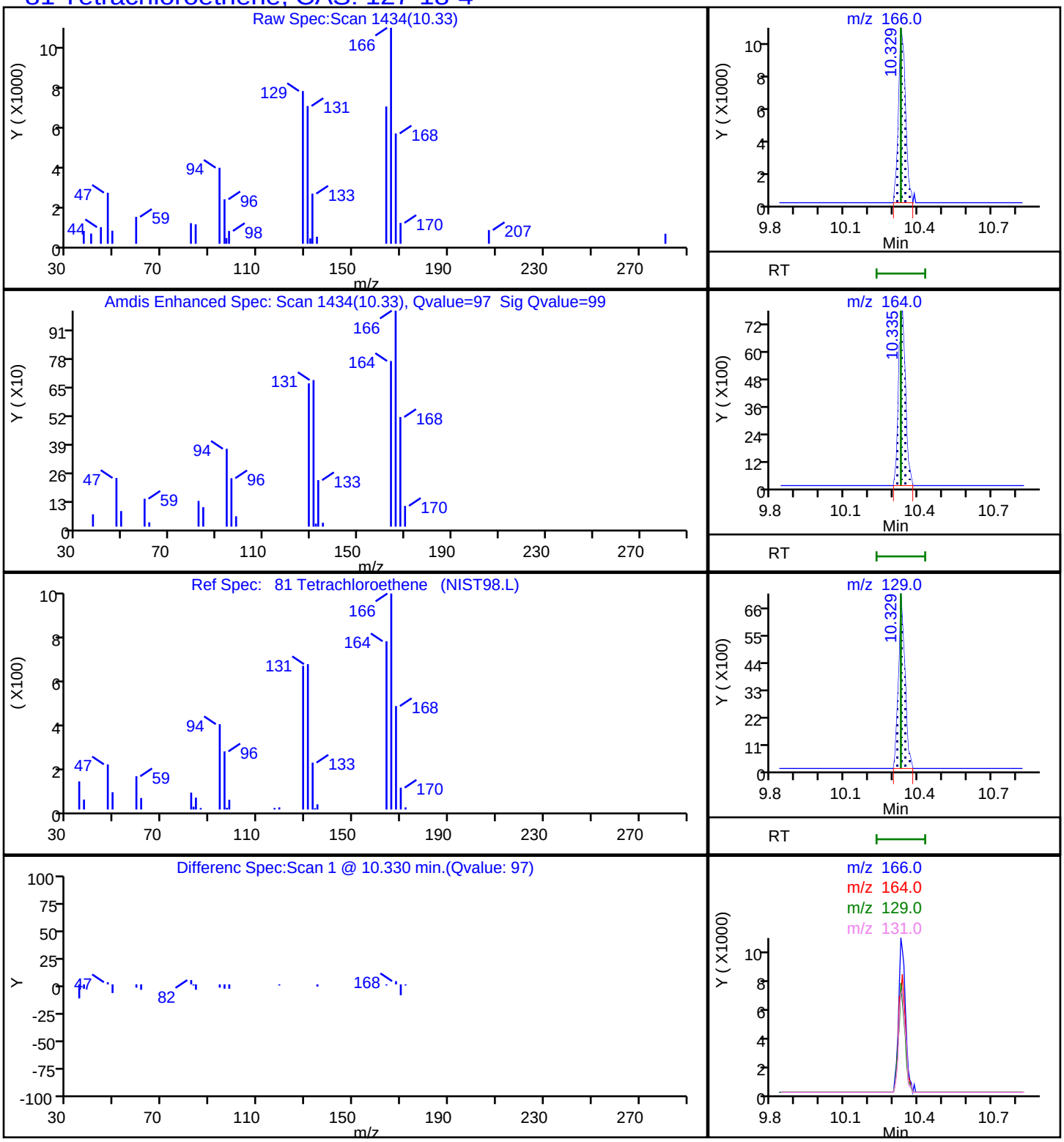
37 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X26.D
Injection Date: 27-Mar-2022 17:41:30 Instrument ID: 19930
Lims ID: 410-77437-A-12 Lab Sample ID: 410-77437-12
Client ID: HD-COD-SW-29-0/1-0
Operator ID: KNK41612 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

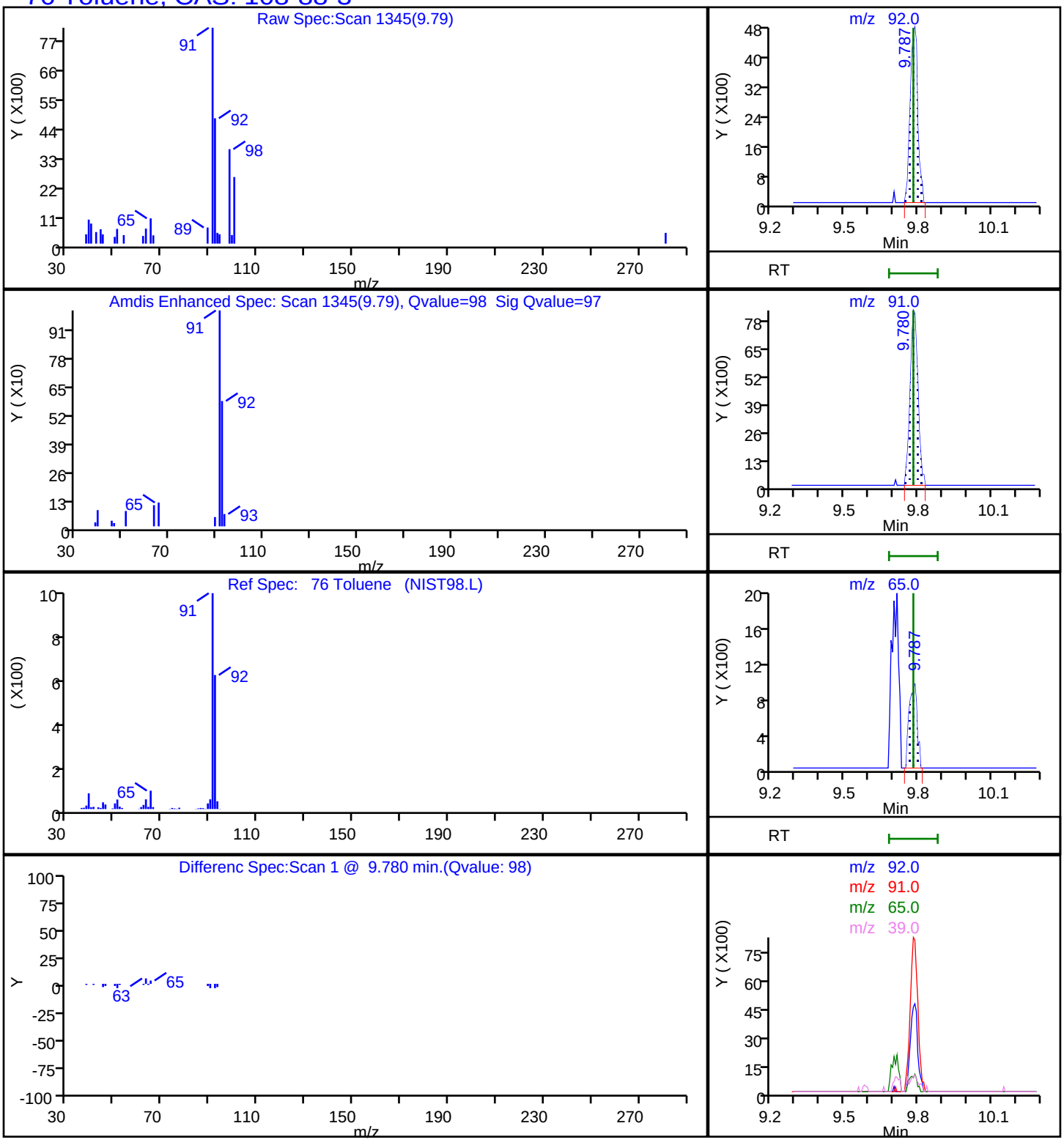
81 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X26.D				
Injection Date:	27-Mar-2022 17:41:30	Instrument ID:	19930		
Lims ID:	410-77437-A-12	Lab Sample ID:	410-77437-12		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

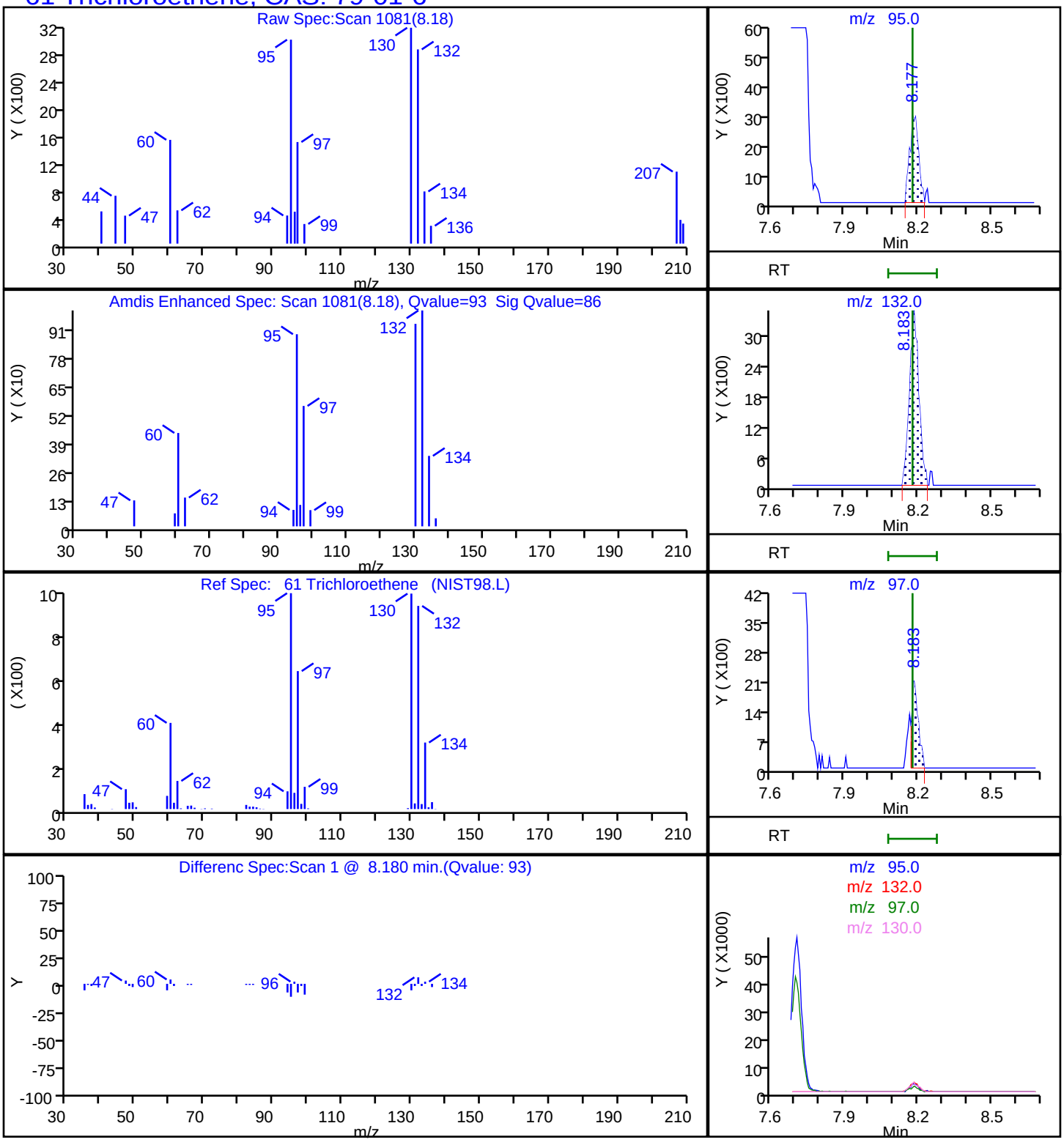
76 Toluene, CAS: 108-88-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X26.D				
Injection Date:	27-Mar-2022 17:41:30	Instrument ID:	19930		
Lims ID:	410-77437-A-12	Lab Sample ID:	410-77437-12		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

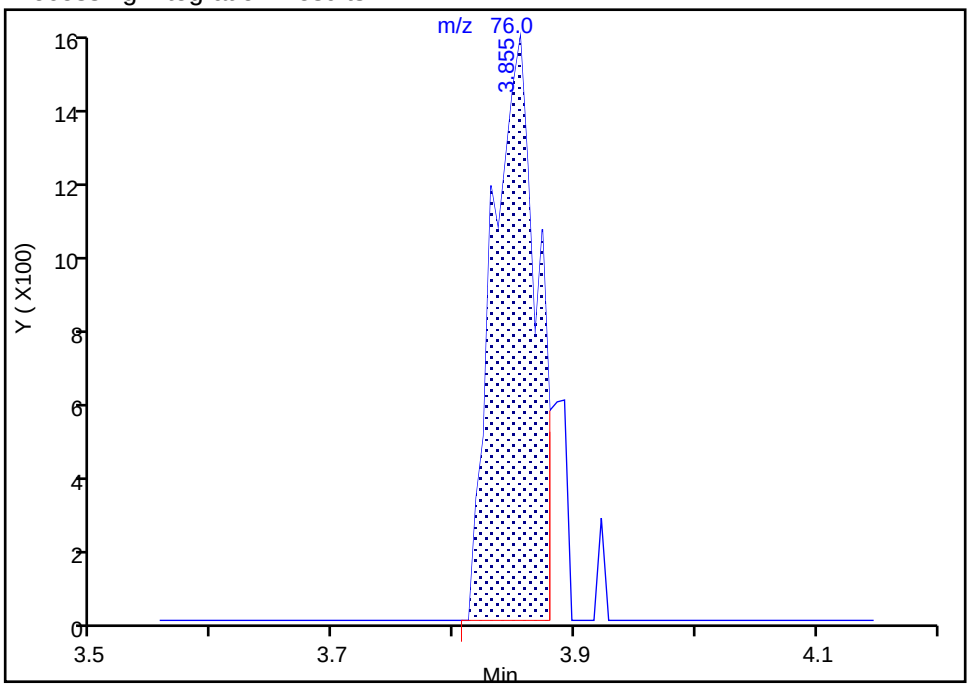
Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X26.D				
Injection Date:	27-Mar-2022 17:41:30	Instrument ID:	19930		
Lims ID:	410-77437-A-12	Lab Sample ID:	410-77437-12		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	KNK41612	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

19 Carbon disulfide, CAS: 75-15-0

Signal: 1

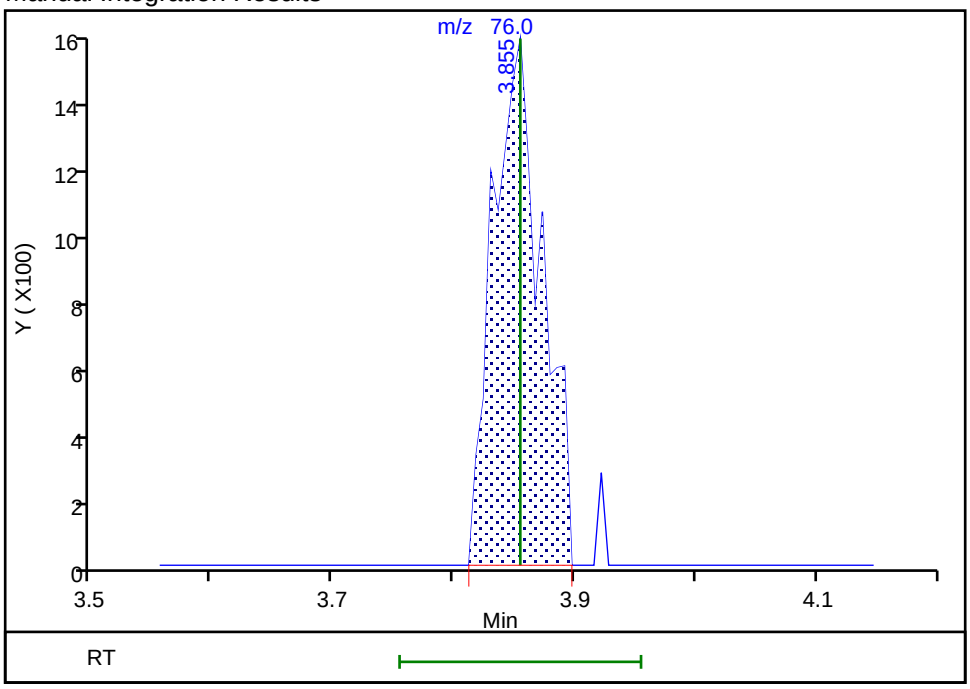
Processing Integration Results

RT: 3.85
Area: 3964
Amount: 0.038549
Amount Units: ug/l



Manual Integration Results

RT: 3.85
Area: 4394
Amount: 0.042731
Amount Units: ug/l



Reviewer: kaewrungrueangp, 28-Mar-2022 10:04:02

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 410-77437-13

Matrix: Water Lab File ID: IM27X27.D

Analysis Method: 8260D Date Collected: 03/24/2022 12:00

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 18:02

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 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	7.4		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	1.2		0.50	0.070
75-35-4	1,1-Dichloroethene	0.61		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	ND		5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	0.23	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	4.2		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	5.0		0.50	0.060
75-01-4	Vinyl chloride	ND		0.50	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 410-77437-13

Matrix: Water Lab File ID: IM27X27.D

Analysis Method: 8260D Date Collected: 03/24/2022 12:00

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 18:02

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	104		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X27.D
Lims ID: 410-77437-A-13
Client ID: HD-QC1-0/1-1
Sample Type: Client
Inject. Date: 27-Mar-2022 18:02:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-028
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 10:06:36 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 10:06:36

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
	4 Chloromethane	50		2.154				ND	
	5 Vinyl chloride	62		2.270				ND	7
	7 Bromomethane	94		2.605				ND	
	8 Chloroethane	64		2.684				ND	
	14 1,1-Dichloroethene	96	3.556	3.556	0.000	97	28083	0.6115	
	15 Acetone	43		3.586				ND	U
	19 Carbon disulfide	76		3.855				ND	
	23 Methylene Chloride	84		4.214				ND	
*	24 t-Butyl alcohol-d10 (IS)	65	4.245	4.239	0.006	30	145019	50.0	
	27 Methyl tert-butyl ether	73		4.623				ND	7
	28 trans-1,2-Dichloroethene	96		4.641				ND	7
	31 1,1-Dichloroethane	63	5.306	5.300	0.006	96	102876	1.15	
	36 2-Butanone (MEK)	43		6.080				ND	
	37 cis-1,2-Dichloroethene	96	6.129	6.123	0.006	76	247749	4.16	
	43 Chlorobromomethane	128		6.458				ND	
	45 Chloroform	83	6.610	6.598	0.012	91	22036	0.2295	
$	46 Dibromofluoromethane (Surr)	113	6.817	6.811	0.006	94	492381	10.4	
	47 1,1,1-Trichloroethane	97	6.830	6.830	0.000	97	685670	7.36	
	50 Carbon tetrachloride	117		7.043				ND	
$	53 1,2-Dichloroethane-d4 (Surr)	102	7.281	7.275	0.006	68	87972	10.4	M
	54 Benzene	78		7.299				ND	
	56 1,2-Dichloroethane	62		7.366				ND	
*	58 Fluorobenzene (IS)	96	7.708	7.702	0.006	99	1750692	10.0	
	61 Trichloroethene	95	8.183	8.177	0.006	94	296403	5.00	
	63 1,2-Dichloropropane	63		8.512				ND	
	68 Dichlorobromomethane	83		8.854				ND	
	73 cis-1,3-Dichloropropene	75		9.396				ND	
	74 4-Methyl-2-pentanone (MIBK)	43		9.567				ND	
$	75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1766652	9.92	
	76 Toluene	92	9.793	9.780	0.013	89	3708	0.0269	
	78 trans-1,3-Dichloropropene	75		10.036				ND	
	80 1,1,2-Trichloroethane	97		10.238				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166	10.329	10.329	0.000	98	8573667	108.0	E
83 2-Hexanone	43		10.451				ND	
85 Chlorodibromomethane	129		10.616				ND	
86 Ethylene Dibromide	107		10.725				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	83	1462828	10.0	
90 Chlorobenzene	112		11.183				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.268				ND	
92 Ethylbenzene	91		11.268				ND	
93 m-Xylene & p-Xylene	106		11.384				ND	7
94 o-Xylene	106		11.713				ND	
95 Styrene	104		11.725				ND	
96 Bromoform	173		11.884				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	642026	9.30	
101 1,1,2,2-Tetrachloroethane	83		12.256				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	93	850523	10.0	

QC Flag Legend

Processing Flags
- E - Exceeded Maximum Amount
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated
- U - Marked Undetected

Reagents:

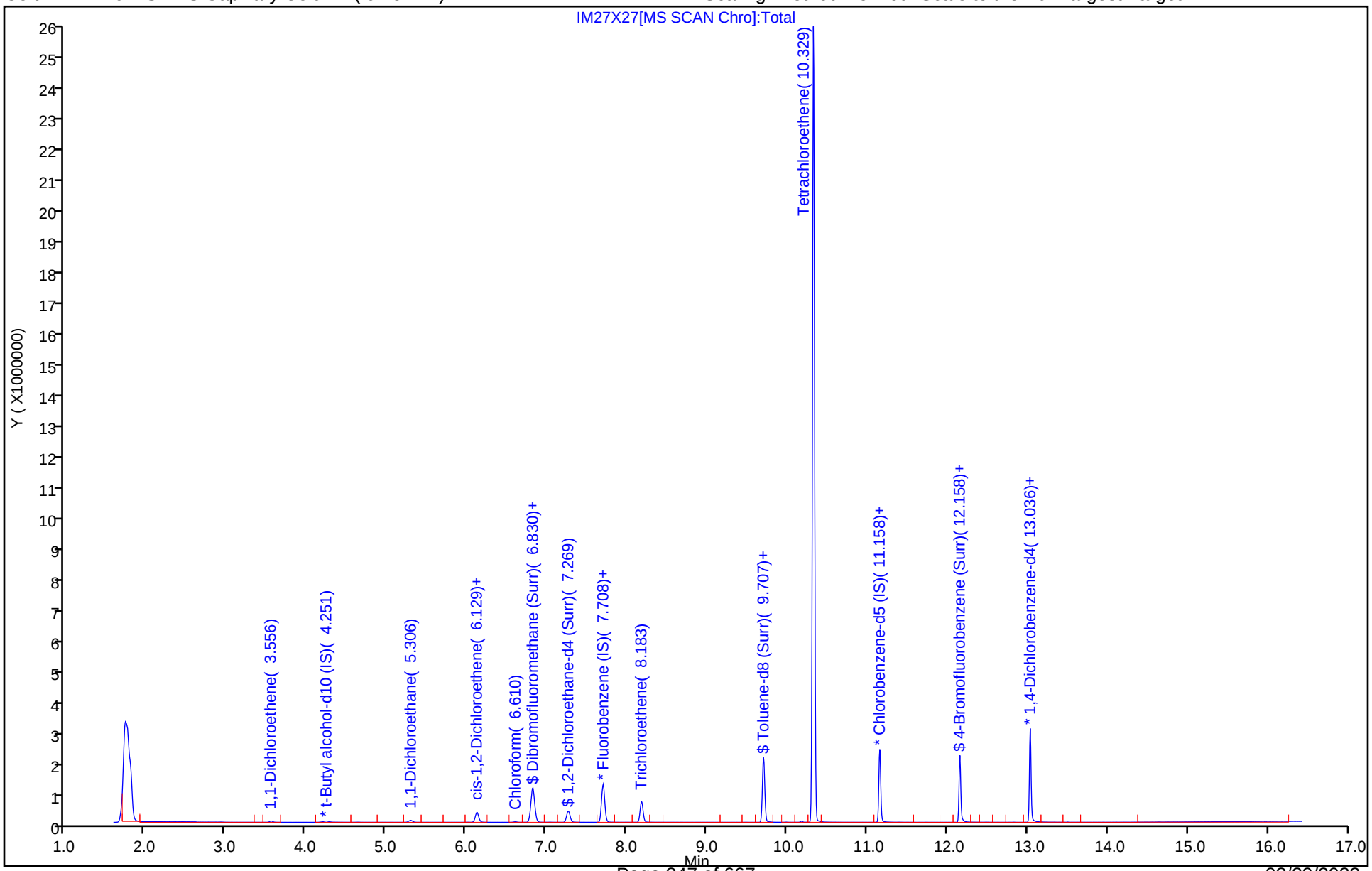
MSV_LLcentISS_00004 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 28-Mar-2022 10:06:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X27.D				
Injection Date:	27-Mar-2022 18:02:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	410-77437-A-13	Lab Sample ID:	410-77437-13	Worklist Smp#:	28
Client ID:	HD-QC1-0/1-1				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X27.D
Lims ID: 410-77437-A-13
Client ID: HD-QC1-0/1-1
Sample Type: Client
Inject. Date: 27-Mar-2022 18:02:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-028
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 10:06:36 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 10:06:36

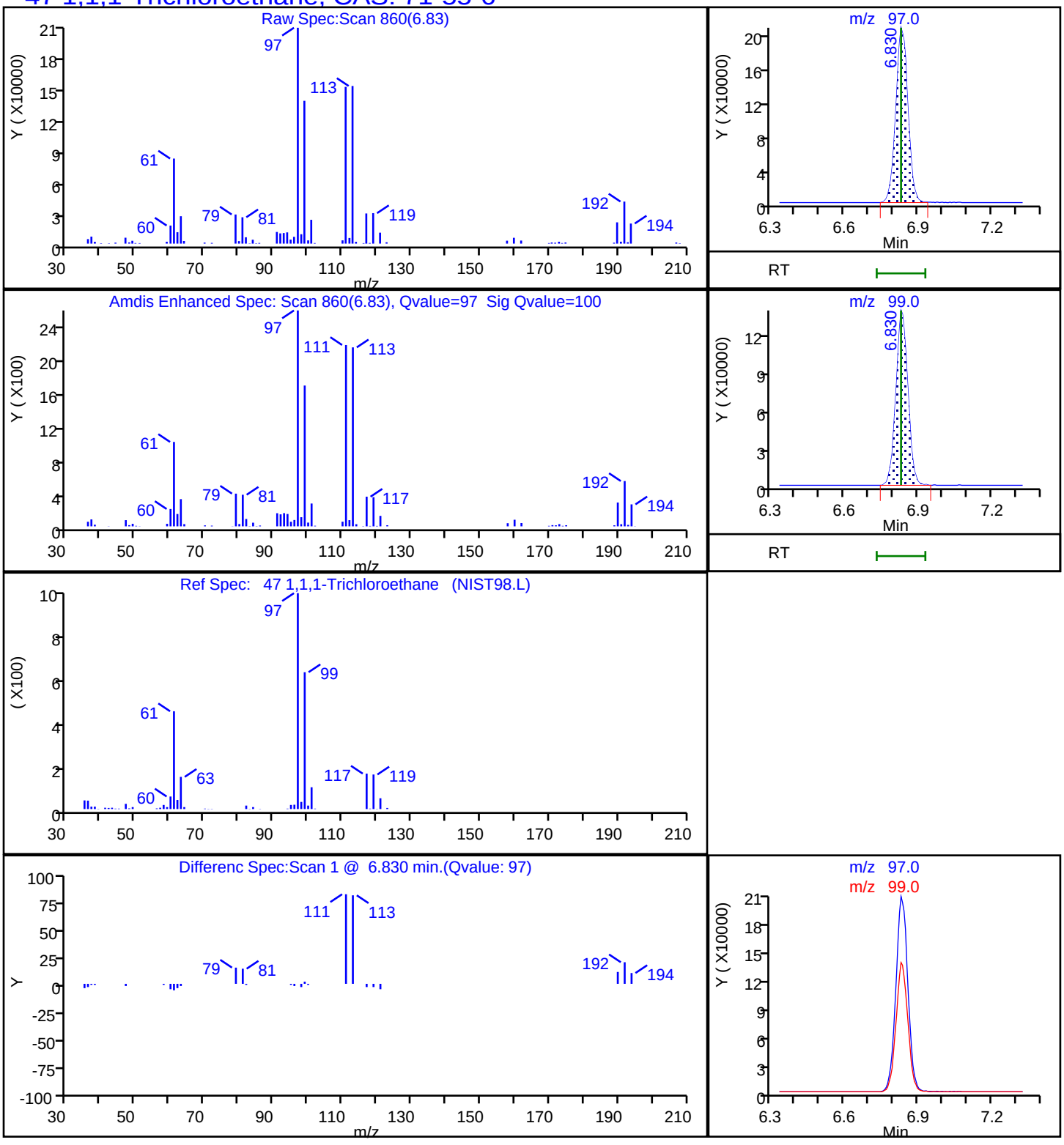
Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.4	103.90
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	104.21
$ 75 Toluene-d8 (Surr)	10.0	9.92	99.24
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.30	93.00

Report Date: 28-Mar-2022 10:06:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X27.D				
Injection Date:	27-Mar-2022 18:02:30	Instrument ID:	19930		
Lims ID:	410-77437-A-13	Lab Sample ID:	410-77437-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	KNK41612	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

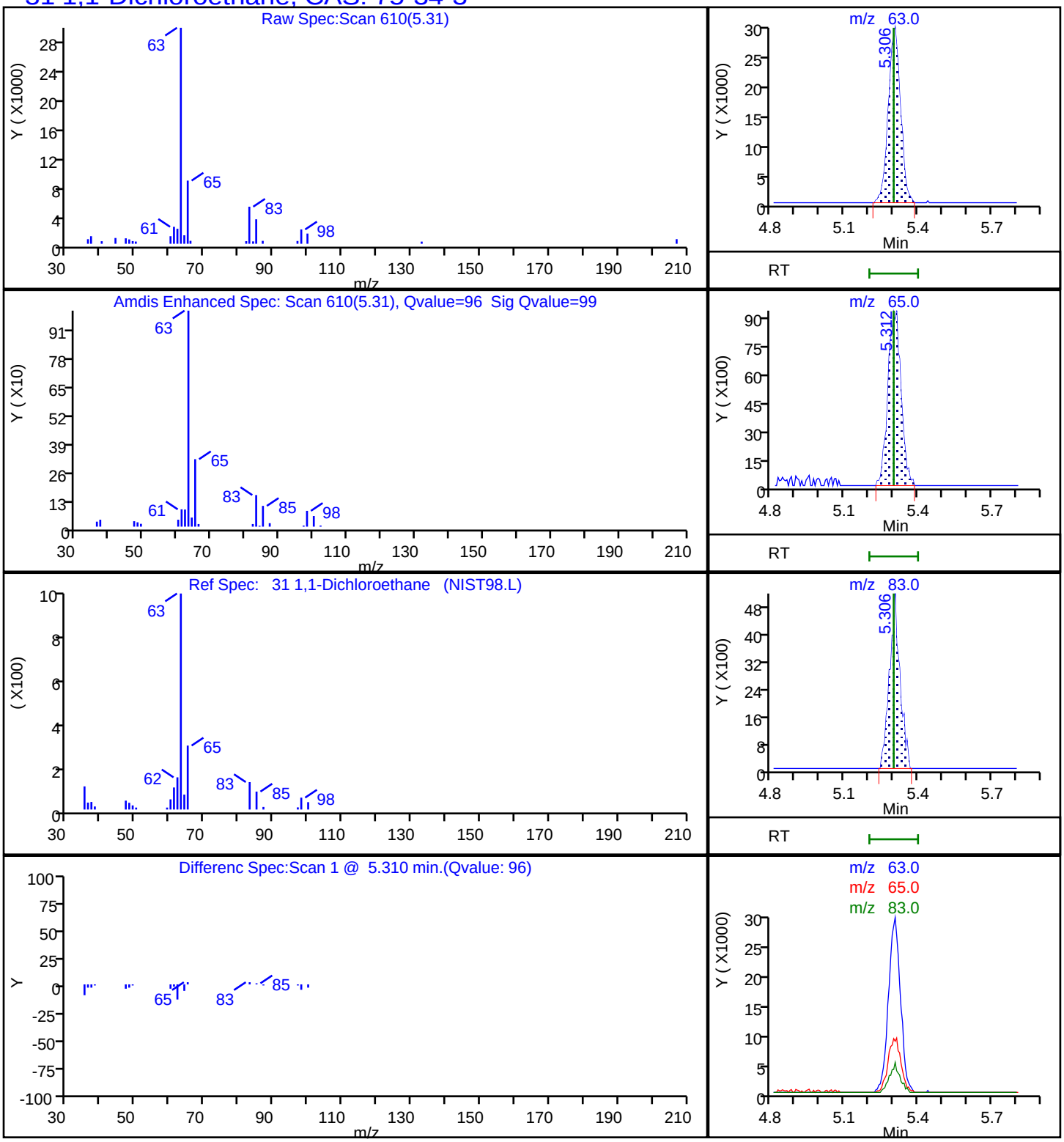
47 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X27.D				
Injection Date:	27-Mar-2022 18:02:30	Instrument ID:	19930		
Lims ID:	410-77437-A-13	Lab Sample ID:	410-77437-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	KNK41612	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

31 1,1-Dichloroethane, CAS: 75-34-3



Report Date: 28-Mar-2022 10:06:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X27.D

Injection Date: 27-Mar-2022 18:02:30 Instrument ID: 19930

Lims ID: 410-77437-A-13 Lab Sample ID: 410-77437-13

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

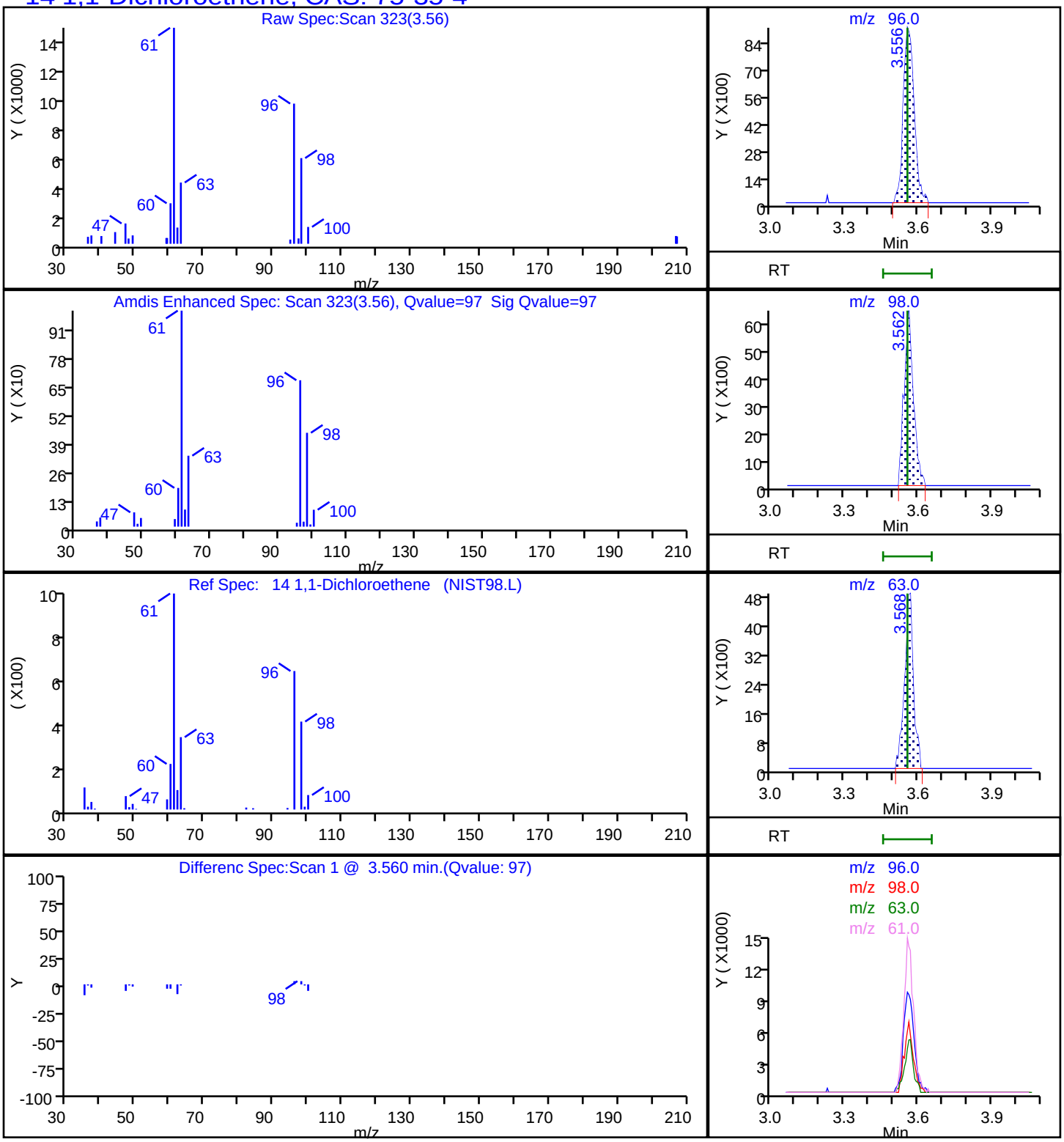
Operator ID: KNK41612 ALS Bottle#: 27 Worklist Smp#: 28

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D

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

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



Report Date: 28-Mar-2022 10:06:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X27.D

Injection Date: 27-Mar-2022 18:02:30 Instrument ID: 19930

Lims ID: 410-77437-A-13 Lab Sample ID: 410-77437-13

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

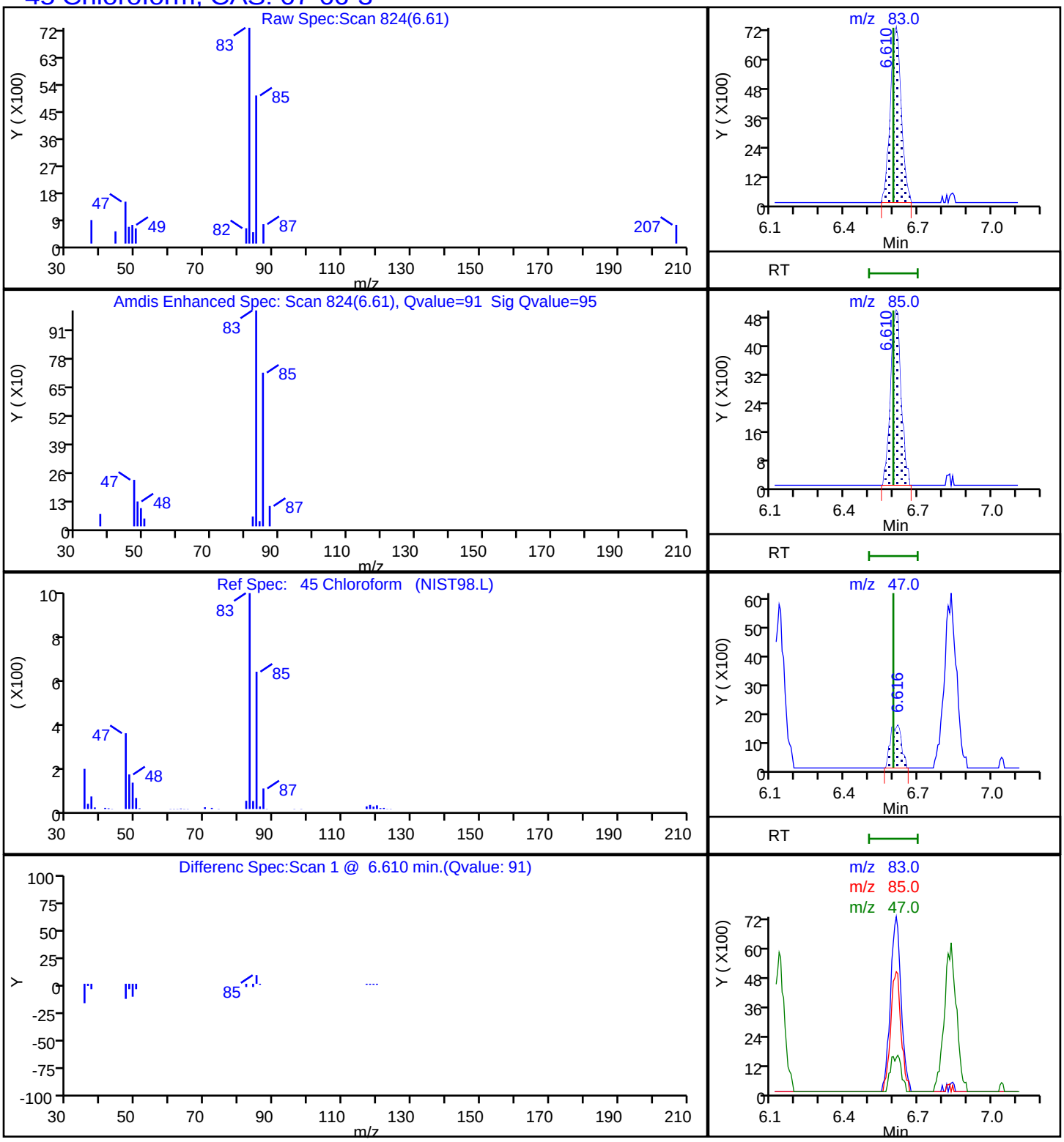
Operator ID: KNK41612 ALS Bottle#: 27 Worklist Smp#: 28

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D

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

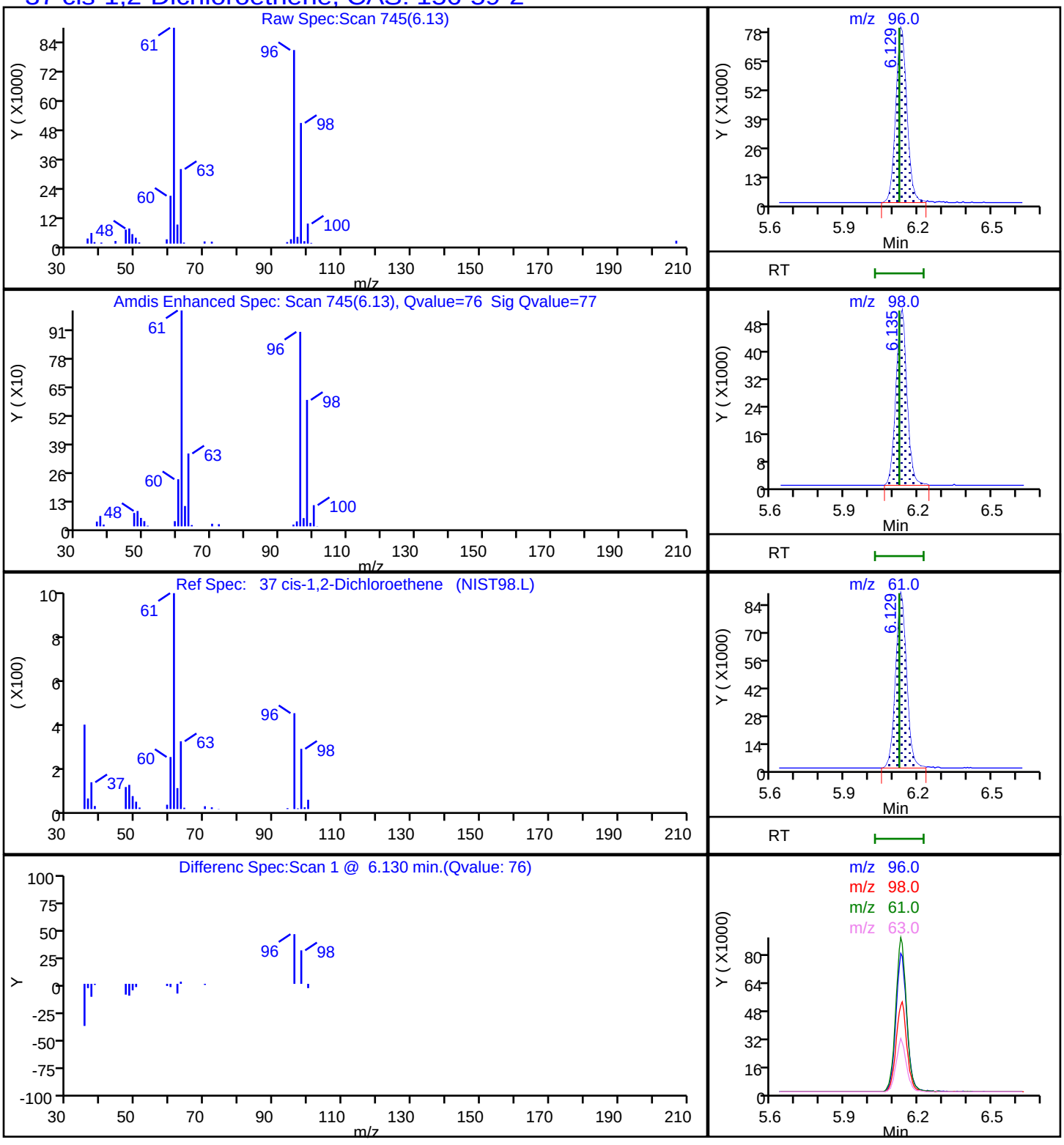
45 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X27.D				
Injection Date:	27-Mar-2022 18:02:30	Instrument ID:	19930		
Lims ID:	410-77437-A-13	Lab Sample ID:	410-77437-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	KNK41612	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

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



Report Date: 28-Mar-2022 10:06:37 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X27.D

Injection Date: 27-Mar-2022 18:02:30 Instrument ID: 19930

Lims ID: 410-77437-A-13 Lab Sample ID: 410-77437-13

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

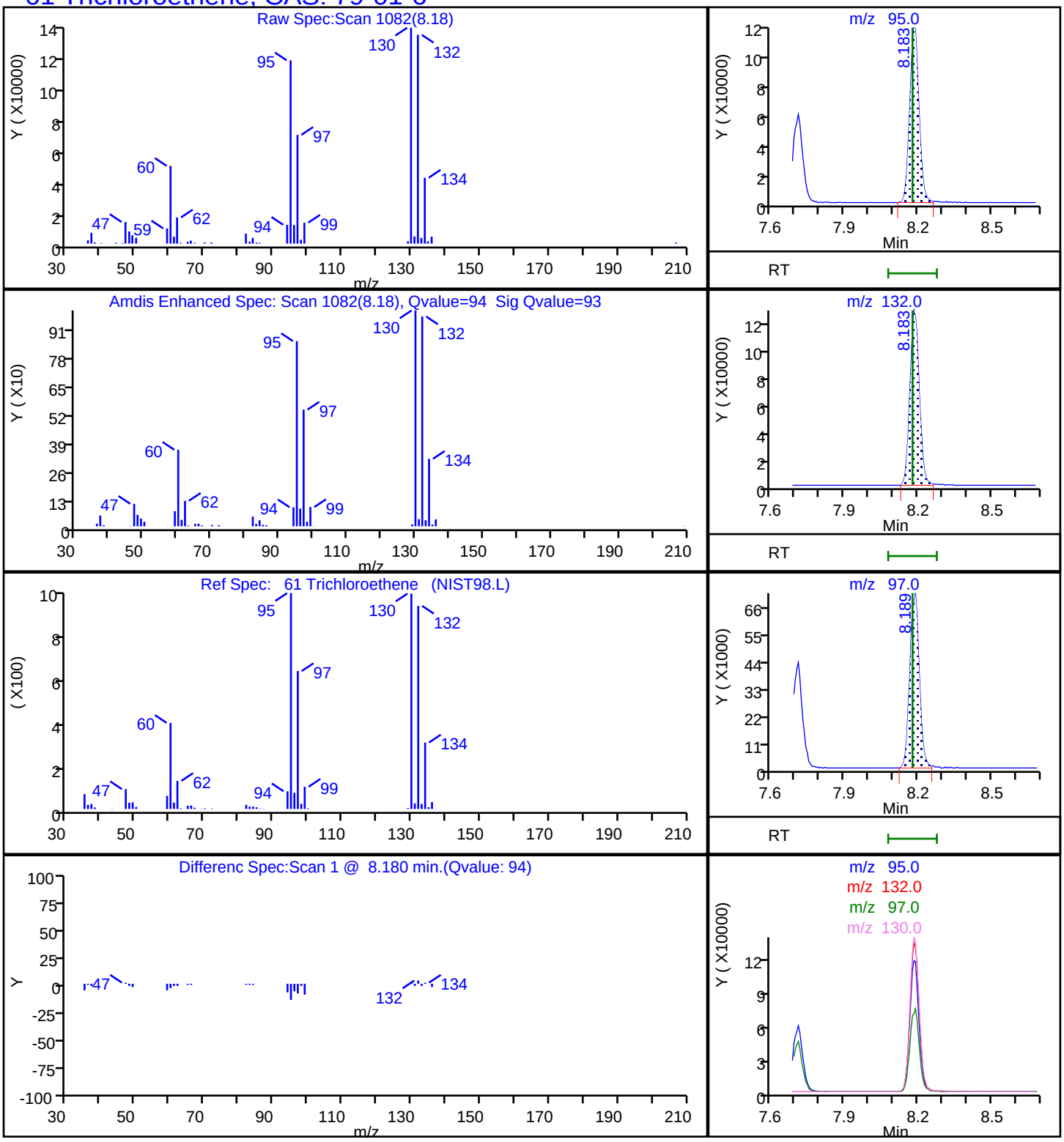
Operator ID: KNK41612 ALS Bottle#: 27 Worklist Smp#: 28

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D

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

61 Trichloroethene, CAS: 79-01-6



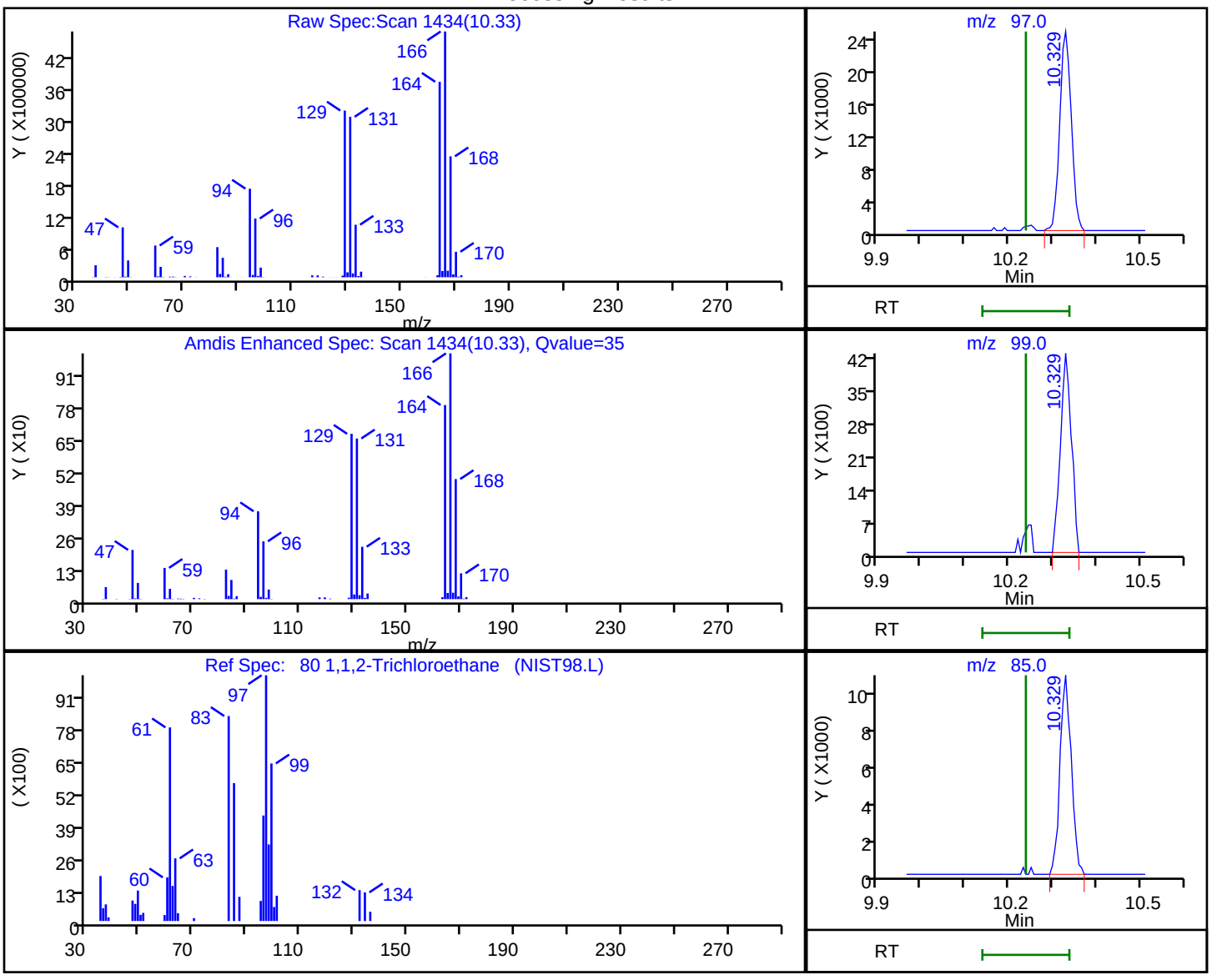
User Disabled Compound Report

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X27.D				
Injection Date:	27-Mar-2022 18:02:30	Instrument ID:	19930		
Lims ID:	410-77437-A-13	Lab Sample ID:	410-77437-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	KNK41612	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

80 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
10.33	97.00	45478	1.202545
10.33	99.00	7454	
10.33	85.00	18390	
10.33	83.00	111935	

Reviewer: kaewrungrueangp, 28-Mar-2022 10:06:17

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

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

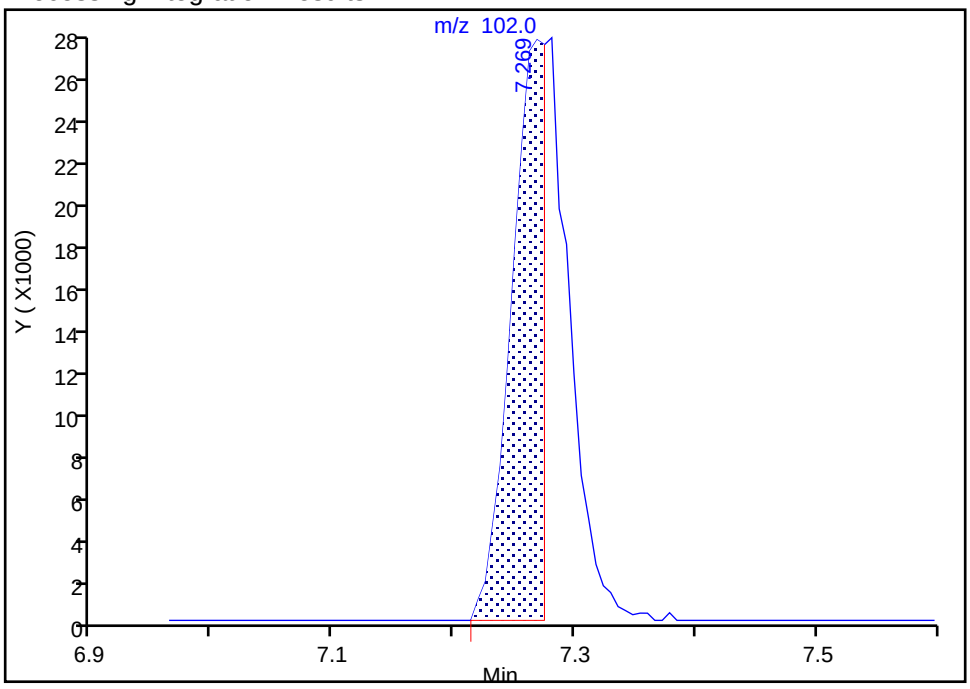
Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X27.D				
Injection Date:	27-Mar-2022 18:02:30	Instrument ID:	19930		
Lims ID:	410-77437-A-13	Lab Sample ID:	410-77437-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	KNK41612	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

$ 53 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

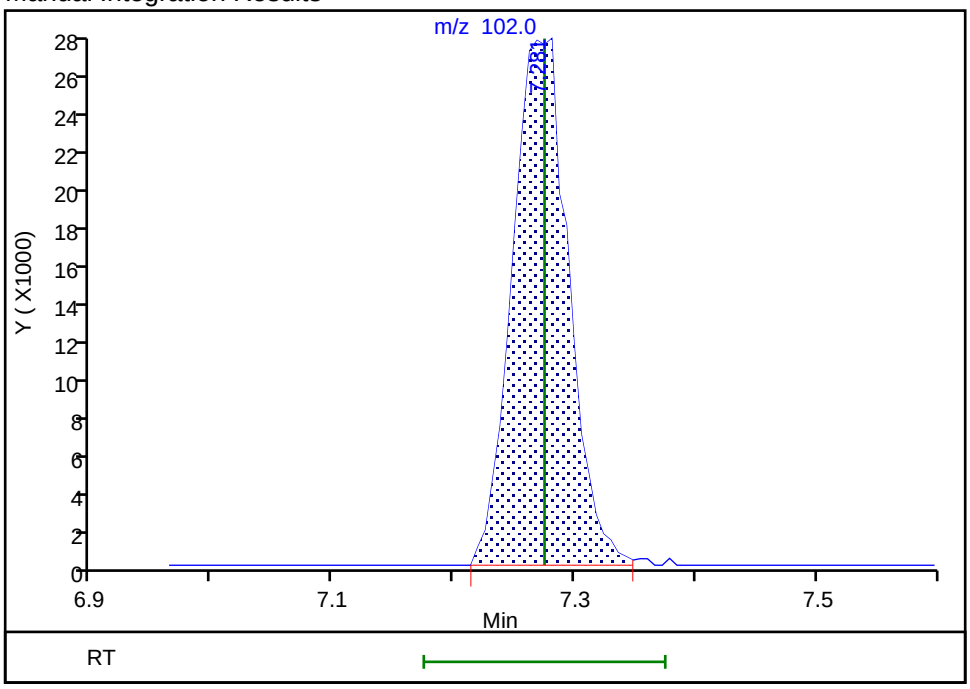
Processing Integration Results

RT: 7.27
Area: 53674
Amount: 6.357911
Amount Units: ug/l



Manual Integration Results

RT: 7.28
Area: 87972
Amount: 10.420653
Amount Units: ug/l



Reviewer: kaewrungrueangp, 28-Mar-2022 10:05:02

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

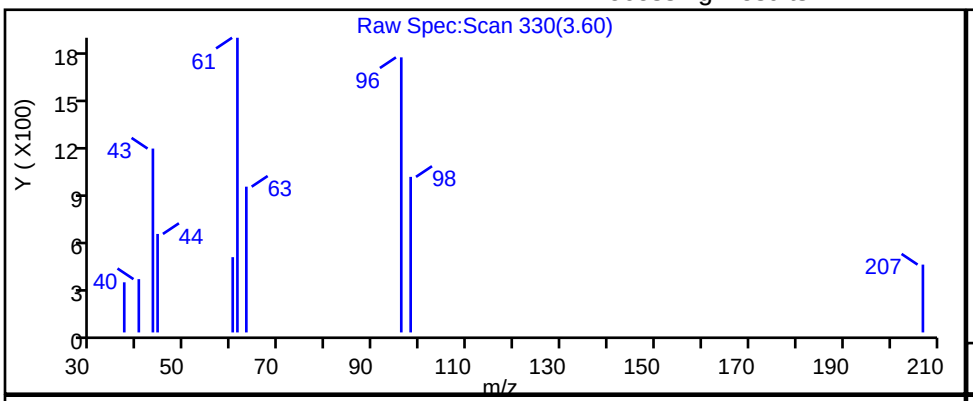
User Disabled Compound Report

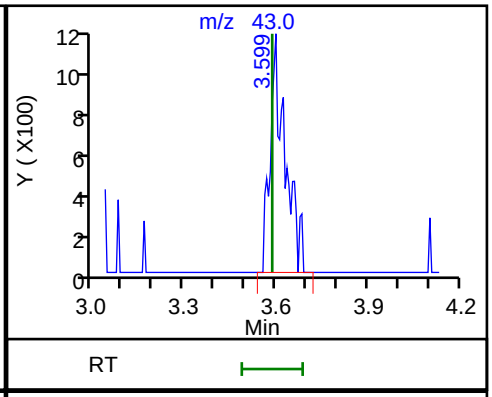
Eurofins Lancaster Laboratories Env, LLC

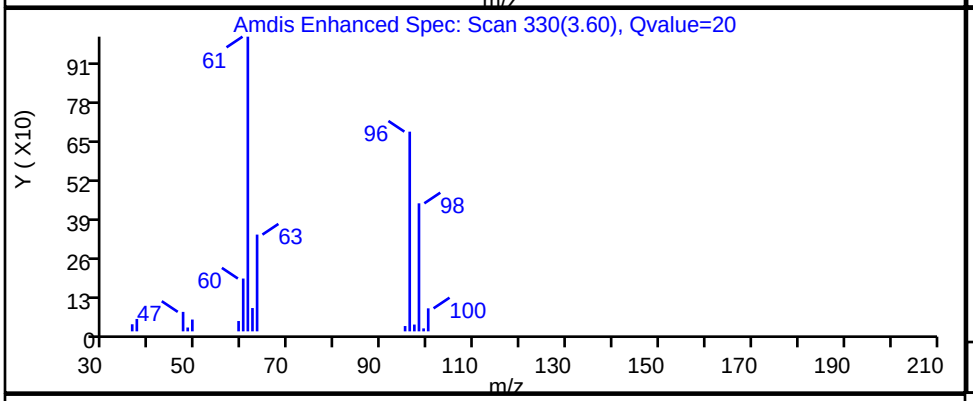
Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X27.D				
Injection Date:	27-Mar-2022 18:02:30	Instrument ID:	19930		
Lims ID:	410-77437-A-13	Lab Sample ID:	410-77437-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	KNK41612	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

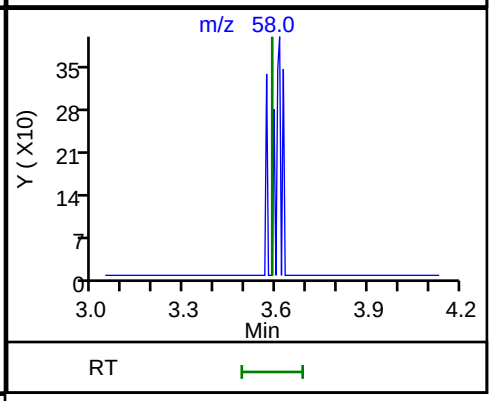
15 Acetone, CAS: 67-64-1

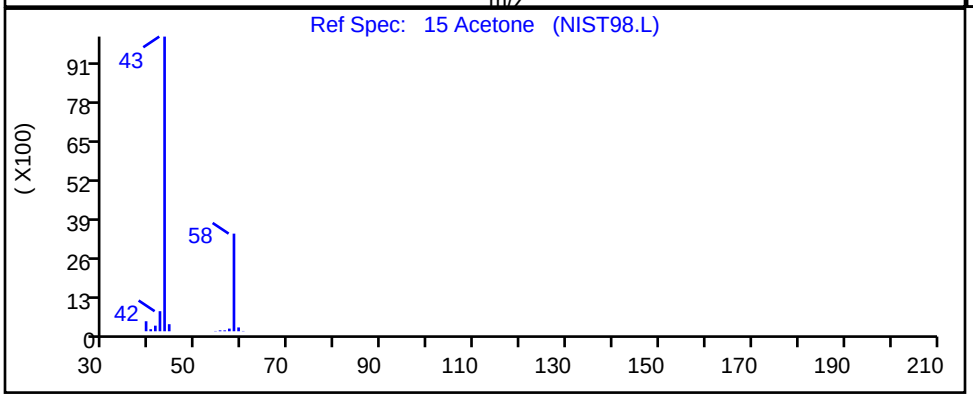
Processing Results











RT	Mass	Response	Amount
3.60	43.00	4018	0.510785
3.59	58.00	0	

Reviewer: kaewrungrueangp, 28-Mar-2022 10:05:24

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-QC1-0/1-1 DL Lab Sample ID: 410-77437-13 DL

Matrix: Water Lab File ID: IM28X29.D

Analysis Method: 8260D Date Collected: 03/24/2022 12:00

Sample wt/vol: 25(mL) Date Analyzed: 03/28/2022 18:55

Soil Aliquot Vol: Dilution Factor: 10

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 238139 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	87		5.0	0.60

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		80-120
460-00-4	4-Bromofluorobenzene (Surr)	91		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X29.D
Lims ID: 410-77437-B-13 DL
Client ID: HD-QC1-0/1-1
Sample Type: Client
Inject. Date: 28-Mar-2022 18:55:30 ALS Bottle#: 29 Worklist Smp#: 30
Purge Vol: 25.000 mL Dil. Factor: 10.0000
Sample Info: 410-0053457-030
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 20:12:04 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1618

First Level Reviewer: beckerk Date: 28-Mar-2022 20:09:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50		2.166				ND	
5 Vinyl chloride	62		2.282				ND	
7 Bromomethane	94		2.617				ND	
8 Chloroethane	64		2.696				ND	
14 1,1-Dichloroethene	96	3.550	3.562	-0.012	94	2022	0.0446	
15 Acetone	43		3.599				ND	7
19 Carbon disulfide	76		3.867				ND	
23 Methylene Chloride	84		4.233				ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.251	4.251	0.000	26	141381	50.0	
27 Methyl tert-butyl ether	73		4.635				ND	
28 trans-1,2-Dichloroethene	96		4.647				ND	
31 1,1-Dichloroethane	63	5.306	5.299	0.007	92	8828	0.1002	
36 2-Butanone (MEK)	43		6.092				ND	
37 cis-1,2-Dichloroethene	96	6.129	6.129	-0.001	76	22197	0.3775	
43 Chlorobromomethane	128		6.458				ND	
45 Chloroform	83		6.610				ND	7
$ 46 Dibromofluoromethane (Surr)	113	6.817	6.824	-0.007	94	482677	10.3	
47 1,1,1-Trichloroethane	97	6.830	6.836	-0.006	39	55781	0.6062	
50 Carbon tetrachloride	117		7.043				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.275	7.275	0.000	67	89505	10.7	
54 Benzene	78		7.305				ND	
56 1,2-Dichloroethane	62		7.378				ND	
* 58 Fluorobenzene (IS)	96	7.707	7.708	-0.001	99	1729907	10.0	
61 Trichloroethene	95	8.183	8.183	0.000	94	24861	0.4245	
63 1,2-Dichloropropane	63		8.512				ND	
68 Dichlorobromomethane	83		8.860				ND	
73 cis-1,3-Dichloropropene	75		9.396				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.567				ND	
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1742057	9.94	
76 Toluene	92		9.780				ND	7
78 trans-1,3-Dichloropropene	75		10.036				ND	
80 1,1,2-Trichloroethane	97		10.244				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166	10.335	10.329	0.006	97	678782	8.69	
83 2-Hexanone	43		10.451				ND	
85 Chlorodibromomethane	129		10.616				ND	
86 Ethylene Dibromide	107		10.731				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	83	1440634	10.0	
90 Chlorobenzene	112		11.182				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.268				ND	
92 Ethylbenzene	91		11.268				ND	
93 m-Xylene & p-Xylene	106		11.384				ND	
94 o-Xylene	106		11.713				ND	
95 Styrene	104		11.725				ND	
96 Bromoform	173		11.884				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	618915	9.10	
101 1,1,2,2-Tetrachloroethane	83		12.255				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	93	843879	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_LLcentISS_00004 Amount Added: 5.00 Units: uL Run Reagent

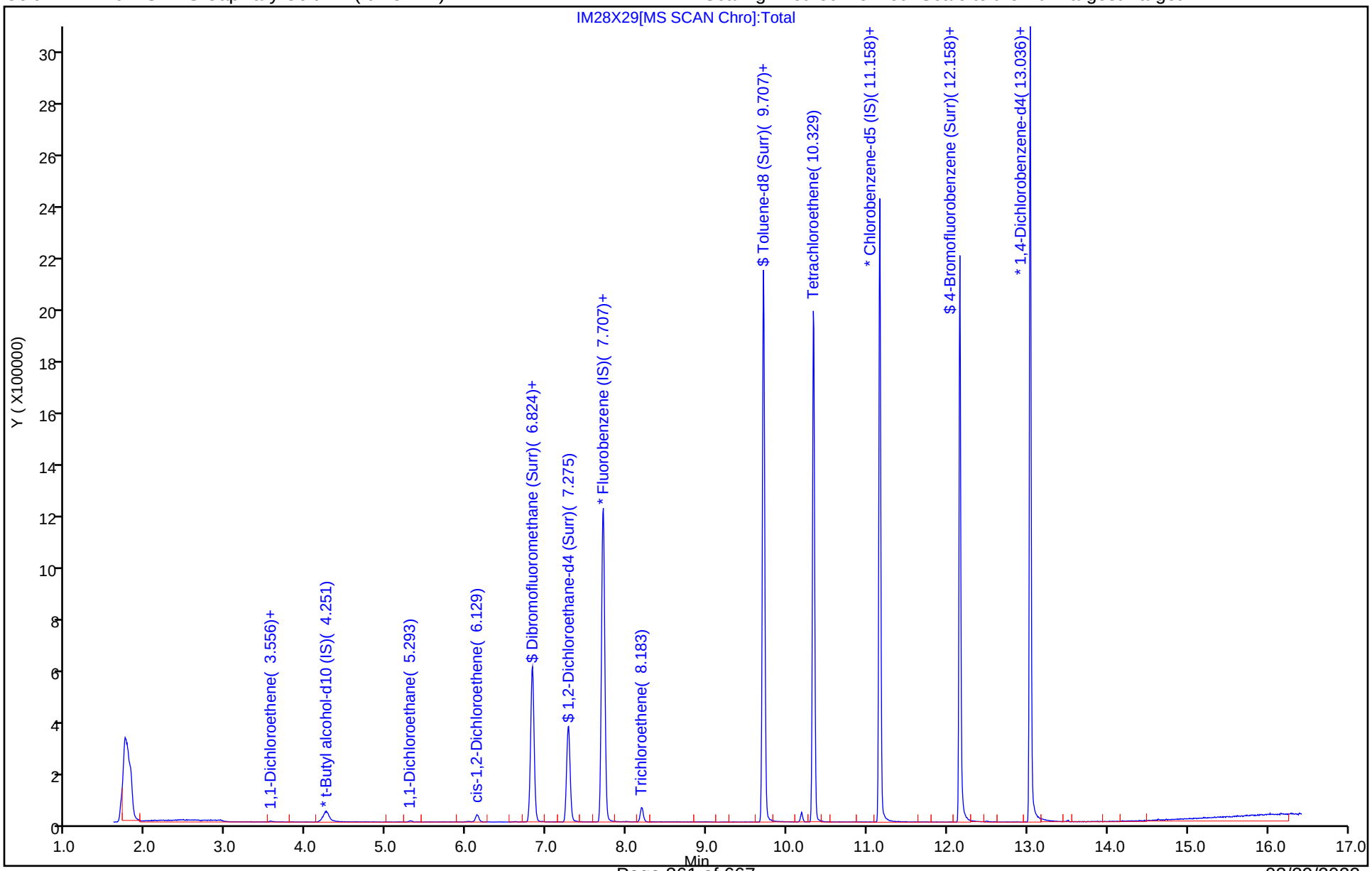
Report Date: 28-Mar-2022 20:12:15 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X29.D

Injection Date:	28-Mar-2022 18:55:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	410-77437-B-13 DL	Lab Sample ID:	410-77437-13	Worklist Smp#:	30
Client ID:	HD-QC1-0/1-1				
Purge Vol:	25.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	29
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X29.D
Lims ID: 410-77437-B-13 DL
Client ID: HD-QC1-0/1-1
Sample Type: Client
Inject. Date: 28-Mar-2022 18:55:30 ALS Bottle#: 29 Worklist Smp#: 30
Purge Vol: 25.000 mL Dil. Factor: 10.0000
Sample Info: 410-0053457-030
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 20:12:04 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1618

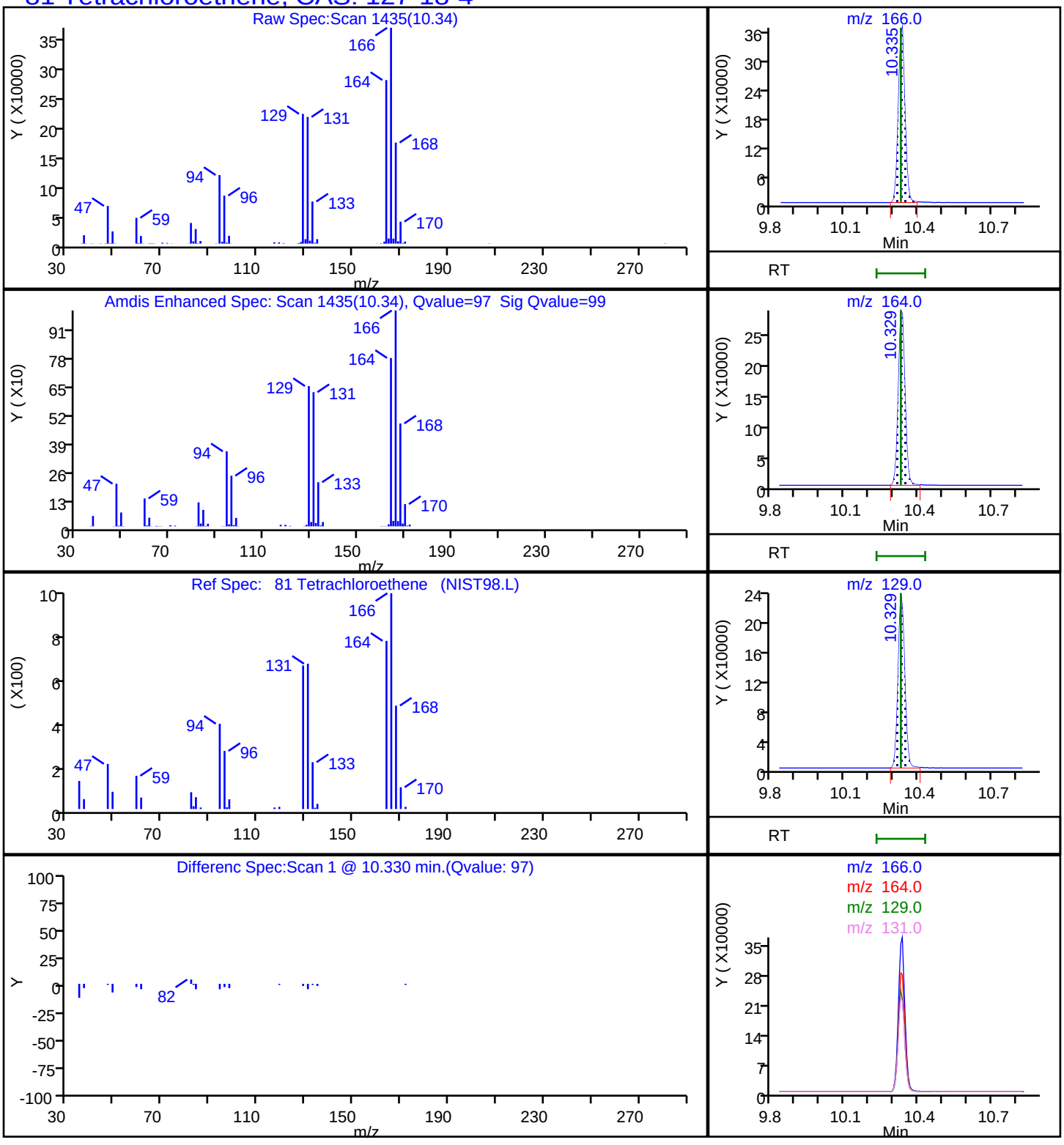
First Level Reviewer: beckerk Date: 28-Mar-2022 20:09:33

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.3	103.07
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.7	107.30
$ 75 Toluene-d8 (Surr)	10.0	9.94	99.37
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.10	91.03

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X29.D				
Injection Date:	28-Mar-2022 18:55:30	Instrument ID:	19930		
Lims ID:	410-77437-B-13 DL	Lab Sample ID:	410-77437-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	KNK41612	ALS Bottle#:	29	Worklist Smp#:	30
Purge Vol:	25.000 mL	Dil. Factor:	10.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

81 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 410-77437-14

Matrix: Water Lab File ID: IM27X07.D

Analysis Method: 8260D Date Collected: 03/23/2022 00:00

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 10:59

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	ND		5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 410-77437-14

Matrix: Water Lab File ID: IM27X07.D

Analysis Method: 8260D Date Collected: 03/23/2022 00:00

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 10:59

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	92		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X07.D
Lims ID: 410-77437-A-14
Client ID: HD-QC1-0/1-2
Sample Type: Client
Inject. Date: 27-Mar-2022 10:59:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-008
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 09:37:12 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 09:37:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50		2.154				ND	
5 Vinyl chloride	62		2.270				ND	
7 Bromomethane	94		2.605				ND	
8 Chloroethane	64		2.684				ND	
14 1,1-Dichloroethene	96		3.556				ND	
15 Acetone	43	3.605	3.586	0.019	67	4160	0.5068	
19 Carbon disulfide	76		3.855				ND	7
23 Methylene Chloride	84		4.214				ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.239	4.239	0.000	23	151330	50.0	
27 Methyl tert-butyl ether	73		4.623				ND	
28 trans-1,2-Dichloroethene	96		4.641				ND	
31 1,1-Dichloroethane	63		5.300				ND	
36 2-Butanone (MEK)	43		6.080				ND	
37 cis-1,2-Dichloroethene	96		6.123				ND	
43 Chlorobromomethane	128		6.458				ND	
45 Chloroform	83		6.598				ND	
$ 46 Dibromofluoromethane (Surr)	113	6.811	6.811	0.000	94	509105	10.1	
47 1,1,1-Trichloroethane	97		6.830				ND	
50 Carbon tetrachloride	117		7.043				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.269	7.275	-0.006	67	93881	10.5	
54 Benzene	78		7.299				ND	
56 1,2-Dichloroethane	62		7.366				ND	
* 58 Fluorobenzene (IS)	96	7.701	7.702	-0.001	99	1861852	10.0	
61 Trichloroethene	95		8.177				ND	
63 1,2-Dichloropropane	63		8.512				ND	
68 Dichlorobromomethane	83		8.854				ND	
73 cis-1,3-Dichloropropene	75		9.396				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.567				ND	
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1854884	9.98	
76 Toluene	92		9.780				ND	
78 trans-1,3-Dichloropropene	75		10.036				ND	
80 1,1,2-Trichloroethane	97		10.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166		10.329				ND	
83 2-Hexanone	43		10.451				ND	
85 Chlorodibromomethane	129		10.616				ND	
86 Ethylene Dibromide	107		10.725				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	83	1526870	10.0	
90 Chlorobenzene	112		11.183				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.268				ND	
92 Ethylbenzene	91		11.268				ND	
93 m-Xylene & p-Xylene	106		11.384				ND	
94 o-Xylene	106		11.713				ND	
95 Styrene	104		11.725				ND	
96 Bromoform	173		11.884				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	97	660657	9.17	
101 1,1,2,2-Tetrachloroethane	83		12.256				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	92	913113	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

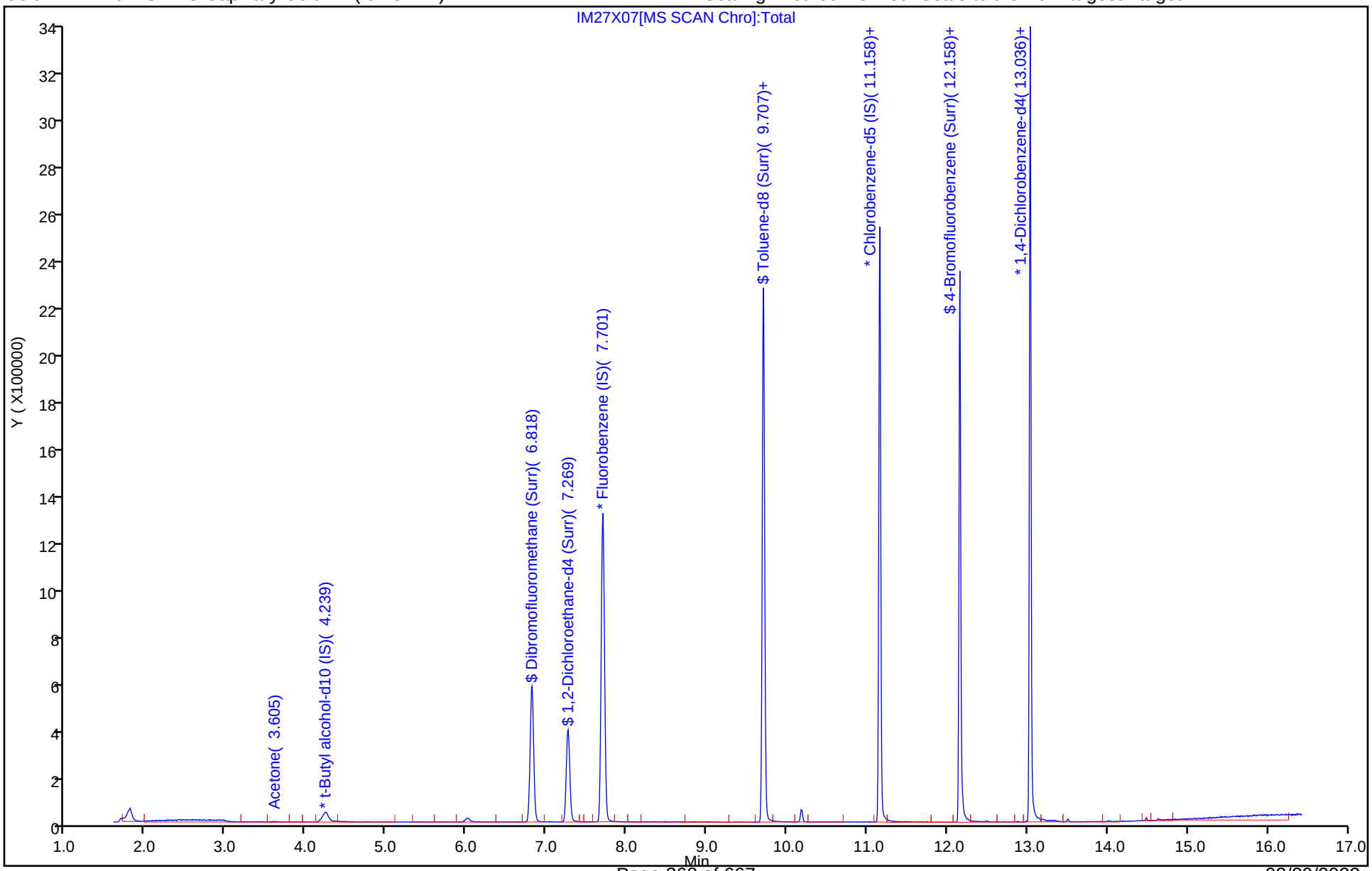
MSV_LLcentISS_00004 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 28-Mar-2022 09:37:40 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X07.D				
Injection Date:	27-Mar-2022 10:59:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	410-77437-A-14	Lab Sample ID:	410-77437-14	Worklist Smp#:	8
Client ID:	HD-QC1-0/1-2				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X07.D
Lims ID: 410-77437-A-14
Client ID: HD-QC1-0/1-2
Sample Type: Client
Inject. Date: 27-Mar-2022 10:59:30 ALS Bottle#: 7 Worklist Smp#: 8
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-008
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 09:37:12 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 09:37:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.1	101.01
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	104.57
$ 75 Toluene-d8 (Surr)	10.0	9.98	99.83
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.17	91.68

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1 Analy Batch No.: 233459

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/15/2022 01:15 Calibration End Date: 03/15/2022 03:22 Calibration ID: 36162

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-233459/18	IM14I37.D
Level 2	IC 410-233459/17	IM14I36.D
Level 3	IC 410-233459/16	IM14I35.D
Level 4	IC 410-233459/15	IM14I34.D
Level 5	IC 410-233459/14	IM14I33.D
Level 6	ICIS 410-233459/13	IM14I32.D
Level 7	IC 410-233459/12	IM14I31.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3011 0.3842	0.3801 0.3920	0.3865	0.3775	0.3902	Ave		0.3731			0.1000	8.6		20.0			
Chloromethane	0.4254 0.3802	0.3926 0.3584	0.3727	0.3809	0.3822	Ave		0.3846			0.1000	5.4		20.0			
Vinyl chloride	0.3822 0.4141	0.4239 0.3907	0.4120	0.4014	0.4196	Ave		0.4063			0.1000	3.8		20.0			
1,3-Butadiene	0.3767 0.3958	0.4022 0.3600	0.4194	0.4245	0.4021	Ave		0.3972				5.7		20.0			
Bromomethane	0.3542 0.3367	0.3425 0.3484	0.3251	0.3188	0.3294	Ave		0.3364			0.1000	3.8		20.0			
Chloroethane	0.2378 0.2504	0.2567 0.2541	0.2407	0.2422	0.2483	Ave		0.2471			0.1000	2.9		20.0			
Dichlorofluoromethane	0.6593 0.6273	0.6161 0.6121	0.6149	0.6102	0.6105	Ave		0.6215			0.1000	2.8		20.0			
Trichlorofluoromethane	0.5469 0.6167	0.6013 0.6152	0.6074	0.6163	0.6238	Ave		0.6039			0.1000	4.3		20.0			
Ethyl ether	0.1678 0.1658	0.1686 0.1665	0.1679	0.1638	0.1673	Ave		0.1668				1.0		20.0			
Freon 123a	0.3590 0.3366	0.3494 0.3433	0.3595	0.3391	0.3415	Ave		0.3469				2.7		20.0			
Acrolein	1.9983 2.0487	2.0765 1.8583	2.0078	2.0934	1.9682	Ave		2.0073				4.0		20.0			
1,1-Dichloroethene	0.2637 0.2528	0.2595 0.2590	0.2766	0.2603	0.2645	Ave		0.2623			0.1000	2.8		20.0			
Acetone	3.2498 2.4723	2.9711 2.1504	2.8622	2.6413	2.6381	Ave		2.7122			0.1000	13.1		20.0			

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

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1 Analy Batch No.: 233459

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/15/2022 01:15 Calibration End Date: 03/15/2022 03:22 Calibration ID: 36162

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Freon 113	0.2524 0.2702	0.2634 0.2797	0.2950	0.2805	0.2865	Ave		0.2754			0.1000	5.2		20.0			
Methyl iodide	0.5613 0.5170	0.5149 0.5320	0.5645	0.5432	0.5311	Ave		0.5377				3.7		20.0			
Carbon disulfide	0.5906 0.5774	0.5642 0.6030	0.5958	0.5921	0.5943	Ave		0.5882			0.1000	2.2		20.0			
Methyl acetate	12.030 6.3273	6.7384 6.5299	7.6667	6.9772	7.0272	Lin	0.8864	6.4725			0.1000				1.0000		0.9900
Allyl chloride	0.3769 0.3642	0.3736 0.3634	0.3821	0.3726	0.3688	Ave		0.3717				1.8		20.0			
Methylene Chloride	0.2981 0.2635	0.2670 0.2652	0.2805	0.2761	0.2694	Ave		0.2743			0.1000	4.4		20.0			
t-Butyl alcohol	0.9726 1.0500	1.1813 0.8808	0.8615	1.0659	0.9976	Ave		1.0014				11.1		20.0			
Acrylonitrile	2.8240 3.3265	3.5581 2.9550	3.2612	3.1381	3.2819	Ave		3.1921				7.7		20.0			
Methyl tert-butyl ether	0.7542 0.6648	0.6563 0.6715	0.6905	0.6830	0.6756	Ave		0.6851			0.1000	4.7		20.0			
trans-1,2-Dichloroethene	0.3136 0.2849	0.2990 0.2909	0.3109	0.2929	0.2905	Ave		0.2975			0.1000	3.7		20.0			
n-Hexane	0.3211 0.3585	0.3453 0.3651	0.3827	0.3778	0.3746	Ave		0.3607				6.0		20.0			
1,1-Dichloroethane	0.5155 0.4924	0.5068 0.4993	0.5267	0.5190	0.5048	Ave		0.5092			0.2000	2.3		20.0			
di-Isopropyl ether	0.7959 0.7964	0.7623 0.7935	0.8140	0.8000	0.8033	Ave		0.7950				2.0		20.0			
2-Chloro-1,3-butadiene	0.4256 0.4054	0.4003 0.4221	0.4225	0.4087	0.4182	Ave		0.4147				2.4		20.0			
Ethyl t-butyl ether	0.8380 0.7916	0.8000 0.7975	0.8351	0.8002	0.8026	Ave		0.8093				2.3		20.0			
2-Butanone (MEK)	4.4038 4.7114	4.9328 4.2757	5.0509	4.7925	4.7412	Ave		4.7012			0.1000	5.9		20.0			
cis-1,2-Dichloroethene	0.3816 0.3192	0.3394 0.3239	0.3563	0.3343	0.3246	Ave		0.3399			0.1000	6.5		20.0			
2,2-Dichloropropane	0.4622 0.4664	0.4607 0.4787	0.4847	0.4782	0.4749	Ave		0.4723				1.9		20.0			

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

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1 Analy Batch No.: 233459

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/15/2022 01:15 Calibration End Date: 03/15/2022 03:22 Calibration ID: 36162

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Propionitrile	1.1029 1.2342	1.2203 1.1677	1.3151	1.2122	1.1743	Ave		1.2038				5.5		20.0			
Methacrylonitrile	4.6645 4.7701	4.8939 4.5187	5.2061	4.9035	4.7214	Ave		4.8112				4.6		20.0			
Bromochloromethane	0.1604 0.1494	0.1553 0.1527	0.1678	0.1521	0.1534	Ave		0.1559				4.0		20.0			
Tetrahydrofuran	1.3127 1.3305	1.3853 1.2091	1.3375	1.3797	1.3529	Ave		1.3297				4.5		20.0			
Chloroform	0.5772 0.5301	0.5380 0.5406	0.5700	0.5422	0.5403	Ave		0.5483			0.2000	3.3		20.0			
1,1,1-Trichloroethane	0.5511 0.5140	0.5209 0.5282	0.5448	0.5366	0.5276	Ave		0.5319			0.1000	2.5		20.0			
Cyclohexane	0.4020 0.4464	0.4075 0.4616	0.4838	0.4700	0.4586	Ave		0.4471			0.1000	7.0		20.0			
1,1-Dichloropropene	0.4295 0.4009	0.3877 0.4188	0.4120	0.4130	0.4104	Ave		0.4103				3.2		20.0			
Carbon tetrachloride	0.4781 0.4837	0.4760 0.5093	0.5083	0.4923	0.4957	Ave		0.4919			0.1000	2.7		20.0			
Isobutyl alcohol	0.3691 0.3373	0.3333 0.3028	0.3509	0.3238	0.3463	Ave		0.3377				6.2		20.0			
Benzene	1.2210 1.1436	1.1535 1.1814	1.2007	1.1793	1.1691	Ave		1.1784			0.5000	2.3		20.0			
1,2-Dichloroethane	0.3619 0.3155	0.3191 0.3253	0.3476	0.3136	0.3165	Ave		0.3285			0.1000	5.7		20.0			
t-Amyl methyl ether	0.7849 0.7399	0.7368 0.7533	0.7751	0.7507	0.7456	Ave		0.7552				2.4		20.0			
n-Heptane	0.4023 0.3706	0.3824 0.3790	0.3878	0.3837	0.3913	Ave		0.3853				2.6		20.0			
n-Butanol	0.1983 0.3182	0.2706 0.2575	0.2440	0.2752	0.3057	Ave		0.2671				14.9		20.0			
Trichloroethene	0.3557 0.3278	0.3269 0.3411	0.3510	0.3344	0.3329	Ave		0.3385			0.2000	3.3		20.0			
Methylcyclohexane	0.4889 0.5363	0.4996 0.5559	0.5781	0.5672	0.5533	Ave		0.5399			0.1000	6.3		20.0			
1,2-Dichloropropane	0.2689 0.2821	0.2706 0.2930	0.2850	0.2872	0.2896	Ave		0.2824			0.1000	3.3		20.0			

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

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1 Analy Batch No.: 233459

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/15/2022 01:15 Calibration End Date: 03/15/2022 03:22 Calibration ID: 36162

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methyl methacrylate	7.8711 9.1053	9.7706 9.0719	9.3729	9.4215	9.1953	Ave		9.1155				6.6		20.0			
1,4-Dioxane	+++++ 0.0750	0.0730 0.0591	0.0630	0.0730	0.0699	Ave		0.0688			0.0050	9.2		20.0			
Dibromomethane	0.1599 0.1521	0.1660 0.1542	0.1580	0.1491	0.1547	Ave		0.1563				3.6		20.0			
Bromodichloromethane	0.3585 0.3757	0.3589 0.3917	0.3791	0.3728	0.3734	Ave		0.3729			0.2000	3.1		20.0			
2-Nitropropane	2.5621 2.9053	2.8969 2.9155	2.8473	2.8480	2.8494	Ave		2.8321				4.3		20.0			
cis-1,3-Dichloropropene	0.4284 0.4471	0.4074 0.4655	0.4407	0.4352	0.4491	Ave		0.4391			0.2000	4.2		20.0			
4-Methyl-2-pentanone (MIBK)	10.693 12.715	13.024 12.580	12.812	12.596	12.612	Ave		12.433			0.1000	6.3		20.0			
Toluene	0.9770 0.9160	0.9402 0.9423	0.9662	0.9309	0.9310	Ave		0.9434			0.4000	2.3		20.0			
trans-1,3-Dichloropropene	0.3652 0.4437	0.4047 0.4606	0.4228	0.4268	0.4422	Ave		0.4237			0.1000	7.4		20.0			
Ethyl methacrylate	0.2824 0.3462	0.3145 0.3586	0.3261	0.3259	0.3465	Ave		0.3286				7.7		20.0			
1,1,2-Trichloroethane	0.2606 0.2482	0.2629 0.2528	0.2793	0.2551	0.2509	Ave		0.2585			0.1000	4.1		20.0			
Tetrachloroethene	0.5377 0.5324	0.5311 0.5426	0.5650	0.5478	0.5408	Ave		0.5425			0.2000	2.1		20.0			
1,3-Dichloropropane	0.4132 0.4082	0.4100 0.4143	0.4260	0.4173	0.4209	Ave		0.4157				1.5		20.0			
2-Hexanone	6.2452 9.0742	8.5380 9.1007	8.2483	8.5857	8.6622	Ave		8.3506			0.1000	11.7		20.0			
Dibromochloromethane	0.3371 0.3562	0.3394 0.3771	0.3428	0.3463	0.3565	Ave		0.3508				4.0		20.0			
1,2-Dibromoethane (EDB)	0.2222 0.2531	0.2507 0.2596	0.2588	0.2507	0.2620	Ave		0.2510			0.1000	5.4		20.0			
1-Chlorohexane	0.6418 0.5478	0.5691 0.5619	0.5717	0.5528	0.5551	Ave		0.5715				5.6		20.0			
Chlorobenzene	1.0923 1.0813	1.1540 1.1210	1.1594	1.0988	1.1089	Ave		1.1165			0.5000	2.7		20.0			

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

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1 Analy Batch No.: 233459

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/15/2022 01:15 Calibration End Date: 03/15/2022 03:22 Calibration ID: 36162

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1,1,2-Tetrachloroethane	0.3662 0.4157	0.4098 0.4394	0.4211	0.4151	0.4191	Ave		0.4123				5.4		20.0			
Ethylbenzene	1.8717 1.8307	1.8632 1.8970	1.9194	1.8337	1.8500	Ave		1.8665			0.1000	1.7		20.0			
m&p-Xylene	0.7528 0.7526	0.7563 0.7897	0.7837	0.7548	0.7611	Ave		0.7645			0.1000	2.0		20.0			
o-Xylene	0.7383 0.7366	0.7597 0.7786	0.7699	0.7415	0.7422	Ave		0.7524			0.3000	2.2		20.0			
Styrene	1.1177 1.1852	1.1305 1.2603	1.1798	1.1512	1.1761	Ave		1.1715			0.3000	4.0		20.0			
Bromoform	0.1853 0.2344	0.2026 0.2468	0.2074	0.2106	0.2252	Ave		0.2160			0.1000	9.6		20.0			
Isopropylbenzene	1.9114 1.9540	1.9695 1.9998	2.0024	1.9541	1.9548	Ave		1.9637			0.1000	1.6		20.0			
1,1,2,2-Tetrachloroethane	0.5149 0.5194	0.5384 0.5439	0.5413	0.5102	0.5359	Ave		0.5291			0.3000	2.6		20.0			
Bromobenzene	0.8424 0.8034	0.8567 0.8593	0.8596	0.8237	0.8446	Ave		0.8414				2.5		20.0			
trans-1,4-Dichloro-2-butene	2.9110 5.1398	4.3318 5.4265	4.3068	4.5578	4.7266	Ave		4.4858				18.0		20.0			
1,2,3-Trichloropropane	0.1466 0.1500	0.1753 0.1524	0.1620	0.1524	0.1577	Ave		0.1566				6.2		20.0			
N-Propylbenzene	3.6220 3.5982	3.6888 3.6614	3.7469	3.6310	3.7431	Ave		3.6702				1.6		20.0			
2-Chlorotoluene	0.7506 0.7749	0.8439 0.8110	0.8380	0.8180	0.8124	Ave		0.8070				4.1		20.0			
1,3,5-Trimethylbenzene	2.5950 2.6716	2.7845 2.7943	2.7379	2.6861	2.7424	Ave		2.7160				2.6		20.0			
4-Chlorotoluene	0.8438 0.7965	0.8738 0.8272	0.7985	0.8147	0.8172	Ave		0.8245				3.3		20.0			
tert-Butylbenzene	0.6716 0.6311	0.6547 0.6582	0.6489	0.6574	0.6597	Ave		0.6545				1.9		20.0			
Pentachloroethane	0.4761 0.5599	0.5079 0.6042	0.5105	0.5374	0.5673	Ave		0.5376				8.0		20.0			
1,2,4-Trimethylbenzene	2.5223 2.7253	2.7720 2.8577	2.7882	2.7337	2.7729	Ave		2.7389				3.8		20.0			

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

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1 Analy Batch No.: 233459

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/15/2022 01:15 Calibration End Date: 03/15/2022 03:22 Calibration ID: 36162

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	3.3368 3.4146	3.4904 3.5024	3.5435	3.4656	3.5139	Ave		3.4667				2.0		20.0			
1,3-Dichlorobenzene	1.5686 1.6017	1.7033 1.7059	1.6613	1.6055	1.6225	Ave		1.6384			0.6000	3.2		20.0			
p-Isopropyltoluene	2.9708 3.0857	3.1564 3.2540	3.1523	3.0919	3.1277	Ave		3.1198				2.8		20.0			
1,4-Dichlorobenzene	1.7310 1.6048	1.7426 1.6935	1.6531	1.6495	1.6403	Ave		1.6735			0.5000	3.0		20.0			
1,2,3-Trimethylbenzene	1.2689 1.2160	1.3393 1.2992	1.2740	1.2179	1.2430	Ave		1.2655				3.5		20.0			
Benzyl chloride	0.1789 0.2319	0.1925 0.2512	0.2022	0.2061	0.2354	Ave		0.2140				12.1		20.0			
n-Butylbenzene	1.2216 1.4268	1.3349 1.5379	1.3822	1.3808	1.4096	Ave		1.3848				6.9		20.0			
1,2-Dichlorobenzene	1.4265 1.4744	1.5306 1.5609	1.5095	1.4616	1.4900	Ave		1.4934			0.4000	3.0		20.0			
1,2-Dibromo-3-Chloropropane	0.0558 0.0906	0.0854 0.0970	0.0841	0.0860	0.0936	Ave		0.0846			0.0500	16.0		20.0			
1,3,5-Trichlorobenzene	1.1286 1.2290	1.2521 1.2559	1.2330	1.2376	1.2287	Ave		1.2235				3.5		20.0			
1,2,4-Trichlorobenzene	0.9509 1.0527	0.9810 1.0707	1.0538	1.0294	1.0781	Ave		1.0310			0.2000	4.6		20.0			
Hexachlorobutadiene	0.5538 0.4439	0.4520 0.4573	0.4724	0.4527	0.4407	Ave		0.4676				8.4		20.0			
Naphthalene	1.6404 1.7690	1.7693 1.7731	1.7762	1.7871	1.8317	Ave		1.7638				3.3		20.0			
1,2,3-Trichlorobenzene	0.9214 0.8866	0.9035 0.8834	0.9279	0.8889	0.9085	Ave		0.9029				1.9		20.0			
Dibromofluoromethane (Surr)	0.2708 0.2702	0.2693 0.2713	0.2721	0.2718	0.2693	Ave		0.2707				0.4		20.0			
1,2-Dichloroethane-d4 (Surr)	0.0497 0.0476	0.0491 0.0483	0.0478	0.0477	0.0473	Ave		0.0482				1.8		20.0			
Toluene-d8 (Surr)	1.2218 1.2157	1.2150 1.2048	1.2157	1.2264	1.2192	Ave		1.2169				0.6		20.0			
4-Bromofluorobenzene (Surr)	0.4759 0.4695	0.4711 0.4686	0.4731	0.4754	0.4700	Ave		0.4719				0.6		20.0			

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

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1 Analy Batch No.: 233459

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/15/2022 01:15 Calibration End Date: 03/15/2022 03:22 Calibration ID: 36162

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-233459/18	IM14I37.D
Level 2	IC 410-233459/17	IM14I36.D
Level 3	IC 410-233459/16	IM14I35.D
Level 4	IC 410-233459/15	IM14I34.D
Level 5	IC 410-233459/14	IM14I33.D
Level 6	ICIS 410-233459/13	IM14I32.D
Level 7	IC 410-233459/12	IM14I31.D

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
Dichlorodifluoromethane	FB	Ave	12174 775367	38342 1940345	77703	151440	391871	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloromethane	FB	Ave	17202 767362	39601 1774005	74938	152777	383740	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Vinyl chloride	FB	Ave	15454 835832	42756 1934005	82830	161037	421383	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Butadiene	FB	Ave	15233 798845	40566 1781874	84313	170292	403813	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromomethane	FB	Ave	14324 679556	34546 1724314	65359	127889	330801	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloroethane	FB	Ave	9614 505348	25889 1257515	48387	97172	249286	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dichlorofluoromethane	FB	Ave	26658 1266108	62146 3029501	123616	244787	613064	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Trichlorofluoromethane	FB	Ave	22113 1244670	60650 3044874	122112	247207	626391	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl ether	FB	Ave	6784 334626	17004 823941	33746	65699	168002	0.200 10.00	0.500 25.0	1.000	2.00	5.00
Freon 123a	FB	Ave	14515 679412	35242 1698938	72278	136009	342871	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acrolein	TBAd 10	Ave	62205 3017661	139607 6990883	289265	590057	1475679	10.0 500	25.0 1250	50.0	100	250
1,1-Dichloroethene	FB	Ave	10662 510336	26177 1281845	55619	104409	265552	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acetone	TBAd 10	Ave	20231	39948	82464	148892	395553	2.00	5.00	10.0	20.0	50.0

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1 Analy Batch No.: 233459

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/15/2022 01:15 Calibration End Date: 03/15/2022 03:22 Calibration ID: 36162

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
			728270	1617920				100	250			
Freon 113	FB	Ave	10208 545338	26572 1384320	59314	112525	287670	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl iodide	FB	Ave	22696 1043578	51940 2633227	113489	217917	533265	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon disulfide	FB	Ave	23883 1165433	56905 2984590	119785	237527	596804	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl acetate	TBAd 10	Lin	7489 186384	9060 491288	22089	39331	105367	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Allyl chloride	FB	Ave	15242 735174	37686 1798703	76818	149475	370309	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylene Chloride	FB	Ave	12056 531797	26934 1312595	56397	110744	270557	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Butyl alcohol	TBAd 10	Ave	12109 618605	31765 1325434	49640	120168	299177	4.00 200	10.0 500	20.0	40.0	100
Acrylonitrile	TBAd 10	Ave	4395 244970	11960 555811	23490	44225	123024	0.500 25.0	1.25 62.5	2.50	5.00	12.5
Methyl tert-butyl ether	FB	Ave	30498 1341869	66197 3323390	138822	273994	678446	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,2-Dichloroethene	FB	Ave	12680 574992	30157 1439651	62513	117480	291715	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Hexane	FB	Ave	12983 723629	34826 1806929	76935	151532	376145	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloroethane	FB	Ave	20843 993908	51123 2471272	105889	208183	506938	0.200 10.0	0.500 25.0	1.00	2.00	5.00
di-Isopropyl ether	FB	Ave	32182 1607499	76892 3927371	163646	320905	806621	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chloro-1,3-butadiene	FB	Ave	17211 818283	40379 2089215	84943	163958	419888	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl t-butyl ether	FB	Ave	33885 1597708	80698 3947072	167888	321001	805906	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Butanone (MEK)	TBAd 10	Ave	27415	66323	145525	270158	710896	2.00	5.00	10.0	20.0	50.0

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1 Analy Batch No.: 233459

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/15/2022 01:15 Calibration End Date: 03/15/2022 03:22 Calibration ID: 36162

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
			1387836	3216854				100	250			
cis-1,2-Dichloroethene	FB	Ave	15432 644276	34237 1603024	71636	134101	325971	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2,2-Dichloropropane	FB	Ave	18690 941433	46465 2369416	97449	191828	476899	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Propionitrile	TBAd 10	Ave	13732 727147	32816 1757061	75781	136671	352145	4.00 200	10.0 500	20.0	40.0	100
Methacrylonitrile	TBAd 10	Ave	29038 1405130	65801 3399707	149998	276412	707937	2.00 100	5.00 250	10.0	20.0	50.0
Bromochloromethane	FB	Ave	6487 301613	15669 755832	33730	61031	153997	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrahydrofuran	TBAd 10	Ave	4086 195966	9313 454844	19268	38887	101424	1.00 50.0	2.50 125	5.00	10.0	25.0
Chloroform	FB	Ave	23341 1069836	54271 2675658	114605	217483	542529	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1-Trichloroethane	FB	Ave	22284 1037449	52545 2614158	109534	215247	529783	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Cyclohexane	FB	Ave	16256 901090	41104 2284509	97272	188548	460490	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloropropene	FB	Ave	17366 809214	39107 2073084	82831	165673	412120	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon tetrachloride	FB	Ave	19333 976207	48008 2520671	102183	197475	497787	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isobutyl alcohol	TBAd 10	Ave	11490 496869	22406 1139036	50547	91271	259655	10.0 500	25.0 1250	50.0	100	250
Benzene	FB	Ave	49374 2308112	116345 5847262	241399	473085	1173966	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloroethane	FB	Ave	14632 636810	32183 1610330	69891	125787	317860	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Amyl methyl ether	FB	Ave	31737 1493443	74320 3728390	155828	301152	748734	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Heptane	FB	Ave	16268	38570	77970	153938	392950	0.200	0.500	1.00	2.00	5.00

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1 Analy Batch No.: 233459

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/15/2022 01:15 Calibration End Date: 03/15/2022 03:22 Calibration ID: 36162

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
			748067	1876111				10.0	25.0			
n-Butanol	TBAd 10	Ave	10801 820288	31832 1695501	61521	135748	401095	17.5 875	43.8 2188	87.5	175	438
Trichloroethene	FB	Ave	14385 661523	32974 1688115	70571	134124	334265	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylcyclohexane	FB	Ave	19770 1082507	50397 2751245	116232	227524	555609	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloropropane	FB	Ave	10875 569329	27296 1450382	57297	115228	290817	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl methacrylate	TBAd 10	Ave	4900 268217	13137 682538	27005	53110	137875	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,4-Dioxane	TBAd 10	Ave	+++++ 110430	4908 222411	9072	20566	52415	+++++ 500	25.0 1250	50.0	100	250
Dibromomethane	FB	Ave	6467 307015	16746 763014	31772	59795	155310	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromodichloromethane	FB	Ave	14496 758285	36200 1938816	76212	149556	374926	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Nitropropane	TBAd 10	Ave	7975 427911	19475 1096762	41018	80273	213622	1.00 50.0	2.50 125	5.00	10.0	25.0
cis-1,3-Dichloropropene	FB	Ave	17322 902444	41097 2303922	88594	174580	450984	0.200 10.0	0.500 25.0	1.00	2.00	5.00
4-Methyl-2-pentanone (MIBK)	TBAd 10	Ave	66567 3745376	175115 9464495	369128	710069	1890983	2.00 100	5.00 250	10.0	20.0	50.0
Toluene	CBZd 5	Ave	32803 1558024	78723 3999921	161808	310732	784204	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,3-Dichloropropene	CBZd 5	Ave	12263 754768	33885 1955314	70803	142453	372452	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl methacrylate	CBZd 5	Ave	9480	26333	54614	108772	291895	0.200	0.500	1.00	2.00	5.00

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1 Analy Batch No.: 233459

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/15/2022 01:15 Calibration End Date: 03/15/2022 03:22 Calibration ID: 36162

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
			588856	1522306				10.0	25.0			
1,1,2-Trichloroethane	CBZd 5	Ave	8749 422109	22015 1072964	46767	85157	211303	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrachloroethene	CBZd 5	Ave	18053 905603	44469 2303151	94610	182846	455530	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichloropropane	CBZd 5	Ave	13872 694300	34333 1758682	71340	139306	354541	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Hexanone	TBAd 10	Ave	38878 2672997	114797 6847069	237649	483982	1298814	2.00 100	5.00 250	10.0	20.0	50.0
Dibromochloromethane	CBZd 5	Ave	11317 605912	28417 1600637	57407	115590	300253	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromoethane (EDB)	CBZd 5	Ave	7460 430495	20990 1101758	43335	83682	220656	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1-Chlorohexane	CBZd 5	Ave	21550 931799	47652 2384893	95733	184524	467596	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chlorobenzene	CBZd 5	Ave	36676 1839209	96628 4758275	194153	366783	933989	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1,2-Tetrachloroethane	CBZd 5	Ave	12294 707043	34314 1865047	70523	138560	353025	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethylbenzene	CBZd 5	Ave	62844 3113773	156010 8052347	321428	612096	1558260	0.200 10.0	0.500 25.0	1.00	2.00	5.00
m&p-Xylene	CBZd 5	Ave	50551 2560376	126661 6704068	262497	503919	1282219	0.400 20.0	1.00 50.0	2.00	4.00	10.0
o-Xylene	CBZd 5	Ave	24789	63612	128931	247504	625138	0.200	0.500	1.00	2.00	5.00

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1 Analy Batch No.: 233459

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/15/2022 01:15 Calibration End Date: 03/15/2022 03:22 Calibration ID: 36162

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
			1252820	3304917				10.0	25.0			
Styrene	CBZd 5	Ave	37528 2015851	94656 5349467	197567	384280	990642	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromoform	CBZd 5	Ave	6223 398616	16961 1047560	34732	70310	189692	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isopropylbenzene	CBZd 5	Ave	64175 3323539	164910 8488413	335336	652274	1646507	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	10440 545272	27127 1413094	54800	103362	272342	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromobenzene	DCBd 4	Ave	17078 843377	43168 2232497	87022	166897	429256	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,4-Dichloro-2-butene	TBAd 10	Ave	18122 1514033	58243 4082743	124086	256925	708706	2.00 100	5.00 250	10.0	20.0	50.0
1,2,3-Trichloropropane	DCBd 4	Ave	2972 157407	8831 396072	16398	30887	80120	0.200 10.0	0.500 25.0	1.00	2.00	5.00
N-Propylbenzene	DCBd 4	Ave	73431 3777132	185867 9513016	379299	735673	1902259	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chlorotoluene	DCBd 4	Ave	15217 813415	42524 2107004	84829	165738	412847	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3,5-Trimethylbenzene	DCBd 4	Ave	52611 2804438	140301 7260173	277155	544217	1393730	0.200 10.0	0.500 25.0	1.00	2.00	5.00
4-Chlorotoluene	DCBd 4	Ave	17108 836084	44030 2149136	80828	165055	415311	0.200 10.0	0.500 25.0	1.00	2.00	5.00
tert-Butylbenzene	DCBd 4	Ave	13616	32989	65689	133195	335259	0.200	0.500	1.00	2.00	5.00

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1 Analy Batch No.: 233459

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/15/2022 01:15 Calibration End Date: 03/15/2022 03:22 Calibration ID: 36162

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
			662432	1710155				10.0	25.0			
Pentachloroethane	DCBd 4	Ave	9652 587717	25590 1569725	51676	108889	288333	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,4-Trimethylbenzene	DCBd 4	Ave	51136 2860782	139673 7424779	282251	553867	1409233	0.200 10.0	0.500 25.0	1.00	2.00	5.00
sec-Butylbenzene	DCBd 4	Ave	67649 3584310	175873 9099816	358710	702149	1785777	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichlorobenzene	DCBd 4	Ave	31802 1681322	85825 4432211	168169	325278	824593	0.200 10.0	0.500 25.0	1.00	2.00	5.00
p-Isopropyltoluene	DCBd 4	Ave	60230 3239138	159043 8454498	319108	626442	1589520	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,4-Dichlorobenzene	DCBd 4	Ave	35095 1684578	87803 4400002	167339	334191	833641	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,3-Trimethylbenzene	DCBd 4	Ave	25725 1276413	67484 3375478	128963	246753	631723	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Benzyl chloride	DCBd 4	Ave	3627 243381	9700 652676	20470	41765	119615	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Butylbenzene	DCBd 4	Ave	24766 1497756	67261 3995744	139920	279757	716377	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichlorobenzene	DCBd 4	Ave	28920 1547734	77120 4055635	152809	296139	757252	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1132 95086	4305 252108	8509	17417	47557	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3,5-Trichlorobenzene	DCBd 4	Ave	22882	63089	124815	250743	624432	0.200	0.500	1.00	2.00	5.00

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1 Analy Batch No.: 233459

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/15/2022 01:15 Calibration End Date: 03/15/2022 03:22 Calibration ID: 36162

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
			1290067	3263029				10.0	25.0			
1,2,4-Trichlorobenzene	DCBd 4	Ave	19278 1105018	49430 2781903	106675	208572	547927	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Hexachlorobutadiene	DCBd 4	Ave	11228 466003	22776 1188278	47822	91714	223993	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Naphthalene	DCBd 4	Ave	33257 1856952	89149 4606935	179802	362073	930872	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,3-Trichlorobenzene	DCBd 4	Ave	18681 930716	45526 2295134	93928	180095	461720	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dibromofluoromethane (Surr)	FB	Ave	547531 545283	543314 537217	546963	545251	540907	10.0 10.0	10.0 10.0	10.0	10.0	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	100556 96026	98965 95694	96046	95723	95088	10.0 10.0	10.0 10.0	10.0	10.0	10.0
Toluene-d8 (Surr)	CBZd 5	Ave	2051196 2067816	2034623 2045611	2035925	2046750	2053919	10.0 10.0	10.0 10.0	10.0	10.0	10.0
4-Bromofluorobenzene (Surr)	CBZd 5	Ave	798883 798597	788876 795598	792251	793453	791795	10.0 10.0	10.0 10.0	10.0	10.0	10.0

Curve Type Legend
Ave = Average ISTD
Lin = Linear ISTD

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1 Analy Batch No.: 233459

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/15/2022 01:15 Calibration End Date: 03/15/2022 03:22 Calibration ID: 36162

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-233459/18	IM14I37.D
Level 2	IC 410-233459/17	IM14I36.D
Level 3	IC 410-233459/16	IM14I35.D
Level 4	IC 410-233459/15	IM14I34.D
Level 5	IC 410-233459/14	IM14I33.D
Level 6	ICIS 410-233459/13	IM14I32.D
Level 7	IC 410-233459/12	IM14I31.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	-19.3 5.1	1.9	3.6	1.2	4.6	3.0	50 30	30	30	30	30	30
Chloromethane	10.6 -6.8	2.1	-3.1	-1.0	-0.6	-1.2	50 30	30	30	30	30	30
Vinyl chloride	-5.9 -3.8	4.3	1.4	-1.2	3.3	1.9	50 30	30	30	30	30	30
1,3-Butadiene	-5.2 -9.4	1.2	5.6	6.9	1.2	-0.4	50 30	30	30	30	30	30
Bromomethane	5.3 3.5	1.8	-3.4	-5.2	-2.1	0.1	50 30	30	30	30	30	30
Chloroethane	-3.8 2.8	3.9	-2.6	-2.0	0.4	1.3	50 30	30	30	30	30	30
Dichlorofluoromethane	6.1 -1.5	-0.9	-1.1	-1.8	-1.8	0.9	50 30	30	30	30	30	30
Trichlorofluoromethane	-9.4 1.9	-0.4	0.6	2.0	3.3	2.1	50 30	30	30	30	30	30
Ethyl ether	0.6 -0.2	1.1	0.6	-1.8	0.3	-0.6	50 30	30	30	30	30	30
Freon 123a	3.5 -1.0	0.7	3.6	-2.3	-1.6	-3.0	50 30	30	30	30	30	30
Acrolein	-0.4 -7.4	3.4	0.0	4.3	-1.9	2.1	50 30	30	30	30	30	30
1,1-Dichloroethene	0.5 -1.3	-1.1	5.5	-0.8	0.8	-3.6	50 30	30	30	30	30	30
Acetone	19.8 -20.7	9.5	5.5	-2.6	-2.7	-8.8	50 30	30	30	30	30	30
Freon 113	-8.3 1.6	-4.3	7.1	1.9	4.0	-1.9	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 Env Job No.: 410-77437-1 Analy Batch No.: 233459

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/15/2022 01:15 Calibration End Date: 03/15/2022 03:22 Calibration ID: 36162

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	4.4 -1.1	-4.2	5.0	1.0	-1.2	-3.8	50 30	30	30	30	30	30
Carbon disulfide	0.4 2.5	-4.1	1.3	0.7	1.0	-1.8	50 30	30	30	30	30	30
Methyl acetate	17.4 0.3	-23.3	4.8	0.9	5.8	-3.6	50 30	30	30	30	30	30
Allyl chloride	1.4 -2.2	0.5	2.8	0.3	-0.8	-2.0	50 30	30	30	30	30	30
Methylene Chloride	8.7 -3.3	-2.6	2.3	0.7	-1.8	-3.9	50 30	30	30	30	30	30
t-Butyl alcohol	-2.9 -12.0	18.0	-14.0	6.4	-0.4	4.9	50 30	30	30	30	30	30
Acrylonitrile	-11.5 -7.4	11.5	2.2	-1.7	2.8	4.2	50 30	30	30	30	30	30
Methyl tert-butyl ether	10.1 -2.0	-4.2	0.8	-0.3	-1.4	-3.0	50 30	30	30	30	30	30
trans-1,2-Dichloroethene	5.4 -2.2	0.5	4.5	-1.6	-2.4	-4.2	50 30	30	30	30	30	30
n-Hexane	-11.0 1.2	-4.3	6.1	4.7	3.8	-0.6	50 30	30	30	30	30	30
1,1-Dichloroethane	1.2 -1.9	-0.5	3.4	1.9	-0.9	-3.3	50 30	30	30	30	30	30
di-Isopropyl ether	0.1 -0.2	-4.1	2.4	0.6	1.0	0.2	50 30	30	30	30	30	30
2-Chloro-1,3-butadiene	2.6 1.8	-3.5	1.9	-1.4	0.8	-2.2	50 30	30	30	30	30	30
Ethyl t-butyl ether	3.5 -1.5	-1.1	3.2	-1.1	-0.8	-2.2	50 30	30	30	30	30	30
2-Butanone (MEK)	-6.3 -9.1	4.9	7.4	1.9	0.9	0.2	50 30	30	30	30	30	30
cis-1,2-Dichloroethene	12.3 -4.7	-0.1	4.8	-1.7	-4.5	-6.1	50 30	30	30	30	30	30
2,2-Dichloropropane	-2.1 1.4	-2.5	2.6	1.3	0.6	-1.2	50 30	30	30	30	30	30
Propionitrile	-8.4 -3.0	1.4	9.2	0.7	-2.5	2.5	50 30	30	30	30	30	30
Methacrylonitrile	-3.0 -6.1	1.7	8.2	1.9	-1.9	-0.9	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 Env Job No.: 410-77437-1 Analy Batch No.: 233459

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/15/2022 01:15 Calibration End Date: 03/15/2022 03:22 Calibration ID: 36162

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	2.9 -2.0	-0.3	7.6	-2.4	-1.6	-4.1	50 30	30	30	30	30	30
Tetrahydrofuran	-1.3 -9.1	4.2	0.6	3.8	1.7	0.1	50 30	30	30	30	30	30
Chloroform	5.3 -1.4	-1.9	4.0	-1.1	-1.5	-3.3	50 30	30	30	30	30	30
1,1,1-Trichloroethane	3.6 -0.7	-2.1	2.4	0.9	-0.8	-3.4	50 30	30	30	30	30	30
Cyclohexane	-10.1 3.2	-8.9	8.2	5.1	2.6	-0.2	50 30	30	30	30	30	30
1,1-Dichloropropene	4.7 2.1	-5.5	0.4	0.6	0.0	-2.3	50 30	30	30	30	30	30
Carbon tetrachloride	-2.8 3.5	-3.2	3.3	0.1	0.8	-1.7	50 30	30	30	30	30	30
Isobutyl alcohol	9.3 -10.3	-1.3	3.9	-4.1	2.6	-0.1	50 30	30	30	30	30	30
Benzene	3.6 0.3	-2.1	1.9	0.1	-0.8	-3.0	50 30	30	30	30	30	30
1,2-Dichloroethane	10.2 -1.0	-2.9	5.8	-4.5	-3.6	-4.0	50 30	30	30	30	30	30
t-Amyl methyl ether	3.9 -0.3	-2.4	2.6	-0.6	-1.3	-2.0	50 30	30	30	30	30	30
n-Heptane	4.4 -1.6	-0.8	0.6	-0.4	1.6	-3.8	50 30	30	30	30	30	30
n-Butanol	-25.8 -3.6	1.3	-8.6	3.0	14.5	19.2	50 30	30	30	30	30	30
Trichloroethene	5.1 0.7	-3.4	3.7	-1.2	-1.7	-3.2	50 30	30	30	30	30	30
Methylcyclohexane	-9.4 3.0	-7.5	7.1	5.1	2.5	-0.7	50 30	30	30	30	30	30
1,2-Dichloropropane	-4.8 3.8	-4.2	0.9	1.7	2.6	-0.1	50 30	30	30	30	30	30
Methyl methacrylate	-13.7 -0.5	7.2	2.8	3.4	0.9	-0.1	50 30	30	30	30	30	30
1,4-Dioxane	+++++ -14.1	6.1	-8.5	6.0	1.6	8.9	 30	50	30	30	30	30
Dibromomethane	2.3 -1.4	6.2	1.1	-4.6	-1.0	-2.7	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 Env Job No.: 410-77437-1 Analy Batch No.: 233459

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/15/2022 01:15 Calibration End Date: 03/15/2022 03:22 Calibration ID: 36162

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	-3.9 5.1	-3.7	1.7	0.0	0.1	0.8	50 30	30	30	30	30	30
2-Nitropropane	-9.5 2.9	2.3	0.5	0.6	0.6	2.6	50 30	30	30	30	30	30
cis-1,3-Dichloropropene	-2.4 6.0	-7.2	0.4	-0.9	2.3	1.8	50 30	30	30	30	30	30
4-Methyl-2-pentanone (MIBK)	-14.0 1.2	4.8	3.0	1.3	1.4	2.3	50 30	30	30	30	30	30
Toluene	3.6 -0.1	-0.3	2.4	-1.3	-1.3	-2.9	50 30	30	30	30	30	30
trans-1,3-Dichloropropene	-13.8 8.7	-4.5	-0.2	0.7	4.4	4.7	50 30	30	30	30	30	30
Ethyl methacrylate	-14.1 9.1	-4.3	-0.8	-0.8	5.5	5.4	50 30	30	30	30	30	30
1,1,2-Trichloroethane	0.8 -2.2	1.7	8.0	-1.3	-3.0	-4.0	50 30	30	30	30	30	30
Tetrachloroethene	-0.9 0.0	-2.1	4.1	1.0	-0.3	-1.9	50 30	30	30	30	30	30
1,3-Dichloropropane	-0.6 -0.3	-1.4	2.5	0.4	1.3	-1.8	50 30	30	30	30	30	30
2-Hexanone	-25.2 9.0	2.2	-1.2	2.8	3.7	8.7	50 30	30	30	30	30	30
Dibromochloromethane	-3.9 7.5	-3.2	-2.3	-1.3	1.6	1.6	50 30	30	30	30	30	30
1,2-Dibromoethane (EDB)	-11.5 3.4	-0.1	3.1	-0.1	4.4	0.8	50 30	30	30	30	30	30
1-Chlorohexane	12.3 -1.7	-0.4	0.0	-3.3	-2.9	-4.1	50 30	30	30	30	30	30
Chlorobenzene	-2.2 0.4	3.4	3.8	-1.6	-0.7	-3.2	50 30	30	30	30	30	30
1,1,1,2-Tetrachloroethane	-11.2 6.6	-0.6	2.1	0.7	1.6	0.8	50 30	30	30	30	30	30
Ethylbenzene	0.3 1.6	-0.2	2.8	-1.8	-0.9	-1.9	50 30	30	30	30	30	30
m&p-Xylene	-1.5 3.3	-1.1	2.5	-1.3	-0.4	-1.5	50 30	30	30	30	30	30
o-Xylene	-1.9 3.5	1.0	2.3	-1.4	-1.4	-2.1	50 30	30	30	30	30	30

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-77437-1 Analy Batch No.: 233459

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/15/2022 01:15 Calibration End Date: 03/15/2022 03:22 Calibration ID: 36162

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Styrene	-4.6 7.6	-3.5	0.7	-1.7	0.4	1.2	50 30	30	30	30	30	30
Bromoform	-14.2 14.2	-6.2	-4.0	-2.5	4.2	8.5	50 30	30	30	30	30	30
Isopropylbenzene	-2.7 1.8	0.3	2.0	-0.5	-0.5	-0.5	50 30	30	30	30	30	30
1,1,2,2-Tetrachloroethane	-2.7 2.8	1.7	2.3	-3.6	1.3	-1.8	50 30	30	30	30	30	30
Bromobenzene	0.1 2.1	1.8	2.2	-2.1	0.4	-4.5	50 30	30	30	30	30	30
trans-1,4-Dichloro-2-butene	-35.1 21.0	-3.4	-4.0	1.6	5.4	14.6	50 30	30	30	30	30	30
1,2,3-Trichloropropane	-6.4 -2.7	11.9	3.4	-2.7	0.7	-4.3	50 30	30	30	30	30	30
N-Propylbenzene	-1.3 -0.2	0.5	2.1	-1.1	2.0	-2.0	50 30	30	30	30	30	30
2-Chlorotoluene	-7.0 0.5	4.6	3.8	1.4	0.7	-4.0	50 30	30	30	30	30	30
1,3,5-Trimethylbenzene	-4.5 2.9	2.5	0.8	-1.1	1.0	-1.6	50 30	30	30	30	30	30
4-Chlorotoluene	2.3 0.3	6.0	-3.2	-1.2	-0.9	-3.4	50 30	30	30	30	30	30
tert-Butylbenzene	2.6 0.6	0.0	-0.9	0.4	0.8	-3.6	50 30	30	30	30	30	30
Pentachloroethane	-11.4 12.4	-5.5	-5.0	0.0	5.5	4.1	50 30	30	30	30	30	30
1,2,4-Trimethylbenzene	-7.9 4.3	1.2	1.8	-0.2	1.2	-0.5	50 30	30	30	30	30	30
sec-Butylbenzene	-3.7 1.0	0.7	2.2	0.0	1.4	-1.5	50 30	30	30	30	30	30
1,3-Dichlorobenzene	-4.3 4.1	4.0	1.4	-2.0	-1.0	-2.2	50 30	30	30	30	30	30
p-Isopropyltoluene	-4.8 4.3	1.2	1.0	-0.9	0.3	-1.1	50 30	30	30	30	30	30
1,4-Dichlorobenzene	3.4 1.2	4.1	-1.2	-1.4	-2.0	-4.1	50 30	30	30	30	30	30
1,2,3-Trimethylbenzene	0.3 2.7	5.8	0.7	-3.8	-1.8	-3.9	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 Env Job No.: 410-77437-1 Analy Batch No.: 233459

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/15/2022 01:15 Calibration End Date: 03/15/2022 03:22 Calibration ID: 36162

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	-16.4 17.4	-10.1	-5.5	-3.7	10.0	8.3	50 30	30	30	30	30	30
n-Butylbenzene	-11.8 11.1	-3.6	-0.2	-0.3	1.8	3.0	50 30	30	30	30	30	30
1,2-Dichlorobenzene	-4.5 4.5	2.5	1.1	-2.1	-0.2	-1.3	50 30	30	30	30	30	30
1,2-Dibromo-3-Chloropropane	-34.0 14.6	0.9	-0.7	1.6	10.6	7.0	50 30	30	30	30	30	30
1,3,5-Trichlorobenzene	-7.8 2.6	2.3	0.8	1.1	0.4	0.4	50 30	30	30	30	30	30
1,2,4-Trichlorobenzene	-7.8 3.9	-4.8	2.2	-0.1	4.6	2.1	50 30	30	30	30	30	30
Hexachlorobutadiene	18.4 -2.2	-3.3	1.0	-3.2	-5.7	-5.1	50 30	30	30	30	30	30
Naphthalene	-7.0 0.5	0.3	0.7	1.3	3.8	0.3	50 30	30	30	30	30	30
1,2,3-Trichlorobenzene	2.1 -2.2	0.1	2.8	-1.6	0.6	-1.8	50 30	30	30	30	30	30
Dibromofluoromethane (Surr)	0.0 0.2	-0.5	0.5	0.4	-0.5	-0.2	50 30	30	30	30	30	30
1,2-Dichloroethane-d4 (Surr)	3.1 0.2	1.7	-0.9	-1.0	-1.8	-1.3	50 30	30	30	30	30	30
Toluene-d8 (Surr)	0.4 -1.0	-0.2	-0.1	0.8	0.2	-0.1	50 30	30	30	30	30	30
4-Bromofluorobenzene (Surr)	0.8 -0.7	-0.2	0.2	0.7	-0.4	-0.5	50 30	30	30	30	30	30

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I31.D
Lims ID: IC std7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 15-Mar-2022 01:15:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0052441-012
Misc. Info.: IC STD7
Operator ID: mec29284 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 16-Mar-2022 10:11:24 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1676

First Level Reviewer: kephartk Date: 16-Mar-2022 08:18:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.953	1.953	0.000	99	1940345	25.0	26.3	
4 Chloromethane	50	2.154	2.142	0.012	99	1774005	25.0	23.3	
5 Vinyl chloride	62	2.276	2.264	0.012	98	1934005	25.0	24.0	
6 Butadiene	39	2.276	2.264	0.012	92	1781874	25.0	22.7	
7 Bromomethane	94	2.605	2.599	0.006	92	1724314	25.0	25.9	
8 Chloroethane	64	2.684	2.678	0.006	99	1257515	25.0	25.7	
9 Dichlorofluoromethane	67	2.922	2.916	0.006	98	3029501	25.0	24.6	
10 Trichlorofluoromethane	101	2.934	2.928	0.006	97	3044874	25.0	25.5	
11 Ethyl ether	59	3.245	3.233	0.012	90	823941	25.0	25.0	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.324	3.312	0.012	88	1698938	25.0	24.7	
13 Acrolein	56	3.410	3.404	0.006	99	6990883	1250.1	1157.2	
14 1,1-Dichloroethene	96	3.550	3.544	0.006	98	1281845	25.0	24.7	
15 Acetone	43	3.580	3.580	0.000	98	1617920	250.0	198.2	
16 112TCTFE	101	3.586	3.580	0.006	89	1384320	25.0	25.4	
17 Iodomethane	142	3.745	3.739	0.006	99	2633227	25.0	24.7	
18 Ethyl bromide	108	3.775	3.769	0.006	99	1232809	25.0	24.9	
19 Carbon disulfide	76	3.855	3.849	0.006	100	2984590	25.0	25.6	
21 Methyl acetate	43	4.007	4.007	0.000	97	491288	25.0	25.1	M
22 3-Chloro-1-propene	41	4.025	4.025	0.000	88	1798703	25.0	24.4	
23 Methylene Chloride	84	4.220	4.214	0.006	90	1312595	25.0	24.2	
* 24 t-Butyl alcohol-d10 (IS)	65	4.227	4.263	-0.036	95	150473	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.348	4.342	0.006	99	1325434	500.0	439.8	
26 Acrylonitrile	53	4.556	4.562	-0.006	99	555811	62.5	57.9	
27 Methyl tert-butyl ether	73	4.629	4.617	0.012	95	3323390	25.0	24.5	
28 trans-1,2-Dichloroethene	96	4.641	4.629	0.012	98	1439651	25.0	24.4	
29 Hexane	57	5.062	5.056	0.006	93	1806929	25.0	25.3	
31 1,1-Dichloroethane	63	5.293	5.287	0.006	96	2471272	25.0	24.5	
32 Isopropyl ether	45	5.354	5.354	0.000	92	3927371	25.0	25.0	
33 2-Chloro-1,3-butadiene	53	5.409	5.403	0.006	92	2089215	25.0	25.4	
34 Tert-butyl ethyl ether	59	5.891	5.879	0.012	96	3947072	25.0	24.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.086	6.080	0.006	99	3216854	250.0	227.4	
37 cis-1,2-Dichloroethene	96	6.129	6.123	0.006	82	1603024	25.0	23.8	
38 2,2-Dichloropropane	77	6.135	6.135	0.000	87	2369416	25.0	25.3	
S 35 1,2-Dichloroethene, Total	100				0			48.3	
40 Propionitrile	54	6.171	6.177	-0.006	99	1757061	500.0	485.0	
42 Methacrylonitrile	67	6.391	6.379	0.012	91	3399707	250.0	234.8	
43 Chlorobromomethane	128	6.458	6.446	0.012	87	755832	25.0	24.5	
44 Tetrahydrofuran	71	6.476	6.458	0.018	77	454844	125.0	113.7	
45 Chloroform	83	6.604	6.604	0.000	94	2675658	25.0	24.6	
$ 46 Dibromofluoromethane (Surr)	113	6.824	6.812	0.012	93	537217	10.0	10.0	
47 1,1,1-Trichloroethane	97	6.830	6.830	0.000	98	2614158	25.0	24.8	
48 Cyclohexane	56	6.927	6.927	0.000	90	2284509	25.0	25.8	
50 Carbon tetrachloride	117	7.043	7.037	0.006	96	2520671	25.0	25.9	
51 1,1-Dichloropropene	75	7.043	7.037	0.006	93	2073084	25.0	25.5	
52 Isobutyl alcohol	41	7.189	7.189	0.000	92	1139036	1250.0	1120.9	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.269	7.257	0.012	78	95694	10.0	10.0	
54 Benzene	78	7.305	7.299	0.006	96	5847262	25.0	25.1	
56 1,2-Dichloroethane	62	7.372	7.366	0.006	97	1610330	25.0	24.8	
57 Tert-amyl methyl ether	73	7.494	7.488	0.006	98	3728390	25.0	24.9	
* 58 Fluorobenzene (IS)	96	7.701	7.701	0.000	99	1979820	10.0	10.0	
59 n-Heptane	43	7.714	7.708	0.006	90	1876111	25.0	24.6	
60 n-Butanol	56	8.067	8.073	-0.006	89	1695501	2187.5	2109.4	
61 Trichloroethene	95	8.183	8.177	0.006	95	1688115	25.0	25.2	
62 Methylcyclohexane	83	8.494	8.482	0.012	90	2751245	25.0	25.7	
63 1,2-Dichloropropane	63	8.512	8.500	0.012	85	1450382	25.0	25.9	
64 Methyl methacrylate	69	8.592	8.592	0.000	88	682538	25.0	24.9	
65 1,4-Dioxane	88	8.604	8.604	0.000	33	222411	1250.0	1073.8	
66 Dibromomethane	93	8.622	8.610	0.012	90	763014	25.0	24.7	
68 Dichlorobromomethane	83	8.854	8.854	0.000	99	1938816	25.0	26.3	
69 2-Nitropropane	41	9.122	9.116	0.006	100	1096762	125.0	128.7	
72 1-Bromo-2-chloroethane	63	9.250	9.244	0.006	99	1377982	25.0	26.0	
73 cis-1,3-Dichloropropene	75	9.396	9.396	0.000	95	2303922	25.0	26.5	
74 4-Methyl-2-pentanone (MIBK)	43	9.567	9.567	0.000	97	9464495	250.0	252.9	
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	2045611	10.0	9.90	
76 Toluene	92	9.780	9.780	0.000	98	3999921	25.0	25.0	
78 trans-1,3-Dichloropropene	75	10.036	10.036	0.000	93	1955314	25.0	27.2	
S 77 1,3-Dichloropropene, Total	100				0			53.7	
79 Ethyl methacrylate	69	10.097	10.097	0.000	87	1522306	25.0	27.3	
80 1,1,2-Trichloroethane	97	10.244	10.244	0.000	91	1072964	25.0	24.4	
81 Tetrachloroethene	166	10.335	10.329	0.006	98	2303151	25.0	25.0	
82 1,3-Dichloropropane	76	10.402	10.402	0.000	90	1758682	25.0	24.9	
83 2-Hexanone	43	10.451	10.451	0.000	97	6847069	250.0	272.5	
85 Chlorodibromomethane	129	10.616	10.616	0.000	89	1600637	25.0	26.9	
86 Ethylene Dibromide	107	10.731	10.731	0.000	99	1101758	25.0	25.9	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	84	1697885	10.0	10.0	
88 1-Chlorohexane	91	11.164	11.164	0.000	95	2384893	25.0	24.6	
90 Chlorobenzene	112	11.183	11.183	0.000	96	4758275	25.0	25.1	
S 89 Xylenes, Total	106				0			77.5	
91 1,1,1,2-Tetrachloroethane	131	11.268	11.268	0.000	95	1865047	25.0	26.6	
92 Ethylbenzene	91	11.268	11.268	0.000	98	8052347	25.0	25.4	
93 m-Xylene & p-Xylene	106	11.384	11.384	0.000	99	6704068	50.0	51.7	
94 o-Xylene	106	11.713	11.713	0.000	96	3304917	25.0	25.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.725	11.731	-0.006	93	5349467	25.0	26.9	
96 Bromoform	173	11.884	11.890	-0.006	98	1047560	25.0	28.6	
97 Isopropylbenzene	105	12.012	12.012	0.000	96	8488413	25.0	25.5	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	97	795598	10.0	9.93	
101 1,1,2,2-Tetrachloroethane	83	12.255	12.256	-0.001	95	1413094	25.0	25.7	
102 Bromobenzene	156	12.274	12.274	0.000	97	2232497	25.0	25.5	
103 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	92	4082743	250.0	302.4	
104 1,2,3-Trichloropropane	110	12.304	12.298	0.006	84	396072	25.0	24.3	
105 N-Propylbenzene	91	12.341	12.341	0.000	98	9513016	25.0	24.9	
106 2-Chlorotoluene	126	12.420	12.414	0.006	98	2107004	25.0	25.1	
107 1,3,5-Trimethylbenzene	105	12.475	12.475	0.000	94	7260173	25.0	25.7	
108 4-Chlorotoluene	126	12.512	12.512	0.000	97	2149136	25.0	25.1	
109 tert-Butylbenzene	134	12.719	12.719	0.000	93	1710155	25.0	25.1	
110 Pentachloroethane	167	12.749	12.749	0.000	93	1569725	25.0	28.1	
111 1,2,4-Trimethylbenzene	105	12.761	12.762	-0.001	97	7424779	25.0	26.1	
112 sec-Butylbenzene	105	12.883	12.877	0.006	94	9099816	25.0	25.3	
113 1,3-Dichlorobenzene	146	12.981	12.981	0.000	99	4432211	25.0	26.0	
114 4-Isopropyltoluene	119	12.987	12.987	0.000	96	8454498	25.0	26.1	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	92	1039276	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.054	13.054	0.000	95	4400002	25.0	25.3	
117 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	98	3375478	25.0	25.7	
118 Benzyl chloride	126	13.127	13.133	-0.006	98	652676	25.0	29.3	
119 n-Butylbenzene	92	13.280	13.280	0.000	97	3995744	25.0	27.8	
120 1,2-Dichlorobenzene	146	13.310	13.316	-0.006	99	4055635	25.0	26.1	
122 1,2-Dibromo-3-Chloropropane	155	13.853	13.859	-0.006	90	252108	25.0	28.7	
123 1,3,5-Trichlorobenzene	180	13.981	13.981	0.000	98	3263029	25.0	25.7	
124 1,2,4-Trichlorobenzene	180	14.401	14.408	-0.007	94	2781903	25.0	26.0	
125 Hexachlorobutadiene	225	14.487	14.487	0.000	95	1188278	25.0	24.5	
126 Naphthalene	128	14.584	14.584	0.000	97	4606935	25.0	25.1	
127 1,2,3-Trichlorobenzene	180	14.725	14.725	-0.001	95	2295134	25.0	24.5	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
134 Isopropyl alcohol	45		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_00038	Amount Added: 25.00	Units: uL	
MSV_LL_#2_826_00042	Amount Added: 25.00	Units: uL	
MSV_LL_GAS826_00072	Amount Added: 25.00	Units: uL	
MSV_LLcentISS_00004	Amount Added: 5.00	Units: uL	Run Reagent

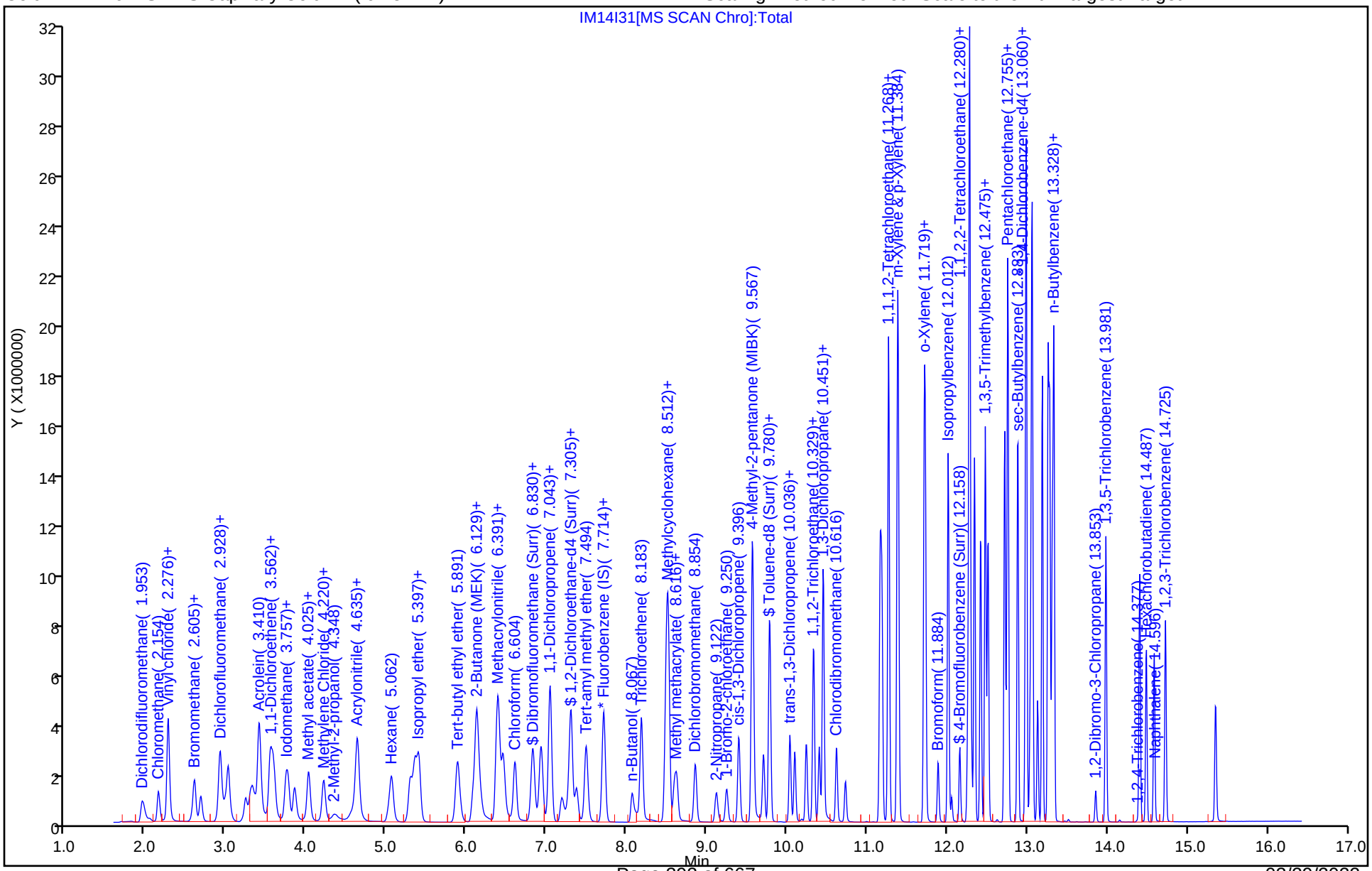
Report Date: 16-Mar-2022 10:11:25 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I31.D

Injection Date:	15-Mar-2022 01:15:30	Instrument ID:	19930	Operator ID:	mec29284
Lims ID:	IC std7			Worklist Smp#:	12
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

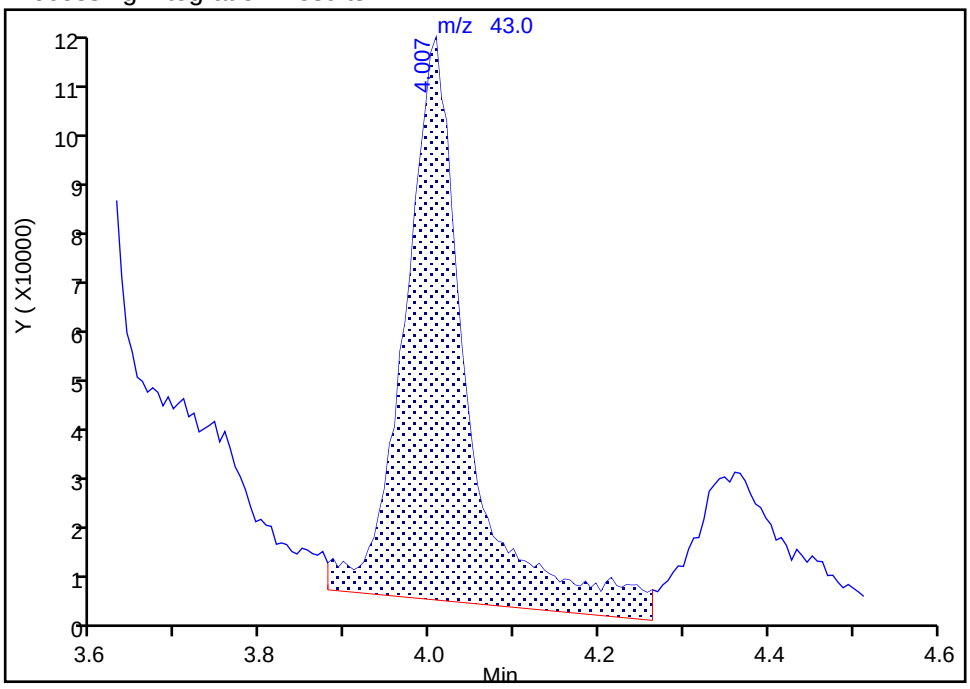
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I31.D
Injection Date: 15-Mar-2022 01:15:30 Instrument ID: 19930
Lims ID: IC std7
Client ID:
Operator ID: mec29284 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

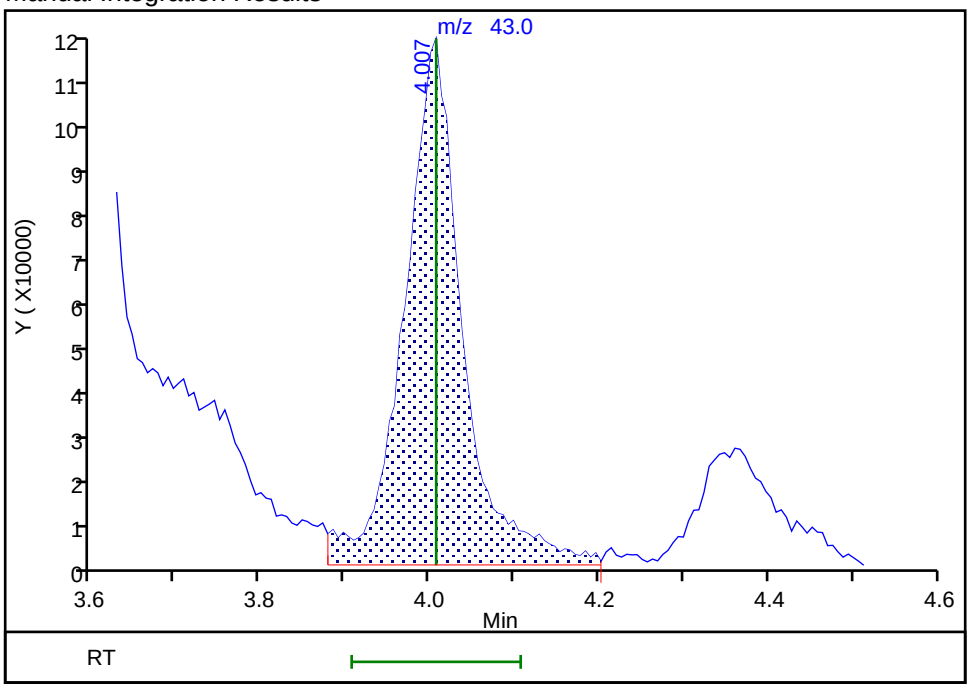
Processing Integration Results

RT: 4.01
Area: 537135
Amount: 22.911080
Amount Units: ug/l



Manual Integration Results

RT: 4.01
Area: 491288
Amount: 25.084836
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:17:09
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

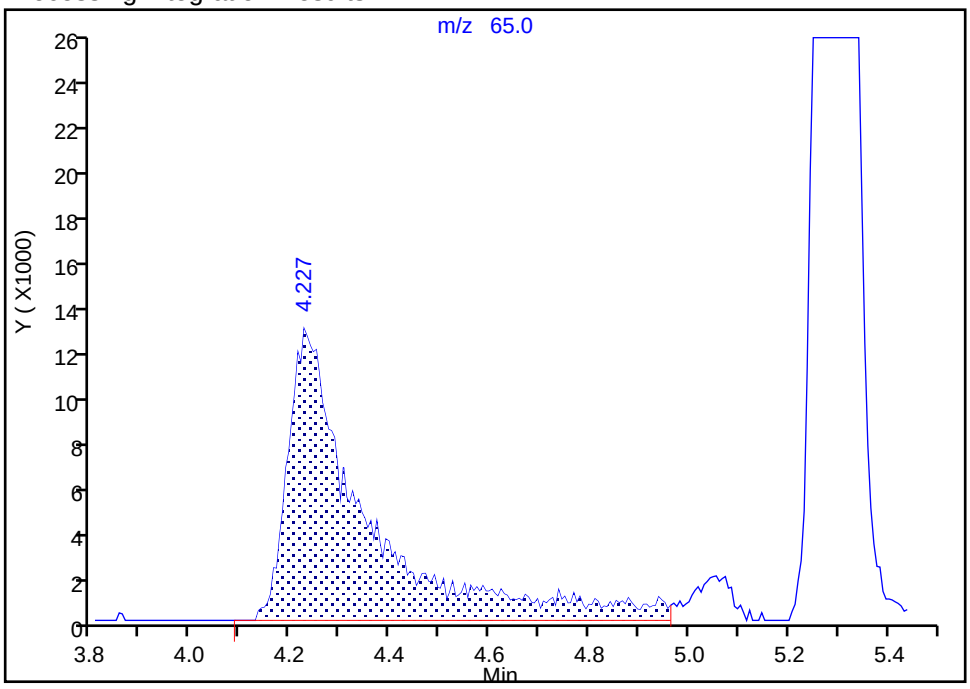
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I31.D
Injection Date: 15-Mar-2022 01:15:30 Instrument ID: 19930
Lims ID: IC std7
Client ID:
Operator ID: mec29284 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

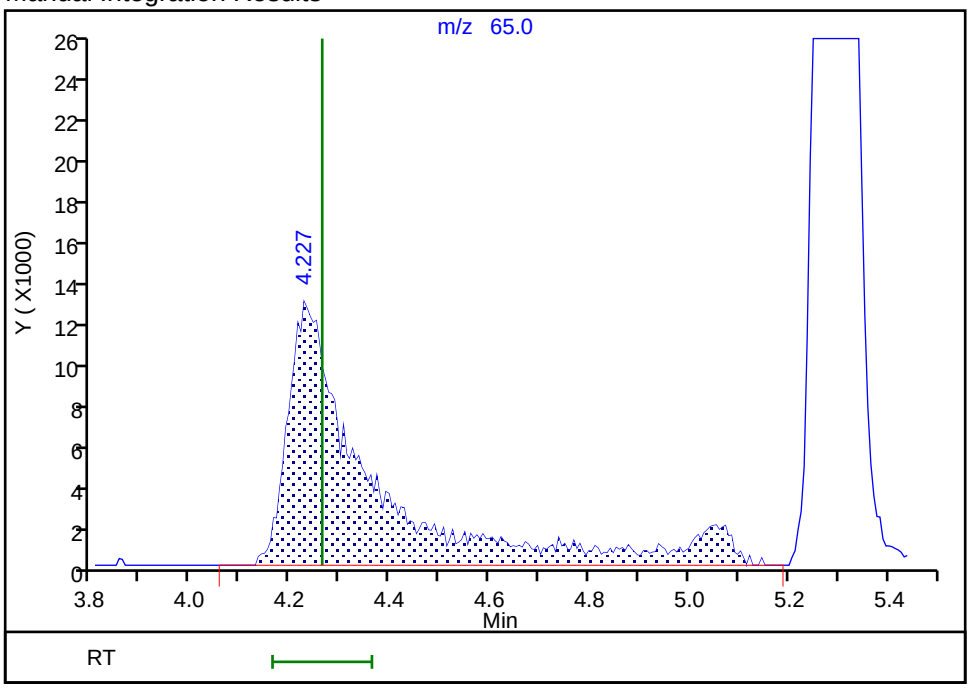
Processing Integration Results

RT: 4.23
Area: 139456
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 4.23
Area: 150473
Amount: 50.000000
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:17:22
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I32.D
Lims ID: ICIS - LG
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 15-Mar-2022 01:36:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0052441-013
Misc. Info.: ICIS - LG
Operator ID: mec29284 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 16-Mar-2022 10:11:28 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1676

First Level Reviewer: kephartk Date: 16-Mar-2022 08:19:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.953	1.953	0.000	99	775367	10.0	10.3	
4 Chloromethane	50	2.148	2.148	0.000	99	767362	10.0	9.88	
5 Vinyl chloride	62	2.263	2.263	0.000	98	835832	10.0	10.2	
6 Butadiene	39	2.270	2.270	0.000	95	798845	10.0	9.96	
7 Bromomethane	94	2.599	2.599	0.000	92	679556	10.0	10.0	
8 Chloroethane	64	2.678	2.678	0.000	99	505348	10.0	10.1	
9 Dichlorofluoromethane	67	2.910	2.910	0.000	97	1266108	10.0	10.1	
10 Trichlorofluoromethane	101	2.928	2.928	0.000	97	1244670	10.0	10.2	
11 Ethyl ether	59	3.239	3.239	0.000	91	334626	10.0	9.94	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.306	3.306	0.000	88	679412	10.0	9.70	
13 Acrolein	56	3.403	3.403	0.000	99	3017661	500.0	510.3	
14 1,1-Dichloroethene	96	3.544	3.544	0.000	98	510336	10.0	9.64	
15 Acetone	43	3.574	3.574	0.000	100	728270	100.0	91.2	
16 112TCTFE	101	3.580	3.580	0.000	90	545338	10.0	9.81	
17 Iodomethane	142	3.739	3.739	0.000	99	1043578	10.0	9.62	
18 Ethyl bromide	108	3.769	3.769	0.000	99	487922	10.0	9.65	
19 Carbon disulfide	76	3.848	3.848	0.000	100	1165433	10.0	9.82	
21 Methyl acetate	43	3.995	3.995	0.000	96	186384	10.0	9.64	M
22 3-Chloro-1-propene	41	4.019	4.019	0.000	88	735174	10.0	9.80	
23 Methylene Chloride	84	4.208	4.208	0.000	90	531797	10.0	9.61	
* 24 t-Butyl alcohol-d10 (IS)	65	4.226	4.226	0.000	95	147286	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.354	4.354	0.000	99	618605	200.0	209.7	
26 Acrylonitrile	53	4.550	4.550	0.000	98	244970	25.0	26.1	
27 Methyl tert-butyl ether	73	4.617	4.617	0.000	94	1341869	10.0	9.70	
28 trans-1,2-Dichloroethene	96	4.629	4.629	0.000	97	574992	10.0	9.58	
29 Hexane	57	5.056	5.056	0.000	93	723629	10.0	9.94	
31 1,1-Dichloroethane	63	5.287	5.287	0.000	96	993908	10.0	9.67	
32 Isopropyl ether	45	5.348	5.348	0.000	92	1607499	10.0	10.0	
33 2-Chloro-1,3-butadiene	53	5.403	5.403	0.000	92	818283	10.0	9.78	
34 Tert-butyl ethyl ether	59	5.885	5.885	0.000	97	1597708	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
36 2-Butanone (MEK)	43	6.074	6.074	0.000	99	1387836	100.0	100.2	
37 cis-1,2-Dichloroethene	96	6.122	6.122	0.000	81	644276	10.0	9.39	
38 2,2-Dichloropropane	77	6.135	6.135	0.000	87	941433	10.0	9.88	
40 Propionitrile	54	6.165	6.165	0.000	98	727147	200.0	205.1	
42 Methacrylonitrile	67	6.378	6.378	0.000	91	1405130	100.0	99.1	
43 Chlorobromomethane	128	6.446	6.446	0.000	87	301613	10.0	9.59	
44 Tetrahydrofuran	71	6.458	6.458	0.000	78	195966	50.0	50.0	
45 Chloroform	83	6.598	6.598	0.000	94	1069836	10.0	9.67	
$ 46 Dibromofluoromethane (Surr)	113	6.817	6.817	0.000	93	545283	10.0	9.98	
47 1,1,1-Trichloroethane	97	6.824	6.824	0.000	98	1037449	10.0	9.66	
48 Cyclohexane	56	6.927	6.927	0.000	91	901090	10.0	9.98	
50 Carbon tetrachloride	117	7.037	7.037	0.000	96	976207	10.0	9.83	
51 1,1-Dichloropropene	75	7.043	7.043	0.000	93	809214	10.0	9.77	
52 Isobutyl alcohol	41	7.183	7.183	0.000	93	496869	500.0	499.5	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.256	7.256	0.000	90	96026	10.0	9.87	
54 Benzene	78	7.299	7.299	0.000	97	2308112	10.0	9.70	
56 1,2-Dichloroethane	62	7.366	7.366	0.000	98	636810	10.0	9.60	
57 Tert-amyl methyl ether	73	7.488	7.488	0.000	98	1493443	10.0	9.80	
* 58 Fluorobenzene (IS)	96	7.701	7.701	0.000	99	2018353	10.0	10.0	
59 n-Heptane	43	7.714	7.714	0.000	89	748067	10.0	9.62	
60 n-Butanol	56	8.061	8.061	0.000	89	820288	875.0	1042.6	
61 Trichloroethene	95	8.177	8.177	0.000	96	661523	10.0	9.68	
62 Methylcyclohexane	83	8.488	8.488	0.000	90	1082507	10.0	9.93	
63 1,2-Dichloropropane	63	8.506	8.506	0.000	93	569329	10.0	9.99	
64 Methyl methacrylate	69	8.591	8.591	0.000	84	268217	10.0	9.99	
65 1,4-Dioxane	88	8.604	8.604	0.000	39	110430	500.0	544.7	
66 Dibromomethane	93	8.616	8.616	0.000	91	307015	10.0	9.73	
68 Dichlorobromomethane	83	8.854	8.854	0.000	99	758285	10.0	10.1	
69 2-Nitropropane	41	9.116	9.116	0.000	100	427911	50.0	51.3	
72 1-Bromo-2-chloroethane	63	9.244	9.244	0.000	99	545876	10.0	10.1	
73 cis-1,3-Dichloropropene	75	9.396	9.396	0.000	95	902444	10.0	10.2	
74 4-Methyl-2-pentanone (MIBK)	43	9.567	9.567	0.000	97	3745376	100.0	102.3	
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	94	2067816	10.0	9.99	
76 Toluene	92	9.780	9.780	0.000	98	1558024	10.0	9.71	
78 trans-1,3-Dichloropropene	75	10.036	10.036	0.000	94	754768	10.0	10.5	
79 Ethyl methacrylate	69	10.097	10.097	0.000	87	588856	10.0	10.5	
80 1,1,2-Trichloroethane	97	10.237	10.237	0.000	92	422109	10.0	9.60	
81 Tetrachloroethene	166	10.329	10.329	0.000	98	905603	10.0	9.81	
82 1,3-Dichloropropane	76	10.402	10.402	0.000	89	694300	10.0	9.82	
83 2-Hexanone	43	10.451	10.451	0.000	97	2672997	100.0	108.7	
85 Chlorodibromomethane	129	10.615	10.615	0.000	89	605912	10.0	10.2	
86 Ethylene Dibromide	107	10.731	10.731	0.000	98	430495	10.0	10.1	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	84	1700909	10.0	10.0	
88 1-Chlorohexane	91	11.164	11.164	0.000	95	931799	10.0	9.59	
90 Chlorobenzene	112	11.182	11.182	0.000	97	1839209	10.0	9.68	
91 1,1,1,2-Tetrachloroethane	131	11.268	11.268	0.000	95	707043	10.0	10.1	
92 Ethylbenzene	91	11.268	11.268	0.000	98	3113773	10.0	9.81	
93 m-Xylene & p-Xylene	106	11.384	11.384	0.000	99	2560376	20.0	19.7	
94 o-Xylene	106	11.713	11.713	0.000	95	1252820	10.0	9.79	
95 Styrene	104	11.725	11.725	0.000	94	2015851	10.0	10.1	
96 Bromoform	173	11.890	11.890	0.000	98	398616	10.0	10.8	
97 Isopropylbenzene	105	12.012	12.012	0.000	96	3323539	10.0	9.95	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	798597	10.0	9.95	
101 1,1,2,2-Tetrachloroethane	83	12.255	12.255	0.000	95	545272	10.0	9.82	
102 Bromobenzene	156	12.274	12.274	0.000	97	843377	10.0	9.55	
103 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	92	1514033	100.0	114.6	
104 1,2,3-Trichloropropane	110	12.304	12.304	0.000	85	157407	10.0	9.57	
105 N-Propylbenzene	91	12.341	12.341	0.000	98	3777132	10.0	9.80	
106 2-Chlorotoluene	126	12.414	12.414	0.000	97	813415	10.0	9.60	
107 1,3,5-Trimethylbenzene	105	12.475	12.475	0.000	94	2804438	10.0	9.84	
108 4-Chlorotoluene	126	12.511	12.511	0.000	97	836084	10.0	9.66	
109 tert-Butylbenzene	134	12.719	12.719	0.000	93	662432	10.0	9.64	
110 Pentachloroethane	167	12.749	12.749	0.000	93	587717	10.0	10.4	
111 1,2,4-Trimethylbenzene	105	12.755	12.755	0.000	97	2860782	10.0	9.95	
112 sec-Butylbenzene	105	12.877	12.877	0.000	94	3584310	10.0	9.85	
113 1,3-Dichlorobenzene	146	12.981	12.981	0.000	99	1681322	10.0	9.78	
114 4-Isopropyltoluene	119	12.987	12.987	0.000	97	3239138	10.0	9.89	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	93	1049716	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.054	13.054	0.000	95	1684578	10.0	9.59	
117 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	98	1276413	10.0	9.61	
118 Benzyl chloride	126	13.127	13.127	0.000	98	243381	10.0	10.8	
119 n-Butylbenzene	92	13.280	13.280	0.000	97	1497756	10.0	10.3	
120 1,2-Dichlorobenzene	146	13.310	13.310	0.000	99	1547734	10.0	9.87	
122 1,2-Dibromo-3-Chloropropane	155	13.853	13.853	0.000	90	95086	10.0	10.7	
123 1,3,5-Trichlorobenzene	180	13.981	13.981	0.000	98	1290067	10.0	10.0	
124 1,2,4-Trichlorobenzene	180	14.401	14.401	0.000	94	1105018	10.0	10.2	
125 Hexachlorobutadiene	225	14.487	14.487	0.000	95	466003	10.0	9.49	
126 Naphthalene	128	14.584	14.584	0.000	97	1856952	10.0	10.0	
127 1,2,3-Trichlorobenzene	180	14.724	14.724	0.000	95	930716	10.0	9.82	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
134 Isopropyl alcohol	45		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_00038	Amount Added: 10.00	Units: uL	
MSV_LL_#2_826_00042	Amount Added: 10.00	Units: uL	
MSV_LL_GAS826_00072	Amount Added: 10.00	Units: uL	
MSV_LLcentISS_00004	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 16-Mar-2022 10:11:29 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I32.D

Injection Date: 15-Mar-2022 01:36:30 Instrument ID: 19930 Operator ID: mec29284

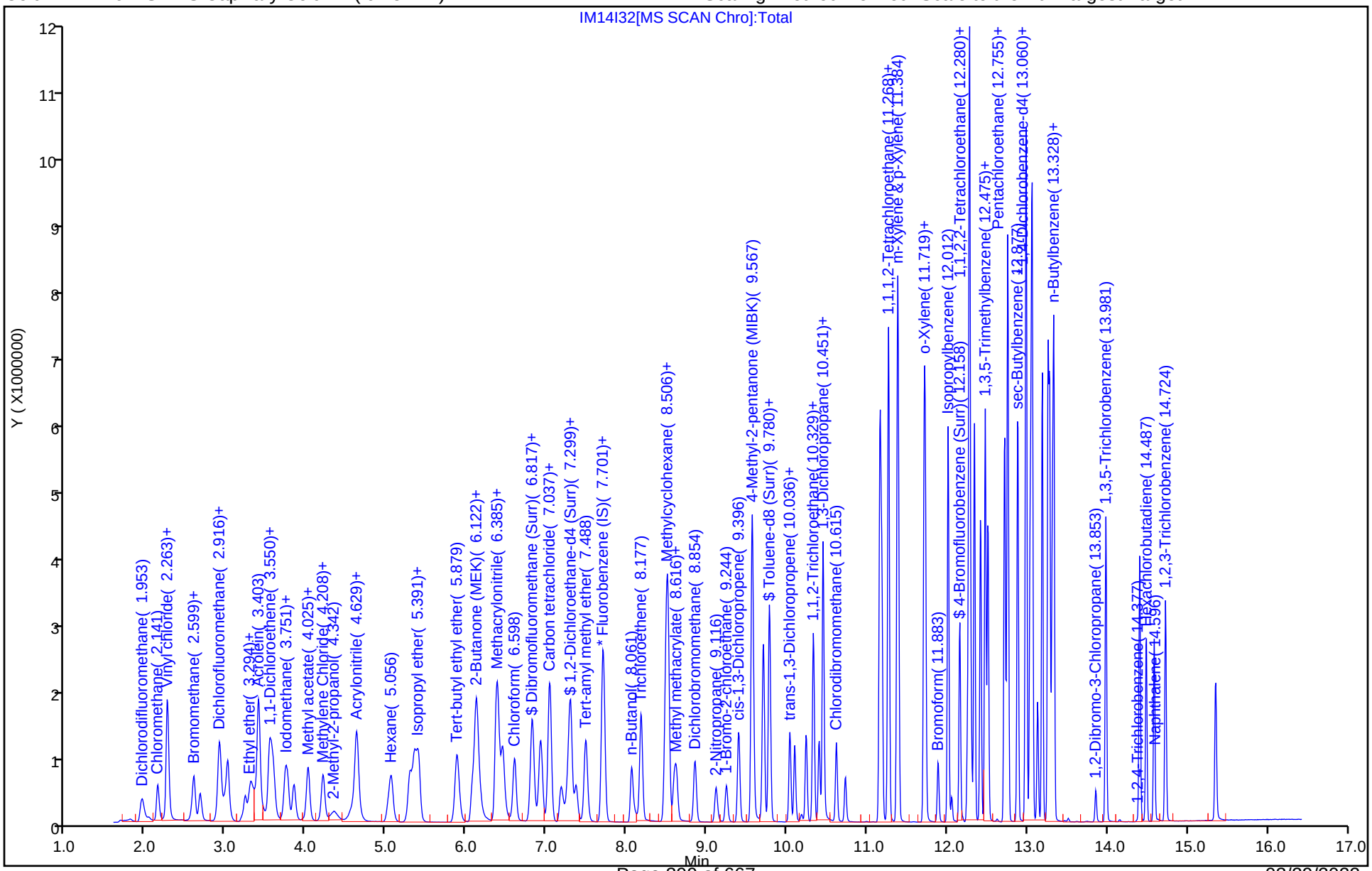
Lims ID: ICIS - LG Worklist Smp#: 13

Client ID:

Purge Vol: 25.000 mL Dil. Factor: 1.0000 ALS Bottle#: 12

Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

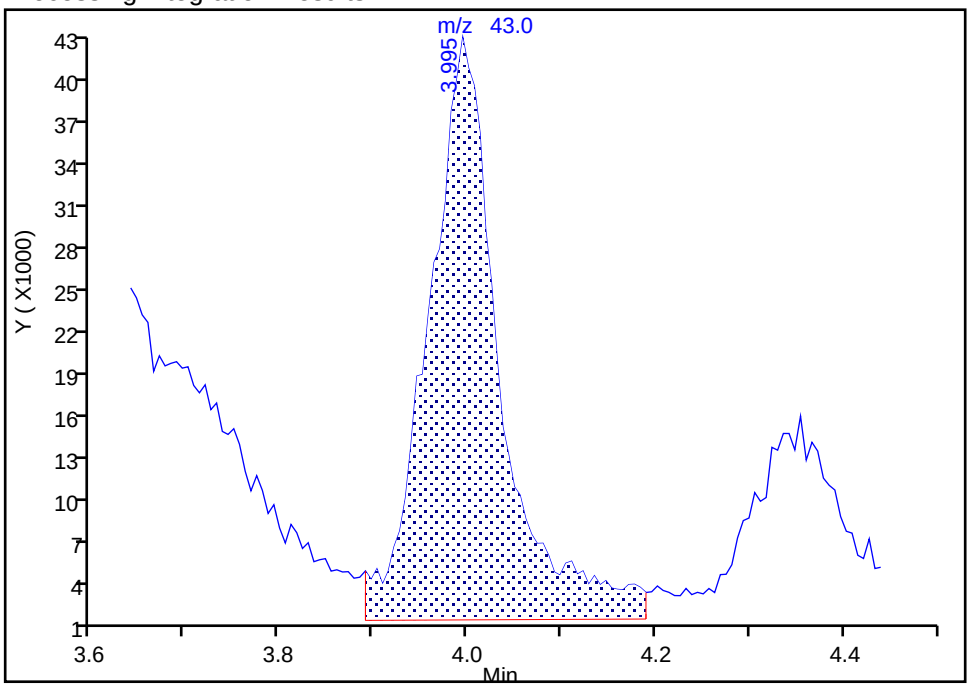
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I32.D
Injection Date: 15-Mar-2022 01:36:30 Instrument ID: 19930
Lims ID: ICIS - LG
Client ID:
Operator ID: mec29284 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

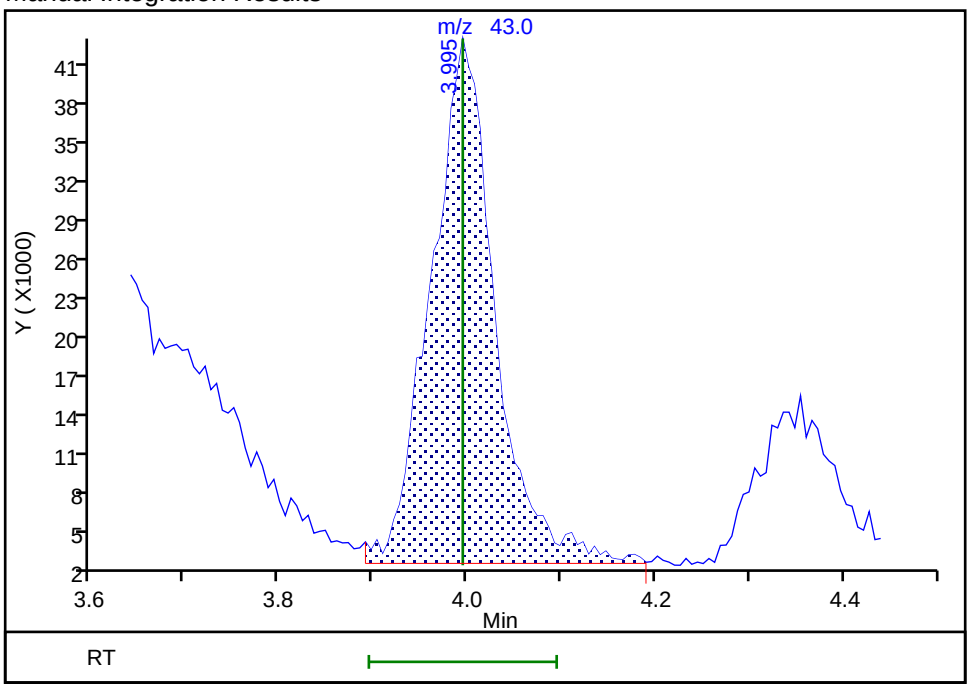
Processing Integration Results

RT: 3.99
Area: 220010
Amount: 11.108859
Amount Units: ug/l



Manual Integration Results

RT: 3.99
Area: 186384
Amount: 9.638692
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:18:41
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

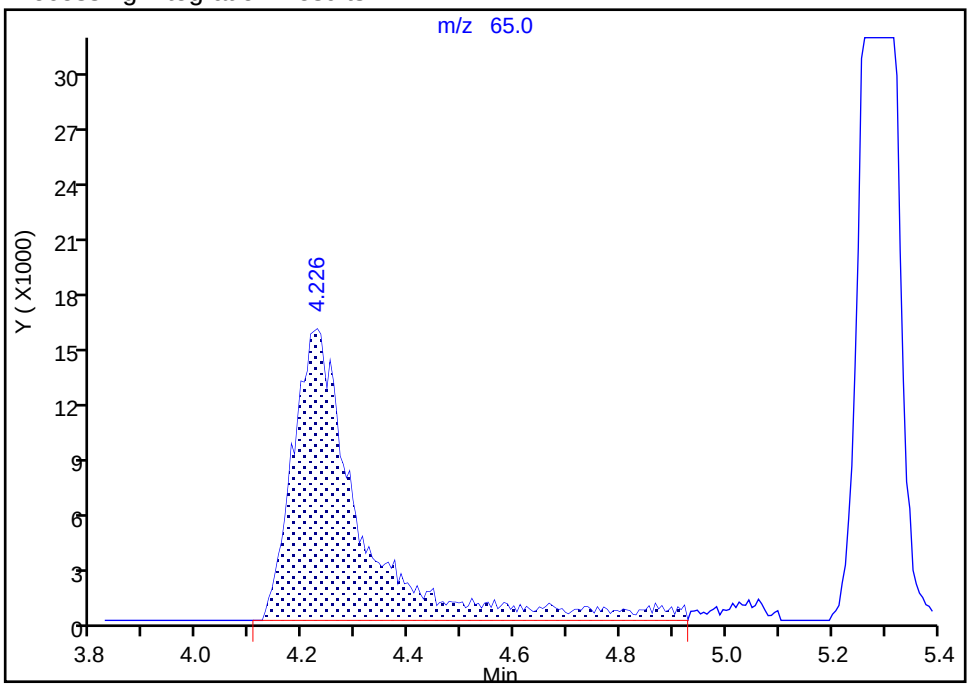
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I32.D
Injection Date: 15-Mar-2022 01:36:30 Instrument ID: 19930
Lims ID: ICIS - LG
Client ID:
Operator ID: mec29284 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

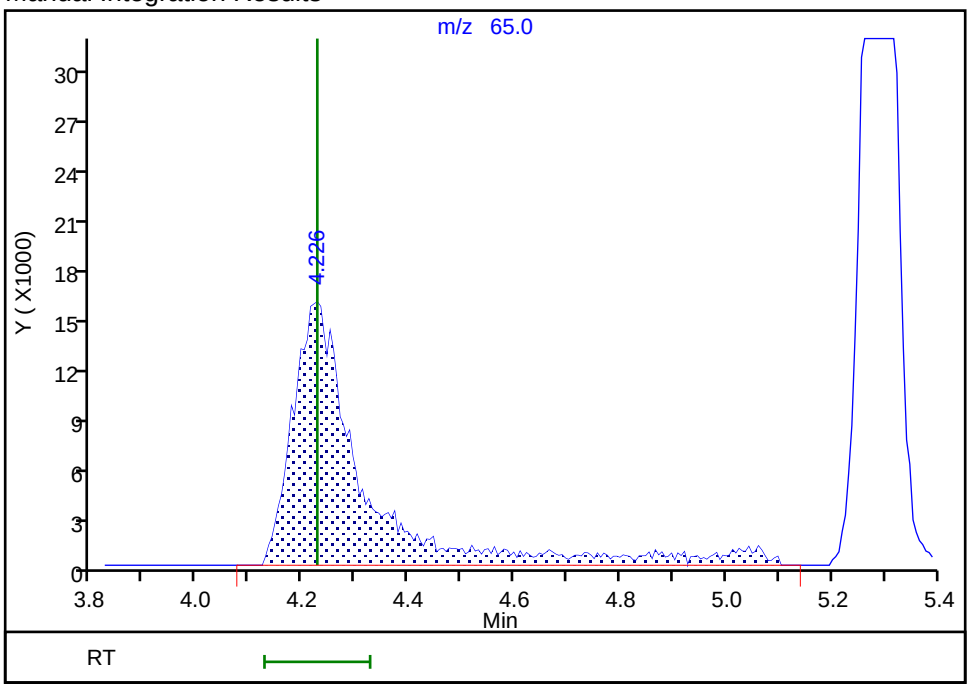
Processing Integration Results

RT: 4.23
Area: 140812
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 4.23
Area: 147286
Amount: 50.000000
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:18:48
Audit Action: Manually Integrated Audit Reason: Baseline

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I33.D
Lims ID: IC std5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 15-Mar-2022 01:58:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0052441-014
Misc. Info.: IC STD5
Operator ID: mec29284 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 16-Mar-2022 10:11:32 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1676

First Level Reviewer: kephartk Date: 16-Mar-2022 08:23:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.953	1.953	0.001	99	391871	5.00	5.23	
4 Chloromethane	50	2.148	2.148	0.000	99	383740	5.00	4.97	
5 Vinyl chloride	62	2.264	2.263	0.001	84	421383	5.00	5.16	
6 Butadiene	39	2.270	2.270	0.000	93	403813	5.00	5.06	
7 Bromomethane	94	2.599	2.599	0.000	92	330801	5.00	4.90	
8 Chloroethane	64	2.678	2.678	0.000	99	249286	5.00	5.02	
9 Dichlorofluoromethane	67	2.916	2.910	0.006	98	613064	5.00	4.91	
10 Trichlorofluoromethane	101	2.928	2.928	0.000	97	626391	5.00	5.16	
11 Ethyl ether	59	3.239	3.239	0.000	90	168002	5.00	5.02	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.306	3.306	0.000	88	342871	5.00	4.92	
13 Acrolein	56	3.404	3.403	0.001	99	1475679	250.0	245.1	
14 1,1-Dichloroethene	96	3.544	3.544	0.000	97	265552	5.00	5.04	
15 Acetone	43	3.574	3.574	0.000	81	395553	50.0	48.6	M
16 112TCTFE	101	3.586	3.580	0.006	89	287670	5.00	5.20	
17 Iodomethane	142	3.739	3.739	0.000	100	533265	5.00	4.94	
18 Ethyl bromide	108	3.769	3.769	0.000	99	256852	5.00	5.11	
19 Carbon disulfide	76	3.849	3.848	0.001	100	596804	5.00	5.05	
21 Methyl acetate	43	4.013	3.995	0.018	97	105367	5.00	5.29	M
22 3-Chloro-1-propene	41	4.025	4.019	0.006	88	370309	5.00	4.96	
23 Methylene Chloride	84	4.214	4.208	0.006	92	270557	5.00	4.91	
* 24 t-Butyl alcohol-d10 (IS)	65	4.214	4.226	-0.012	97	149941	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.349	4.354	-0.006	99	299177	100.0	99.6	
26 Acrylonitrile	53	4.550	4.550	0.000	97	123024	12.5	12.9	
27 Methyl tert-butyl ether	73	4.623	4.617	0.006	94	678446	5.00	4.93	
28 trans-1,2-Dichloroethene	96	4.635	4.629	0.006	97	291715	5.00	4.88	
29 Hexane	57	5.062	5.056	0.006	93	376145	5.00	5.19	
31 1,1-Dichloroethane	63	5.287	5.287	0.000	96	506938	5.00	4.96	
32 Isopropyl ether	45	5.348	5.348	0.000	92	806621	5.00	5.05	
33 2-Chloro-1,3-butadiene	53	5.397	5.403	-0.006	91	419888	5.00	5.04	
34 Tert-butyl ethyl ether	59	5.879	5.885	-0.006	97	805906	5.00	4.96	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.080	6.074	0.006	99	710896	50.0	50.4	
37 cis-1,2-Dichloroethene	96	6.123	6.122	0.001	81	325971	5.00	4.78	
38 2,2-Dichloropropane	77	6.135	6.135	0.000	88	476899	5.00	5.03	
S 35 1,2-Dichloroethene, Total	100				0			9.66	
40 Propionitrile	54	6.171	6.165	0.006	98	352145	100.0	97.5	
42 Methacrylonitrile	67	6.385	6.378	0.007	94	707937	50.0	49.1	
43 Chlorobromomethane	128	6.452	6.446	0.006	86	153997	5.00	4.92	
44 Tetrahydrofuran	71	6.464	6.458	0.006	88	101424	25.0	25.4	
45 Chloroform	83	6.598	6.598	0.000	94	542529	5.00	4.93	
$ 46 Dibromofluoromethane (Surr)	113	6.811	6.817	-0.006	94	540907	10.0	9.95	
47 1,1,1-Trichloroethane	97	6.830	6.824	0.006	97	529783	5.00	4.96	
48 Cyclohexane	56	6.927	6.927	0.000	90	460490	5.00	5.13	
50 Carbon tetrachloride	117	7.043	7.037	0.006	96	497787	5.00	5.04	
51 1,1-Dichloropropene	75	7.037	7.043	-0.006	93	412120	5.00	5.00	
52 Isobutyl alcohol	41	7.177	7.183	-0.006	92	259655	250.0	256.4	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.263	7.256	0.007	86	95088	10.0	9.82	
54 Benzene	78	7.299	7.299	0.000	97	1173966	5.00	4.96	
56 1,2-Dichloroethane	62	7.366	7.366	0.000	97	317860	5.00	4.82	
57 Tert-amyl methyl ether	73	7.488	7.488	0.000	98	748734	5.00	4.94	
* 58 Fluorobenzene (IS)	96	7.702	7.701	0.001	99	2008310	10.0	10.0	
59 n-Heptane	43	7.714	7.714	0.000	91	392950	5.00	5.08	
60 n-Butanol	56	8.061	8.061	0.000	89	401095	437.5	500.8	
61 Trichloroethene	95	8.177	8.177	0.000	95	334265	5.00	4.92	
62 Methylcyclohexane	83	8.488	8.488	0.000	91	555609	5.00	5.12	
63 1,2-Dichloropropane	63	8.506	8.506	0.000	92	290817	5.00	5.13	
64 Methyl methacrylate	69	8.592	8.591	0.001	88	137875	5.00	5.04	
65 1,4-Dioxane	88	8.604	8.604	0.000	40	52415	250.0	253.9	
66 Dibromomethane	93	8.622	8.616	0.006	91	155310	5.00	4.95	
68 Dichlorobromomethane	83	8.854	8.854	0.000	99	374926	5.00	5.01	
69 2-Nitropropane	41	9.116	9.116	0.000	99	213622	25.0	25.2	
72 1-Bromo-2-chloroethane	63	9.244	9.244	0.000	98	273832	5.00	5.10	
73 cis-1,3-Dichloropropene	75	9.396	9.396	0.000	95	450984	5.00	5.11	
74 4-Methyl-2-pentanone (MIBK)	43	9.567	9.567	0.000	97	1890983	50.0	50.7	
$ 75 Toluene-d8 (Surr)	98	9.701	9.707	-0.006	93	2053919	10.0	10.0	
76 Toluene	92	9.780	9.780	0.000	98	784204	5.00	4.93	
78 trans-1,3-Dichloropropene	75	10.036	10.036	0.000	93	372452	5.00	5.22	
S 77 1,3-Dichloropropene, Total	100				0			10.3	
79 Ethyl methacrylate	69	10.097	10.097	0.000	88	291895	5.00	5.27	
80 1,1,2-Trichloroethane	97	10.238	10.237	0.001	92	211303	5.00	4.85	
81 Tetrachloroethene	166	10.329	10.329	0.000	98	455530	5.00	4.98	
82 1,3-Dichloropropane	76	10.402	10.402	0.000	90	354541	5.00	5.06	
83 2-Hexanone	43	10.451	10.451	0.000	97	1298814	50.0	51.9	
85 Chlorodibromomethane	129	10.616	10.615	0.001	89	300253	5.00	5.08	
86 Ethylene Dibromide	107	10.731	10.731	0.000	98	220656	5.00	5.22	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	84	1684584	10.0	10.0	
88 1-Chlorohexane	91	11.164	11.164	0.000	94	467596	5.00	4.86	
90 Chlorobenzene	112	11.183	11.182	0.001	96	933989	5.00	4.97	
S 89 Xylenes, Total	106				0			14.9	
91 1,1,1,2-Tetrachloroethane	131	11.268	11.268	0.000	95	353025	5.00	5.08	
92 Ethylbenzene	91	11.268	11.268	0.000	98	1558260	5.00	4.96	
93 m-Xylene & p-Xylene	106	11.384	11.384	0.000	99	1282219	10.0	9.96	
94 o-Xylene	106	11.713	11.713	0.000	96	625138	5.00	4.93	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.731	11.725	0.006	95	990642	5.00	5.02	
96 Bromoform	173	11.890	11.890	0.000	98	189692	5.00	5.21	
97 Isopropylbenzene	105	12.012	12.012	0.000	95	1646507	5.00	4.98	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	97	791795	10.0	9.96	
101 1,1,2,2-Tetrachloroethane	83	12.256	12.255	0.001	94	272342	5.00	5.06	
102 Bromobenzene	156	12.274	12.274	0.000	95	429256	5.00	5.02	
103 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	95	708706	50.0	52.7	
104 1,2,3-Trichloropropane	110	12.304	12.304	0.000	84	80120	5.00	5.03	
105 N-Propylbenzene	91	12.341	12.341	0.000	99	1902259	5.00	5.10	
106 2-Chlorotoluene	126	12.414	12.414	0.000	98	412847	5.00	5.03	
107 1,3,5-Trimethylbenzene	105	12.475	12.475	0.000	95	1393730	5.00	5.05	
108 4-Chlorotoluene	126	12.512	12.511	0.001	96	415311	5.00	4.96	
109 tert-Butylbenzene	134	12.719	12.719	0.000	92	335259	5.00	5.04	
110 Pentachloroethane	167	12.749	12.749	0.000	91	288333	5.00	5.28	
111 1,2,4-Trimethylbenzene	105	12.762	12.755	0.007	97	1409233	5.00	5.06	
112 sec-Butylbenzene	105	12.877	12.877	0.000	94	1785777	5.00	5.07	
113 1,3-Dichlorobenzene	146	12.981	12.981	0.000	99	824593	5.00	4.95	
114 4-Isopropyltoluene	119	12.987	12.987	0.000	97	1589520	5.00	5.01	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	93	1016421	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.054	13.054	0.000	95	833641	5.00	4.90	
117 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	98	631723	5.00	4.91	
118 Benzyl chloride	126	13.127	13.127	0.000	98	119615	5.00	5.50	
119 n-Butylbenzene	92	13.280	13.280	0.000	97	716377	5.00	5.09	
120 1,2-Dichlorobenzene	146	13.310	13.310	0.000	99	757252	5.00	4.99	
122 1,2-Dibromo-3-Chloropropane	155	13.859	13.853	0.006	89	47557	5.00	5.53	
123 1,3,5-Trichlorobenzene	180	13.981	13.981	0.000	98	624432	5.00	5.02	
124 1,2,4-Trichlorobenzene	180	14.401	14.401	0.000	94	547927	5.00	5.23	
125 Hexachlorobutadiene	225	14.487	14.487	0.000	95	223993	5.00	4.71	
126 Naphthalene	128	14.584	14.584	0.000	97	930872	5.00	5.19	
127 1,2,3-Trichlorobenzene	180	14.725	14.724	0.001	96	461720	5.00	5.03	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
134 Isopropyl alcohol	45		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_00038	Amount Added:	5.00	Units: uL	
MSV_LL_#2_826_00042	Amount Added:	5.00	Units: uL	
MSV_LL_GAS826_00072	Amount Added:	5.00	Units: uL	
MSV_LLcentISS_00004	Amount Added:	5.00	Units: uL	Run Reagent

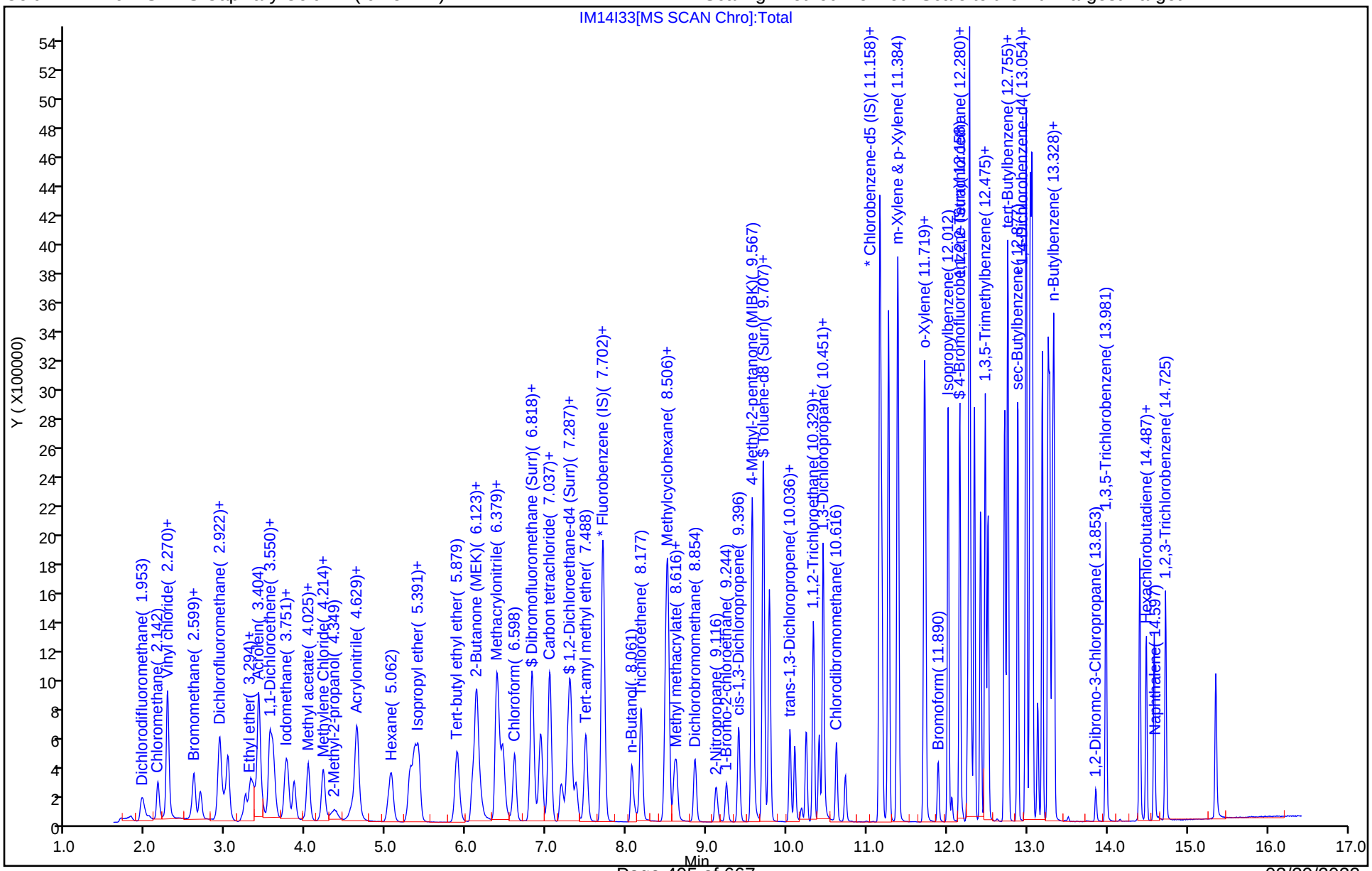
Report Date: 16-Mar-2022 10:11:33 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I33.D

Injection Date:	15-Mar-2022 01:58:30	Instrument ID:	19930	Operator ID:	mec29284
Lims ID:	IC std5			Worklist Smp#:	14
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

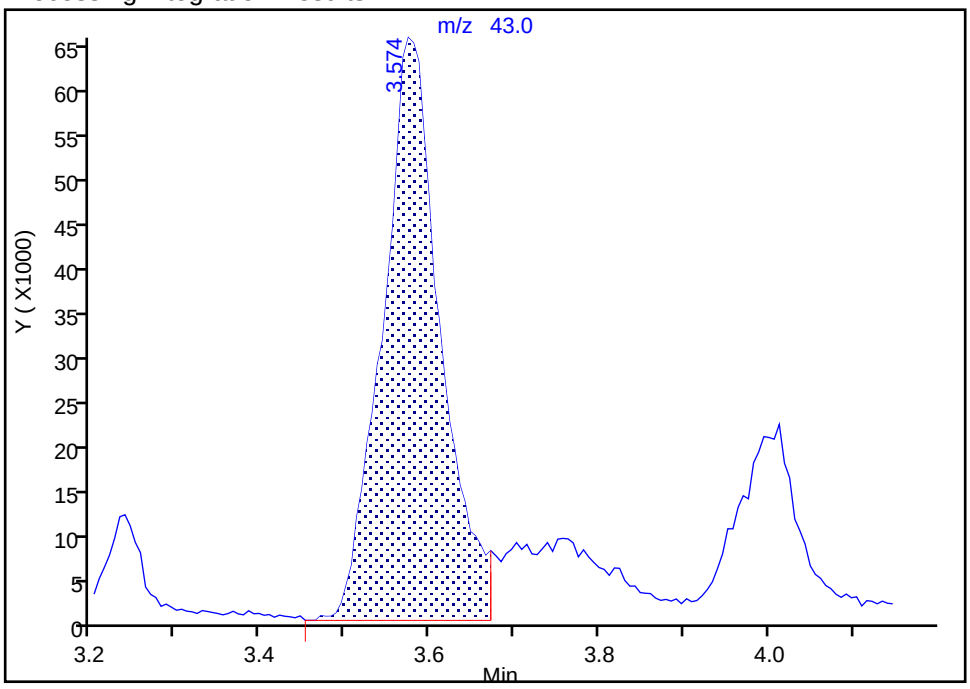
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I33.D
Injection Date: 15-Mar-2022 01:58:30 Instrument ID: 19930
Lims ID: IC std5
Client ID:
Operator ID: mec29284 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

15 Acetone, CAS: 67-64-1

Signal: 1

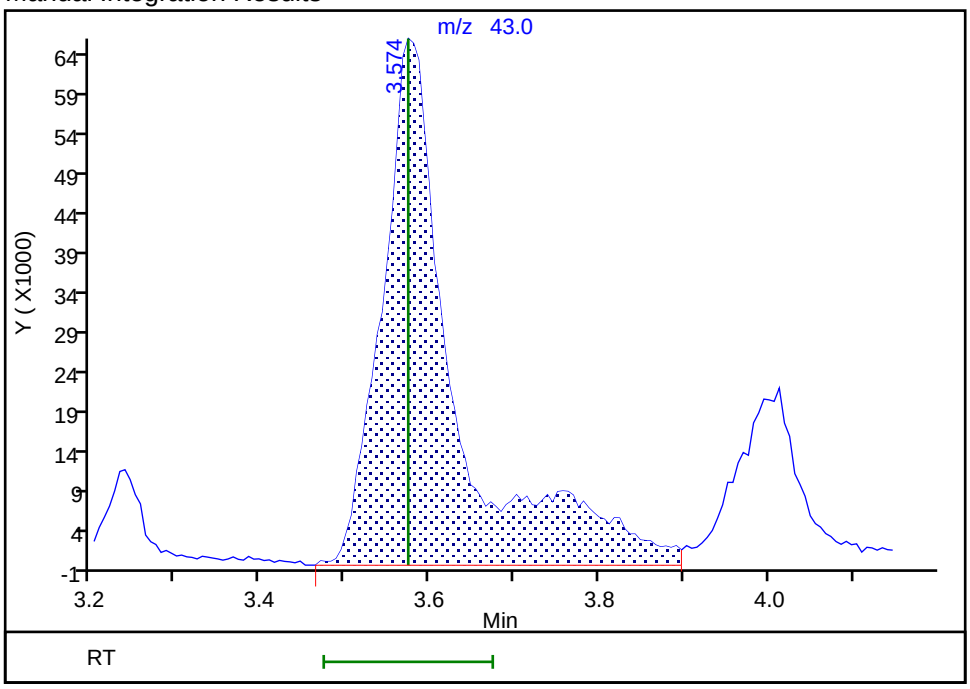
Processing Integration Results

RT: 3.57
Area: 313372
Amount: 41.169443
Amount Units: ug/l



Manual Integration Results

RT: 3.57
Area: 395553
Amount: 48.633680
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:20:05
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

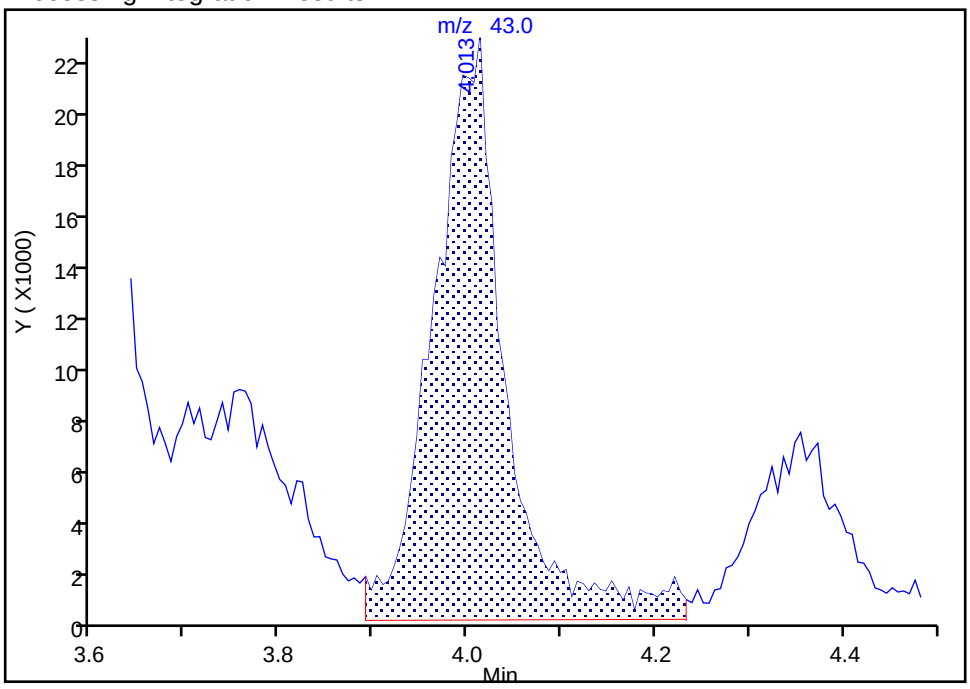
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I33.D
Injection Date: 15-Mar-2022 01:58:30 Instrument ID: 19930
Lims ID: IC std5
Client ID:
Operator ID: mec29284 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

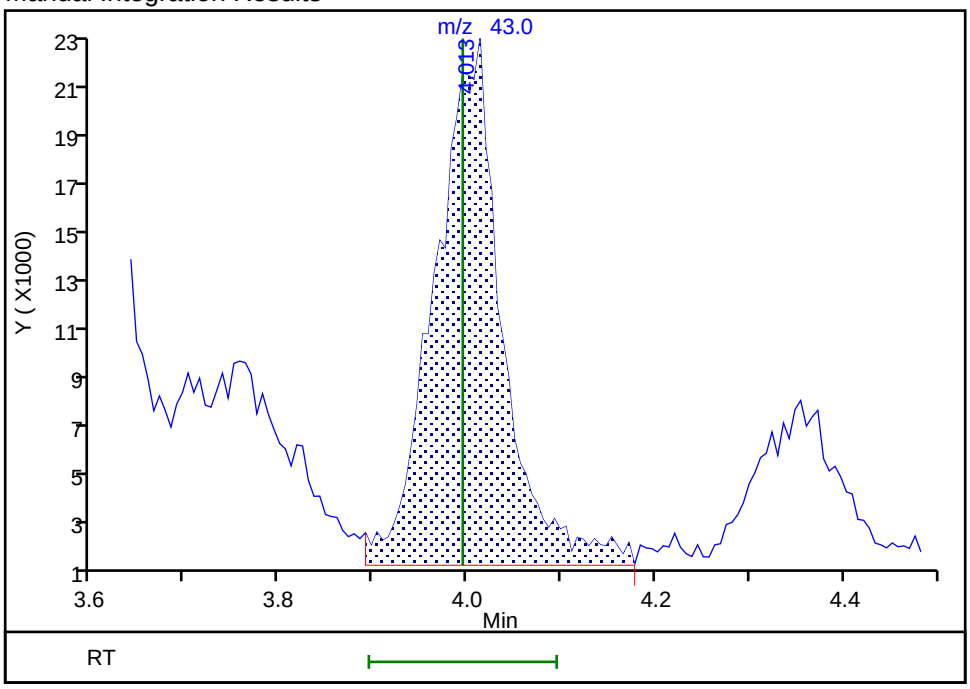
Processing Integration Results

RT: 4.01
Area: 113696
Amount: 5.683993
Amount Units: ug/l



Manual Integration Results

RT: 4.01
Area: 105367
Amount: 5.291579
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:20:33
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

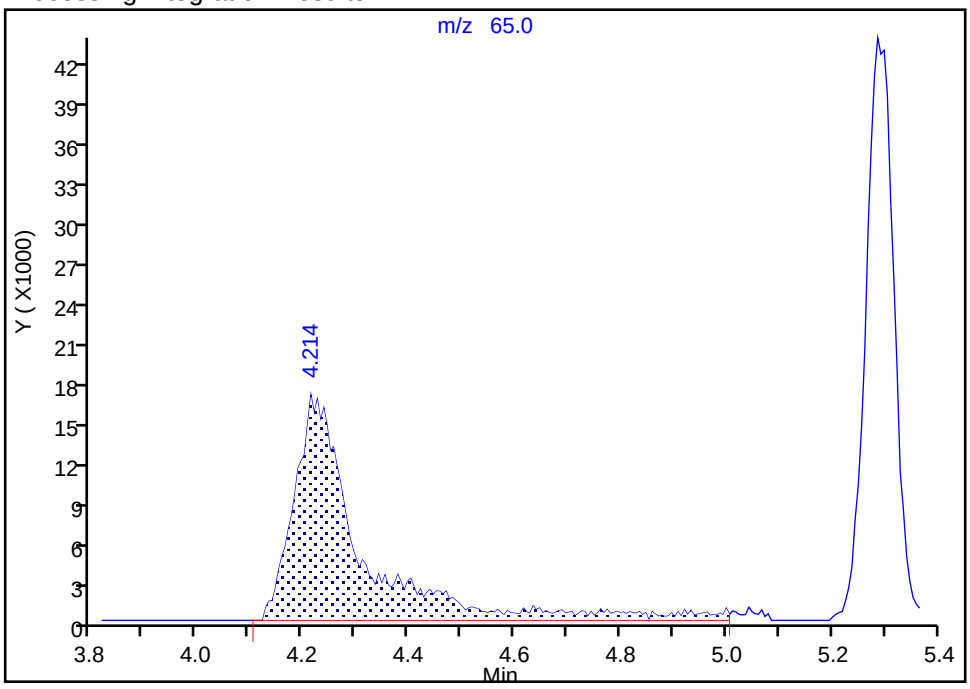
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I33.D
Injection Date: 15-Mar-2022 01:58:30 Instrument ID: 19930
Lims ID: IC std5
Client ID:
Operator ID: mec29284 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

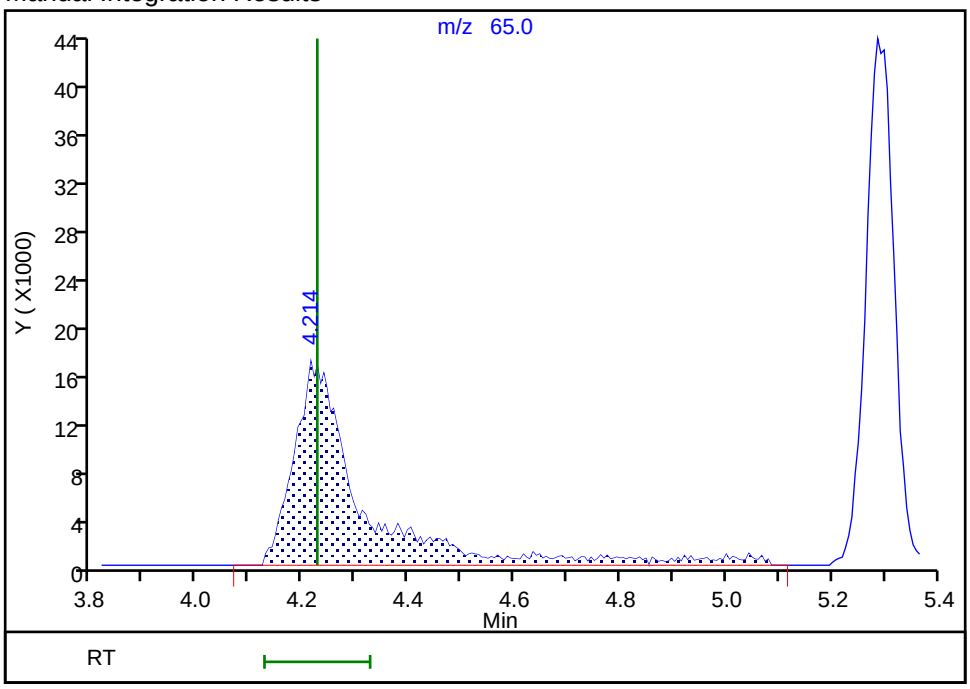
Processing Integration Results

RT: 4.21
Area: 147454
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 4.21
Area: 149941
Amount: 50.000000
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:20:41
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I34.D
Lims ID: IC std4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 15-Mar-2022 02:19:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0052441-015
Misc. Info.: IC STD4
Operator ID: mec29284 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 16-Mar-2022 10:11:37 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1676

First Level Reviewer: kephartk Date: 16-Mar-2022 08:25:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.953	1.953	0.000	99	151440	2.00	2.02	
4 Chloromethane	50	2.142	2.142	0.000	99	152777	2.00	1.98	
5 Vinyl chloride	62	2.264	2.264	0.000	89	161037	2.00	1.98	
6 Butadiene	39	2.264	2.264	0.000	92	170292	2.00	2.14	
7 Bromomethane	94	2.599	2.599	0.000	92	127889	2.00	1.90	
8 Chloroethane	64	2.678	2.678	0.000	99	97172	2.00	1.96	
9 Dichlorofluoromethane	67	2.916	2.916	0.000	97	244787	2.00	1.96	
10 Trichlorofluoromethane	101	2.928	2.928	0.000	94	247207	2.00	2.04	
11 Ethyl ether	59	3.233	3.233	0.000	89	65699	2.00	1.96	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.312	3.312	0.000	93	136009	2.00	1.95	
13 Acrolein	56	3.404	3.404	0.000	99	590057	100.0	104.3	
14 1,1-Dichloroethene	96	3.544	3.544	0.000	98	104409	2.00	1.98	
15 Acetone	43	3.580	3.580	0.000	96	148892	20.0	19.5	
16 112TCTFE	101	3.580	3.580	0.000	88	112525	2.00	2.04	
17 Iodomethane	142	3.739	3.739	0.000	99	217917	2.00	2.02	
18 Ethyl bromide	108	3.769	3.769	0.000	99	99603	2.00	1.98	
19 Carbon disulfide	76	3.849	3.849	0.000	100	237527	2.00	2.01	
21 Methyl acetate	43	4.007	4.007	0.000	20	39331	2.00	2.02	M
22 3-Chloro-1-propene	41	4.025	4.025	0.000	88	149475	2.00	2.01	
23 Methylene Chloride	84	4.214	4.214	0.000	89	110744	2.00	2.01	
* 24 t-Butyl alcohol-d10 (IS)	65	4.214	4.214	0.000	97	140927	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.342	4.342	0.000	99	120168	40.0	42.6	
26 Acrylonitrile	53	4.562	4.562	0.000	97	44225	5.00	4.92	
27 Methyl tert-butyl ether	73	4.617	4.617	0.000	95	273994	2.00	1.99	
28 trans-1,2-Dichloroethene	96	4.629	4.629	0.000	98	117480	2.00	1.97	
29 Hexane	57	5.056	5.056	0.000	95	151532	2.00	2.09	
31 1,1-Dichloroethane	63	5.287	5.287	0.000	96	208183	2.00	2.04	
32 Isopropyl ether	45	5.354	5.354	0.000	91	320905	2.00	2.01	
33 2-Chloro-1,3-butadiene	53	5.403	5.403	0.000	92	163958	2.00	1.97	
34 Tert-butyl ethyl ether	59	5.879	5.879	0.000	96	321001	2.00	1.98	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.080	6.080	0.000	100	270158	20.0	20.4	
37 cis-1,2-Dichloroethene	96	6.123	6.123	0.000	81	134101	2.00	1.97	
38 2,2-Dichloropropane	77	6.135	6.135	0.000	78	191828	2.00	2.03	
S 35 1,2-Dichloroethene, Total	100				0			3.94	
40 Propionitrile	54	6.177	6.177	0.000	99	136671	40.0	40.3	
42 Methacrylonitrile	67	6.379	6.379	0.000	89	276412	20.0	20.4	
43 Chlorobromomethane	128	6.446	6.446	0.000	87	61031	2.00	1.95	
44 Tetrahydrofuran	71	6.458	6.458	0.000	74	38887	10.0	10.4	
45 Chloroform	83	6.604	6.604	0.000	93	217483	2.00	1.98	
$ 46 Dibromofluoromethane (Surr)	113	6.812	6.812	0.000	94	545251	10.0	10.0	
47 1,1,1-Trichloroethane	97	6.830	6.830	0.000	59	215247	2.00	2.02	
48 Cyclohexane	56	6.927	6.927	0.000	90	188548	2.00	2.10	
50 Carbon tetrachloride	117	7.037	7.037	0.000	96	197475	2.00	2.00	
51 1,1-Dichloropropene	75	7.037	7.037	0.000	93	165673	2.00	2.01	
52 Isobutyl alcohol	41	7.189	7.189	0.000	94	91271	100.0	95.9	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.257	7.257	0.000	73	95723	10.0	9.90	
54 Benzene	78	7.299	7.299	0.000	97	473085	2.00	2.00	
56 1,2-Dichloroethane	62	7.366	7.366	0.000	97	125787	2.00	1.91	
57 Tert-amyl methyl ether	73	7.488	7.488	0.000	98	301152	2.00	1.99	
* 58 Fluorobenzene (IS)	96	7.695	7.695	0.000	99	2005717	10.0	10.0	
59 n-Heptane	43	7.708	7.708	0.000	85	153938	2.00	1.99	
60 n-Butanol	56	8.073	8.073	0.000	92	135748	175.0	180.3	
61 Trichloroethene	95	8.177	8.177	0.000	95	134124	2.00	1.98	
62 Methylcyclohexane	83	8.482	8.482	0.000	91	227524	2.00	2.10	
63 1,2-Dichloropropane	63	8.500	8.500	0.000	88	115228	2.00	2.03	
64 Methyl methacrylate	69	8.592	8.592	0.000	84	53110	2.00	2.07	
65 1,4-Dioxane	88	8.604	8.604	0.000	32	20566	100.0	106.0	M
66 Dibromomethane	93	8.610	8.610	0.000	90	59795	2.00	1.91	
68 Dichlorobromomethane	83	8.854	8.854	0.000	99	149556	2.00	2.00	
69 2-Nitropropane	41	9.116	9.116	0.000	98	80273	10.0	10.1	
72 1-Bromo-2-chloroethane	63	9.244	9.244	0.000	98	107071	2.00	2.00	
73 cis-1,3-Dichloropropene	75	9.396	9.396	0.000	95	174580	2.00	1.98	
74 4-Methyl-2-pentanone (MIBK)	43	9.567	9.567	0.000	97	710069	20.0	20.3	
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	2046750	10.0	10.1	
76 Toluene	92	9.780	9.780	0.000	98	310732	2.00	1.97	
78 trans-1,3-Dichloropropene	75	10.036	10.036	0.000	93	142453	2.00	2.01	
S 77 1,3-Dichloropropene, Total	100				0			4.00	
79 Ethyl methacrylate	69	10.097	10.097	0.000	88	108772	2.00	1.98	
80 1,1,2-Trichloroethane	97	10.244	10.244	0.000	91	85157	2.00	1.97	
81 Tetrachloroethene	166	10.329	10.329	0.000	98	182846	2.00	2.02	
82 1,3-Dichloropropane	76	10.402	10.402	0.000	90	139306	2.00	2.01	
83 2-Hexanone	43	10.451	10.451	0.000	97	483982	20.0	20.6	
85 Chlorodibromomethane	129	10.616	10.616	0.000	89	115590	2.00	1.97	
86 Ethylene Dibromide	107	10.731	10.731	0.000	99	83682	2.00	2.00	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	84	1668976	10.0	10.0	
88 1-Chlorohexane	91	11.164	11.164	0.000	95	184524	2.00	1.93	
90 Chlorobenzene	112	11.183	11.183	0.000	97	366783	2.00	1.97	
S 89 Xylenes, Total	106				0			5.92	
91 1,1,1,2-Tetrachloroethane	131	11.268	11.268	0.000	95	138560	2.00	2.01	
92 Ethylbenzene	91	11.268	11.268	0.000	98	612096	2.00	1.96	
93 m-Xylene & p-Xylene	106	11.384	11.384	0.000	100	503919	4.00	3.95	
94 o-Xylene	106	11.713	11.713	0.000	96	247504	2.00	1.97	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.731	11.731	0.000	95	384280	2.00	1.97	
96 Bromoform	173	11.890	11.890	0.000	98	70310	2.00	1.95	
97 Isopropylbenzene	105	12.012	12.012	0.000	95	652274	2.00	1.99	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	97	793453	10.0	10.1	
101 1,1,2,2-Tetrachloroethane	83	12.256	12.256	0.000	94	103362	2.00	1.93	
102 Bromobenzene	156	12.274	12.274	0.000	92	166897	2.00	1.96	
103 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	95	256925	20.0	20.3	
104 1,2,3-Trichloropropane	110	12.298	12.298	0.000	82	30887	2.00	1.95	
105 N-Propylbenzene	91	12.341	12.341	0.000	98	735673	2.00	1.98	
106 2-Chlorotoluene	126	12.414	12.414	0.000	98	165738	2.00	2.03	
107 1,3,5-Trimethylbenzene	105	12.475	12.475	0.000	94	544217	2.00	1.98	
108 4-Chlorotoluene	126	12.512	12.512	0.000	96	165055	2.00	1.98	
109 tert-Butylbenzene	134	12.719	12.719	0.000	92	133195	2.00	2.01	
110 Pentachloroethane	167	12.749	12.749	0.000	91	108889	2.00	2.00	
111 1,2,4-Trimethylbenzene	105	12.762	12.762	0.000	96	553867	2.00	2.00	
112 sec-Butylbenzene	105	12.877	12.877	0.000	94	702149	2.00	2.00	
113 1,3-Dichlorobenzene	146	12.981	12.981	0.000	99	325278	2.00	1.96	
114 4-Isopropyltoluene	119	12.987	12.987	0.000	98	626442	2.00	1.98	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	93	1013034	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.054	13.054	0.000	97	334191	2.00	1.97	
117 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	98	246753	2.00	1.92	
118 Benzyl chloride	126	13.133	13.133	0.000	98	41765	2.00	1.93	
119 n-Butylbenzene	92	13.280	13.280	0.000	96	279757	2.00	1.99	
120 1,2-Dichlorobenzene	146	13.316	13.316	0.000	99	296139	2.00	1.96	
122 1,2-Dibromo-3-Chloropropane	155	13.859	13.859	0.000	88	17417	2.00	2.03	
123 1,3,5-Trichlorobenzene	180	13.981	13.981	0.000	98	250743	2.00	2.02	
124 1,2,4-Trichlorobenzene	180	14.408	14.408	0.000	92	208572	2.00	2.00	
125 Hexachlorobutadiene	225	14.487	14.487	0.000	96	91714	2.00	1.94	
126 Naphthalene	128	14.584	14.584	0.000	96	362073	2.00	2.03	
127 1,2,3-Trichlorobenzene	180	14.725	14.725	0.000	95	180095	2.00	1.97	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	
204 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_00038	Amount Added:	2.00	Units: uL	
MSV_LL_#2_826_00042	Amount Added:	2.00	Units: uL	
MSV_LL_GAS826_00072	Amount Added:	2.00	Units: uL	
MSV_LLcentISS_00004	Amount Added:	5.00	Units: uL	Run Reagent

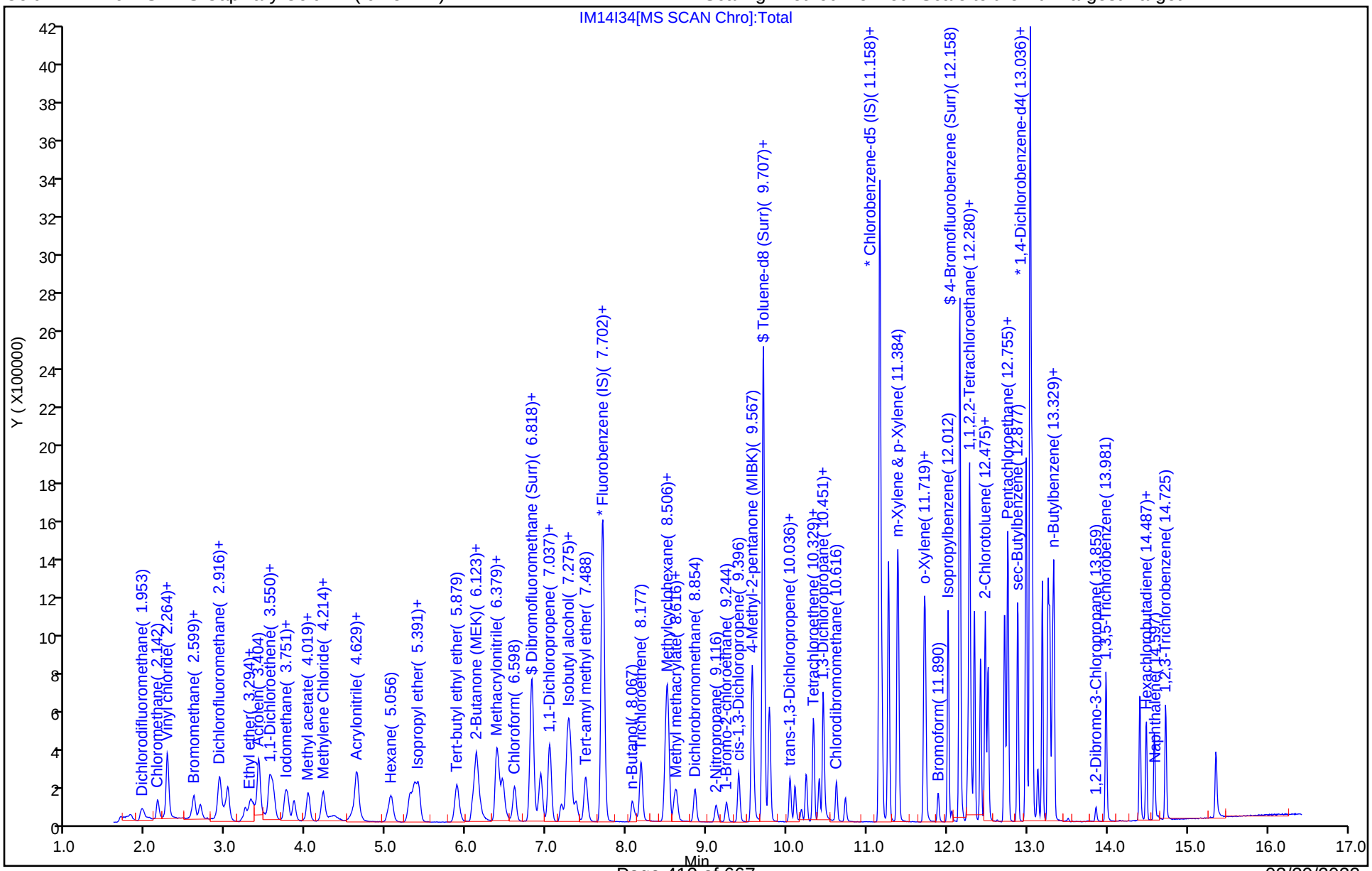
Report Date: 16-Mar-2022 10:11:38 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I34.D

Injection Date:	15-Mar-2022 02:19:30	Instrument ID:	19930	Operator ID:	mec29284
Lims ID:	IC std4			Worklist Smp#:	15
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

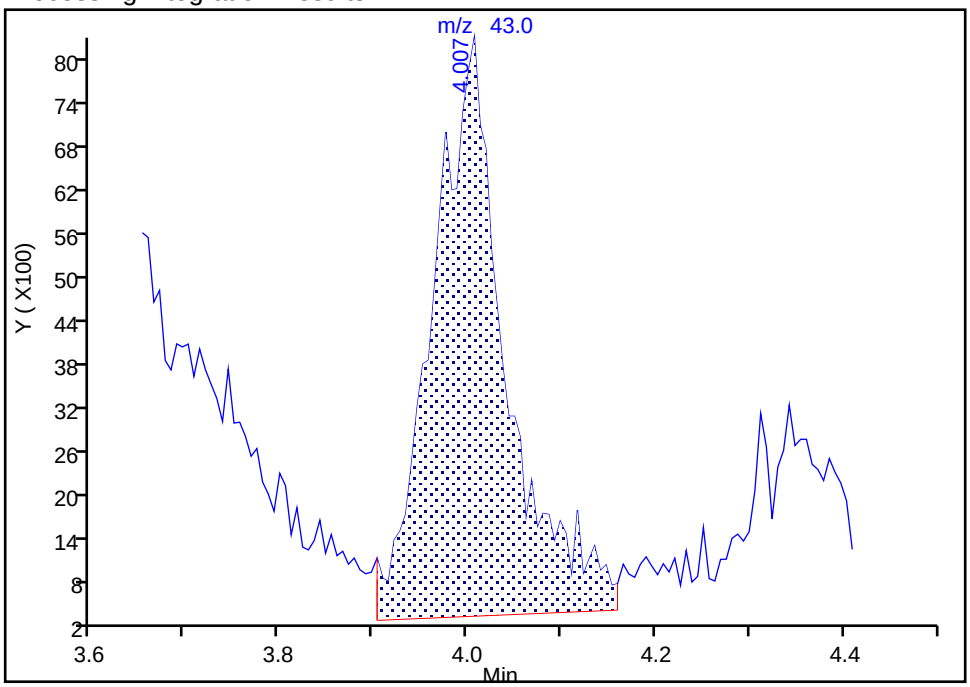
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I34.D
Injection Date: 15-Mar-2022 02:19:30 Instrument ID: 19930
Lims ID: IC std4
Client ID:
Operator ID: mec29284 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

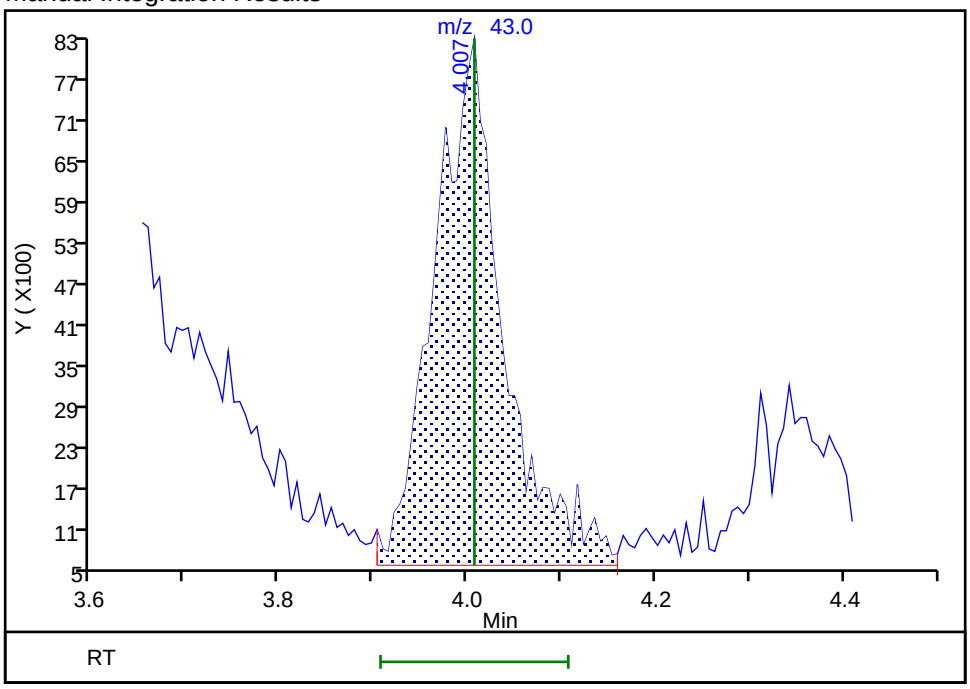
Processing Integration Results

RT: 4.01
Area: 43562
Amount: 2.317954
Amount Units: ug/l



Manual Integration Results

RT: 4.01
Area: 39331
Amount: 2.018997
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:23:51
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

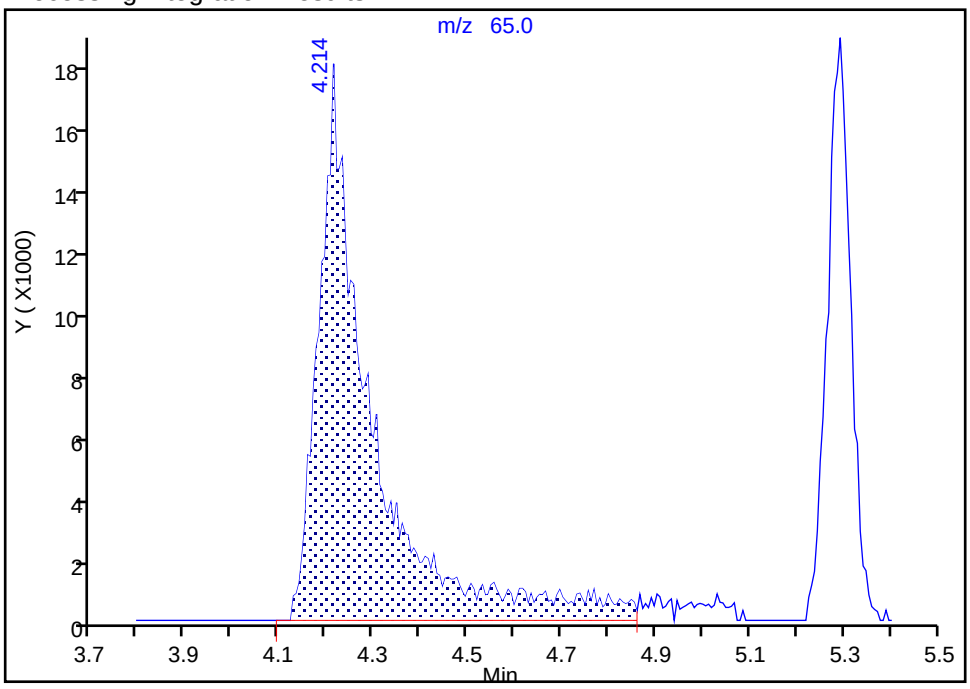
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I34.D
Injection Date: 15-Mar-2022 02:19:30 Instrument ID: 19930
Lims ID: IC std4
Client ID:
Operator ID: mec29284 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

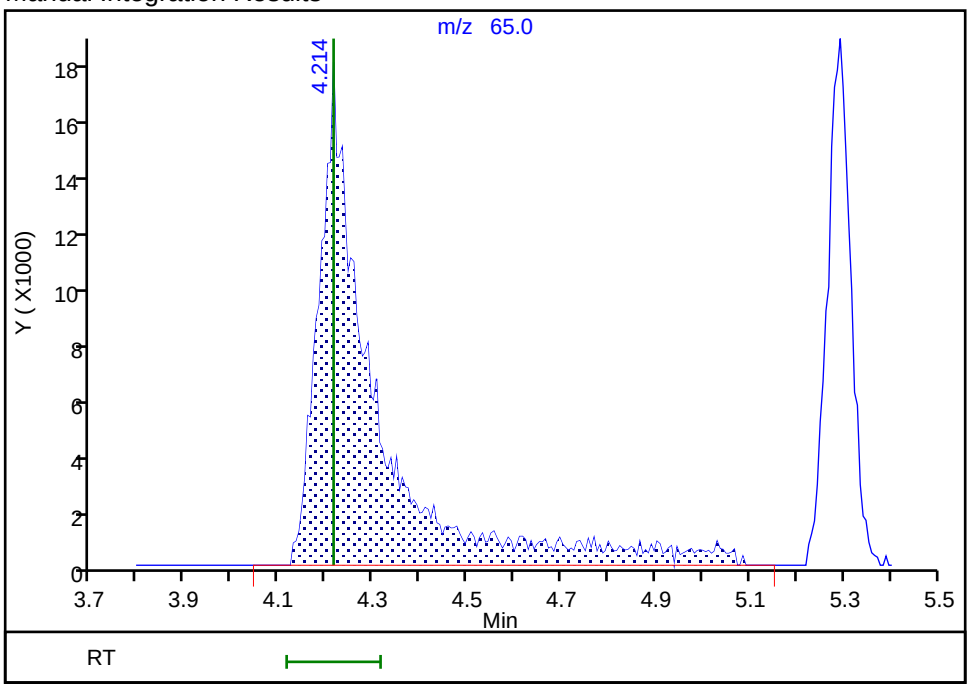
Processing Integration Results

RT: 4.21
Area: 134392
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 4.21
Area: 140927
Amount: 50.000000
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:24:09
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

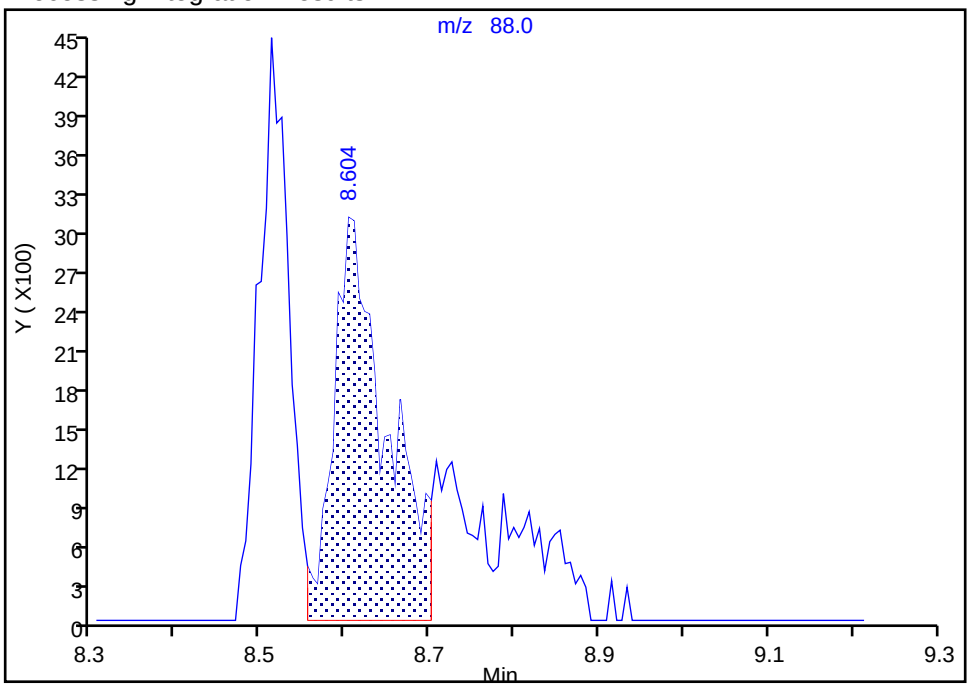
Data File:	\\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I34.D				
Injection Date:	15-Mar-2022 02:19:30	Instrument ID:	19930		
Lims ID:	IC std4				
Client ID:					
Operator ID:	mec29284	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

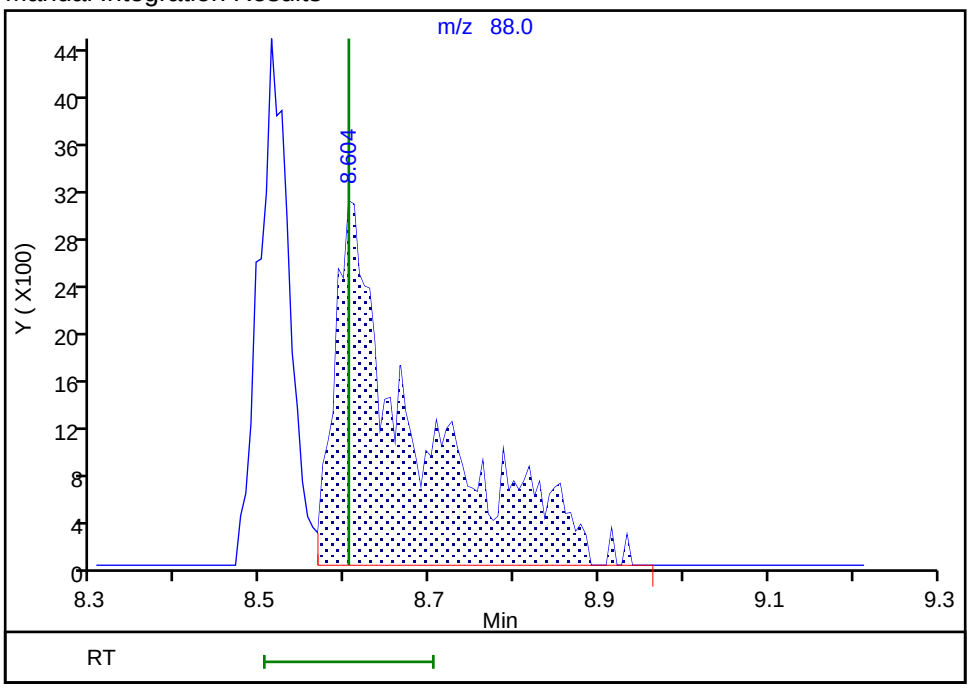
Processing Integration Results

RT: 8.60
Area: 13292
Amount: 77.783149
Amount Units: ug/l



Manual Integration Results

RT: 8.60
Area: 20566
Amount: 106.0150
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:24:35
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I35.D
Lims ID: IC std3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 15-Mar-2022 02:40:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0052441-016
Misc. Info.: IC STD3
Operator ID: mec29284 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 16-Mar-2022 10:11:42 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1676

First Level Reviewer: kephartk Date: 16-Mar-2022 08:27:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.953	1.953	0.000	99	77703	1.00	1.04	
4 Chloromethane	50	2.148	2.142	0.006	98	74938	1.00	0.9691	
5 Vinyl chloride	62	2.276	2.264	0.012	88	82830	1.00	1.01	
6 Butadiene	39	2.276	2.264	0.012	92	84313	1.00	1.06	
7 Bromomethane	94	2.605	2.599	0.006	92	65359	1.00	0.9663	
8 Chloroethane	64	2.684	2.678	0.006	99	48387	1.00	0.9738	
9 Dichlorofluoromethane	67	2.922	2.916	0.006	97	123616	1.00	0.9894	
10 Trichlorofluoromethane	101	2.934	2.928	0.006	97	122112	1.00	1.01	
11 Ethyl ether	59	3.245	3.233	0.012	90	33746	1.00	1.01	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.312	3.312	0.000	84	72278	1.00	1.04	
13 Acrolein	56	3.410	3.404	0.006	98	289265	50.0	50.0	
14 1,1-Dichloroethene	96	3.550	3.544	0.006	97	55619	1.00	1.05	
15 Acetone	43	3.580	3.580	0.000	71	82464	10.0	10.6	M
16 112TCTFE	101	3.593	3.580	0.013	87	59314	1.00	1.07	
17 Iodomethane	142	3.745	3.739	0.006	100	113489	1.00	1.05	
18 Ethyl bromide	108	3.776	3.769	0.007	97	50833	1.00	1.01	
19 Carbon disulfide	76	3.855	3.849	0.006	100	119785	1.00	1.01	
21 Methyl acetate	43	4.013	4.007	0.006	98	22089	1.00	1.05	M
22 3-Chloro-1-propene	41	4.038	4.025	0.013	89	76818	1.00	1.03	
23 Methylene Chloride	84	4.221	4.214	0.007	90	56397	1.00	1.02	
* 24 t-Butyl alcohol-d10 (IS)	65	4.233	4.214	0.019	94	144059	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.342	4.342	0.000	99	49640	20.0	17.2	
26 Acrylonitrile	53	4.568	4.562	0.006	91	23490	2.50	2.55	
27 Methyl tert-butyl ether	73	4.623	4.617	0.006	91	138822	1.00	1.01	
28 trans-1,2-Dichloroethene	96	4.641	4.629	0.012	98	62513	1.00	1.05	
29 Hexane	57	5.068	5.056	0.012	91	76935	1.00	1.06	
31 1,1-Dichloroethane	63	5.294	5.287	0.007	96	105889	1.00	1.03	
32 Isopropyl ether	45	5.354	5.354	0.000	92	163646	1.00	1.02	
33 2-Chloro-1,3-butadiene	53	5.409	5.403	0.006	92	84943	1.00	1.02	
34 Tert-butyl ethyl ether	59	5.891	5.879	0.012	97	167888	1.00	1.03	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.086	6.080	0.006	100	145525	10.0	10.7	
37 cis-1,2-Dichloroethene	96	6.123	6.123	0.000	80	71636	1.00	1.05	
38 2,2-Dichloropropane	77	6.135	6.135	0.000	82	97449	1.00	1.03	
S 35 1,2-Dichloroethene, Total	100				0			2.09	
40 Propionitrile	54	6.190	6.177	0.013	96	75781	20.0	21.8	
42 Methacrylonitrile	67	6.391	6.379	0.012	90	149998	10.0	10.8	
43 Chlorobromomethane	128	6.452	6.446	0.006	83	33730	1.00	1.08	
44 Tetrahydrofuran	71	6.458	6.458	0.000	73	19268	5.00	5.03	
45 Chloroform	83	6.610	6.604	0.006	93	114605	1.00	1.04	
$ 46 Dibromofluoromethane (Surr)	113	6.812	6.812	0.000	94	546963	10.0	10.1	
47 1,1,1-Trichloroethane	97	6.836	6.830	0.006	96	109534	1.00	1.02	
48 Cyclohexane	56	6.927	6.927	0.000	89	97272	1.00	1.08	
50 Carbon tetrachloride	117	7.043	7.037	0.006	96	102183	1.00	1.03	
51 1,1-Dichloropropene	75	7.043	7.037	0.006	93	82831	1.00	1.00	
52 Isobutyl alcohol	41	7.196	7.189	0.007	90	50547	50.0	52.0	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.263	7.257	0.006	71	96046	10.0	9.91	
54 Benzene	78	7.305	7.299	0.006	96	241399	1.00	1.02	
56 1,2-Dichloroethane	62	7.366	7.366	0.000	97	69891	1.00	1.06	
57 Tert-amyl methyl ether	73	7.494	7.488	0.006	99	155828	1.00	1.03	
* 58 Fluorobenzene (IS)	96	7.702	7.695	0.007	99	2010448	10.0	10.0	
59 n-Heptane	43	7.714	7.708	0.006	48	77970	1.00	1.01	
60 n-Butanol	56	8.080	8.073	0.007	89	61521	87.5	79.9	
61 Trichloroethene	95	8.177	8.177	0.000	95	70571	1.00	1.04	
62 Methylcyclohexane	83	8.488	8.482	0.006	91	116232	1.00	1.07	
63 1,2-Dichloropropane	63	8.512	8.500	0.012	72	57297	1.00	1.01	
64 Methyl methacrylate	69	8.604	8.592	0.012	84	27005	1.00	1.03	
65 1,4-Dioxane	88	8.622	8.604	0.018	32	9072	50.0	45.7	M
66 Dibromomethane	93	8.616	8.610	0.006	88	31772	1.00	1.01	
68 Dichlorobromomethane	83	8.854	8.854	0.000	98	76212	1.00	1.02	
69 2-Nitropropane	41	9.116	9.116	0.000	96	41018	5.00	5.03	
72 1-Bromo-2-chloroethane	63	9.250	9.244	0.006	98	54686	1.00	1.02	
73 cis-1,3-Dichloropropene	75	9.402	9.396	0.006	95	88594	1.00	1.00	
74 4-Methyl-2-pentanone (MIBK)	43	9.567	9.567	0.000	96	369128	10.0	10.3	
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	2035925	10.0	10.0	
76 Toluene	92	9.780	9.780	0.000	97	161808	1.00	1.02	
78 trans-1,3-Dichloropropene	75	10.043	10.036	0.007	93	70803	1.00	1.00	
S 77 1,3-Dichloropropene, Total	100				0			2.00	
79 Ethyl methacrylate	69	10.104	10.097	0.007	88	54614	1.00	0.99	
80 1,1,2-Trichloroethane	97	10.244	10.244	0.000	89	46767	1.00	1.08	
81 Tetrachloroethene	166	10.335	10.329	0.006	97	94610	1.00	1.04	
82 1,3-Dichloropropane	76	10.402	10.402	0.000	90	71340	1.00	1.02	
83 2-Hexanone	43	10.457	10.451	0.006	97	237649	10.0	9.88	
85 Chlorodibromomethane	129	10.616	10.616	0.000	90	57407	1.00	0.9773	
86 Ethylene Dibromide	107	10.731	10.731	0.000	97	43335	1.00	1.03	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	84	1674640	10.0	10.0	
88 1-Chlorohexane	91	11.164	11.164	0.000	95	95733	1.00	1.00	
90 Chlorobenzene	112	11.183	11.183	0.000	97	194153	1.00	1.04	
S 89 Xylenes, Total	106				0			3.07	
91 1,1,1,2-Tetrachloroethane	131	11.268	11.268	0.000	93	70523	1.00	1.02	
92 Ethylbenzene	91	11.268	11.268	0.000	98	321428	1.00	1.03	
93 m-Xylene & p-Xylene	106	11.384	11.384	0.000	99	262497	2.00	2.05	
94 o-Xylene	106	11.713	11.713	0.000	96	128931	1.00	1.02	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.731	11.731	0.000	95	197567	1.00	1.01	
96 Bromoform	173	11.890	11.890	0.000	98	34732	1.00	0.9600	
97 Isopropylbenzene	105	12.012	12.012	0.000	95	335336	1.00	1.02	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	97	792251	10.0	10.0	
101 1,1,2,2-Tetrachloroethane	83	12.256	12.256	0.000	94	54800	1.00	1.02	
102 Bromobenzene	156	12.274	12.274	0.000	94	87022	1.00	1.02	
103 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	91	124086	10.0	9.60	
104 1,2,3-Trichloropropane	110	12.298	12.298	0.000	79	16398	1.00	1.03	
105 N-Propylbenzene	91	12.341	12.341	0.000	98	379299	1.00	1.02	
106 2-Chlorotoluene	126	12.420	12.414	0.006	98	84829	1.00	1.04	
107 1,3,5-Trimethylbenzene	105	12.475	12.475	0.000	95	277155	1.00	1.01	
108 4-Chlorotoluene	126	12.512	12.512	0.000	96	80828	1.00	0.9684	
109 tert-Butylbenzene	134	12.719	12.719	0.000	92	65689	1.00	0.99	
110 Pentachloroethane	167	12.749	12.749	0.000	77	51676	1.00	0.9495	
111 1,2,4-Trimethylbenzene	105	12.762	12.762	0.000	97	282251	1.00	1.02	
112 sec-Butylbenzene	105	12.884	12.877	0.007	94	358710	1.00	1.02	
113 1,3-Dichlorobenzene	146	12.981	12.981	0.000	98	168169	1.00	1.01	
114 4-Isopropyltoluene	119	12.987	12.987	0.000	97	319108	1.00	1.01	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	93	1012300	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.054	13.054	0.000	97	167339	1.00	0.9878	
117 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	97	128963	1.00	1.01	
118 Benzyl chloride	126	13.133	13.133	0.000	98	20470	1.00	0.9448	
119 n-Butylbenzene	92	13.280	13.280	0.000	97	139920	1.00	1.00	
120 1,2-Dichlorobenzene	146	13.316	13.316	0.000	98	152809	1.00	1.01	
122 1,2-Dibromo-3-Chloropropane	155	13.865	13.859	0.006	91	8509	1.00	0.99	
123 1,3,5-Trichlorobenzene	180	13.987	13.981	0.006	97	124815	1.00	1.01	
124 1,2,4-Trichlorobenzene	180	14.408	14.408	0.000	93	106675	1.00	1.02	
125 Hexachlorobutadiene	225	14.487	14.487	0.000	96	47822	1.00	1.01	
126 Naphthalene	128	14.590	14.584	0.006	96	179802	1.00	1.01	
127 1,2,3-Trichlorobenzene	180	14.731	14.725	0.006	96	93928	1.00	1.03	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	
204 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_00038	Amount Added:	2.00	Units: uL	
MSV_LL_#2_826_00042	Amount Added:	2.00	Units: uL	
MSV_LL_GAS826_00072	Amount Added:	2.00	Units: uL	
MSV_LLcentISS_00004	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 16-Mar-2022 10:11:42 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I35.D

Injection Date: 15-Mar-2022 02:40:30 Instrument ID: 19930 Operator ID: mec29284

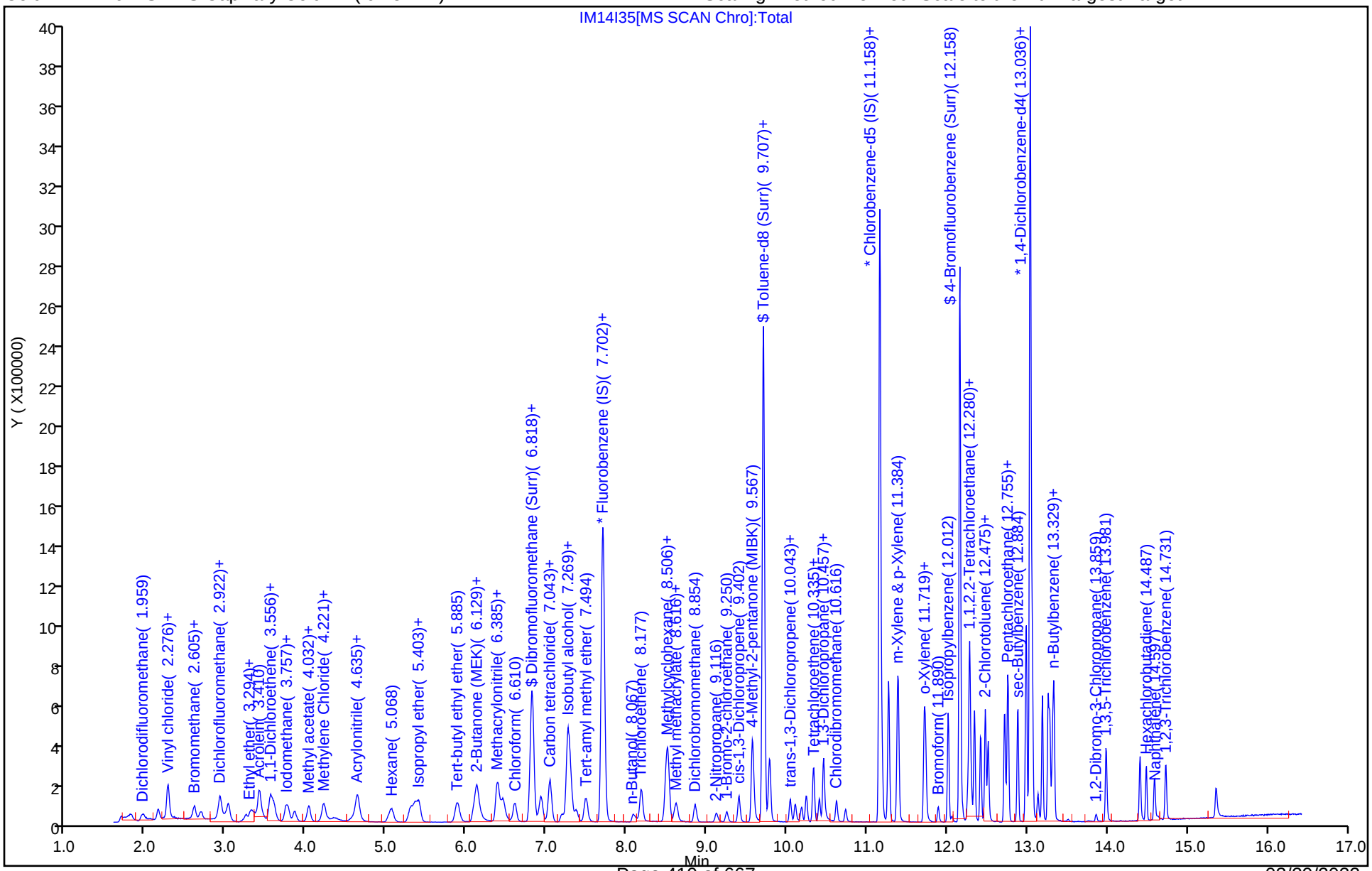
Lims ID: IC std3 Worklist Smp#: 16

Client ID:

Purge Vol: 25.000 mL Dil. Factor: 1.0000 ALS Bottle#: 15

Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

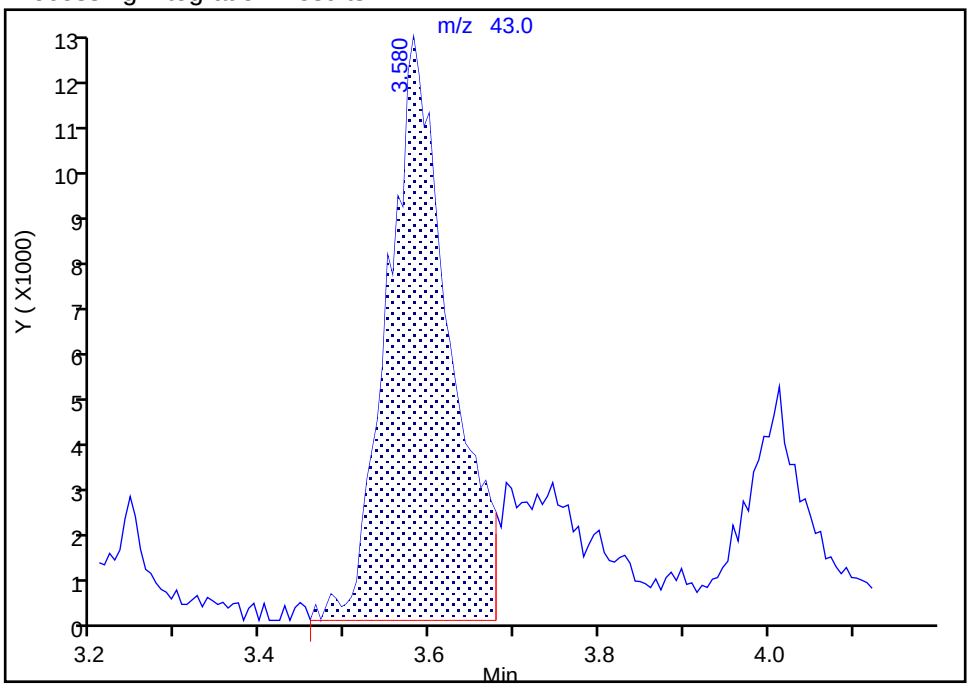
Data File:	\\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I35.D				
Injection Date:	15-Mar-2022 02:40:30	Instrument ID:	19930		
Lims ID:	IC std3				
Client ID:					
Operator ID:	mec29284	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

15 Acetone, CAS: 67-64-1

Signal: 1

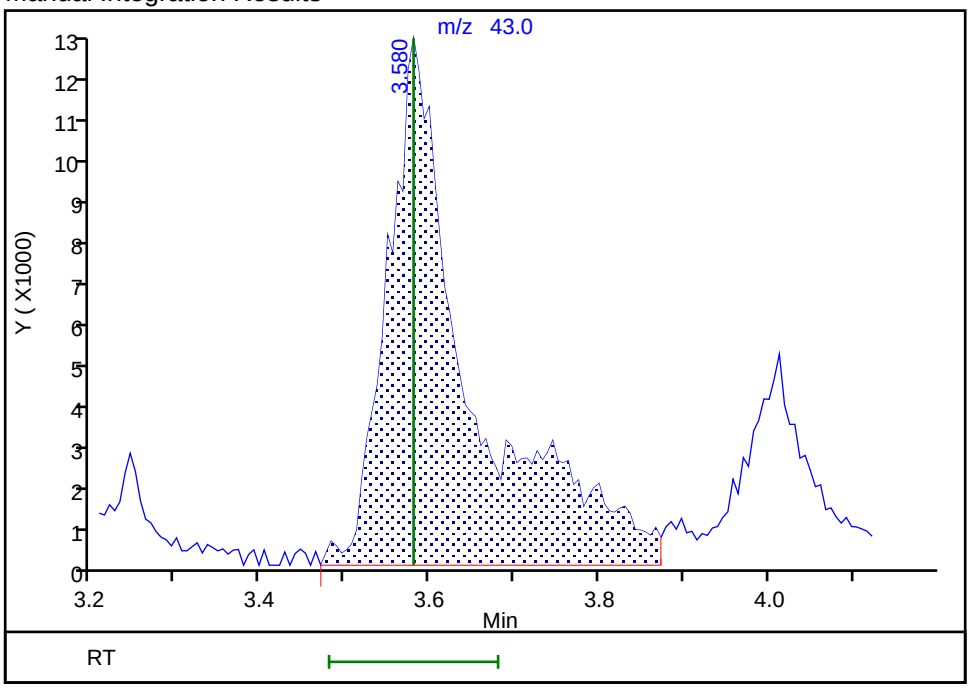
Processing Integration Results

RT: 3.58
Area: 61598
Amount: 8.235946
Amount Units: ug/l



Manual Integration Results

RT: 3.58
Area: 82464
Amount: 10.553022
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:25:53
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

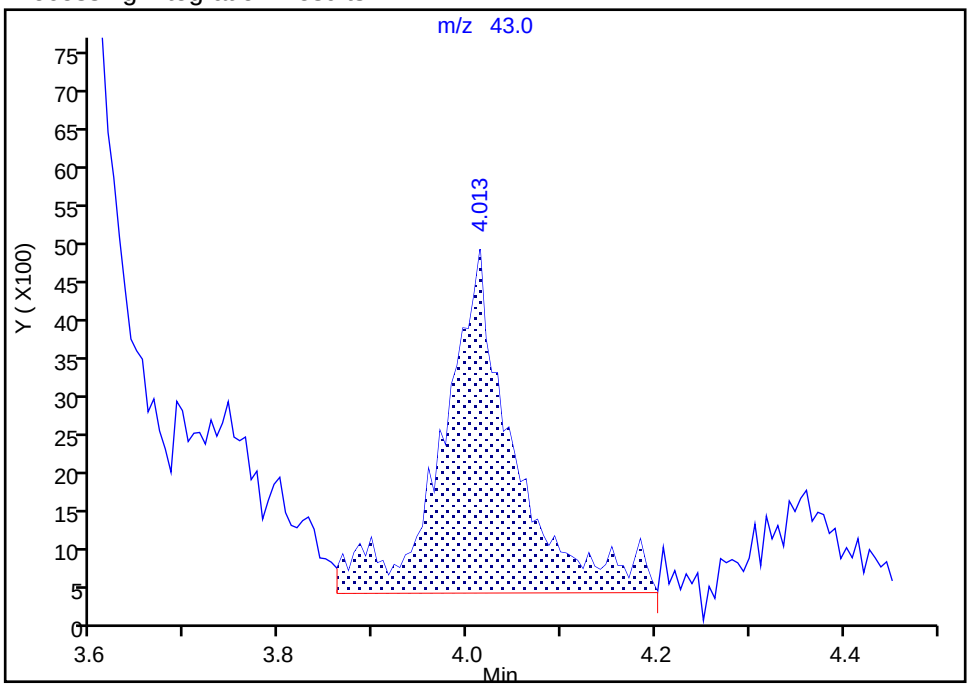
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I35.D
Injection Date: 15-Mar-2022 02:40:30 Instrument ID: 19930
Lims ID: IC std3
Client ID:
Operator ID: mec29284 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

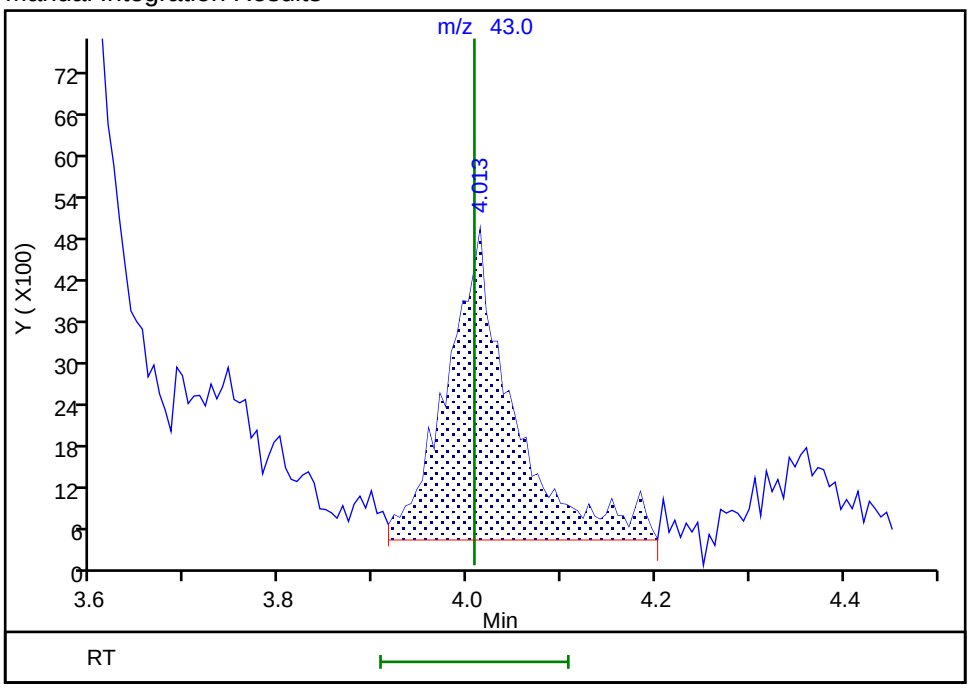
Processing Integration Results

RT: 4.01
Area: 23787
Amount: 1.130695
Amount Units: ug/l



Manual Integration Results

RT: 4.01
Area: 22089
Amount: 1.047542
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:26:17
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

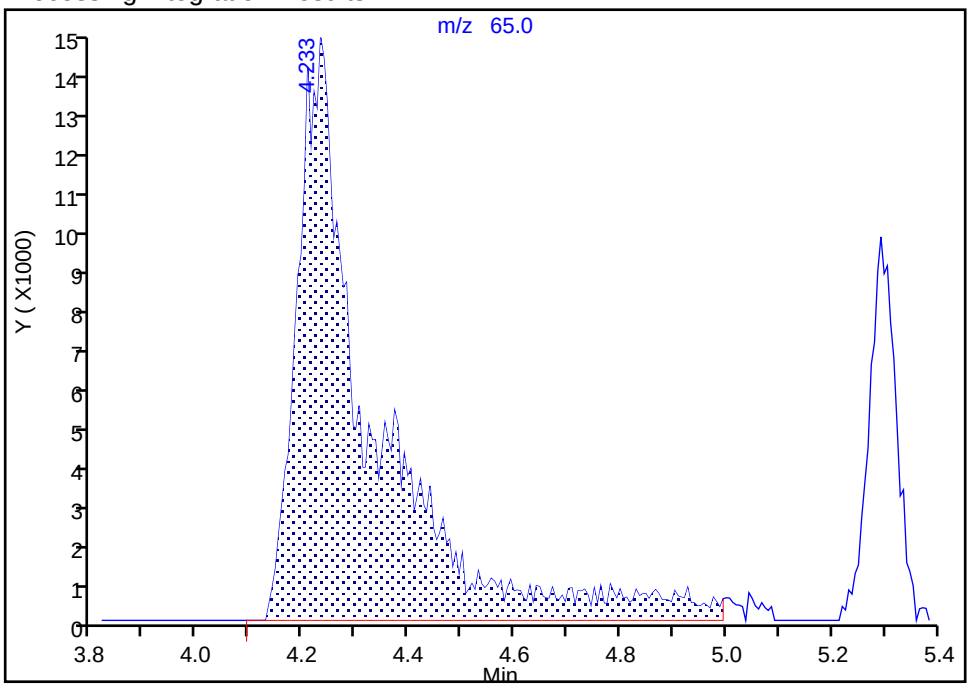
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I35.D
Injection Date: 15-Mar-2022 02:40:30 Instrument ID: 19930
Lims ID: IC std3
Client ID:
Operator ID: mec29284 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

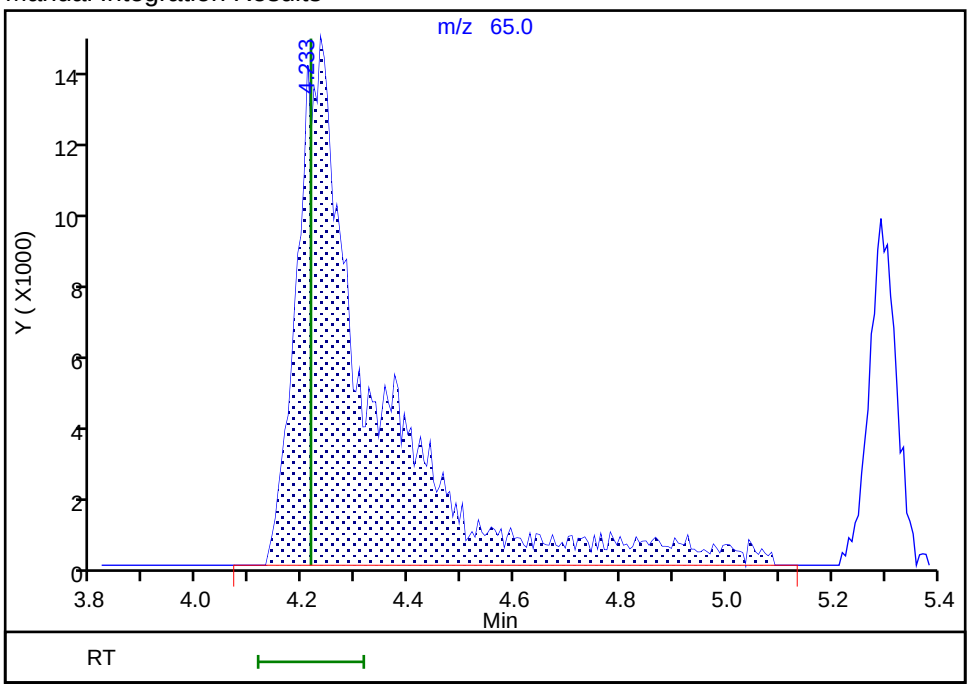
Processing Integration Results

RT: 4.23
Area: 141867
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 4.23
Area: 144059
Amount: 50.000000
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:26:25
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

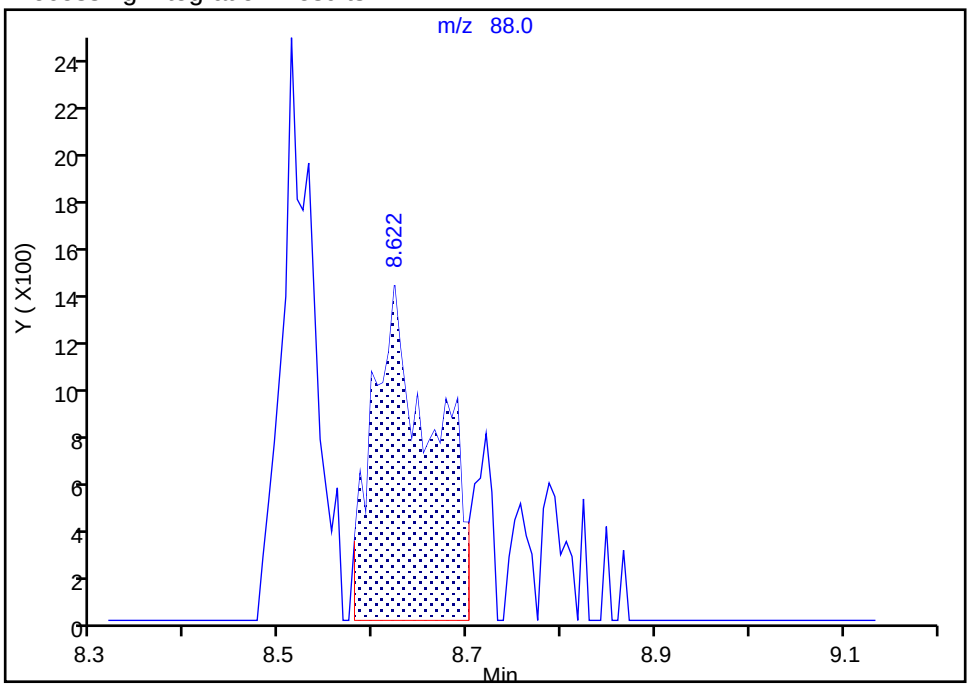
Data File:	\\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I35.D				
Injection Date:	15-Mar-2022 02:40:30	Instrument ID:	19930		
Lims ID:	IC std3				
Client ID:					
Operator ID:	mec29284	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

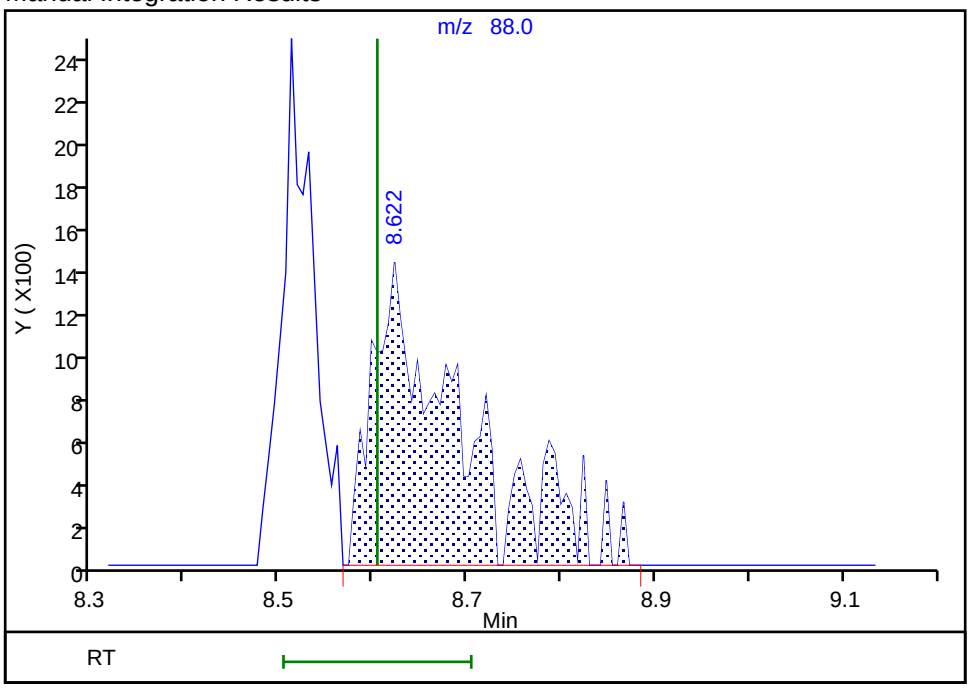
Processing Integration Results

RT: 8.62
Area: 6211
Amount: 41.639336
Amount Units: ug/l



Manual Integration Results

RT: 8.62
Area: 9072
Amount: 45.748252
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:26:43

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I36.D
Lims ID: IC std2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 15-Mar-2022 03:01:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0052441-017
Misc. Info.: IC STD2
Operator ID: mec29284 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 16-Mar-2022 10:11:46 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1676

First Level Reviewer: kephartk Date: 16-Mar-2022 08:28:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.959	1.953	0.006	99	38342	0.5000	0.5094	
4 Chloromethane	50	2.154	2.142	0.012	99	39601	0.5000	0.5104	
5 Vinyl chloride	62	2.276	2.264	0.012	95	42756	0.5000	0.5217	
6 Butadiene	39	2.276	2.264	0.012	90	40566	0.5000	0.5062	
7 Bromomethane	94	2.599	2.599	0.000	92	34546	0.5000	0.5090	
8 Chloroethane	64	2.678	2.678	0.000	99	25889	0.5000	0.5193	
9 Dichlorofluoromethane	67	2.928	2.916	0.012	96	62146	0.5000	0.4957	
10 Trichlorofluoromethane	101	2.940	2.928	0.012	94	60650	0.5000	0.4978	
11 Ethyl ether	59	3.245	3.233	0.012	91	17004	0.5000	0.5054	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.318	3.312	0.006	90	35242	0.5000	0.5036	
13 Acrolein	56	3.422	3.404	0.018	99	139607	25.0	25.9	
14 1,1-Dichloroethene	96	3.550	3.544	0.006	97	26177	0.5000	0.4946	
15 Acetone	43	3.586	3.580	0.006	96	39948	5.00	5.48	
16 112TCTFE	101	3.605	3.580	0.025	91	26572	0.5000	0.4783	
17 Iodomethane	142	3.751	3.739	0.012	99	51940	0.5000	0.4788	
18 Ethyl bromide	108	3.775	3.769	0.006	99	25501	0.4998	0.5047	
19 Carbon disulfide	76	3.861	3.849	0.012	100	56905	0.5000	0.4796	
21 Methyl acetate	43	4.037	4.007	0.030	25	9060	0.5000	0.3836	
22 3-Chloro-1-propene	41	4.031	4.025	0.006	87	37686	0.5000	0.5026	
23 Methylene Chloride	84	4.214	4.214	0.000	90	26934	0.5000	0.4868	
* 24 t-Butyl alcohol-d10 (IS)	65	4.233	4.214	0.019	93	134454	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.373	4.342	0.031	96	31765	10.0	11.8	
26 Acrylonitrile	53	4.568	4.562	0.006	18	11960	1.25	1.39	M
27 Methyl tert-butyl ether	73	4.635	4.617	0.018	89	66197	0.5000	0.4789	
28 trans-1,2-Dichloroethene	96	4.647	4.629	0.018	96	30157	0.5000	0.5025	
29 Hexane	57	5.062	5.056	0.006	93	34826	0.5000	0.4786	
31 1,1-Dichloroethane	63	5.306	5.287	0.019	96	51123	0.5000	0.4977	
32 Isopropyl ether	45	5.360	5.354	0.006	91	76892	0.5000	0.4794	
33 2-Chloro-1,3-butadiene	53	5.415	5.403	0.012	92	40379	0.5000	0.4827	
34 Tert-butyl ethyl ether	59	5.891	5.879	0.012	96	80698	0.5000	0.4943	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.098	6.080	0.018	100	66323	5.00	5.25	
37 cis-1,2-Dichloroethene	96	6.135	6.123	0.012	80	34237	0.5000	0.4993	
38 2,2-Dichloropropane	77	6.141	6.135	0.006	74	46465	0.5000	0.4877	
S 35 1,2-Dichloroethene, Total	100				0			1.00	
40 Propionitrile	54	6.183	6.177	0.006	97	32816	10.0	10.1	
42 Methacrylonitrile	67	6.391	6.379	0.012	88	65801	5.00	5.09	
43 Chlorobromomethane	128	6.458	6.446	0.012	75	15669	0.5000	0.4983	
44 Tetrahydrofuran	71	6.476	6.458	0.018	66	9313	2.50	2.60	
45 Chloroform	83	6.610	6.604	0.006	93	54271	0.5000	0.4906	
$ 46 Dibromofluoromethane (Surr)	113	6.817	6.812	0.005	94	543314	10.0	9.95	
47 1,1,1-Trichloroethane	97	6.836	6.830	0.006	98	52545	0.5000	0.4897	
48 Cyclohexane	56	6.921	6.927	-0.006	88	41104	0.5000	0.4557	
50 Carbon tetrachloride	117	7.043	7.037	0.006	88	48008	0.5000	0.4838	
51 1,1-Dichloropropene	75	7.049	7.037	0.012	85	39107	0.5000	0.4724	
52 Isobutyl alcohol	41	7.195	7.189	0.006	79	22406	25.0	24.7	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.269	7.257	0.012	81	98965	10.0	10.2	
54 Benzene	78	7.299	7.299	0.000	95	116345	0.5000	0.4894	
56 1,2-Dichloroethane	62	7.378	7.366	0.012	91	32183	0.5000	0.4856	
57 Tert-amyl methyl ether	73	7.488	7.488	0.000	98	74320	0.5000	0.4878	
* 58 Fluorobenzene (IS)	96	7.701	7.695	0.006	99	2017326	10.0	10.0	
59 n-Heptane	43	7.720	7.708	0.012	37	38570	0.5000	0.4962	
60 n-Butanol	56	8.085	8.073	0.012	90	31832	43.8	44.3	
61 Trichloroethene	95	8.183	8.177	0.006	94	32974	0.5000	0.4828	
62 Methylcyclohexane	83	8.494	8.482	0.012	92	50397	0.5000	0.4627	
63 1,2-Dichloropropane	63	8.512	8.500	0.012	72	27296	0.5000	0.4792	
64 Methyl methacrylate	69	8.598	8.592	0.006	84	13137	0.5000	0.5359	
65 1,4-Dioxane	88	8.634	8.604	0.030	31	4908	25.0	26.5	M
66 Dibromomethane	93	8.622	8.610	0.012	92	16746	0.5000	0.5312	
68 Dichlorobromomethane	83	8.860	8.854	0.006	98	36200	0.5000	0.4813	
69 2-Nitropropane	41	9.116	9.116	0.000	97	19475	2.50	2.56	
72 1-Bromo-2-chloroethane	63	9.250	9.244	0.006	97	25181	0.5000	0.4672	
73 cis-1,3-Dichloropropene	75	9.402	9.396	0.006	95	41097	0.5000	0.4640	
74 4-Methyl-2-pentanone (MIBK)	43	9.567	9.567	0.000	96	175115	5.00	5.24	
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	2034623	10.0	9.98	
76 Toluene	92	9.780	9.780	0.000	97	78723	0.5000	0.4983	
78 trans-1,3-Dichloropropene	75	10.042	10.036	0.006	92	33885	0.5000	0.4775	
S 77 1,3-Dichloropropene, Total	100				0			0.9415	
79 Ethyl methacrylate	69	10.109	10.097	0.012	87	26333	0.5000	0.4785	
80 1,1,2-Trichloroethane	97	10.244	10.244	0.000	92	22015	0.5000	0.5085	
81 Tetrachloroethene	166	10.335	10.329	0.006	97	44469	0.5000	0.4895	
82 1,3-Dichloropropane	76	10.408	10.402	0.006	90	34333	0.5000	0.4932	
83 2-Hexanone	43	10.457	10.451	0.006	96	114797	5.00	5.11	
85 Chlorodibromomethane	129	10.622	10.616	0.006	89	28417	0.5000	0.4838	
86 Ethylene Dibromide	107	10.731	10.731	0.000	99	20990	0.5000	0.4994	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	84	1674650	10.0	10.0	
88 1-Chlorohexane	91	11.164	11.164	0.000	94	47652	0.5000	0.4979	
90 Chlorobenzene	112	11.189	11.183	0.006	97	96628	0.5000	0.5168	
S 89 Xylenes, Total	106				0			1.49	
91 1,1,1,2-Tetrachloroethane	131	11.268	11.268	0.000	91	34314	0.5000	0.4969	
92 Ethylbenzene	91	11.274	11.268	0.006	98	156010	0.5000	0.4991	
93 m-Xylene & p-Xylene	106	11.384	11.384	0.000	99	126661	1.00	0.9894	
94 o-Xylene	106	11.713	11.713	0.000	97	63612	0.5000	0.5049	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.731	11.731	0.000	95	94656	0.5000	0.4825	
96 Bromoform	173	11.890	11.890	0.000	97	16961	0.5000	0.4688	
97 Isopropylbenzene	105	12.012	12.012	0.000	95	164910	0.5000	0.5015	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	788876	10.0	9.98	
101 1,1,2,2-Tetrachloroethane	83	12.255	12.256	-0.001	94	27127	0.5000	0.5087	
102 Bromobenzene	156	12.274	12.274	0.000	93	43168	0.5000	0.5091	
103 trans-1,4-Dichloro-2-butene	53	12.286	12.280	0.006	91	58243	5.00	4.83	
104 1,2,3-Trichloropropane	110	12.304	12.298	0.006	82	8831	0.5000	0.5595	
105 N-Propylbenzene	91	12.341	12.341	0.000	98	185867	0.5000	0.5025	
106 2-Chlorotoluene	126	12.420	12.414	0.006	97	42524	0.5000	0.5229	
107 1,3,5-Trimethylbenzene	105	12.475	12.475	0.000	95	140301	0.5000	0.5126	
108 4-Chlorotoluene	126	12.518	12.512	0.006	95	44030	0.5000	0.5299	
109 tert-Butylbenzene	134	12.719	12.719	0.000	92	32989	0.5000	0.5002	
110 Pentachloroethane	167	12.749	12.749	0.000	80	25590	0.5000	0.4723	
111 1,2,4-Trimethylbenzene	105	12.761	12.762	-0.001	97	139673	0.5000	0.5060	
112 sec-Butylbenzene	105	12.883	12.877	0.006	94	175873	0.5000	0.5034	
113 1,3-Dichlorobenzene	146	12.981	12.981	0.000	98	85825	0.5000	0.5198	
114 4-Isopropyltoluene	119	12.987	12.987	0.000	97	159043	0.5000	0.5059	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	93	1007739	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.054	13.054	0.000	96	87803	0.5000	0.5206	
117 1,2,3-Trimethylbenzene	120	13.066	13.060	0.006	96	67484	0.5000	0.5292	
118 Benzyl chloride	126	13.139	13.133	0.006	98	9700	0.5000	0.4497	
119 n-Butylbenzene	92	13.280	13.280	0.000	97	67261	0.5000	0.4820	
120 1,2-Dichlorobenzene	146	13.316	13.316	0.000	98	77120	0.5000	0.5124	
122 1,2-Dibromo-3-Chloropropane	155	13.859	13.859	0.000	81	4305	0.5000	0.5047	
123 1,3,5-Trichlorobenzene	180	13.987	13.981	0.006	97	63089	0.5000	0.5117	
124 1,2,4-Trichlorobenzene	180	14.407	14.408	-0.001	94	49430	0.5000	0.4758	
125 Hexachlorobutadiene	225	14.487	14.487	0.000	95	22776	0.5000	0.4834	
126 Naphthalene	128	14.590	14.584	0.006	96	89149	0.5000	0.5016	
127 1,2,3-Trichlorobenzene	180	14.731	14.725	0.006	94	45526	0.5000	0.5004	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	
204 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_00038	Amount Added:	2.00	Units: uL	
MSV_LL_#2_826_00042	Amount Added:	2.00	Units: uL	
MSV_LL_GAS826_00072	Amount Added:	2.00	Units: uL	
MSV_LLcentISS_00004	Amount Added:	5.00	Units: uL	Run Reagent

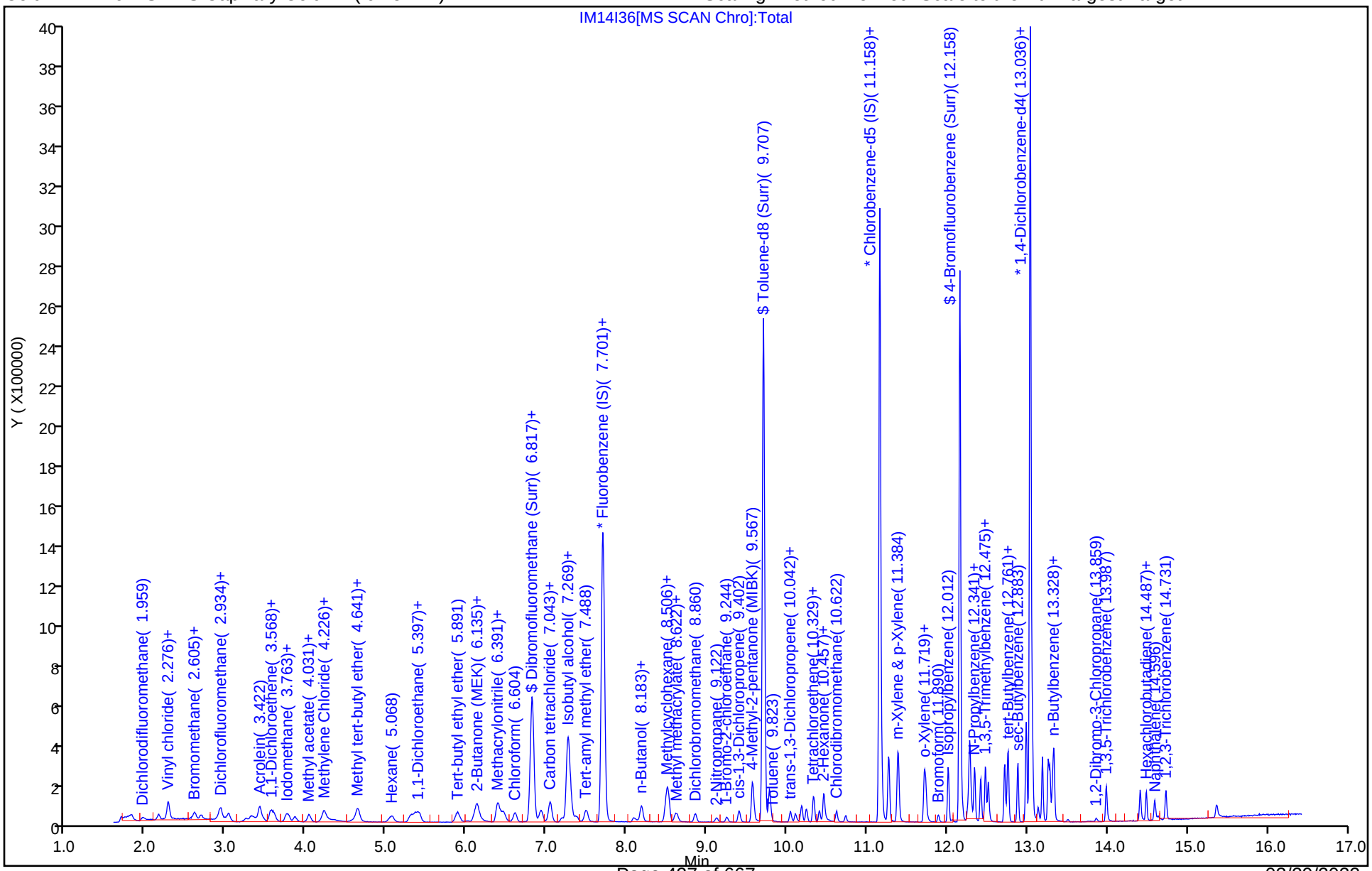
Report Date: 16-Mar-2022 10:11:47 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I36.D

Injection Date:	15-Mar-2022 03:01:30	Instrument ID:	19930	Operator ID:	mec29284
Lims ID:	IC std2			Worklist Smp#:	17
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

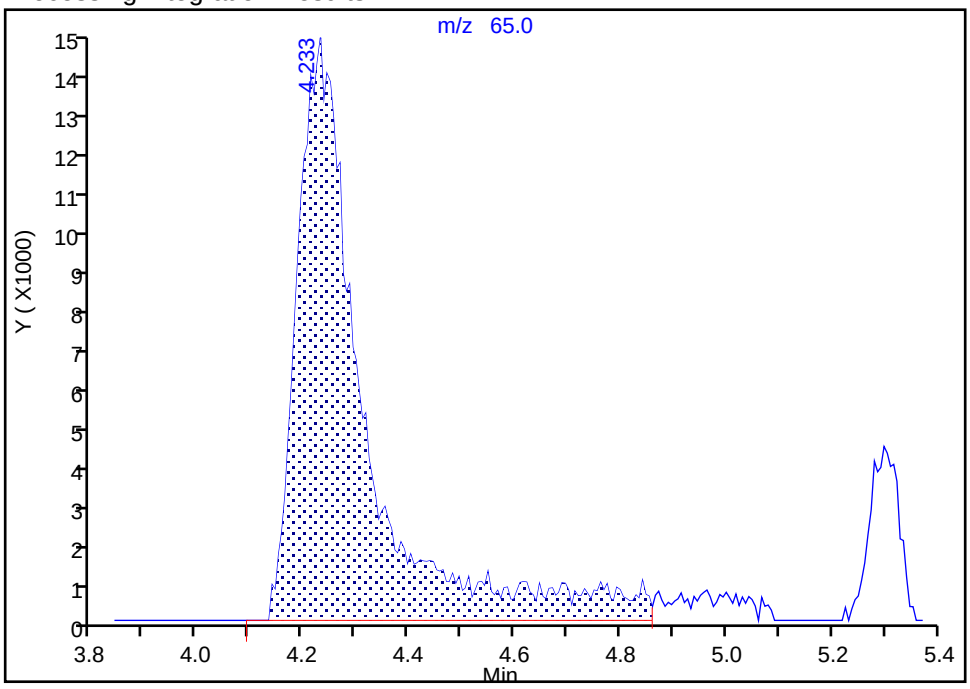
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I36.D
Injection Date: 15-Mar-2022 03:01:30 Instrument ID: 19930
Lims ID: IC std2
Client ID:
Operator ID: mec29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

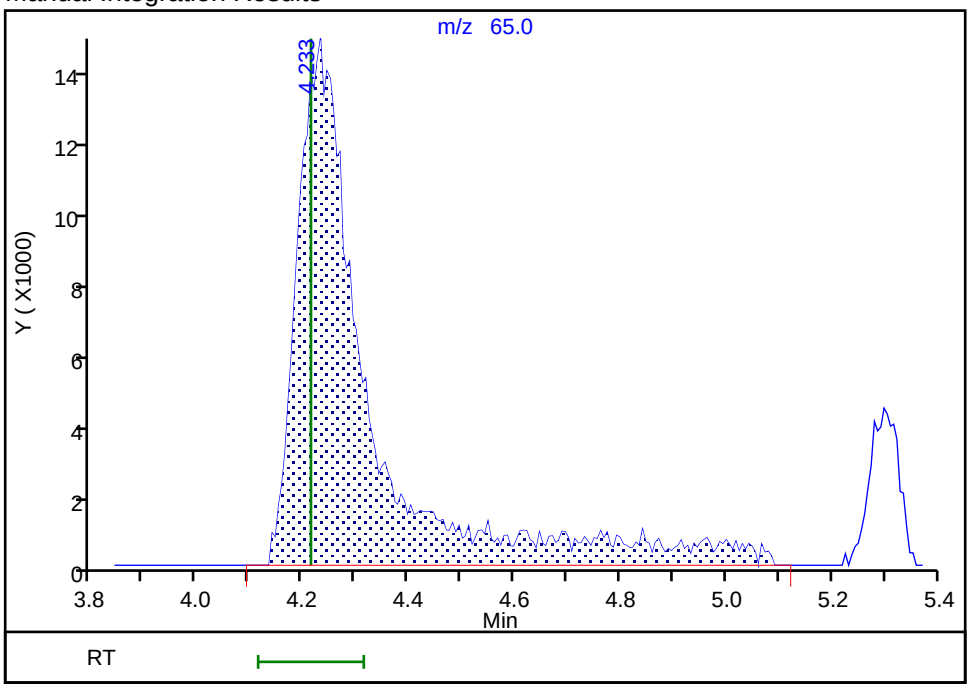
Processing Integration Results

RT: 4.23
Area: 127672
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 4.23
Area: 134454
Amount: 50.000000
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:27:27
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

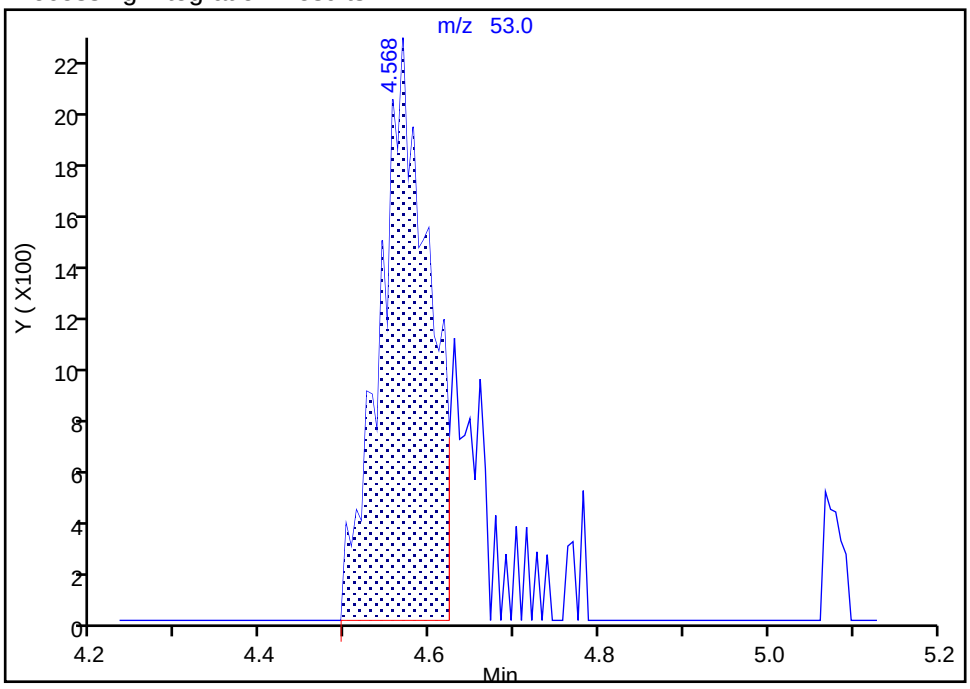
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I36.D
Injection Date: 15-Mar-2022 03:01:30 Instrument ID: 19930
Lims ID: IC std2
Client ID:
Operator ID: mec29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

26 Acrylonitrile, CAS: 107-13-1

Signal: 1

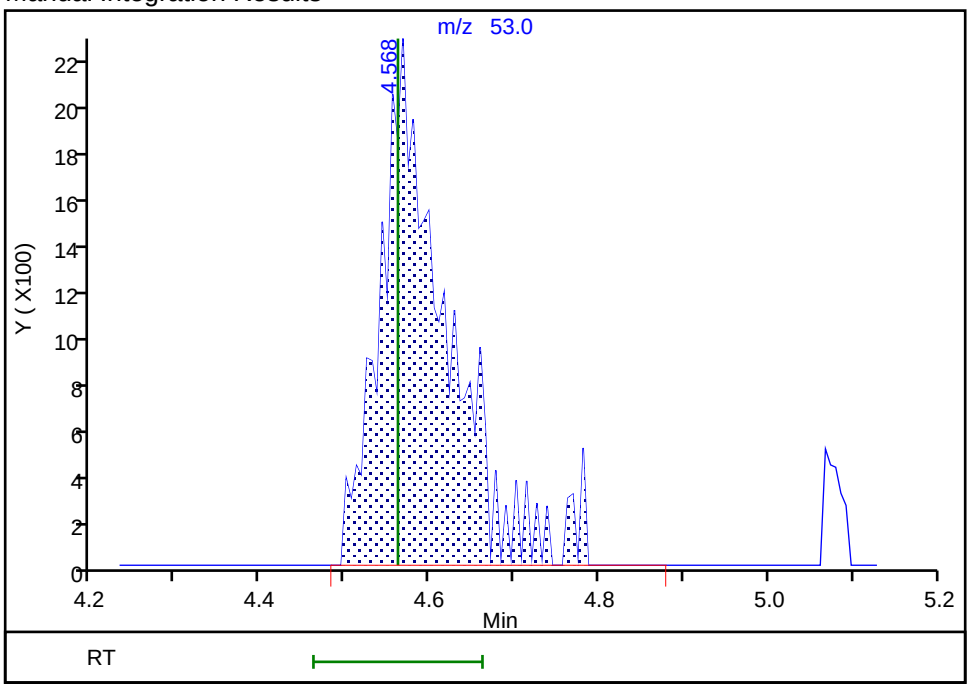
Processing Integration Results

RT: 4.57
Area: 8930
Amount: 1.142354
Amount Units: ug/l



Manual Integration Results

RT: 4.57
Area: 11960
Amount: 1.393316
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:27:32
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

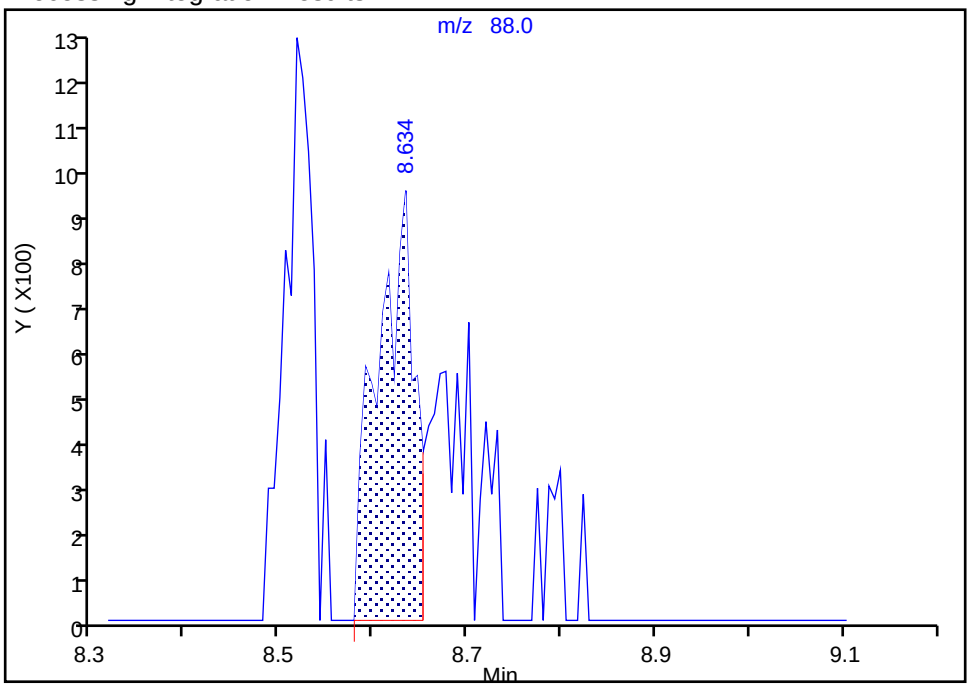
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I36.D
Injection Date: 15-Mar-2022 03:01:30 Instrument ID: 19930
Lims ID: IC std2
Client ID:
Operator ID: mec29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

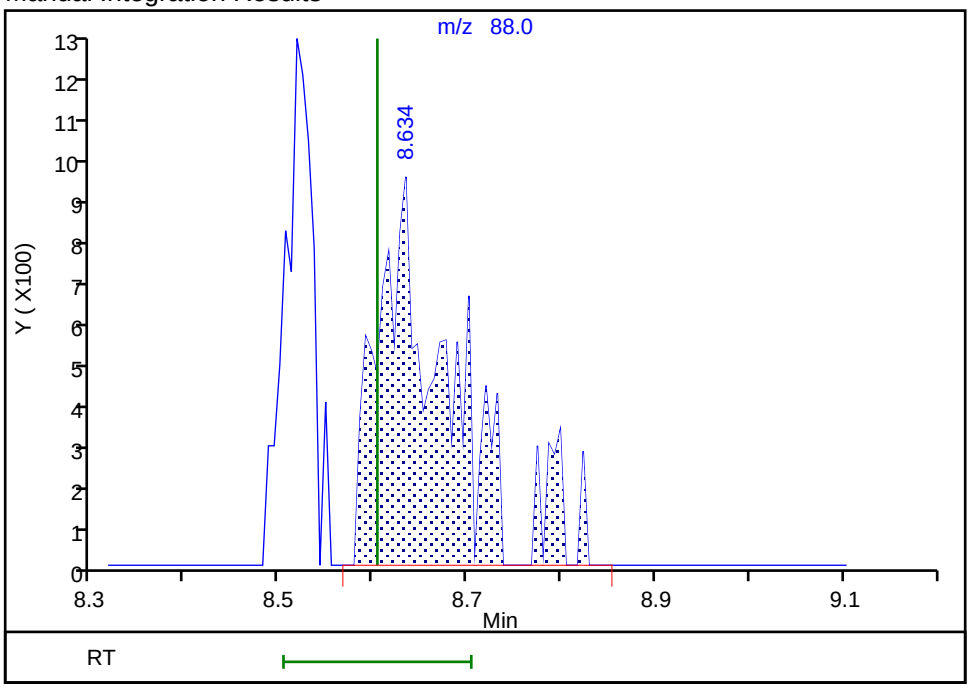
Processing Integration Results

RT: 8.63
Area: 2537
Amount: 24.612667
Amount Units: ug/l



Manual Integration Results

RT: 8.63
Area: 4908
Amount: 26.518117
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:27:48
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D
Lims ID: IC std1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 15-Mar-2022 03:22:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0052441-018
Misc. Info.: IC STD1
Operator ID: mec29284 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 16-Mar-2022 10:11:50 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1676

First Level Reviewer: kephartk Date: 16-Mar-2022 08:29:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.947	1.953	-0.006	97	12174	0.2000	0.1614	
4 Chloromethane	50	2.154	2.142	0.012	99	17202	0.2000	0.2212	
5 Vinyl chloride	62	2.270	2.264	0.006	89	15454	0.2000	0.1881	
6 Butadiene	39	2.264	2.264	0.000	97	15233	0.2000	0.1897	
7 Bromomethane	94	2.599	2.599	0.000	92	14324	0.2000	0.2106	
8 Chloroethane	64	2.678	2.678	0.000	98	9614	0.2000	0.1924	
9 Dichlorofluoromethane	67	2.916	2.916	0.000	95	26658	0.2000	0.2122	
10 Trichlorofluoromethane	101	2.928	2.928	0.000	50	22113	0.2000	0.1811	
11 Ethyl ether	59	3.245	3.233	0.012	85	6784	0.2000	0.2012	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.312	3.312	0.000	89	14515	0.2000	0.2070	
13 Acrolein	56	3.422	3.404	0.018	99	62205	10.0	9.96	
14 1,1-Dichloroethene	96	3.550	3.544	0.006	98	10662	0.2000	0.2010	
15 Acetone	43	3.580	3.580	0.000	72	20231	2.00	2.40	
16 112TCTFE	101	3.593	3.580	0.013	58	10208	0.2000	0.1833	
17 Iodomethane	142	3.751	3.739	0.012	72	22696	0.2000	0.2088	M
18 Ethyl bromide	108	3.775	3.769	0.006	95	10187	0.1999	0.2012	
19 Carbon disulfide	76	3.855	3.849	0.006	99	23883	0.2000	0.2008	
21 Methyl acetate	43	4.025	4.007	0.018	27	7489	0.2000	0.2348	
22 3-Chloro-1-propene	41	4.032	4.025	0.007	84	15242	0.2000	0.2028	
23 Methylene Chloride	84	4.227	4.214	0.013	82	12056	0.2000	0.2174	
* 24 t-Butyl alcohol-d10 (IS)	65	4.257	4.214	0.043	66	155632	50.0	50.0	
25 2-Methyl-2-propanol	59	4.373	4.342	0.031	29	12109	4.00	3.88	
26 Acrylonitrile	53	4.598	4.562	0.036	22	4395	0.5000	0.4423	M
27 Methyl tert-butyl ether	73	4.629	4.617	0.012	92	30498	0.2000	0.2202	
28 trans-1,2-Dichloroethene	96	4.647	4.629	0.018	95	12680	0.2000	0.2108	M
29 Hexane	57	5.056	5.056	0.000	91	12983	0.2000	0.1780	
31 1,1-Dichloroethane	63	5.300	5.287	0.013	95	20843	0.2000	0.2024	
32 Isopropyl ether	45	5.354	5.354	0.000	90	32182	0.2000	0.2002	
33 2-Chloro-1,3-butadiene	53	5.415	5.403	0.012	93	17211	0.2000	0.2053	
34 Tert-butyl ethyl ether	59	5.885	5.879	0.006	97	33885	0.2000	0.2071	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.104	6.080	0.024	99	27415	2.00	1.87	
37 cis-1,2-Dichloroethene	96	6.135	6.123	0.012	63	15432	0.2000	0.2245	M
38 2,2-Dichloropropane	77	6.123	6.135	-0.012	73	18690	0.2000	0.1957	
S 35 1,2-Dichloroethene, Total	100				0			0.4353	
40 Propionitrile	54	6.190	6.177	0.013	97	13732	4.00	3.66	
42 Methacrylonitrile	67	6.397	6.379	0.018	85	29038	2.00	1.94	M
43 Chlorobromomethane	128	6.458	6.446	0.012	72	6487	0.2000	0.2058	M
44 Tetrahydrofuran	71	6.470	6.458	0.012	57	4086	1.00	0.9872	
45 Chloroform	83	6.610	6.604	0.006	90	23341	0.2000	0.2105	
$ 46 Dibromofluoromethane (Surr)	113	6.818	6.812	0.006	94	547531	10.0	10.0	
47 1,1,1-Trichloroethane	97	6.830	6.830	0.000	56	22284	0.2000	0.2072	
48 Cyclohexane	56	6.927	6.927	0.000	93	16256	0.2000	0.1798	
50 Carbon tetrachloride	117	7.049	7.037	0.012	95	19333	0.2000	0.1944	
51 1,1-Dichloropropene	75	7.037	7.037	0.000	92	17366	0.2000	0.2093	
52 Isobutyl alcohol	41	7.202	7.189	0.013	92	11490	10.0	10.9	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.269	7.257	0.012	67	100556	10.0	10.3	
54 Benzene	78	7.299	7.299	0.000	94	49374	0.2000	0.2072	
56 1,2-Dichloroethane	62	7.366	7.366	0.000	96	14632	0.2000	0.2203	
57 Tert-amyl methyl ether	73	7.494	7.488	0.006	98	31737	0.2000	0.2079	
* 58 Fluorobenzene (IS)	96	7.695	7.695	0.000	99	2021821	10.0	10.0	
59 n-Heptane	43	7.714	7.708	0.006	37	16268	0.2000	0.2088	
60 n-Butanol	56	8.116	8.073	0.043	68	10801	17.5	13.0	
61 Trichloroethene	95	8.183	8.177	0.006	93	14385	0.2000	0.2102	M
62 Methylcyclohexane	83	8.482	8.482	0.000	90	19770	0.2000	0.1811	
63 1,2-Dichloropropane	63	8.500	8.500	0.000	72	10875	0.2000	0.1905	
64 Methyl methacrylate	69	8.604	8.592	0.012	91	4900	0.2000	0.1727	M
65 1,4-Dioxane	88	8.634	8.604	0.030	28	447	10.0	2.09	M
66 Dibromomethane	93	8.622	8.610	0.012	90	6467	0.2000	0.2047	
68 Dichlorobromomethane	83	8.854	8.854	0.000	97	14496	0.2000	0.1923	
69 2-Nitropropane	41	9.116	9.116	0.000	96	7975	1.00	0.9047	
72 1-Bromo-2-chloroethane	63	9.244	9.244	0.000	97	10522	0.2000	0.1948	
73 cis-1,3-Dichloropropene	75	9.402	9.396	0.006	96	17322	0.2000	0.1951	
74 4-Methyl-2-pentanone (MIBK)	43	9.573	9.567	0.006	97	66567	2.00	1.72	
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	2051196	10.0	10.0	
76 Toluene	92	9.786	9.780	0.006	97	32803	0.2000	0.2071	
78 trans-1,3-Dichloropropene	75	10.049	10.036	0.013	93	12263	0.2000	0.1724	
S 77 1,3-Dichloropropene, Total	100				0			0.3675	
79 Ethyl methacrylate	69	10.110	10.097	0.013	83	9480	0.2000	0.1718	
80 1,1,2-Trichloroethane	97	10.238	10.244	-0.006	91	8749	0.2000	0.2016	
81 Tetrachloroethene	166	10.335	10.329	0.006	96	18053	0.2000	0.1982	
82 1,3-Dichloropropane	76	10.408	10.402	0.006	92	13872	0.2000	0.1988	
83 2-Hexanone	43	10.463	10.451	0.012	95	38878	2.00	1.50	
85 Chlorodibromomethane	129	10.616	10.616	0.000	88	11317	0.2000	0.1922	
86 Ethylene Dibromide	107	10.738	10.731	0.007	96	7460	0.2000	0.1770	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	84	1678767	10.0	10.0	
88 1-Chlorohexane	91	11.170	11.164	0.006	34	21550	0.2000	0.2246	
90 Chlorobenzene	112	11.183	11.183	0.000	95	36676	0.2000	0.1957	
S 89 Xylenes, Total	106				0			0.5902	
91 1,1,1,2-Tetrachloroethane	131	11.268	11.268	0.000	81	12294	0.2000	0.1776	
92 Ethylbenzene	91	11.274	11.268	0.006	98	62844	0.2000	0.2006	
93 m-Xylene & p-Xylene	106	11.384	11.384	0.000	99	50551	0.4000	0.3939	
94 o-Xylene	106	11.719	11.713	0.006	95	24789	0.2000	0.1963	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.737	11.731	0.006	94	37528	0.2000	0.1908	
96 Bromoform	173	11.890	11.890	0.000	95	6223	0.2000	0.1716	
97 Isopropylbenzene	105	12.012	12.012	0.000	95	64175	0.2000	0.1947	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	97	798883	10.0	10.1	
101 1,1,2,2-Tetrachloroethane	83	12.256	12.256	0.000	94	10440	0.2000	0.1946	
102 Bromobenzene	156	12.274	12.274	0.000	93	17078	0.2000	0.2002	
103 trans-1,4-Dichloro-2-butene	53	12.286	12.280	0.006	90	18122	2.00	1.30	
104 1,2,3-Trichloropropane	110	12.304	12.298	0.006	74	2972	0.2000	0.1872	
105 N-Propylbenzene	91	12.341	12.341	0.000	98	73431	0.2000	0.1974	
106 2-Chlorotoluene	126	12.420	12.414	0.006	96	15217	0.2000	0.1860	
107 1,3,5-Trimethylbenzene	105	12.475	12.475	0.000	94	52611	0.2000	0.1911	
108 4-Chlorotoluene	126	12.518	12.512	0.006	96	17108	0.2000	0.2047	
109 tert-Butylbenzene	134	12.719	12.719	0.000	92	13616	0.2000	0.2052	
110 Pentachloroethane	167	12.749	12.749	0.000	77	9652	0.2000	0.1771	
111 1,2,4-Trimethylbenzene	105	12.762	12.762	0.000	97	51136	0.2000	0.1842	
112 sec-Butylbenzene	105	12.883	12.877	0.006	94	67649	0.2000	0.1925	
113 1,3-Dichlorobenzene	146	12.987	12.981	0.006	98	31802	0.2000	0.1915	
114 4-Isopropyltoluene	119	12.987	12.987	0.000	97	60230	0.2000	0.1904	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	93	1013693	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.054	13.054	0.000	93	35095	0.2000	0.2069	
117 1,2,3-Trimethylbenzene	120	13.066	13.060	0.006	94	25725	0.2000	0.2005	
118 Benzyl chloride	126	13.139	13.133	0.006	95	3627	0.2000	0.1672	
119 n-Butylbenzene	92	13.280	13.280	0.000	96	24766	0.2000	0.1764	
120 1,2-Dichlorobenzene	146	13.316	13.316	0.000	98	28920	0.2000	0.1910	
122 1,2-Dibromo-3-Chloropropane	155	13.865	13.859	0.006	89	1132	0.2000	0.1319	
123 1,3,5-Trichlorobenzene	180	13.987	13.981	0.006	95	22882	0.2000	0.1845	
124 1,2,4-Trichlorobenzene	180	14.414	14.408	0.006	93	19278	0.2000	0.1845	
125 Hexachlorobutadiene	225	14.487	14.487	0.000	93	11228	0.2000	0.2369	
126 Naphthalene	128	14.597	14.584	0.013	97	33257	0.2000	0.1860	
127 1,2,3-Trichlorobenzene	180	14.731	14.725	0.006	93	18681	0.2000	0.2041	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
134 Isopropyl alcohol	45		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_00038	Amount Added:	2.00	Units: uL	
MSV_LL_#2_826_00042	Amount Added:	2.00	Units: uL	
MSV_LL_GAS826_00072	Amount Added:	2.00	Units: uL	
MSV_LLcentISS_00004	Amount Added:	5.00	Units: uL	Run Reagent

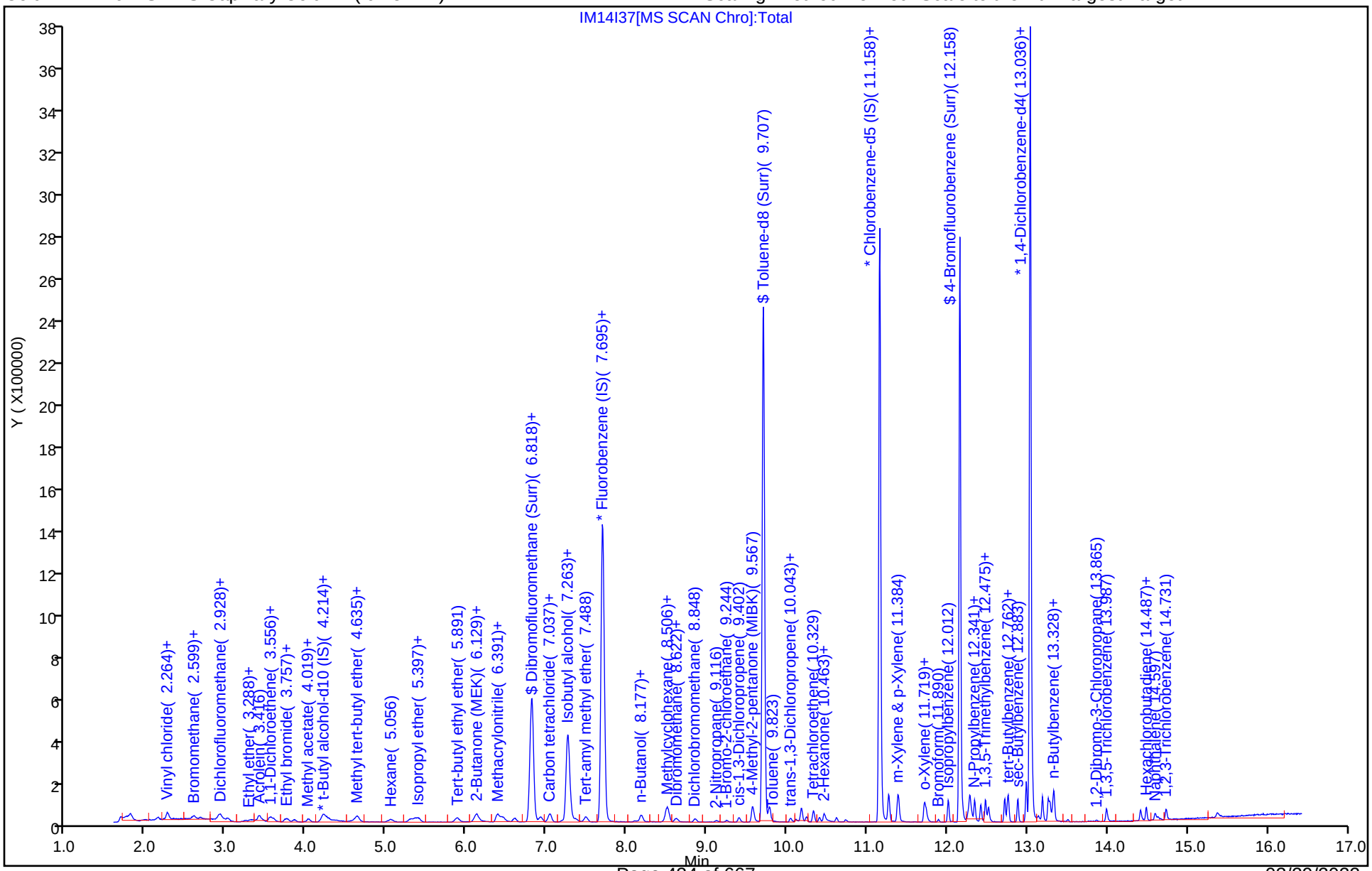
Report Date: 16-Mar-2022 10:11:51 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Injection Date:	15-Mar-2022 03:22:30	Instrument ID:	19930	Operator ID:	mec29284
Lims ID:	IC std1			Worklist Smp#:	18
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

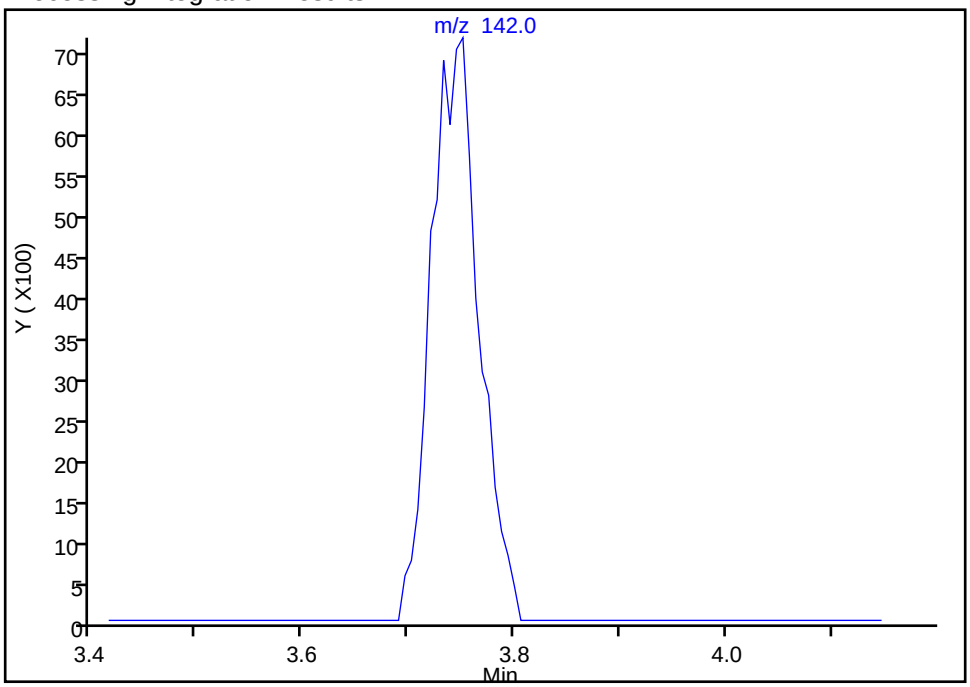
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D
Injection Date: 15-Mar-2022 03:22:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: mec29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

17 Iodomethane, CAS: 74-88-4

Signal: 1

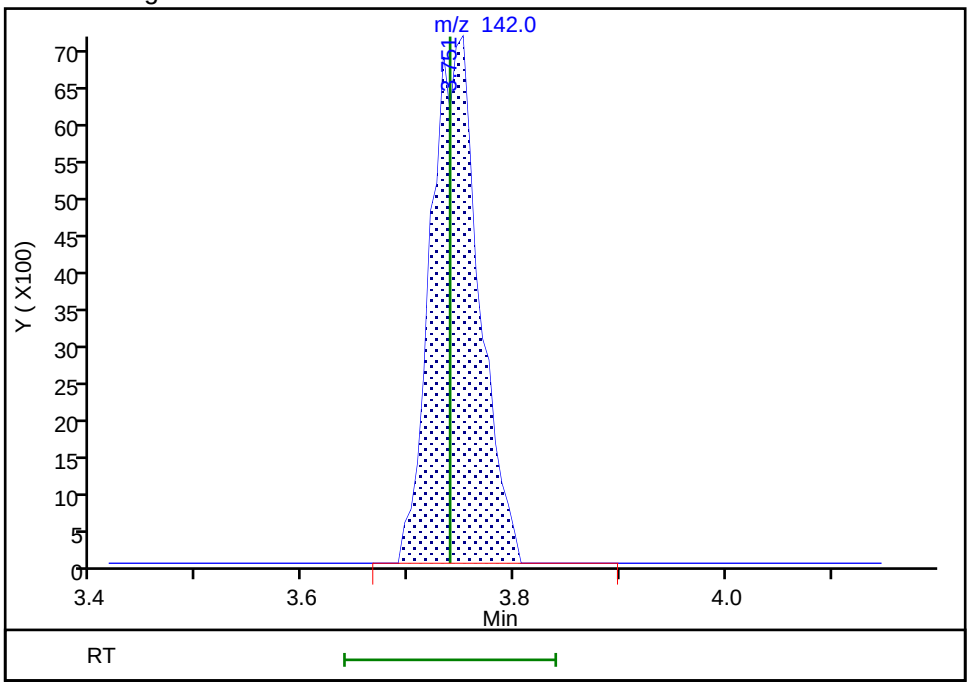
Not Detected
Expected RT: 3.74

Processing Integration Results



Manual Integration Results

RT: 3.75
Area: 22696
Amount: 0.208760
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:28:28
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

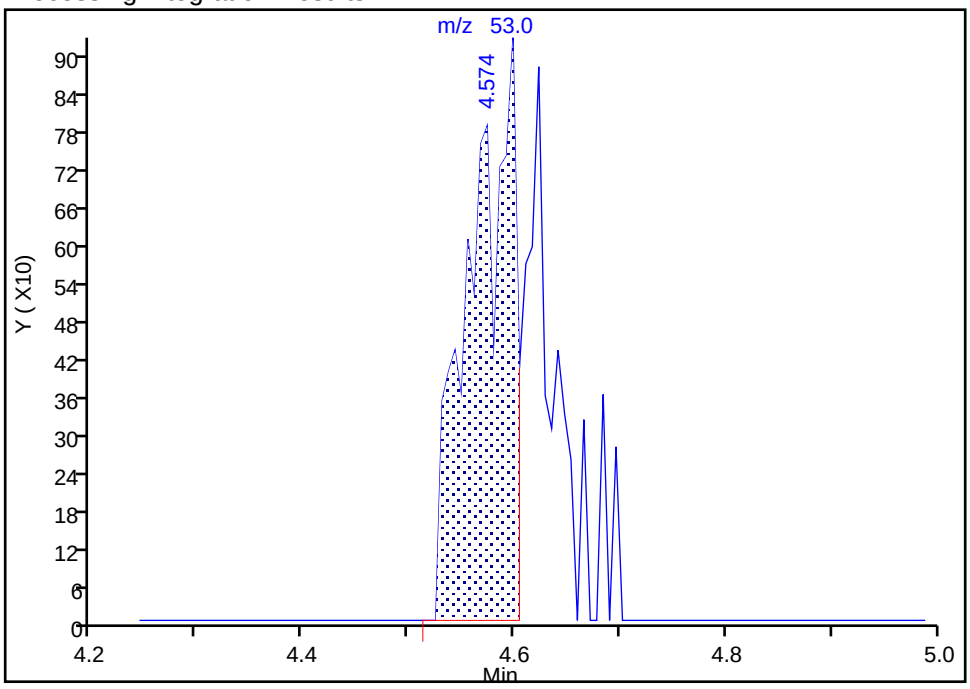
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D
Injection Date: 15-Mar-2022 03:22:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: mec29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

26 Acrylonitrile, CAS: 107-13-1

Signal: 1

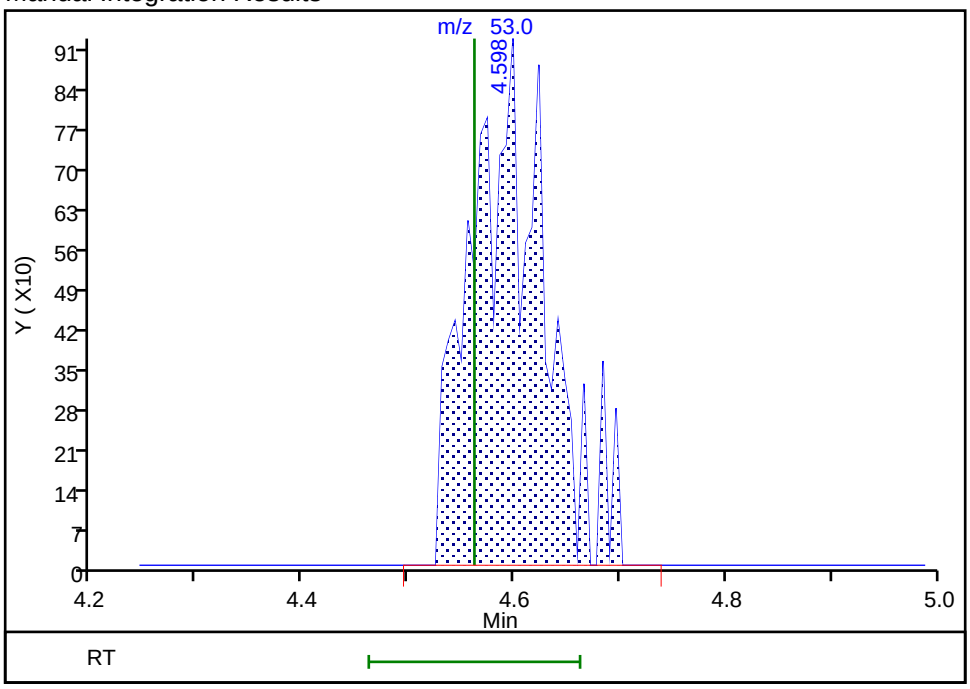
Processing Integration Results

RT: 4.57
Area: 2692
Amount: 0.284888
Amount Units: ug/l



Manual Integration Results

RT: 4.60
Area: 4395
Amount: 0.442336
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:28:36
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

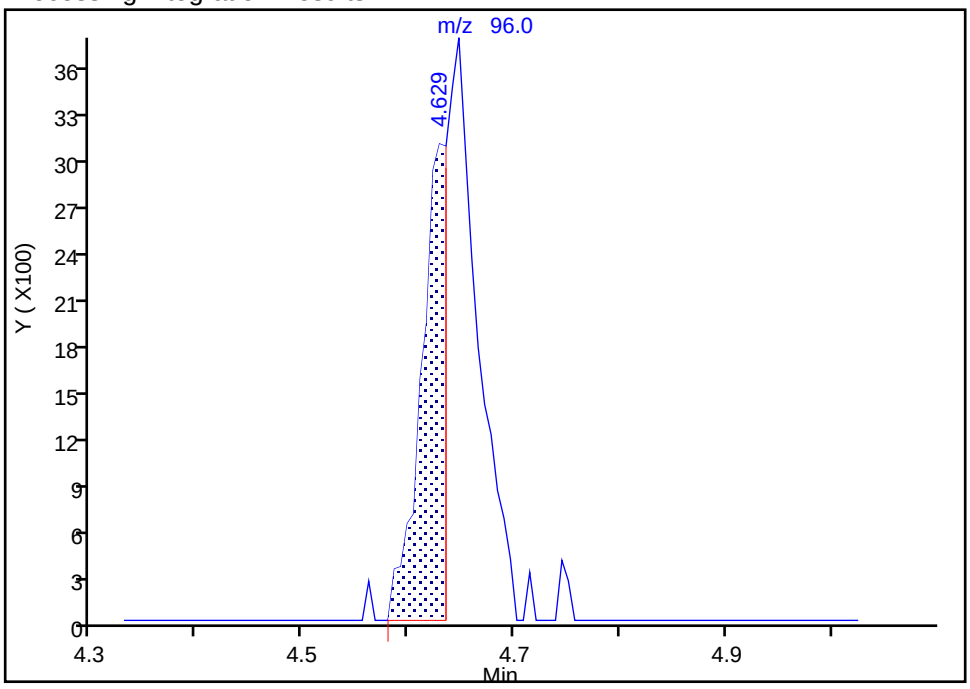
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D
Injection Date: 15-Mar-2022 03:22:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: mec29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

28 trans-1,2-Dichloroethene, CAS: 156-60-5

Signal: 1

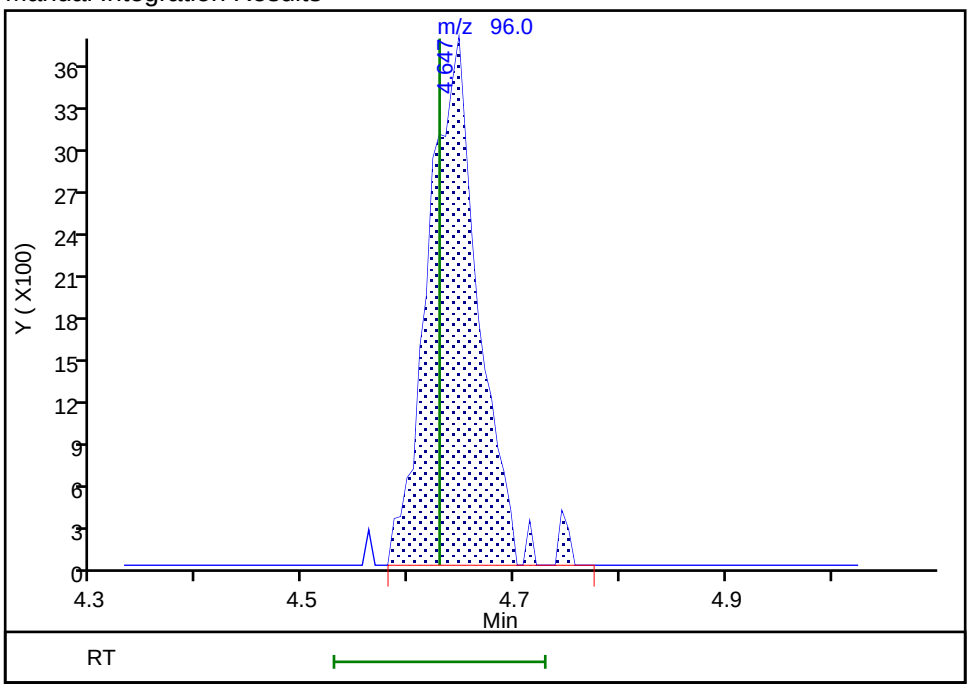
Processing Integration Results

RT: 4.63
Area: 5365
Amount: 0.115492
Amount Units: ug/l



Manual Integration Results

RT: 4.65
Area: 12680
Amount: 0.210797
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:28:41
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

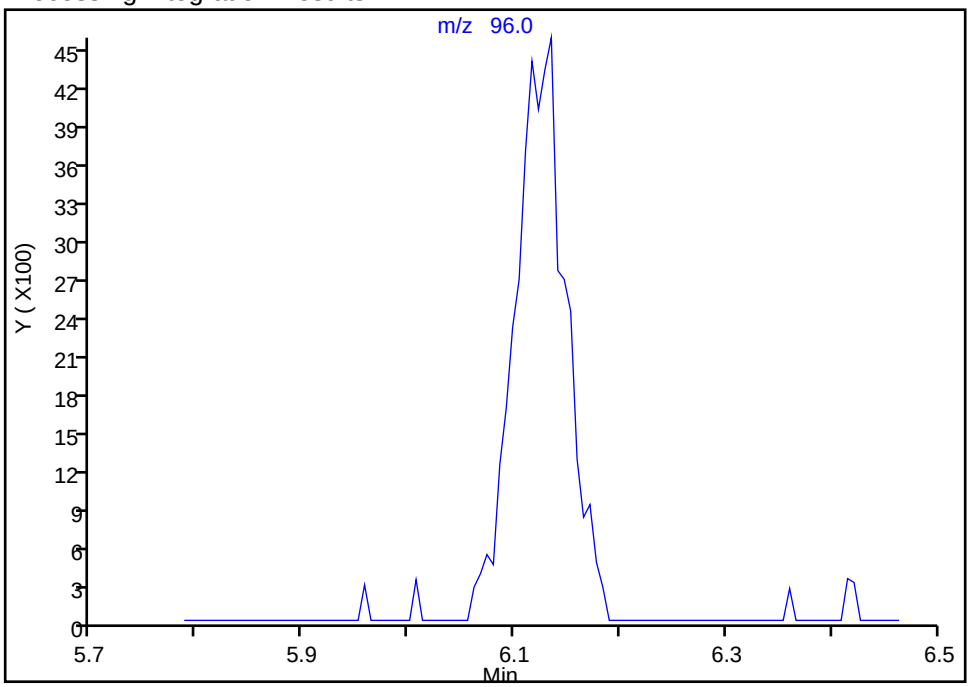
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D
Injection Date: 15-Mar-2022 03:22:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: mec29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

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

Signal: 1

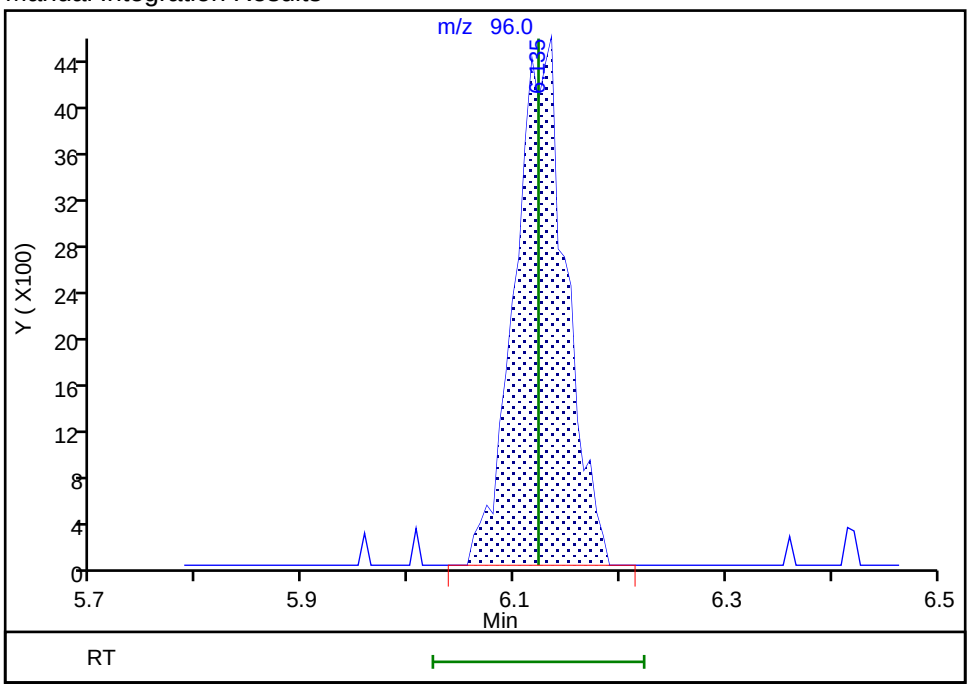
Not Detected
Expected RT: 6.12

Processing Integration Results



Manual Integration Results

RT: 6.13
Area: 15432
Amount: 0.224550
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:28:48
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

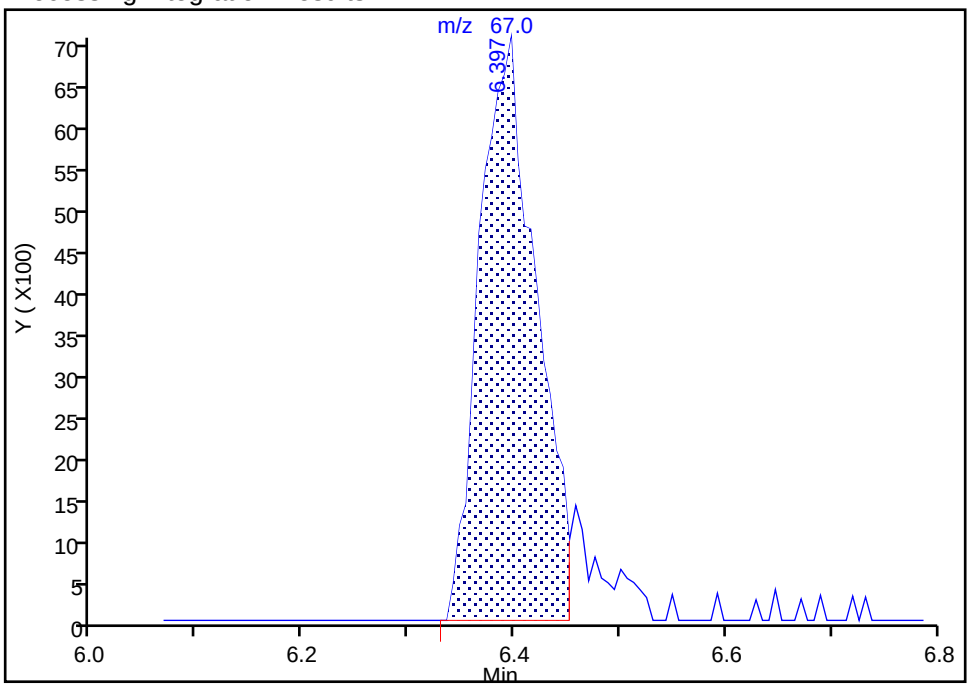
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D
Injection Date: 15-Mar-2022 03:22:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: mec29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

42 Methacrylonitrile, CAS: 126-98-7

Signal: 1

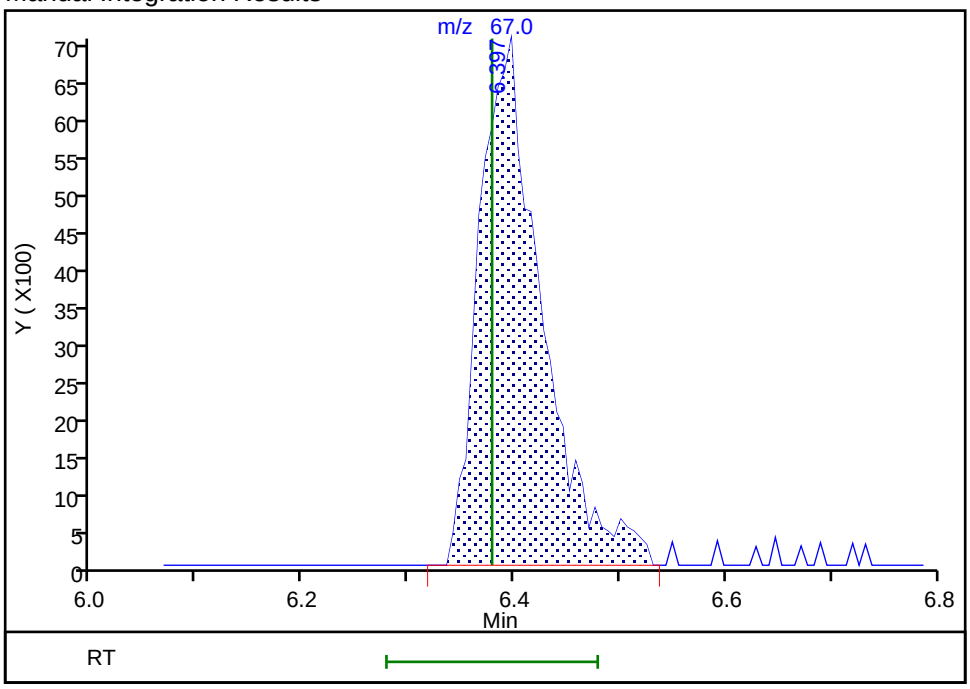
Processing Integration Results

RT: 6.40
Area: 26356
Amount: 1.782750
Amount Units: ug/l



Manual Integration Results

RT: 6.40
Area: 29038
Amount: 1.939037
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:28:53
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

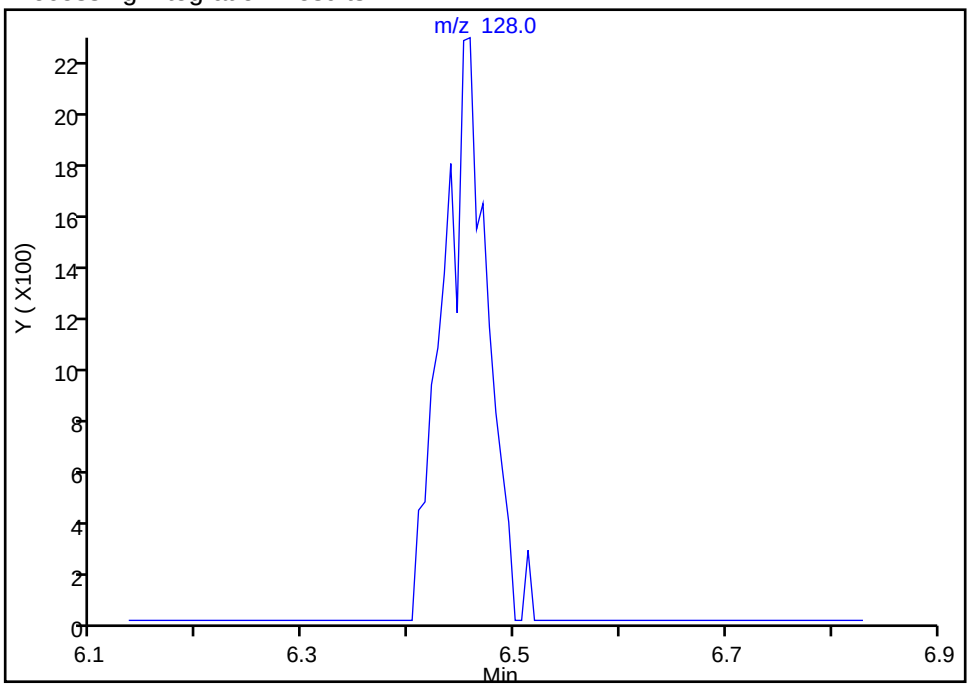
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D
Injection Date: 15-Mar-2022 03:22:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: mec29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

43 Chlorobromomethane, CAS: 74-97-5

Signal: 1

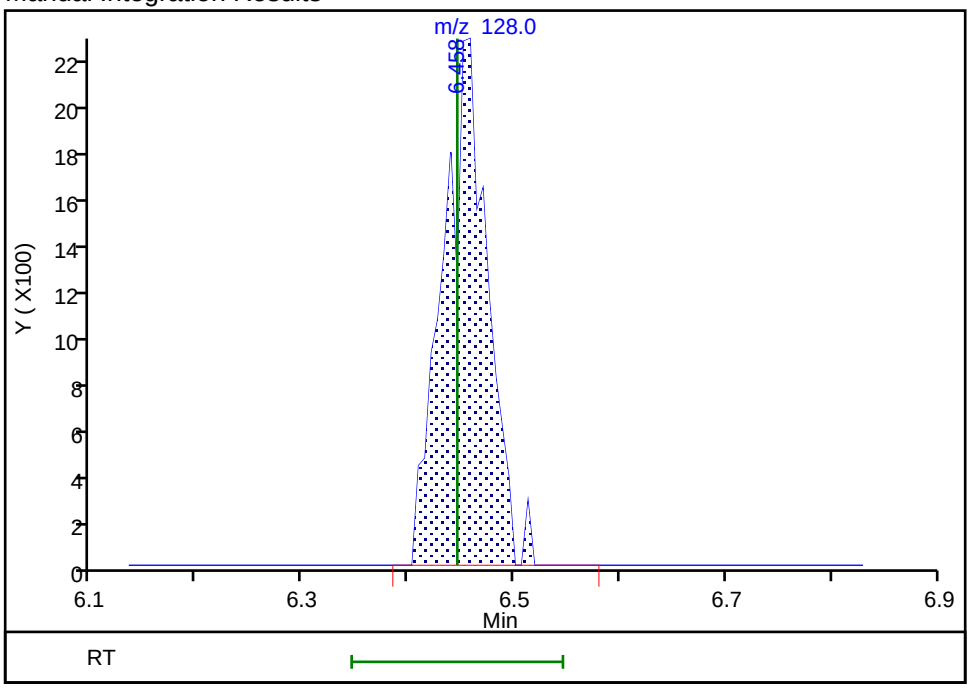
Not Detected
Expected RT: 6.45

Processing Integration Results



Manual Integration Results

RT: 6.46
Area: 6487
Amount: 0.205826
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:28:56
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

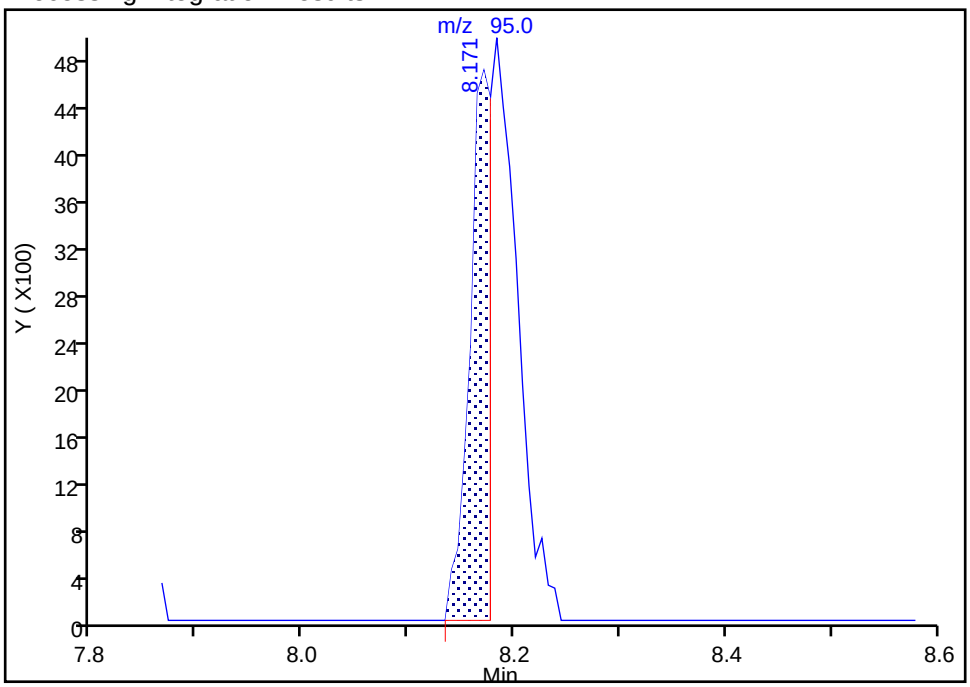
Data File:	\\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D				
Injection Date:	15-Mar-2022 03:22:30	Instrument ID:	19930		
Lims ID:	IC std1				
Client ID:					
Operator ID:	mec29284	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6

Signal: 1

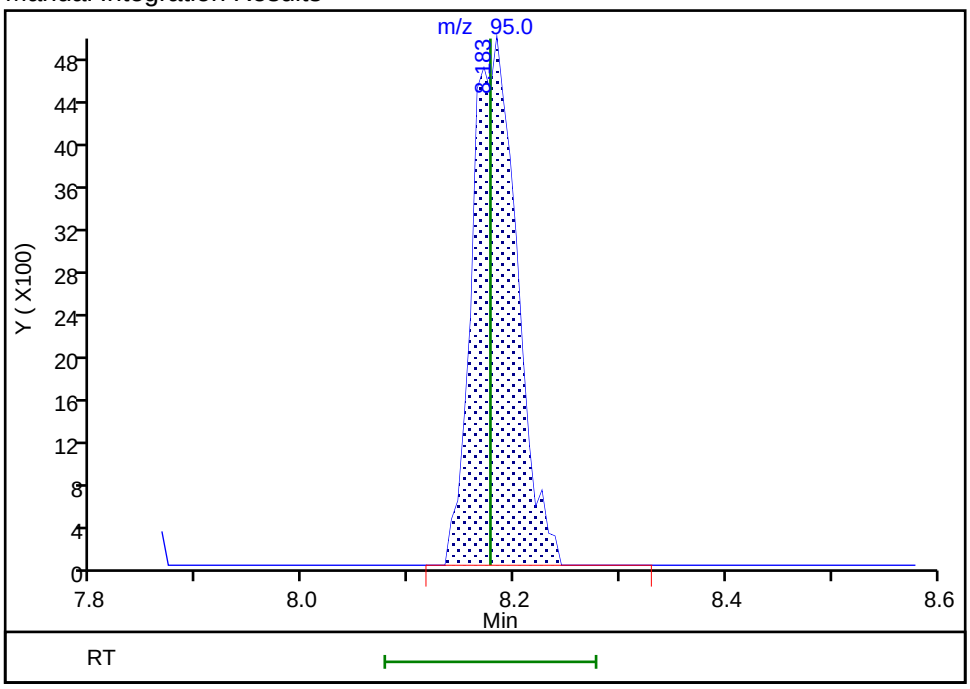
Processing Integration Results

RT: 8.17
Area: 6687
Amount: 0.181941
Amount Units: ug/l



Manual Integration Results

RT: 8.18
Area: 14385
Amount: 0.210168
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:29:07
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

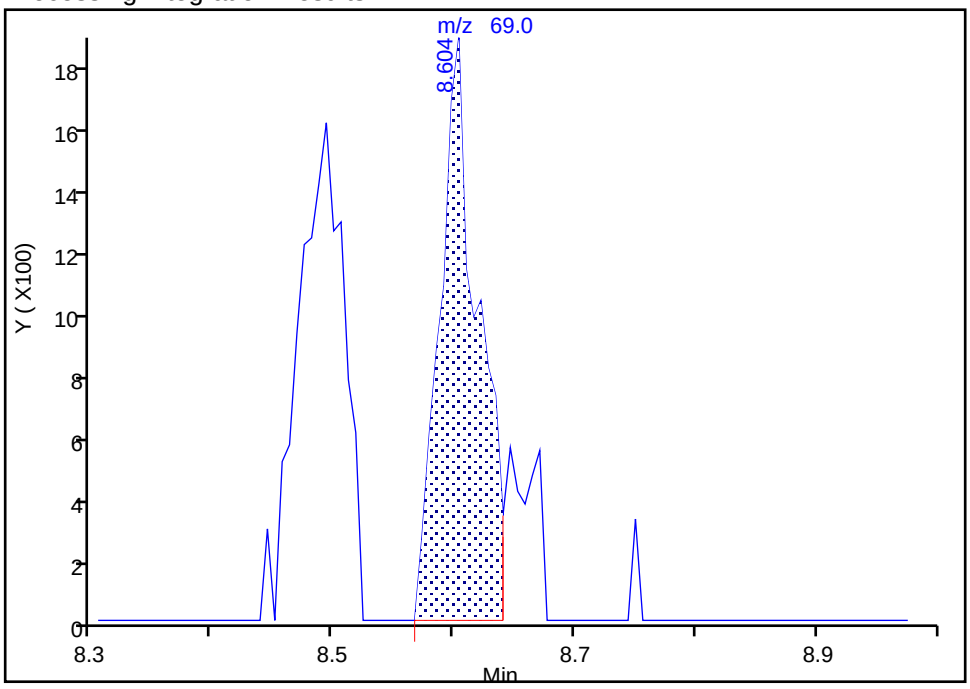
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D
Injection Date: 15-Mar-2022 03:22:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: mec29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

64 Methyl methacrylate, CAS: 80-62-6

Signal: 1

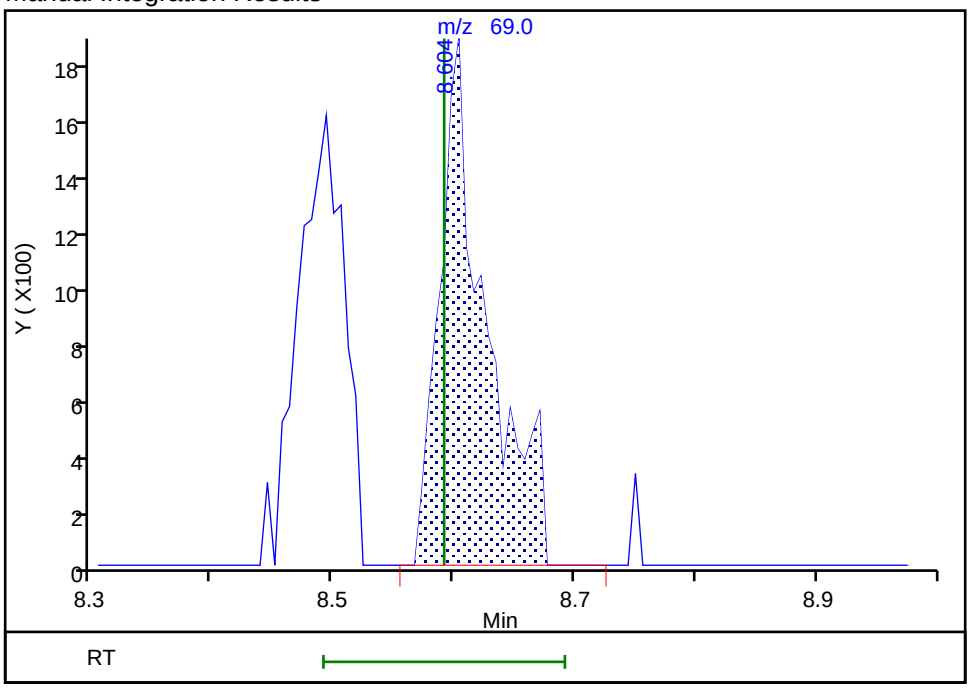
Processing Integration Results

RT: 8.60
Area: 4059
Amount: 0.146151
Amount Units: ug/l



Manual Integration Results

RT: 8.60
Area: 4900
Amount: 0.172697
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:29:15
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

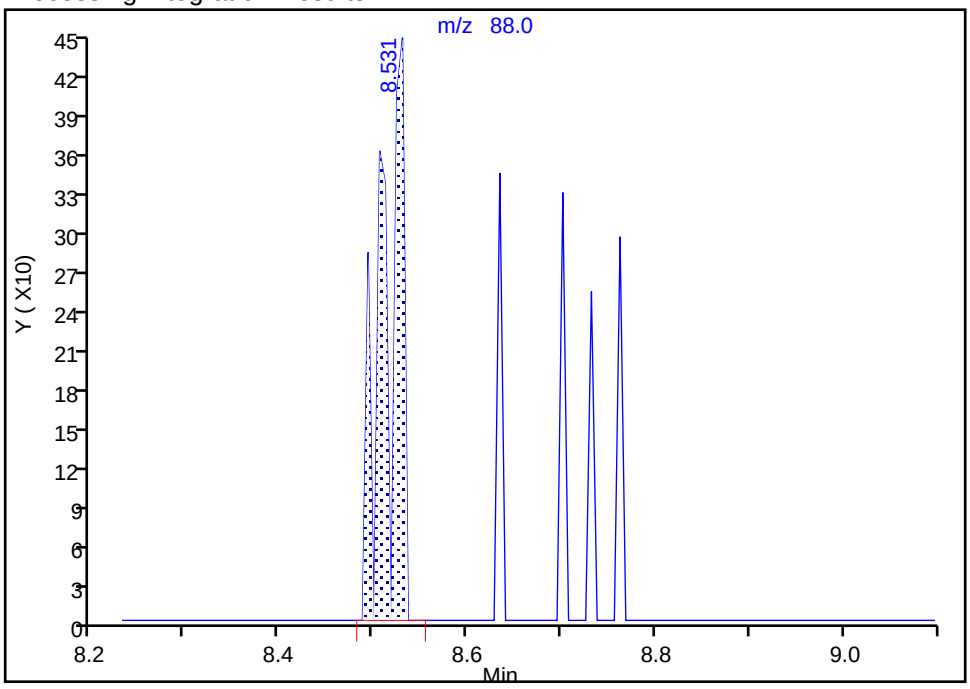
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D
Injection Date: 15-Mar-2022 03:22:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: mec29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

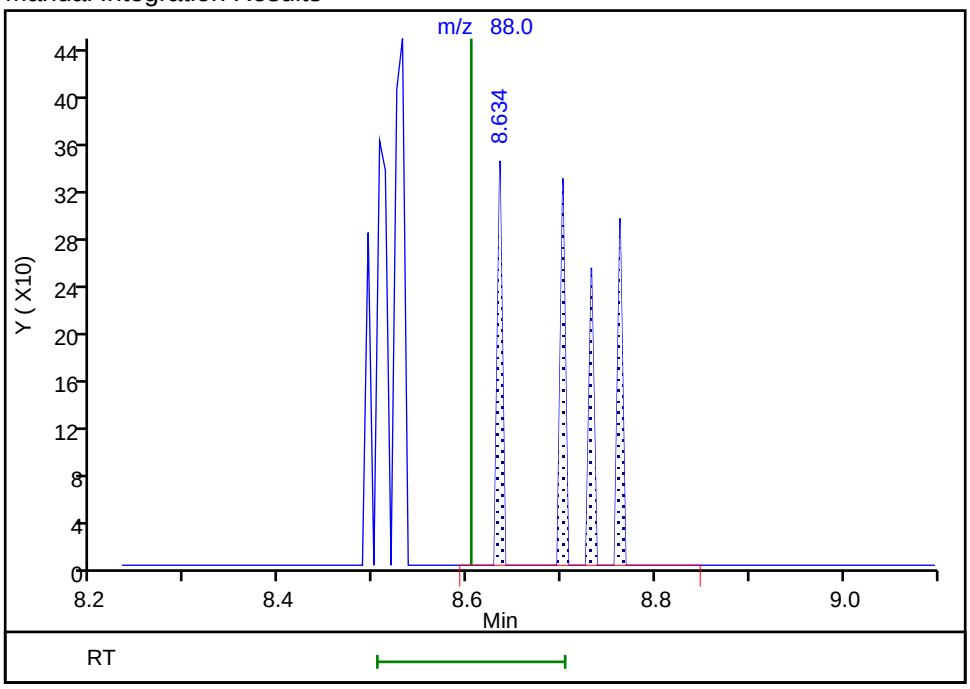
Processing Integration Results

RT: 8.53
Area: 670
Amount: 12.995507
Amount Units: ug/l



Manual Integration Results

RT: 8.63
Area: 447
Amount: 2.086510
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:29:17
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

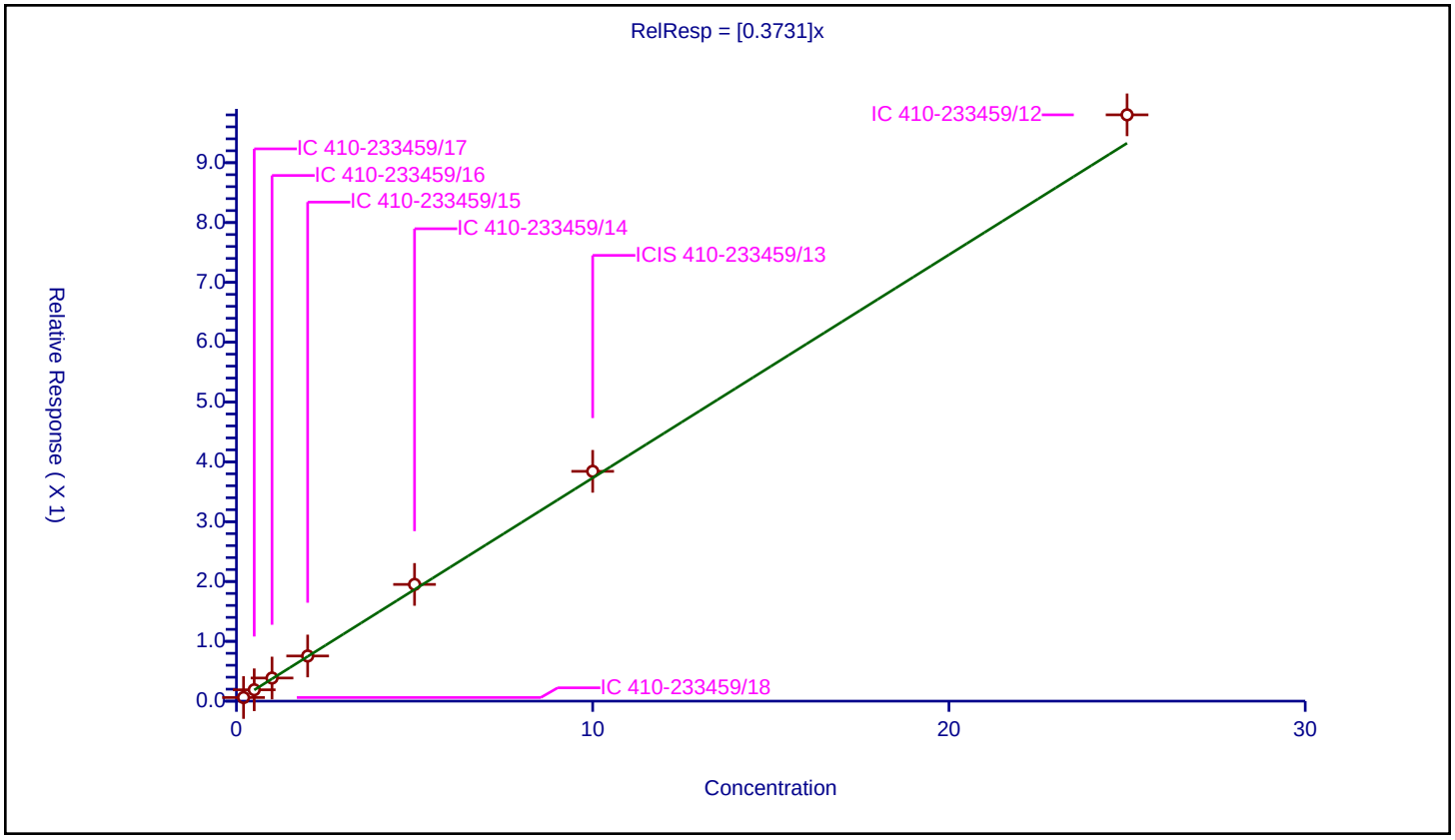
Curve Coefficients

Intercept:	0
Slope:	0.3731

Error Coefficients

Standard Error:	871000
Relative Standard Error:	8.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.060213	10.0	2021821.0	0.301065	Y
2	IC 410-233459/17	0.5	0.190063	10.0	2017326.0	0.380127	Y
3	IC 410-233459/16	1.0	0.386496	10.0	2010448.0	0.386496	Y
4	IC 410-233459/15	2.0	0.755042	10.0	2005717.0	0.377521	Y
5	IC 410-233459/14	5.0	1.951248	10.0	2008310.0	0.39025	Y
6	ICIS 410-233459/13	10.0	3.841583	10.0	2018353.0	0.384158	Y
7	IC 410-233459/12	25.0	9.800613	10.0	1979820.0	0.392025	Y



Calibration / Chloromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

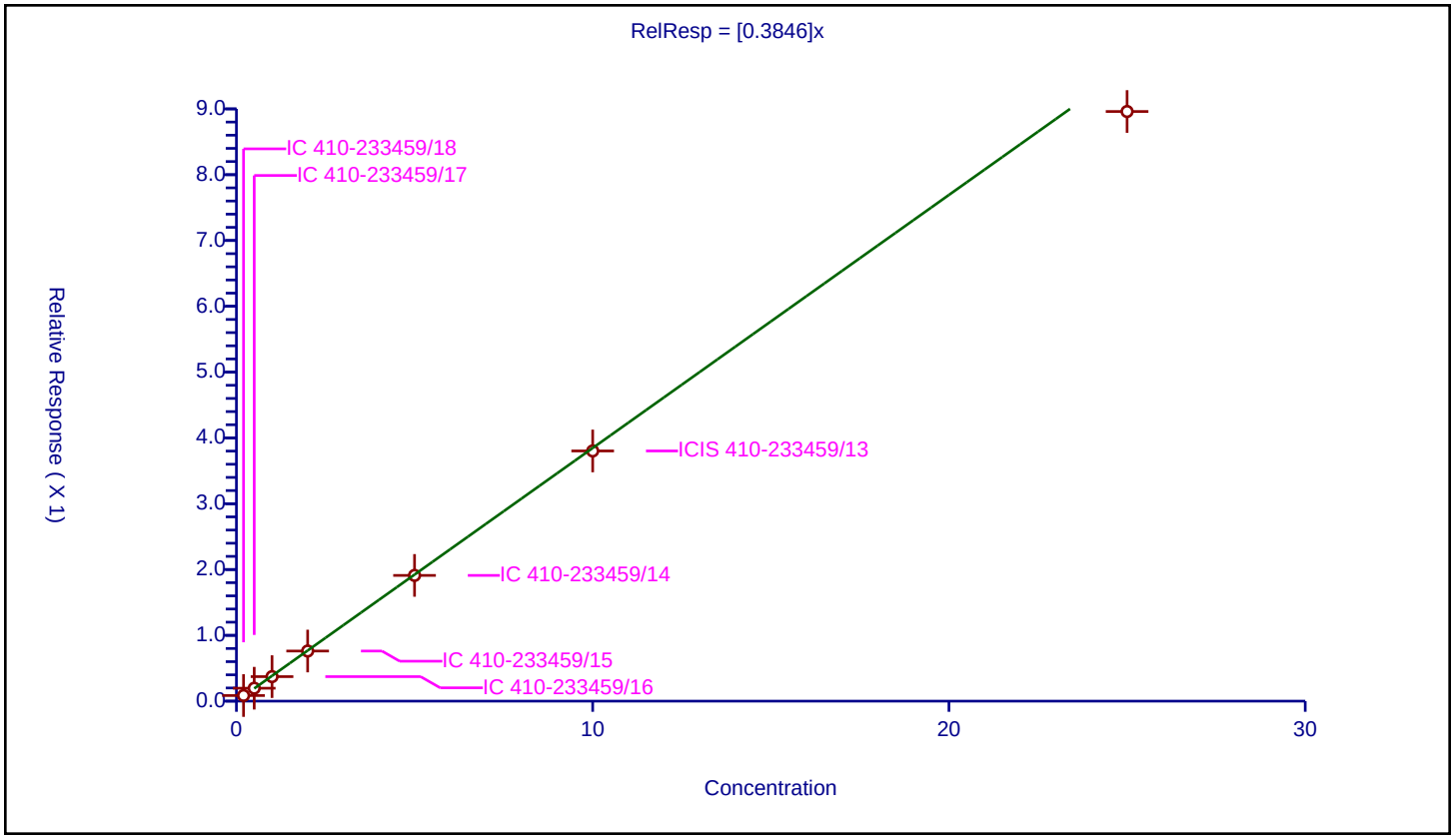
Curve Coefficients

Intercept:	0
Slope:	0.3846

Error Coefficients

Standard Error:	808000
Relative Standard Error:	5.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.085082	10.0	2021821.0	0.425409	Y
2	IC 410-233459/17	0.5	0.196304	10.0	2017326.0	0.392609	Y
3	IC 410-233459/16	1.0	0.372743	10.0	2010448.0	0.372743	Y
4	IC 410-233459/15	2.0	0.761708	10.0	2005717.0	0.380854	Y
5	IC 410-233459/14	5.0	1.910761	10.0	2008310.0	0.382152	Y
6	ICIS 410-233459/13	10.0	3.801922	10.0	2018353.0	0.380192	Y
7	IC 410-233459/12	25.0	8.960436	10.0	1979820.0	0.358417	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

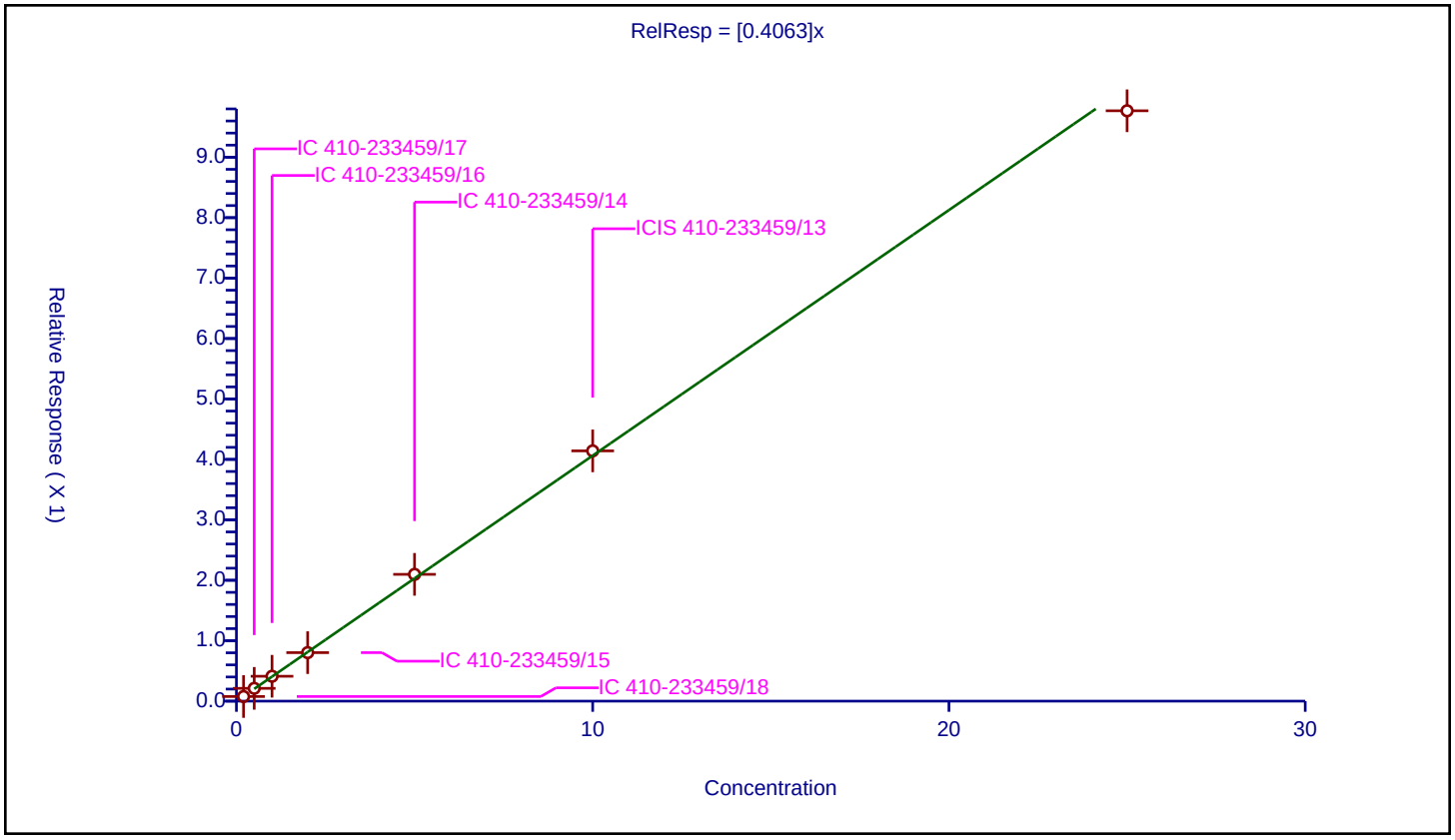
Curve Coefficients

Intercept:	0
Slope:	0.4063

Error Coefficients

Standard Error:	880000
Relative Standard Error:	3.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.076436	10.0	2021821.0	0.38218	Y
2	IC 410-233459/17	0.5	0.211944	10.0	2017326.0	0.423888	Y
3	IC 410-233459/16	1.0	0.411998	10.0	2010448.0	0.411998	Y
4	IC 410-233459/15	2.0	0.80289	10.0	2005717.0	0.401445	Y
5	IC 410-233459/14	5.0	2.098197	10.0	2008310.0	0.419639	Y
6	ICIS 410-233459/13	10.0	4.141159	10.0	2018353.0	0.414116	Y
7	IC 410-233459/12	25.0	9.76859	10.0	1979820.0	0.390744	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

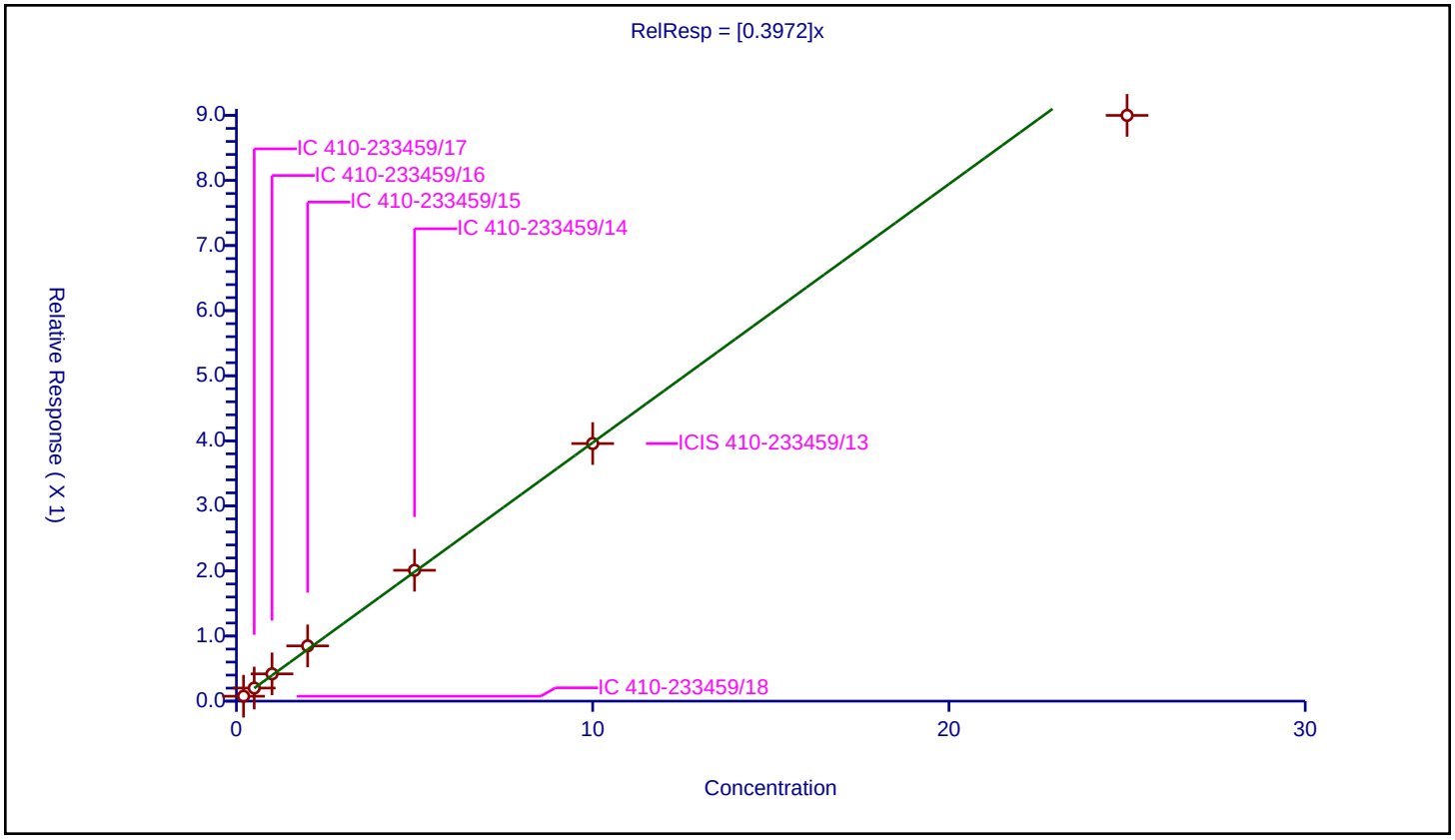
Curve Coefficients

Intercept:	0
Slope:	0.3972

Error Coefficients

Standard Error:	818000
Relative Standard Error:	5.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.075343	10.0	2021821.0	0.376715	Y
2	IC 410-233459/17	0.5	0.201088	10.0	2017326.0	0.402176	Y
3	IC 410-233459/16	1.0	0.419374	10.0	2010448.0	0.419374	Y
4	IC 410-233459/15	2.0	0.849033	10.0	2005717.0	0.424517	Y
5	IC 410-233459/14	5.0	2.01071	10.0	2008310.0	0.402142	Y
6	ICIS 410-233459/13	10.0	3.957905	10.0	2018353.0	0.395791	Y
7	IC 410-233459/12	25.0	9.000182	10.0	1979820.0	0.360007	Y



Calibration / Bromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

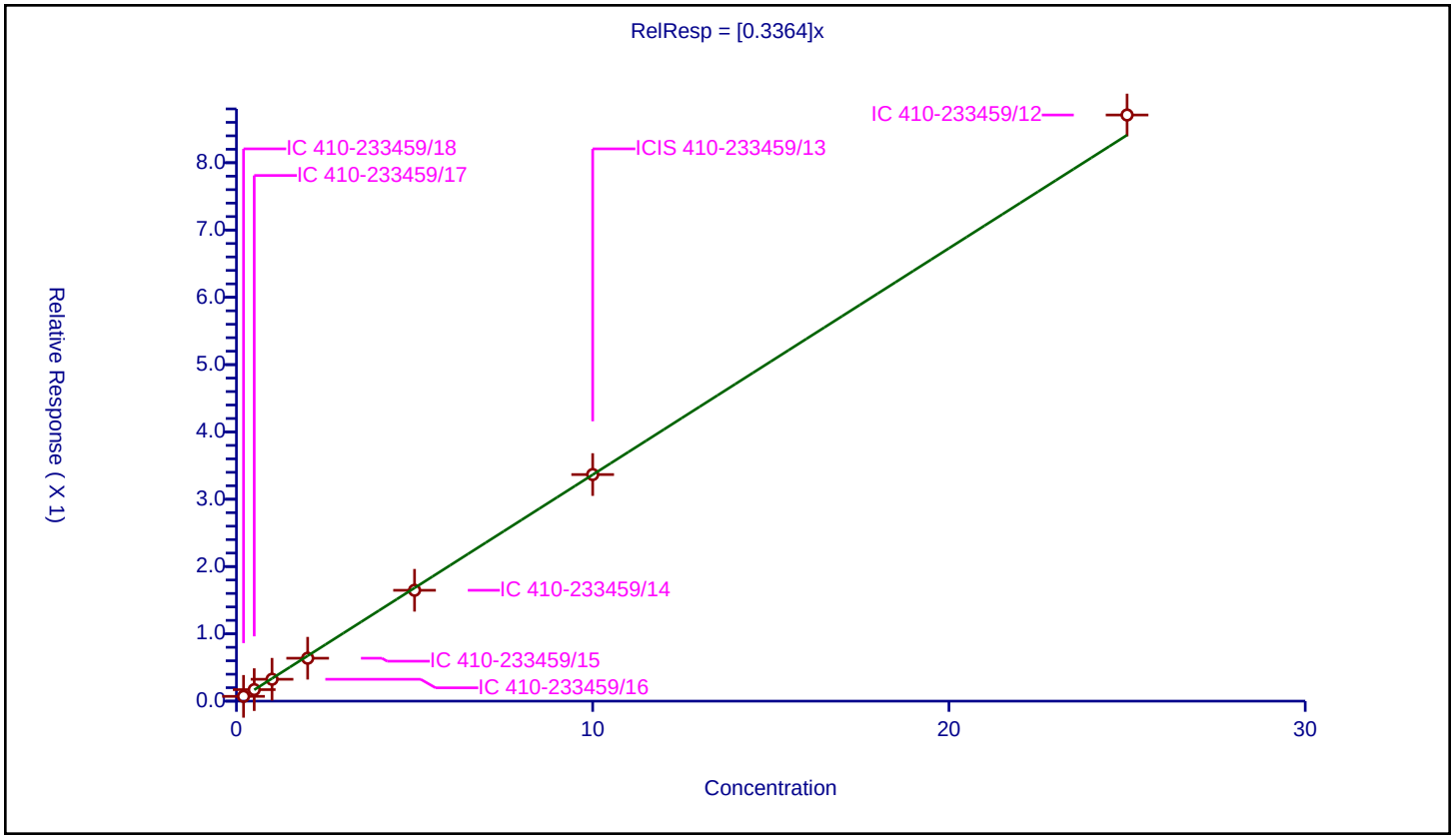
Curve Coefficients

Intercept:	0
Slope:	0.3364

Error Coefficients

Standard Error:	771000
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 410-233459/18	0.2	0.070847	10.0	2021821.0	0.354235	Y
2	IC 410-233459/17	0.5	0.171246	10.0	2017326.0	0.342493	Y
3	IC 410-233459/16	1.0	0.325097	10.0	2010448.0	0.325097	Y
4	IC 410-233459/15	2.0	0.637622	10.0	2005717.0	0.318811	Y
5	IC 410-233459/14	5.0	1.647161	10.0	2008310.0	0.329432	Y
6	ICIS 410-233459/13	10.0	3.366884	10.0	2018353.0	0.336688	Y
7	IC 410-233459/12	25.0	8.709448	10.0	1979820.0	0.348378	Y



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

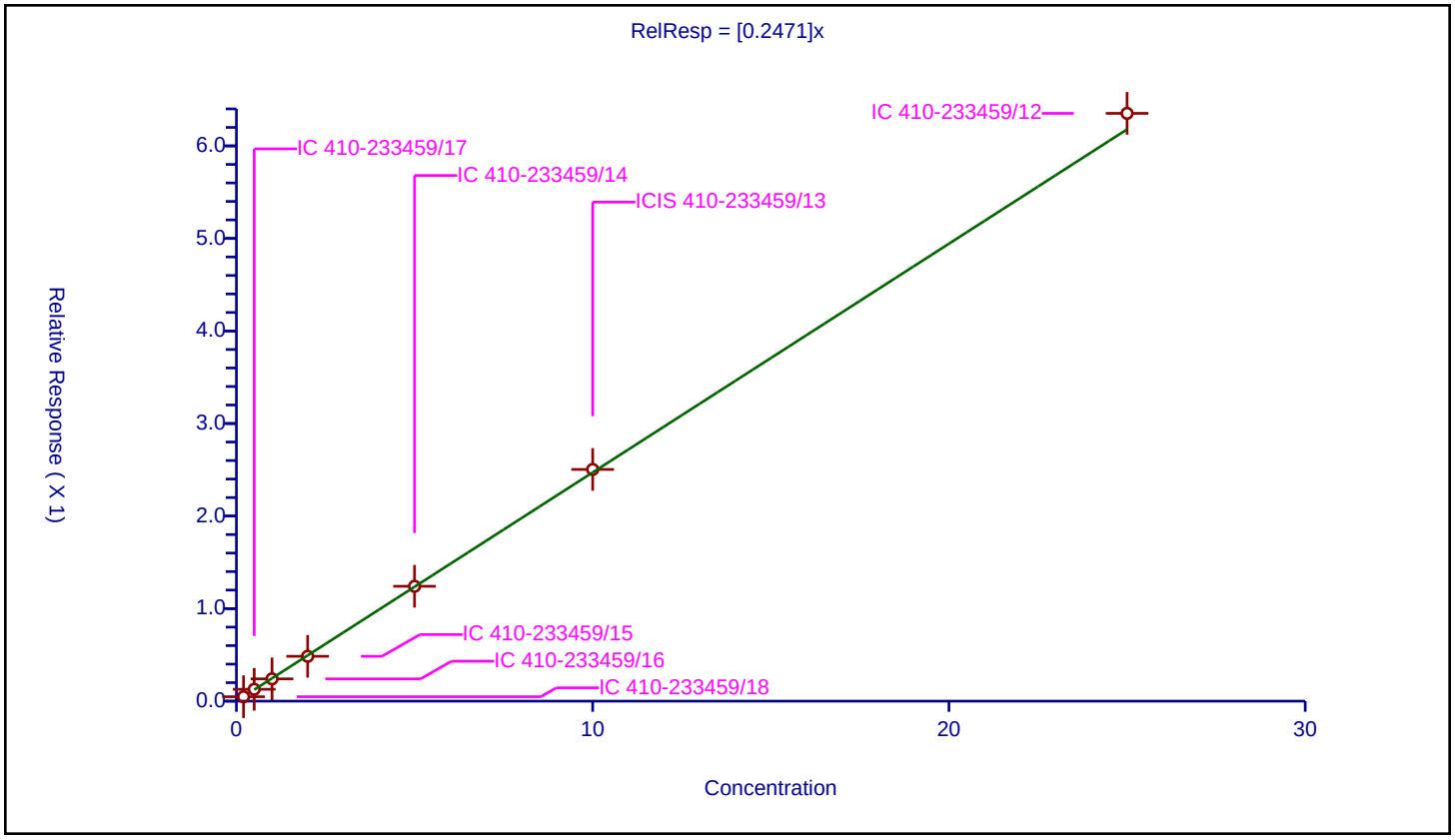
Curve Coefficients

Intercept:	0
Slope:	0.2471

Error Coefficients

Standard Error:	564000
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 410-233459/18	0.2	0.047551	10.0	2021821.0	0.237756	Y
2	IC 410-233459/17	0.5	0.128333	10.0	2017326.0	0.256666	Y
3	IC 410-233459/16	1.0	0.240678	10.0	2010448.0	0.240678	Y
4	IC 410-233459/15	2.0	0.484475	10.0	2005717.0	0.242238	Y
5	IC 410-233459/14	5.0	1.241273	10.0	2008310.0	0.248255	Y
6	ICIS 410-233459/13	10.0	2.503764	10.0	2018353.0	0.250376	Y
7	IC 410-233459/12	25.0	6.351663	10.0	1979820.0	0.254067	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

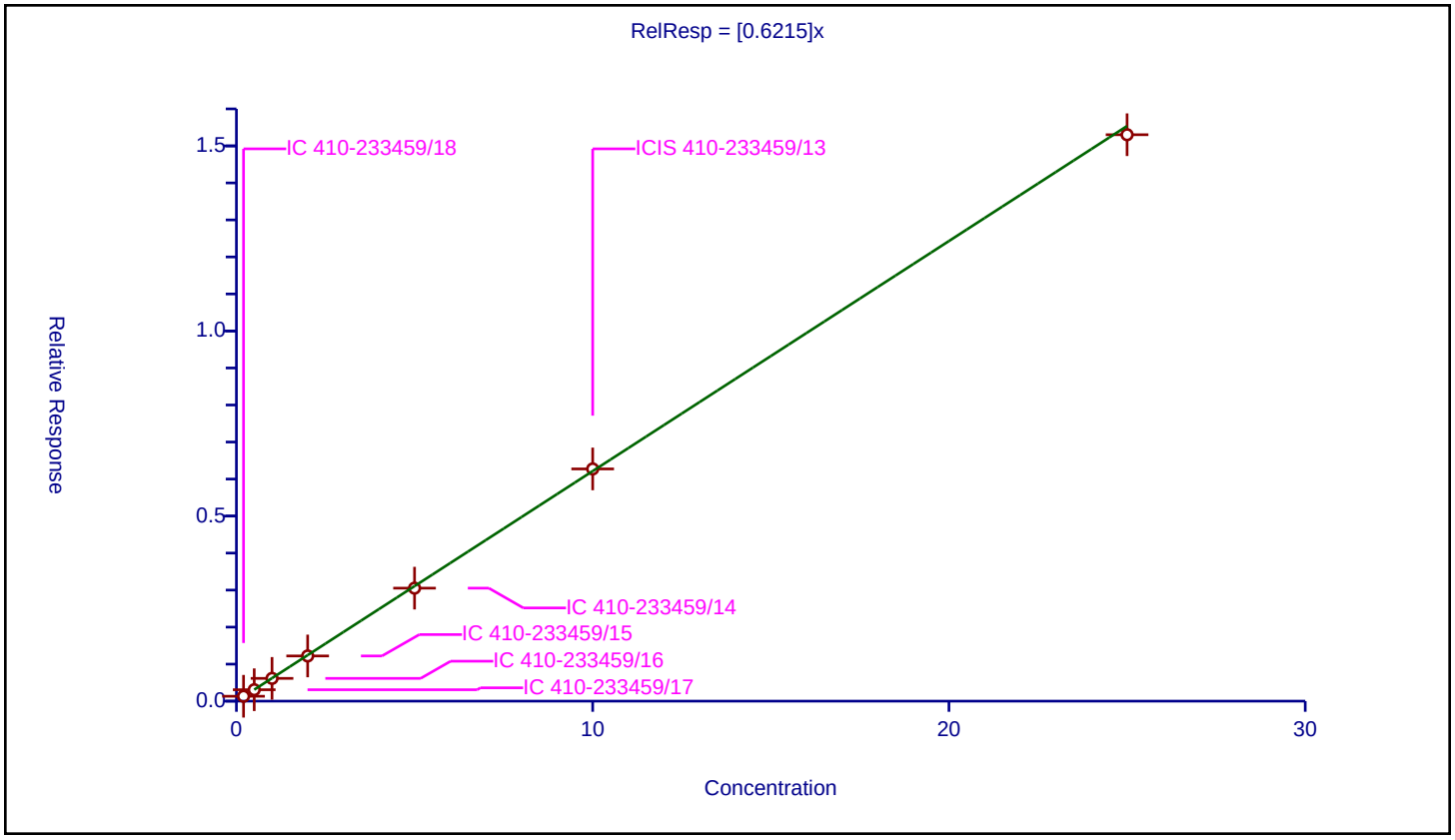
Curve Coefficients

Intercept:	0
Slope:	0.6215

Error Coefficients

Standard Error:	1370000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.131851	10.0	2021821.0	0.659257	Y
2	IC 410-233459/17	0.5	0.308061	10.0	2017326.0	0.616123	Y
3	IC 410-233459/16	1.0	0.614868	10.0	2010448.0	0.614868	Y
4	IC 410-233459/15	2.0	1.220446	10.0	2005717.0	0.610223	Y
5	IC 410-233459/14	5.0	3.052636	10.0	2008310.0	0.610527	Y
6	ICIS 410-233459/13	10.0	6.272976	10.0	2018353.0	0.627298	Y
7	IC 410-233459/12	25.0	15.301901	10.0	1979820.0	0.612076	Y



Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

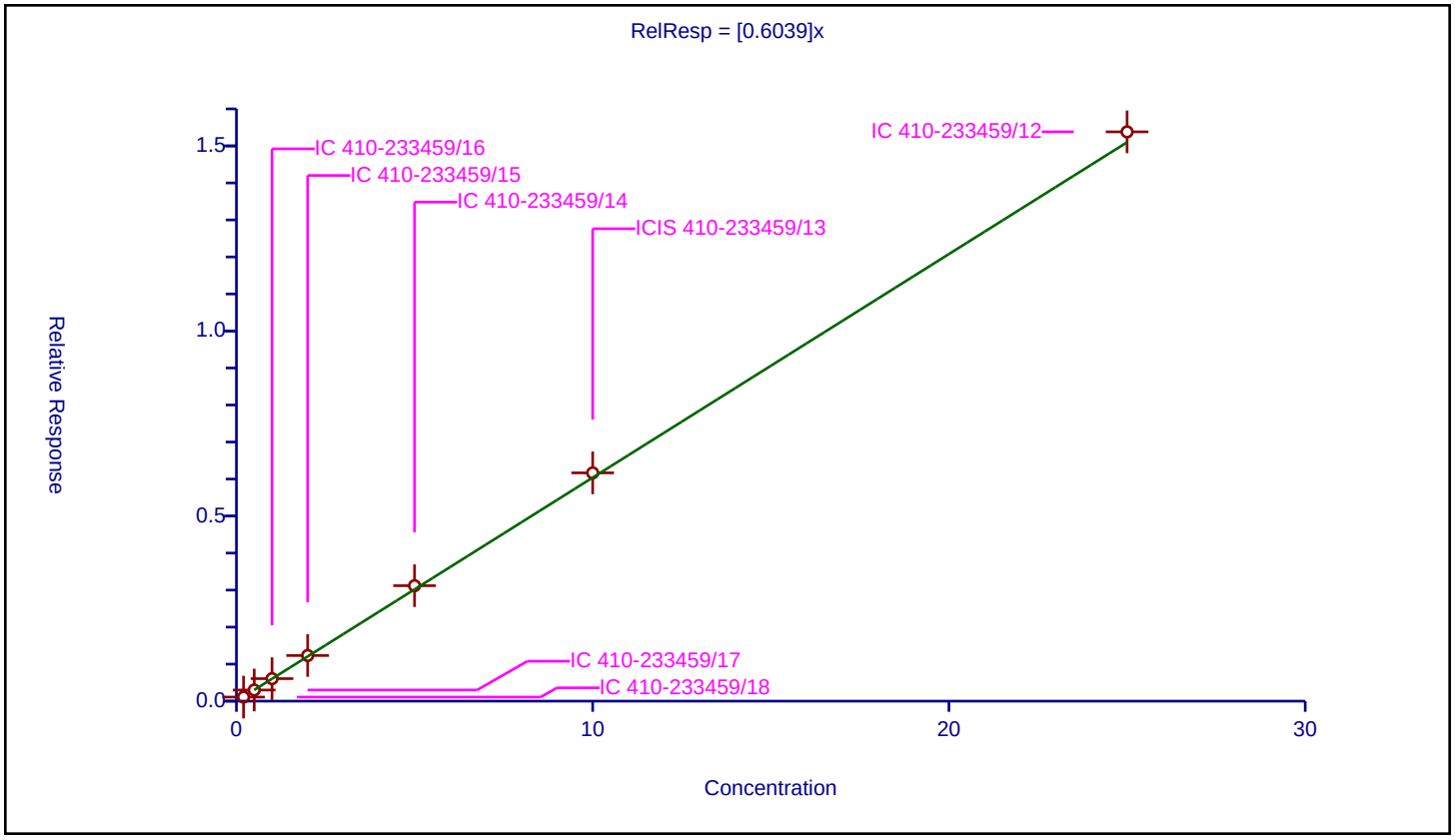
Curve Coefficients

Intercept:	0
Slope:	0.6039

Error Coefficients

Standard Error:	1370000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.109372	10.0	2021821.0	0.546859	Y
2	IC 410-233459/17	0.5	0.300646	10.0	2017326.0	0.601291	Y
3	IC 410-233459/16	1.0	0.607387	10.0	2010448.0	0.607387	Y
4	IC 410-233459/15	2.0	1.232512	10.0	2005717.0	0.616256	Y
5	IC 410-233459/14	5.0	3.118996	10.0	2008310.0	0.623799	Y
6	ICIS 410-233459/13	10.0	6.166761	10.0	2018353.0	0.616676	Y
7	IC 410-233459/12	25.0	15.37955	10.0	1979820.0	0.615182	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

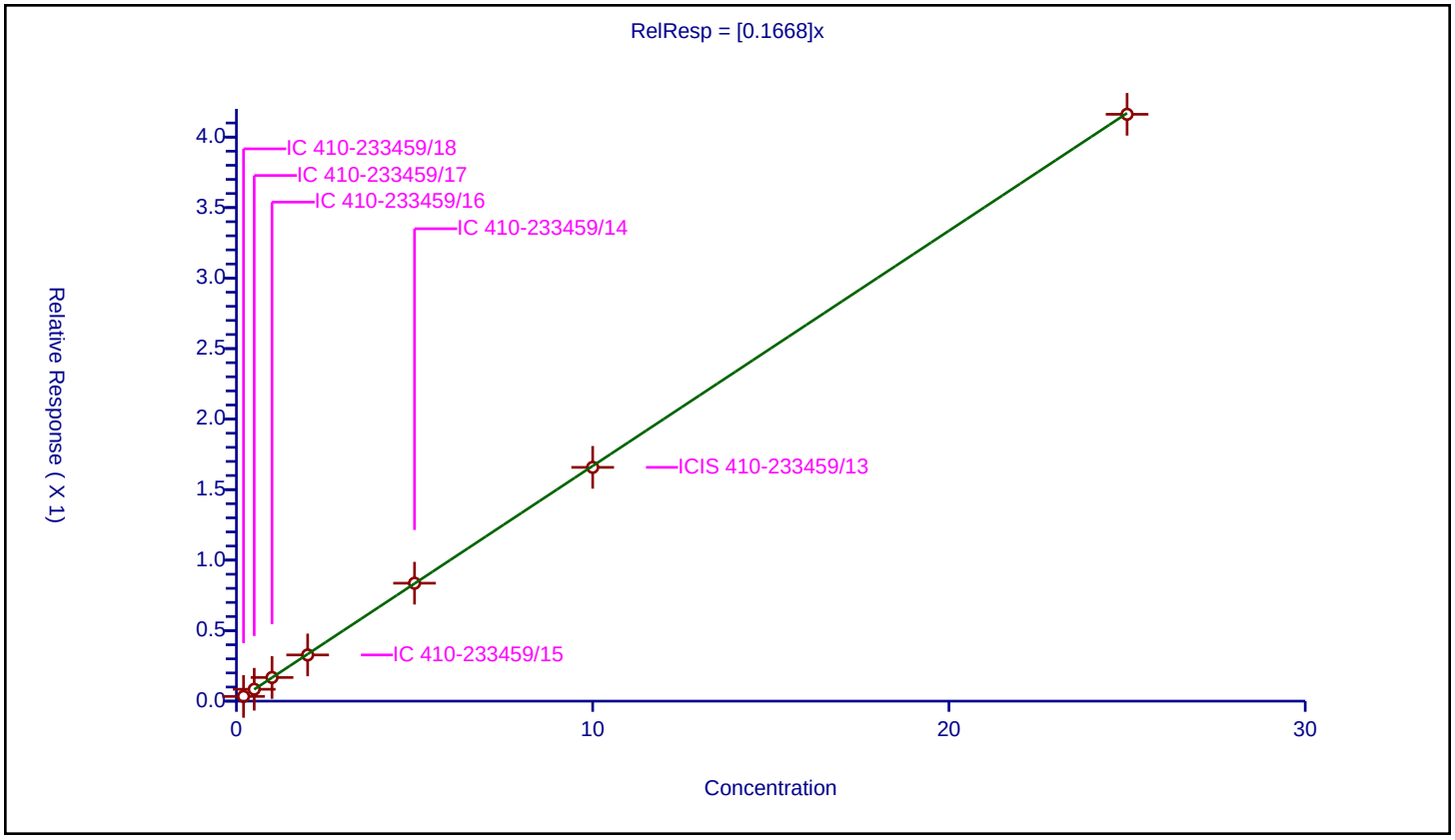
Curve Coefficients

Intercept:	0
Slope:	0.1668

Error Coefficients

Standard Error:	371000
Relative Standard Error:	1.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.033554	10.0	2021821.0	0.16777	Y
2	IC 410-233459/17	0.5	0.08429	10.0	2017326.0	0.16858	Y
3	IC 410-233459/16	0.999999	0.167853	10.0	2010448.0	0.167853	Y
4	IC 410-233459/15	1.999998	0.327559	10.0	2005717.0	0.16378	Y
5	IC 410-233459/14	4.999995	0.836534	10.0	2008310.0	0.167307	Y
6	ICIS 410-233459/13	9.99999	1.657916	10.0	2018353.0	0.165792	Y
7	IC 410-233459/12	24.999975	4.161697	10.0	1979820.0	0.166468	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

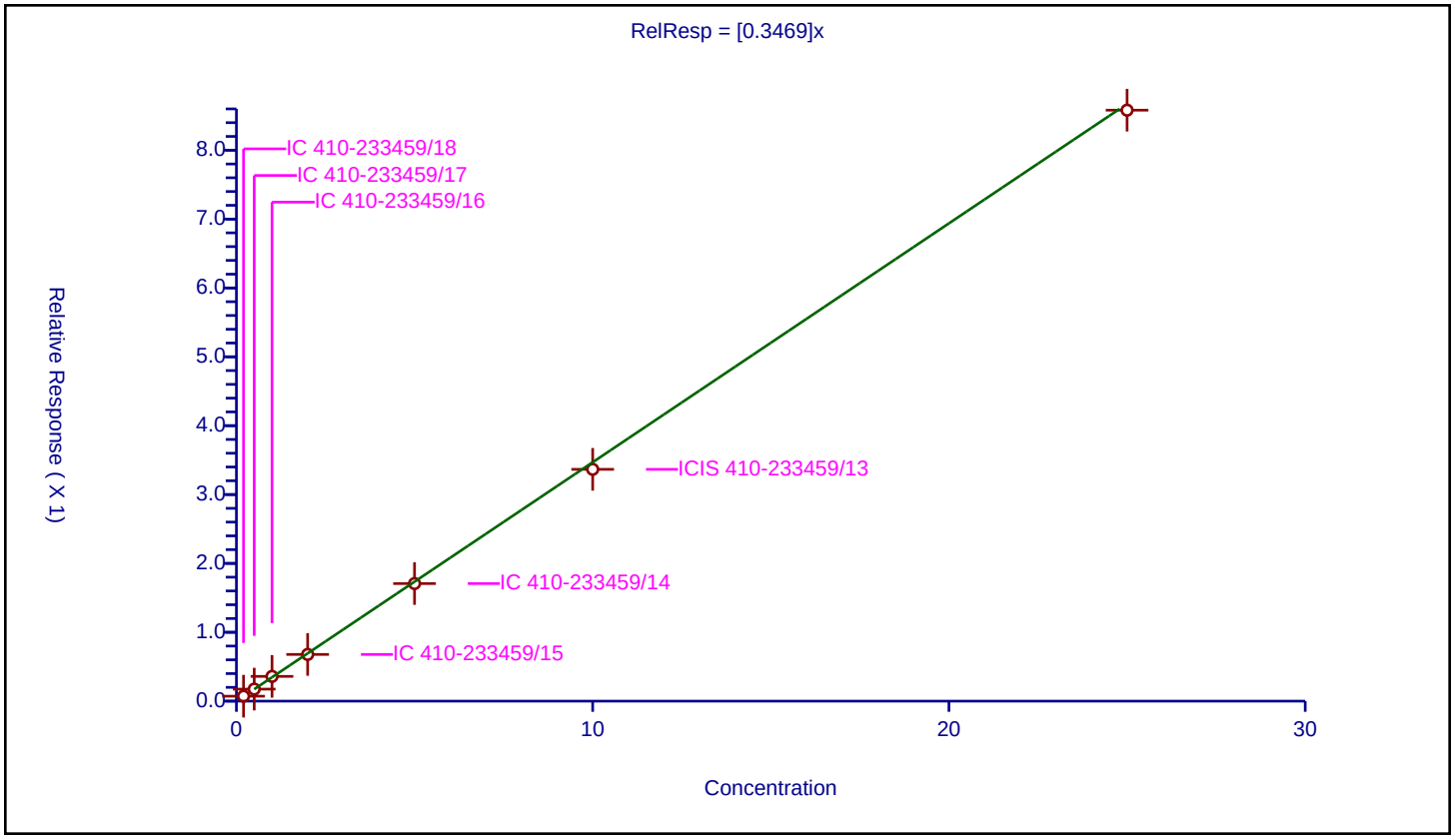
Curve Coefficients

Intercept:	0
Slope:	0.3469

Error Coefficients

Standard Error:	763000
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 410-233459/18	0.2	0.071792	10.0	2021821.0	0.358959	Y
2	IC 410-233459/17	0.5	0.174697	10.0	2017326.0	0.349393	Y
3	IC 410-233459/16	1.0	0.359512	10.0	2010448.0	0.359512	Y
4	IC 410-233459/15	2.0	0.678107	10.0	2005717.0	0.339053	Y
5	IC 410-233459/14	5.0	1.707261	10.0	2008310.0	0.341452	Y
6	ICIS 410-233459/13	10.0	3.36617	10.0	2018353.0	0.336617	Y
7	IC 410-233459/12	25.0	8.581275	10.0	1979820.0	0.343251	Y



Calibration / Acrolein

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

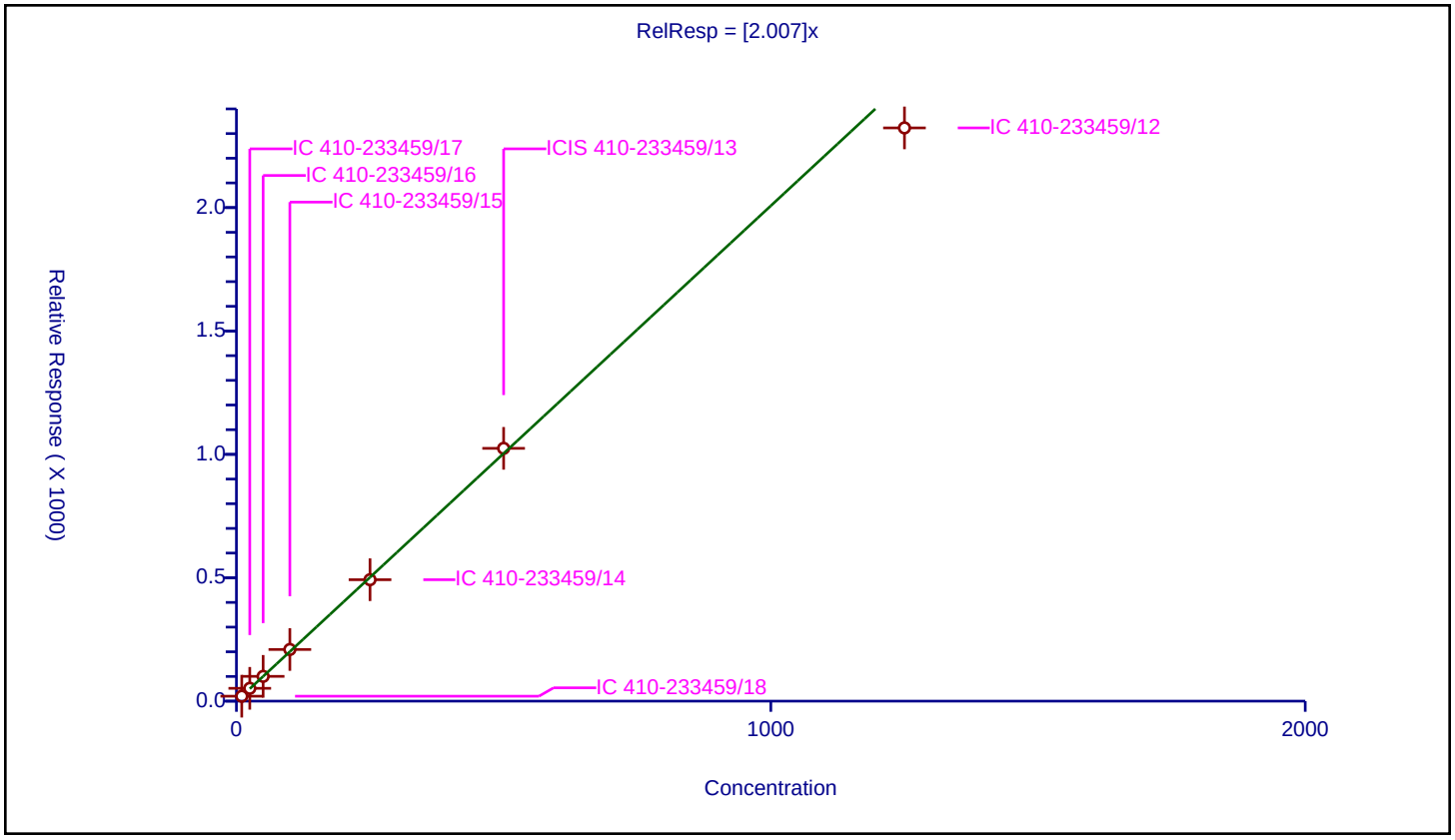
Curve Coefficients

Intercept:	0
Slope:	2.007

Error Coefficients

Standard Error:	3180000
Relative Standard Error:	4.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	10.000602	19.984643	50.0	155632.0	1.998344	Y
2	IC 410-233459/17	25.001506	51.916269	50.0	134454.0	2.076526	Y
3	IC 410-233459/16	50.003012	100.398101	50.0	144059.0	2.007841	Y
4	IC 410-233459/15	100.006024	209.348457	50.0	140927.0	2.093358	Y
5	IC 410-233459/14	250.01506	492.086554	50.0	149941.0	1.968228	Y
6	ICIS 410-233459/13	500.03012	1024.422213	50.0	147286.0	2.048721	Y
7	IC 410-233459/12	1250.075299	2322.969237	50.0	150473.0	1.858263	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

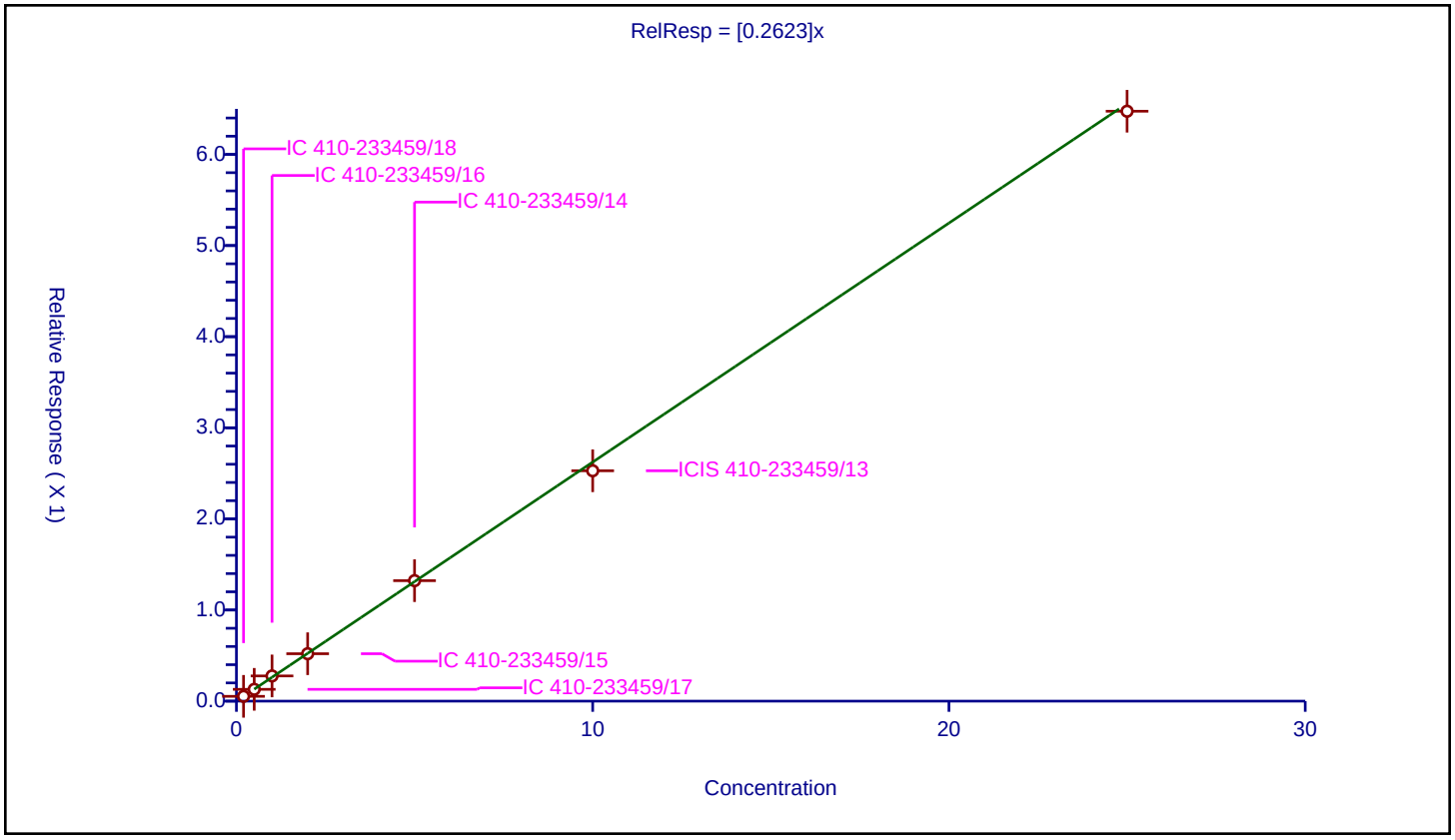
Curve Coefficients

Intercept:	0
Slope:	0.2623

Error Coefficients

Standard Error:	576000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.052735	10.0	2021821.0	0.263673	Y
2	IC 410-233459/17	0.5	0.129761	10.0	2017326.0	0.259522	Y
3	IC 410-233459/16	1.0	0.27665	10.0	2010448.0	0.27665	Y
4	IC 410-233459/15	2.0	0.520557	10.0	2005717.0	0.260278	Y
5	IC 410-233459/14	5.0	1.322266	10.0	2008310.0	0.264453	Y
6	ICIS 410-233459/13	10.0	2.528477	10.0	2018353.0	0.252848	Y
7	IC 410-233459/12	25.0	6.474553	10.0	1979820.0	0.258982	Y



Calibration / Acetone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

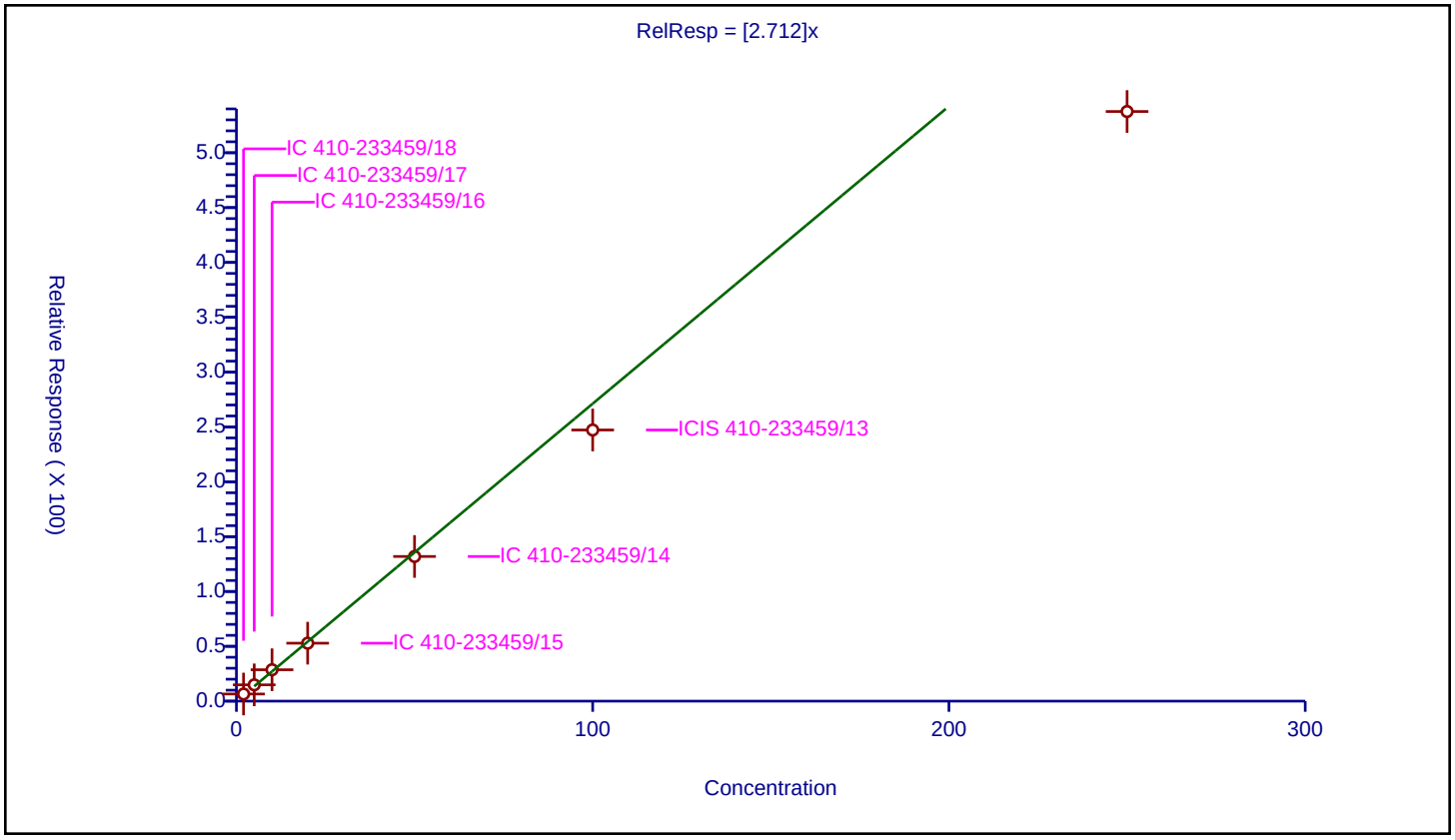
Curve Coefficients

Intercept:	0
Slope:	2.712

Error Coefficients

Standard Error:	745000
Relative Standard Error:	13.1
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.973

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	2.0	6.499627	50.0	155632.0	3.249814	Y
2	IC 410-233459/17	5.0	14.855638	50.0	134454.0	2.971128	Y
3	IC 410-233459/16	10.0	28.621606	50.0	144059.0	2.862161	Y
4	IC 410-233459/15	20.0	52.825931	50.0	140927.0	2.641297	Y
5	IC 410-233459/14	50.0	131.902882	50.0	149941.0	2.638058	Y
6	ICIS 410-233459/13	100.0	247.229879	50.0	147286.0	2.472299	Y
7	IC 410-233459/12	250.0	537.611399	50.0	150473.0	2.150446	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

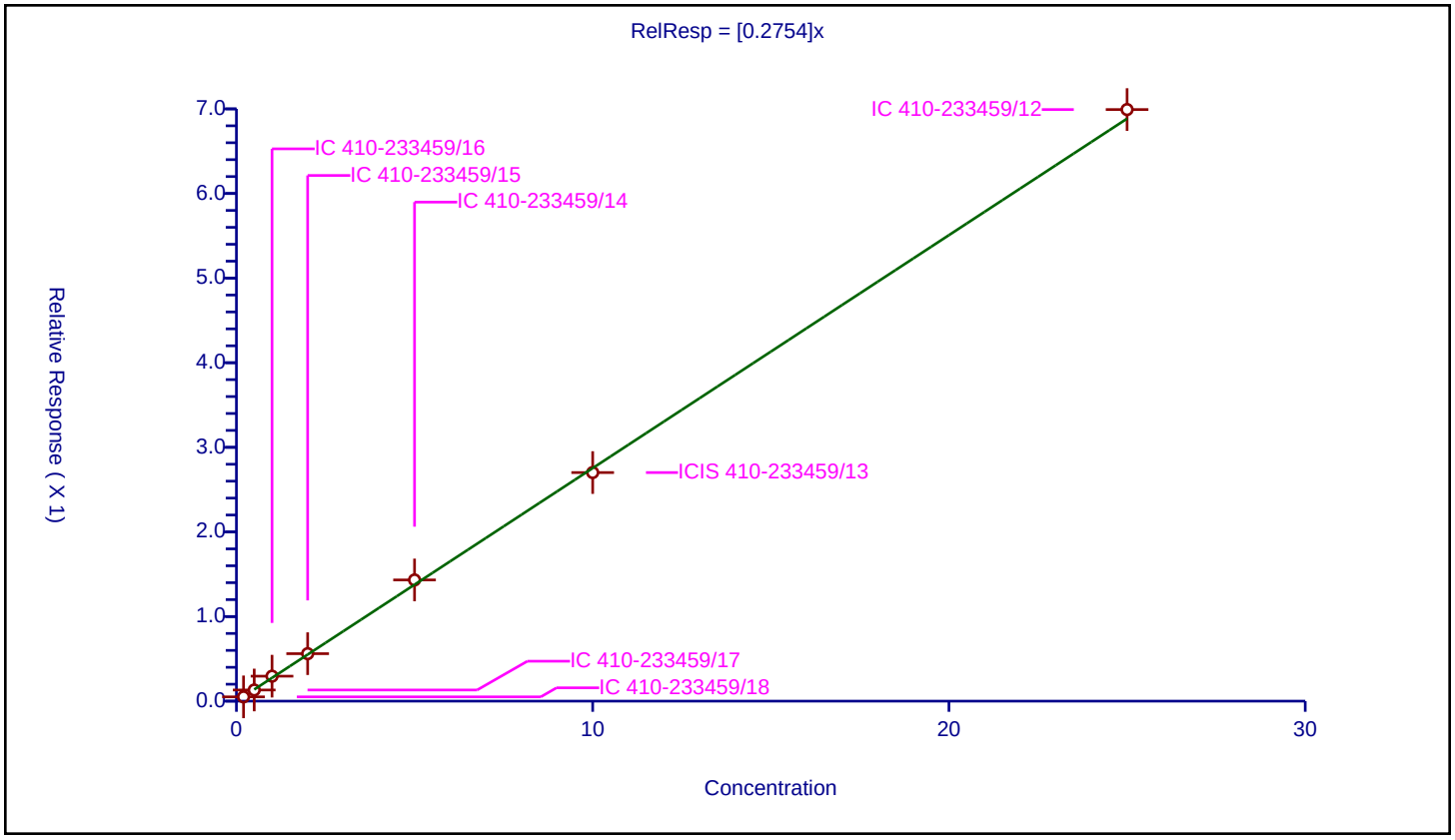
Curve Coefficients

Intercept:	0
Slope:	0.2754

Error Coefficients

Standard Error:	621000
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 410-233459/18	0.2	0.050489	10.0	2021821.0	0.252446	Y
2	IC 410-233459/17	0.5	0.131719	10.0	2017326.0	0.263438	Y
3	IC 410-233459/16	1.0	0.295029	10.0	2010448.0	0.295029	Y
4	IC 410-233459/15	2.0	0.561021	10.0	2005717.0	0.280511	Y
5	IC 410-233459/14	5.0	1.432398	10.0	2008310.0	0.28648	Y
6	ICIS 410-233459/13	10.0	2.701896	10.0	2018353.0	0.27019	Y
7	IC 410-233459/12	25.0	6.992151	10.0	1979820.0	0.279686	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

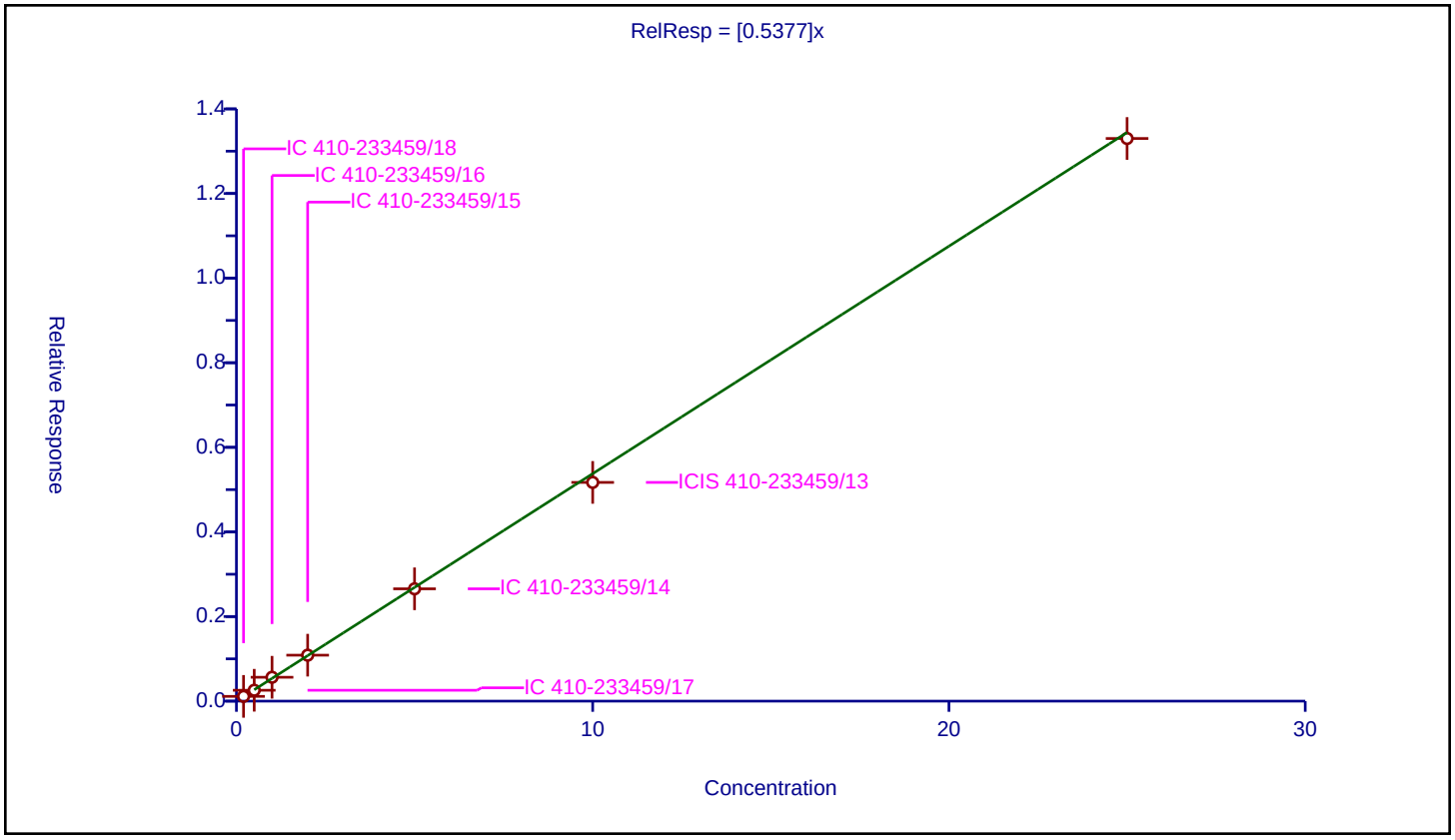
Curve Coefficients

Intercept:	0
Slope:	0.5377

Error Coefficients

Standard Error:	1180000
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 410-233459/18	0.2	0.112255	10.0	2021821.0	0.561276	Y
2	IC 410-233459/17	0.5	0.25747	10.0	2017326.0	0.514939	Y
3	IC 410-233459/16	1.0	0.564496	10.0	2010448.0	0.564496	Y
4	IC 410-233459/15	2.0	1.086479	10.0	2005717.0	0.54324	Y
5	IC 410-233459/14	5.0	2.655292	10.0	2008310.0	0.531058	Y
6	ICIS 410-233459/13	10.0	5.170443	10.0	2018353.0	0.517044	Y
7	IC 410-233459/12	25.0	13.300335	10.0	1979820.0	0.532013	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

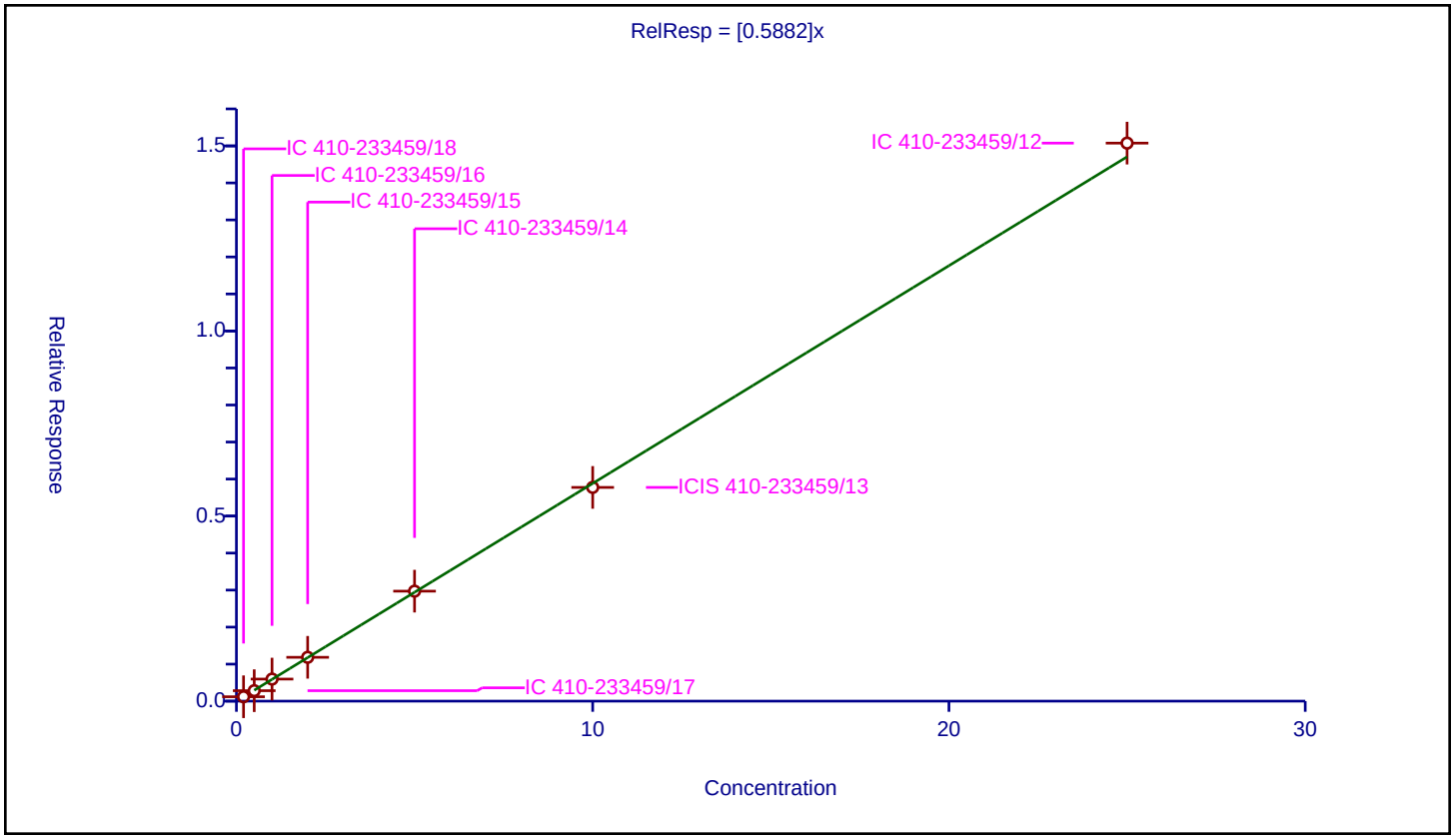
Curve Coefficients

Intercept:	0
Slope:	0.5882

Error Coefficients

Standard Error:	1340000
Relative Standard Error:	2.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.118126	10.0	2021821.0	0.590631	Y
2	IC 410-233459/17	0.5	0.282081	10.0	2017326.0	0.564163	Y
3	IC 410-233459/16	1.0	0.595812	10.0	2010448.0	0.595812	Y
4	IC 410-233459/15	2.0	1.18425	10.0	2005717.0	0.592125	Y
5	IC 410-233459/14	5.0	2.971673	10.0	2008310.0	0.594335	Y
6	ICIS 410-233459/13	10.0	5.774178	10.0	2018353.0	0.577418	Y
7	IC 410-233459/12	25.0	15.075057	10.0	1979820.0	0.603002	Y



Calibration / Methyl acetate

Curve Type:	Linear
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

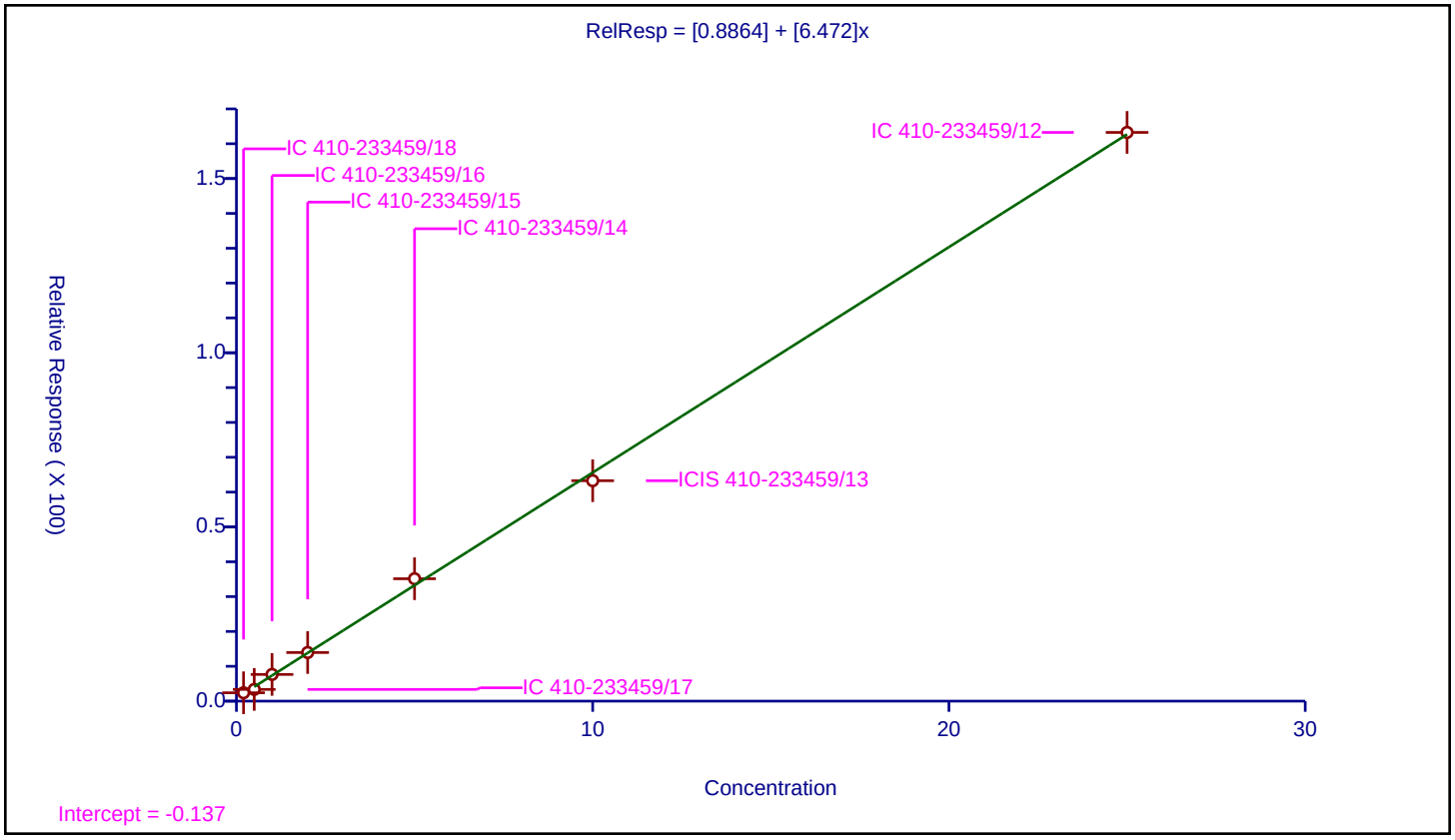
Curve Coefficients

Intercept:	0.8864
Slope:	6.472

Error Coefficients

Standard Error:	240000
Relative Standard Error:	13.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	2.405996	50.0	155632.0	12.029981	Y
2	IC 410-233459/17	0.5	3.369182	50.0	134454.0	6.738364	Y
3	IC 410-233459/16	1.0	7.66665	50.0	144059.0	7.66665	Y
4	IC 410-233459/15	2.0	13.954388	50.0	140927.0	6.977194	Y
5	IC 410-233459/14	5.0	35.136154	50.0	149941.0	7.027231	Y
6	ICIS 410-233459/13	10.0	63.272816	50.0	147286.0	6.327282	Y
7	IC 410-233459/12	25.0	163.247892	50.0	150473.0	6.529916	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

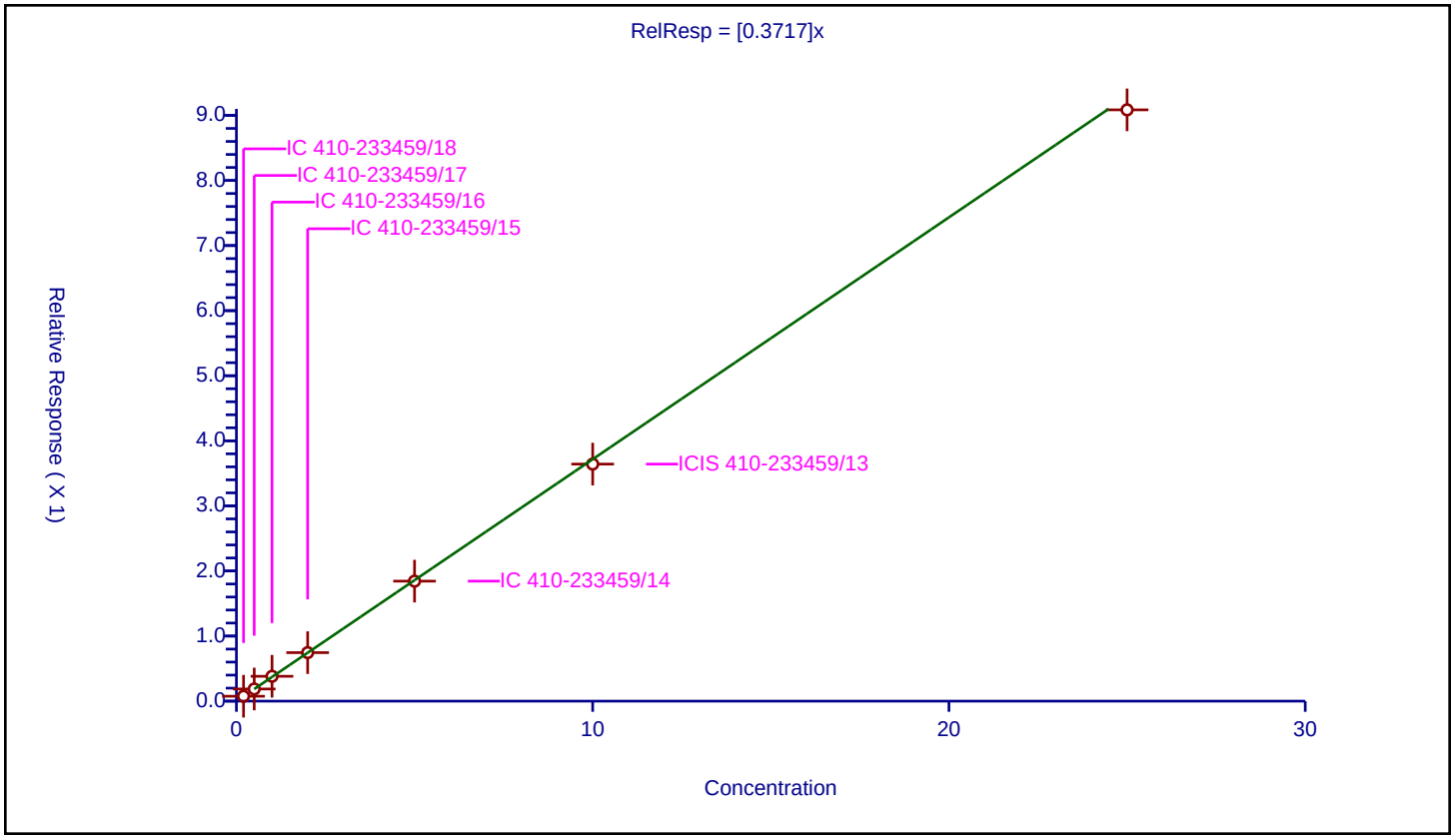
Curve Coefficients

Intercept:	0
Slope:	0.3717

Error Coefficients

Standard Error:	811000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.075387	10.0	2021821.0	0.376937	Y
2	IC 410-233459/17	0.5	0.186812	10.0	2017326.0	0.373623	Y
3	IC 410-233459/16	1.0	0.382094	10.0	2010448.0	0.382094	Y
4	IC 410-233459/15	2.0	0.745245	10.0	2005717.0	0.372622	Y
5	IC 410-233459/14	5.0	1.843884	10.0	2008310.0	0.368777	Y
6	ICIS 410-233459/13	10.0	3.642445	10.0	2018353.0	0.364245	Y
7	IC 410-233459/12	25.0	9.085185	10.0	1979820.0	0.363407	Y



Calibration / Methylene Chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

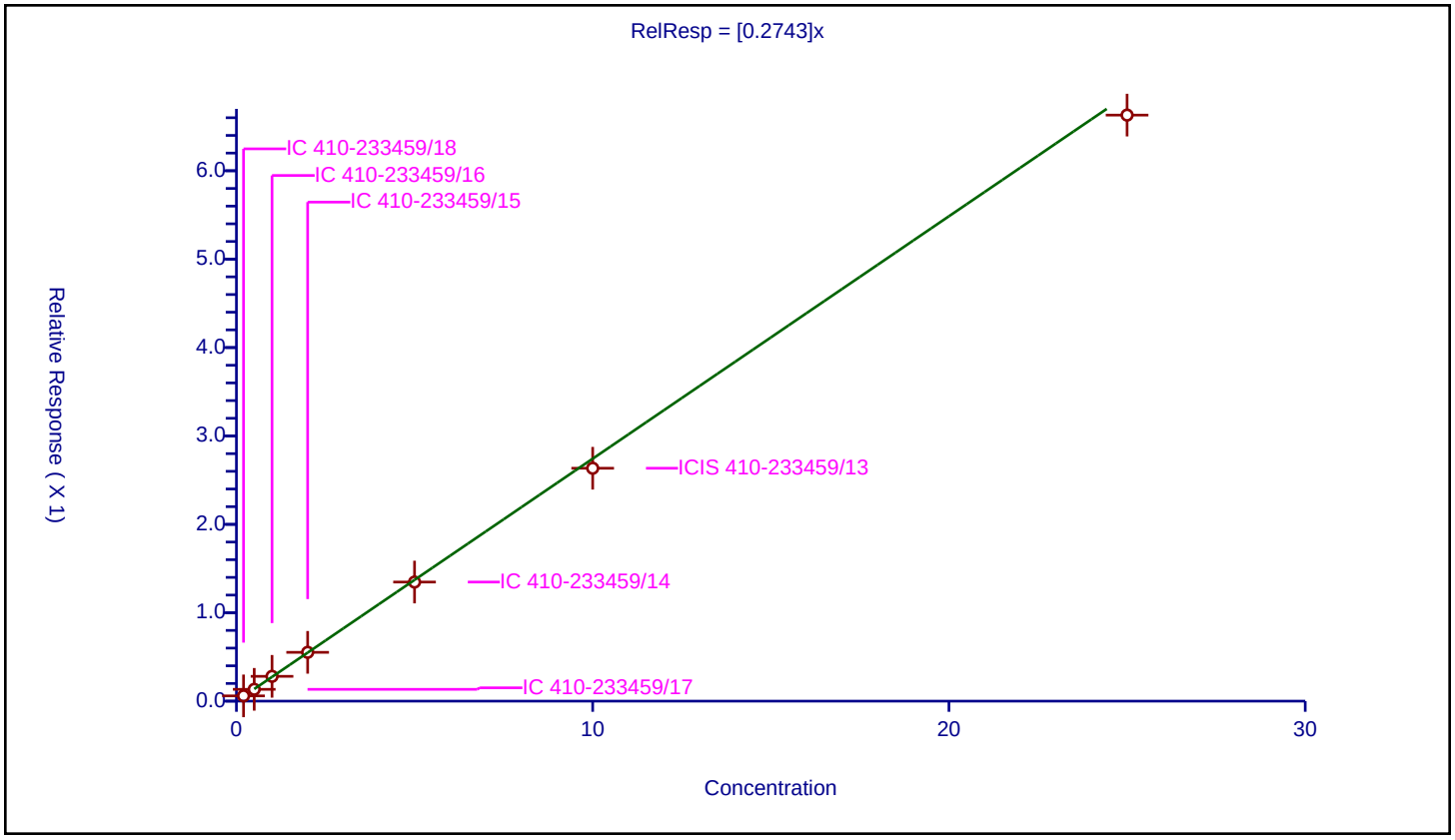
Curve Coefficients

Intercept:	0
Slope:	0.2743

Error Coefficients

Standard Error:	591000
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 410-233459/18	0.2	0.059629	10.0	2021821.0	0.298147	Y
2	IC 410-233459/17	0.5	0.133513	10.0	2017326.0	0.267027	Y
3	IC 410-233459/16	1.0	0.28052	10.0	2010448.0	0.28052	Y
4	IC 410-233459/15	2.0	0.552142	10.0	2005717.0	0.276071	Y
5	IC 410-233459/14	5.0	1.347187	10.0	2008310.0	0.269437	Y
6	ICIS 410-233459/13	10.0	2.634807	10.0	2018353.0	0.263481	Y
7	IC 410-233459/12	25.0	6.62987	10.0	1979820.0	0.265195	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

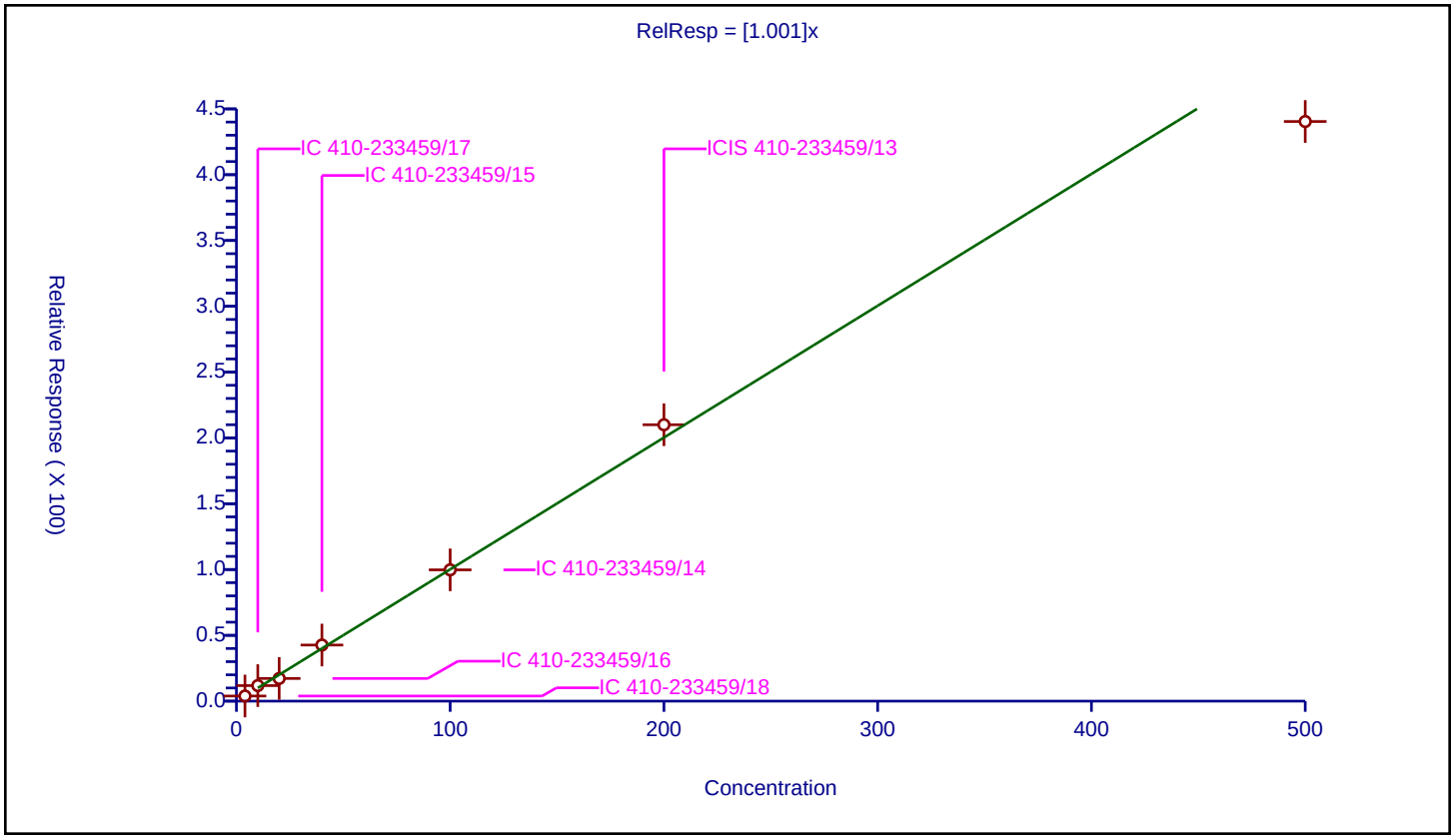
Curve Coefficients

Intercept:	0
Slope:	1.001

Error Coefficients

Standard Error:	612000
Relative Standard Error:	11.1
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	4.0	3.890267	50.0	155632.0	0.972567	Y
2	IC 410-233459/17	10.0	11.81259	50.0	134454.0	1.181259	Y
3	IC 410-233459/16	20.0	17.229052	50.0	144059.0	0.861453	Y
4	IC 410-233459/15	40.0	42.634839	50.0	140927.0	1.065871	Y
5	IC 410-233459/14	100.0	99.764908	50.0	149941.0	0.997649	Y
6	ICIS 410-233459/13	200.0	210.00129	50.0	147286.0	1.050006	Y
7	IC 410-233459/12	500.0	440.422534	50.0	150473.0	0.880845	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

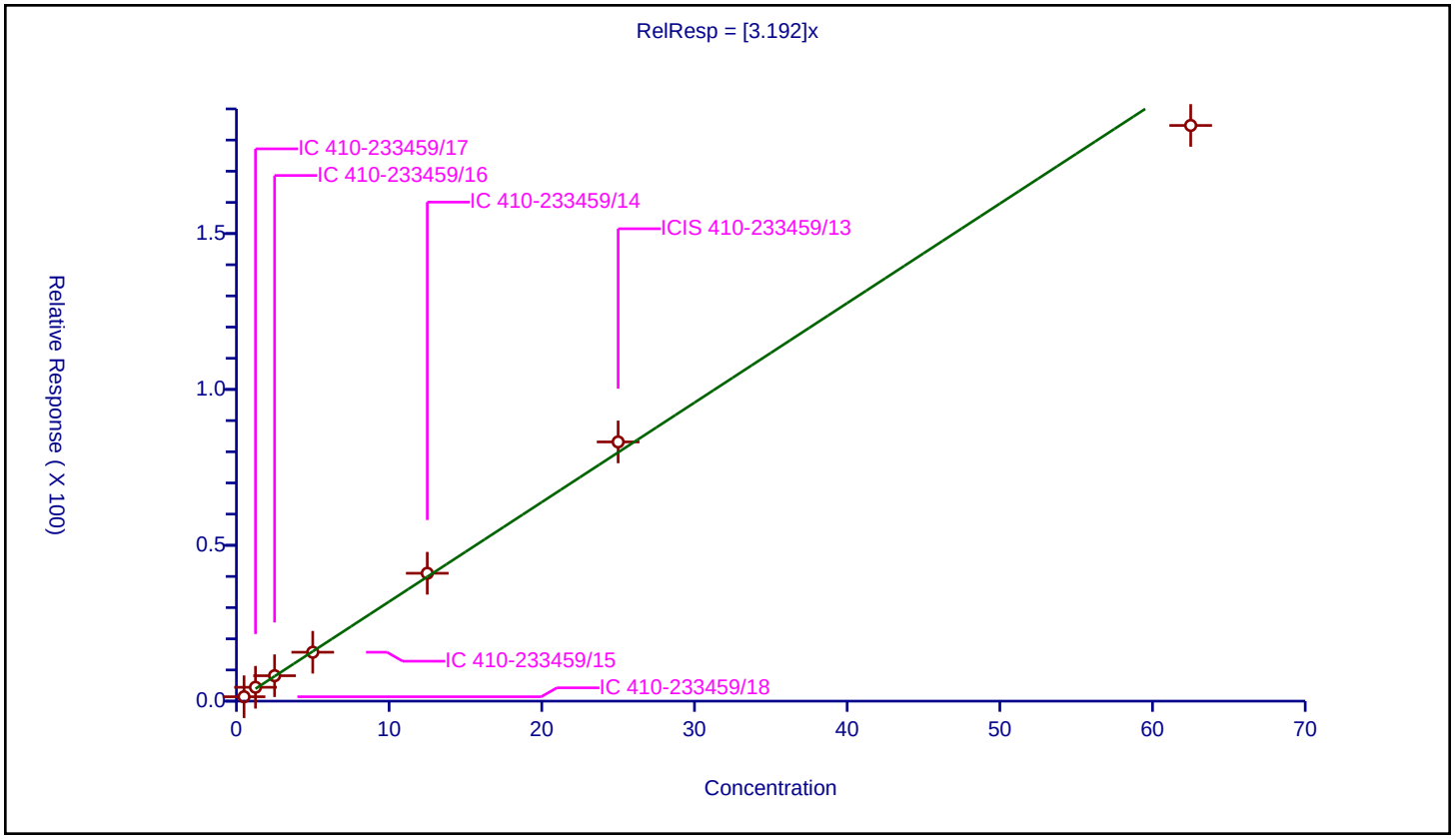
Curve Coefficients

Intercept:	0
Slope:	3.192

Error Coefficients

Standard Error:	254000
Relative Standard Error:	7.7
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.5	1.411985	50.0	155632.0	2.823969	Y
2	IC 410-233459/17	1.25	4.447618	50.0	134454.0	3.558094	Y
3	IC 410-233459/16	2.5	8.15291	50.0	144059.0	3.261164	Y
4	IC 410-233459/15	5.0	15.690748	50.0	140927.0	3.13815	Y
5	IC 410-233459/14	12.5	41.024136	50.0	149941.0	3.281931	Y
6	ICIS 410-233459/13	25.0	83.161332	50.0	147286.0	3.326453	Y
7	IC 410-233459/12	62.5	184.687951	50.0	150473.0	2.955007	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

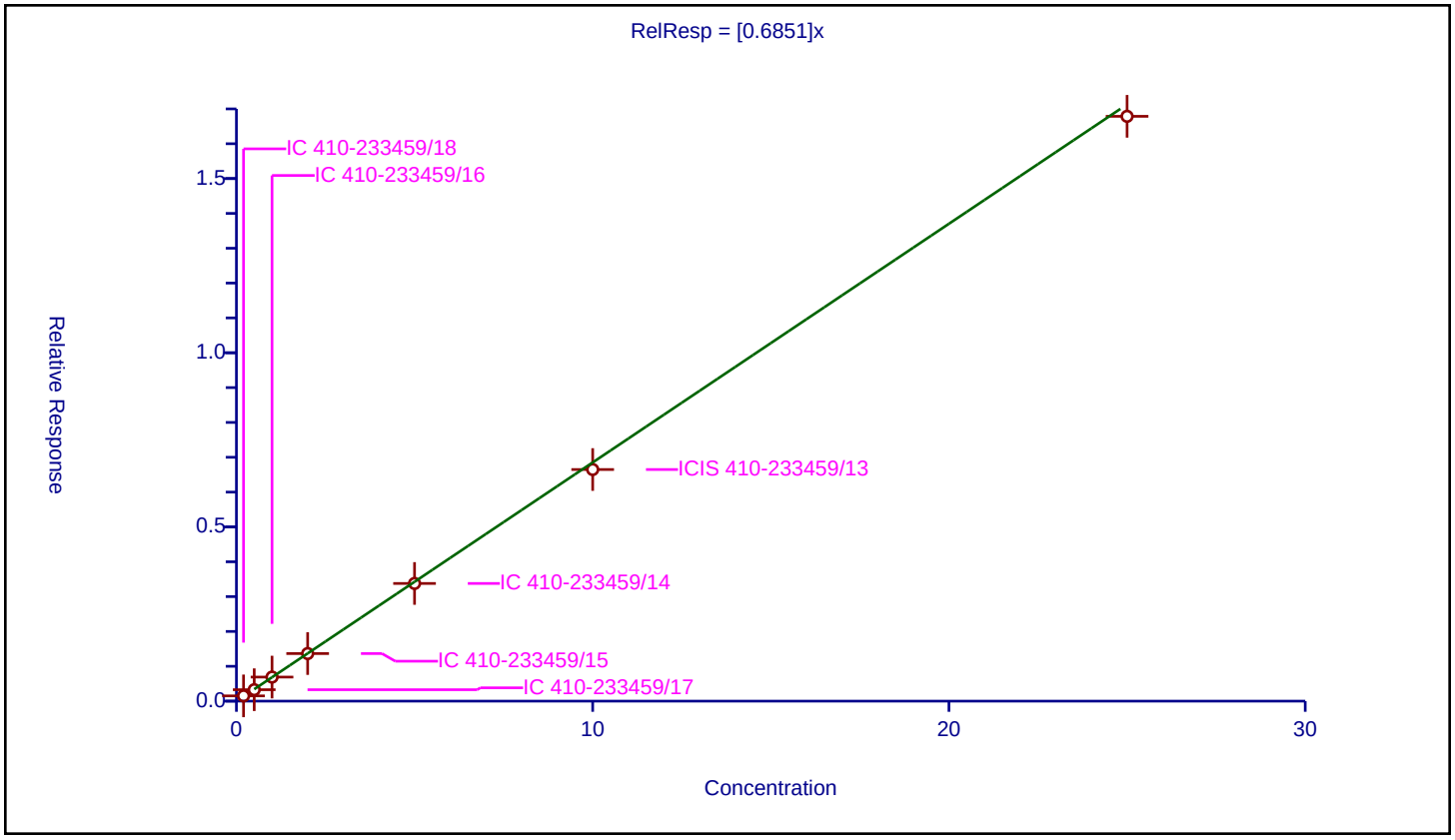
Curve Coefficients

Intercept:	0
Slope:	0.6851

Error Coefficients

Standard Error:	1490000
Relative Standard Error:	4.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.150844	10.0	2021821.0	0.754221	Y
2	IC 410-233459/17	0.5	0.328142	10.0	2017326.0	0.656285	Y
3	IC 410-233459/16	1.0	0.690503	10.0	2010448.0	0.690503	Y
4	IC 410-233459/15	2.0	1.366065	10.0	2005717.0	0.683033	Y
5	IC 410-233459/14	5.0	3.378194	10.0	2008310.0	0.675639	Y
6	ICIS 410-233459/13	10.0	6.648337	10.0	2018353.0	0.664834	Y
7	IC 410-233459/12	25.0	16.786324	10.0	1979820.0	0.671453	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

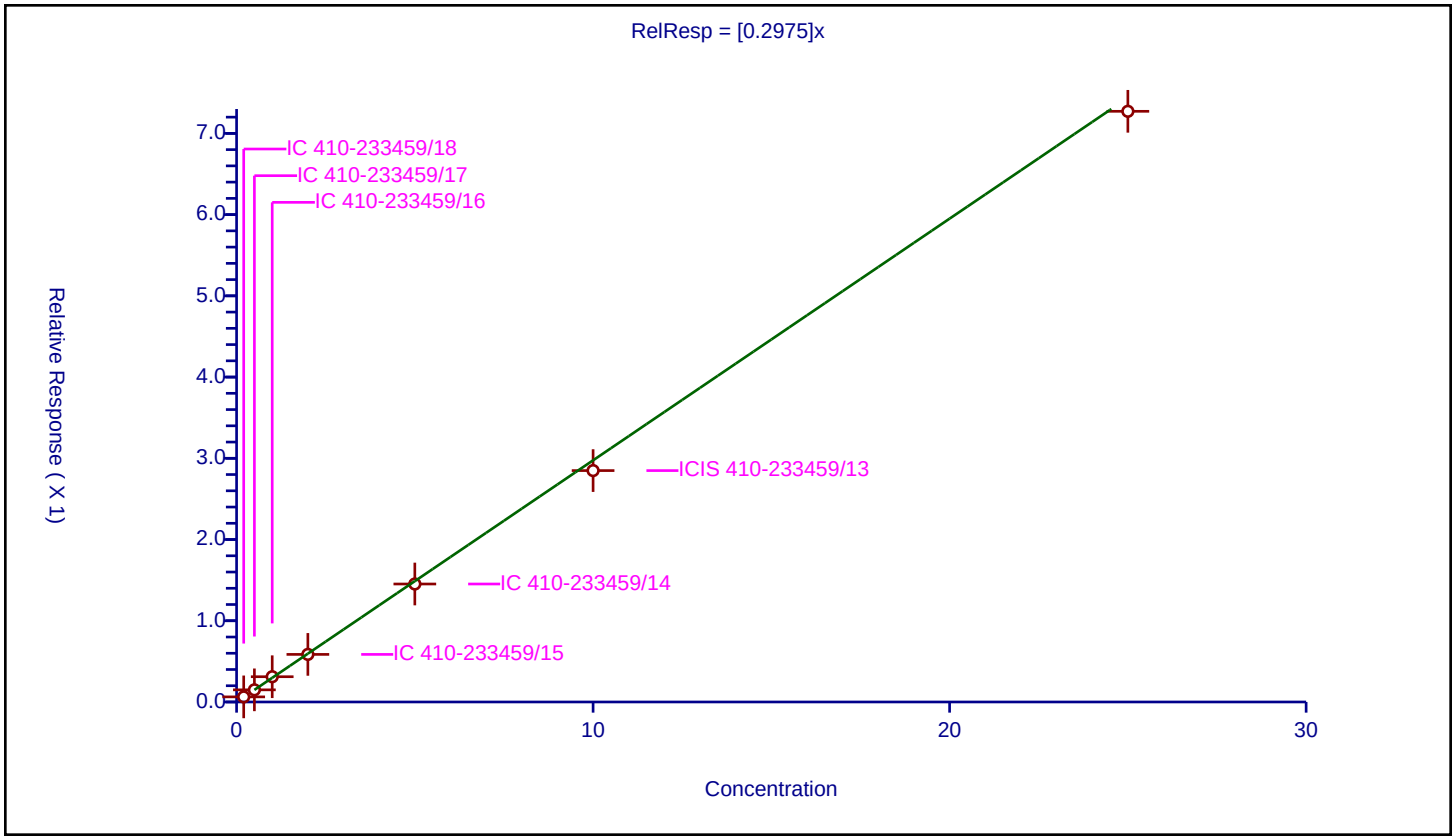
Curve Coefficients

Intercept:	0
Slope:	0.2975

Error Coefficients

Standard Error:	646000
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 410-233459/18	0.2	0.062716	10.0	2021821.0	0.313579	Y
2	IC 410-233459/17	0.5	0.14949	10.0	2017326.0	0.29898	Y
3	IC 410-233459/16	1.0	0.310941	10.0	2010448.0	0.310941	Y
4	IC 410-233459/15	2.0	0.585726	10.0	2005717.0	0.292863	Y
5	IC 410-233459/14	5.0	1.45254	10.0	2008310.0	0.290508	Y
6	ICIS 410-233459/13	10.0	2.848818	10.0	2018353.0	0.284882	Y
7	IC 410-233459/12	25.0	7.271626	10.0	1979820.0	0.290865	Y



Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

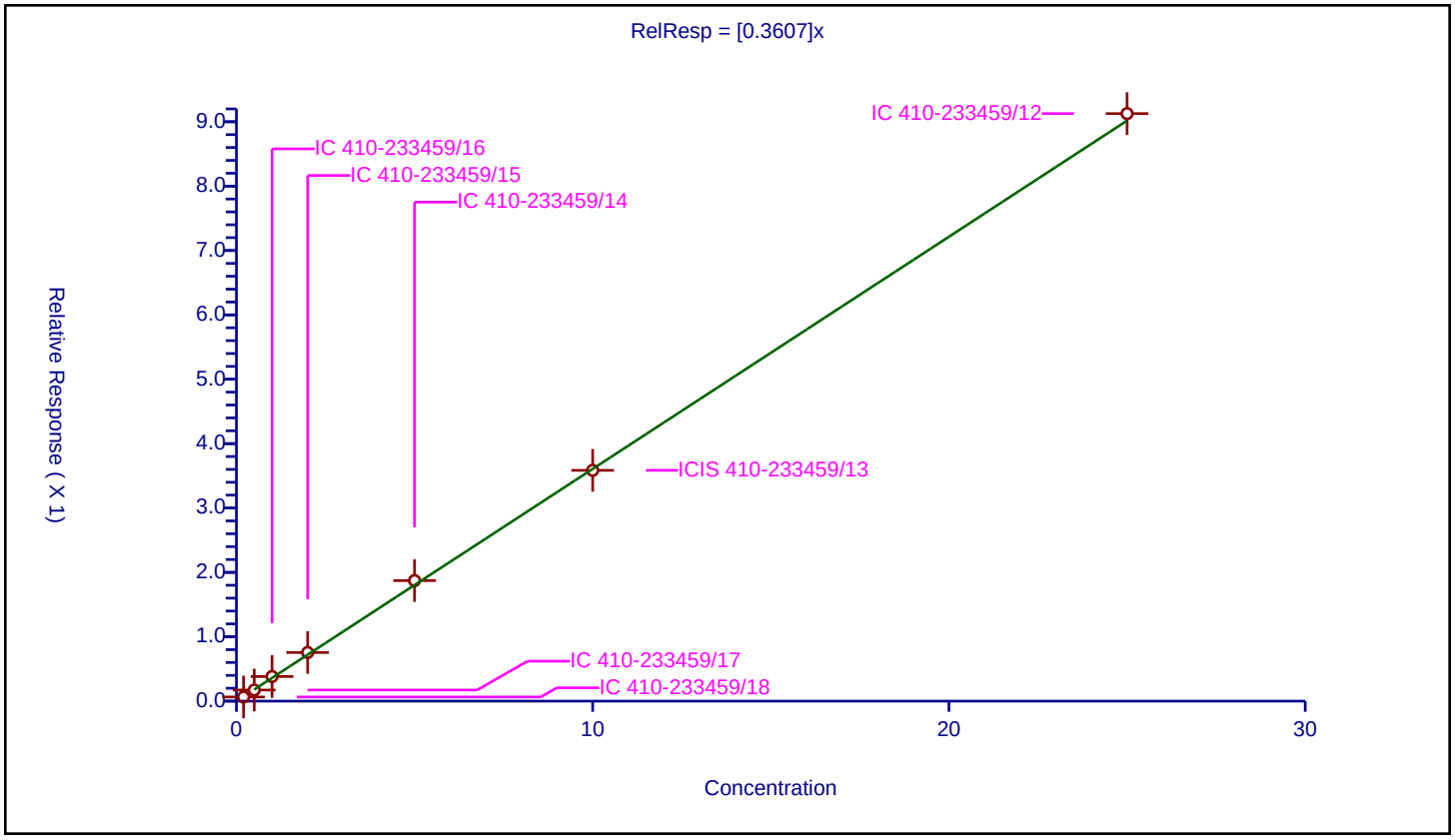
Curve Coefficients

Intercept:	0
Slope:	0.3607

Error Coefficients

Standard Error:	812000
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 410-233459/18	0.2	0.064214	10.0	2021821.0	0.321072	Y
2	IC 410-233459/17	0.5	0.172634	10.0	2017326.0	0.345269	Y
3	IC 410-233459/16	1.0	0.382676	10.0	2010448.0	0.382676	Y
4	IC 410-233459/15	2.0	0.7555	10.0	2005717.0	0.37775	Y
5	IC 410-233459/14	5.0	1.872943	10.0	2008310.0	0.374589	Y
6	ICIS 410-233459/13	10.0	3.585245	10.0	2018353.0	0.358524	Y
7	IC 410-233459/12	25.0	9.126734	10.0	1979820.0	0.365069	Y



Calibration / 1,1-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

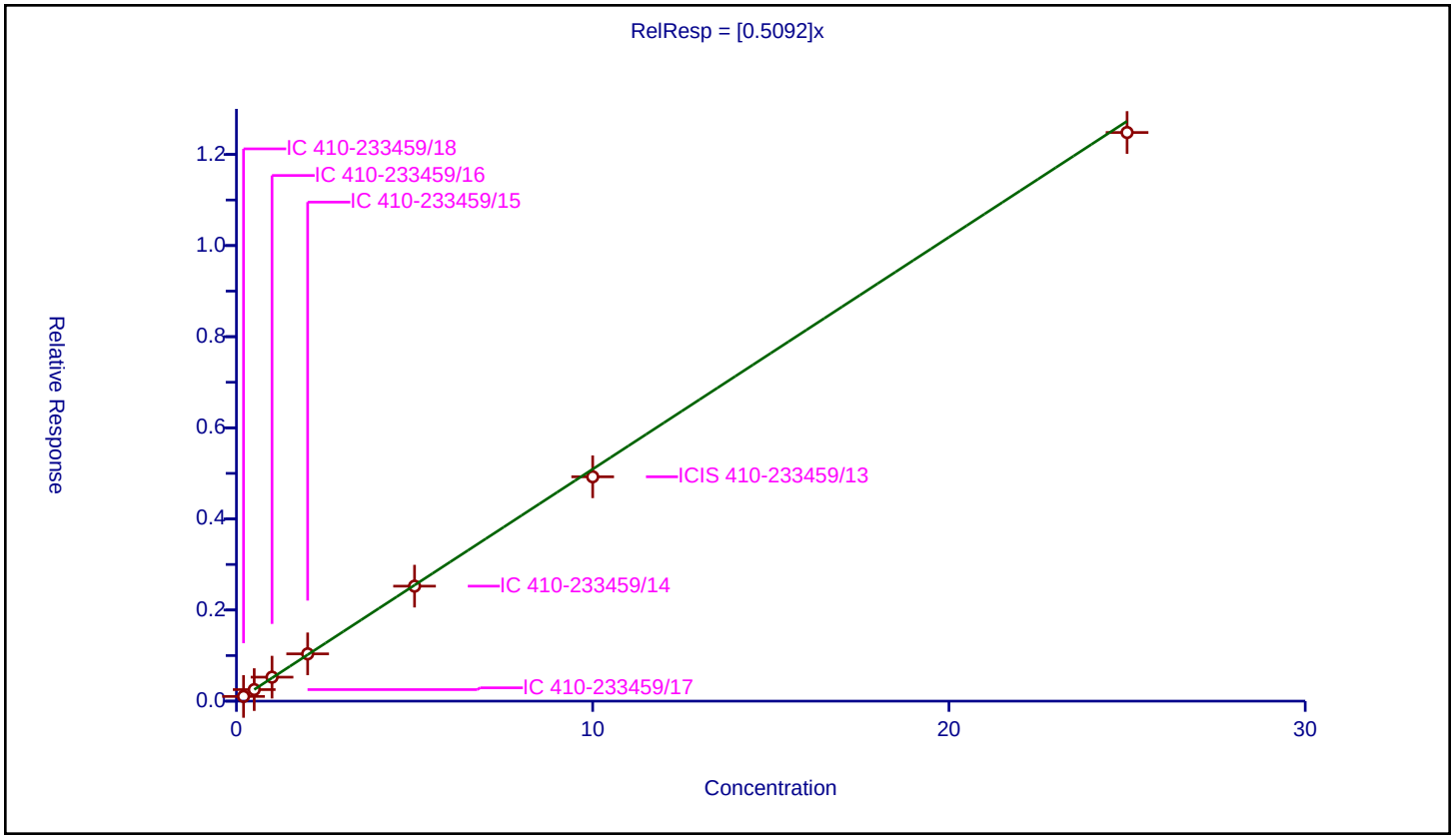
Curve Coefficients

Intercept:	0
Slope:	0.5092

Error Coefficients

Standard Error:	1110000
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.10309	10.0	2021821.0	0.515451	Y
2	IC 410-233459/17	0.5	0.25342	10.0	2017326.0	0.506839	Y
3	IC 410-233459/16	1.0	0.526694	10.0	2010448.0	0.526694	Y
4	IC 410-233459/15	2.0	1.037948	10.0	2005717.0	0.518974	Y
5	IC 410-233459/14	5.0	2.524202	10.0	2008310.0	0.50484	Y
6	ICIS 410-233459/13	10.0	4.924352	10.0	2018353.0	0.492435	Y
7	IC 410-233459/12	25.0	12.482306	10.0	1979820.0	0.499292	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

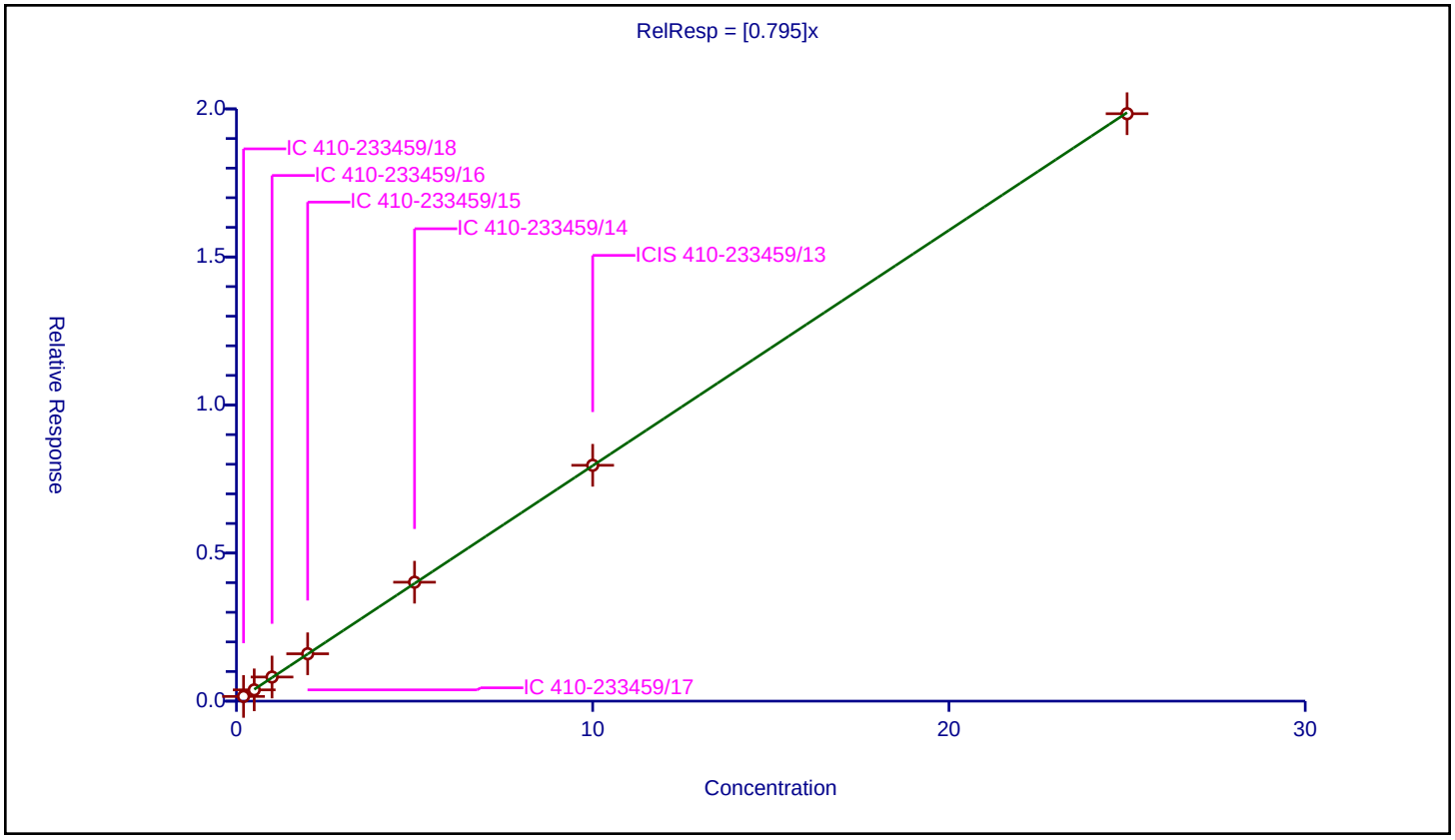
Curve Coefficients

Intercept:	0
Slope:	0.795

Error Coefficients

Standard Error:	1770000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.159173	10.0	2021821.0	0.795867	Y
2	IC 410-233459/17	0.5	0.381158	10.0	2017326.0	0.762316	Y
3	IC 410-233459/16	1.0	0.813978	10.0	2010448.0	0.813978	Y
4	IC 410-233459/15	2.0	1.599952	10.0	2005717.0	0.799976	Y
5	IC 410-233459/14	5.0	4.016417	10.0	2008310.0	0.803283	Y
6	ICIS 410-233459/13	10.0	7.96441	10.0	2018353.0	0.796441	Y
7	IC 410-233459/12	25.0	19.83701	10.0	1979820.0	0.79348	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

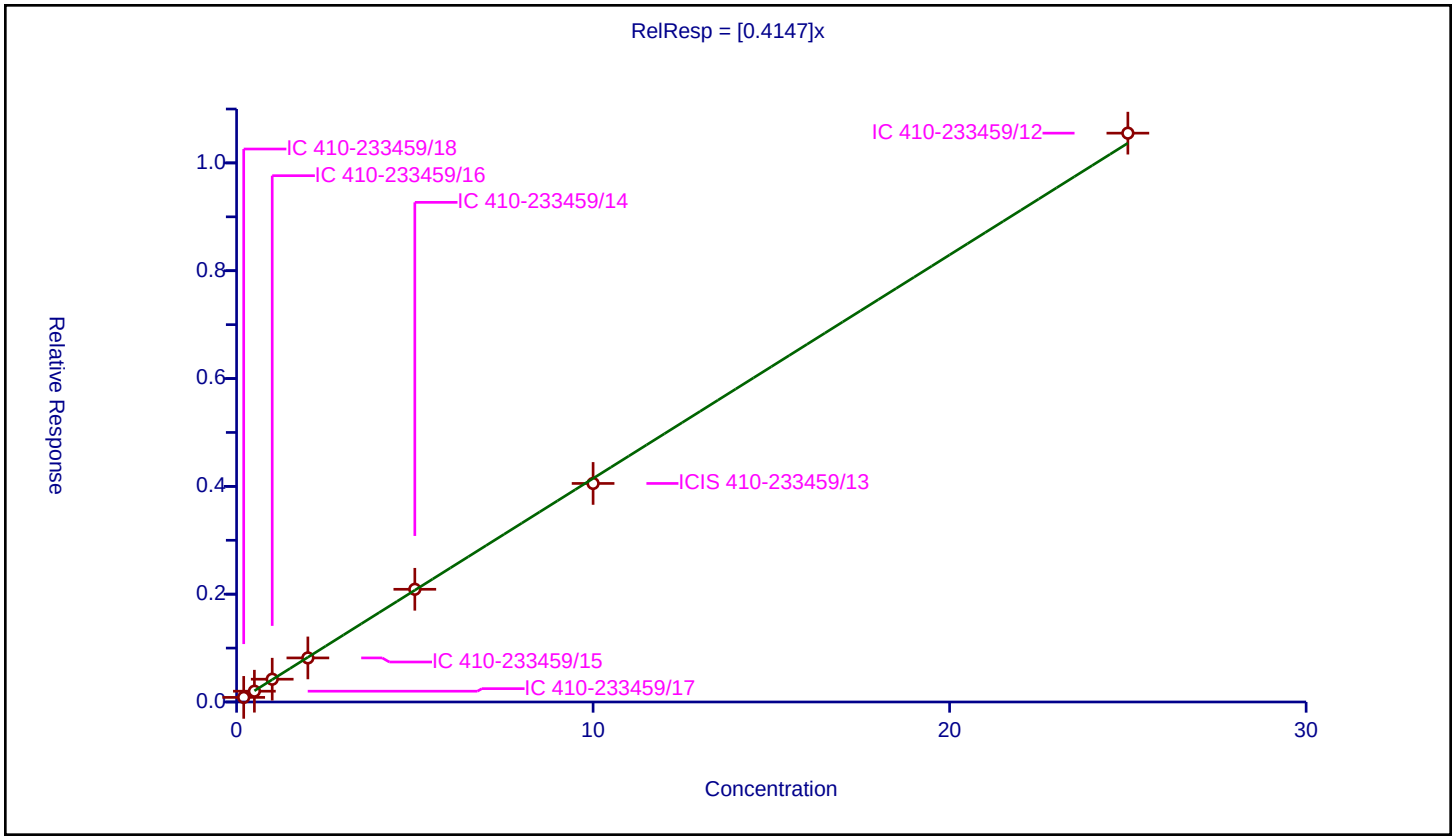
Curve Coefficients

Intercept:	0
Slope:	0.4147

Error Coefficients

Standard Error:	935000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.085126	10.0	2021821.0	0.425631	Y
2	IC 410-233459/17	0.5	0.200161	10.0	2017326.0	0.400322	Y
3	IC 410-233459/16	1.0	0.422508	10.0	2010448.0	0.422508	Y
4	IC 410-233459/15	2.0	0.817453	10.0	2005717.0	0.408727	Y
5	IC 410-233459/14	5.0	2.090753	10.0	2008310.0	0.418151	Y
6	ICIS 410-233459/13	10.0	4.054212	10.0	2018353.0	0.405421	Y
7	IC 410-233459/12	25.0	10.55255	10.0	1979820.0	0.422102	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

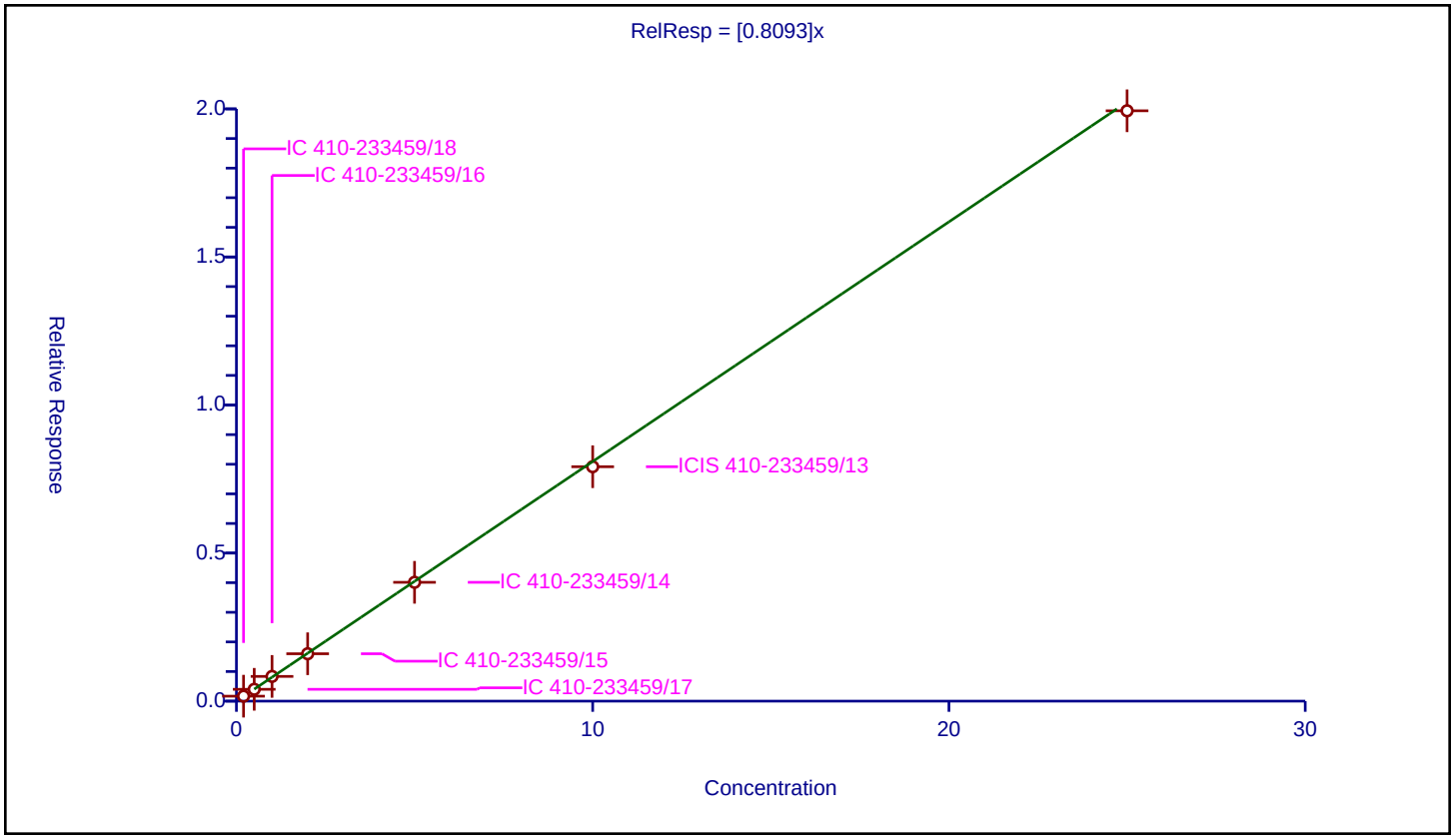
Curve Coefficients

Intercept:	0
Slope:	0.8093

Error Coefficients

Standard Error:	1780000
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.167596	10.0	2021821.0	0.837982	Y
2	IC 410-233459/17	0.5	0.400025	10.0	2017326.0	0.800049	Y
3	IC 410-233459/16	1.0	0.835078	10.0	2010448.0	0.835078	Y
4	IC 410-233459/15	2.0	1.60043	10.0	2005717.0	0.800215	Y
5	IC 410-233459/14	5.0	4.012857	10.0	2008310.0	0.802571	Y
6	ICIS 410-233459/13	10.0	7.9159	10.0	2018353.0	0.79159	Y
7	IC 410-233459/12	25.0	19.936519	10.0	1979820.0	0.797461	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

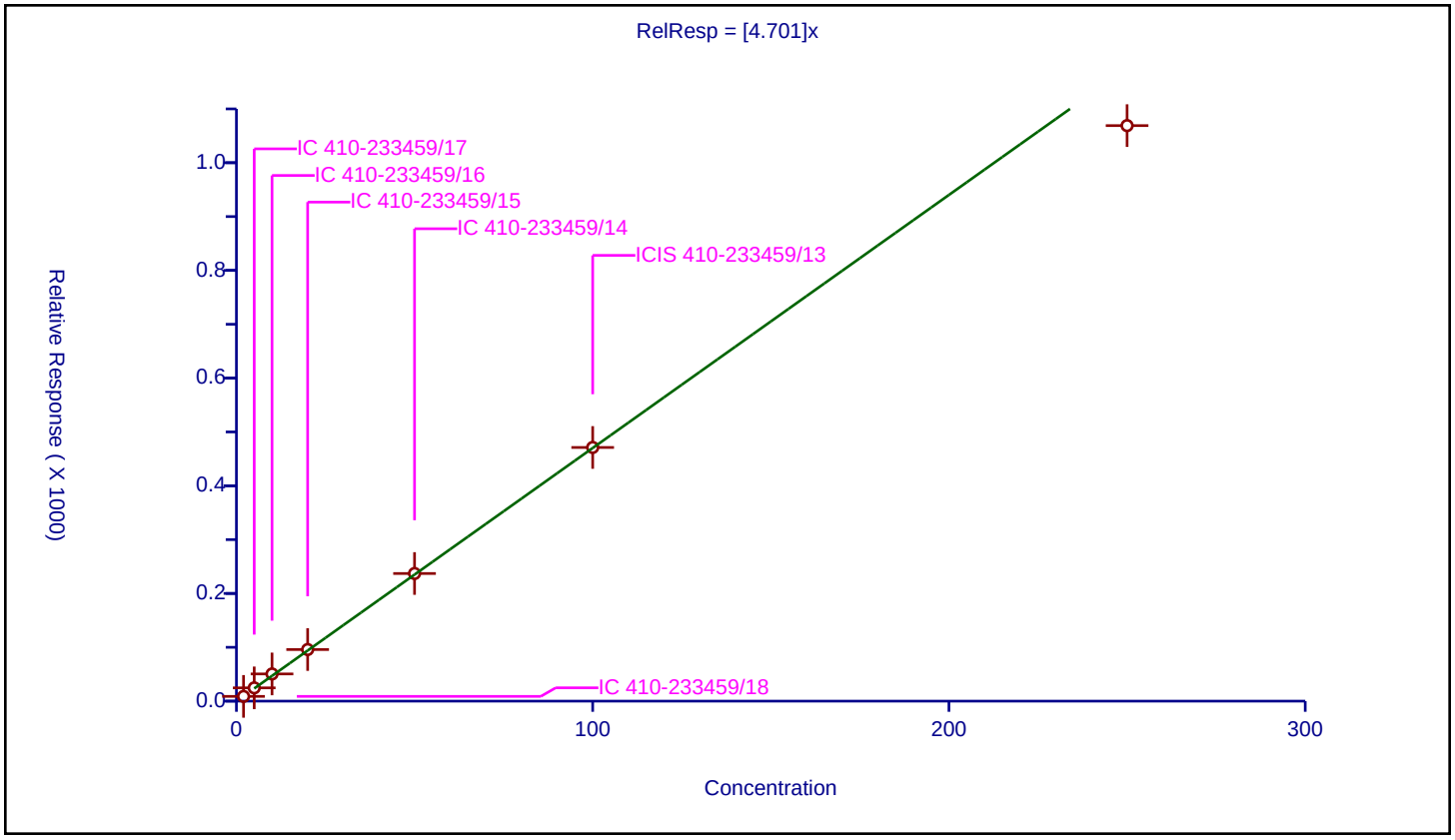
Curve Coefficients

Intercept:	0
Slope:	4.701

Error Coefficients

Standard Error:	1460000
Relative Standard Error:	5.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	2.0	8.807636	50.0	155632.0	4.403818	Y
2	IC 410-233459/17	5.0	24.663826	50.0	134454.0	4.932765	Y
3	IC 410-233459/16	10.0	50.508819	50.0	144059.0	5.050882	Y
4	IC 410-233459/15	20.0	95.850334	50.0	140927.0	4.792517	Y
5	IC 410-233459/14	50.0	237.058576	50.0	149941.0	4.741172	Y
6	ICIS 410-233459/13	100.0	471.136428	50.0	147286.0	4.711364	Y
7	IC 410-233459/12	250.0	1068.914024	50.0	150473.0	4.275656	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

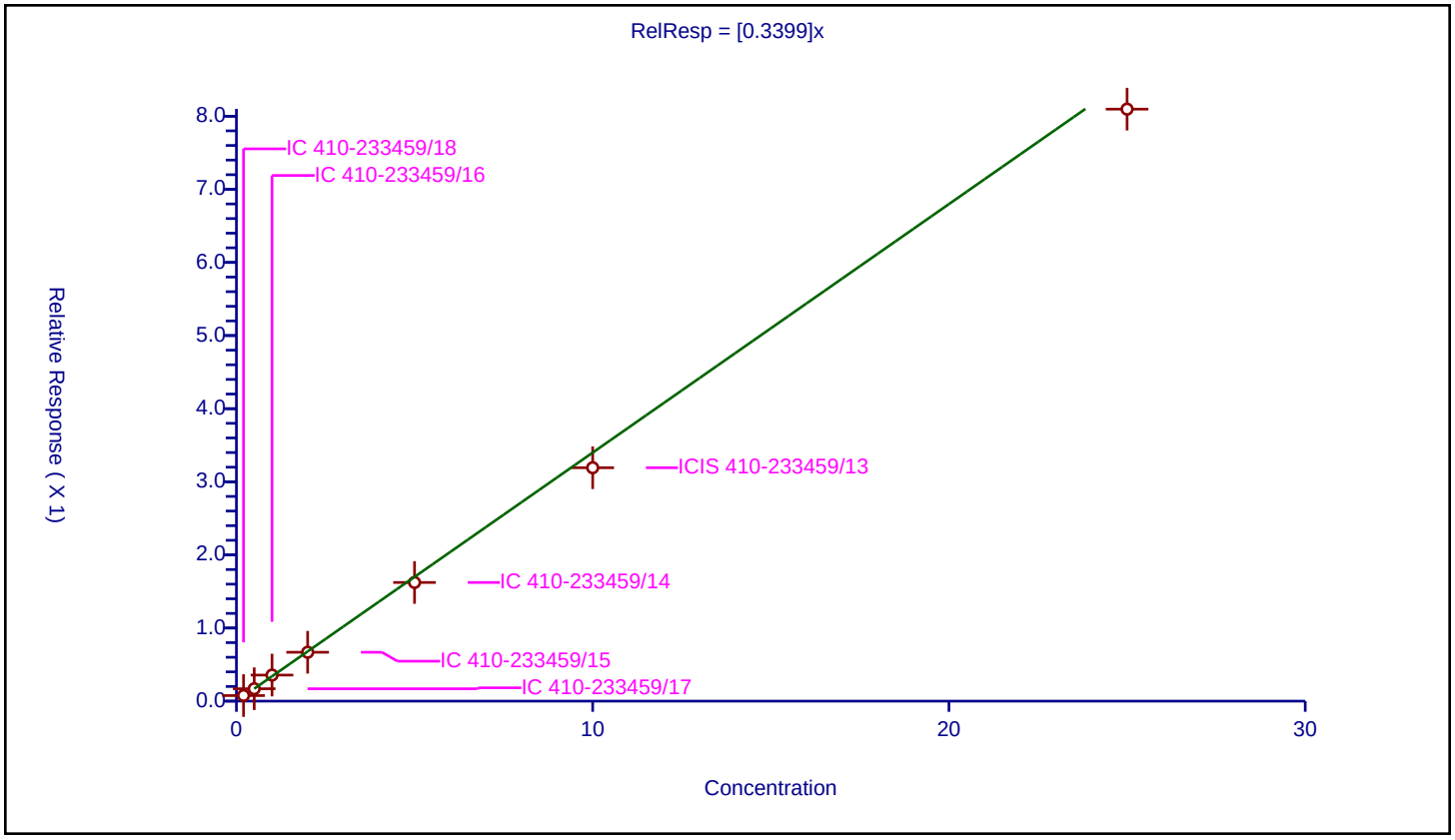
Curve Coefficients

Intercept:	0
Slope:	0.3399

Error Coefficients

Standard Error:	721000
Relative Standard Error:	6.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.076327	10.0	2021821.0	0.381636	Y
2	IC 410-233459/17	0.5	0.169715	10.0	2017326.0	0.33943	Y
3	IC 410-233459/16	1.0	0.356319	10.0	2010448.0	0.356319	Y
4	IC 410-233459/15	2.0	0.668594	10.0	2005717.0	0.334297	Y
5	IC 410-233459/14	5.0	1.623111	10.0	2008310.0	0.324622	Y
6	ICIS 410-233459/13	10.0	3.192088	10.0	2018353.0	0.319209	Y
7	IC 410-233459/12	25.0	8.096817	10.0	1979820.0	0.323873	Y



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

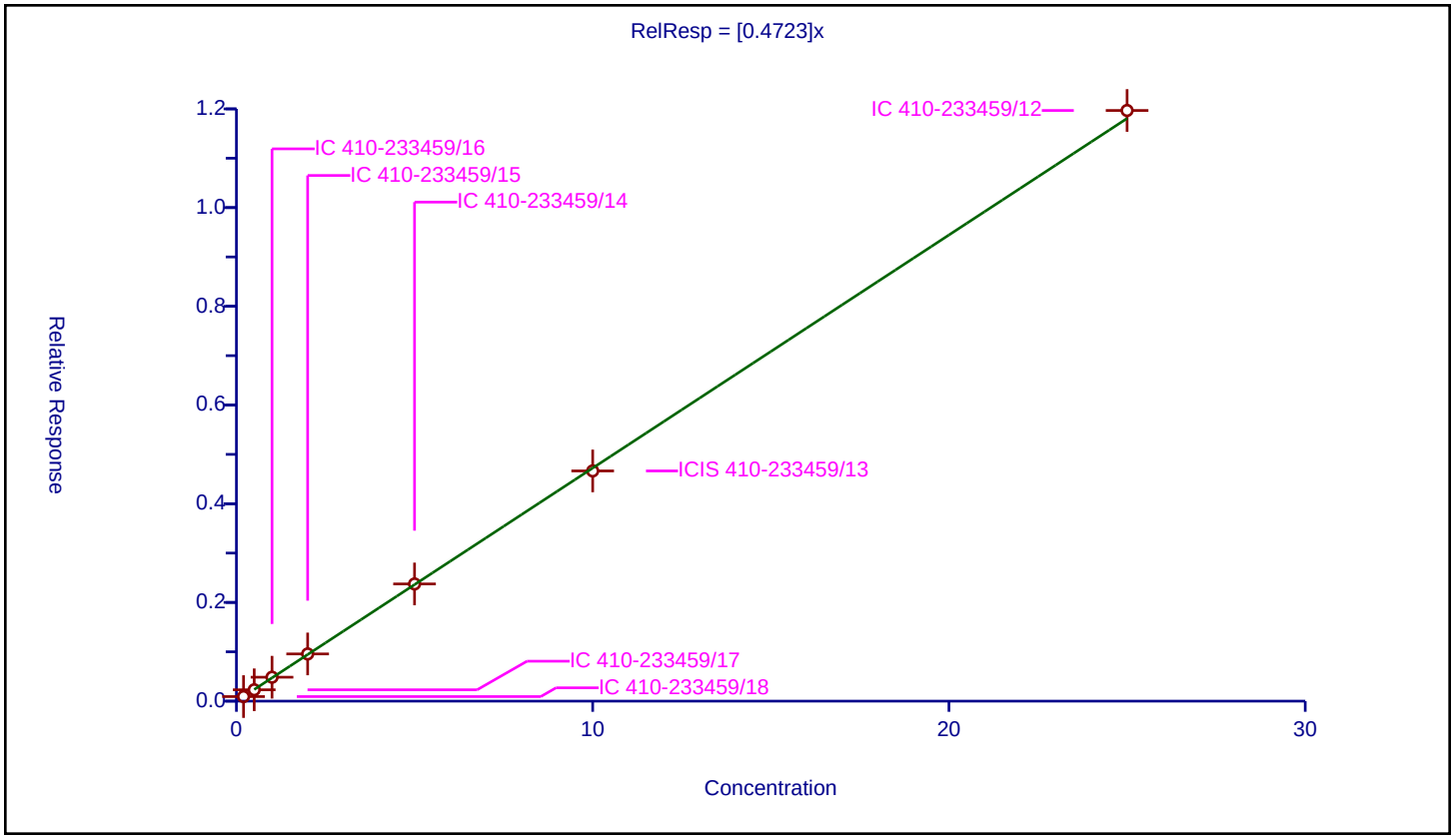
Curve Coefficients

Intercept:	0
Slope:	0.4723

Error Coefficients

Standard Error:	1060000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.092441	10.0	2021821.0	0.462207	Y
2	IC 410-233459/17	0.5	0.23033	10.0	2017326.0	0.460659	Y
3	IC 410-233459/16	1.0	0.484713	10.0	2010448.0	0.484713	Y
4	IC 410-233459/15	2.0	0.956406	10.0	2005717.0	0.478203	Y
5	IC 410-233459/14	5.0	2.374628	10.0	2008310.0	0.474926	Y
6	ICIS 410-233459/13	10.0	4.664362	10.0	2018353.0	0.466436	Y
7	IC 410-233459/12	25.0	11.967835	10.0	1979820.0	0.478713	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

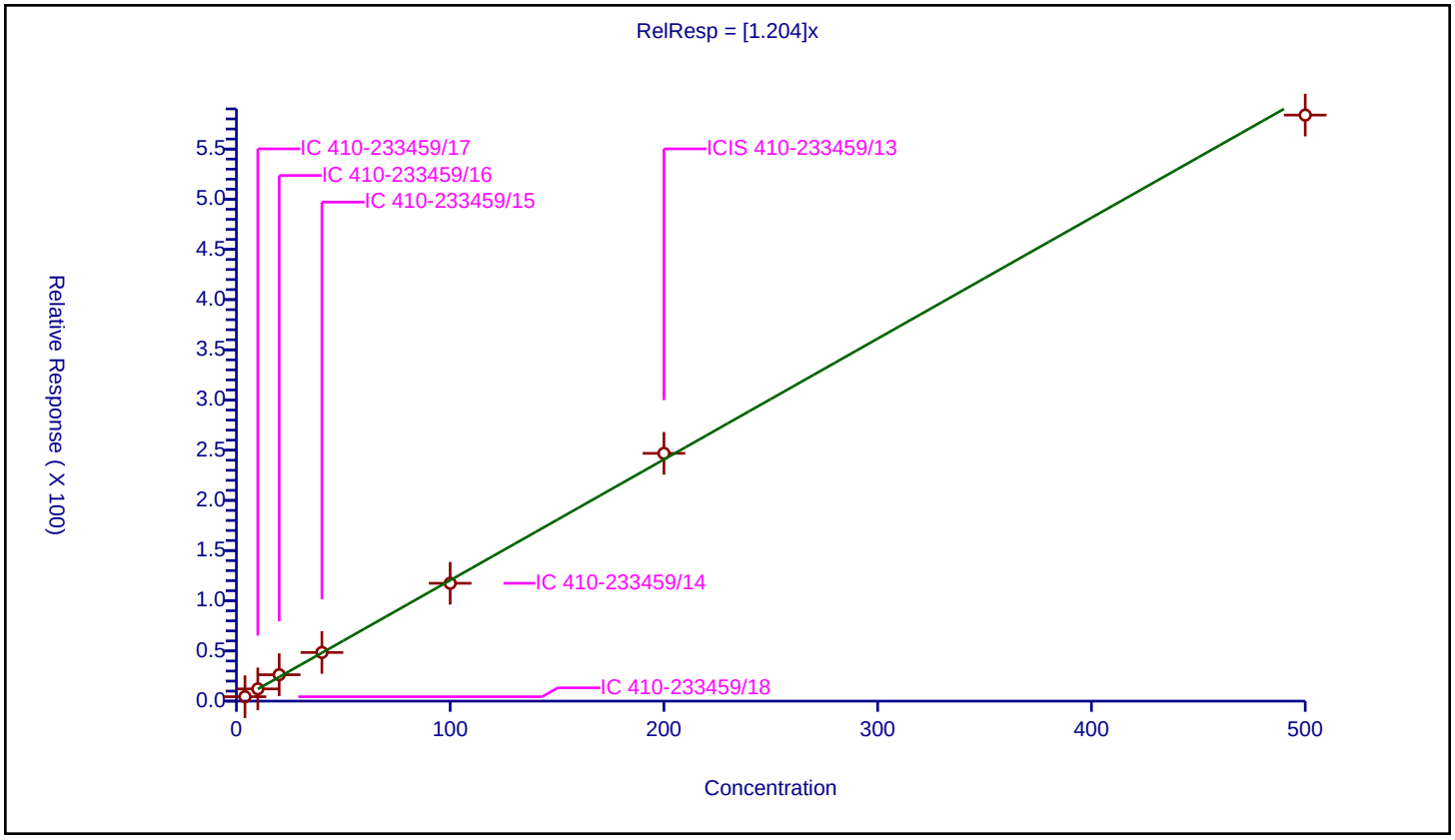
Curve Coefficients

Intercept:	0
Slope:	1.204

Error Coefficients

Standard Error:	792000
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 410-233459/18	4.0	4.411689	50.0	155632.0	1.102922	Y
2	IC 410-233459/17	10.0	12.20343	50.0	134454.0	1.220343	Y
3	IC 410-233459/16	20.0	26.302071	50.0	144059.0	1.315104	Y
4	IC 410-233459/15	40.0	48.489998	50.0	140927.0	1.21225	Y
5	IC 410-233459/14	100.0	117.427855	50.0	149941.0	1.174279	Y
6	ICIS 410-233459/13	200.0	246.848648	50.0	147286.0	1.234243	Y
7	IC 410-233459/12	500.0	583.845939	50.0	150473.0	1.167692	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

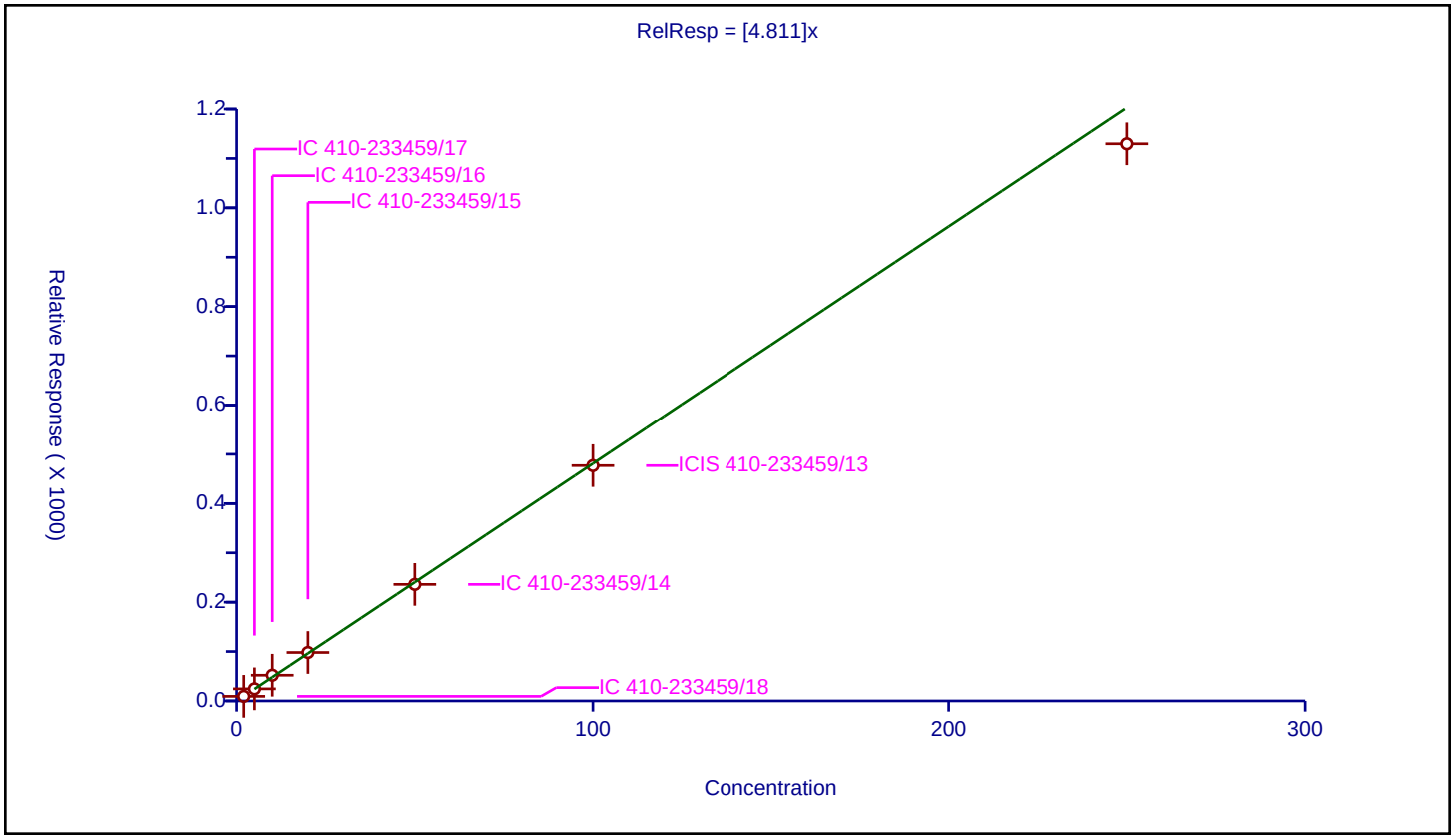
Curve Coefficients

Intercept:	0
Slope:	4.811

Error Coefficients

Standard Error:	1530000
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 410-233459/18	2.0	9.329058	50.0	155632.0	4.664529	Y
2	IC 410-233459/17	5.0	24.469707	50.0	134454.0	4.893941	Y
3	IC 410-233459/16	10.0	52.061308	50.0	144059.0	5.206131	Y
4	IC 410-233459/15	20.0	98.069213	50.0	140927.0	4.903461	Y
5	IC 410-233459/14	50.0	236.071855	50.0	149941.0	4.721437	Y
6	ICIS 410-233459/13	100.0	477.007319	50.0	147286.0	4.770073	Y
7	IC 410-233459/12	250.0	1129.67343	50.0	150473.0	4.518694	Y



Calibration / Chlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

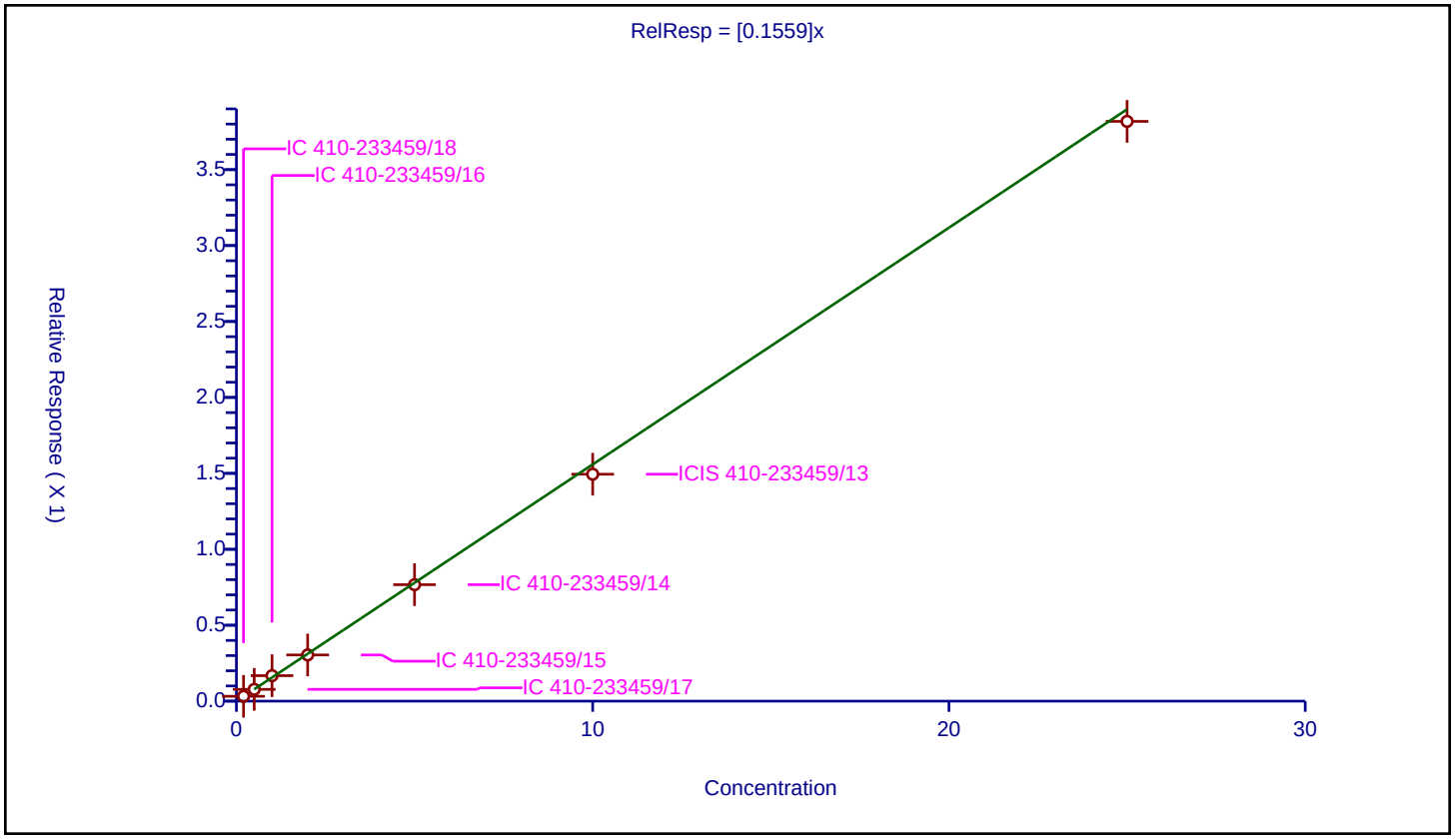
Curve Coefficients

Intercept:	0
Slope:	0.1559

Error Coefficients

Standard Error:	339000
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 410-233459/18	0.2	0.032085	10.0	2021821.0	0.160425	Y
2	IC 410-233459/17	0.5	0.077672	10.0	2017326.0	0.155344	Y
3	IC 410-233459/16	1.0	0.167774	10.0	2010448.0	0.167774	Y
4	IC 410-233459/15	2.0	0.304285	10.0	2005717.0	0.152143	Y
5	IC 410-233459/14	5.0	0.766799	10.0	2008310.0	0.15336	Y
6	ICIS 410-233459/13	10.0	1.494352	10.0	2018353.0	0.149435	Y
7	IC 410-233459/12	25.0	3.81768	10.0	1979820.0	0.152707	Y



Calibration / Tetrahydrofuran

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

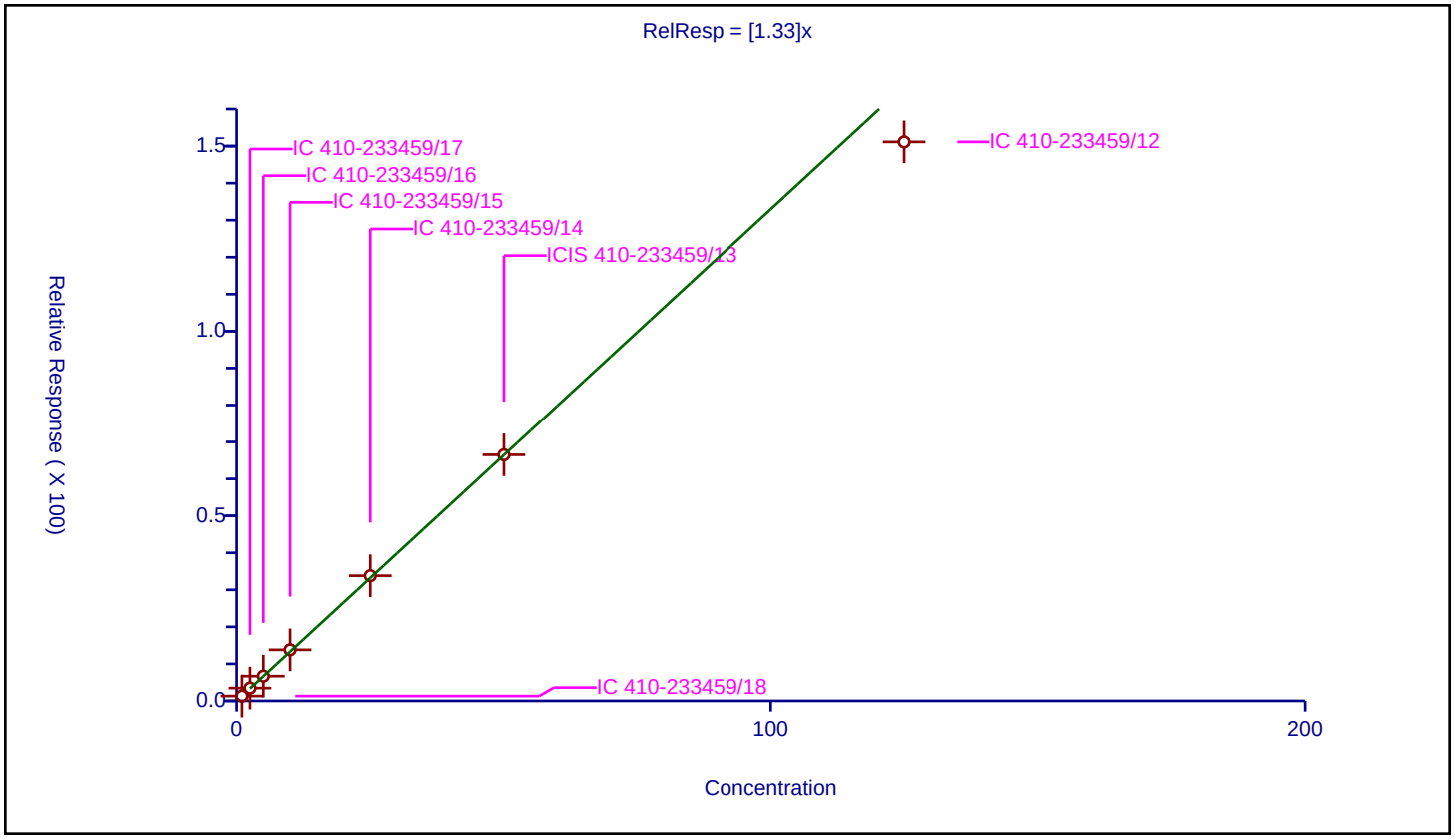
Curve Coefficients

Intercept:	0
Slope:	1.33

Error Coefficients

Standard Error:	207000
Relative Standard Error:	4.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	1.0	1.312712	50.0	155632.0	1.312712	Y
2	IC 410-233459/17	2.5	3.463266	50.0	134454.0	1.385306	Y
3	IC 410-233459/16	5.0	6.687538	50.0	144059.0	1.337508	Y
4	IC 410-233459/15	10.0	13.796859	50.0	140927.0	1.379686	Y
5	IC 410-233459/14	25.0	33.821303	50.0	149941.0	1.352852	Y
6	ICIS 410-233459/13	50.0	66.525671	50.0	147286.0	1.330513	Y
7	IC 410-233459/12	125.0	151.138078	50.0	150473.0	1.209105	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

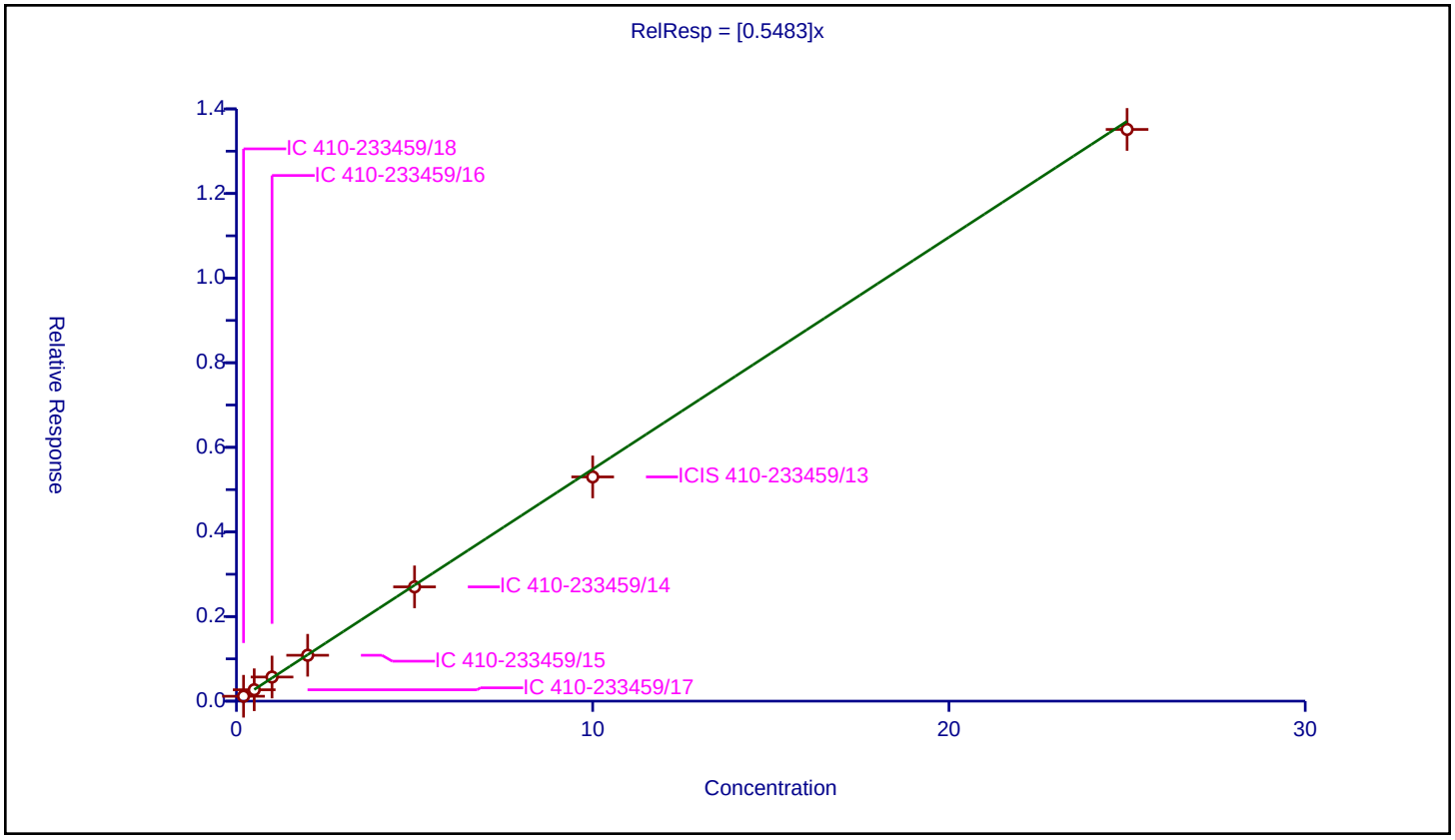
Curve Coefficients

Intercept:	0
Slope:	0.5483

Error Coefficients

Standard Error:	1200000
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 410-233459/18	0.2	0.115445	10.0	2021821.0	0.577227	Y
2	IC 410-233459/17	0.5	0.269024	10.0	2017326.0	0.538049	Y
3	IC 410-233459/16	1.0	0.570047	10.0	2010448.0	0.570047	Y
4	IC 410-233459/15	2.0	1.084315	10.0	2005717.0	0.542158	Y
5	IC 410-233459/14	5.0	2.701421	10.0	2008310.0	0.540284	Y
6	ICIS 410-233459/13	10.0	5.30054	10.0	2018353.0	0.530054	Y
7	IC 410-233459/12	25.0	13.514653	10.0	1979820.0	0.540586	Y



Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

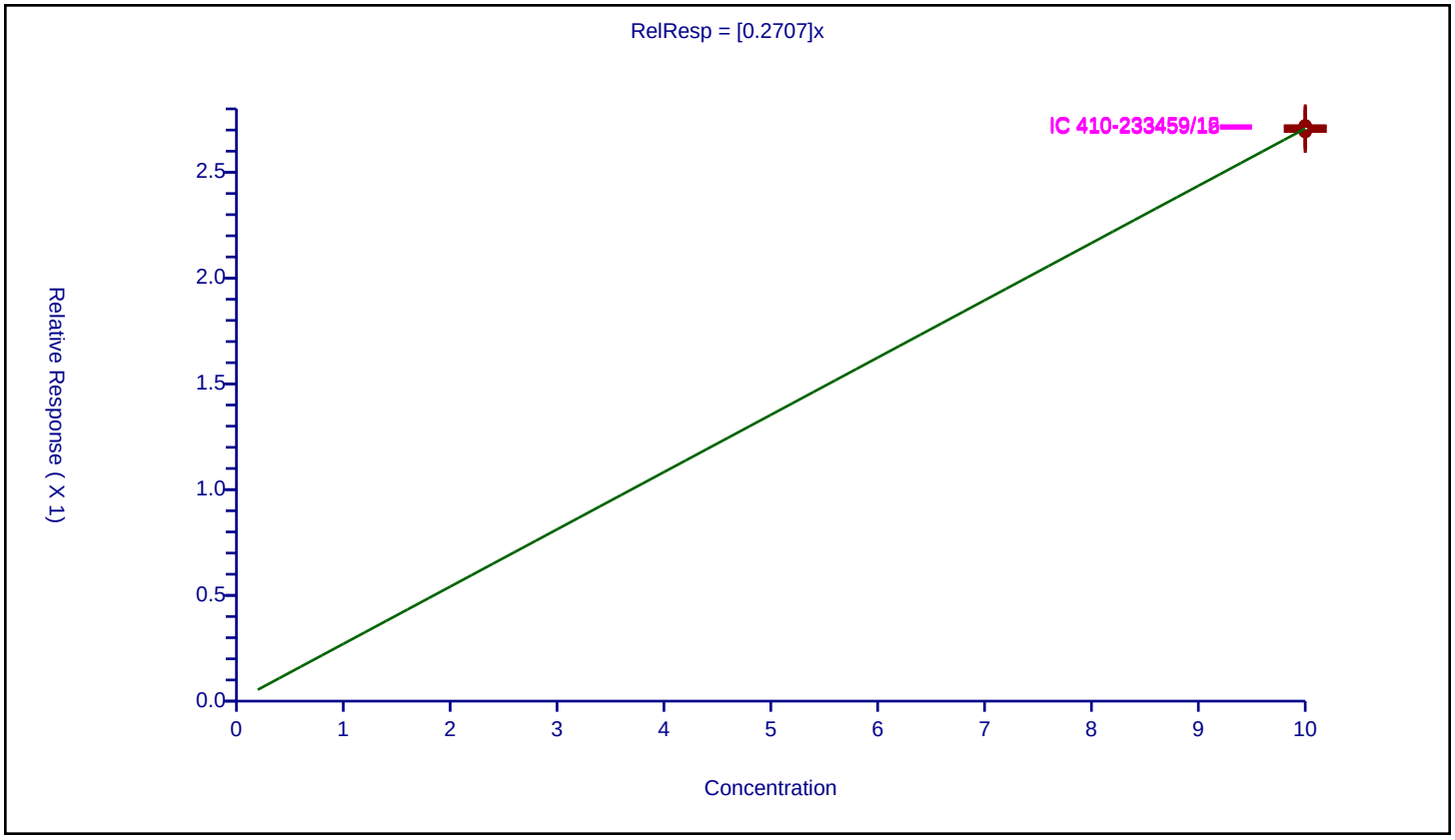
Curve Coefficients

Intercept:	0
Slope:	0.2707

Error Coefficients

Standard Error:	587000
Relative Standard Error:	0.4
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/12	10.0	2.713464	10.0	1979820.0	0.271346	Y
2	ICIS 410-233459/13	10.0	2.701624	10.0	2018353.0	0.270162	Y
3	IC 410-233459/14	10.0	2.693344	10.0	2008310.0	0.269334	Y
4	IC 410-233459/15	10.0	2.718484	10.0	2005717.0	0.271848	Y
5	IC 410-233459/16	10.0	2.720603	10.0	2010448.0	0.27206	Y
6	IC 410-233459/17	10.0	2.693238	10.0	2017326.0	0.269324	Y
7	IC 410-233459/18	10.0	2.708108	10.0	2021821.0	0.270811	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

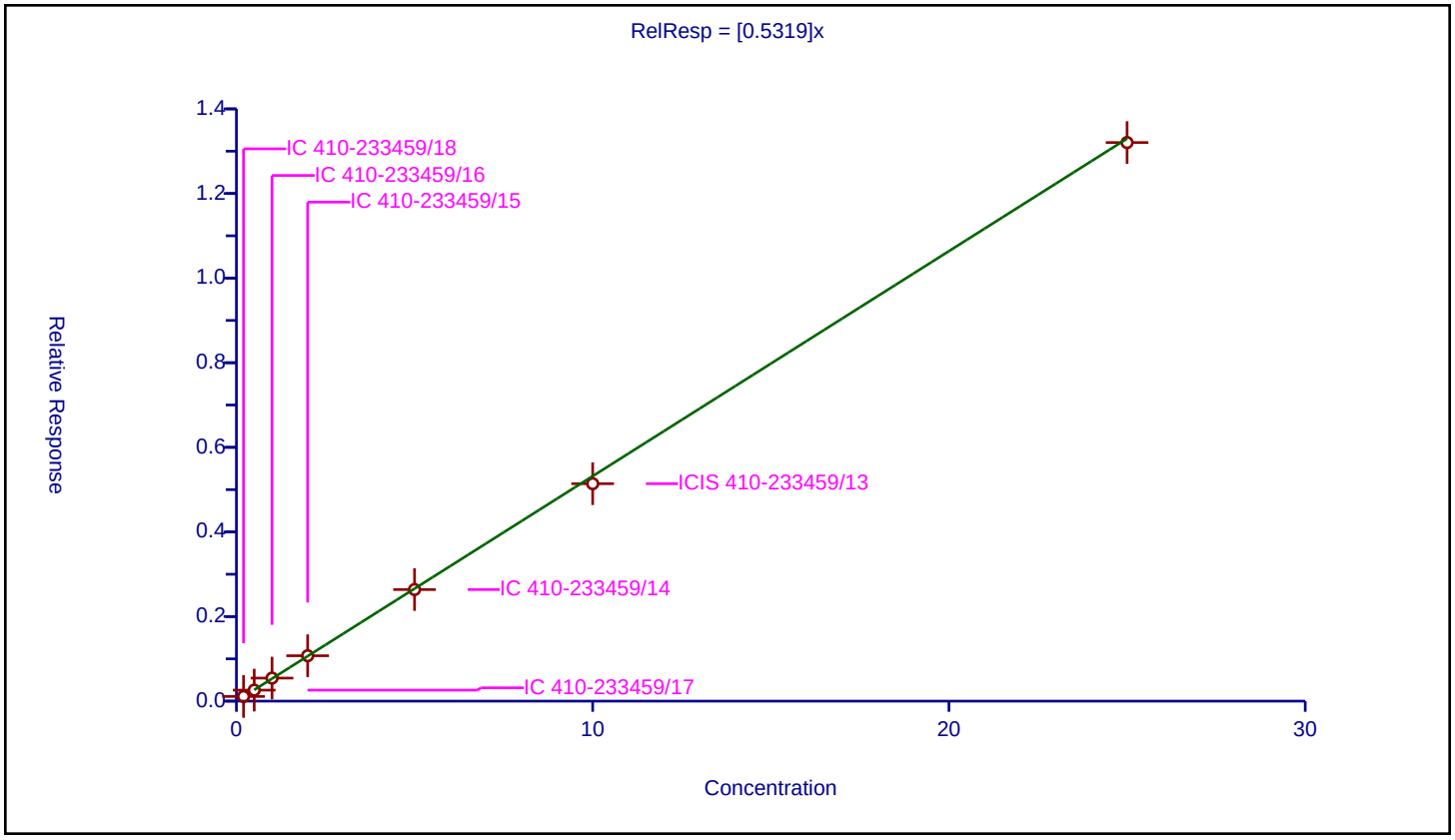
Curve Coefficients

Intercept:	0
Slope:	0.5319

Error Coefficients

Standard Error:	1170000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.110217	10.0	2021821.0	0.551087	Y
2	IC 410-233459/17	0.5	0.260469	10.0	2017326.0	0.520937	Y
3	IC 410-233459/16	1.0	0.544824	10.0	2010448.0	0.544824	Y
4	IC 410-233459/15	2.0	1.073167	10.0	2005717.0	0.536584	Y
5	IC 410-233459/14	5.0	2.637954	10.0	2008310.0	0.527591	Y
6	ICIS 410-233459/13	10.0	5.140077	10.0	2018353.0	0.514008	Y
7	IC 410-233459/12	25.0	13.204019	10.0	1979820.0	0.528161	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

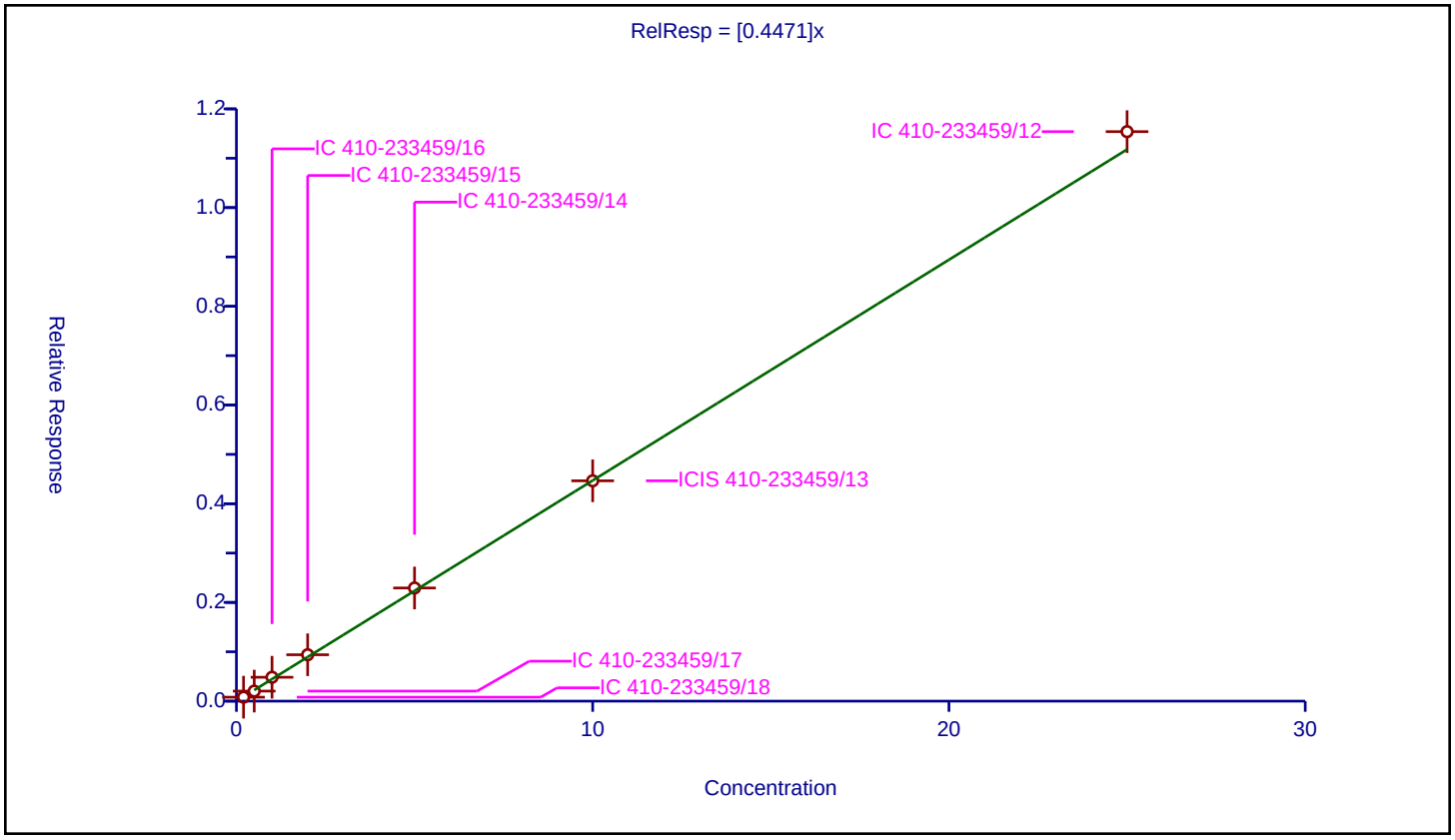
Curve Coefficients

Intercept:	0
Slope:	0.4471

Error Coefficients

Standard Error:	1020000
Relative Standard Error:	7.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.080403	10.0	2021821.0	0.402014	Y
2	IC 410-233459/17	0.5	0.203755	10.0	2017326.0	0.40751	Y
3	IC 410-233459/16	1.0	0.483832	10.0	2010448.0	0.483832	Y
4	IC 410-233459/15	2.0	0.940053	10.0	2005717.0	0.470026	Y
5	IC 410-233459/14	5.0	2.292923	10.0	2008310.0	0.458585	Y
6	ICIS 410-233459/13	10.0	4.464482	10.0	2018353.0	0.446448	Y
7	IC 410-233459/12	25.0	11.538973	10.0	1979820.0	0.461559	Y



Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

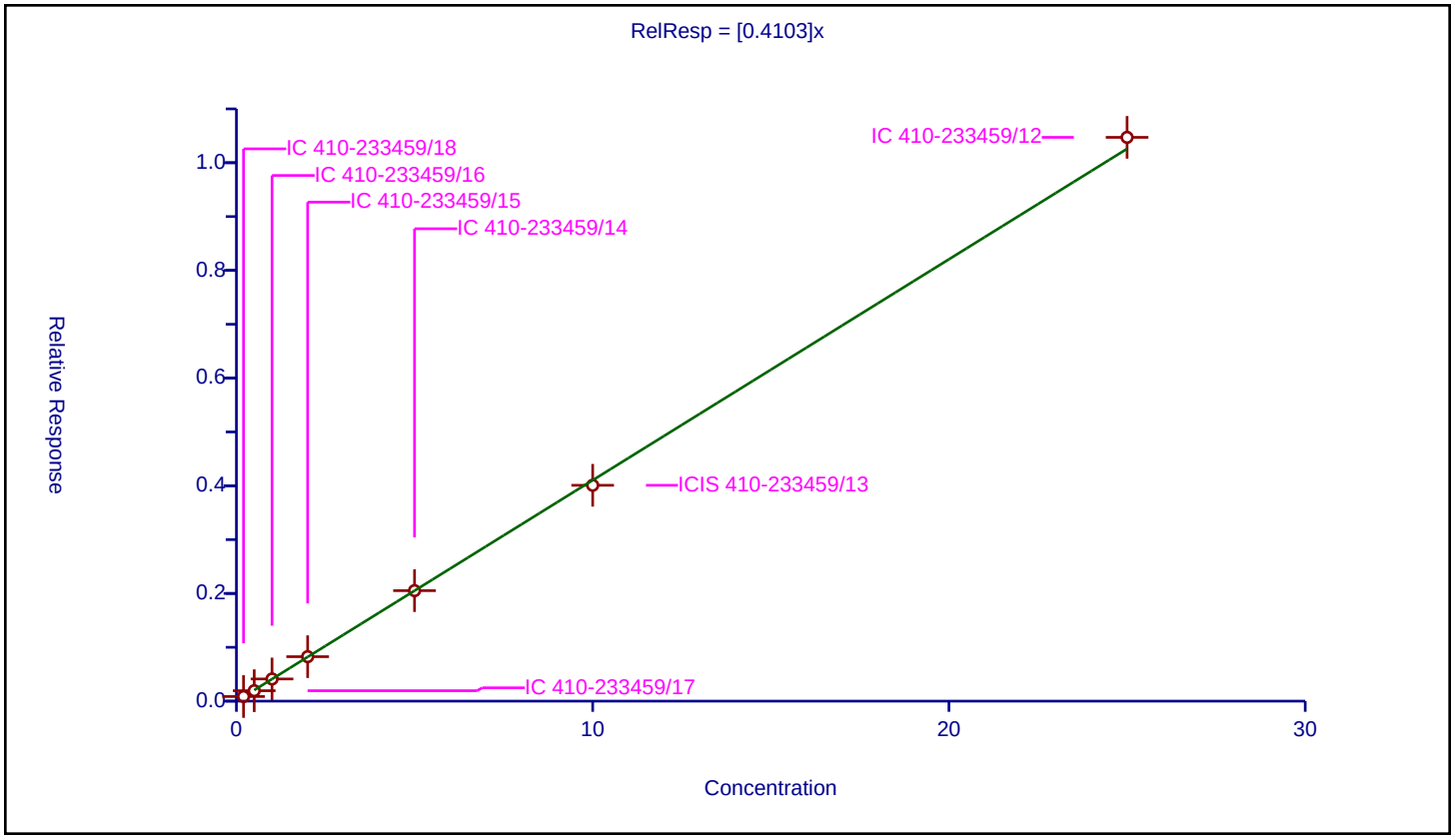
Curve Coefficients

Intercept:	0
Slope:	0.4103

Error Coefficients

Standard Error:	927000
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 410-233459/18	0.2	0.085893	10.0	2021821.0	0.429464	Y
2	IC 410-233459/17	0.5	0.193856	10.0	2017326.0	0.387711	Y
3	IC 410-233459/16	1.0	0.412003	10.0	2010448.0	0.412003	Y
4	IC 410-233459/15	2.0	0.826004	10.0	2005717.0	0.413002	Y
5	IC 410-233459/14	5.0	2.052074	10.0	2008310.0	0.410415	Y
6	ICIS 410-233459/13	10.0	4.009279	10.0	2018353.0	0.400928	Y
7	IC 410-233459/12	25.0	10.471073	10.0	1979820.0	0.418843	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

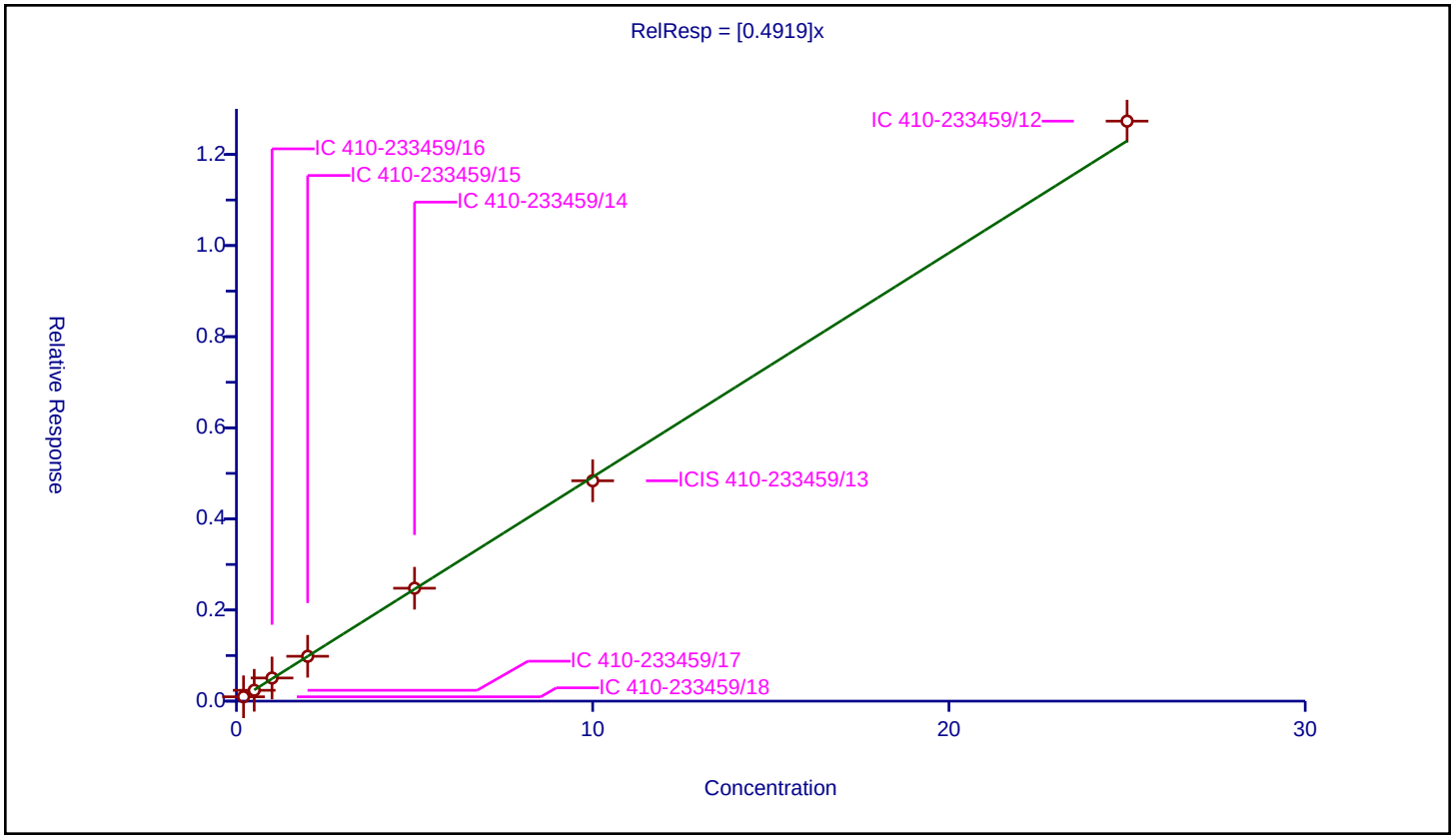
Curve Coefficients

Intercept:	0
Slope:	0.4919

Error Coefficients

Standard Error:	1130000
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 410-233459/18	0.2	0.095622	10.0	2021821.0	0.478109	Y
2	IC 410-233459/17	0.5	0.237978	10.0	2017326.0	0.475957	Y
3	IC 410-233459/16	1.0	0.50826	10.0	2010448.0	0.50826	Y
4	IC 410-233459/15	2.0	0.984561	10.0	2005717.0	0.49228	Y
5	IC 410-233459/14	5.0	2.478636	10.0	2008310.0	0.495727	Y
6	ICIS 410-233459/13	10.0	4.836651	10.0	2018353.0	0.483665	Y
7	IC 410-233459/12	25.0	12.731819	10.0	1979820.0	0.509273	Y



Calibration / Isobutyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

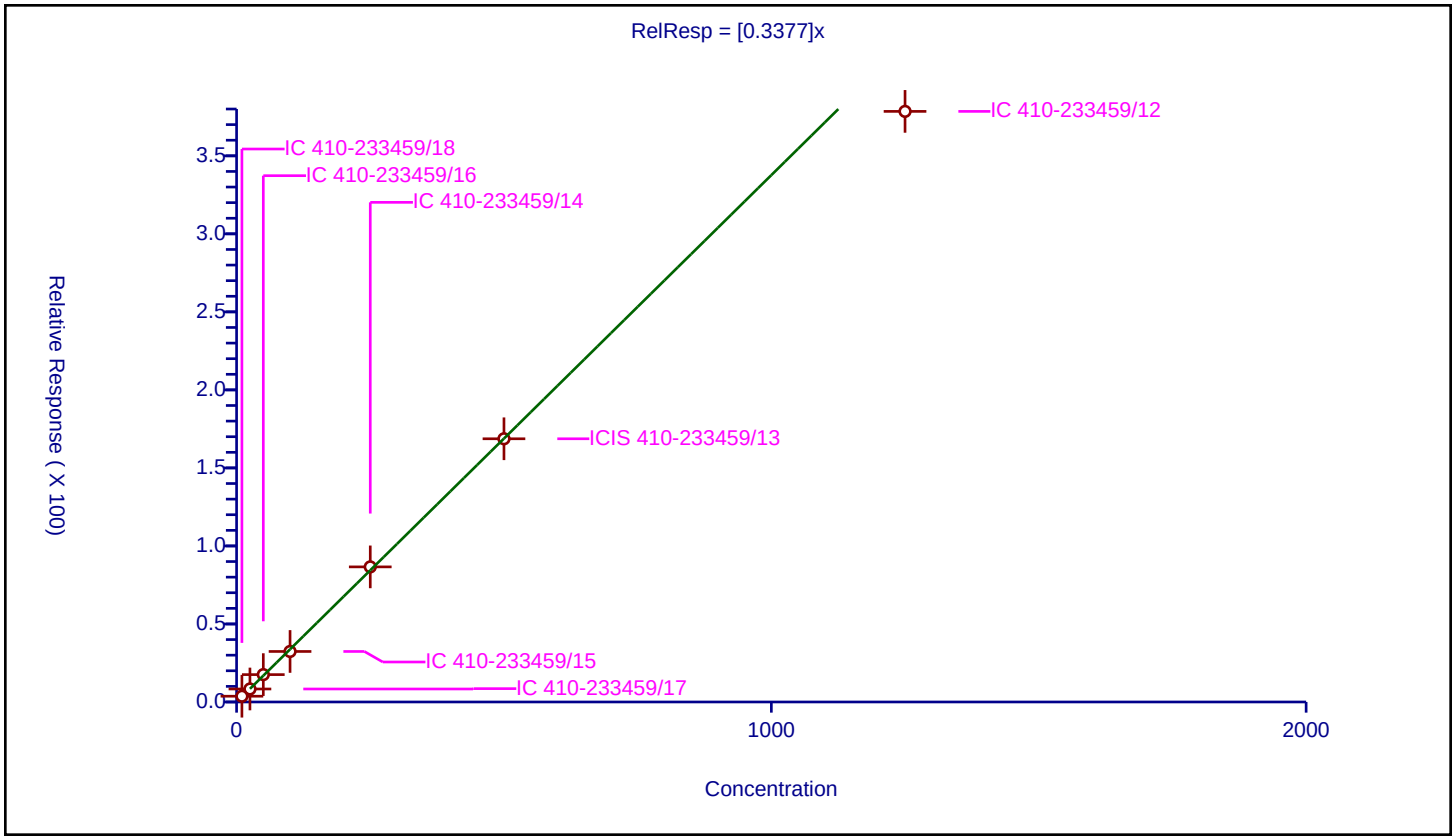
Curve Coefficients

Intercept:	0
Slope:	0.3377

Error Coefficients

Standard Error:	520000
Relative Standard Error:	6.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	10.0	3.6914	50.0	155632.0	0.36914	Y
2	IC 410-233459/17	25.0	8.332218	50.0	134454.0	0.333289	Y
3	IC 410-233459/16	50.0	17.543854	50.0	144059.0	0.350877	Y
4	IC 410-233459/15	100.0	32.382368	50.0	140927.0	0.323824	Y
5	IC 410-233459/14	250.0	86.585724	50.0	149941.0	0.346343	Y
6	ICIS 410-233459/13	500.0	168.674891	50.0	147286.0	0.33735	Y
7	IC 410-233459/12	1250.0	378.485177	50.0	150473.0	0.302788	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

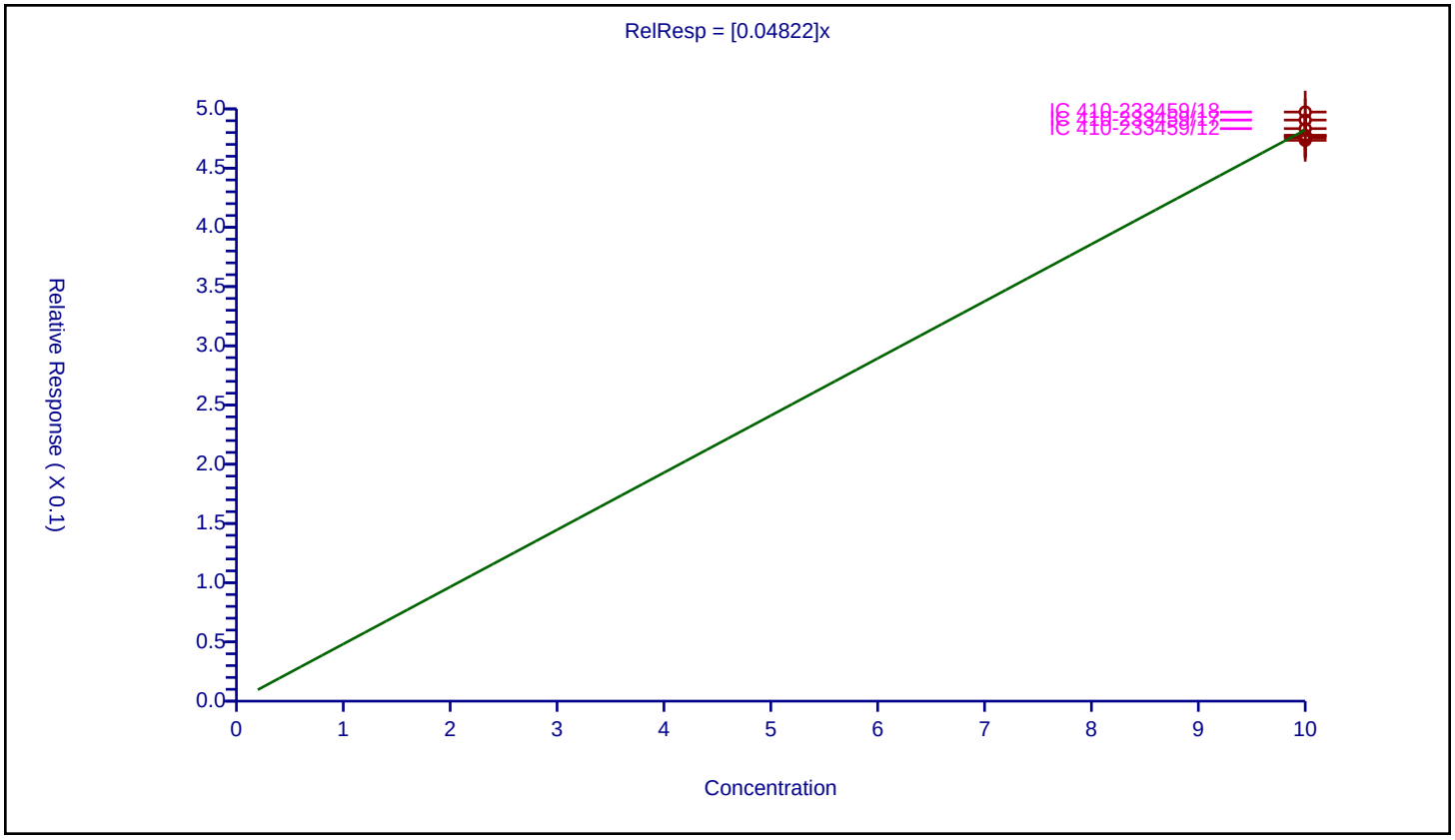
Curve Coefficients

Intercept:	0
Slope:	0.04822

Error Coefficients

Standard Error:	105000
Relative Standard Error:	1.8
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/12	10.0	0.483347	10.0	1979820.0	0.048335	Y
2	ICIS 410-233459/13	10.0	0.475764	10.0	2018353.0	0.047576	Y
3	IC 410-233459/14	10.0	0.473473	10.0	2008310.0	0.047347	Y
4	IC 410-233459/15	10.0	0.477251	10.0	2005717.0	0.047725	Y
5	IC 410-233459/16	10.0	0.477734	10.0	2010448.0	0.047773	Y
6	IC 410-233459/17	10.0	0.490575	10.0	2017326.0	0.049058	Y
7	IC 410-233459/18	10.0	0.497354	10.0	2021821.0	0.049735	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

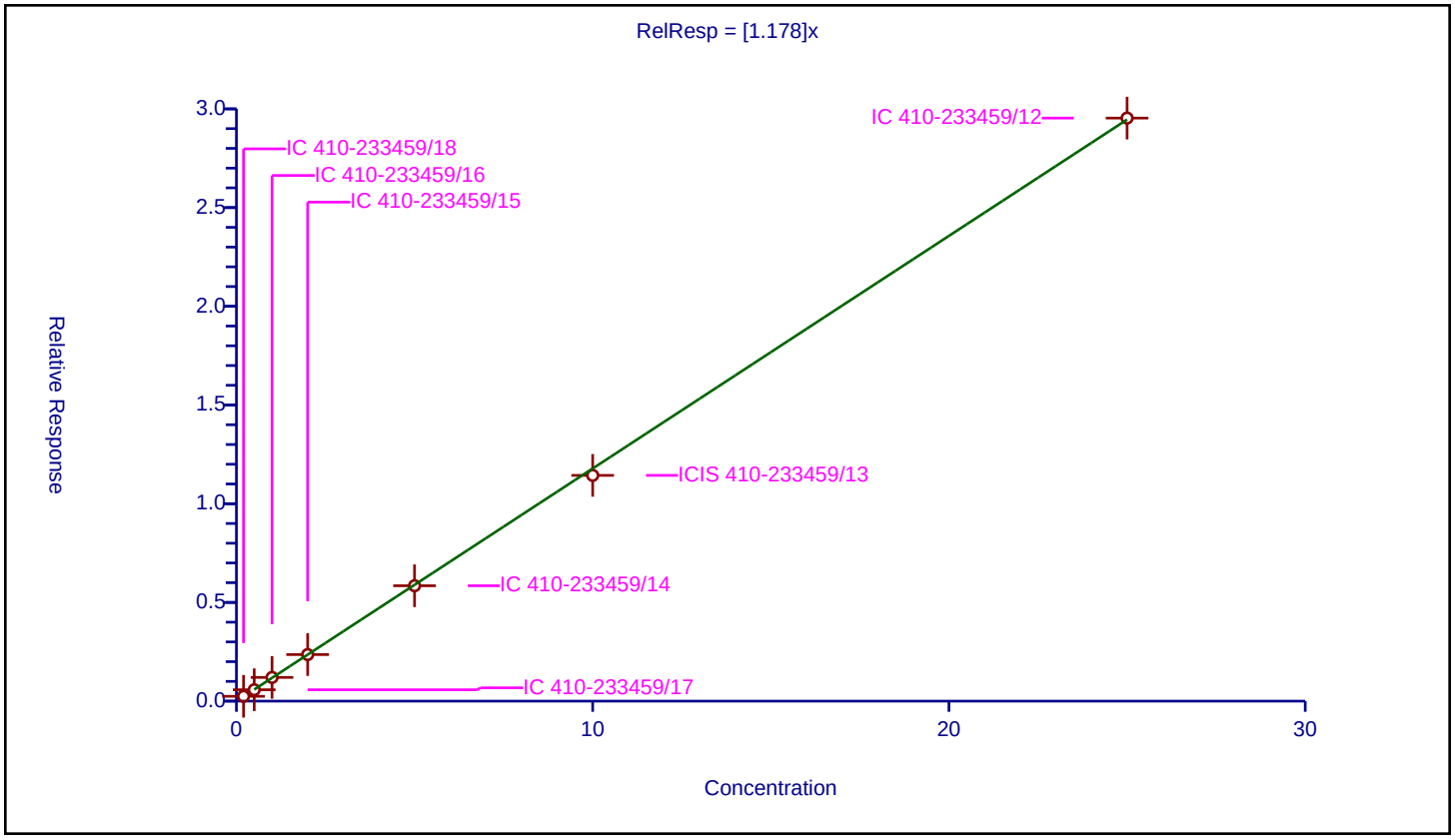
Curve Coefficients

Intercept:	0
Slope:	1.178

Error Coefficients

Standard Error:	2620000
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.244206	10.0	2021821.0	1.221028	Y
2	IC 410-233459/17	0.5	0.576729	10.0	2017326.0	1.153458	Y
3	IC 410-233459/16	1.0	1.200722	10.0	2010448.0	1.200722	Y
4	IC 410-233459/15	2.0	2.358683	10.0	2005717.0	1.179341	Y
5	IC 410-233459/14	5.0	5.845542	10.0	2008310.0	1.169108	Y
6	ICIS 410-233459/13	10.0	11.435621	10.0	2018353.0	1.143562	Y
7	IC 410-233459/12	25.0	29.534311	10.0	1979820.0	1.181372	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

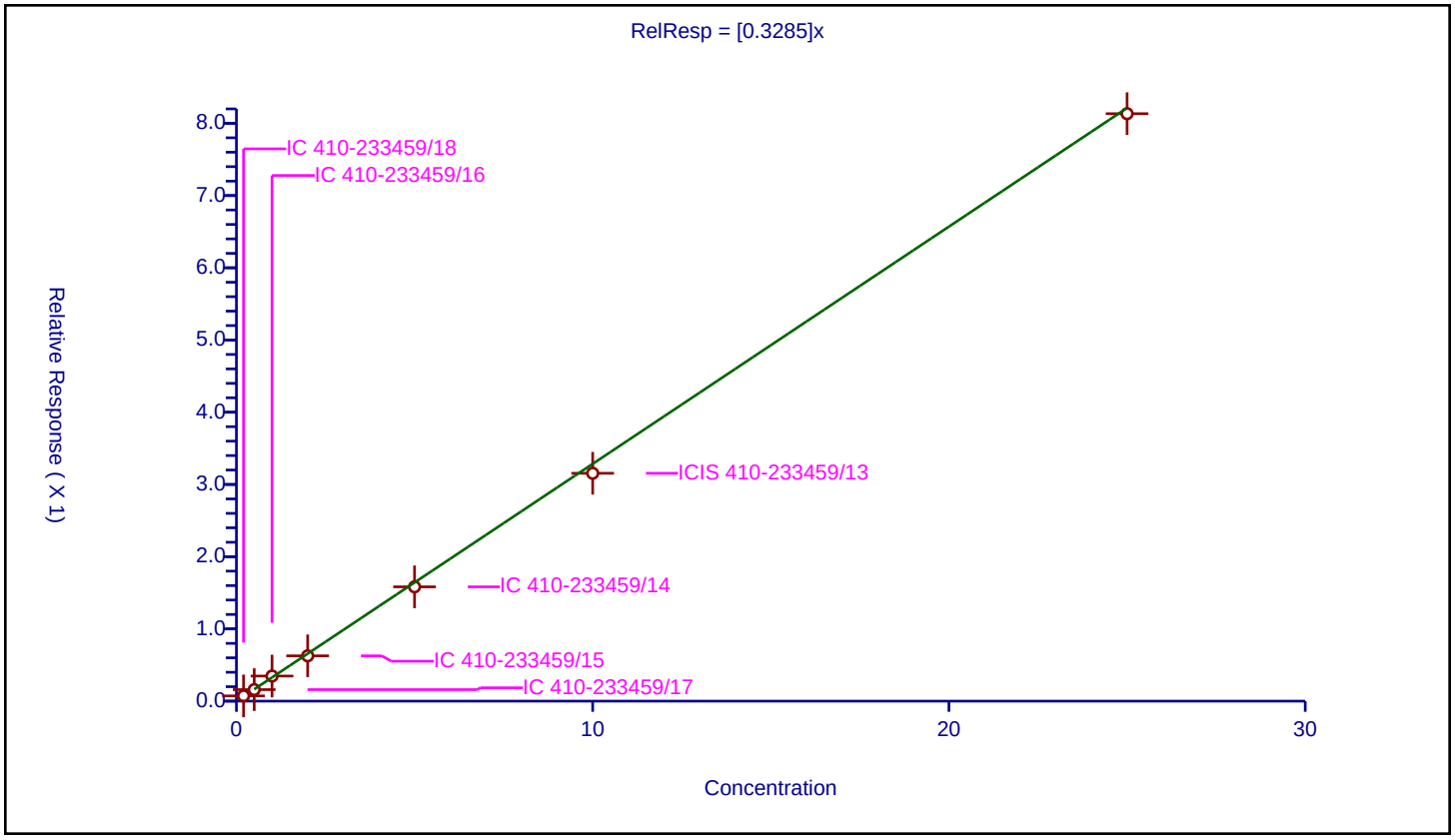
Curve Coefficients

Intercept:	0
Slope:	0.3285

Error Coefficients

Standard Error:	721000
Relative Standard Error:	5.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.07237	10.0	2021821.0	0.361852	Y
2	IC 410-233459/17	0.5	0.159533	10.0	2017326.0	0.319066	Y
3	IC 410-233459/16	1.0	0.347639	10.0	2010448.0	0.347639	Y
4	IC 410-233459/15	2.0	0.627142	10.0	2005717.0	0.313571	Y
5	IC 410-233459/14	5.0	1.582724	10.0	2008310.0	0.316545	Y
6	ICIS 410-233459/13	10.0	3.155097	10.0	2018353.0	0.31551	Y
7	IC 410-233459/12	25.0	8.133719	10.0	1979820.0	0.325349	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

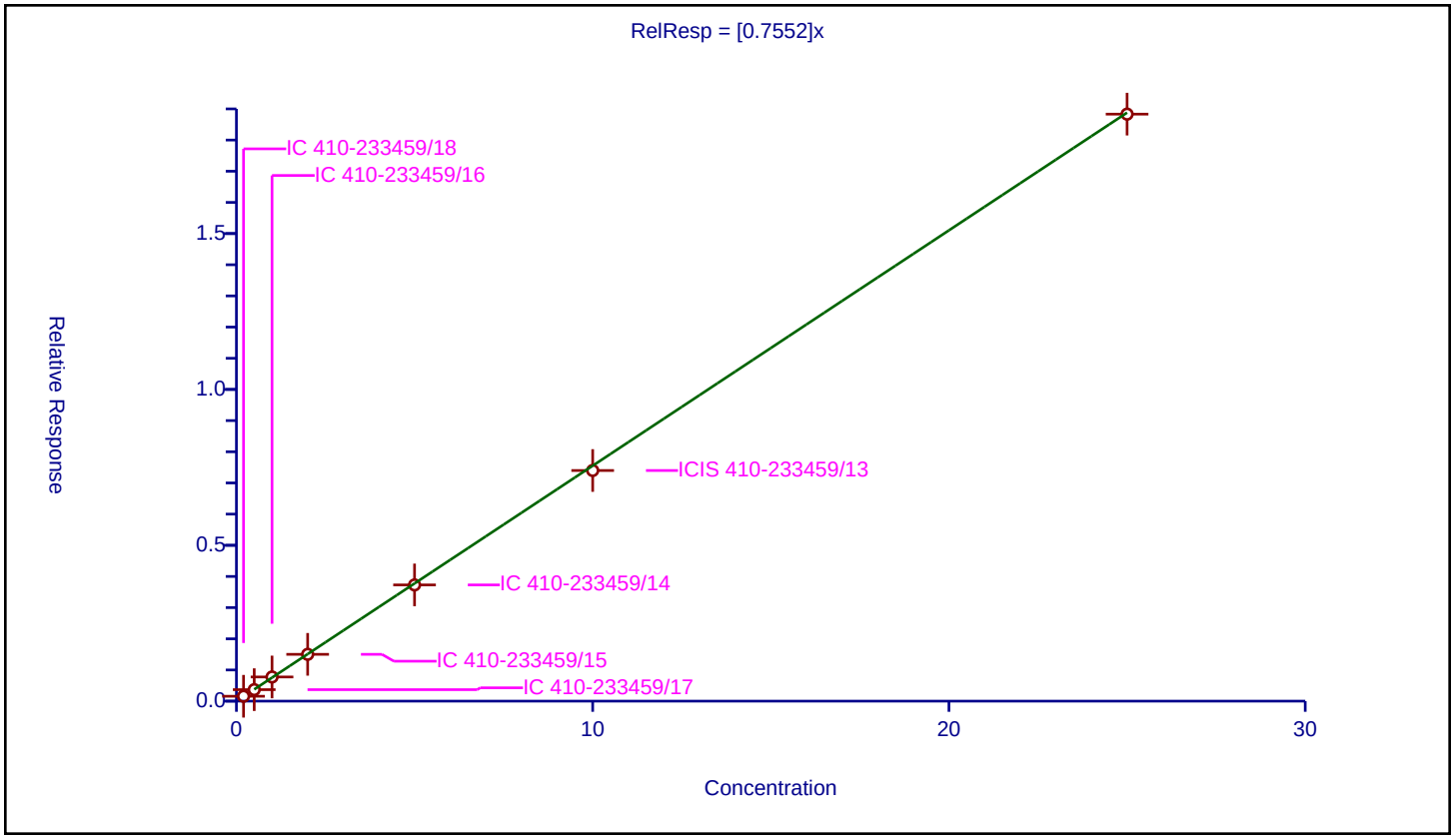
Curve Coefficients

Intercept:	0
Slope:	0.7552

Error Coefficients

Standard Error:	1670000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.156972	10.0	2021821.0	0.784862	Y
2	IC 410-233459/17	0.5	0.368408	10.0	2017326.0	0.736817	Y
3	IC 410-233459/16	1.0	0.775091	10.0	2010448.0	0.775091	Y
4	IC 410-233459/15	2.0	1.501468	10.0	2005717.0	0.750734	Y
5	IC 410-233459/14	5.0	3.728179	10.0	2008310.0	0.745636	Y
6	ICIS 410-233459/13	10.0	7.399315	10.0	2018353.0	0.739932	Y
7	IC 410-233459/12	25.0	18.831965	10.0	1979820.0	0.753279	Y



Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

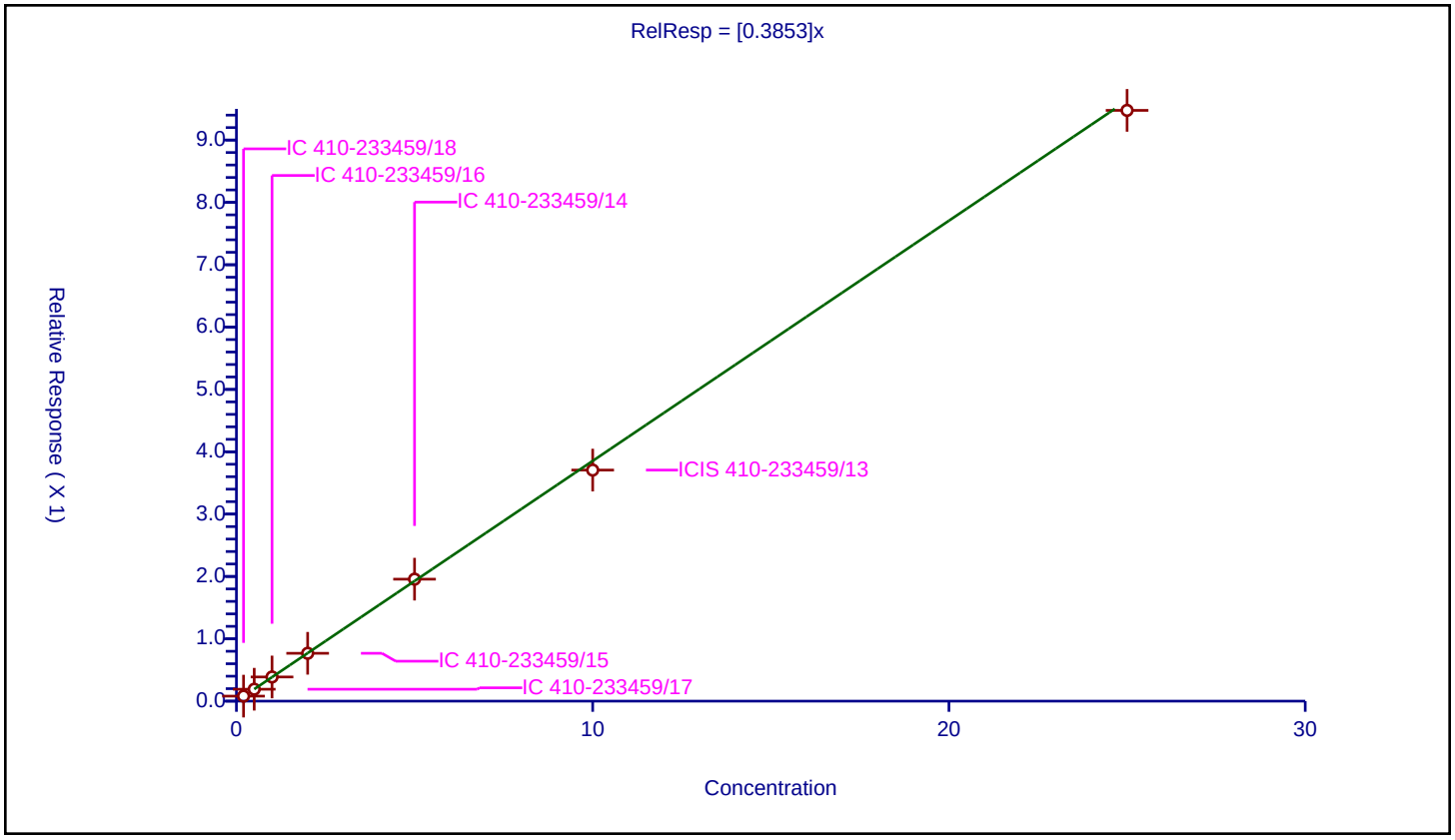
Curve Coefficients

Intercept:	0
Slope:	0.3853

Error Coefficients

Standard Error:	843000
Relative Standard Error:	2.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.080462	10.0	2021821.0	0.402311	Y
2	IC 410-233459/17	0.5	0.191194	10.0	2017326.0	0.382387	Y
3	IC 410-233459/16	1.0	0.387824	10.0	2010448.0	0.387824	Y
4	IC 410-233459/15	2.0	0.767496	10.0	2005717.0	0.383748	Y
5	IC 410-233459/14	5.0	1.95662	10.0	2008310.0	0.391324	Y
6	ICIS 410-233459/13	10.0	3.706324	10.0	2018353.0	0.370632	Y
7	IC 410-233459/12	25.0	9.47617	10.0	1979820.0	0.379047	Y



Calibration / n-Butanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

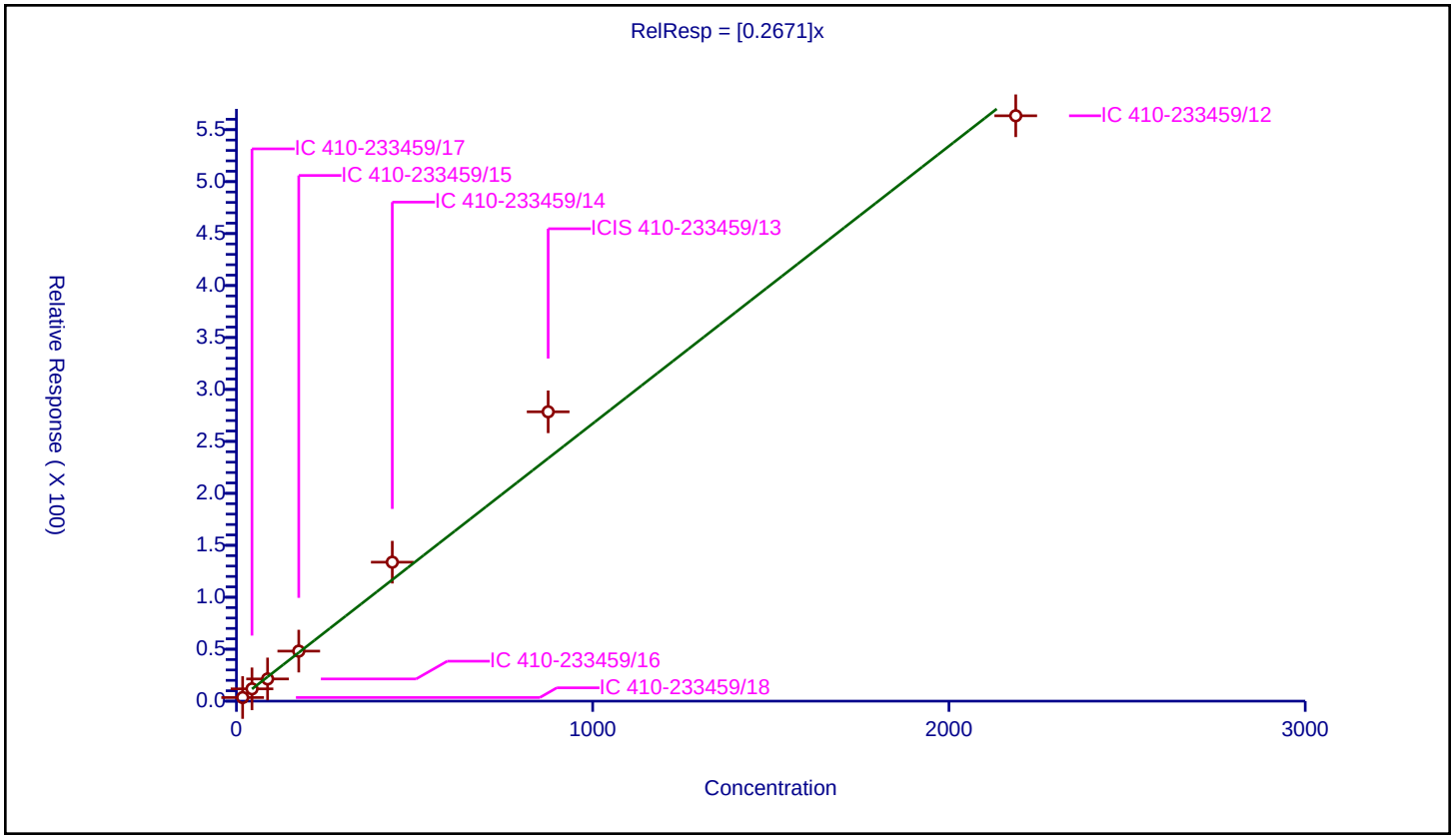
Curve Coefficients

Intercept:	0
Slope:	0.2671

Error Coefficients

Standard Error:	788000
Relative Standard Error:	14.9
Correlation Coefficient:	0.992
Coefficient of Determination (Adjusted):	0.975

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	17.5	3.470045	50.0	155632.0	0.198288	Y
2	IC 410-233459/17	43.75	11.837506	50.0	134454.0	0.270572	Y
3	IC 410-233459/16	87.5	21.35271	50.0	144059.0	0.244031	Y
4	IC 410-233459/15	175.0	48.162524	50.0	140927.0	0.275214	Y
5	IC 410-233459/14	437.5	133.750942	50.0	149941.0	0.305716	Y
6	ICIS 410-233459/13	875.0	278.467743	50.0	147286.0	0.318249	Y
7	IC 410-233459/12	2187.5	563.390442	50.0	150473.0	0.25755	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

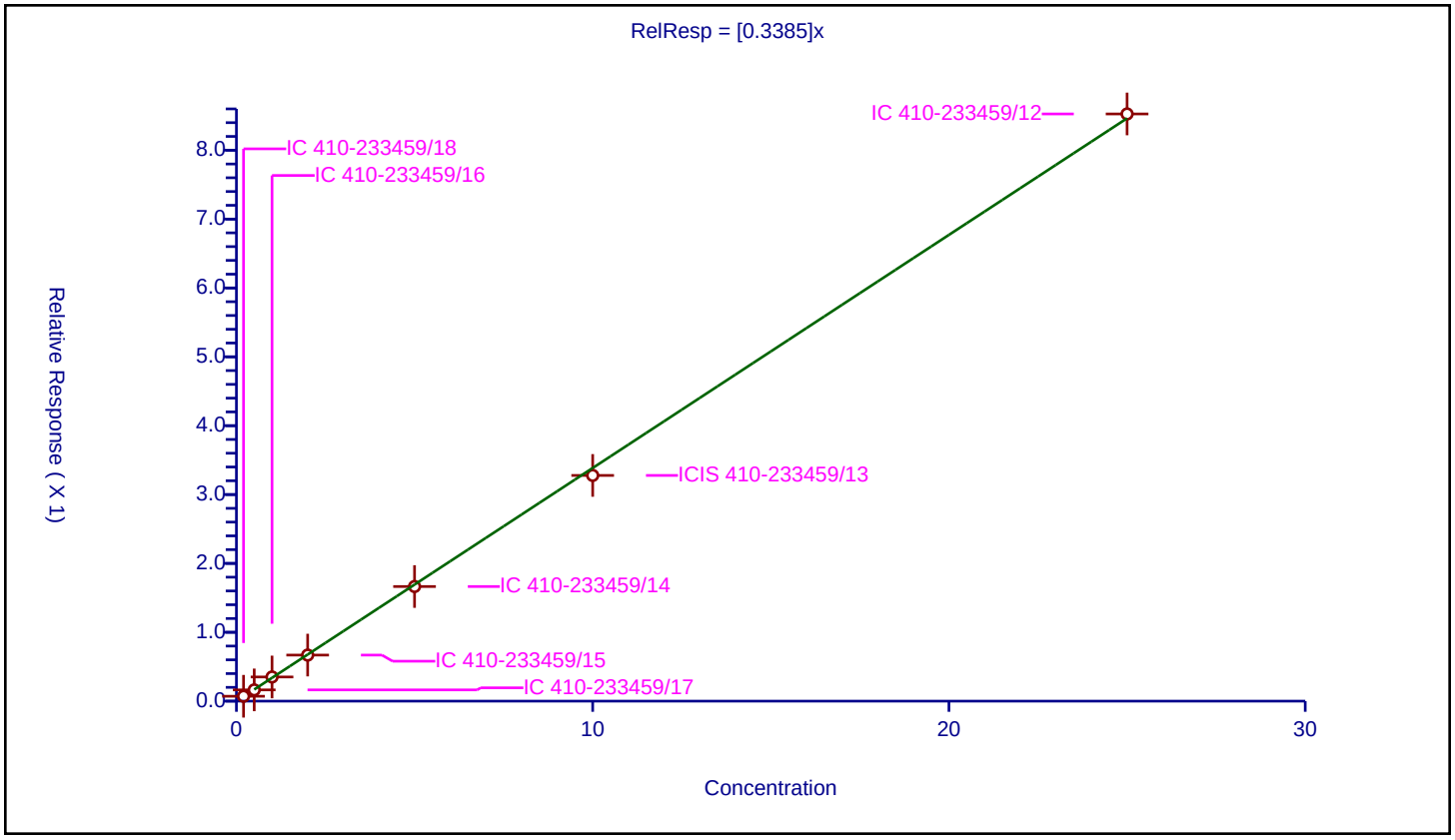
Curve Coefficients

Intercept:	0
Slope:	0.3385

Error Coefficients

Standard Error:	755000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.071149	10.0	2021821.0	0.355744	Y
2	IC 410-233459/17	0.5	0.163454	10.0	2017326.0	0.326908	Y
3	IC 410-233459/16	1.0	0.351021	10.0	2010448.0	0.351021	Y
4	IC 410-233459/15	2.0	0.668708	10.0	2005717.0	0.334354	Y
5	IC 410-233459/14	5.0	1.664409	10.0	2008310.0	0.332882	Y
6	ICIS 410-233459/13	10.0	3.277539	10.0	2018353.0	0.327754	Y
7	IC 410-233459/12	25.0	8.526608	10.0	1979820.0	0.341064	Y



Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

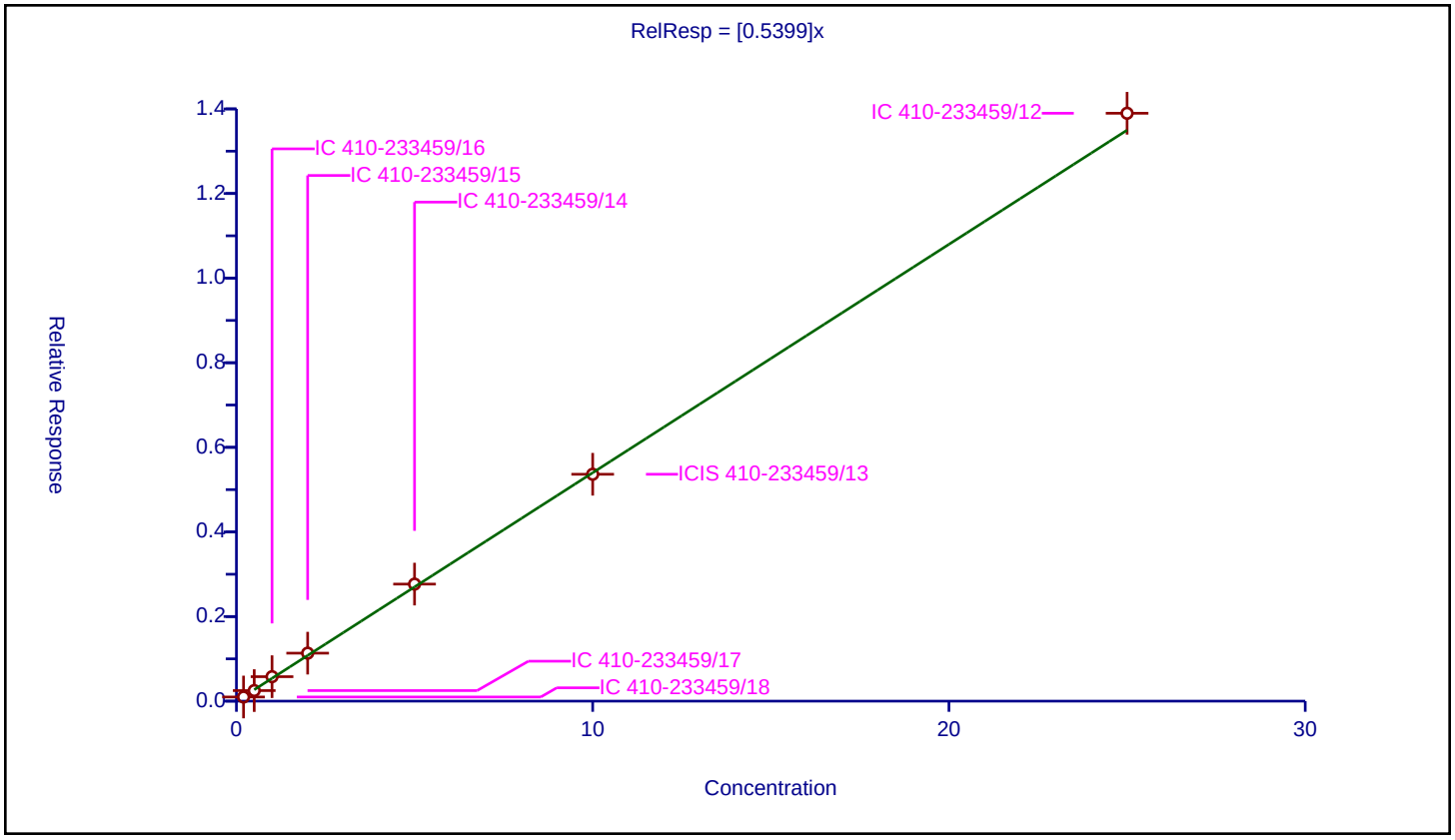
Curve Coefficients

Intercept:	0
Slope:	0.5399

Error Coefficients

Standard Error:	1230000
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.097783	10.0	2021821.0	0.488916	Y
2	IC 410-233459/17	0.5	0.249821	10.0	2017326.0	0.499642	Y
3	IC 410-233459/16	1.0	0.57814	10.0	2010448.0	0.57814	Y
4	IC 410-233459/15	2.0	1.134377	10.0	2005717.0	0.567189	Y
5	IC 410-233459/14	5.0	2.76655	10.0	2008310.0	0.55331	Y
6	ICIS 410-233459/13	10.0	5.363319	10.0	2018353.0	0.536332	Y
7	IC 410-233459/12	25.0	13.89644	10.0	1979820.0	0.555858	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

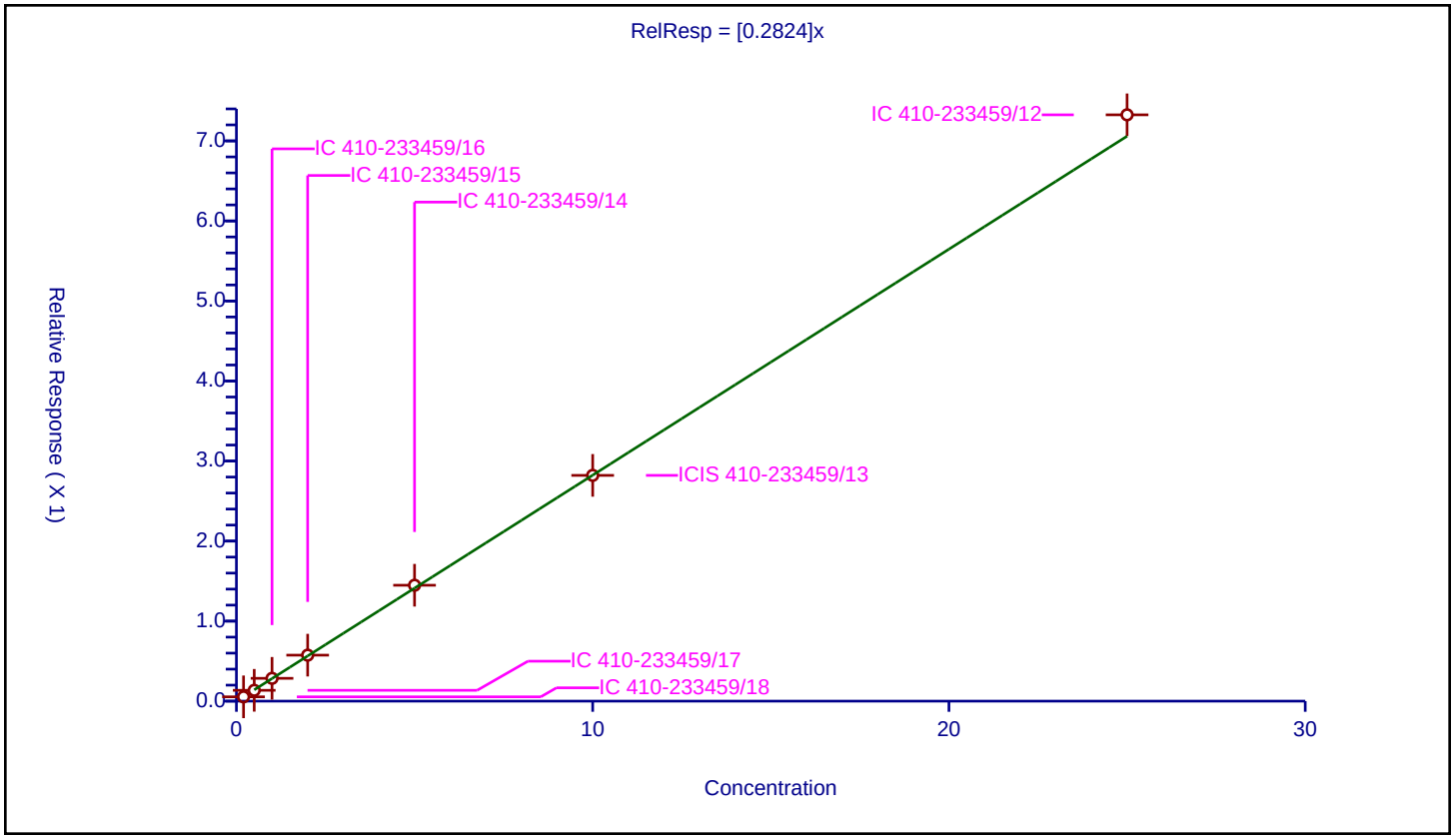
Curve Coefficients

Intercept:	0
Slope:	0.2824

Error Coefficients

Standard Error:	649000
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 410-233459/18	0.2	0.053788	10.0	2021821.0	0.268941	Y
2	IC 410-233459/17	0.5	0.135308	10.0	2017326.0	0.270616	Y
3	IC 410-233459/16	1.0	0.284996	10.0	2010448.0	0.284996	Y
4	IC 410-233459/15	2.0	0.574498	10.0	2005717.0	0.287249	Y
5	IC 410-233459/14	5.0	1.448068	10.0	2008310.0	0.289614	Y
6	ICIS 410-233459/13	10.0	2.82076	10.0	2018353.0	0.282076	Y
7	IC 410-233459/12	25.0	7.325828	10.0	1979820.0	0.293033	Y



Calibration / Methyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

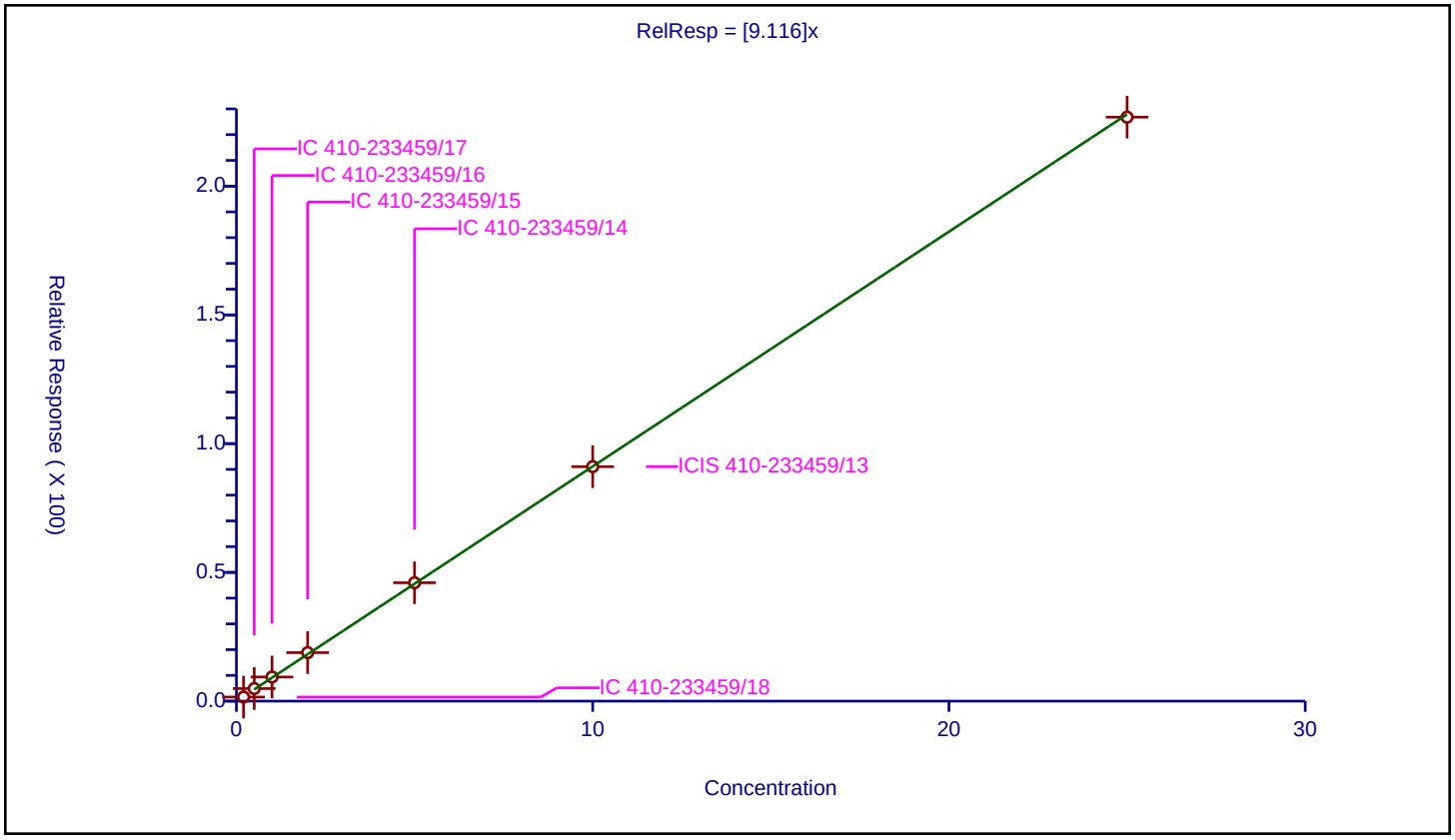
Curve Coefficients

Intercept:	0
Slope:	9.116

Error Coefficients

Standard Error:	306000
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 410-233459/18	0.2	1.574226	50.0	155632.0	7.871132	Y
2	IC 410-233459/17	0.5	4.885314	50.0	134454.0	9.770628	Y
3	IC 410-233459/16	1.0	9.372896	50.0	144059.0	9.372896	Y
4	IC 410-233459/15	2.0	18.843089	50.0	140927.0	9.421544	Y
5	IC 410-233459/14	5.0	45.976417	50.0	149941.0	9.195283	Y
6	ICIS 410-233459/13	10.0	91.053121	50.0	147286.0	9.105312	Y
7	IC 410-233459/12	25.0	226.797499	50.0	150473.0	9.0719	Y



Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

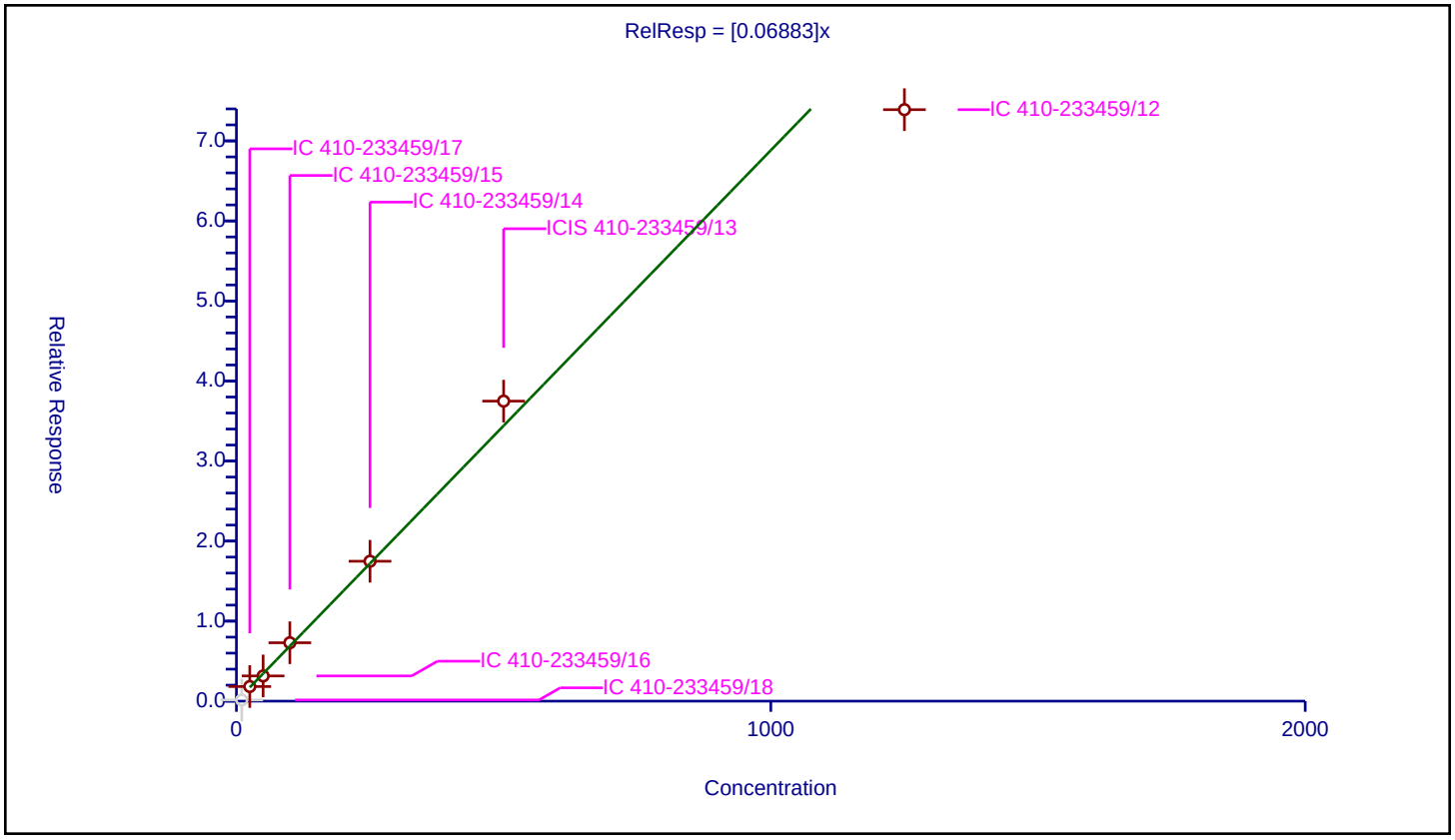
Curve Coefficients

Intercept:	0
Slope:	0.06883

Error Coefficients

Standard Error:	114000
Relative Standard Error:	9.2
Correlation Coefficient:	0.990
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	10.0	0.143608	50.0	155632.0	0.014361	N
2	IC 410-233459/17	25.0	1.82516	50.0	134454.0	0.073006	Y
3	IC 410-233459/16	50.0	3.14871	50.0	144059.0	0.062974	Y
4	IC 410-233459/15	100.0	7.296686	50.0	140927.0	0.072967	Y
5	IC 410-233459/14	250.0	17.478542	50.0	149941.0	0.069914	Y
6	ICIS 410-233459/13	500.0	37.488288	50.0	147286.0	0.074977	Y
7	IC 410-233459/12	1250.0	73.903956	50.0	150473.0	0.059123	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

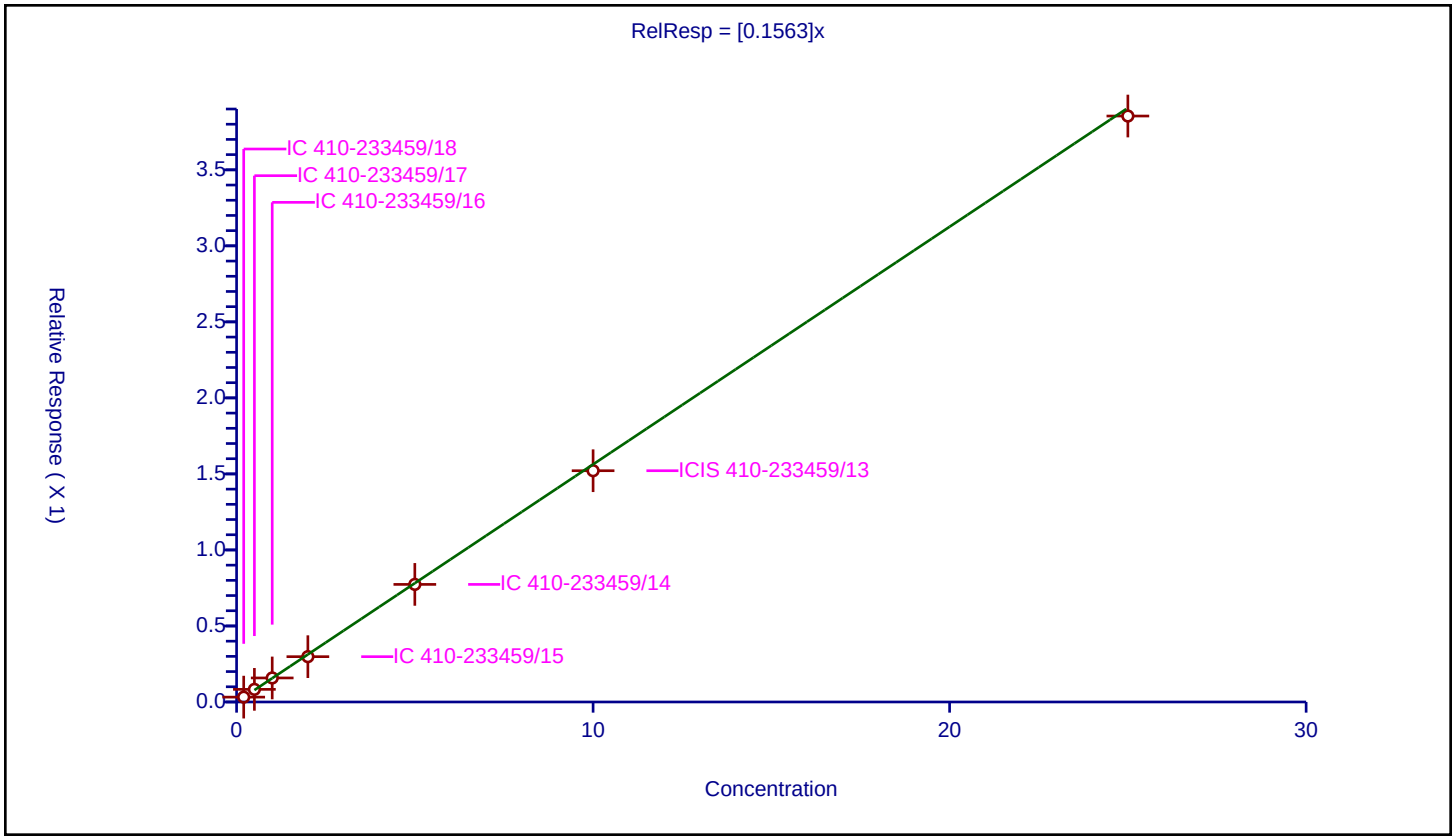
Curve Coefficients

Intercept:	0
Slope:	0.1563

Error Coefficients

Standard Error:	343000
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 410-233459/18	0.2	0.031986	10.0	2021821.0	0.15993	Y
2	IC 410-233459/17	0.5	0.083011	10.0	2017326.0	0.166022	Y
3	IC 410-233459/16	1.0	0.158034	10.0	2010448.0	0.158034	Y
4	IC 410-233459/15	2.0	0.298123	10.0	2005717.0	0.149061	Y
5	IC 410-233459/14	5.0	0.773337	10.0	2008310.0	0.154667	Y
6	ICIS 410-233459/13	10.0	1.521116	10.0	2018353.0	0.152112	Y
7	IC 410-233459/12	25.0	3.853956	10.0	1979820.0	0.154158	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

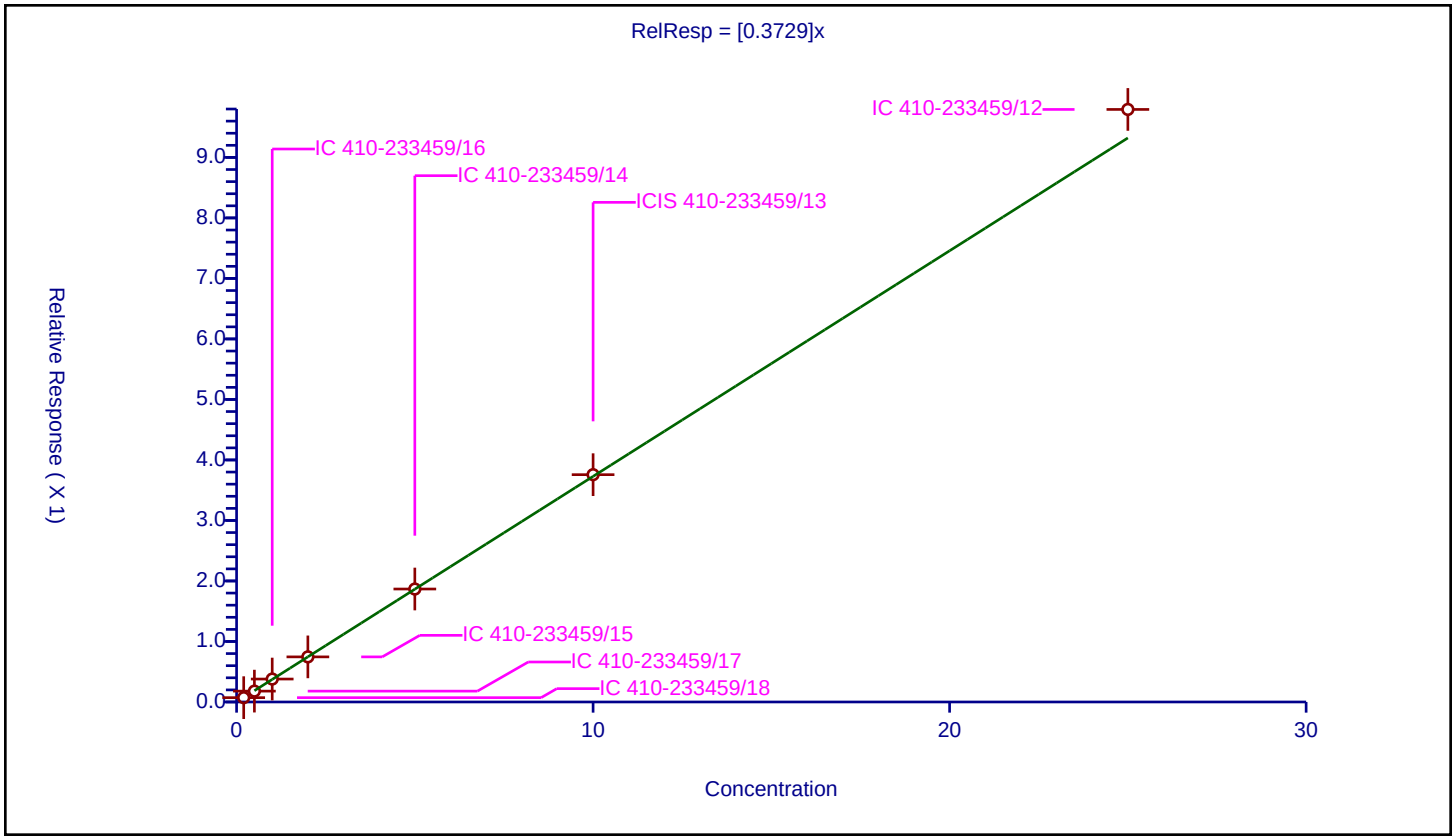
Curve Coefficients

Intercept:	0
Slope:	0.3729

Error Coefficients

Standard Error:	866000
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 410-233459/18	0.2	0.071698	10.0	2021821.0	0.358489	Y
2	IC 410-233459/17	0.5	0.179445	10.0	2017326.0	0.358891	Y
3	IC 410-233459/16	1.0	0.37908	10.0	2010448.0	0.37908	Y
4	IC 410-233459/15	2.0	0.745649	10.0	2005717.0	0.372824	Y
5	IC 410-233459/14	5.0	1.866873	10.0	2008310.0	0.373375	Y
6	ICIS 410-233459/13	10.0	3.756949	10.0	2018353.0	0.375695	Y
7	IC 410-233459/12	25.0	9.79289	10.0	1979820.0	0.391716	Y



Calibration / 2-Nitropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

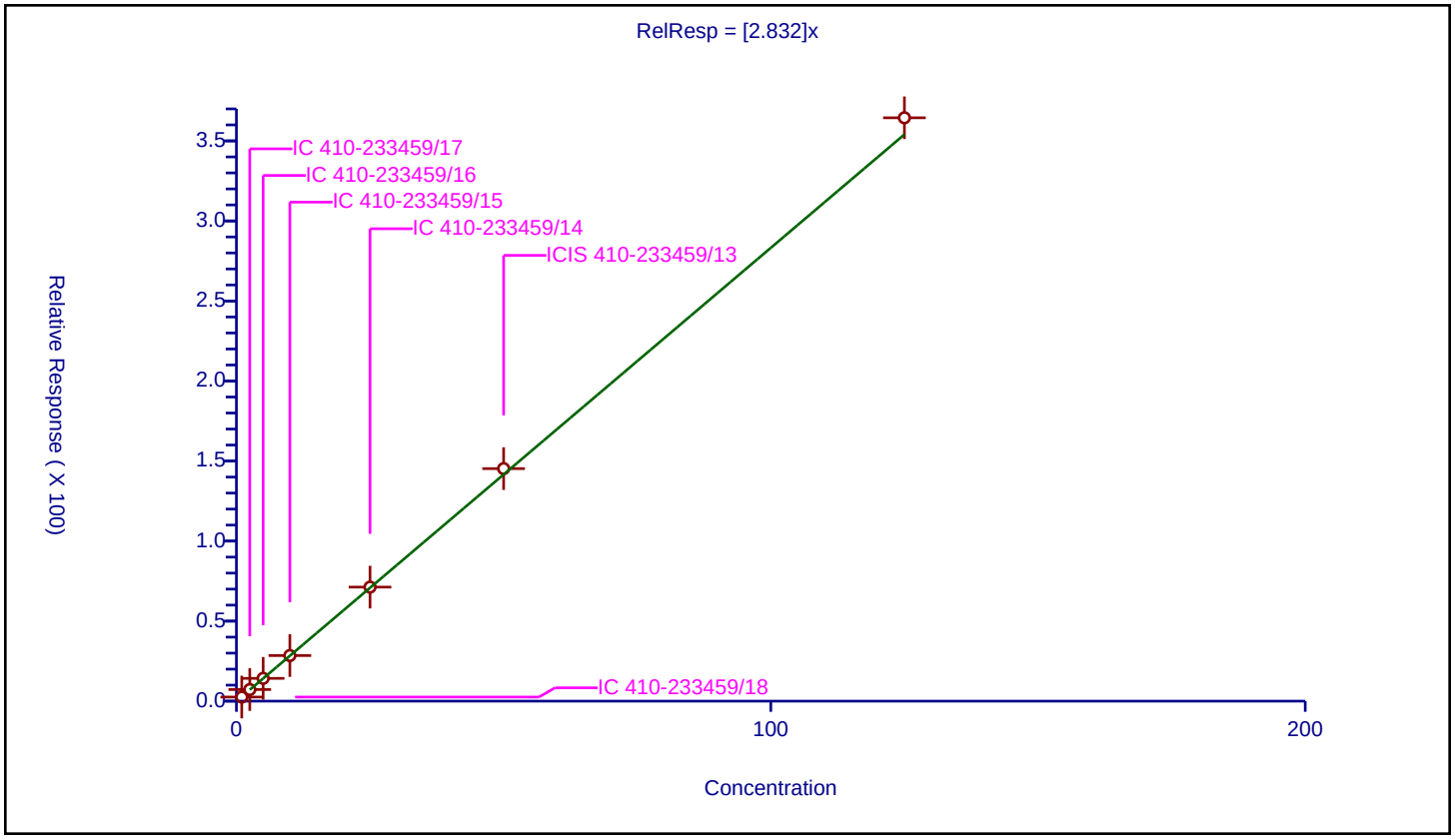
Curve Coefficients

Intercept:	0
Slope:	2.832

Error Coefficients

Standard Error:	490000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	1.0	2.562134	50.0	155632.0	2.562134	Y
2	IC 410-233459/17	2.5	7.242254	50.0	134454.0	2.896902	Y
3	IC 410-233459/16	5.0	14.236528	50.0	144059.0	2.847306	Y
4	IC 410-233459/15	10.0	28.480348	50.0	140927.0	2.848035	Y
5	IC 410-233459/14	25.0	71.235353	50.0	149941.0	2.849414	Y
6	ICIS 410-233459/13	50.0	145.265334	50.0	147286.0	2.905307	Y
7	IC 410-233459/12	125.0	364.438138	50.0	150473.0	2.915505	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

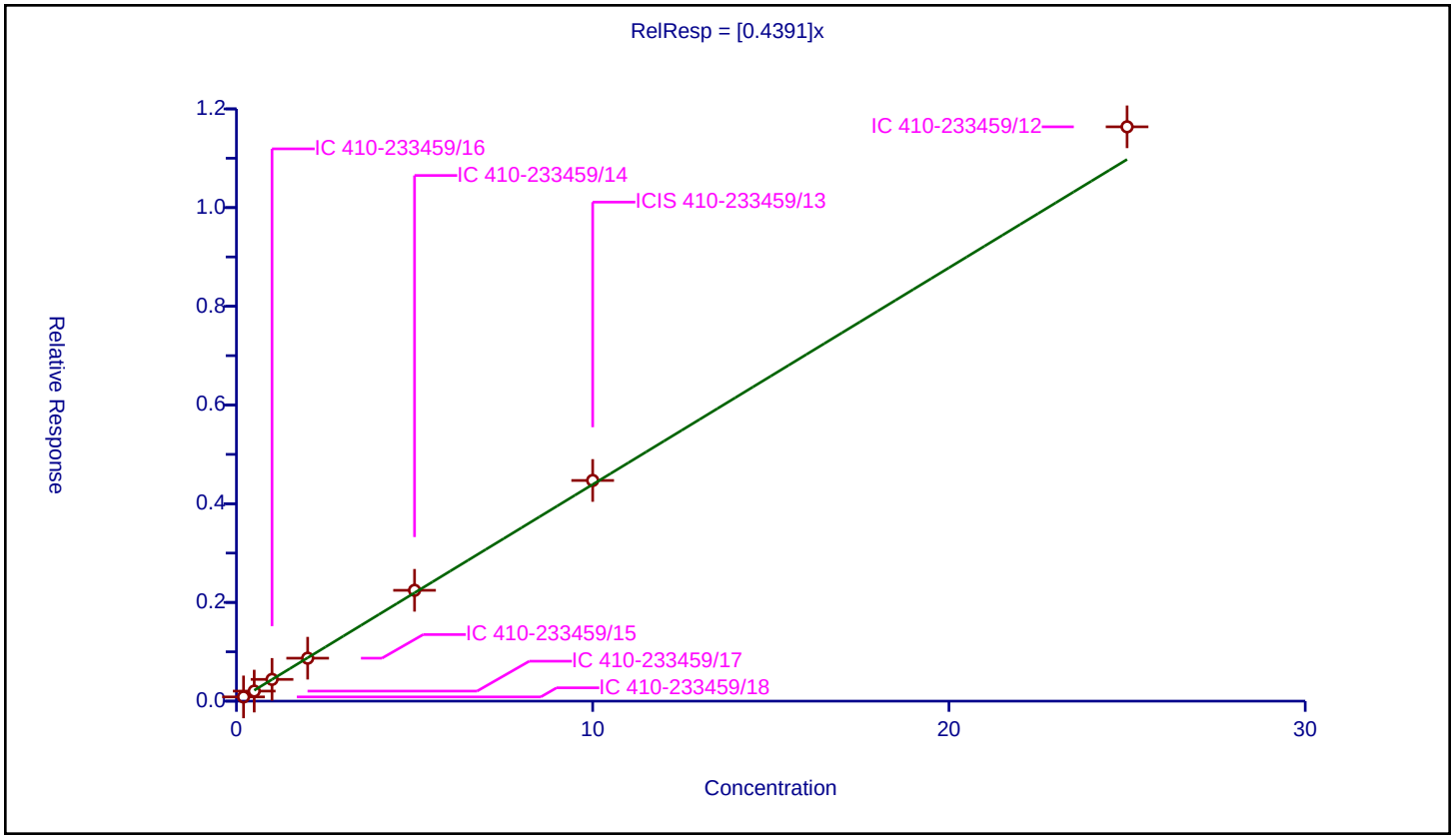
Curve Coefficients

Intercept:	0
Slope:	0.4391

Error Coefficients

Standard Error:	1030000
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 410-233459/18	0.2	0.085675	10.0	2021821.0	0.428376	Y
2	IC 410-233459/17	0.5	0.20372	10.0	2017326.0	0.40744	Y
3	IC 410-233459/16	1.0	0.440668	10.0	2010448.0	0.440668	Y
4	IC 410-233459/15	2.0	0.870412	10.0	2005717.0	0.435206	Y
5	IC 410-233459/14	5.0	2.24559	10.0	2008310.0	0.449118	Y
6	ICIS 410-233459/13	10.0	4.47119	10.0	2018353.0	0.447119	Y
7	IC 410-233459/12	25.0	11.637028	10.0	1979820.0	0.465481	Y



Calibration / 4-Methyl-2-pentanone (MIBK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

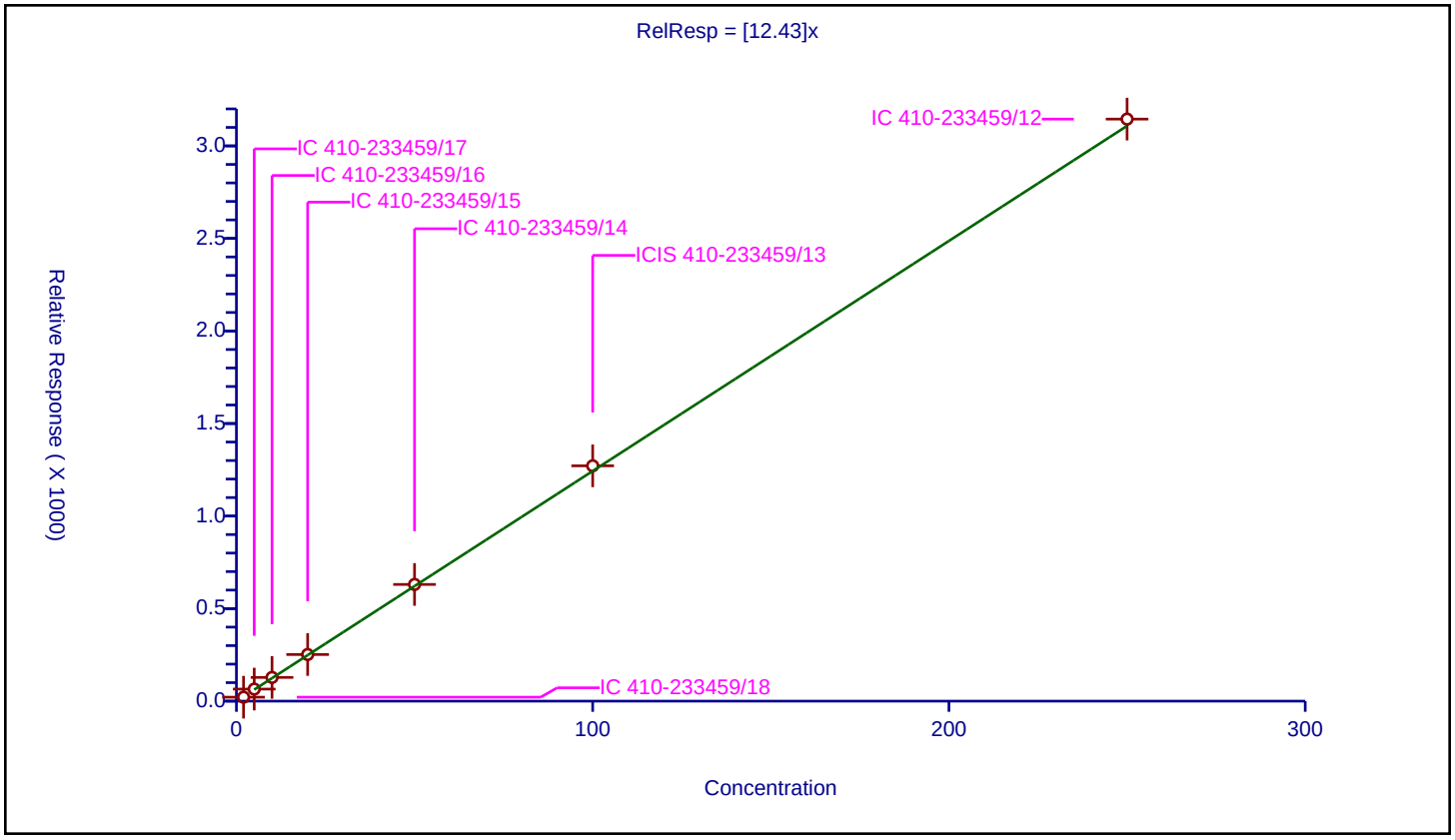
Curve Coefficients

Intercept:	0
Slope:	12.43

Error Coefficients

Standard Error:	4240000
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	2.0	21.386026	50.0	155632.0	10.693013	Y
2	IC 410-233459/17	5.0	65.120785	50.0	134454.0	13.024157	Y
3	IC 410-233459/16	10.0	128.116952	50.0	144059.0	12.811695	Y
4	IC 410-233459/15	20.0	251.927949	50.0	140927.0	12.596397	Y
5	IC 410-233459/14	50.0	630.575693	50.0	149941.0	12.611514	Y
6	ICIS 410-233459/13	100.0	1271.463683	50.0	147286.0	12.714637	Y
7	IC 410-233459/12	250.0	3144.914702	50.0	150473.0	12.579659	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

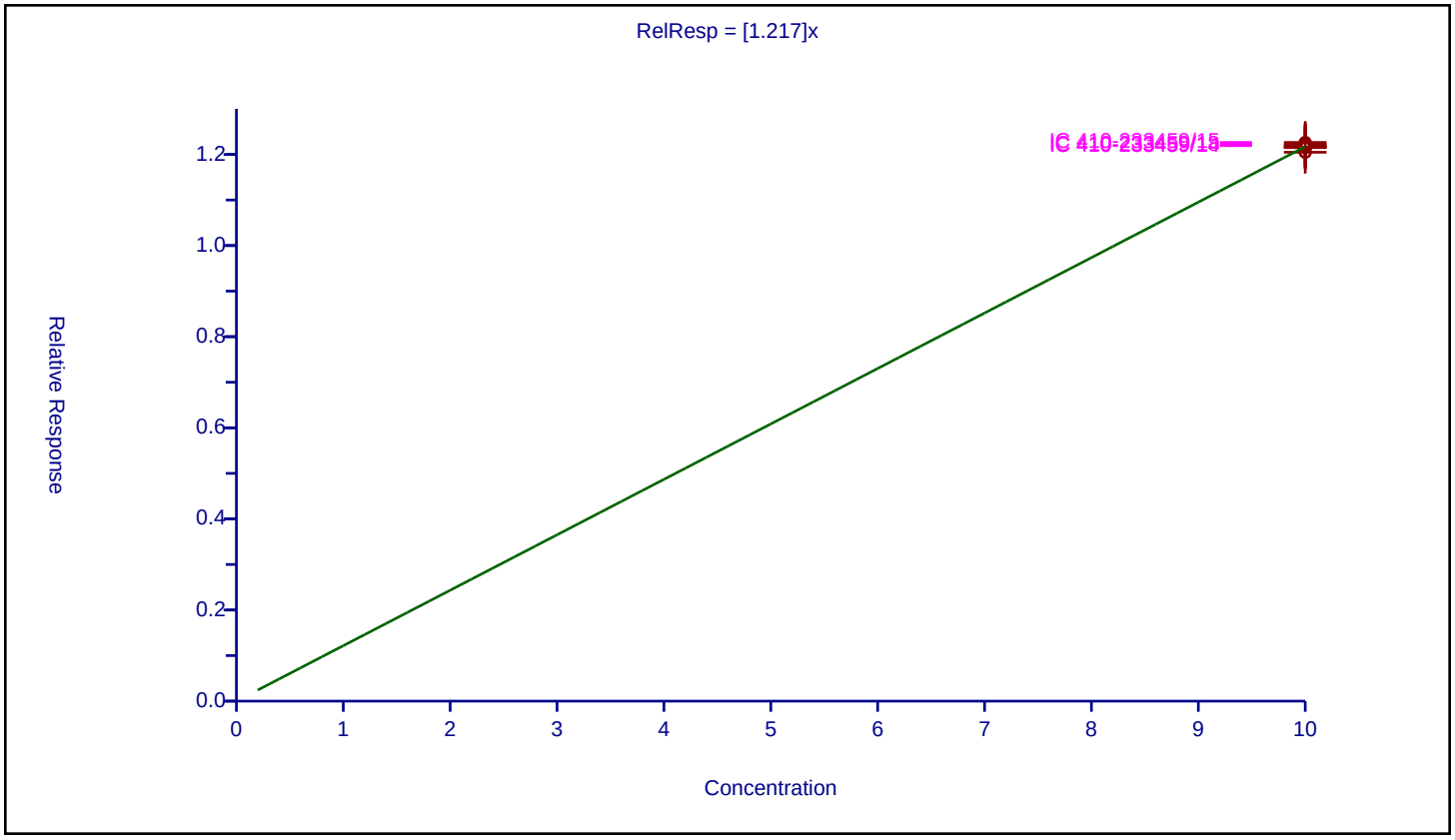
Curve Coefficients

Intercept:	0
Slope:	1.217

Error Coefficients

Standard Error:	2210000
Relative Standard Error:	0.6
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/12	10.0	12.047995	10.0	1697885.0	1.2048	Y
2	ICIS 410-233459/13	10.0	12.157123	10.0	1700909.0	1.215712	Y
3	IC 410-233459/14	10.0	12.19244	10.0	1684584.0	1.219244	Y
4	IC 410-233459/15	10.0	12.263508	10.0	1668976.0	1.226351	Y
5	IC 410-233459/16	10.0	12.157389	10.0	1674640.0	1.215739	Y
6	IC 410-233459/17	10.0	12.149542	10.0	1674650.0	1.214954	Y
7	IC 410-233459/18	10.0	12.218467	10.0	1678767.0	1.221847	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

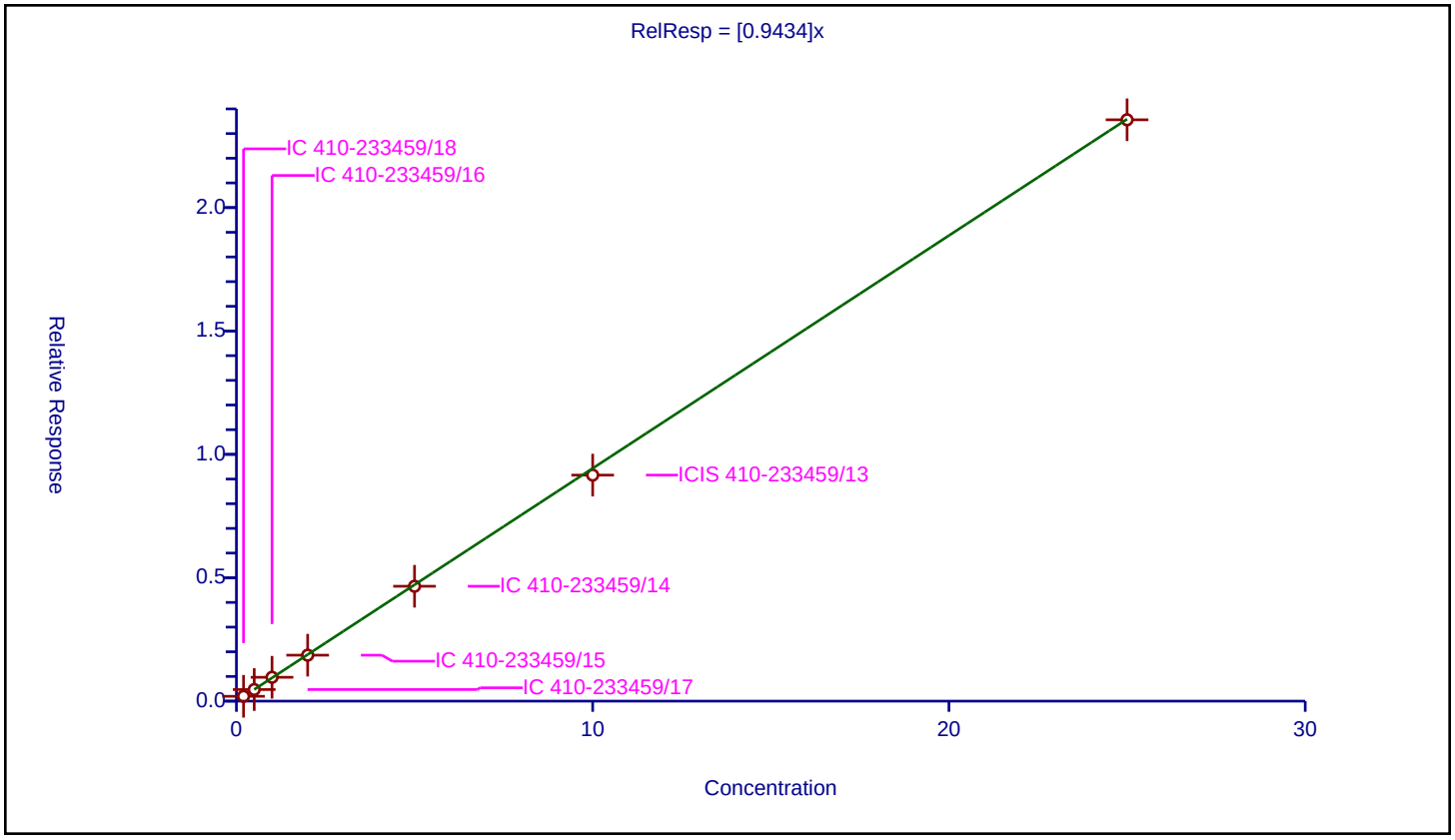
Curve Coefficients

Intercept:	0
Slope:	0.9434

Error Coefficients

Standard Error:	1790000
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.195399	10.0	1678767.0	0.976997	Y
2	IC 410-233459/17	0.5	0.470086	10.0	1674650.0	0.940173	Y
3	IC 410-233459/16	1.0	0.966226	10.0	1674640.0	0.966226	Y
4	IC 410-233459/15	2.0	1.861812	10.0	1668976.0	0.930906	Y
5	IC 410-233459/14	5.0	4.655179	10.0	1684584.0	0.931036	Y
6	ICIS 410-233459/13	10.0	9.159949	10.0	1700909.0	0.915995	Y
7	IC 410-233459/12	25.0	23.558256	10.0	1697885.0	0.94233	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

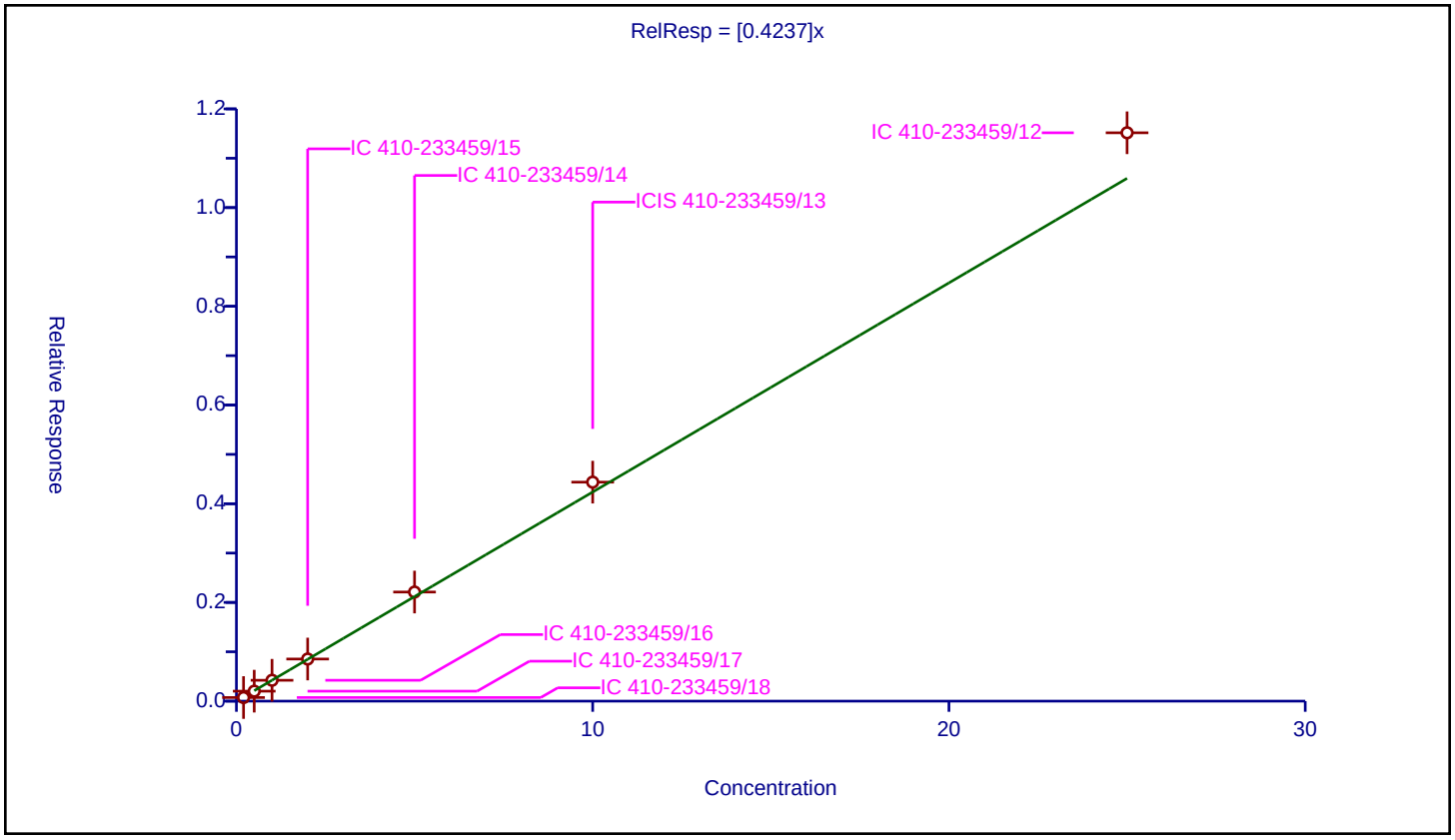
Curve Coefficients

Intercept:	0
Slope:	0.4237

Error Coefficients

Standard Error:	872000
Relative Standard Error:	7.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.073048	10.0	1678767.0	0.365238	Y
2	IC 410-233459/17	0.5	0.202341	10.0	1674650.0	0.404682	Y
3	IC 410-233459/16	1.0	0.422795	10.0	1674640.0	0.422795	Y
4	IC 410-233459/15	2.0	0.853535	10.0	1668976.0	0.426768	Y
5	IC 410-233459/14	5.0	2.210943	10.0	1684584.0	0.442189	Y
6	ICIS 410-233459/13	10.0	4.437439	10.0	1700909.0	0.443744	Y
7	IC 410-233459/12	25.0	11.516175	10.0	1697885.0	0.460647	Y



Calibration / Ethyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

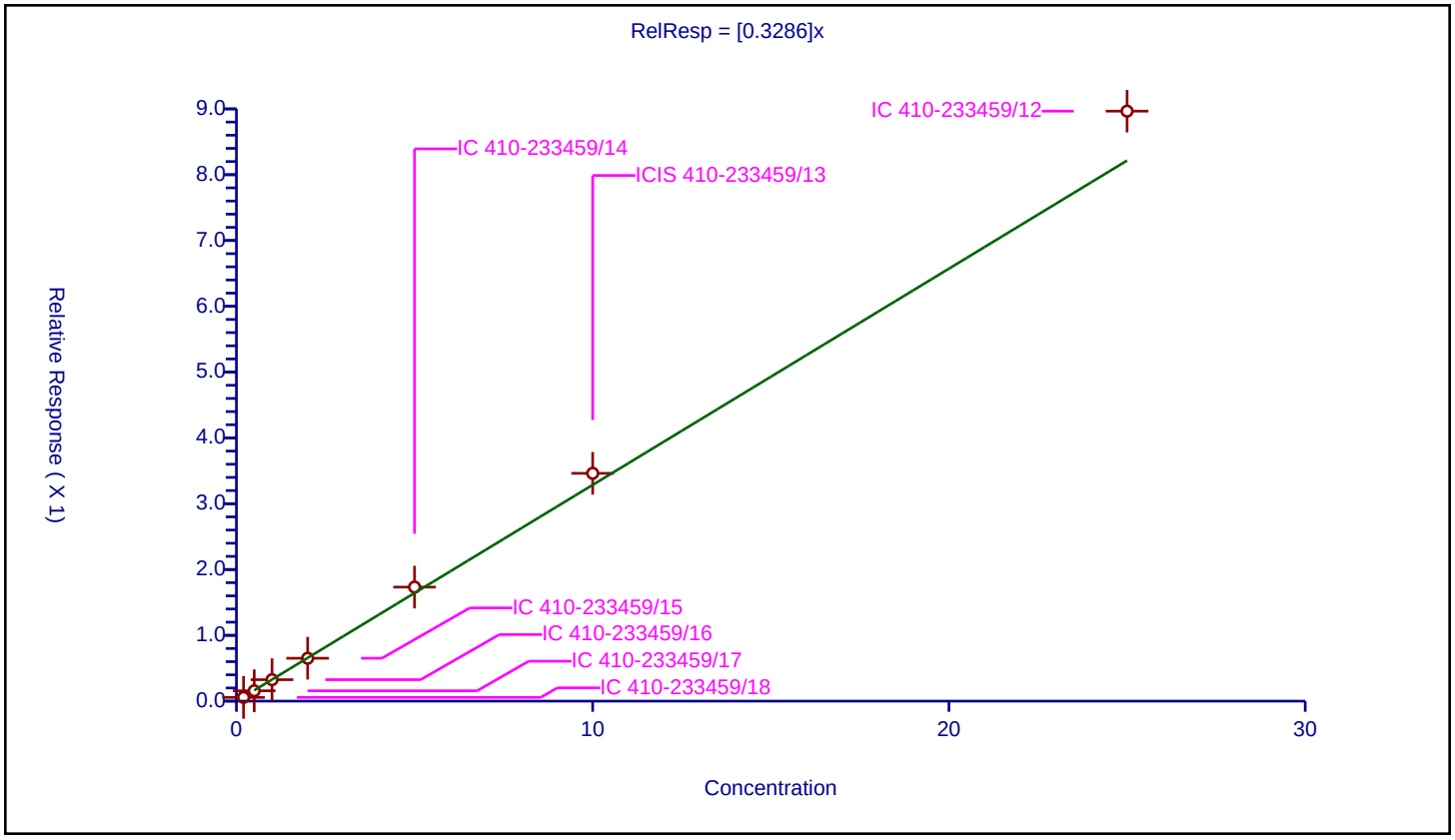
Curve Coefficients

Intercept:	0
Slope:	0.3286

Error Coefficients

Standard Error:	679000
Relative Standard Error:	7.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.05647	10.0	1678767.0	0.28235	Y
2	IC 410-233459/17	0.5	0.157245	10.0	1674650.0	0.31449	Y
3	IC 410-233459/16	1.0	0.326124	10.0	1674640.0	0.326124	Y
4	IC 410-233459/15	2.0	0.651729	10.0	1668976.0	0.325864	Y
5	IC 410-233459/14	5.0	1.732742	10.0	1684584.0	0.346548	Y
6	ICIS 410-233459/13	10.0	3.462008	10.0	1700909.0	0.346201	Y
7	IC 410-233459/12	25.0	8.965896	10.0	1697885.0	0.358636	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

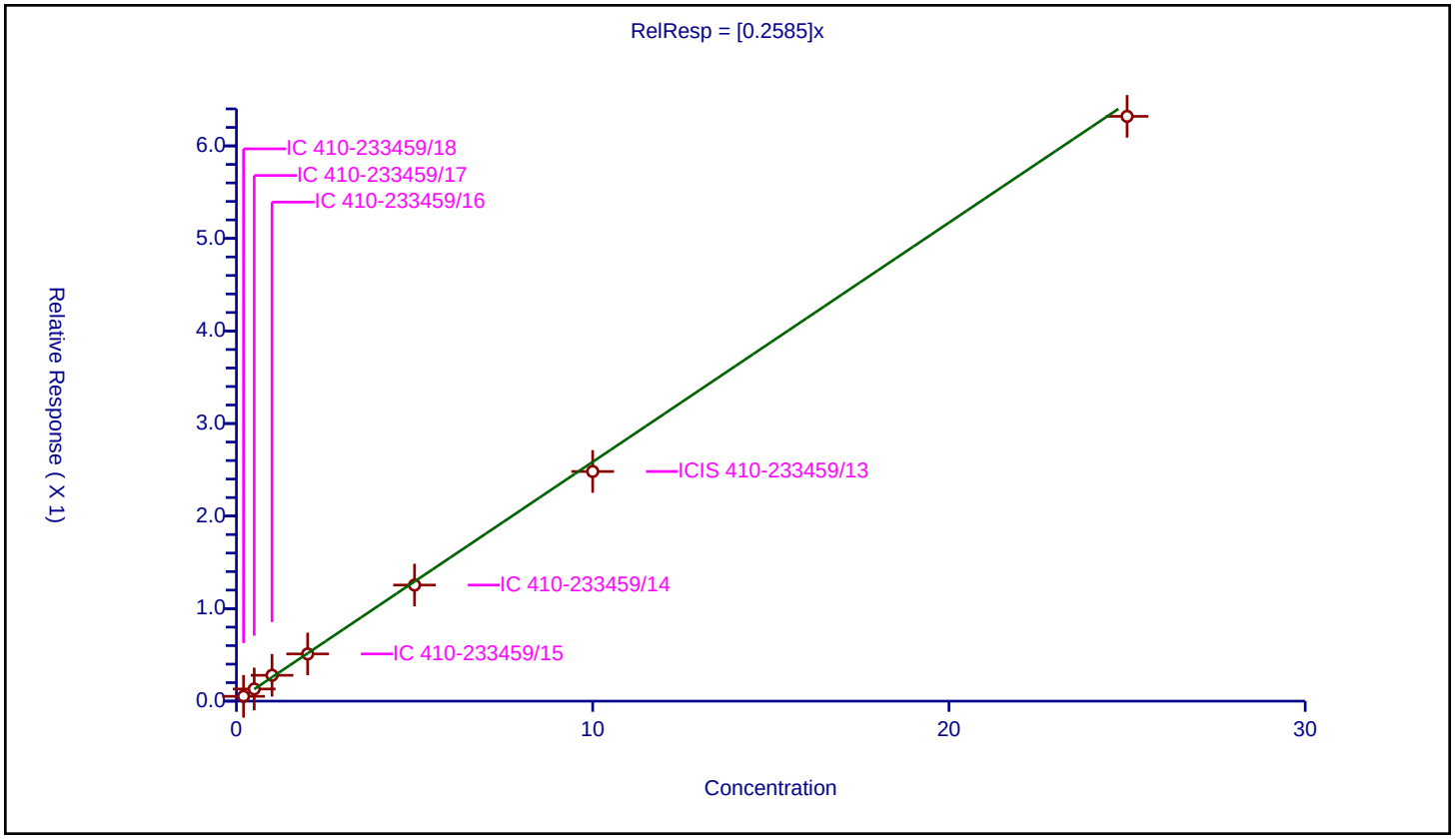
Curve Coefficients

Intercept:	0
Slope:	0.2585

Error Coefficients

Standard Error:	480000
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 410-233459/18	0.2	0.052116	10.0	1678767.0	0.260578	Y
2	IC 410-233459/17	0.5	0.13146	10.0	1674650.0	0.262921	Y
3	IC 410-233459/16	1.0	0.279266	10.0	1674640.0	0.279266	Y
4	IC 410-233459/15	2.0	0.510235	10.0	1668976.0	0.255118	Y
5	IC 410-233459/14	5.0	1.254333	10.0	1684584.0	0.250867	Y
6	ICIS 410-233459/13	10.0	2.481667	10.0	1700909.0	0.248167	Y
7	IC 410-233459/12	25.0	6.319415	10.0	1697885.0	0.252777	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

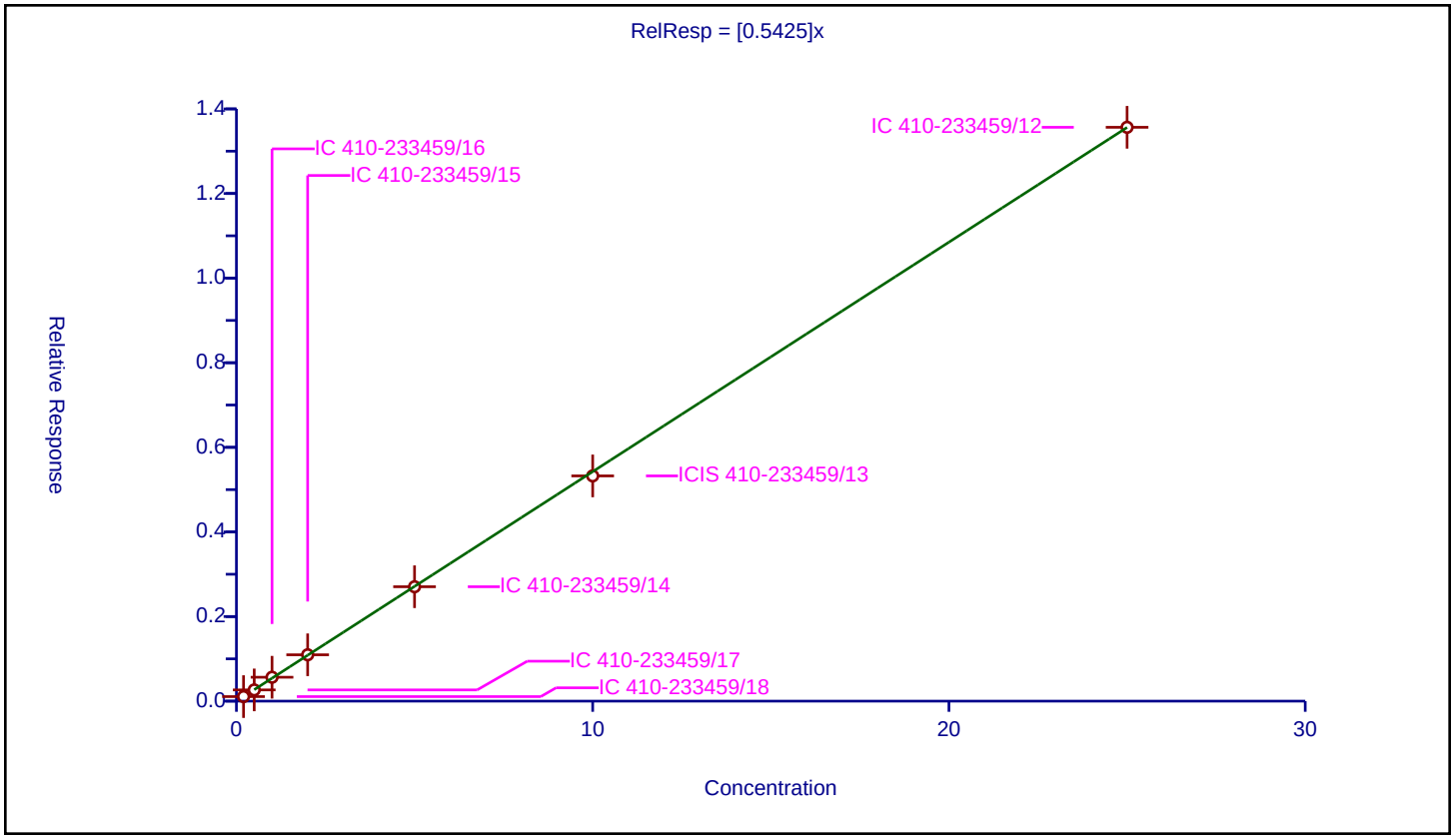
Curve Coefficients

Intercept:	0
Slope:	0.5425

Error Coefficients

Standard Error:	1030000
Relative Standard Error:	2.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.107537	10.0	1678767.0	0.537686	Y
2	IC 410-233459/17	0.5	0.265542	10.0	1674650.0	0.531084	Y
3	IC 410-233459/16	1.0	0.564957	10.0	1674640.0	0.564957	Y
4	IC 410-233459/15	2.0	1.095558	10.0	1668976.0	0.547779	Y
5	IC 410-233459/14	5.0	2.70411	10.0	1684584.0	0.540822	Y
6	ICIS 410-233459/13	10.0	5.32423	10.0	1700909.0	0.532423	Y
7	IC 410-233459/12	25.0	13.564823	10.0	1697885.0	0.542593	Y



Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

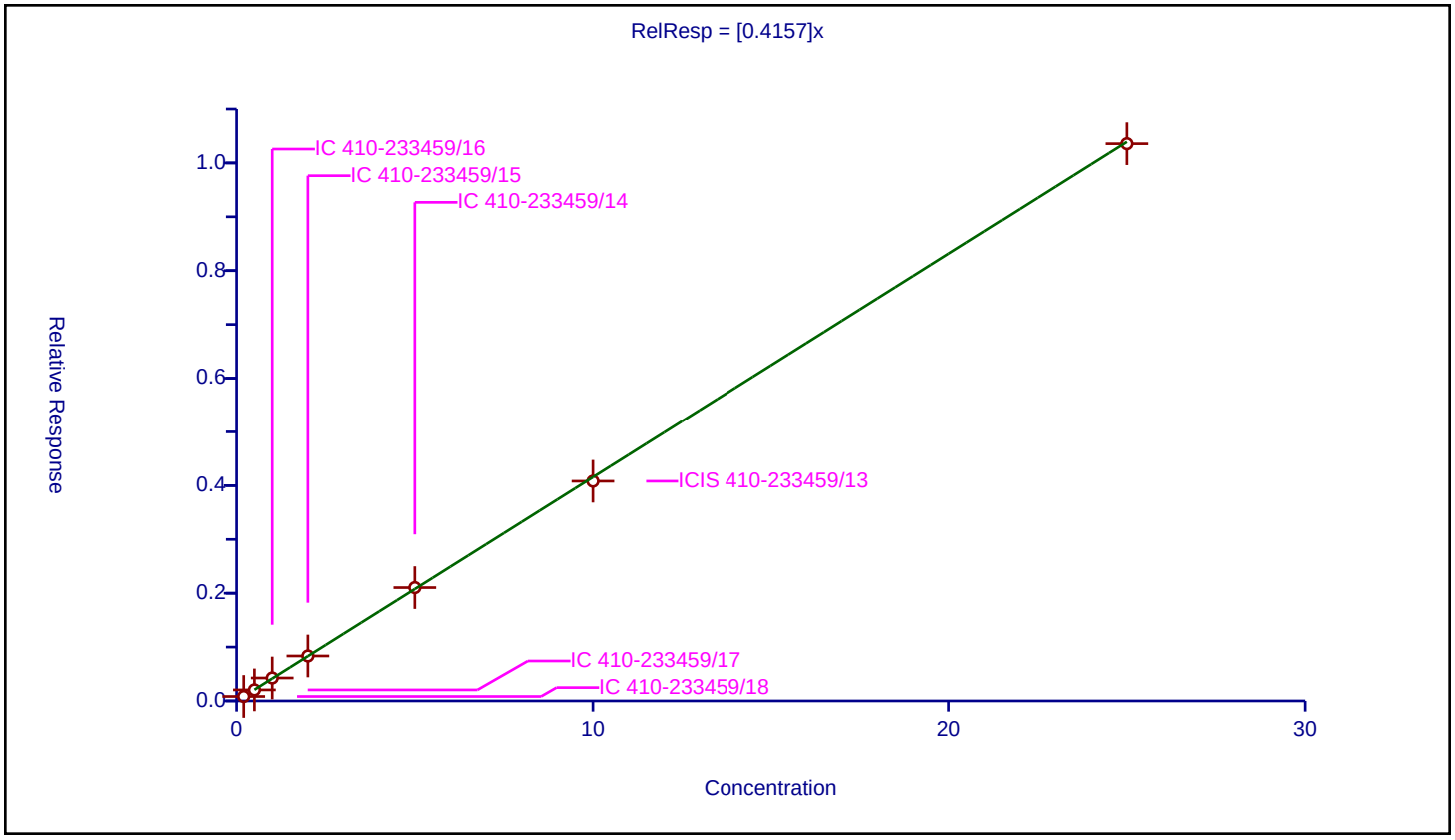
Curve Coefficients

Intercept:	0
Slope:	0.4157

Error Coefficients

Standard Error:	788000
Relative Standard Error:	1.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.082632	10.0	1678767.0	0.41316	Y
2	IC 410-233459/17	0.5	0.205016	10.0	1674650.0	0.410032	Y
3	IC 410-233459/16	1.0	0.426002	10.0	1674640.0	0.426002	Y
4	IC 410-233459/15	2.0	0.834679	10.0	1668976.0	0.41734	Y
5	IC 410-233459/14	5.0	2.10462	10.0	1684584.0	0.420924	Y
6	ICIS 410-233459/13	10.0	4.081935	10.0	1700909.0	0.408194	Y
7	IC 410-233459/12	25.0	10.358075	10.0	1697885.0	0.414323	Y



Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

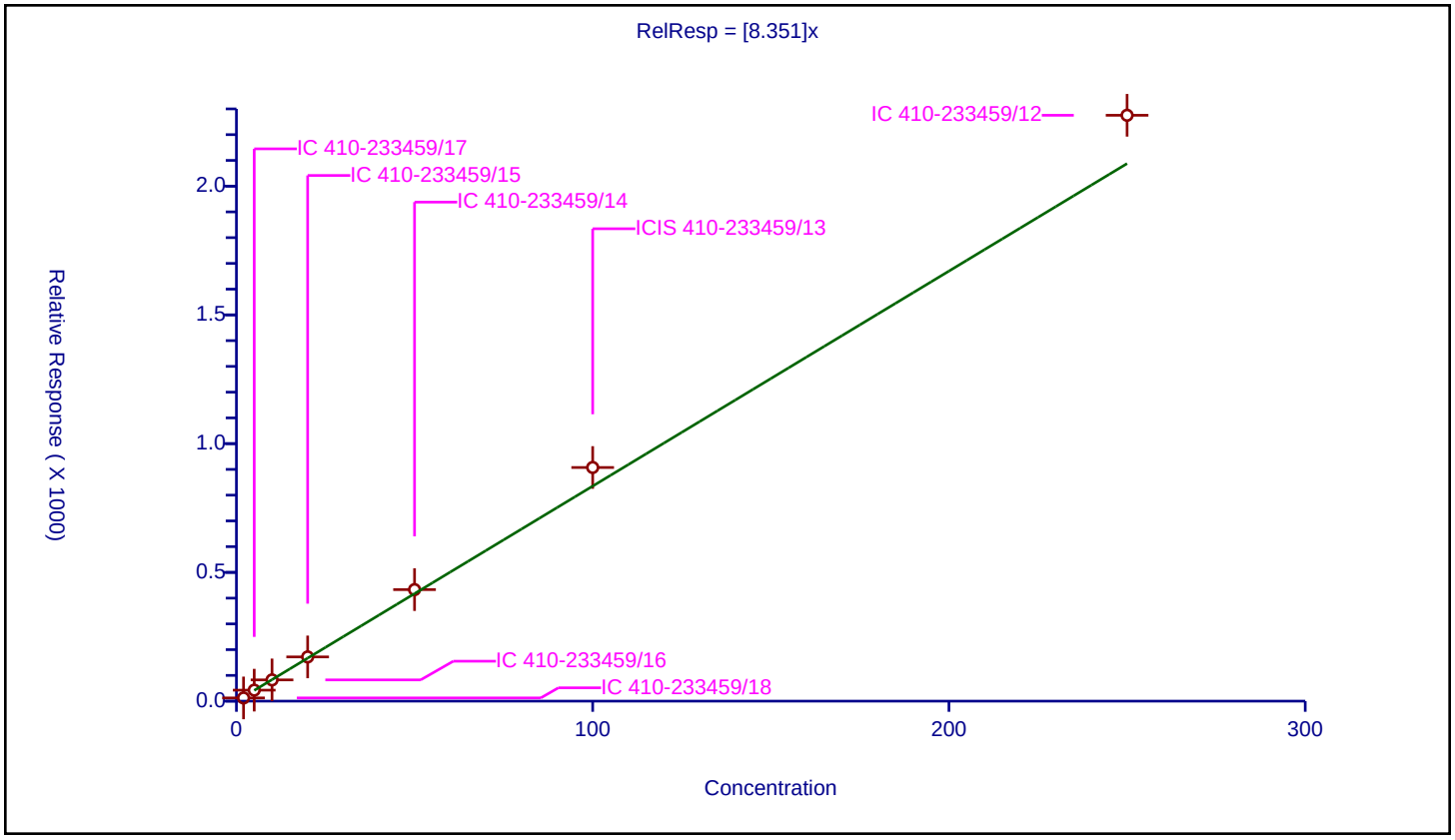
Curve Coefficients

Intercept:	0
Slope:	8.351

Error Coefficients

Standard Error:	3050000
Relative Standard Error:	11.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	2.0	12.490362	50.0	155632.0	6.245181	Y
2	IC 410-233459/17	5.0	42.690065	50.0	134454.0	8.538013	Y
3	IC 410-233459/16	10.0	82.483219	50.0	144059.0	8.248322	Y
4	IC 410-233459/15	20.0	171.713724	50.0	140927.0	8.585686	Y
5	IC 410-233459/14	50.0	433.108356	50.0	149941.0	8.662167	Y
6	ICIS 410-233459/13	100.0	907.417202	50.0	147286.0	9.074172	Y
7	IC 410-233459/12	250.0	2275.181926	50.0	150473.0	9.100728	Y



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

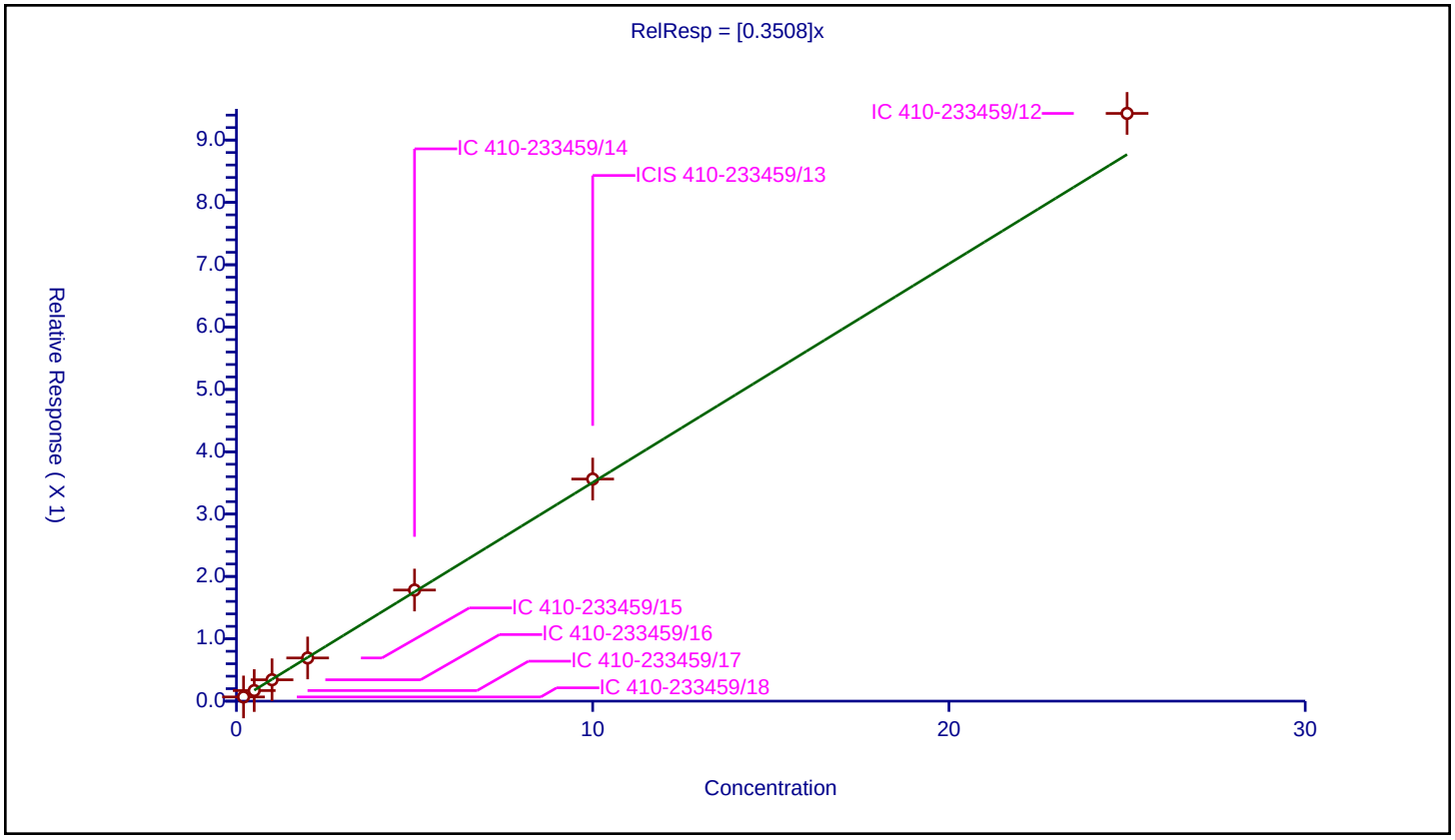
Curve Coefficients

Intercept:	0
Slope:	0.3508

Error Coefficients

Standard Error:	711000
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 410-233459/18	0.2	0.067413	10.0	1678767.0	0.337063	Y
2	IC 410-233459/17	0.5	0.169689	10.0	1674650.0	0.339378	Y
3	IC 410-233459/16	1.0	0.342802	10.0	1674640.0	0.342802	Y
4	IC 410-233459/15	2.0	0.69258	10.0	1668976.0	0.34629	Y
5	IC 410-233459/14	5.0	1.782357	10.0	1684584.0	0.356471	Y
6	ICIS 410-233459/13	10.0	3.562283	10.0	1700909.0	0.356228	Y
7	IC 410-233459/12	25.0	9.42724	10.0	1697885.0	0.37709	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

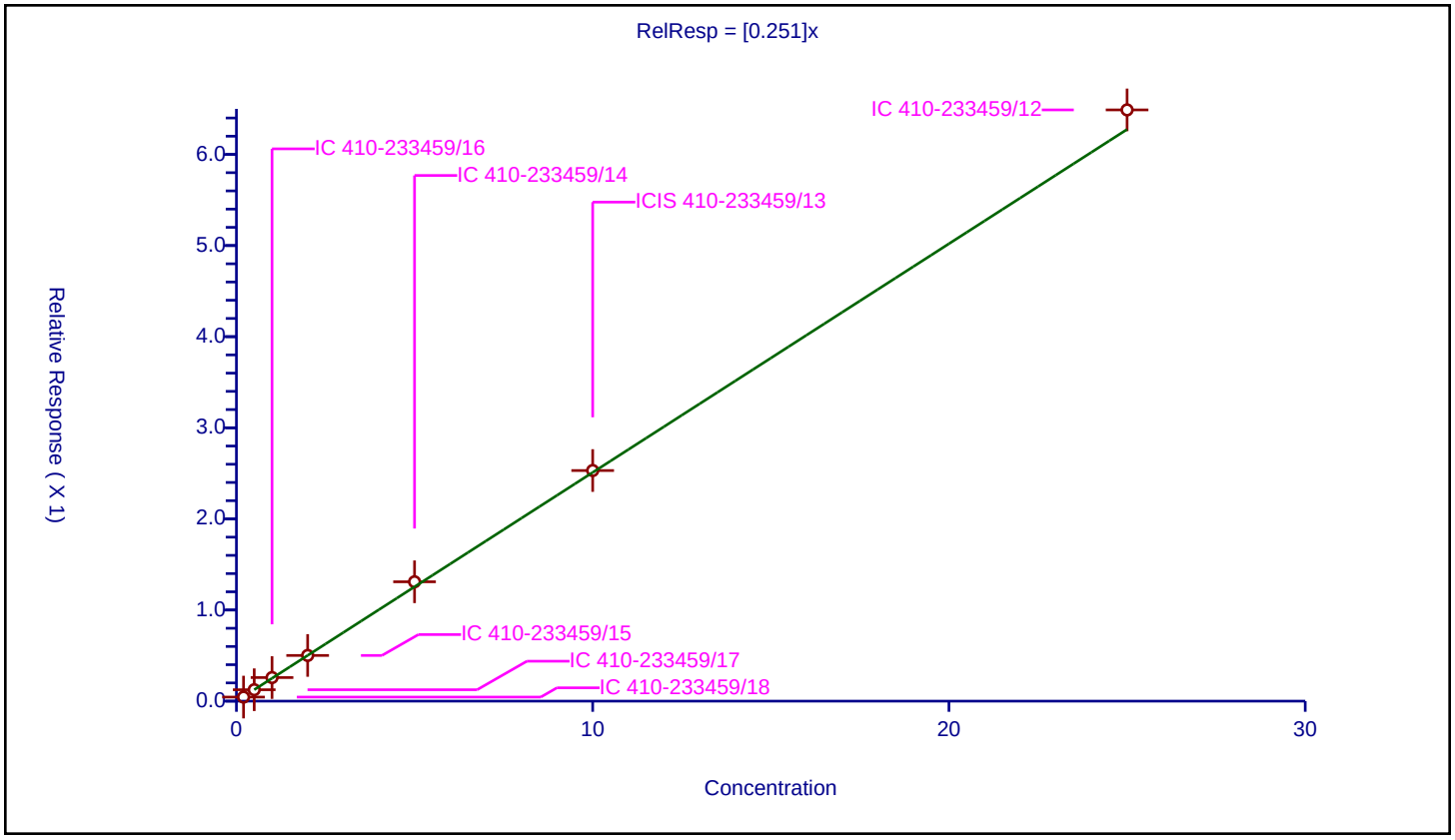
Curve Coefficients

Intercept:	0
Slope:	0.251

Error Coefficients

Standard Error:	493000
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 410-233459/18	0.2	0.044437	10.0	1678767.0	0.222187	Y
2	IC 410-233459/17	0.5	0.12534	10.0	1674650.0	0.250679	Y
3	IC 410-233459/16	1.0	0.258772	10.0	1674640.0	0.258772	Y
4	IC 410-233459/15	2.0	0.501397	10.0	1668976.0	0.250699	Y
5	IC 410-233459/14	5.0	1.309855	10.0	1684584.0	0.261971	Y
6	ICIS 410-233459/13	10.0	2.53097	10.0	1700909.0	0.253097	Y
7	IC 410-233459/12	25.0	6.489002	10.0	1697885.0	0.25956	Y



Calibration / 1-Chlorohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

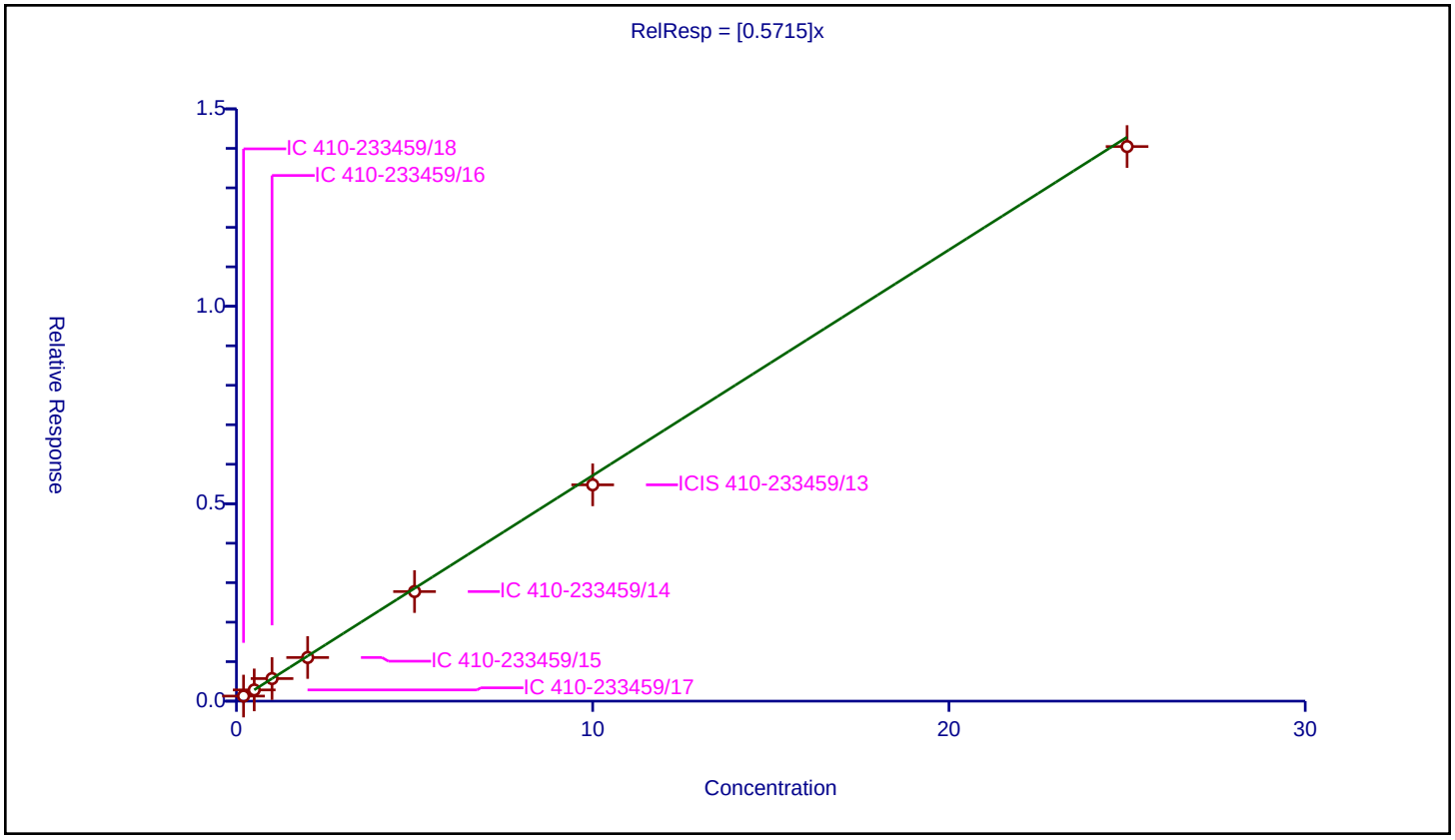
Curve Coefficients

Intercept:	0
Slope:	0.5715

Error Coefficients

Standard Error:	1070000
Relative Standard Error:	5.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.128368	10.0	1678767.0	0.64184	Y
2	IC 410-233459/17	0.5	0.284549	10.0	1674650.0	0.569098	Y
3	IC 410-233459/16	1.0	0.571663	10.0	1674640.0	0.571663	Y
4	IC 410-233459/15	2.0	1.105612	10.0	1668976.0	0.552806	Y
5	IC 410-233459/14	5.0	2.775736	10.0	1684584.0	0.555147	Y
6	ICIS 410-233459/13	10.0	5.478241	10.0	1700909.0	0.547824	Y
7	IC 410-233459/12	25.0	14.046258	10.0	1697885.0	0.56185	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

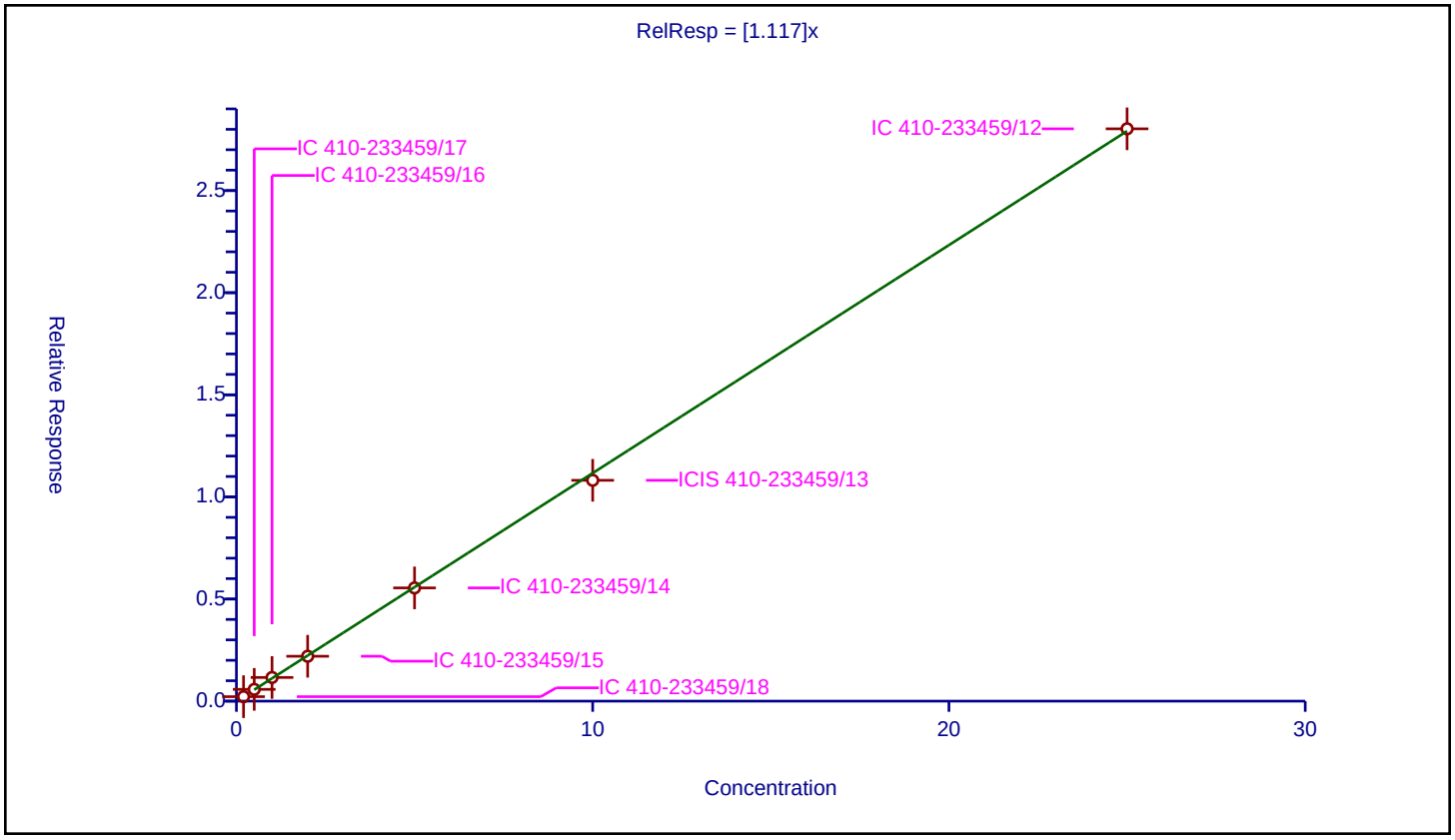
Curve Coefficients

Intercept:	0
Slope:	1.117

Error Coefficients

Standard Error:	2120000
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 410-233459/18	0.2	0.21847	10.0	1678767.0	1.092349	Y
2	IC 410-233459/17	0.5	0.577004	10.0	1674650.0	1.154008	Y
3	IC 410-233459/16	1.0	1.159372	10.0	1674640.0	1.159372	Y
4	IC 410-233459/15	2.0	2.197653	10.0	1668976.0	1.098826	Y
5	IC 410-233459/14	5.0	5.54433	10.0	1684584.0	1.108866	Y
6	ICIS 410-233459/13	10.0	10.813095	10.0	1700909.0	1.081309	Y
7	IC 410-233459/12	25.0	28.024719	10.0	1697885.0	1.120989	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

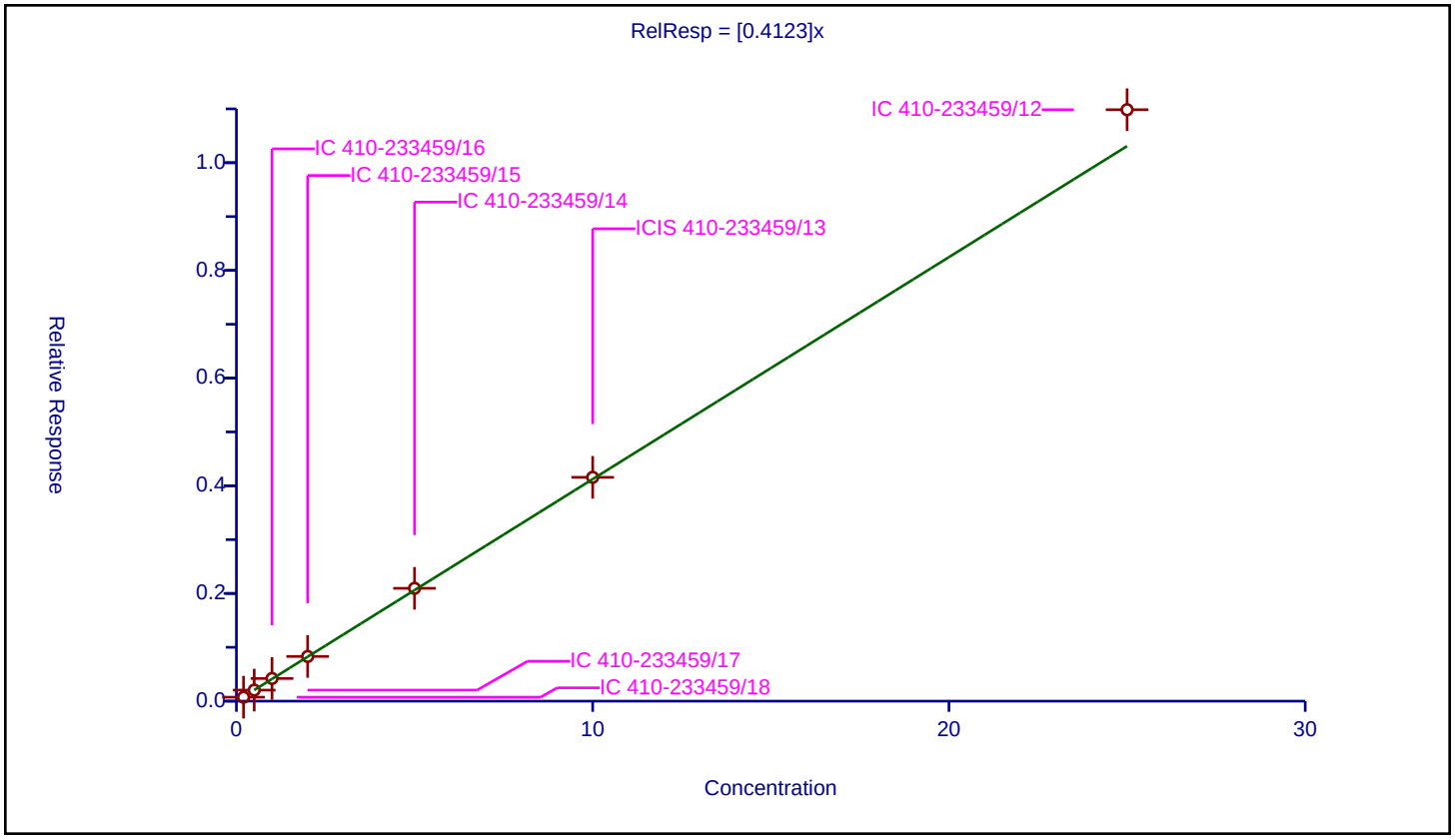
Curve Coefficients

Intercept:	0
Slope:	0.4123

Error Coefficients

Standard Error:	829000
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 410-233459/18	0.2	0.073232	10.0	1678767.0	0.366162	Y
2	IC 410-233459/17	0.5	0.204903	10.0	1674650.0	0.409805	Y
3	IC 410-233459/16	1.0	0.421123	10.0	1674640.0	0.421123	Y
4	IC 410-233459/15	2.0	0.83021	10.0	1668976.0	0.415105	Y
5	IC 410-233459/14	5.0	2.095621	10.0	1684584.0	0.419124	Y
6	ICIS 410-233459/13	10.0	4.156854	10.0	1700909.0	0.415685	Y
7	IC 410-233459/12	25.0	10.984531	10.0	1697885.0	0.439381	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

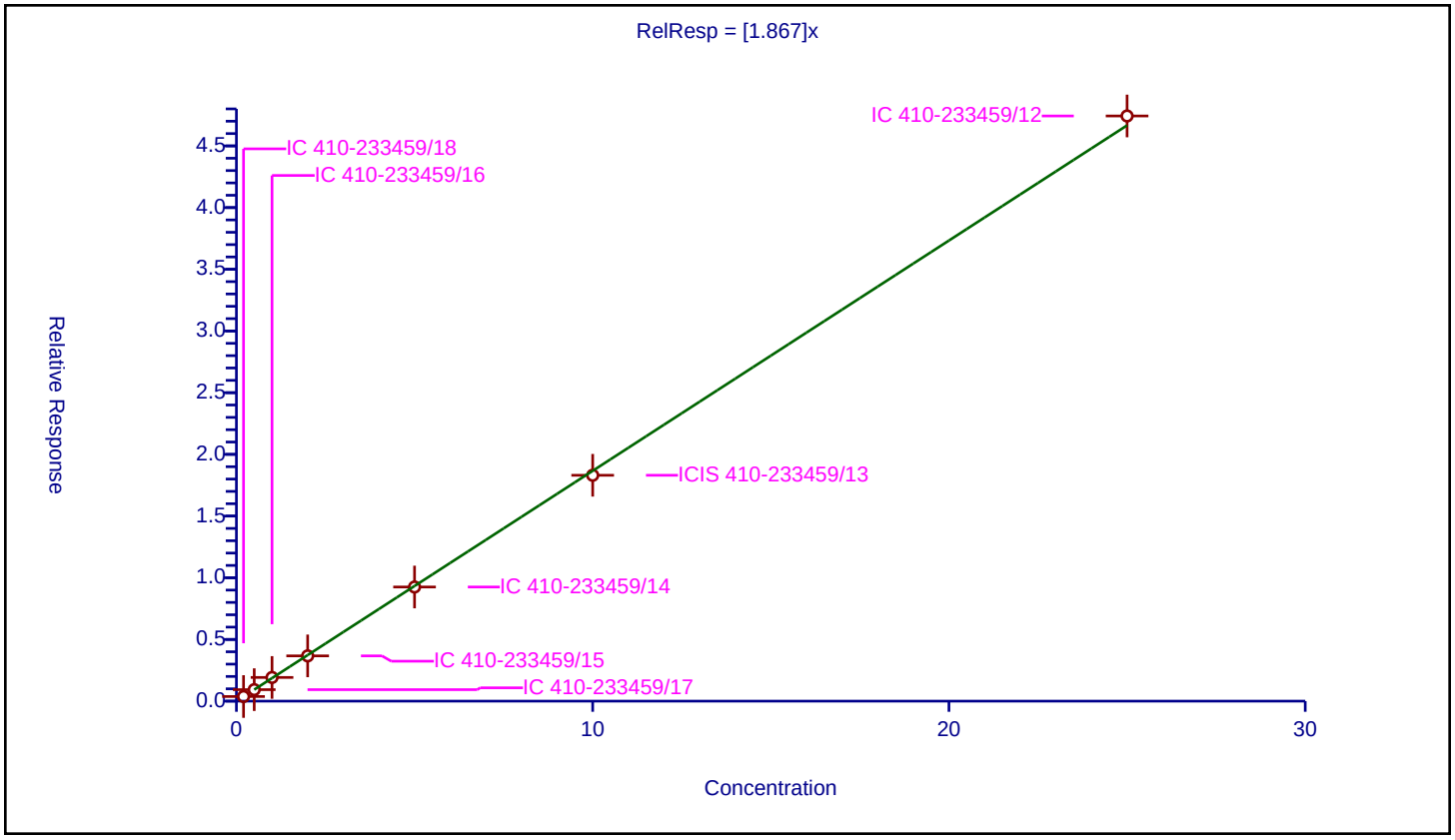
Curve Coefficients

Intercept:	0
Slope:	1.867

Error Coefficients

Standard Error:	3590000
Relative Standard Error:	1.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.374346	10.0	1678767.0	1.871731	Y
2	IC 410-233459/17	0.5	0.931598	10.0	1674650.0	1.863195	Y
3	IC 410-233459/16	1.0	1.919386	10.0	1674640.0	1.919386	Y
4	IC 410-233459/15	2.0	3.667494	10.0	1668976.0	1.833747	Y
5	IC 410-233459/14	5.0	9.250118	10.0	1684584.0	1.850024	Y
6	ICIS 410-233459/13	10.0	18.306523	10.0	1700909.0	1.830652	Y
7	IC 410-233459/12	25.0	47.42575	10.0	1697885.0	1.89703	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

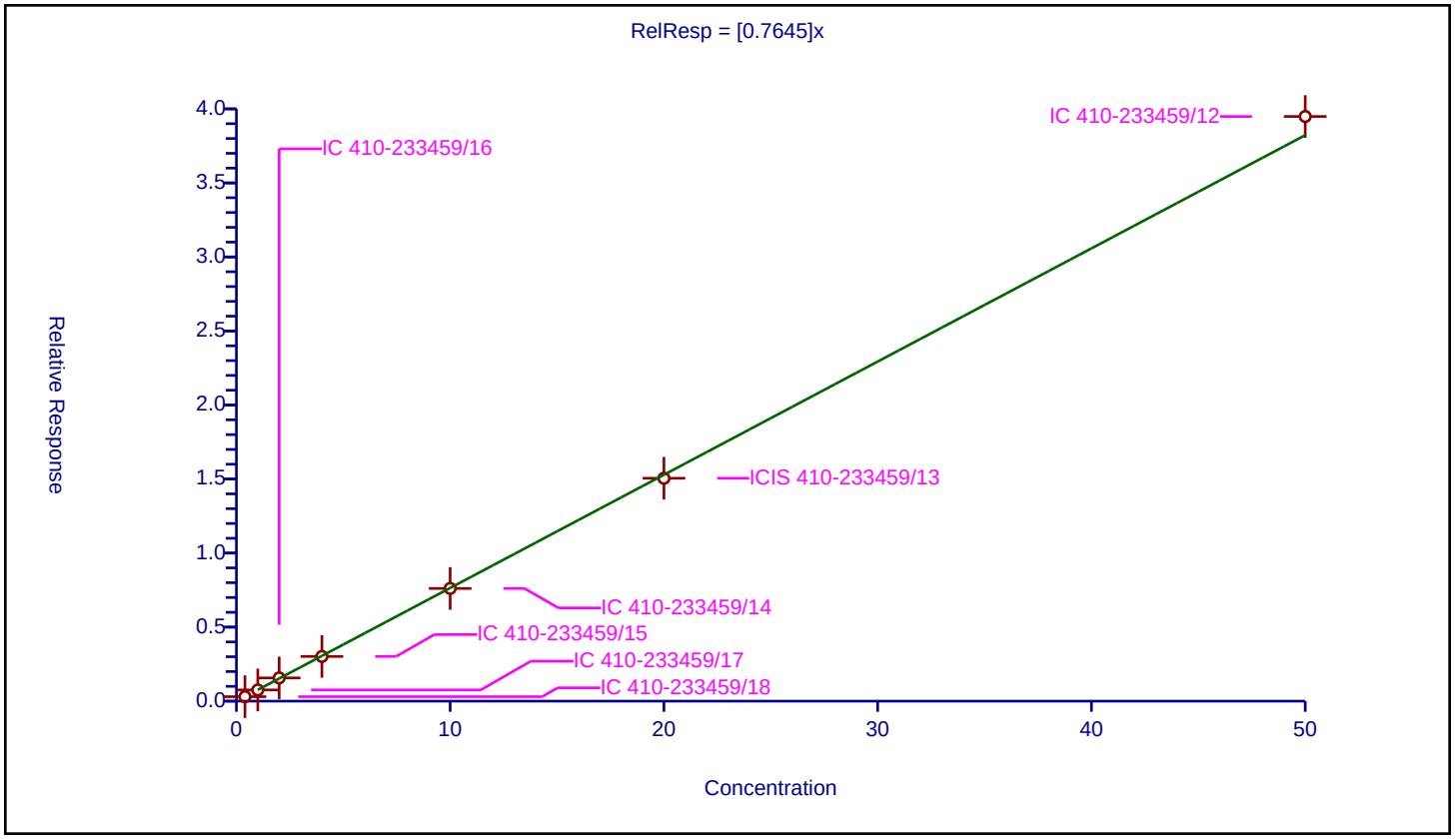
Curve Coefficients

Intercept:	0
Slope:	0.7645

Error Coefficients

Standard Error:	2990000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.4	0.30112	10.0	1678767.0	0.7528	Y
2	IC 410-233459/17	1.0	0.756343	10.0	1674650.0	0.756343	Y
3	IC 410-233459/16	2.0	1.567483	10.0	1674640.0	0.783742	Y
4	IC 410-233459/15	4.0	3.01933	10.0	1668976.0	0.754833	Y
5	IC 410-233459/14	10.0	7.611487	10.0	1684584.0	0.761149	Y
6	ICIS 410-233459/13	20.0	15.052986	10.0	1700909.0	0.752649	Y
7	IC 410-233459/12	50.0	39.484818	10.0	1697885.0	0.789696	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

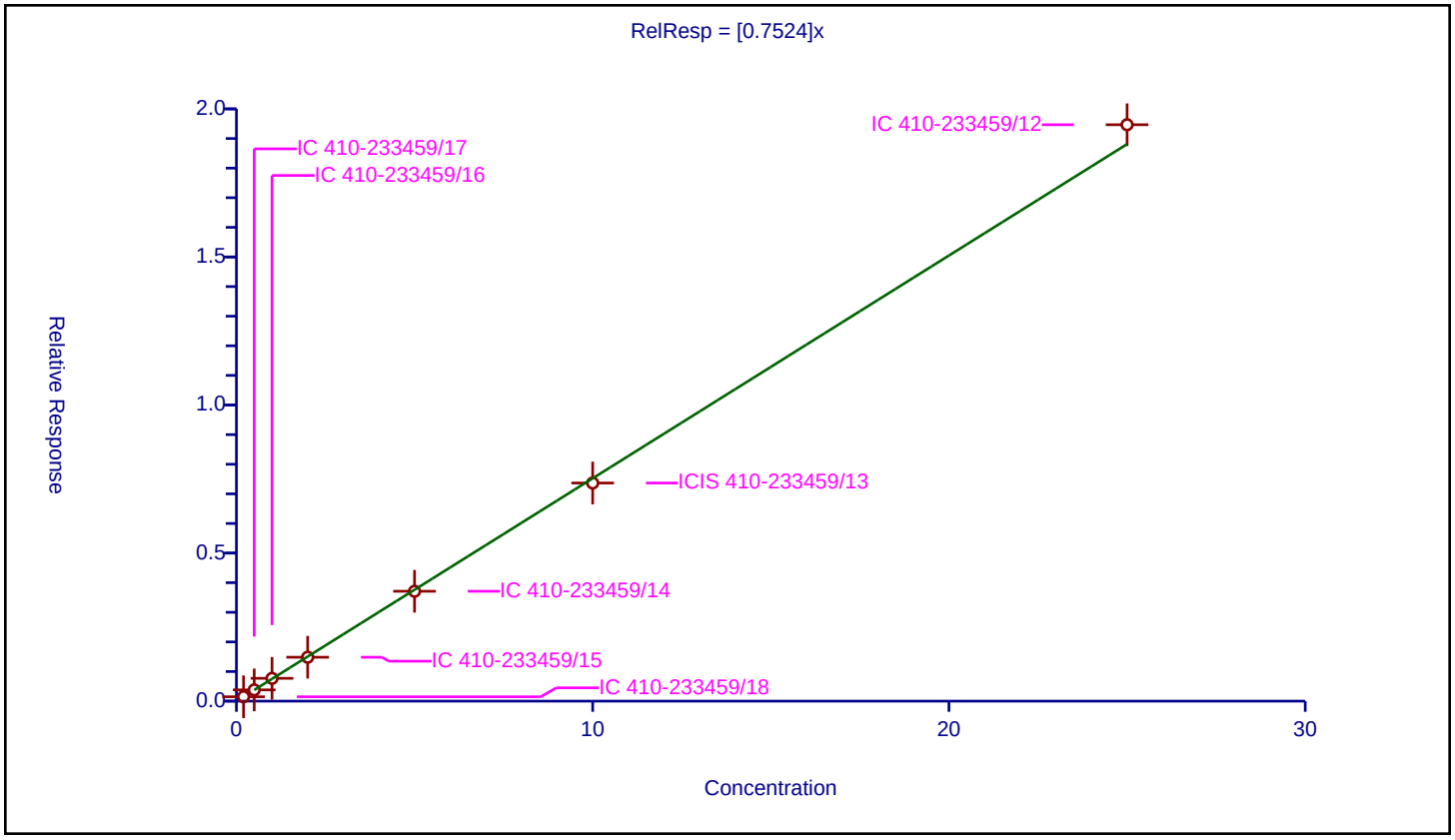
Curve Coefficients

Intercept:	0
Slope:	0.7524

Error Coefficients

Standard Error:	1470000
Relative Standard Error:	2.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.147662	10.0	1678767.0	0.73831	Y
2	IC 410-233459/17	0.5	0.379853	10.0	1674650.0	0.759705	Y
3	IC 410-233459/16	1.0	0.769903	10.0	1674640.0	0.769903	Y
4	IC 410-233459/15	2.0	1.482969	10.0	1668976.0	0.741485	Y
5	IC 410-233459/14	5.0	3.710934	10.0	1684584.0	0.742187	Y
6	ICIS 410-233459/13	10.0	7.365591	10.0	1700909.0	0.736559	Y
7	IC 410-233459/12	25.0	19.464905	10.0	1697885.0	0.778596	Y



Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

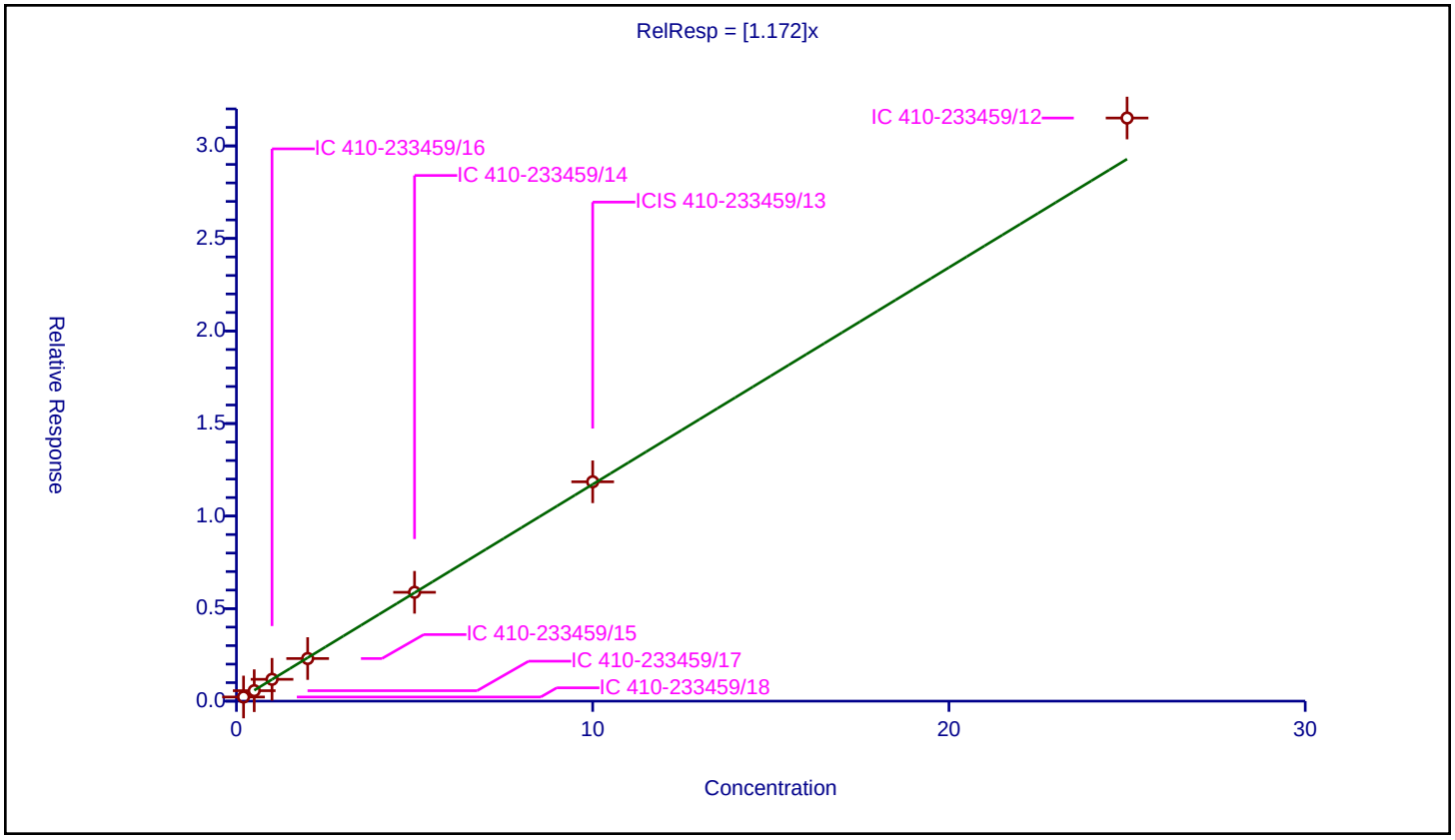
Curve Coefficients

Intercept:	0
Slope:	1.172

Error Coefficients

Standard Error:	2380000
Relative Standard Error:	4.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.223545	10.0	1678767.0	1.117725	Y
2	IC 410-233459/17	0.5	0.565229	10.0	1674650.0	1.130457	Y
3	IC 410-233459/16	1.0	1.179758	10.0	1674640.0	1.179758	Y
4	IC 410-233459/15	2.0	2.30249	10.0	1668976.0	1.151245	Y
5	IC 410-233459/14	5.0	5.880633	10.0	1684584.0	1.176127	Y
6	ICIS 410-233459/13	10.0	11.85161	10.0	1700909.0	1.185161	Y
7	IC 410-233459/12	25.0	31.506651	10.0	1697885.0	1.260266	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

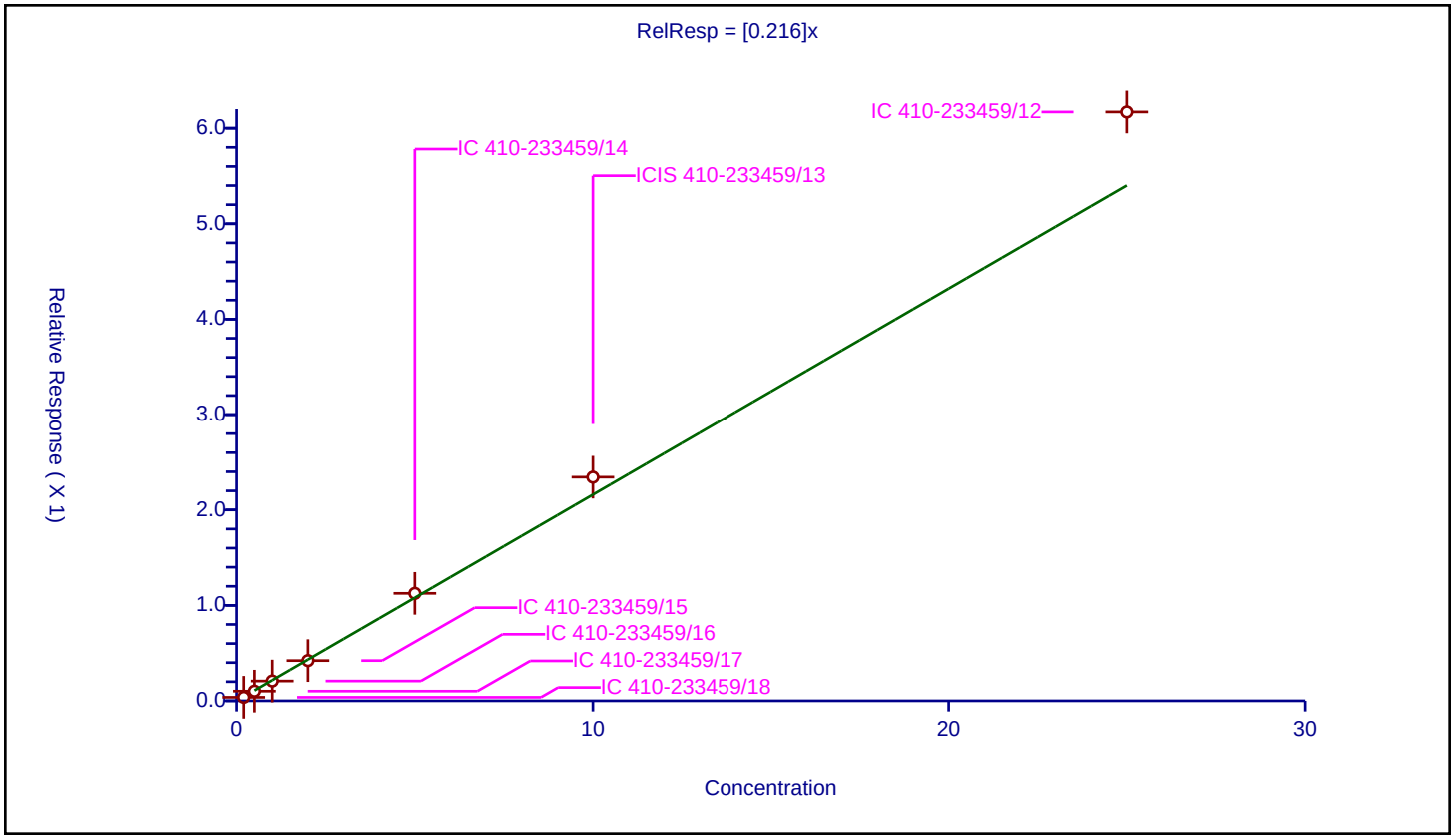
Curve Coefficients

Intercept:	0
Slope:	0.216

Error Coefficients

Standard Error:	465000
Relative Standard Error:	9.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.037069	10.0	1678767.0	0.185344	Y
2	IC 410-233459/17	0.5	0.101281	10.0	1674650.0	0.202562	Y
3	IC 410-233459/16	1.0	0.2074	10.0	1674640.0	0.2074	Y
4	IC 410-233459/15	2.0	0.421276	10.0	1668976.0	0.210638	Y
5	IC 410-233459/14	5.0	1.126047	10.0	1684584.0	0.225209	Y
6	ICIS 410-233459/13	10.0	2.343547	10.0	1700909.0	0.234355	Y
7	IC 410-233459/12	25.0	6.169794	10.0	1697885.0	0.246792	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

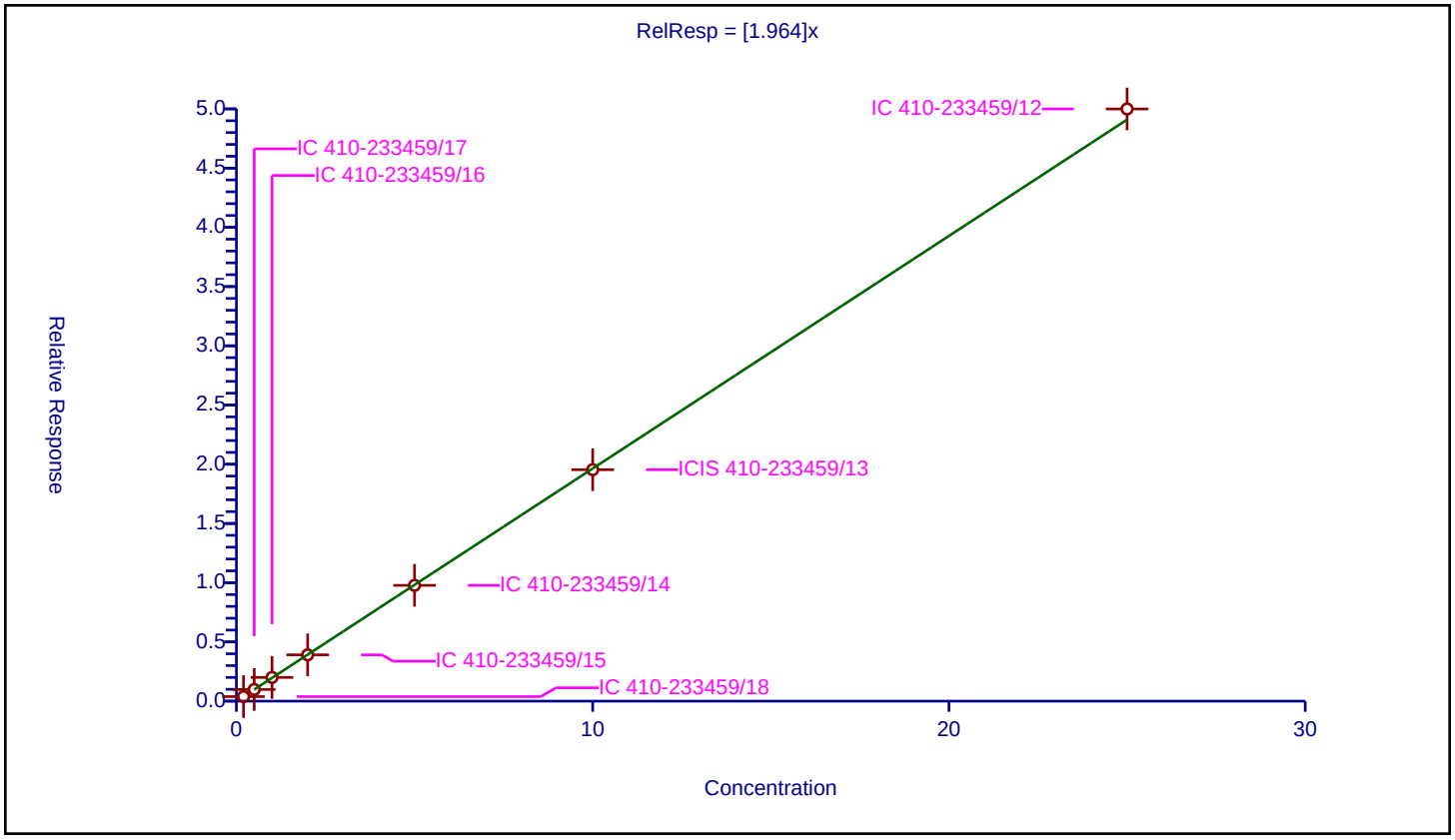
Curve Coefficients

Intercept:	0
Slope:	1.964

Error Coefficients

Standard Error:	3790000
Relative Standard Error:	1.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.382275	10.0	1678767.0	1.911373	Y
2	IC 410-233459/17	0.5	0.984743	10.0	1674650.0	1.969486	Y
3	IC 410-233459/16	1.0	2.002436	10.0	1674640.0	2.002436	Y
4	IC 410-233459/15	2.0	3.908229	10.0	1668976.0	1.954114	Y
5	IC 410-233459/14	5.0	9.773968	10.0	1684584.0	1.954794	Y
6	ICIS 410-233459/13	10.0	19.539781	10.0	1700909.0	1.953978	Y
7	IC 410-233459/12	25.0	49.99404	10.0	1697885.0	1.999762	Y



Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

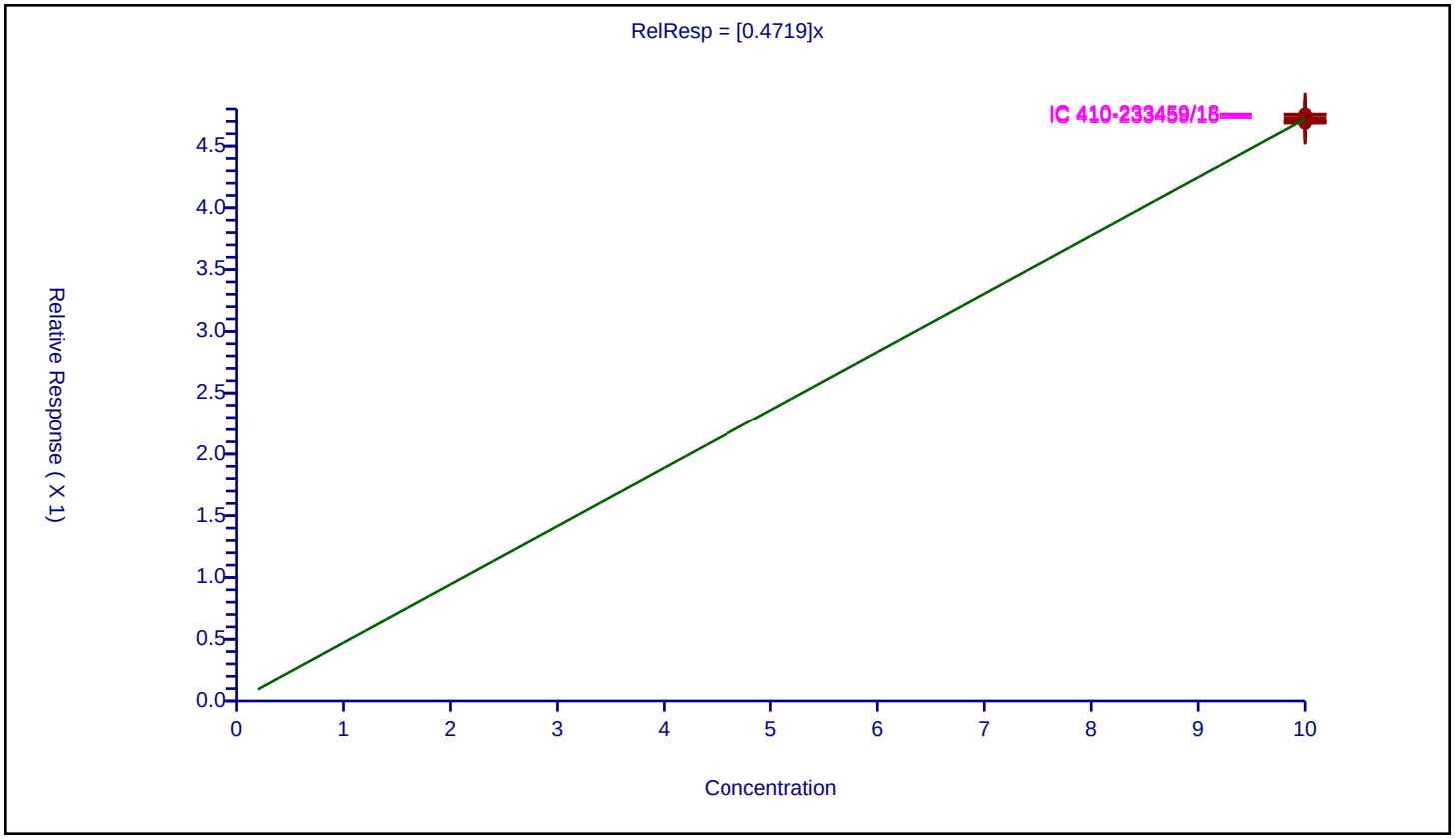
Curve Coefficients

Intercept:	0
Slope:	0.4719

Error Coefficients

Standard Error:	858000
Relative Standard Error:	0.6
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/12	10.0	4.685818	10.0	1697885.0	0.468582	Y
2	ICIS 410-233459/13	10.0	4.695119	10.0	1700909.0	0.469512	Y
3	IC 410-233459/14	10.0	4.700241	10.0	1684584.0	0.470024	Y
4	IC 410-233459/15	10.0	4.754131	10.0	1668976.0	0.475413	Y
5	IC 410-233459/16	10.0	4.730874	10.0	1674640.0	0.473087	Y
6	IC 410-233459/17	10.0	4.710692	10.0	1674650.0	0.471069	Y
7	IC 410-233459/18	10.0	4.758749	10.0	1678767.0	0.475875	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

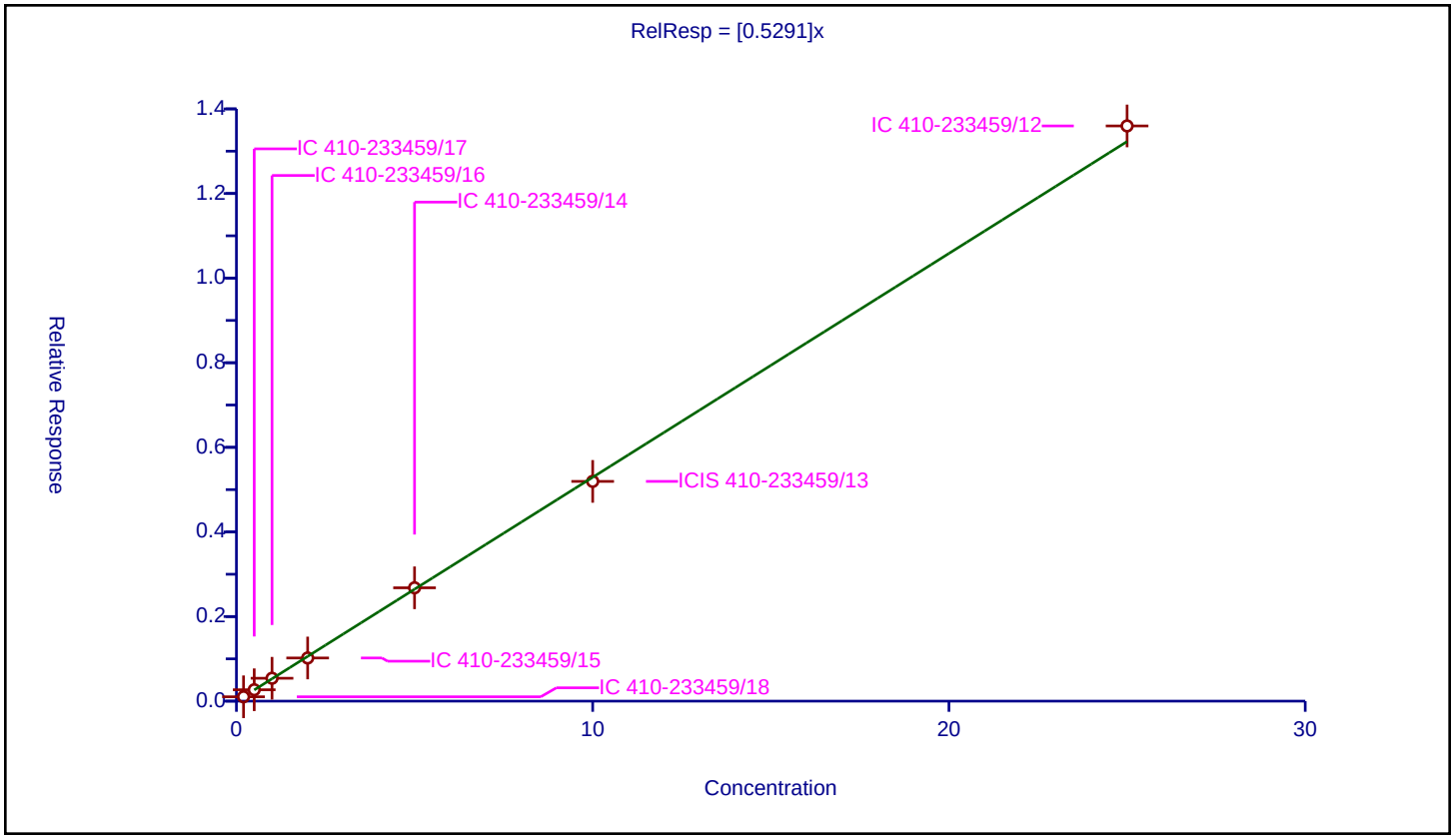
Curve Coefficients

Intercept:	0
Slope:	0.5291

Error Coefficients

Standard Error:	630000
Relative Standard Error:	2.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.10299	10.0	1013693.0	0.514949	Y
2	IC 410-233459/17	0.5	0.269187	10.0	1007739.0	0.538374	Y
3	IC 410-233459/16	1.0	0.541341	10.0	1012300.0	0.541341	Y
4	IC 410-233459/15	2.0	1.020321	10.0	1013034.0	0.510161	Y
5	IC 410-233459/14	5.0	2.679421	10.0	1016421.0	0.535884	Y
6	ICIS 410-233459/13	10.0	5.194472	10.0	1049716.0	0.519447	Y
7	IC 410-233459/12	25.0	13.596908	10.0	1039276.0	0.543876	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

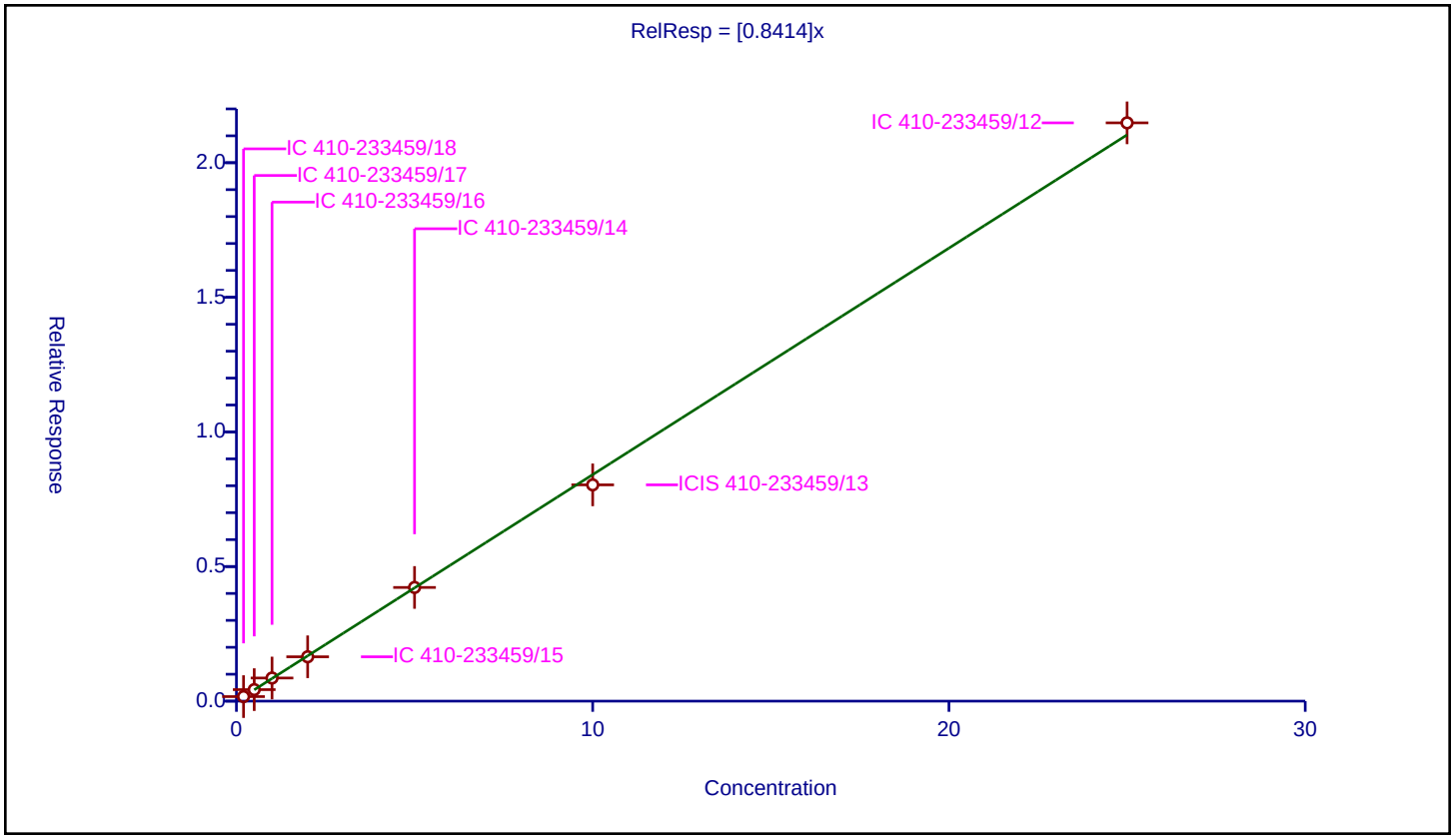
Curve Coefficients

Intercept:	0
Slope:	0.8414

Error Coefficients

Standard Error:	993000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.168473	10.0	1013693.0	0.842365	Y
2	IC 410-233459/17	0.5	0.428365	10.0	1007739.0	0.85673	Y
3	IC 410-233459/16	1.0	0.859646	10.0	1012300.0	0.859646	Y
4	IC 410-233459/15	2.0	1.647497	10.0	1013034.0	0.823748	Y
5	IC 410-233459/14	5.0	4.223211	10.0	1016421.0	0.844642	Y
6	ICIS 410-233459/13	10.0	8.034335	10.0	1049716.0	0.803434	Y
7	IC 410-233459/12	25.0	21.481272	10.0	1039276.0	0.859251	Y



Calibration / trans-1,4-Dichloro-2-butene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

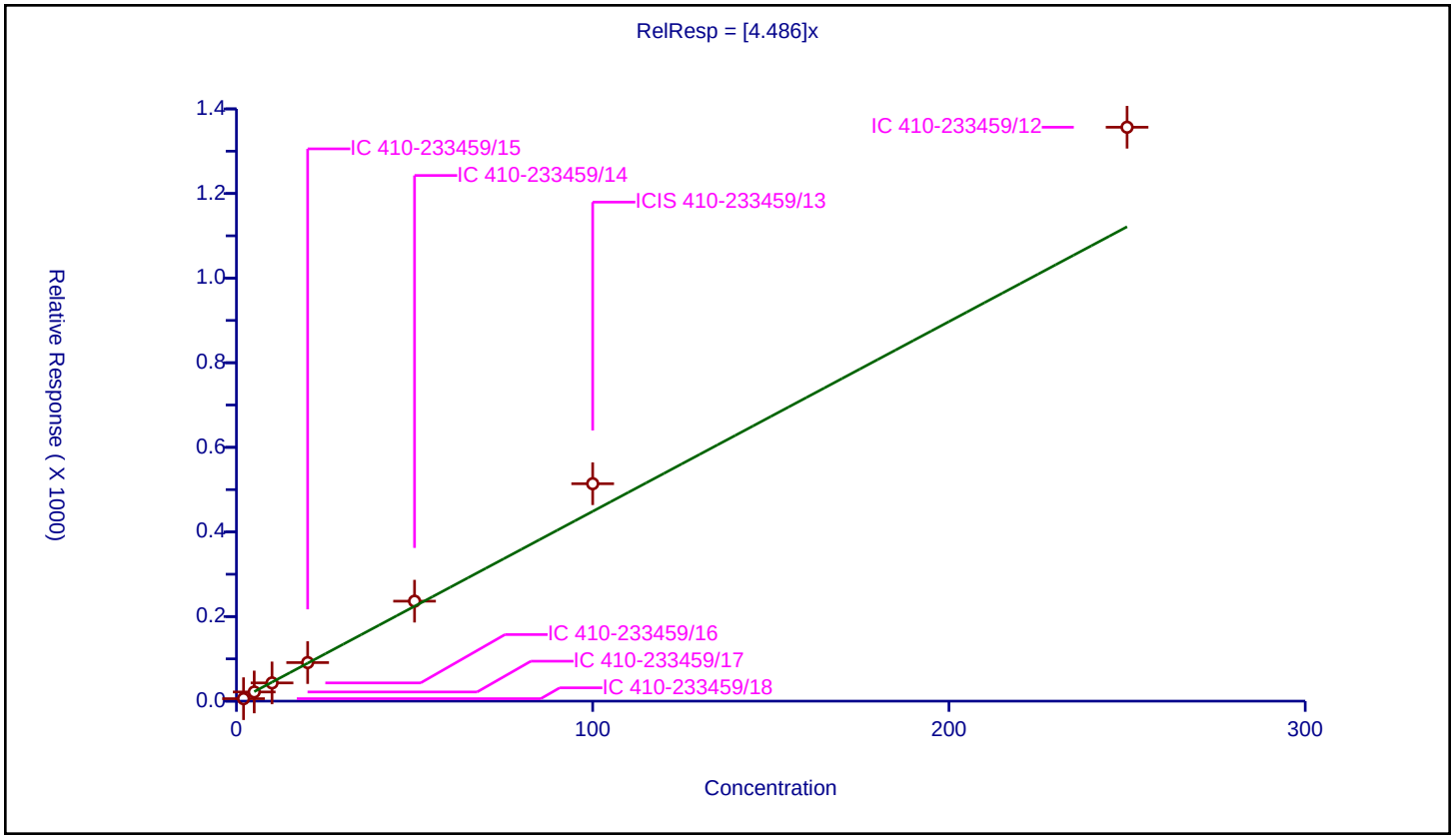
Curve Coefficients

Intercept:	0
Slope:	4.486

Error Coefficients

Standard Error:	1800000
Relative Standard Error:	18.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.965

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	2.0	5.822067	50.0	155632.0	2.911034	Y
2	IC 410-233459/17	5.0	21.65908	50.0	134454.0	4.331816	Y
3	IC 410-233459/16	10.0	43.067771	50.0	144059.0	4.306777	Y
4	IC 410-233459/15	20.0	91.15535	50.0	140927.0	4.557767	Y
5	IC 410-233459/14	50.0	236.328289	50.0	149941.0	4.726566	Y
6	ICIS 410-233459/13	100.0	513.977228	50.0	147286.0	5.139772	Y
7	IC 410-233459/12	250.0	1356.636407	50.0	150473.0	5.426546	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

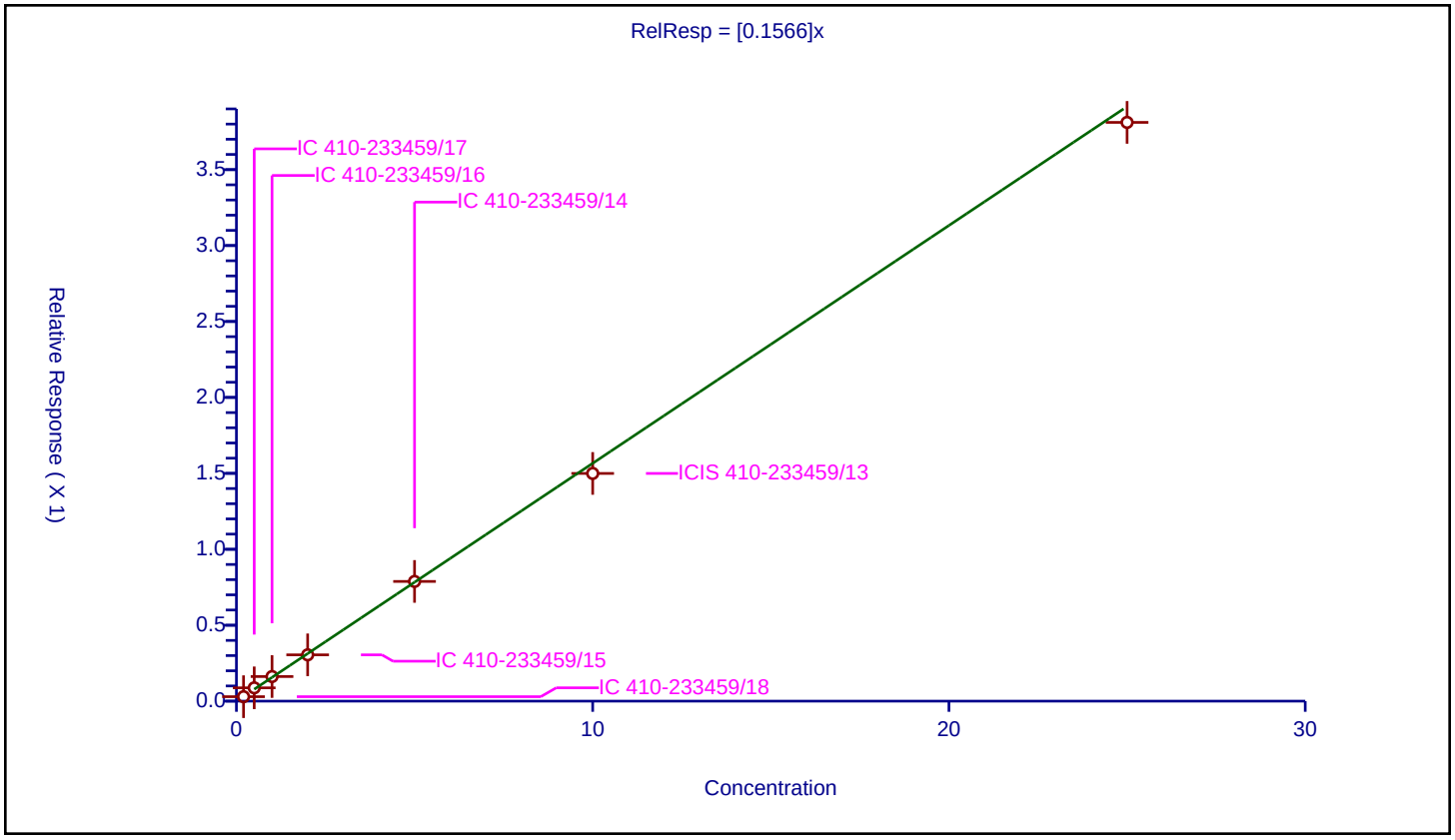
Curve Coefficients

Intercept:	0
Slope:	0.1566

Error Coefficients

Standard Error:	178000
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 410-233459/18	0.2	0.029319	10.0	1013693.0	0.146593	Y
2	IC 410-233459/17	0.5	0.087632	10.0	1007739.0	0.175264	Y
3	IC 410-233459/16	1.0	0.161988	10.0	1012300.0	0.161988	Y
4	IC 410-233459/15	2.0	0.304896	10.0	1013034.0	0.152448	Y
5	IC 410-233459/14	5.0	0.788256	10.0	1016421.0	0.157651	Y
6	ICIS 410-233459/13	10.0	1.49952	10.0	1049716.0	0.149952	Y
7	IC 410-233459/12	25.0	3.811038	10.0	1039276.0	0.152442	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

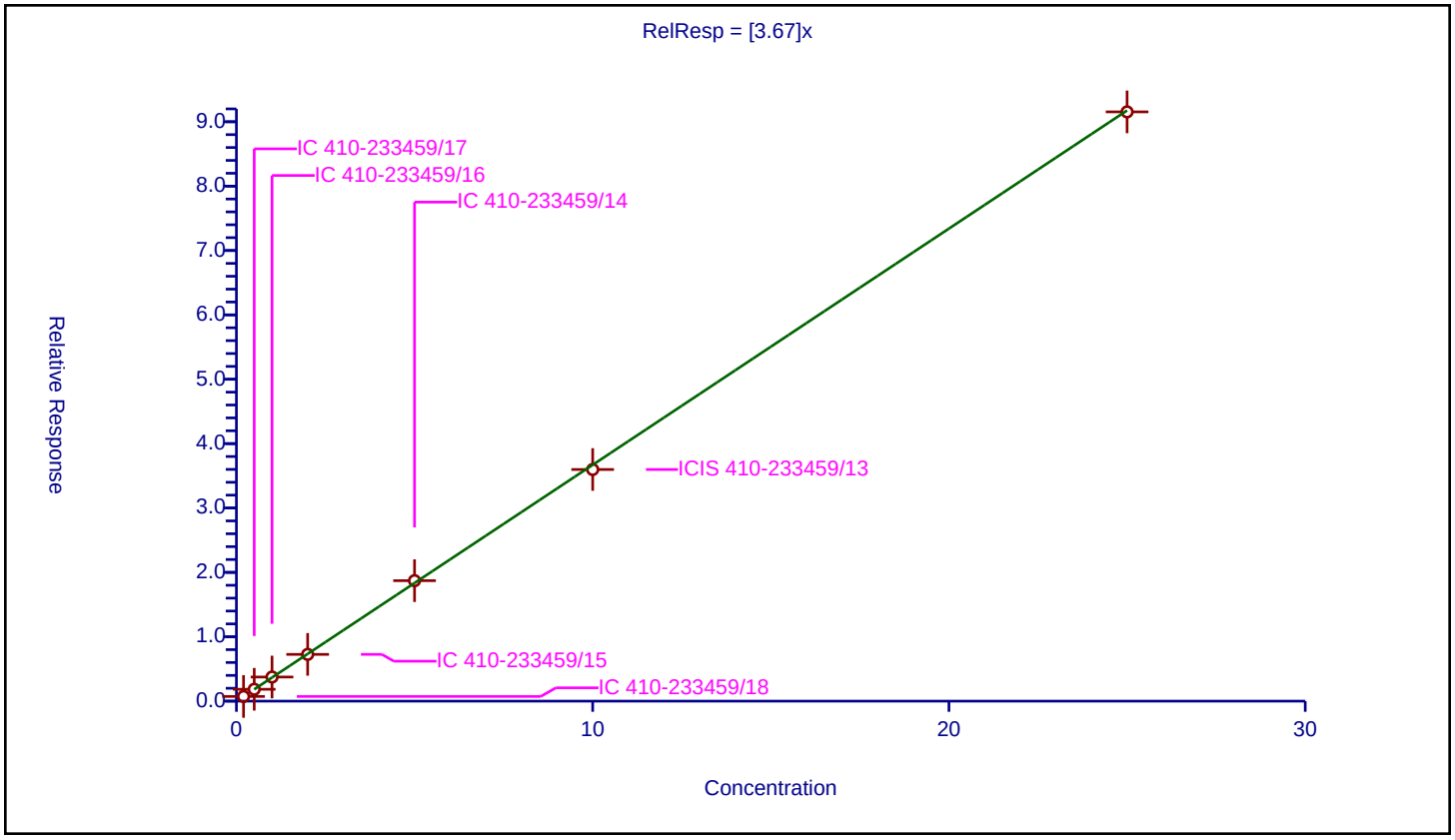
Curve Coefficients

Intercept:	0
Slope:	3.67

Error Coefficients

Standard Error:	4260000
Relative Standard Error:	1.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.724391	10.0	1013693.0	3.621955	Y
2	IC 410-233459/17	0.5	1.844396	10.0	1007739.0	3.688792	Y
3	IC 410-233459/16	1.0	3.746903	10.0	1012300.0	3.746903	Y
4	IC 410-233459/15	2.0	7.262076	10.0	1013034.0	3.631038	Y
5	IC 410-233459/14	5.0	18.715267	10.0	1016421.0	3.743053	Y
6	ICIS 410-233459/13	10.0	35.982418	10.0	1049716.0	3.598242	Y
7	IC 410-233459/12	25.0	91.53503	10.0	1039276.0	3.661401	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

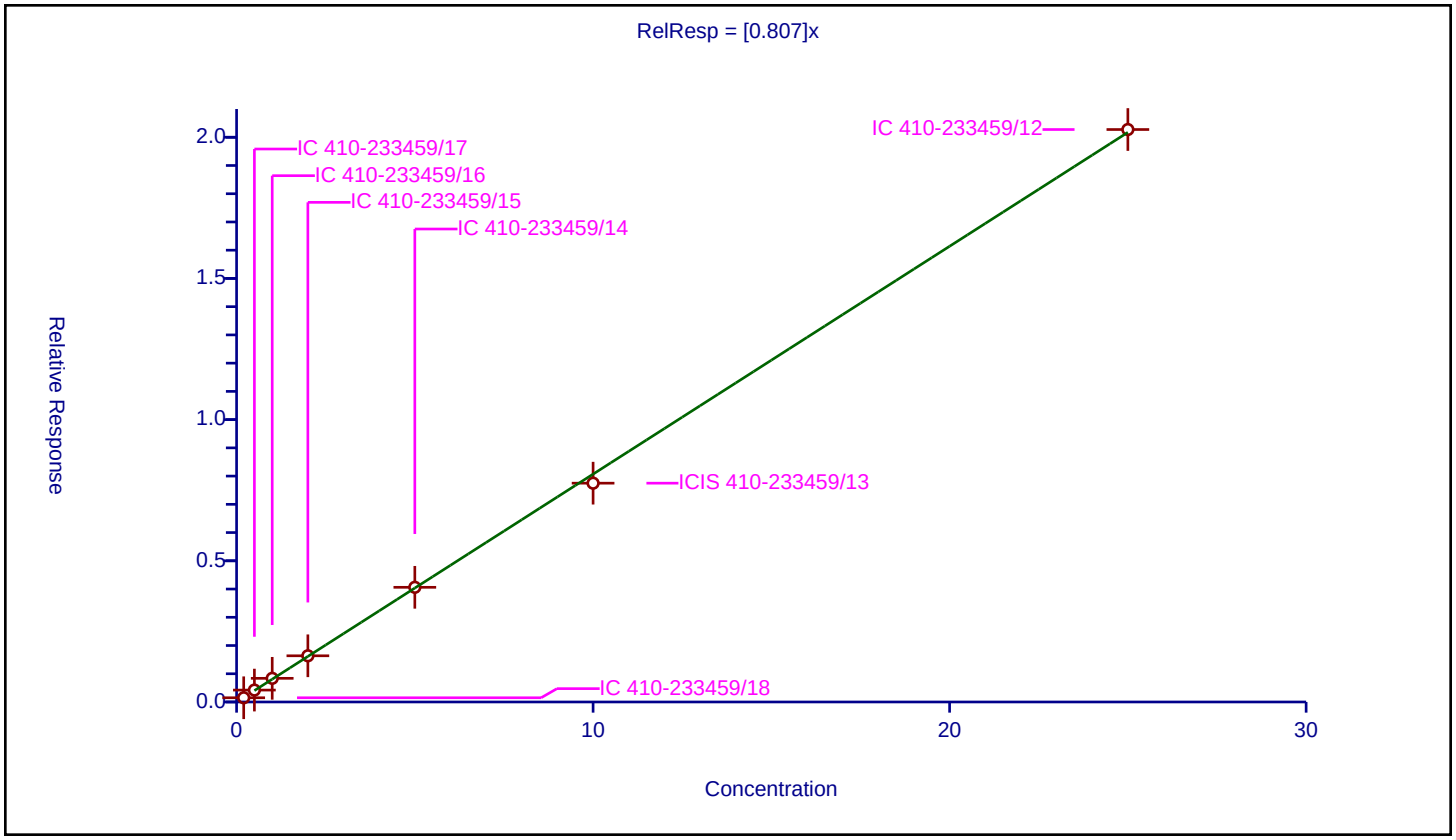
Curve Coefficients

Intercept:	0
Slope:	0.807

Error Coefficients

Standard Error:	941000
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 410-233459/18	0.2	0.150114	10.0	1013693.0	0.750572	Y
2	IC 410-233459/17	0.5	0.421974	10.0	1007739.0	0.843949	Y
3	IC 410-233459/16	1.0	0.837983	10.0	1012300.0	0.837983	Y
4	IC 410-233459/15	2.0	1.636056	10.0	1013034.0	0.818028	Y
5	IC 410-233459/14	5.0	4.061772	10.0	1016421.0	0.812354	Y
6	ICIS 410-233459/13	10.0	7.748905	10.0	1049716.0	0.774891	Y
7	IC 410-233459/12	25.0	20.273768	10.0	1039276.0	0.810951	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

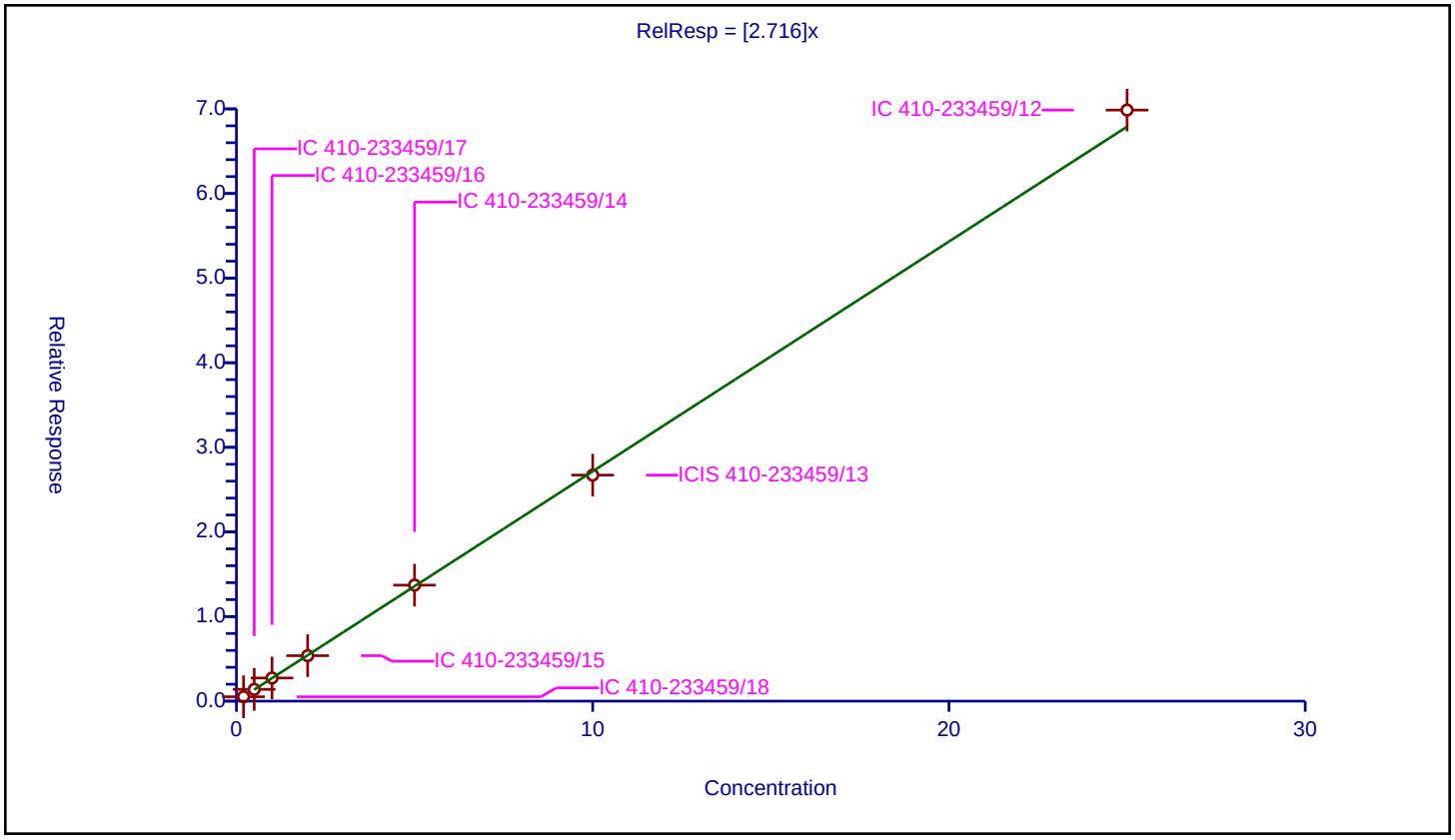
Curve Coefficients

Intercept:	0
Slope:	2.716

Error Coefficients

Standard Error:	3240000
Relative Standard Error:	2.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.519003	10.0	1013693.0	2.595016	Y
2	IC 410-233459/17	0.5	1.392235	10.0	1007739.0	2.784471	Y
3	IC 410-233459/16	1.0	2.737874	10.0	1012300.0	2.737874	Y
4	IC 410-233459/15	2.0	5.372149	10.0	1013034.0	2.686075	Y
5	IC 410-233459/14	5.0	13.712133	10.0	1016421.0	2.742427	Y
6	ICIS 410-233459/13	10.0	26.716159	10.0	1049716.0	2.671616	Y
7	IC 410-233459/12	25.0	69.857988	10.0	1039276.0	2.79432	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

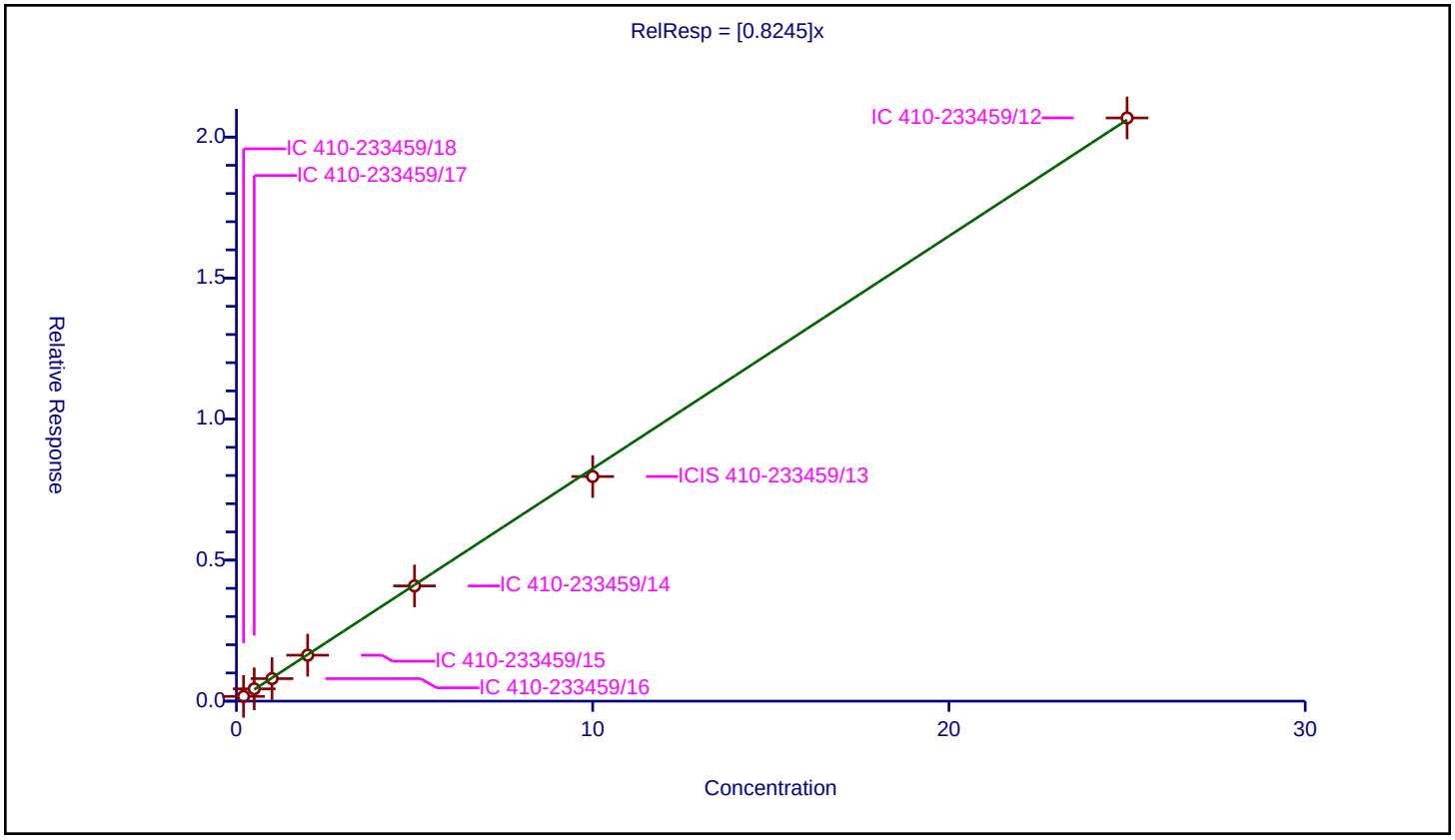
Curve Coefficients

Intercept:	0
Slope:	0.8245

Error Coefficients

Standard Error:	960000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.168769	10.0	1013693.0	0.843845	Y
2	IC 410-233459/17	0.5	0.436919	10.0	1007739.0	0.873837	Y
3	IC 410-233459/16	1.0	0.798459	10.0	1012300.0	0.798459	Y
4	IC 410-233459/15	2.0	1.629314	10.0	1013034.0	0.814657	Y
5	IC 410-233459/14	5.0	4.086014	10.0	1016421.0	0.817203	Y
6	ICIS 410-233459/13	10.0	7.964859	10.0	1049716.0	0.796486	Y
7	IC 410-233459/12	25.0	20.679165	10.0	1039276.0	0.827167	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

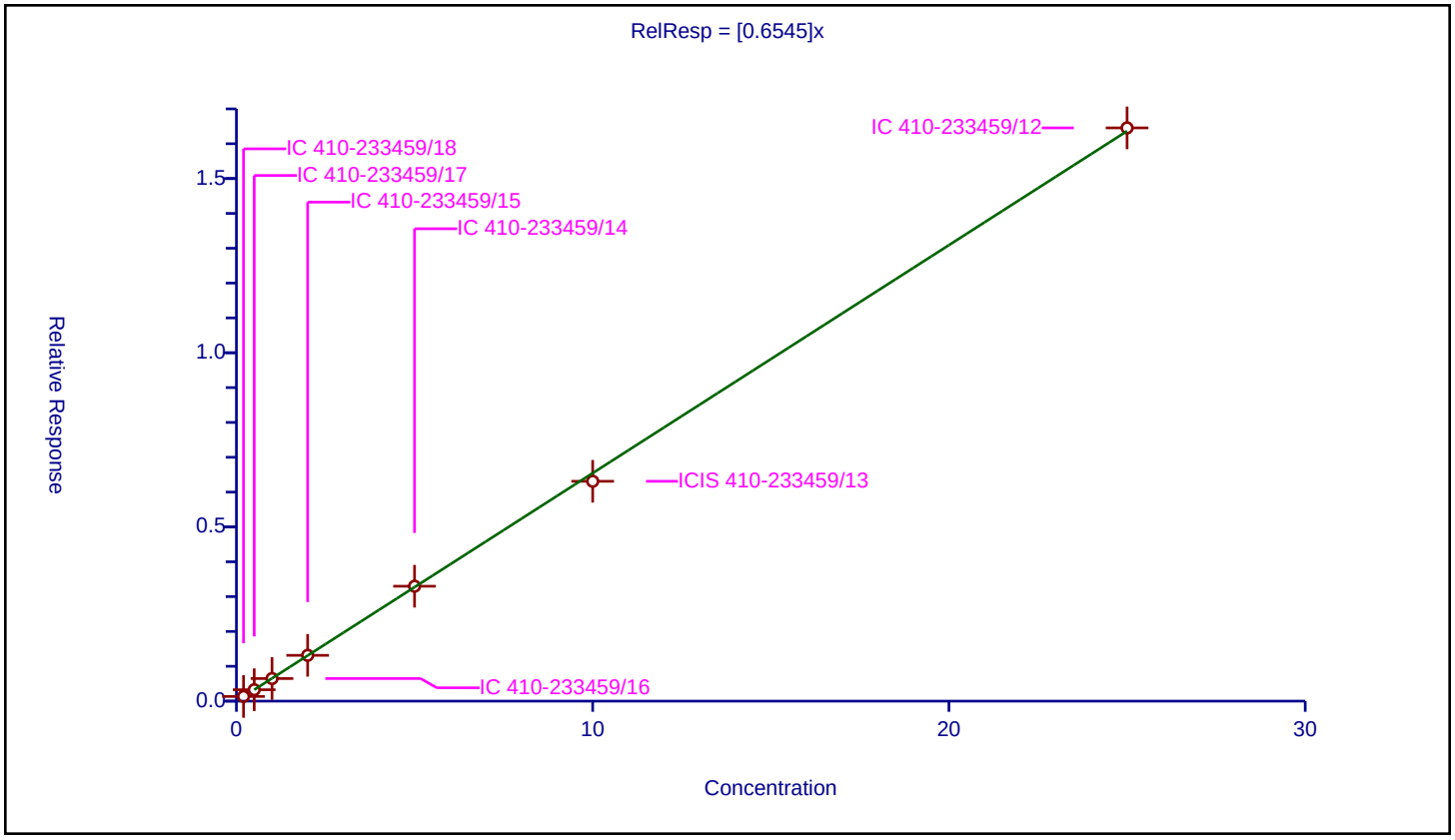
Curve Coefficients

Intercept:	0
Slope:	0.6545

Error Coefficients

Standard Error:	764000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.134321	10.0	1013693.0	0.671604	Y
2	IC 410-233459/17	0.5	0.327357	10.0	1007739.0	0.654713	Y
3	IC 410-233459/16	1.0	0.648908	10.0	1012300.0	0.648908	Y
4	IC 410-233459/15	2.0	1.314813	10.0	1013034.0	0.657406	Y
5	IC 410-233459/14	5.0	3.298427	10.0	1016421.0	0.659685	Y
6	ICIS 410-233459/13	10.0	6.310583	10.0	1049716.0	0.631058	Y
7	IC 410-233459/12	25.0	16.455253	10.0	1039276.0	0.65821	Y



Calibration / Pentachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

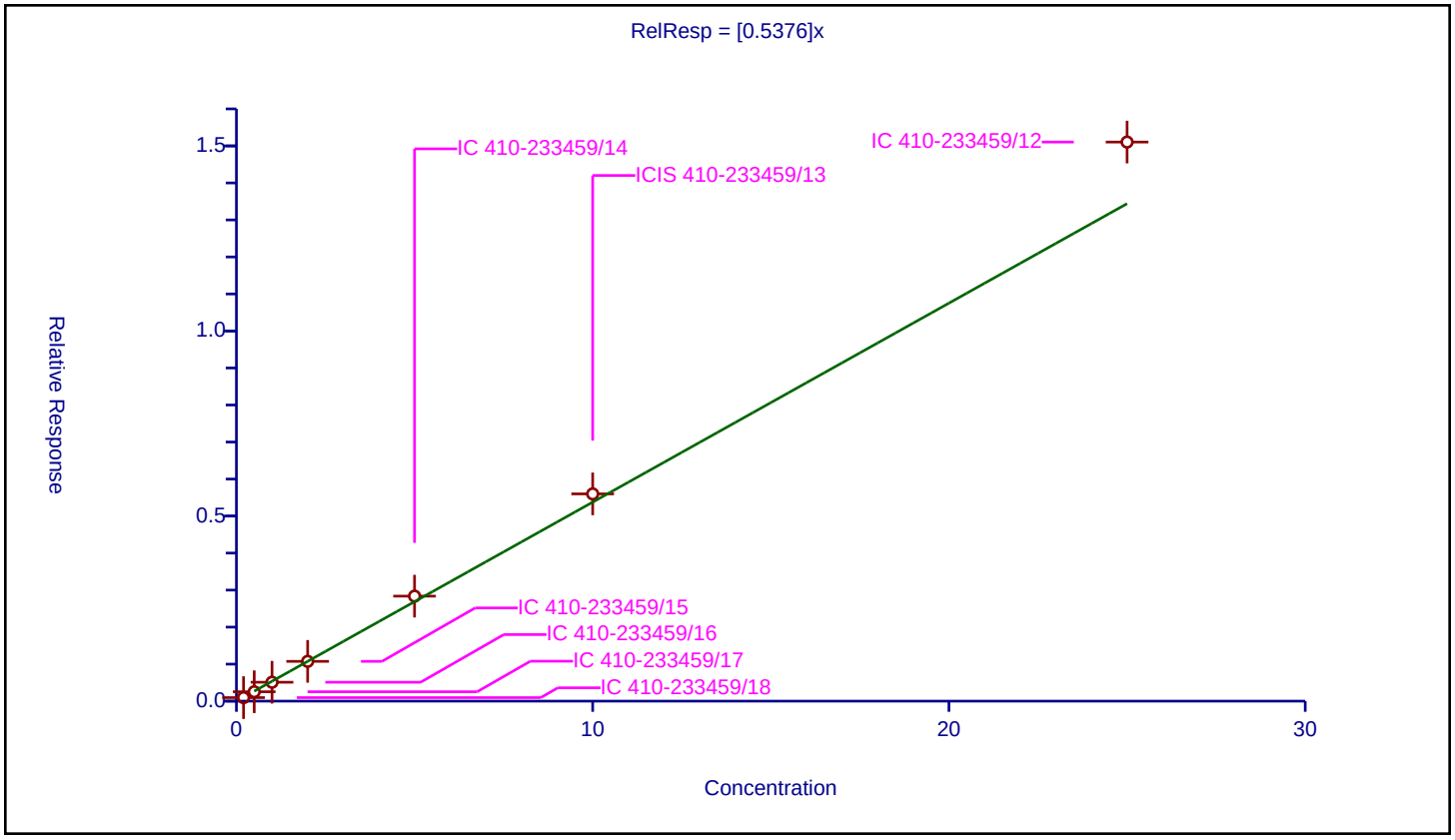
Curve Coefficients

Intercept:	0
Slope:	0.5376

Error Coefficients

Standard Error:	696000
Relative Standard Error:	8.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.095216	10.0	1013693.0	0.476081	Y
2	IC 410-233459/17	0.5	0.253935	10.0	1007739.0	0.50787	Y
3	IC 410-233459/16	1.0	0.510481	10.0	1012300.0	0.510481	Y
4	IC 410-233459/15	2.0	1.07488	10.0	1013034.0	0.53744	Y
5	IC 410-233459/14	5.0	2.836748	10.0	1016421.0	0.56735	Y
6	ICIS 410-233459/13	10.0	5.598819	10.0	1049716.0	0.559882	Y
7	IC 410-233459/12	25.0	15.104024	10.0	1039276.0	0.604161	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

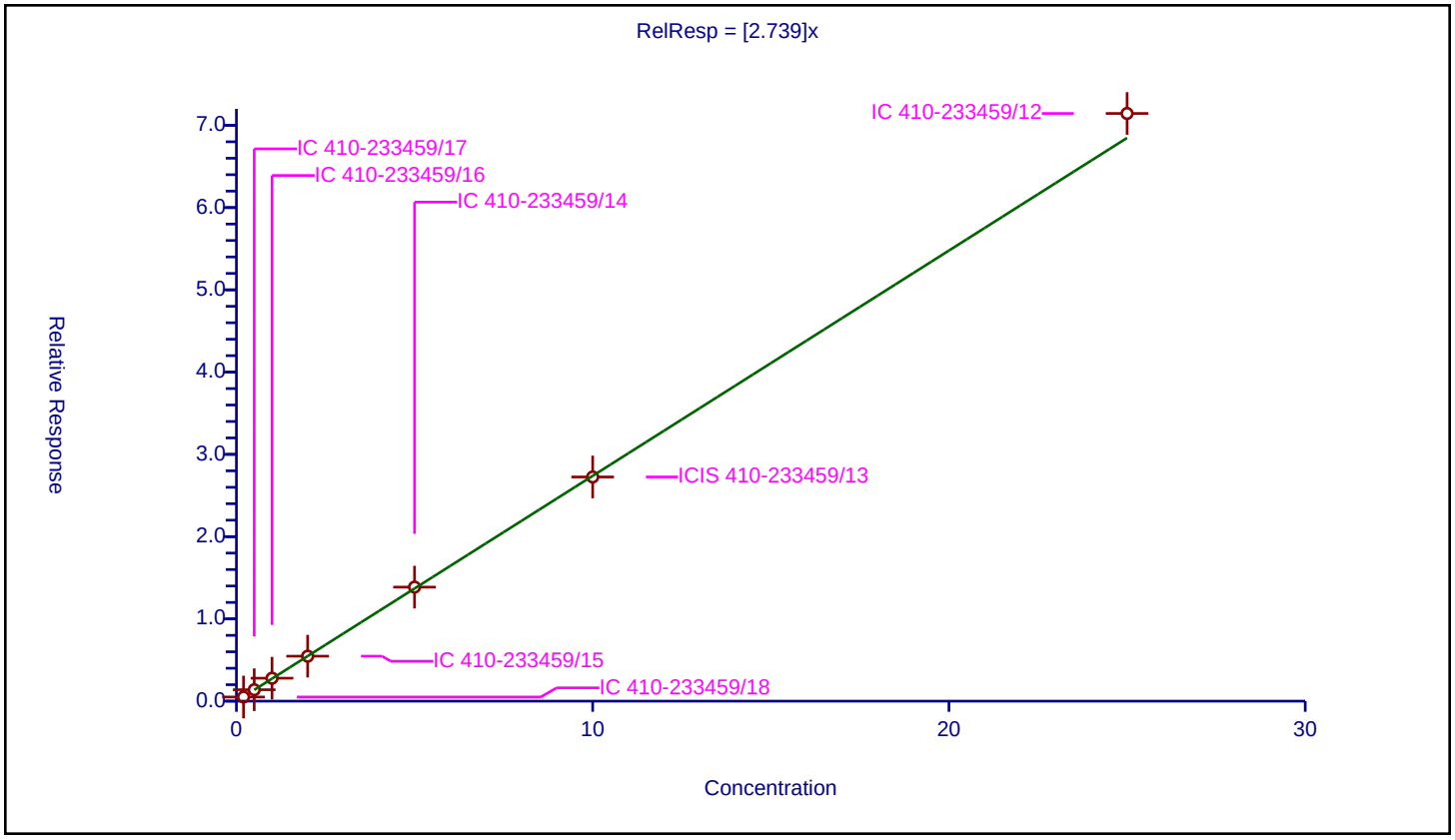
Curve Coefficients

Intercept:	0
Slope:	2.739

Error Coefficients

Standard Error:	3310000
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 410-233459/18	0.2	0.504453	10.0	1013693.0	2.522263	Y
2	IC 410-233459/17	0.5	1.386004	10.0	1007739.0	2.772007	Y
3	IC 410-233459/16	1.0	2.788215	10.0	1012300.0	2.788215	Y
4	IC 410-233459/15	2.0	5.467408	10.0	1013034.0	2.733704	Y
5	IC 410-233459/14	5.0	13.864658	10.0	1016421.0	2.772932	Y
6	ICIS 410-233459/13	10.0	27.252914	10.0	1049716.0	2.725291	Y
7	IC 410-233459/12	25.0	71.44184	10.0	1039276.0	2.857674	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

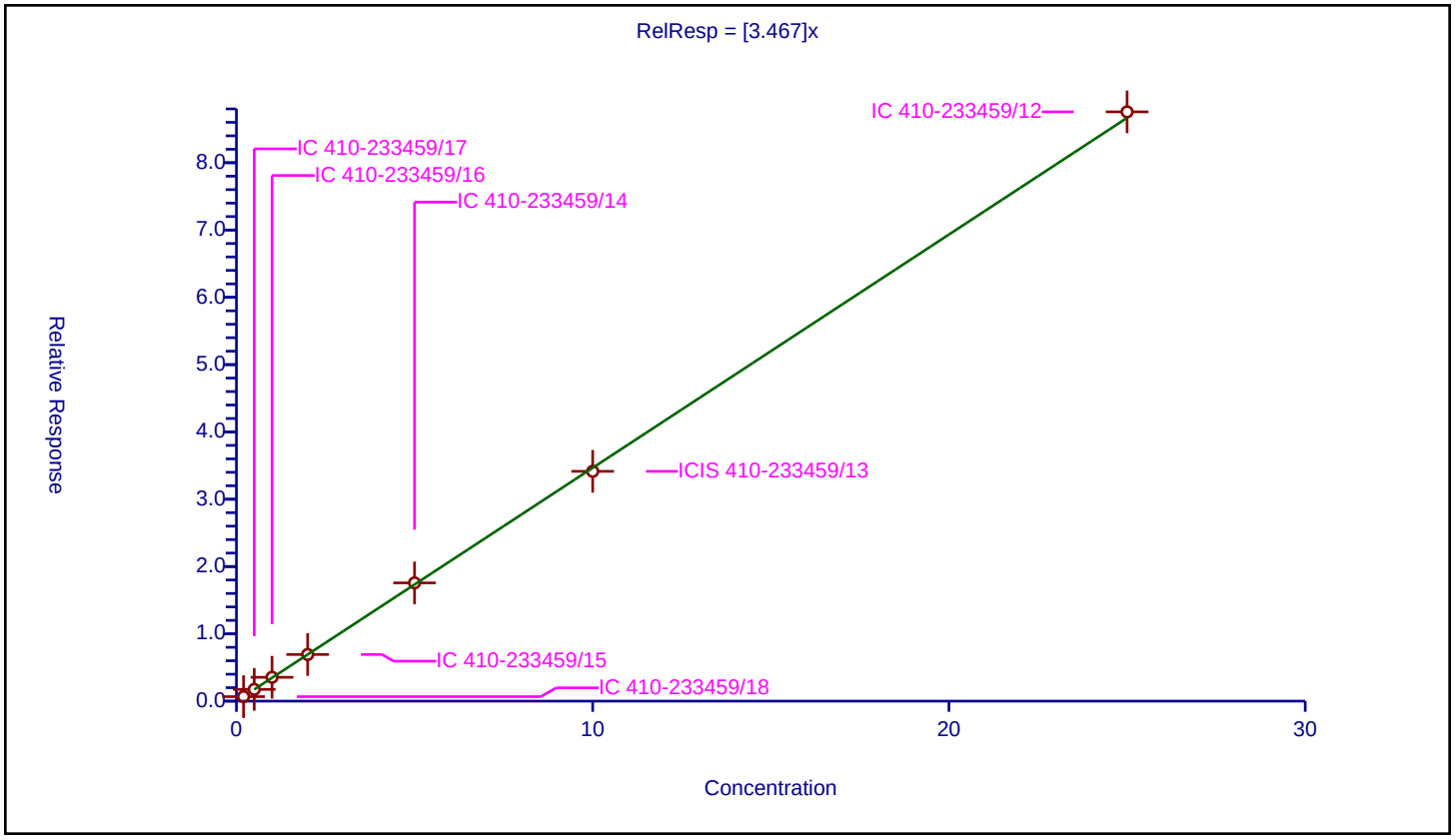
Curve Coefficients

Intercept:	0
Slope:	3.467

Error Coefficients

Standard Error:	4070000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.667352	10.0	1013693.0	3.33676	Y
2	IC 410-233459/17	0.5	1.745224	10.0	1007739.0	3.490447	Y
3	IC 410-233459/16	1.0	3.543515	10.0	1012300.0	3.543515	Y
4	IC 410-233459/15	2.0	6.931149	10.0	1013034.0	3.465575	Y
5	IC 410-233459/14	5.0	17.569265	10.0	1016421.0	3.513853	Y
6	ICIS 410-233459/13	10.0	34.145521	10.0	1049716.0	3.414552	Y
7	IC 410-233459/12	25.0	87.559185	10.0	1039276.0	3.502367	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

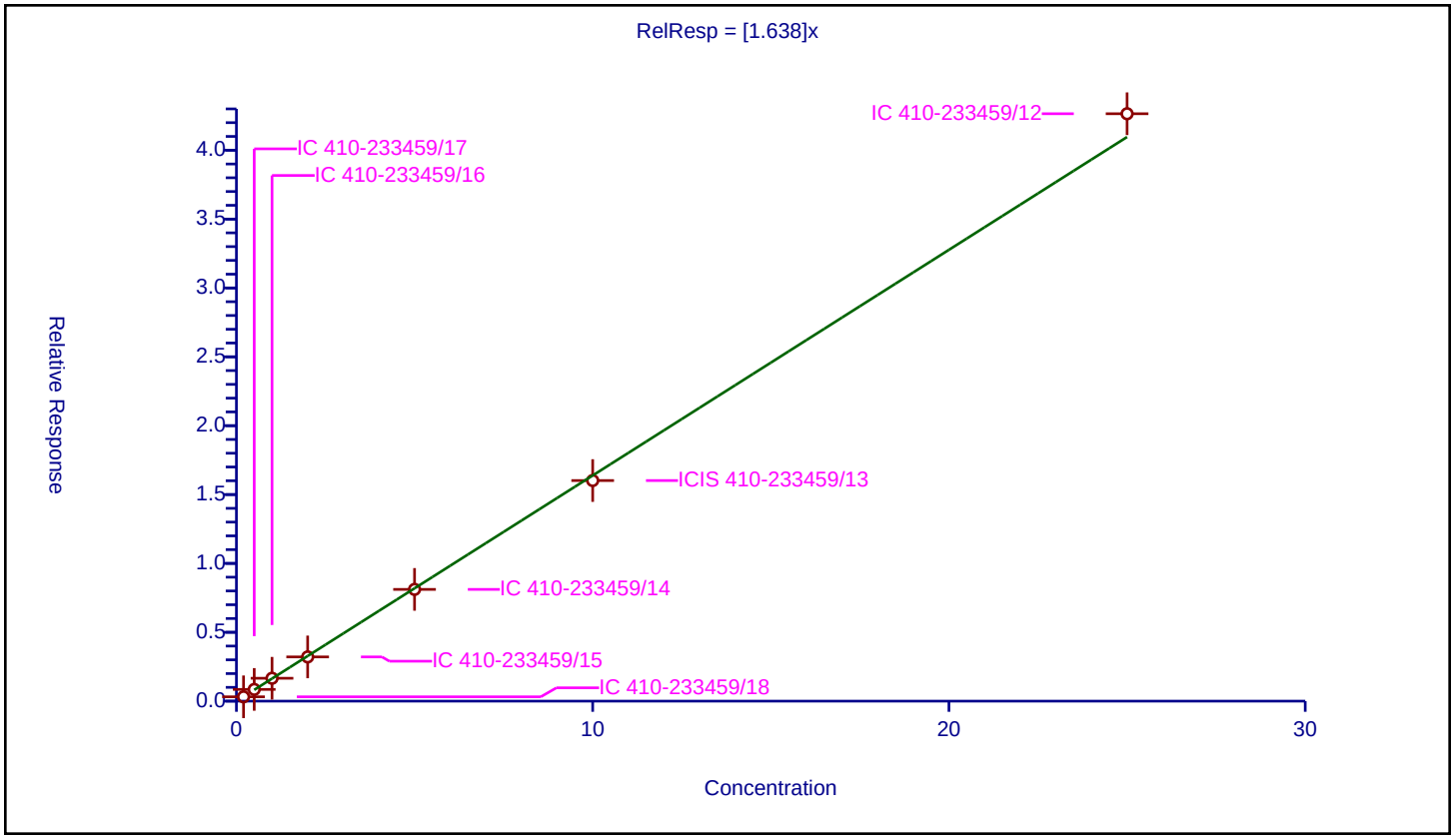
Curve Coefficients

Intercept:	0
Slope:	1.638

Error Coefficients

Standard Error:	1970000
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 410-233459/18	0.2	0.313724	10.0	1013693.0	1.568621	Y
2	IC 410-233459/17	0.5	0.851659	10.0	1007739.0	1.703318	Y
3	IC 410-233459/16	1.0	1.661257	10.0	1012300.0	1.661257	Y
4	IC 410-233459/15	2.0	3.210929	10.0	1013034.0	1.605464	Y
5	IC 410-233459/14	5.0	8.112711	10.0	1016421.0	1.622542	Y
6	ICIS 410-233459/13	10.0	16.016923	10.0	1049716.0	1.601692	Y
7	IC 410-233459/12	25.0	42.647102	10.0	1039276.0	1.705884	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

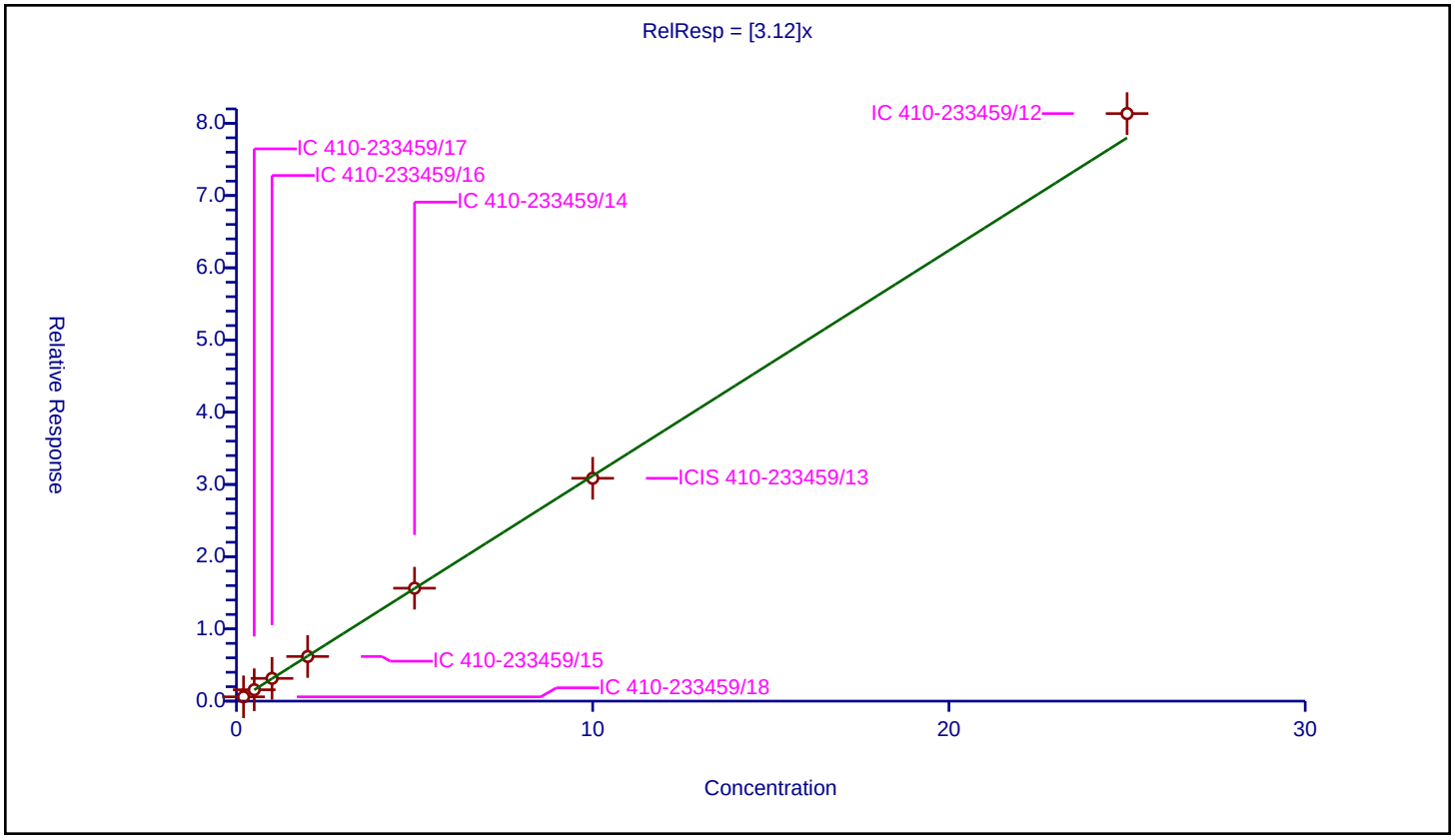
Curve Coefficients

Intercept:	0
Slope:	3.12

Error Coefficients

Standard Error:	3760000
Relative Standard Error:	2.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.594164	10.0	1013693.0	2.970821	Y
2	IC 410-233459/17	0.5	1.578216	10.0	1007739.0	3.156432	Y
3	IC 410-233459/16	1.0	3.152307	10.0	1012300.0	3.152307	Y
4	IC 410-233459/15	2.0	6.18382	10.0	1013034.0	3.09191	Y
5	IC 410-233459/14	5.0	15.638402	10.0	1016421.0	3.12768	Y
6	ICIS 410-233459/13	10.0	30.857279	10.0	1049716.0	3.085728	Y
7	IC 410-233459/12	25.0	81.349882	10.0	1039276.0	3.253995	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

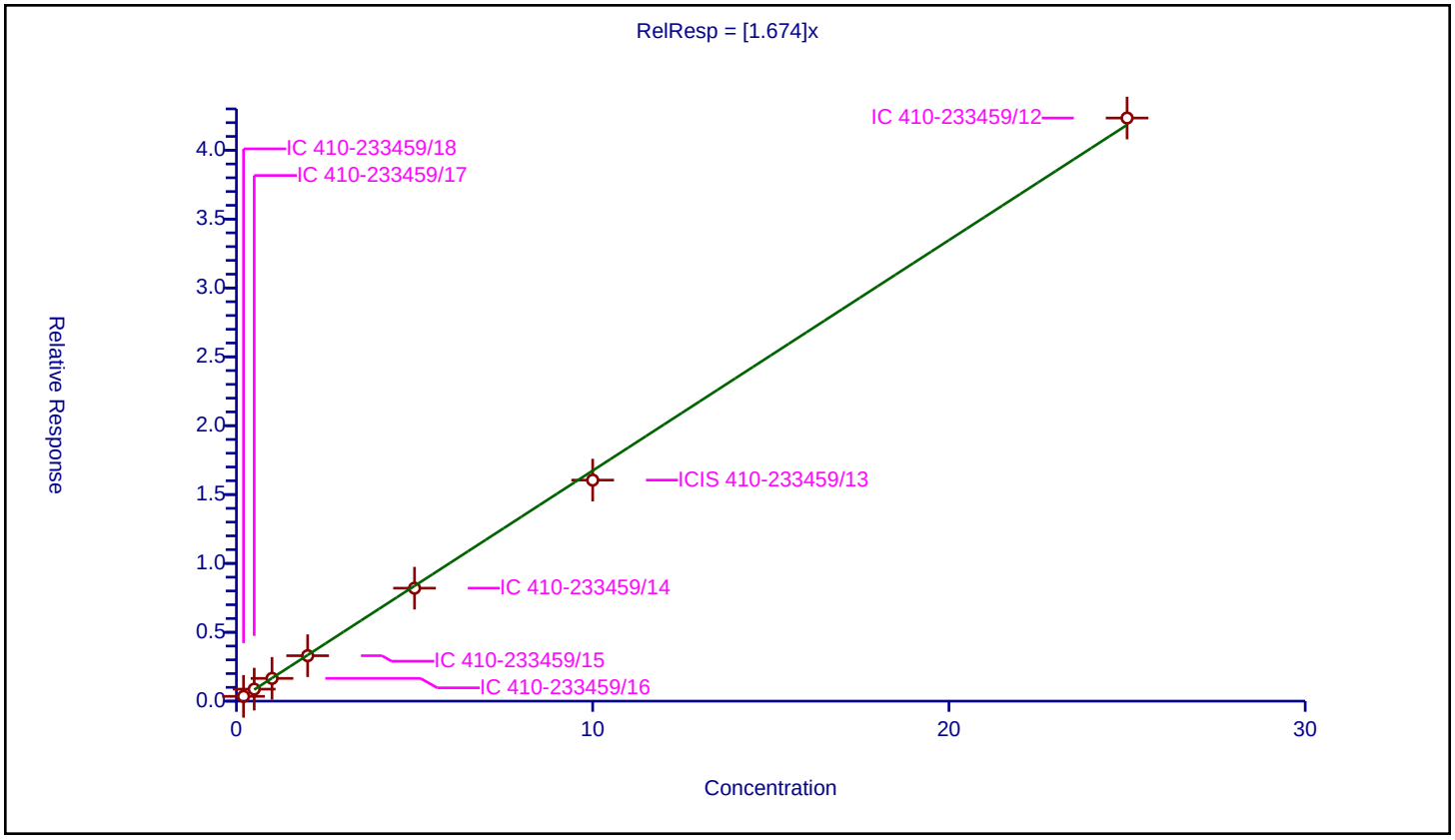
Curve Coefficients

Intercept:	0
Slope:	1.674

Error Coefficients

Standard Error:	1960000
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 410-233459/18	0.2	0.346209	10.0	1013693.0	1.731047	Y
2	IC 410-233459/17	0.5	0.871287	10.0	1007739.0	1.742574	Y
3	IC 410-233459/16	1.0	1.653057	10.0	1012300.0	1.653057	Y
4	IC 410-233459/15	2.0	3.298912	10.0	1013034.0	1.649456	Y
5	IC 410-233459/14	5.0	8.201729	10.0	1016421.0	1.640346	Y
6	ICIS 410-233459/13	10.0	16.047941	10.0	1049716.0	1.604794	Y
7	IC 410-233459/12	25.0	42.337185	10.0	1039276.0	1.693487	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

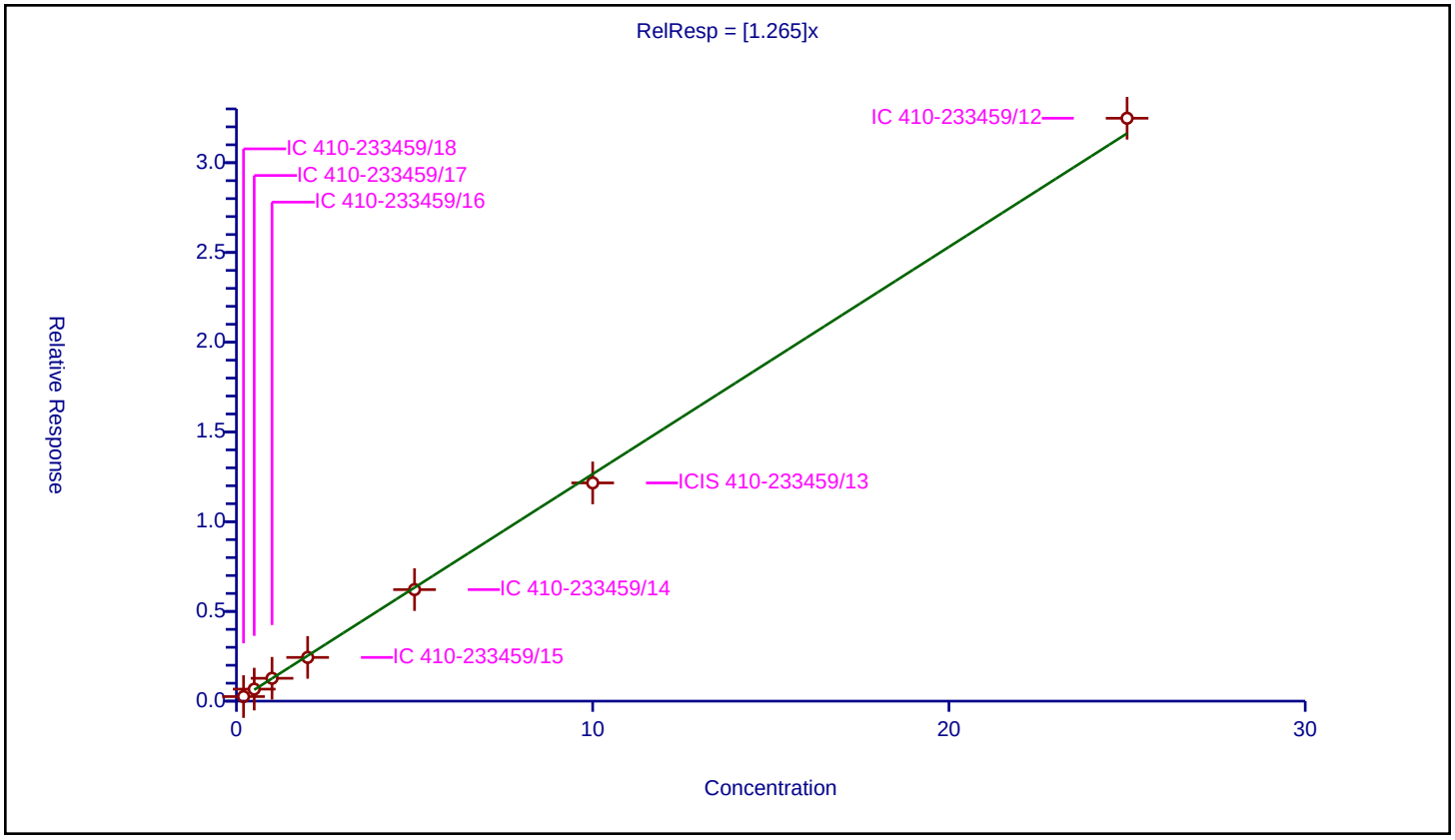
Curve Coefficients

Intercept:	0
Slope:	1.265

Error Coefficients

Standard Error:	1500000
Relative Standard Error:	3.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.253775	10.0	1013693.0	1.268875	Y
2	IC 410-233459/17	0.5	0.669658	10.0	1007739.0	1.339315	Y
3	IC 410-233459/16	1.0	1.27396	10.0	1012300.0	1.27396	Y
4	IC 410-233459/15	2.0	2.435782	10.0	1013034.0	1.217891	Y
5	IC 410-233459/14	5.0	6.215171	10.0	1016421.0	1.243034	Y
6	ICIS 410-233459/13	10.0	12.159603	10.0	1049716.0	1.21596	Y
7	IC 410-233459/12	25.0	32.47913	10.0	1039276.0	1.299165	Y



Calibration / Benzyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

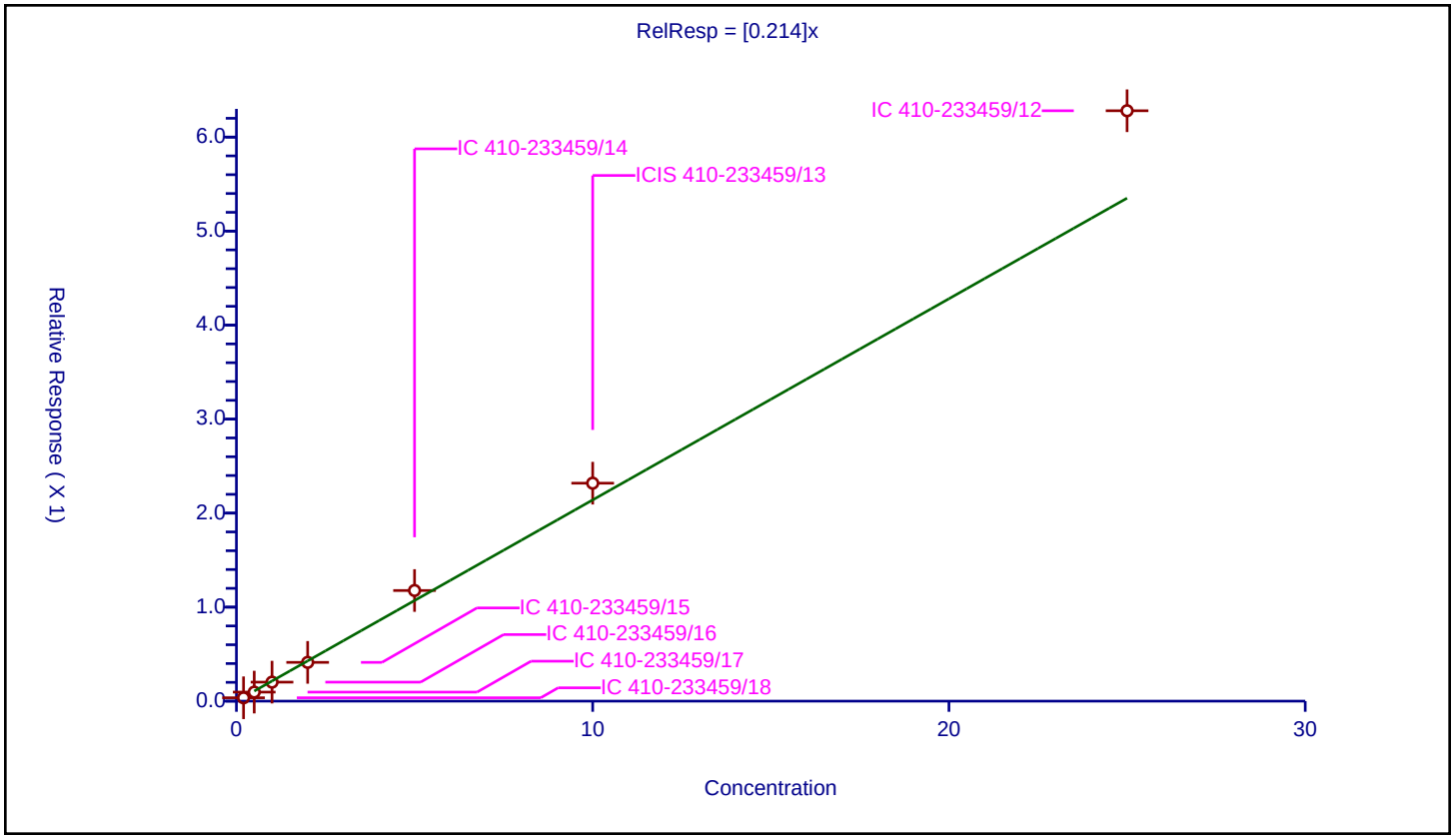
Curve Coefficients

Intercept:	0
Slope:	0.214

Error Coefficients

Standard Error:	289000
Relative Standard Error:	12.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.03578	10.0	1013693.0	0.1789	Y
2	IC 410-233459/17	0.5	0.096255	10.0	1007739.0	0.19251	Y
3	IC 410-233459/16	1.0	0.202213	10.0	1012300.0	0.202213	Y
4	IC 410-233459/15	2.0	0.412276	10.0	1013034.0	0.206138	Y
5	IC 410-233459/14	5.0	1.176825	10.0	1016421.0	0.235365	Y
6	ICIS 410-233459/13	10.0	2.318541	10.0	1049716.0	0.231854	Y
7	IC 410-233459/12	25.0	6.280103	10.0	1039276.0	0.251204	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

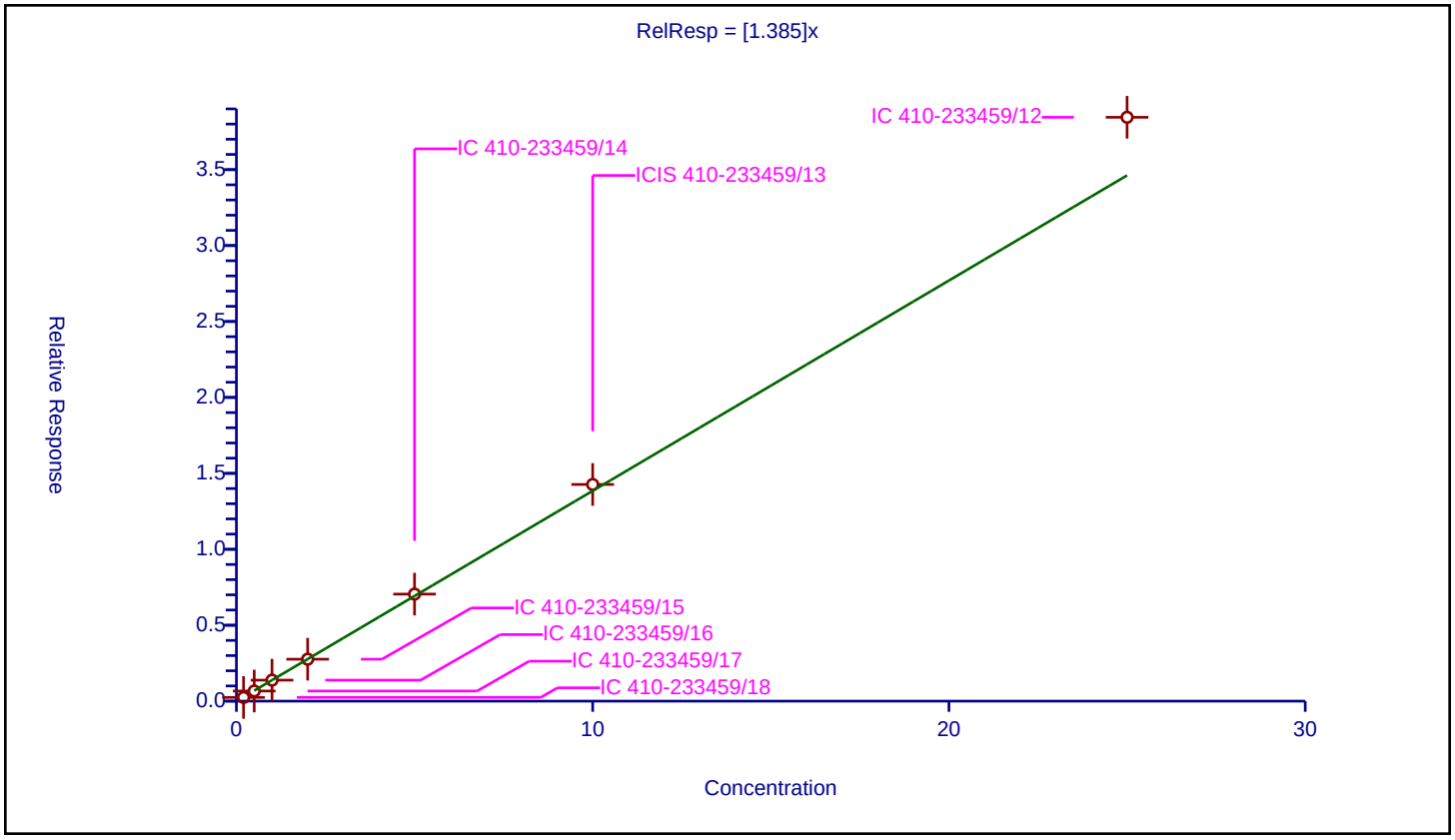
Curve Coefficients

Intercept:	0
Slope:	1.385

Error Coefficients

Standard Error:	1770000
Relative Standard Error:	6.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.244315	10.0	1013693.0	1.221573	Y
2	IC 410-233459/17	0.5	0.667445	10.0	1007739.0	1.334889	Y
3	IC 410-233459/16	1.0	1.382199	10.0	1012300.0	1.382199	Y
4	IC 410-233459/15	2.0	2.761576	10.0	1013034.0	1.380788	Y
5	IC 410-233459/14	5.0	7.048034	10.0	1016421.0	1.409607	Y
6	ICIS 410-233459/13	10.0	14.268202	10.0	1049716.0	1.42682	Y
7	IC 410-233459/12	25.0	38.447381	10.0	1039276.0	1.537895	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

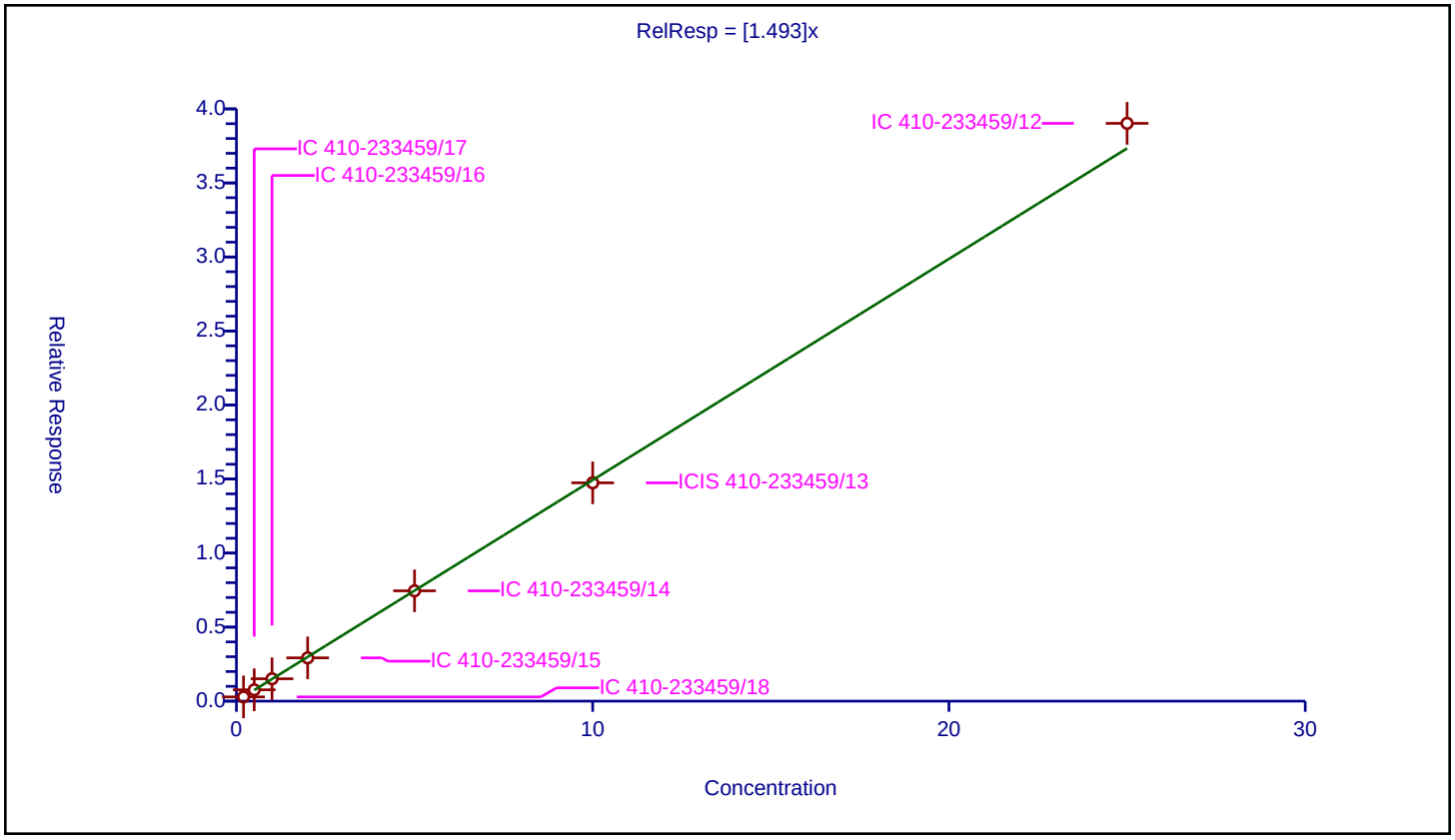
Curve Coefficients

Intercept:	0
Slope:	1.493

Error Coefficients

Standard Error:	1800000
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 410-233459/18	0.2	0.285293	10.0	1013693.0	1.426467	Y
2	IC 410-233459/17	0.5	0.765278	10.0	1007739.0	1.530555	Y
3	IC 410-233459/16	1.0	1.509523	10.0	1012300.0	1.509523	Y
4	IC 410-233459/15	2.0	2.923288	10.0	1013034.0	1.461644	Y
5	IC 410-233459/14	5.0	7.450181	10.0	1016421.0	1.490036	Y
6	ICIS 410-233459/13	10.0	14.744312	10.0	1049716.0	1.474431	Y
7	IC 410-233459/12	25.0	39.023657	10.0	1039276.0	1.560946	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

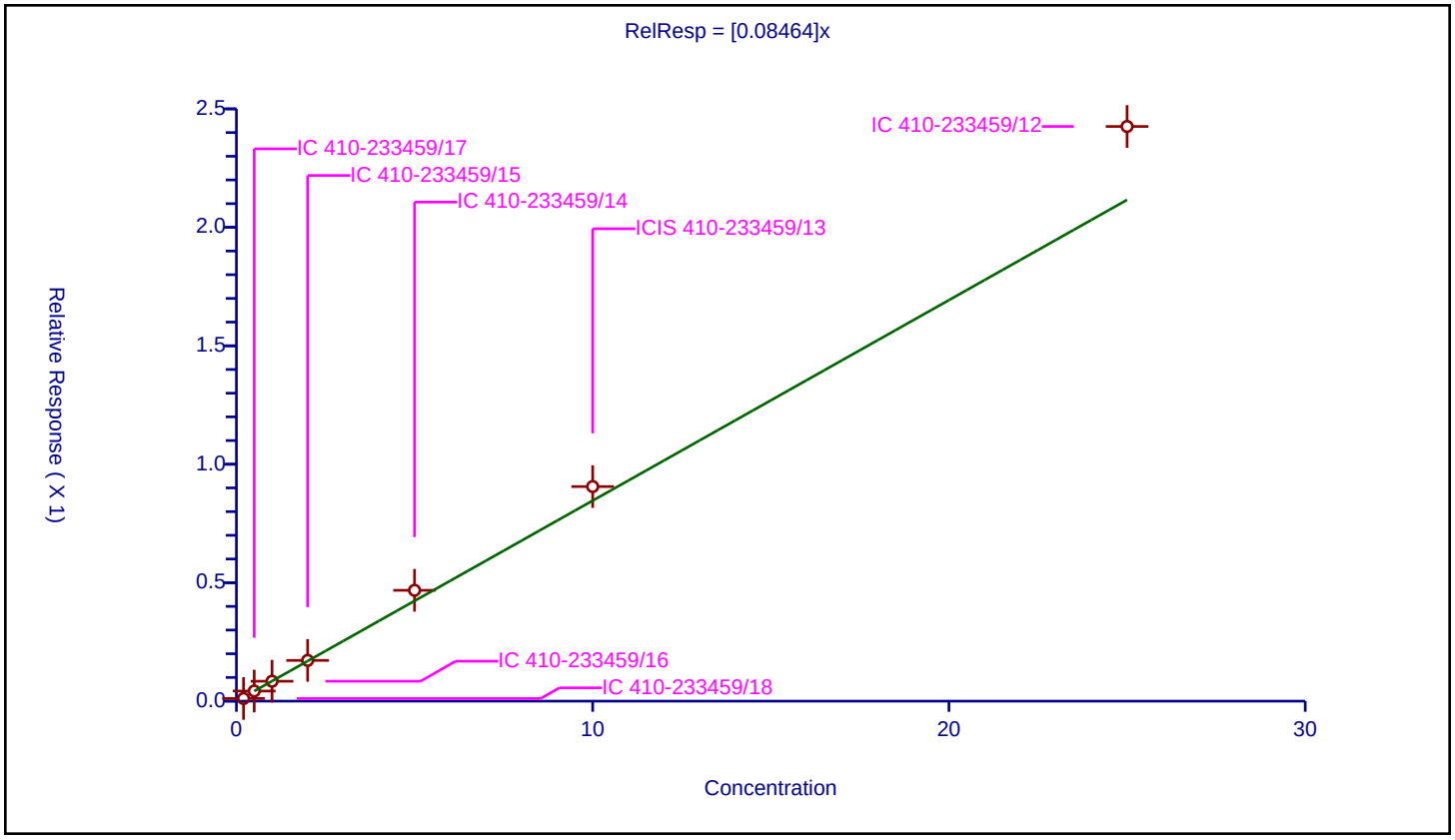
Curve Coefficients

Intercept:	0
Slope:	0.08464

Error Coefficients

Standard Error:	112000
Relative Standard Error:	16.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.972

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.011167	10.0	1013693.0	0.055835	Y
2	IC 410-233459/17	0.5	0.042719	10.0	1007739.0	0.085439	Y
3	IC 410-233459/16	1.0	0.084056	10.0	1012300.0	0.084056	Y
4	IC 410-233459/15	2.0	0.171929	10.0	1013034.0	0.085965	Y
5	IC 410-233459/14	5.0	0.467887	10.0	1016421.0	0.093577	Y
6	ICIS 410-233459/13	10.0	0.905826	10.0	1049716.0	0.090583	Y
7	IC 410-233459/12	25.0	2.425804	10.0	1039276.0	0.097032	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

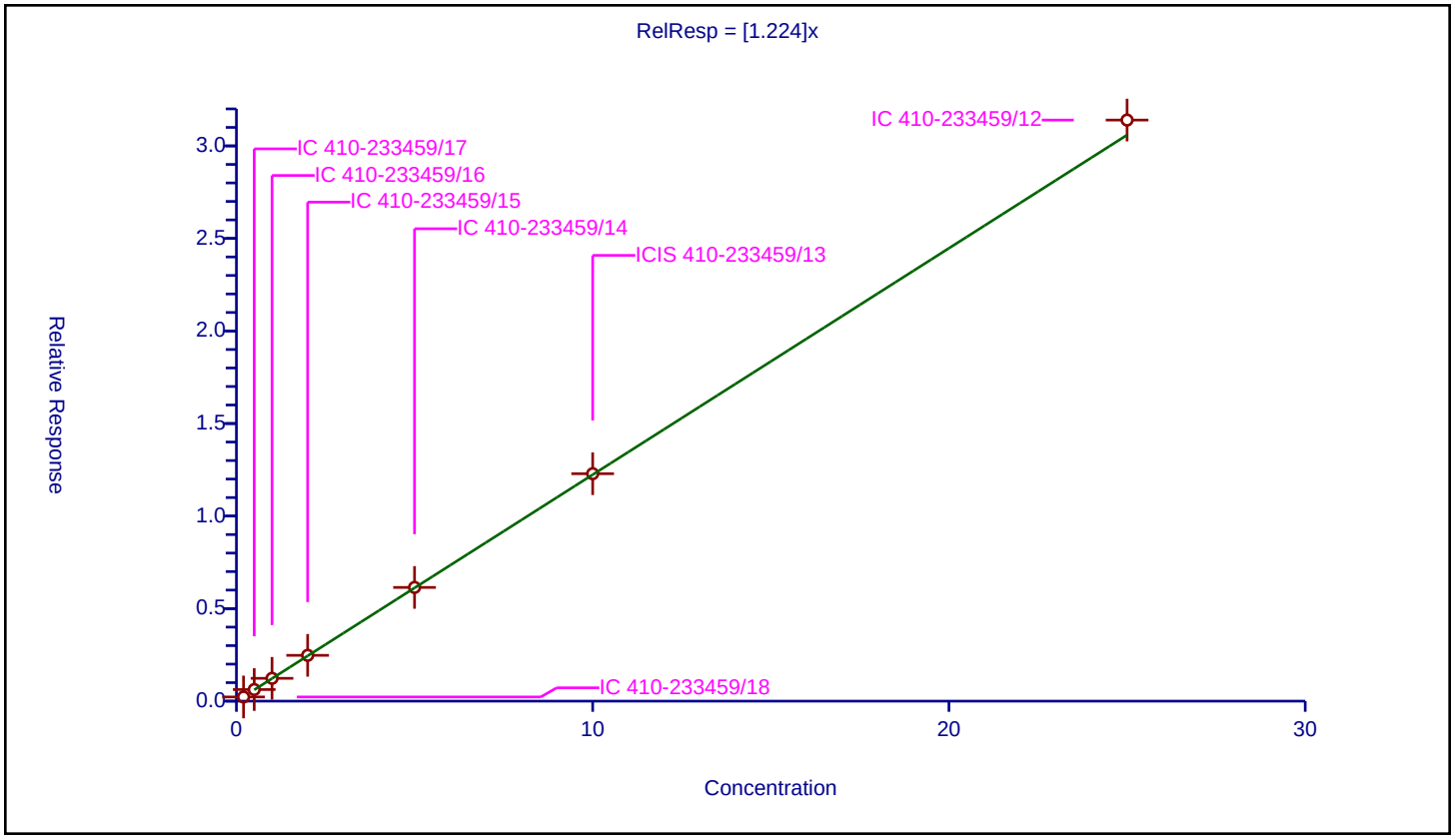
Curve Coefficients

Intercept:	0
Slope:	1.224

Error Coefficients

Standard Error:	1460000
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 410-233459/18	0.2	0.225729	10.0	1013693.0	1.128645	Y
2	IC 410-233459/17	0.5	0.626045	10.0	1007739.0	1.25209	Y
3	IC 410-233459/16	1.0	1.232984	10.0	1012300.0	1.232984	Y
4	IC 410-233459/15	2.0	2.475169	10.0	1013034.0	1.237584	Y
5	IC 410-233459/14	5.0	6.143439	10.0	1016421.0	1.228688	Y
6	ICIS 410-233459/13	10.0	12.289676	10.0	1049716.0	1.228968	Y
7	IC 410-233459/12	25.0	31.397136	10.0	1039276.0	1.255885	Y



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

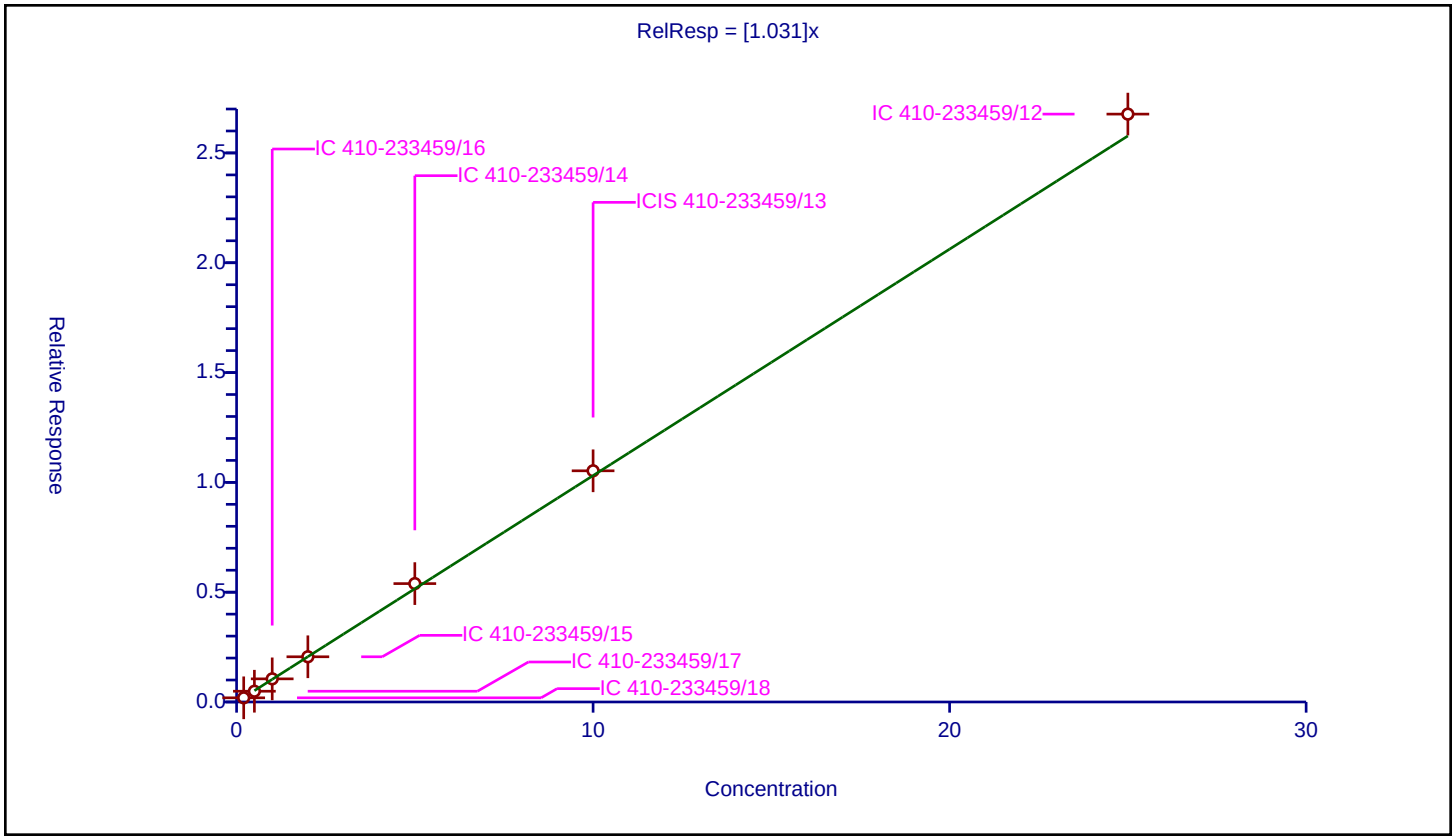
Curve Coefficients

Intercept:	0
Slope:	1.031

Error Coefficients

Standard Error:	1250000
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 410-233459/18	0.2	0.190176	10.0	1013693.0	0.95088	Y
2	IC 410-233459/17	0.5	0.490504	10.0	1007739.0	0.981008	Y
3	IC 410-233459/16	1.0	1.053788	10.0	1012300.0	1.053788	Y
4	IC 410-233459/15	2.0	2.058884	10.0	1013034.0	1.029442	Y
5	IC 410-233459/14	5.0	5.390749	10.0	1016421.0	1.07815	Y
6	ICIS 410-233459/13	10.0	10.526828	10.0	1049716.0	1.052683	Y
7	IC 410-233459/12	25.0	26.767702	10.0	1039276.0	1.070708	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

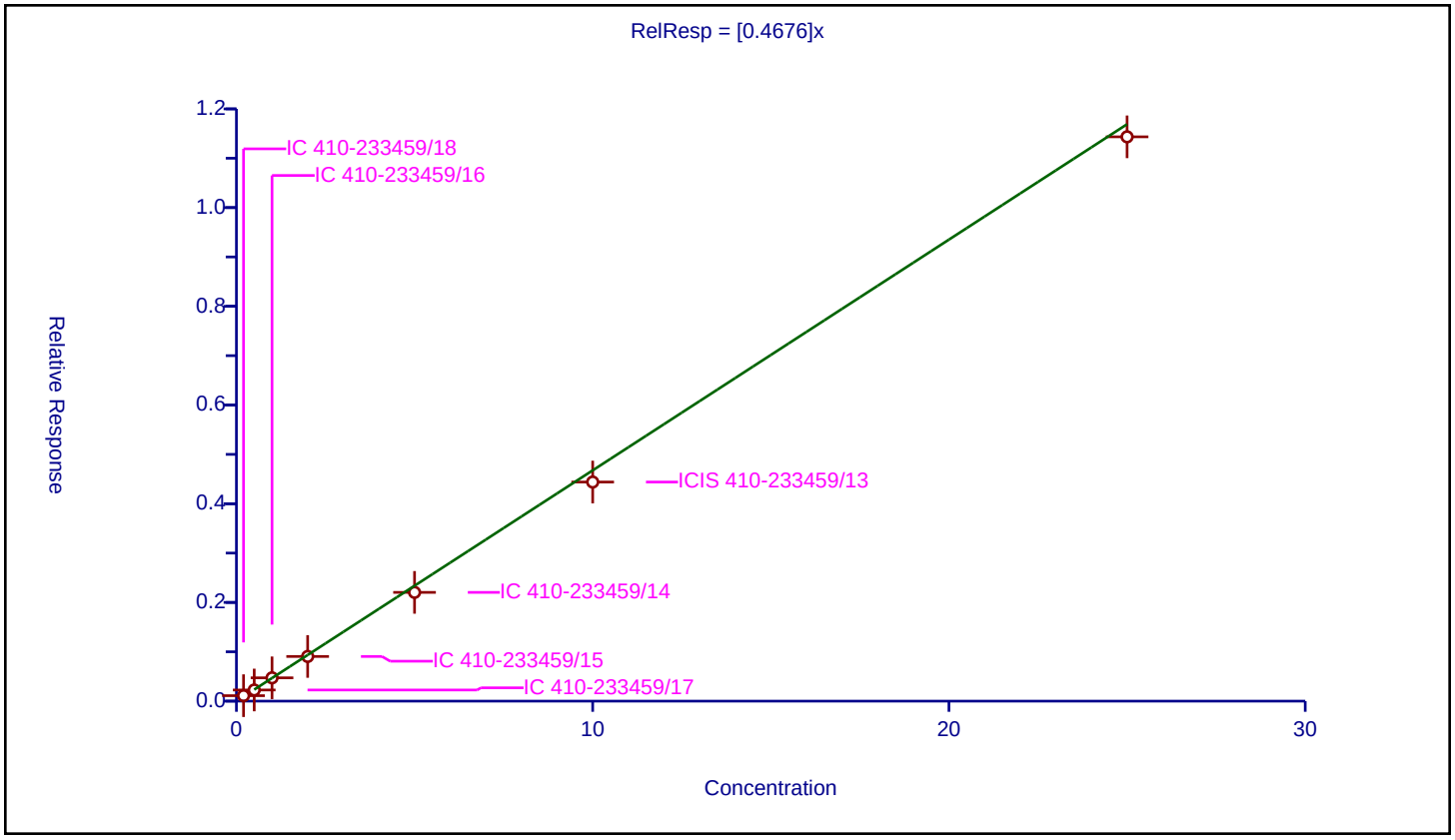
Curve Coefficients

Intercept:	0
Slope:	0.4676

Error Coefficients

Standard Error:	531000
Relative Standard Error:	8.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.110763	10.0	1013693.0	0.553817	Y
2	IC 410-233459/17	0.5	0.226011	10.0	1007739.0	0.452022	Y
3	IC 410-233459/16	1.0	0.472409	10.0	1012300.0	0.472409	Y
4	IC 410-233459/15	2.0	0.90534	10.0	1013034.0	0.45267	Y
5	IC 410-233459/14	5.0	2.203742	10.0	1016421.0	0.440748	Y
6	ICIS 410-233459/13	10.0	4.439325	10.0	1049716.0	0.443932	Y
7	IC 410-233459/12	25.0	11.43371	10.0	1039276.0	0.457348	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

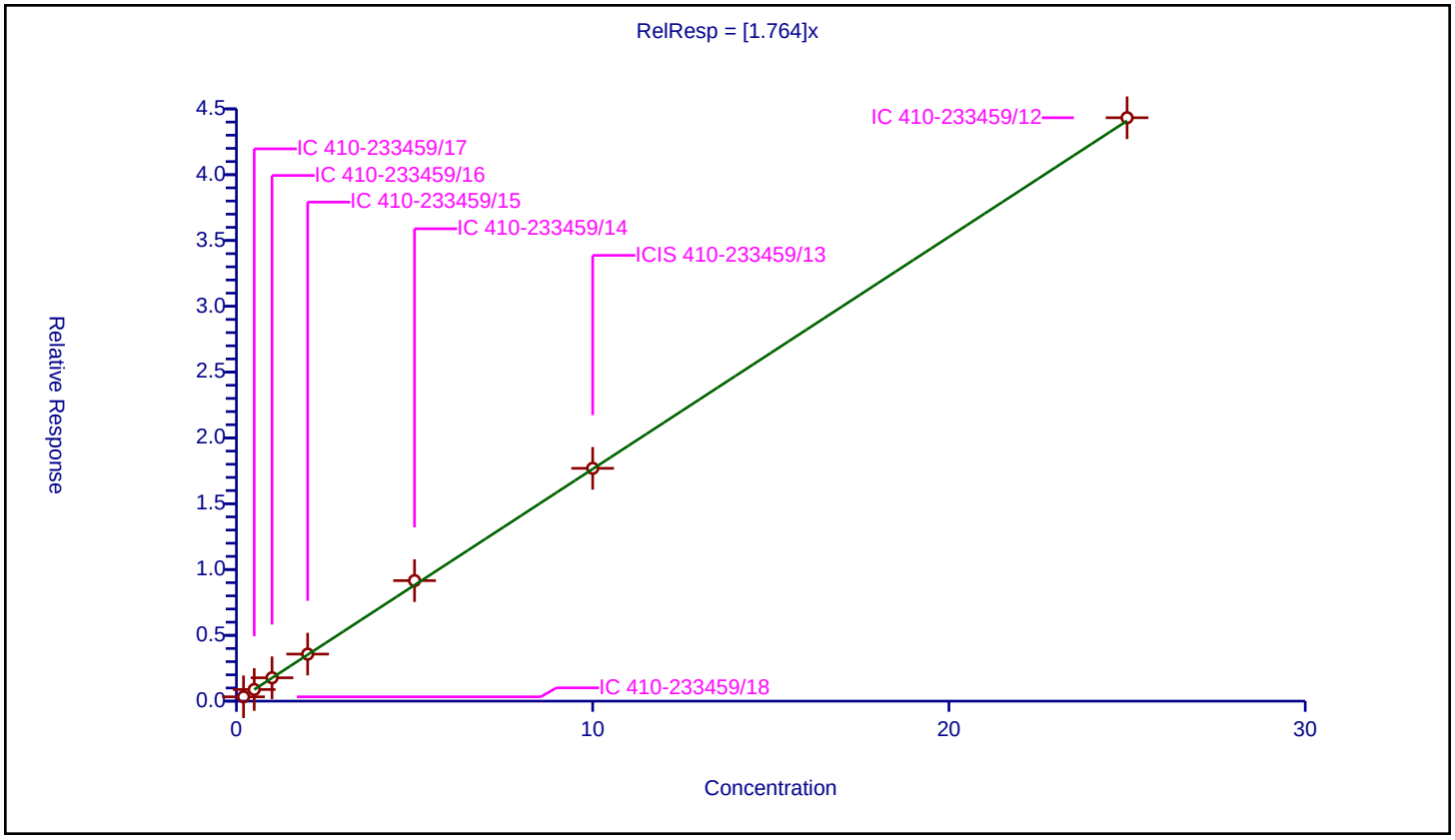
Curve Coefficients

Intercept:	0
Slope:	1.764

Error Coefficients

Standard Error:	2070000
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 410-233459/18	0.2	0.328078	10.0	1013693.0	1.640388	Y
2	IC 410-233459/17	0.5	0.884644	10.0	1007739.0	1.769287	Y
3	IC 410-233459/16	1.0	1.776173	10.0	1012300.0	1.776173	Y
4	IC 410-233459/15	2.0	3.574145	10.0	1013034.0	1.787072	Y
5	IC 410-233459/14	5.0	9.158331	10.0	1016421.0	1.831666	Y
6	ICIS 410-233459/13	10.0	17.690042	10.0	1049716.0	1.769004	Y
7	IC 410-233459/12	25.0	44.328311	10.0	1039276.0	1.773132	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

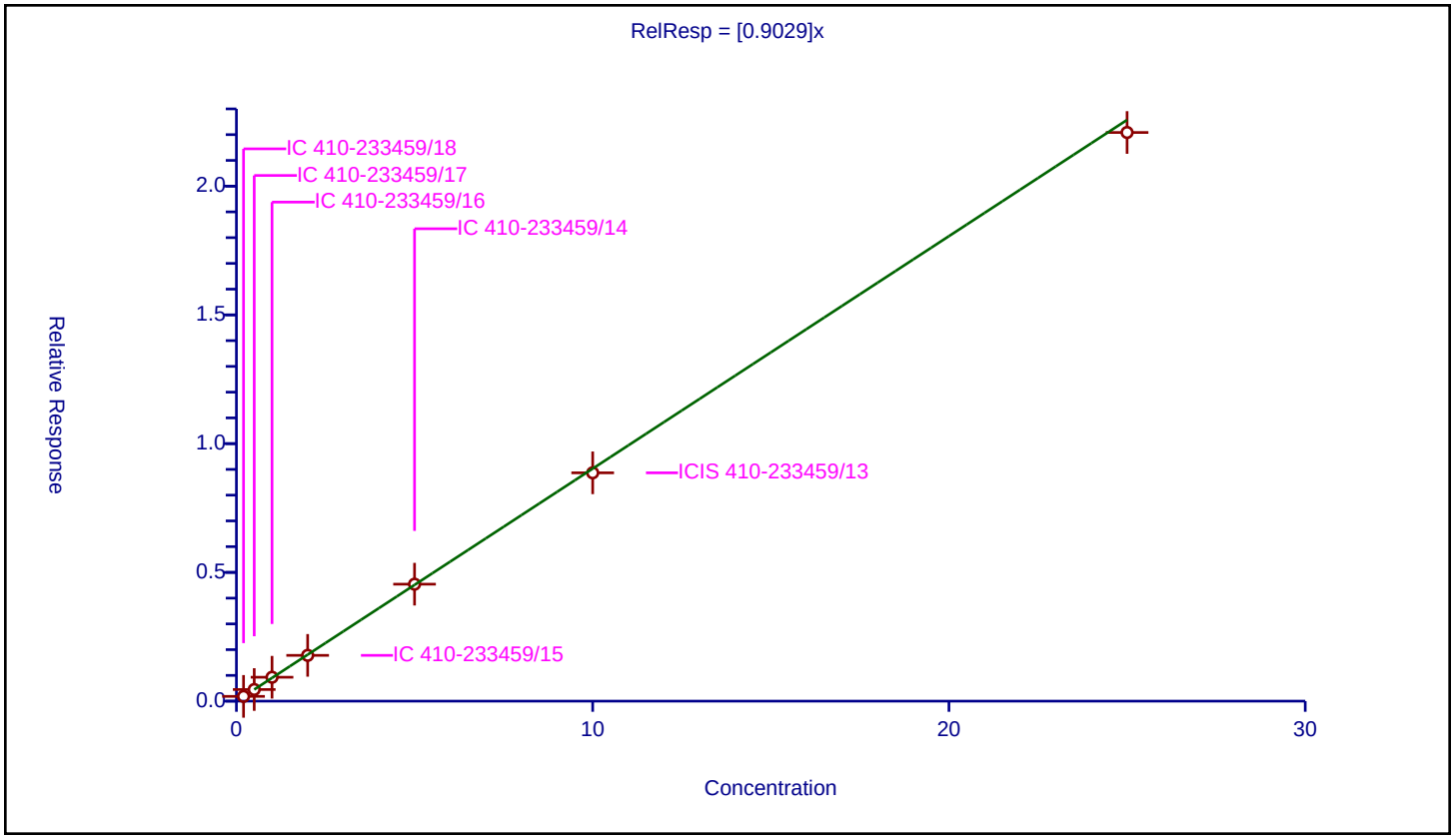
Curve Coefficients

Intercept:	0
Slope:	0.9029

Error Coefficients

Standard Error:	1030000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-233459/18	0.2	0.184287	10.0	1013693.0	0.921433	Y
2	IC 410-233459/17	0.5	0.451764	10.0	1007739.0	0.903528	Y
3	IC 410-233459/16	1.0	0.927867	10.0	1012300.0	0.927867	Y
4	IC 410-233459/15	2.0	1.777778	10.0	1013034.0	0.888889	Y
5	IC 410-233459/14	5.0	4.542606	10.0	1016421.0	0.908521	Y
6	ICIS 410-233459/13	10.0	8.86636	10.0	1049716.0	0.886636	Y
7	IC 410-233459/12	25.0	22.08397	10.0	1039276.0	0.883359	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-77437-1

SDG No.:

Lab Sample ID: ICV 410-233459/19 Calibration Date: 03/15/2022 03:43

Instrument ID: 19930 Calib Start Date: 03/15/2022 01:15

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 03/15/2022 03:22

Lab File ID: IM14V01.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	0.3731	0.3868	0.1000	5.18	5.00	3.7	30.0
Chloromethane	Ave	0.3846	0.4119	0.1000	5.36	5.00	7.1	30.0
1,3-Butadiene	Ave	0.3972	0.3596		4.53	5.00	-9.5	30.0
Vinyl chloride	Ave	0.4063	0.4167	0.1000	5.13	5.00	2.6	30.0
Bromomethane	Ave	0.3364	0.3496	0.1000	5.20	5.00	3.9	30.0
Chloroethane	Ave	0.2471	0.2666	0.1000	5.39	5.00	7.9	30.0
Dichlorofluoromethane	Ave	0.6215	0.6867		5.52	5.00	10.5	30.0
Trichlorofluoromethane	Ave	0.6039	0.6244	0.1000	5.17	5.00	3.4	30.0
Ethyl ether	Ave	0.1668	0.1983		5.91	4.97	18.9	30.0
Freon 123a	Ave	0.3469	0.3579		5.16	5.00	3.2	30.0
Acrolein	Ave	2.007	1.763		32.9	37.5	-12.2	30.0
1,1-Dichloroethene	Ave	0.2623	0.2973	0.1000	5.67	5.00	13.3	30.0
Acetone	Ave	2.712	2.153	0.1000	49.6	62.5	-20.6	30.0
Freon 113	Ave	0.2754	0.3084	0.1000	5.60	5.00	12.0	30.0
Methyl iodide	Ave	0.5377	0.6268		5.83	5.00	16.6	30.0
Ethyl bromide	Ave	0.2505	0.2357		4.70	4.99	-5.9	30.0
Carbon disulfide	Ave	0.5882	0.7190	0.1000	6.11	5.00	22.2	30.0
Methyl acetate	Lin		6.030	0.1000	4.52	5.00	-9.6	30.0
Allyl chloride	Ave	0.3717	0.4119		5.54	5.00	10.8	30.0
Methylene Chloride	Ave	0.2743	0.2827	0.1000	5.15	5.00	3.1	30.0
t-Butyl alcohol	Ave	1.001	1.005		50.2	50.0	0.4	30.0
Acrylonitrile	Ave	3.192	3.006		23.5	25.0	-5.8	30.0
Methyl tert-butyl ether	Ave	0.6851	0.6992	0.1000	5.10	5.00	2.1	30.0
trans-1,2-Dichloroethene	Ave	0.2975	0.3144	0.1000	5.28	5.00	5.7	30.0
n-Hexane	Ave	0.3607	0.3601		4.99	5.00	-0.2	30.0
1,1-Dichloroethane	Ave	0.5092	0.5256	0.2000	5.16	5.00	3.2	30.0
di-Isopropyl ether	Ave	0.7950	0.8073		5.08	5.00	1.5	30.0
2-Chloro-1,3-butadiene	Ave	0.4147	0.4667		5.63	5.00	12.5	30.0
Ethyl t-butyl ether	Ave	0.8093	0.8163		5.04	5.00	0.9	30.0
2-Butanone (MEK)	Ave	4.701	4.063	0.1000	54.0	62.5	-13.6	30.0
cis-1,2-Dichloroethene	Ave	0.3399	0.3487	0.1000	5.13	5.00	2.6	30.0
2,2-Dichloropropane	Ave	0.4723	0.5134		5.44	5.00	8.7	30.0
Propionitrile	Ave	1.204	1.141		35.5	37.5	-5.2	30.0
Methacrylonitrile	Ave	4.811	4.140		32.3	37.5	-13.9	30.0
Bromochloromethane	Ave	0.1559	0.1579		5.06	5.00	1.3	30.0
Tetrahydrofuran	Ave	1.330	1.253		23.6	25.0	-5.8	30.0
Chloroform	Ave	0.5483	0.5589	0.2000	5.10	5.00	1.9	30.0
1,1,1-Trichloroethane	Ave	0.5319	0.5591	0.1000	5.26	5.00	5.1	30.0
Cyclohexane	Ave	0.4471	0.4575	0.1000	5.12	5.00	2.3	30.0
1,1-Dichloropropene	Ave	0.4103	0.4378		5.34	5.00	6.7	30.0
Carbon tetrachloride	Ave	0.4919	0.5169	0.1000	5.25	5.00	5.1	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-77437-1

SDG No.:

Lab Sample ID: ICV 410-233459/19 Calibration Date: 03/15/2022 03:43

Instrument ID: 19930 Calib Start Date: 03/15/2022 01:15

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 03/15/2022 03:22

Lab File ID: IM14V01.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	0.3377	0.2997		111	125	-11.2	30.0
Benzene	Ave	1.178	1.245	0.5000	5.28	5.00	5.7	30.0
1,2-Dichloroethane	Ave	0.3285	0.3232	0.1000	4.92	5.00	-1.6	30.0
t-Amyl methyl ether	Ave	0.7552	0.7502		4.97	5.00	-0.7	30.0
n-Heptane	Ave	0.3853	0.3523		4.57	5.00	-8.6	30.0
n-Butanol	Ave	0.2671	0.2605		244	250	-2.5	30.0
Trichloroethene	Ave	0.3385	0.3552	0.2000	5.25	5.00	4.9	30.0
Methylcyclohexane	Ave	0.5399	0.5327	0.1000	4.93	5.00	-1.3	30.0
1,2-Dichloropropane	Ave	0.2824	0.2888	0.1000	5.11	5.00	2.3	30.0
Methyl methacrylate	Ave	9.116	7.928		4.35	5.00	-13.0	30.0
1,4-Dioxane	Ave	0.0688	0.0665	0.0050	121	125	-3.4	30.0
Dibromomethane	Ave	0.1563	0.1513		4.84	5.00	-3.2	30.0
Bromodichloromethane	Ave	0.3729	0.3791	0.2000	5.08	5.00	1.7	30.0
2-Nitropropane	Ave	2.832	2.162		3.82	5.00	-23.7	30.0
1-Bromo-2-chloroethane	Ave	0.2672	0.2650		4.96	5.00	-0.8	30.0
cis-1,3-Dichloropropene	Ave	0.4391	0.4306	0.2000	4.90	5.00	-1.9	30.0
4-Methyl-2-pentanone (MIBK)	Ave	12.43	10.66	0.1000	53.6	62.5	-14.3	30.0
Toluene	Ave	0.9434	0.9707	0.4000	5.14	5.00	2.9	30.0
trans-1,3-Dichloropropene	Ave	0.4237	0.4340	0.1000	5.12	5.00	2.4	30.0
Ethyl methacrylate	Ave	0.3286	0.3487		5.31	5.00	6.1	30.0
1,1,2-Trichloroethane	Ave	0.2585	0.2547	0.1000	4.93	5.00	-1.5	30.0
Tetrachloroethene	Ave	0.5425	0.5722	0.2000	5.27	5.00	5.5	30.0
1,3-Dichloropropane	Ave	0.4157	0.4103		4.94	5.00	-1.3	30.0
2-Hexanone	Ave	8.351	7.519	0.1000	56.3	62.5	-10.0	30.0
Dibromochloromethane	Ave	0.3508	0.3511		5.01	5.00	0.1	30.0
1,2-Dibromoethane (EDB)	Ave	0.2510	0.2475	0.1000	4.93	5.00	-1.4	30.0
1-Chlorohexane	Ave	0.5715	0.5576		4.88	5.00	-2.4	30.0
Chlorobenzene	Ave	1.117	1.144	0.5000	5.13	5.00	2.5	30.0
1,1,1,2-Tetrachloroethane	Ave	0.4123	0.4225		5.12	5.00	2.5	30.0
Ethylbenzene	Ave	1.867	1.938	0.1000	5.19	5.00	3.8	30.0
m&p-Xylene	Ave	0.7645	0.7974	0.1000	10.4	10.0	4.3	30.0
o-Xylene	Ave	0.7524	0.7708	0.3000	5.12	5.00	2.4	30.0
Styrene	Ave	1.172	1.184	0.3000	5.06	5.00	1.1	30.0
Bromoform	Ave	0.2160	0.2183	0.1000	5.05	5.00	1.0	30.0
Isopropylbenzene	Ave	1.964	2.085	0.1000	5.31	5.00	6.2	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5291	0.5164	0.3000	4.88	5.00	-2.4	30.0
Bromobenzene	Ave	0.8414	0.8458		5.03	5.00	0.5	30.0
trans-1,4-Dichloro-2-butene	Ave	4.486	3.765		21.0	25.0	-16.1	30.0
1,2,3-Trichloropropane	Ave	0.1566	0.1565		5.00	5.00	-0.0	30.0
N-Propylbenzene	Ave	3.670	3.776		5.14	5.00	2.9	30.0
2-Chlorotoluene	Ave	0.8070	0.8289		5.14	5.00	2.7	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-77437-1

SDG No.:

Lab Sample ID: ICV 410-233459/19 Calibration Date: 03/15/2022 03:43

Instrument ID: 19930 Calib Start Date: 03/15/2022 01:15

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 03/15/2022 03:22

Lab File ID: IM14V01.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	2.716	2.801		5.16	5.00	3.1	30.0
4-Chlorotoluene	Ave	0.8245	0.8343		5.06	5.00	1.2	30.0
tert-Butylbenzene	Ave	0.6545	0.6660		5.09	5.00	1.8	30.0
Pentachloroethane	Ave	0.5376	0.5377		5.00	5.00	0.0	30.0
1,2,4-Trimethylbenzene	Ave	2.739	2.791		5.09	5.00	1.9	30.0
sec-Butylbenzene	Ave	3.467	3.548		5.12	5.00	2.4	30.0
1,3-Dichlorobenzene	Ave	1.638	1.614	0.6000	4.93	5.00	-1.5	30.0
p-Isopropyltoluene	Ave	3.120	3.151		5.05	5.00	1.0	30.0
1,4-Dichlorobenzene	Ave	1.674	1.609	0.5000	4.81	5.00	-3.9	30.0
1,2,3-Trimethylbenzene	Ave	1.265	1.259		4.97	5.00	-0.5	30.0
Benzyl chloride	Ave	0.2140	0.2147		5.02	5.00	0.3	30.0
n-Butylbenzene	Ave	1.385	1.370		4.95	5.00	-1.1	30.0
1,2-Dichlorobenzene	Ave	1.493	1.467	0.4000	4.91	5.00	-1.8	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.0846	0.0855	0.0500	5.05	5.00	1.0	30.0
1,3,5-Trichlorobenzene	Ave	1.224	1.204		4.92	5.00	-1.6	30.0
1,2,4-Trichlorobenzene	Ave	1.031	0.9849	0.2000	4.78	5.00	-4.5	30.0
Hexachlorobutadiene	Ave	0.4676	0.4272		4.57	5.00	-8.6	30.0
Naphthalene	Ave	1.764	1.678		4.76	5.00	-4.9	30.0
1,2,3-Trichlorobenzene	Ave	0.9029	0.8252		4.57	5.00	-8.6	30.0
Dibromofluoromethane (Surr)	Ave	0.2707	0.2738		10.1	10.0	1.1	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0482	0.0489		10.1	10.0	1.5	30.0
Toluene-d8 (Surr)	Ave	1.217	1.212		9.96	10.0	-0.4	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4719	0.4666		9.89	10.0	-1.1	30.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14V01.D
Lims ID: ICV LG
Client ID:
Sample Type: ICV
Inject. Date: 15-Mar-2022 03:43:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0052441-019
Misc. Info.: ICV LG
Operator ID: mec29284 Instrument ID: 19930
Sublist:

Method: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 16-Mar-2022 10:12:27 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1676

First Level Reviewer: kephartk Date: 16-Mar-2022 09:28:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.953	1.953	0.000	99	391626	5.00	5.18	
4 Chloromethane	50	2.148	2.142	0.006	99	417083	5.00	5.36	
5 Vinyl chloride	62	2.264	2.264	0.000	98	421931	5.00	5.13	
6 Butadiene	39	2.264	2.264	0.000	92	364080	5.00	4.53	
7 Bromomethane	94	2.593	2.599	-0.006	91	353983	5.00	5.20	
8 Chloroethane	64	2.672	2.678	-0.006	100	269930	5.00	5.39	
9 Dichlorofluoromethane	67	2.916	2.916	0.000	97	695272	5.00	5.52	
10 Trichlorofluoromethane	101	2.928	2.928	0.000	96	632229	5.00	5.17	
11 Ethyl ether	59	3.239	3.233	0.006	90	199646	4.97	5.91	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.306	3.312	-0.006	90	362421	5.00	5.16	
13 Acrolein	56	3.404	3.404	0.000	99	228413	37.5	32.9	M
14 1,1-Dichloroethene	96	3.544	3.544	0.000	97	300976	5.00	5.67	
15 Acetone	43	3.574	3.580	-0.006	100	464976	62.5	49.6	
16 112TCTFE	101	3.580	3.580	0.000	87	312269	5.00	5.60	
17 Iodomethane	142	3.739	3.739	0.000	99	634607	5.00	5.83	
18 Ethyl bromide	108	3.769	3.769	0.000	98	238211	4.99	4.70	
19 Carbon disulfide	76	3.849	3.849	0.000	99	727940	5.00	6.11	
21 Methyl acetate	43	4.001	4.007	-0.006	97	104171	5.00	4.52	M
22 3-Chloro-1-propene	41	4.019	4.025	-0.006	89	417022	5.00	5.54	
23 Methylene Chloride	84	4.208	4.214	-0.006	89	286197	5.00	5.15	
* 24 t-Butyl alcohol-d10 (IS)	65	4.221	4.214	0.007	96	172755	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.361	4.342	0.019	98	173676	50.0	50.2	
26 Acrylonitrile	53	4.550	4.562	-0.012	99	259613	25.0	23.5	
27 Methyl tert-butyl ether	73	4.623	4.617	0.006	88	707946	5.00	5.10	
28 trans-1,2-Dichloroethene	96	4.629	4.629	0.000	97	318354	5.00	5.28	
29 Hexane	57	5.056	5.056	0.000	93	364605	5.00	4.99	
31 1,1-Dichloroethane	63	5.287	5.287	0.000	96	532140	5.00	5.16	
32 Isopropyl ether	45	5.348	5.354	-0.006	92	817397	5.00	5.08	
33 2-Chloro-1,3-butadiene	53	5.397	5.403	-0.006	91	472535	5.00	5.63	
34 Tert-butyl ethyl ether	59	5.879	5.879	0.000	96	826518	5.00	5.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.074	6.080	-0.006	99	877328	62.5	54.0	
37 cis-1,2-Dichloroethene	96	6.117	6.123	-0.006	81	353042	5.00	5.13	
38 2,2-Dichloropropane	77	6.129	6.135	-0.006	90	519821	5.00	5.44	
40 Propionitrile	54	6.171	6.177	-0.006	97	147842	37.5	35.5	
42 Methacrylonitrile	67	6.385	6.379	0.006	90	536438	37.5	32.3	
43 Chlorobromomethane	128	6.446	6.446	0.000	86	159843	5.00	5.06	
44 Tetrahydrofuran	71	6.458	6.458	0.000	77	108236	25.0	23.6	
45 Chloroform	83	6.604	6.604	0.000	93	565843	5.00	5.10	
$ 46 Dibromofluoromethane (Surr)	113	6.812	6.812	0.000	94	554386	10.0	10.1	
47 1,1,1-Trichloroethane	97	6.824	6.830	-0.006	98	566116	5.00	5.26	
48 Cyclohexane	56	6.927	6.927	0.000	89	463244	5.00	5.12	
50 Carbon tetrachloride	117	7.037	7.037	0.000	96	523410	5.00	5.25	
51 1,1-Dichloropropene	75	7.037	7.037	0.000	94	443314	5.00	5.34	
52 Isobutyl alcohol	41	7.183	7.189	-0.006	94	129452	125.0	111.0	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.263	7.257	0.006	86	99080	10.0	10.1	
54 Benzene	78	7.299	7.299	0.000	97	1260758	5.00	5.28	
56 1,2-Dichloroethane	62	7.366	7.366	0.000	98	327234	5.00	4.92	
57 Tert-amyl methyl ether	73	7.488	7.488	0.000	98	759582	5.00	4.97	
* 58 Fluorobenzene (IS)	96	7.702	7.695	0.007	99	2024993	10.0	10.0	
59 n-Heptane	43	7.708	7.708	0.000	91	356744	5.00	4.57	
60 n-Butanol	56	8.061	8.073	-0.012	89	224975	250.0	243.8	
61 Trichloroethene	95	8.177	8.177	0.000	95	359614	5.00	5.25	
62 Methylcyclohexane	83	8.488	8.482	0.006	90	539338	5.00	4.93	
63 1,2-Dichloropropane	63	8.512	8.500	0.012	81	292448	5.00	5.11	
64 Methyl methacrylate	69	8.592	8.592	0.000	87	136965	5.00	4.35	
65 1,4-Dioxane	88	8.604	8.604	0.000	30	28722	125.0	120.8	M
66 Dibromomethane	93	8.622	8.610	0.012	90	153201	5.00	4.84	
68 Dichlorobromomethane	83	8.854	8.854	0.000	99	383843	5.00	5.08	
69 2-Nitropropane	41	9.116	9.116	0.000	100	37353	5.00	3.82	
72 1-Bromo-2-chloroethane	63	9.244	9.244	0.000	99	268265	5.00	4.96	
73 cis-1,3-Dichloropropene	75	9.396	9.396	0.000	96	435933	5.00	4.90	
74 4-Methyl-2-pentanone (MIBK)	43	9.567	9.567	0.000	97	2301440	62.5	53.6	
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	2055897	10.0	9.96	
76 Toluene	92	9.780	9.780	0.000	98	823207	5.00	5.14	
78 trans-1,3-Dichloropropene	75	10.037	10.036	0.001	93	368088	5.00	5.12	
79 Ethyl methacrylate	69	10.098	10.097	0.001	87	295740	5.00	5.31	
80 1,1,2-Trichloroethane	97	10.238	10.244	-0.006	91	216044	5.00	4.93	
81 Tetrachloroethene	166	10.329	10.329	0.000	98	485305	5.00	5.27	
82 1,3-Dichloropropane	76	10.402	10.402	0.000	89	348014	5.00	4.94	
83 2-Hexanone	43	10.451	10.451	0.000	96	1623765	62.5	56.3	
85 Chlorodibromomethane	129	10.616	10.616	0.000	89	297793	5.00	5.01	
86 Ethylene Dibromide	107	10.732	10.731	0.001	100	209865	5.00	4.93	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	84	1696187	10.0	10.0	
88 1-Chlorohexane	91	11.164	11.164	0.000	95	472917	5.00	4.88	
90 Chlorobenzene	112	11.183	11.183	0.000	97	970605	5.00	5.13	
91 1,1,1,2-Tetrachloroethane	131	11.268	11.268	0.000	94	358355	5.00	5.12	
92 Ethylbenzene	91	11.268	11.268	0.000	98	1643933	5.00	5.19	
93 m-Xylene & p-Xylene	106	11.384	11.384	0.000	99	1352568	10.0	10.4	
94 o-Xylene	106	11.713	11.713	0.000	97	653686	5.00	5.12	
95 Styrene	104	11.725	11.731	-0.006	95	1004508	5.00	5.06	
96 Bromoform	173	11.890	11.890	0.000	98	185099	5.00	5.05	
97 Isopropylbenzene	105	12.012	12.012	0.000	95	1768391	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
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	97	791466	10.0	9.89	
101 1,1,2,2-Tetrachloroethane	83	12.256	12.256	0.000	94	266979	5.00	4.88	
102 Bromobenzene	156	12.274	12.274	0.000	93	437274	5.00	5.03	
103 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	93	325176	25.0	21.0	
104 1,2,3-Trichloropropane	110	12.298	12.298	0.000	84	80935	5.00	5.00	
105 N-Propylbenzene	91	12.341	12.341	0.000	98	1951973	5.00	5.14	
106 2-Chlorotoluene	126	12.414	12.414	0.000	98	428523	5.00	5.14	
107 1,3,5-Trimethylbenzene	105	12.475	12.475	0.000	94	1447933	5.00	5.16	
108 4-Chlorotoluene	126	12.512	12.512	0.000	96	431319	5.00	5.06	
109 tert-Butylbenzene	134	12.719	12.719	0.000	92	344319	5.00	5.09	
110 Pentachloroethane	167	12.749	12.749	0.000	91	277987	5.00	5.00	
111 1,2,4-Trimethylbenzene	105	12.762	12.762	0.000	97	1442855	5.00	5.09	
112 sec-Butylbenzene	105	12.877	12.877	0.000	94	1834487	5.00	5.12	
113 1,3-Dichlorobenzene	146	12.981	12.981	0.000	98	834688	5.00	4.93	
114 4-Isopropyltoluene	119	12.987	12.987	0.000	97	1629109	5.00	5.05	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	93	1033998	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.054	13.054	0.000	95	831667	5.00	4.81	
117 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	98	650650	5.00	4.97	
118 Benzyl chloride	126	13.127	13.133	-0.006	98	111006	5.00	5.02	
119 n-Butylbenzene	92	13.280	13.280	0.000	97	708182	5.00	4.95	
120 1,2-Dichlorobenzene	146	13.310	13.316	-0.006	99	758484	5.00	4.91	
122 1,2-Dibromo-3-Chloropropane	155	13.859	13.859	0.000	90	44189	5.00	5.05	
123 1,3,5-Trichlorobenzene	180	13.981	13.981	0.000	98	622686	5.00	4.92	
124 1,2,4-Trichlorobenzene	180	14.402	14.408	-0.006	94	509192	5.00	4.78	
125 Hexachlorobutadiene	225	14.487	14.487	0.000	95	220875	5.00	4.57	
126 Naphthalene	128	14.584	14.584	0.000	96	867528	5.00	4.76	
127 1,2,3-Trichlorobenzene	180	14.725	14.725	0.000	95	426620	5.00	4.57	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_EE_00002	Amount Added:	12.50	Units: uL	
MSV_LCS_VOC#1_00044	Amount Added:	12.50	Units: uL	
MSV_LCS_ACROL_00048	Amount Added:	12.50	Units: uL	
MSV_LCS_Penta_00013	Amount Added:	12.50	Units: uL	
MSV_QC_Gas826_00070	Amount Added:	12.50	Units: uL	
MSV_LCS_ETBR_00001	Amount Added:	12.50	Units: uL	
MSV_LLcentISS_00004	Amount Added:	5.00	Units: uL	Run Reagent

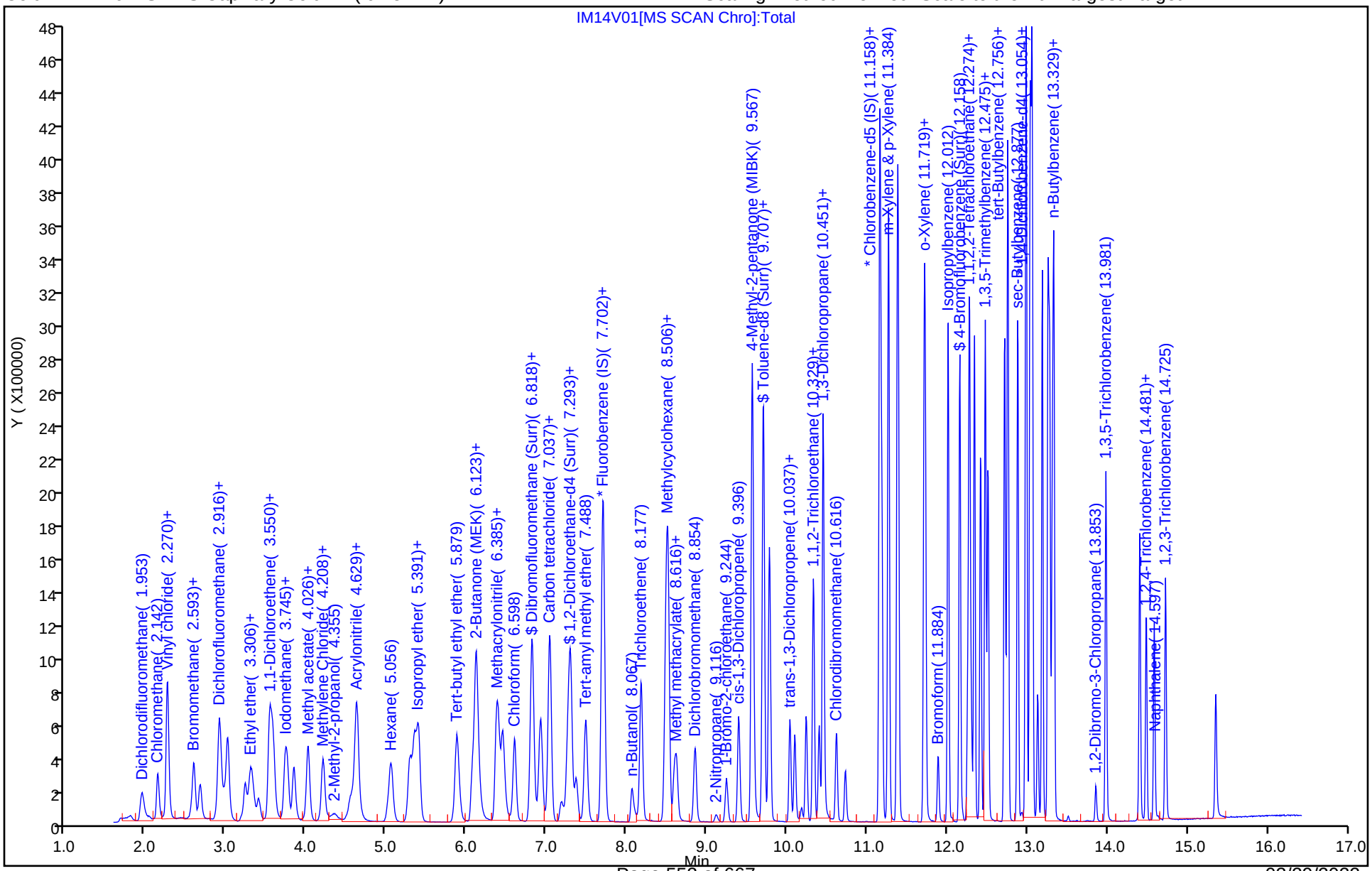
Report Date: 16-Mar-2022 10:12:31 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14V01.D

Injection Date:	15-Mar-2022 03:43:30	Instrument ID:	19930	Operator ID:	mec29284
Lims ID:	ICV LG			Worklist Smp#:	19
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

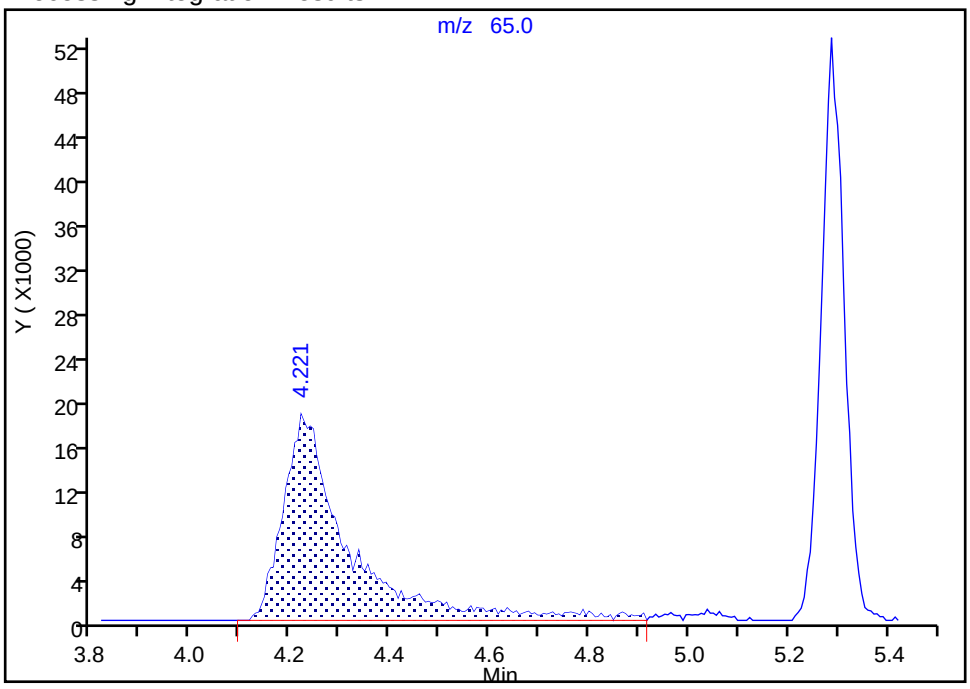
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14V01.D
Injection Date: 15-Mar-2022 03:43:30 Instrument ID: 19930
Lims ID: ICV LG
Client ID:
Operator ID: mec29284 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

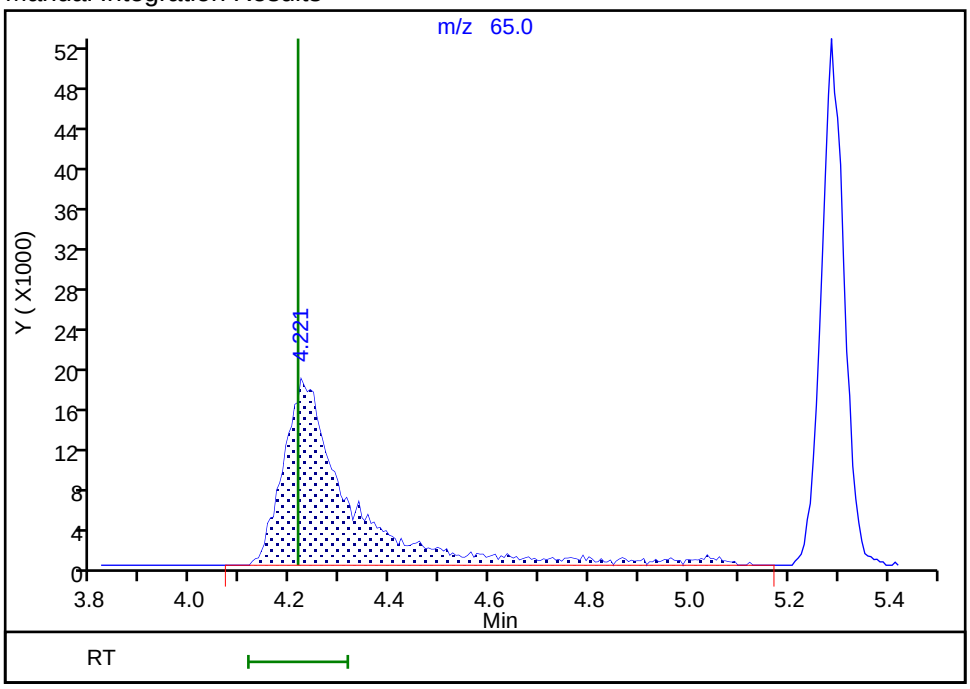
Processing Integration Results

RT: 4.22
Area: 167496
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 4.22
Area: 172755
Amount: 50.000000
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:30:47
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

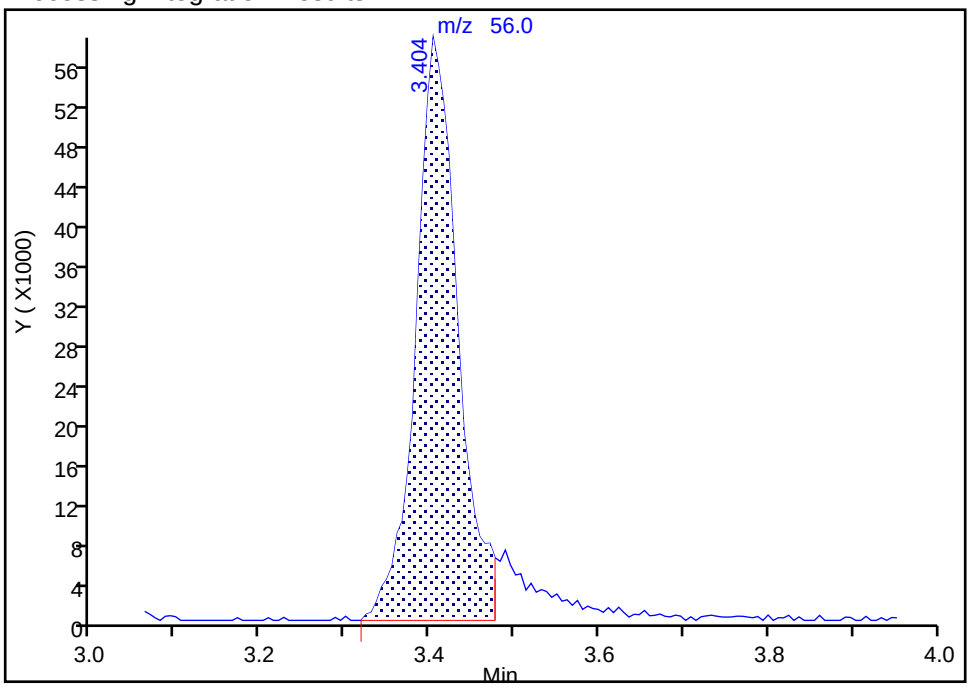
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14V01.D
Injection Date: 15-Mar-2022 03:43:30 Instrument ID: 19930
Lims ID: ICV LG
Client ID:
Operator ID: mec29284 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

13 Acrolein, CAS: 107-02-8

Signal: 1

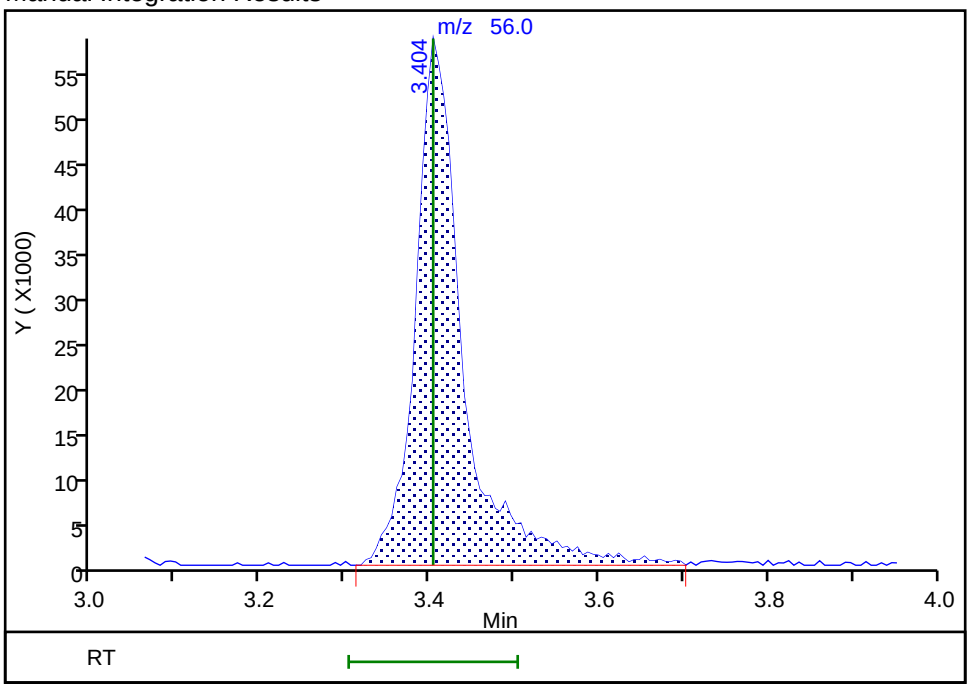
Processing Integration Results

RT: 3.40
Area: 202235
Amount: 30.074886
Amount Units: ug/l



Manual Integration Results

RT: 3.40
Area: 228413
Amount: 32.933835
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:30:15
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

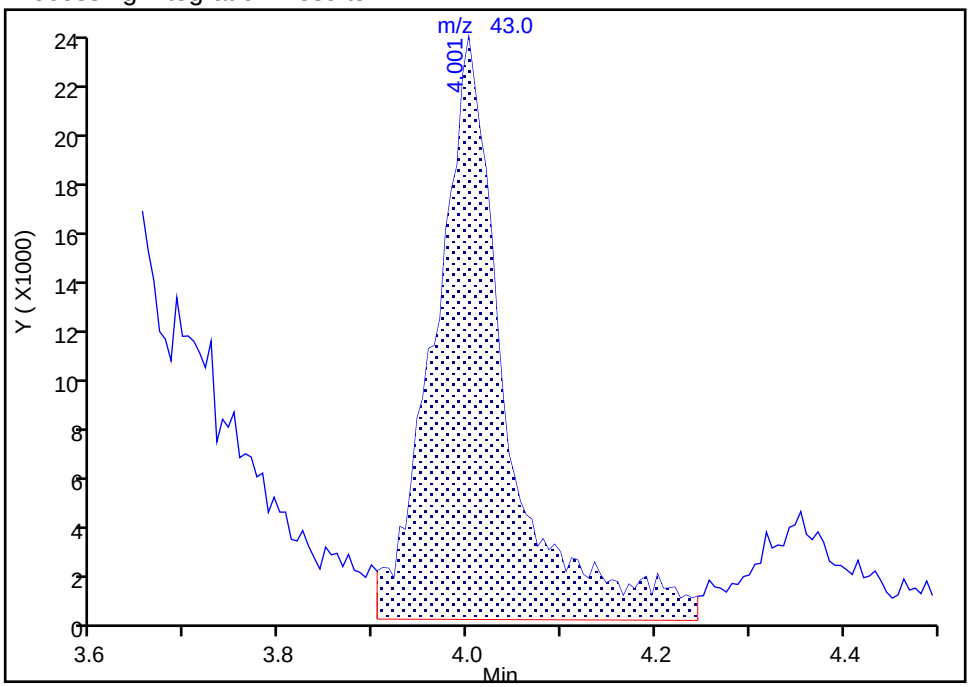
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14V01.D
Injection Date: 15-Mar-2022 03:43:30 Instrument ID: 19930
Lims ID: ICV LG
Client ID:
Operator ID: mec29284 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

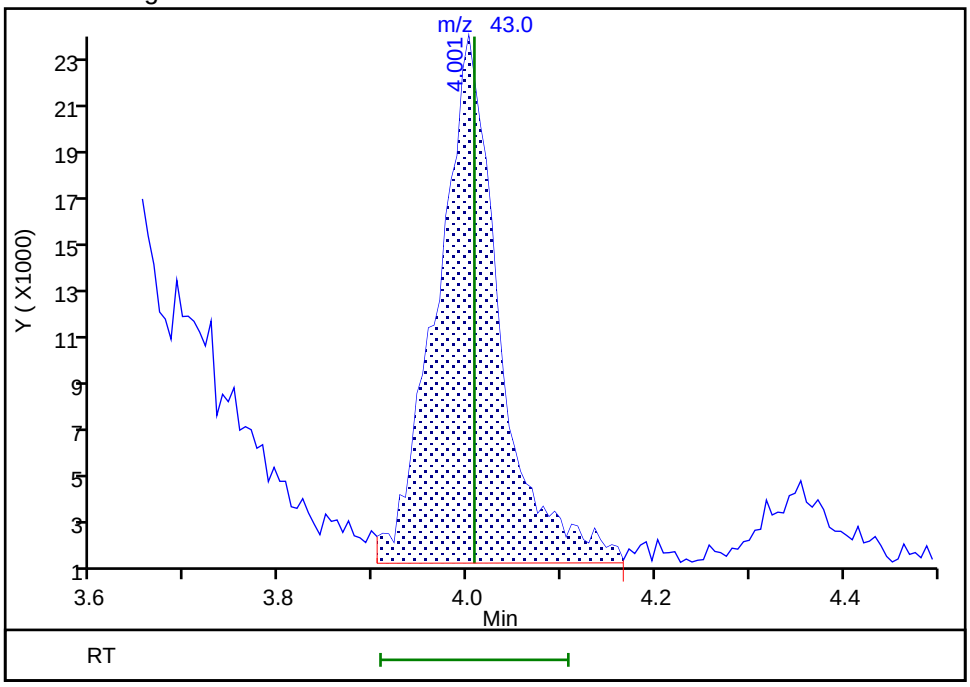
Processing Integration Results

RT: 4.00
Area: 123117
Amount: 5.541261
Amount Units: ug/l



Manual Integration Results

RT: 4.00
Area: 104171
Amount: 4.521206
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:30:39
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

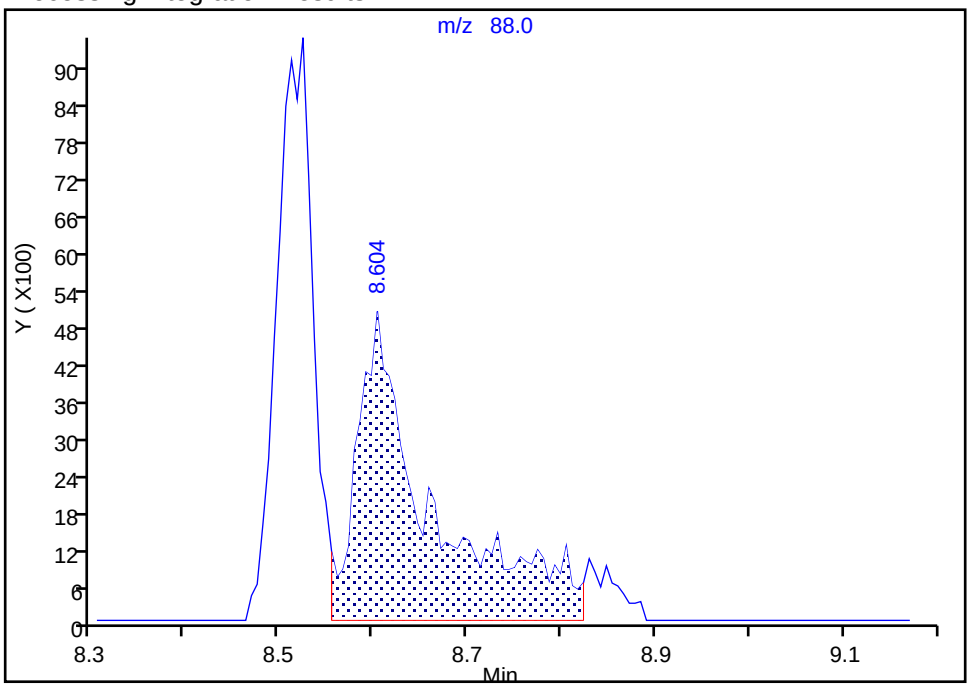
Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14V01.D
Injection Date: 15-Mar-2022 03:43:30 Instrument ID: 19930
Lims ID: ICV LG
Client ID:
Operator ID: mec29284 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

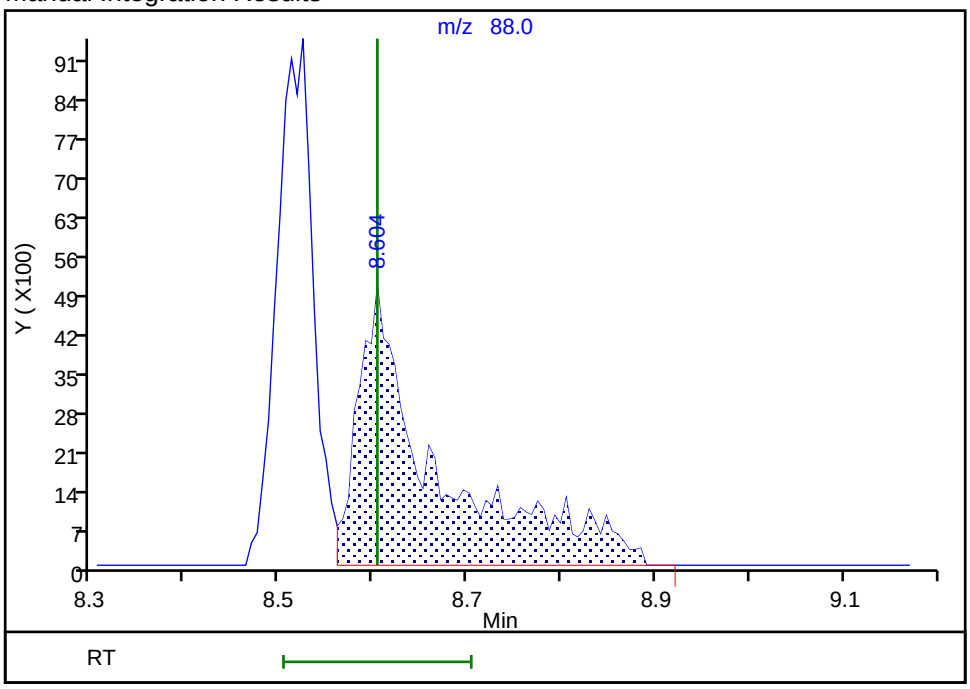
Processing Integration Results

RT: 8.60
Area: 27063
Amount: 105.8270
Amount Units: ug/l



Manual Integration Results

RT: 8.60
Area: 28722
Amount: 120.7802
Amount Units: ug/l



Reviewer: kephartk, 16-Mar-2022 08:31:09
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-77437-1

SDG No.:

Lab Sample ID: CCVIS 410-237993/3 Calibration Date: 03/27/2022 09:13

Instrument ID: 19930 Calib Start Date: 03/15/2022 01:15

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 03/15/2022 03:22

Lab File ID: IM27X02.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	0.3731	0.3326	0.1000	8.92	10.0	-10.8	20.0
Chloromethane	Ave	0.3846	0.3166	0.1000	8.23	10.0	-17.7	20.0
Vinyl chloride	Ave	0.4063	0.3433	0.1000	8.45	10.0	-15.5	20.0
1,3-Butadiene	Ave	0.3972	0.3435		8.65	10.0	-13.5	20.0
Bromomethane	Ave	0.3364	0.2994	0.1000	8.90	10.0	-11.0	20.0
Chloroethane	Ave	0.2471	0.2198	0.1000	8.89	10.0	-11.1	20.0
Dichlorofluoromethane	Ave	0.6215	0.5613		9.03	10.0	-9.7	20.0
Trichlorofluoromethane	Ave	0.6039	0.5832	0.1000	9.66	10.0	-3.4	20.0
Ethyl ether	Ave	0.1668	0.1533		9.19	10.0	-8.1	20.0
Freon 123a	Ave	0.3469	0.3137		9.04	10.0	-9.6	20.0
Acrolein	Ave	2.007	1.584		394	500	-21.1*	20.0
1,1-Dichloroethene	Ave	0.2623	0.2329	0.1000	8.88	10.0	-11.2	20.0
Acetone	Ave	2.712	2.436	0.1000	89.8	100	-10.2	20.0
Freon 113	Ave	0.2754	0.2464	0.1000	8.95	10.0	-10.5	20.0
Methyl iodide	Ave	0.5377	0.5006		9.31	10.0	-6.9	20.0
Ethyl bromide	Ave	0.2505	0.2386		9.52	10.0	-4.7	20.0
Carbon disulfide	Ave	0.5882	0.4942	0.1000	8.40	10.0	-16.0	20.0
Methyl acetate	Lin		5.989	0.1000	9.12	10.0	-8.8	20.0
Allyl chloride	Ave	0.3717	0.2973		8.00	10.0	-20.0	20.0
Methylene Chloride	Ave	0.2743	0.2432	0.1000	8.87	10.0	-11.3	20.0
t-Butyl alcohol	Ave	1.001	0.9205		184	200	-8.1	20.0
Acrylonitrile	Ave	3.192	3.109		24.4	25.0	-2.6	20.0
Methyl tert-butyl ether	Ave	0.6851	0.6142	0.1000	8.96	10.0	-10.4	20.0
trans-1,2-Dichloroethene	Ave	0.2975	0.2637	0.1000	8.86	10.0	-11.4	20.0
n-Hexane	Ave	0.3607	0.2953		8.19	10.0	-18.1	20.0
1,1-Dichloroethane	Ave	0.5092	0.4492	0.2000	8.82	10.0	-11.8	20.0
di-Isopropyl ether	Ave	0.7950	0.6736		8.47	10.0	-15.3	20.0
2-Chloro-1,3-butadiene	Ave	0.4147	0.3529		8.51	10.0	-14.9	20.0
Ethyl t-butyl ether	Ave	0.8093	0.6857		8.47	10.0	-15.3	20.0
2-Butanone (MEK)	Ave	4.701	4.294	0.1000	91.3	100	-8.7	20.0
cis-1,2-Dichloroethene	Ave	0.3399	0.3021	0.1000	8.89	10.0	-11.1	20.0
2,2-Dichloropropane	Ave	0.4723	0.4254		9.01	10.0	-9.9	20.0
Propionitrile	Ave	1.204	1.239		206	200	2.9	20.0
Methacrylonitrile	Ave	4.811	4.457		92.6	100	-7.4	20.0
Bromochloromethane	Ave	0.1559	0.1467		9.41	10.0	-5.9	20.0
Tetrahydrofuran	Ave	1.330	1.254		47.2	50.0	-5.7	20.0
Chloroform	Ave	0.5483	0.4981	0.2000	9.08	10.0	-9.2	20.0
1,1,1-Trichloroethane	Ave	0.5319	0.4782	0.1000	8.99	10.0	-10.1	20.0
Cyclohexane	Ave	0.4471	0.3698	0.1000	8.27	10.0	-17.3	20.0
1,1-Dichloropropene	Ave	0.4103	0.3671		8.95	10.0	-10.5	20.0
Carbon tetrachloride	Ave	0.4919	0.4553	0.1000	9.26	10.0	-7.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-77437-1

SDG No.:

Lab Sample ID: CCVIS 410-237993/3 Calibration Date: 03/27/2022 09:13

Instrument ID: 19930 Calib Start Date: 03/15/2022 01:15

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 03/15/2022 03:22

Lab File ID: IM27X02.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	0.3377	0.3237		479	500	-4.1	20.0
Benzene	Ave	1.178	1.056	0.5000	8.96	10.0	-10.4	20.0
1,2-Dichloroethane	Ave	0.3285	0.3012	0.1000	9.17	10.0	-8.3	20.0
t-Amyl methyl ether	Ave	0.7552	0.6716		8.89	10.0	-11.1	20.0
n-Heptane	Ave	0.3853	0.2995		7.77	10.0	-22.3*	20.0
n-Butanol	Ave	0.2671	0.2925		958	875	9.5	20.0
Trichloroethene	Ave	0.3385	0.3079	0.2000	9.10	10.0	-9.0	20.0
Methylcyclohexane	Ave	0.5399	0.4691	0.1000	8.69	10.0	-13.1	20.0
1,2-Dichloropropane	Ave	0.2824	0.2593	0.1000	9.18	10.0	-8.2	20.0
Methyl methacrylate	Ave	9.116	8.502		9.33	10.0	-6.7	20.0
1,4-Dioxane	Ave	0.0688	0.0636	0.0050	462	500	-7.6	20.0
Dibromomethane	Ave	0.1563	0.1480		9.47	10.0	-5.3	20.0
Bromodichloromethane	Ave	0.3729	0.3596	0.2000	9.64	10.0	-3.6	20.0
2-Nitropropane	Ave	2.832	2.808		49.6	50.0	-0.9	20.0
1-Bromo-2-chloroethane	Ave	0.2672	0.2805		10.5	10.0	5.0	20.0
cis-1,3-Dichloropropene	Ave	0.4391	0.4202	0.2000	9.57	10.0	-4.3	20.0
4-Methyl-2-pentanone (MIBK)	Ave	12.43	11.55	0.1000	92.9	100	-7.1	20.0
Toluene	Ave	0.9434	0.8876	0.4000	9.41	10.0	-5.9	20.0
trans-1,3-Dichloropropene	Ave	0.4237	0.4286	0.1000	10.1	10.0	1.2	20.0
Ethyl methacrylate	Ave	0.3286	0.3318		10.1	10.0	1.0	20.0
1,1,2-Trichloroethane	Ave	0.2585	0.2524	0.1000	9.76	10.0	-2.4	20.0
Tetrachloroethene	Ave	0.5425	0.5303	0.2000	9.78	10.0	-2.2	20.0
1,3-Dichloropropane	Ave	0.4157	0.4036		9.71	10.0	-2.9	20.0
2-Hexanone	Ave	8.351	8.314	0.1000	99.6	100	-0.4	20.0
Dibromochloromethane	Ave	0.3508	0.3687		10.5	10.0	5.1	20.0
1,2-Dibromoethane (EDB)	Ave	0.2510	0.2562	0.1000	10.2	10.0	2.1	20.0
1-Chlorohexane	Ave	0.5715	0.5160		9.03	10.0	-9.7	20.0
Chlorobenzene	Ave	1.117	1.079	0.5000	9.67	10.0	-3.3	20.0
1,1,1,2-Tetrachloroethane	Ave	0.4123	0.4219		10.2	10.0	2.3	20.0
Ethylbenzene	Ave	1.867	1.788	0.1000	9.58	10.0	-4.2	20.0
m&p-Xylene	Ave	0.7645	0.7346	0.1000	19.2	20.0	-3.9	20.0
o-Xylene	Ave	0.7524	0.7187	0.3000	9.55	10.0	-4.5	20.0
Styrene	Ave	1.172	1.160	0.3000	9.90	10.0	-1.0	20.0
Bromoform	Ave	0.2160	0.2468	0.1000	11.4	10.0	14.2	20.0
Isopropylbenzene	Ave	1.964	1.889	0.1000	9.62	10.0	-3.8	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5291	0.5375	0.3000	10.2	10.0	1.6	20.0
Bromobenzene	Ave	0.8414	0.8284		9.85	10.0	-1.5	20.0
trans-1,4-Dichloro-2-butene	Ave	4.486	4.379		97.6	100	-2.4	20.0
1,2,3-Trichloropropane	Ave	0.1566	0.1569		10.0	10.0	0.2	20.0
N-Propylbenzene	Ave	3.670	3.529		9.61	10.0	-3.9	20.0
2-Chlorotoluene	Ave	0.8070	0.8013		9.93	10.0	-0.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-77437-1

SDG No.:

Lab Sample ID: CCVIS 410-237993/3 Calibration Date: 03/27/2022 09:13

Instrument ID: 19930 Calib Start Date: 03/15/2022 01:15

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 03/15/2022 03:22

Lab File ID: IM27X02.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	2.716	2.613		9.62	10.0	-3.8	20.0
4-Chlorotoluene	Ave	0.8245	0.8042		9.75	10.0	-2.5	20.0
tert-Butylbenzene	Ave	0.6545	0.6280		9.60	10.0	-4.0	20.0
Pentachloroethane	Ave	0.5376	0.5708		10.6	10.0	6.2	20.0
1,2,4-Trimethylbenzene	Ave	2.739	2.653		9.69	10.0	-3.1	20.0
sec-Butylbenzene	Ave	3.467	3.296		9.51	10.0	-4.9	20.0
1,3-Dichlorobenzene	Ave	1.638	1.645	0.6000	10.0	10.0	0.4	20.0
p-Isopropyltoluene	Ave	3.120	3.053		9.78	10.0	-2.2	20.0
1,4-Dichlorobenzene	Ave	1.674	1.648	0.5000	9.85	10.0	-1.5	20.0
1,2,3-Trimethylbenzene	Ave	1.265	1.211		9.57	10.0	-4.3	20.0
Benzyl chloride	Ave	0.2140	0.2452		11.5	10.0	14.6	20.0
n-Butylbenzene	Ave	1.385	1.381		9.97	10.0	-0.3	20.0
1,2-Dichlorobenzene	Ave	1.493	1.523	0.4000	10.2	10.0	2.0	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0846	0.0996	0.0500	11.8	10.0	17.7	20.0
1,3,5-Trichlorobenzene	Ave	1.224	1.238		10.1	10.0	1.2	20.0
1,2,4-Trichlorobenzene	Ave	1.031	1.049	0.2000	10.2	10.0	1.8	20.0
Hexachlorobutadiene	Ave	0.4676	0.4593		9.82	10.0	-1.8	20.0
Naphthalene	Ave	1.764	1.782		10.1	10.0	1.0	20.0
1,2,3-Trichlorobenzene	Ave	0.9029	0.8869		9.82	10.0	-1.8	20.0
Dibromofluoromethane (Surr)	Ave	0.2707	0.2724		10.1	10.0	0.6	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0482	0.0497		10.3	10.0	3.1	20.0
Toluene-d8 (Surr)	Ave	1.217	1.237		10.2	10.0	1.6	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4719	0.4489		9.51	10.0	-4.9	20.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X02.D
Lims ID: CCVIS VSTD10
Client ID:
Sample Type: CCVIS
Inject. Date: 27-Mar-2022 09:13:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-003
Misc. Info.: CCVIS
Operator ID: KNK41612 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 27-Mar-2022 11:07:29 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1606

First Level Reviewer: kephartk Date: 27-Mar-2022 09:52:27

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.959	1.959	0.000	99	685362	10.0	8.92	
4 Chloromethane	50	2.154	2.154	0.000	99	652399	10.0	8.23	
5 Vinyl chloride	62	2.270	2.270	0.000	98	707275	10.0	8.45	
6 Butadiene	39	2.276	2.276	0.000	90	707864	10.0	8.65	
7 Bromomethane	94	2.605	2.605	0.000	93	616867	10.0	8.90	
8 Chloroethane	64	2.684	2.684	0.000	99	452835	10.0	8.89	
9 Dichlorofluoromethane	67	2.928	2.928	0.000	97	1156596	10.0	9.03	
10 Trichlorofluoromethane	101	2.934	2.934	0.000	97	1201711	10.0	9.66	
11 Ethyl ether	59	3.245	3.245	0.000	91	315813	10.0	9.19	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.318	3.318	0.000	91	646417	10.0	9.04	
13 Acrolein	56	3.416	3.416	0.000	99	2435183	500.0	394.5	
14 1,1-Dichloroethene	96	3.556	3.556	0.000	96	479890	10.0	8.88	
15 Acetone	43	3.586	3.586	0.000	100	749255	100.0	89.8	M
16 112TCTFE	101	3.593	3.593	0.000	88	507605	10.0	8.95	
17 Iodomethane	142	3.751	3.751	0.000	99	1031540	10.0	9.31	
18 Ethyl bromide	108	3.775	3.775	0.000	99	491484	10.0	9.52	
19 Carbon disulfide	76	3.855	3.855	0.000	100	1018369	10.0	8.40	
21 Methyl acetate	43	4.007	4.007	0.000	97	184187	10.0	9.12	M
22 3-Chloro-1-propene	41	4.031	4.031	0.000	86	612482	10.0	8.00	
23 Methylene Chloride	84	4.214	4.214	0.000	88	501172	10.0	8.87	
* 24 t-Butyl alcohol-d10 (IS)	65	4.239	4.239	0.000	96	153769	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.361	4.361	0.000	99	566190	200.0	183.9	
26 Acrylonitrile	53	4.556	4.556	0.000	95	239062	25.0	24.4	
27 Methyl tert-butyl ether	73	4.623	4.623	0.000	94	1265434	10.0	8.96	
28 trans-1,2-Dichloroethene	96	4.641	4.641	0.000	96	543267	10.0	8.86	
29 Hexane	57	5.056	5.056	0.000	92	608422	10.0	8.19	
31 1,1-Dichloroethane	63	5.300	5.300	0.000	96	925560	10.0	8.82	
32 Isopropyl ether	45	5.361	5.361	0.000	92	1387841	10.0	8.47	
33 2-Chloro-1,3-butadiene	53	5.403	5.403	0.000	91	727136	10.0	8.51	
34 Tert-butyl ethyl ether	59	5.885	5.885	0.000	96	1412833	10.0	8.47	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.080	6.080	0.000	99	1320655	100.0	91.3	
37 cis-1,2-Dichloroethene	96	6.123	6.123	0.000	80	622473	10.0	8.89	
38 2,2-Dichloropropane	77	6.135	6.135	0.000	87	876422	10.0	9.01	
40 Propionitrile	54	6.171	6.171	0.000	98	762042	200.0	205.8	
42 Methacrylonitrile	67	6.385	6.385	0.000	89	1370768	100.0	92.6	
43 Chlorobromomethane	128	6.458	6.458	0.000	85	302352	10.0	9.41	
44 Tetrahydrofuran	71	6.470	6.470	0.000	77	192856	50.0	47.2	
45 Chloroform	83	6.598	6.598	0.000	93	1026345	10.0	9.08	
$ 46 Dibromofluoromethane (Surr)	113	6.811	6.811	0.000	94	561236	10.0	10.1	
47 1,1,1-Trichloroethane	97	6.830	6.830	0.000	98	985388	10.0	8.99	
48 Cyclohexane	56	6.927	6.927	0.000	89	761904	10.0	8.27	
51 1,1-Dichloropropene	75	7.037	7.037	0.000	93	756329	10.0	8.95	
50 Carbon tetrachloride	117	7.043	7.043	0.000	97	938088	10.0	9.26	
52 Isobutyl alcohol	41	7.183	7.183	0.000	91	497703	500.0	479.3	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.275	7.275	0.000	67	102452	10.0	10.3	M
54 Benzene	78	7.299	7.299	0.000	96	2175482	10.0	8.96	
56 1,2-Dichloroethane	62	7.366	7.366	0.000	98	620530	10.0	9.17	
57 Tert-amyl methyl ether	73	7.488	7.488	0.000	98	1383883	10.0	8.89	
* 58 Fluorobenzene (IS)	96	7.702	7.702	0.000	99	2060454	10.0	10.0	
59 n-Heptane	43	7.714	7.714	0.000	86	617050	10.0	7.77	
60 n-Butanol	56	8.061	8.061	0.000	88	786981	875.0	958.1	
61 Trichloroethene	95	8.177	8.177	0.000	94	634460	10.0	9.10	
62 Methylcyclohexane	83	8.494	8.494	0.000	89	966523	10.0	8.69	
63 1,2-Dichloropropane	63	8.512	8.512	0.000	84	534276	10.0	9.18	
64 Methyl methacrylate	69	8.592	8.592	0.000	83	261470	10.0	9.33	
65 1,4-Dioxane	88	8.604	8.604	0.000	33	97812	500.0	462.1	M
66 Dibromomethane	93	8.616	8.616	0.000	89	304934	10.0	9.47	
68 Dichlorobromomethane	83	8.854	8.854	0.000	98	740900	10.0	9.64	
69 2-Nitropropane	41	9.116	9.116	0.000	99	431715	50.0	49.6	
72 1-Bromo-2-chloroethane	63	9.244	9.244	0.000	98	577981	10.0	10.5	
73 cis-1,3-Dichloropropene	75	9.396	9.396	0.000	96	865863	10.0	9.57	
74 4-Methyl-2-pentanone (MIBK)	43	9.567	9.567	0.000	96	3550670	100.0	92.9	
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	2084098	10.0	10.2	
76 Toluene	92	9.780	9.780	0.000	98	1495702	10.0	9.41	
78 trans-1,3-Dichloropropene	75	10.036	10.036	0.000	93	722222	10.0	10.1	
79 Ethyl methacrylate	69	10.097	10.097	0.000	86	559088	10.0	10.1	
80 1,1,2-Trichloroethane	97	10.238	10.238	0.000	91	425283	10.0	9.76	
81 Tetrachloroethene	166	10.329	10.329	0.000	97	893646	10.0	9.78	
82 1,3-Dichloropropane	76	10.402	10.402	0.000	88	680021	10.0	9.71	
83 2-Hexanone	43	10.451	10.451	0.000	96	2556954	100.0	99.6	
85 Chlorodibromomethane	129	10.616	10.616	0.000	89	621296	10.0	10.5	
86 Ethylene Dibromide	107	10.725	10.725	0.000	99	431735	10.0	10.2	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	84	1685037	10.0	10.0	
88 1-Chlorohexane	91	11.164	11.164	0.000	93	869518	10.0	9.03	
90 Chlorobenzene	112	11.183	11.183	0.000	97	1818838	10.0	9.67	
91 1,1,1,2-Tetrachloroethane	131	11.268	11.268	0.000	95	710874	10.0	10.2	
92 Ethylbenzene	91	11.268	11.268	0.000	98	3012149	10.0	9.58	
93 m-Xylene & p-Xylene	106	11.384	11.384	0.000	100	2475634	20.0	19.2	
94 o-Xylene	106	11.713	11.713	0.000	96	1211118	10.0	9.55	
95 Styrene	104	11.725	11.725	0.000	94	1954602	10.0	9.90	
96 Bromoform	173	11.884	11.884	0.000	98	415900	10.0	11.4	
97 Isopropylbenzene	105	12.012	12.012	0.000	95	3183189	10.0	9.62	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	756441	10.0	9.51	
101 1,1,2,2-Tetrachloroethane	83	12.256	12.256	0.000	95	553668	10.0	10.2	
102 Bromobenzene	156	12.274	12.274	0.000	97	853363	10.0	9.85	
103 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	92	1346719	100.0	97.6	
104 1,2,3-Trichloropropane	110	12.298	12.298	0.000	82	161584	10.0	10.0	
105 N-Propylbenzene	91	12.341	12.341	0.000	98	3635054	10.0	9.61	
106 2-Chlorotoluene	126	12.414	12.414	0.000	98	825435	10.0	9.93	
107 1,3,5-Trimethylbenzene	105	12.475	12.475	0.000	94	2692186	10.0	9.62	
108 4-Chlorotoluene	126	12.505	12.505	0.000	97	828471	10.0	9.75	
109 tert-Butylbenzene	134	12.719	12.719	0.000	92	646953	10.0	9.60	
110 Pentachloroethane	167	12.749	12.749	0.000	92	587957	10.0	10.6	
111 1,2,4-Trimethylbenzene	105	12.755	12.755	0.000	96	2733190	10.0	9.69	
112 sec-Butylbenzene	105	12.877	12.877	0.000	94	3395704	10.0	9.51	
113 1,3-Dichlorobenzene	146	12.981	12.981	0.000	99	1694414	10.0	10.0	
114 4-Isopropyltoluene	119	12.987	12.987	0.000	97	3144534	10.0	9.78	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	93	1030133	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.054	13.054	0.000	95	1698022	10.0	9.85	
117 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	98	1247472	10.0	9.57	
118 Benzyl chloride	126	13.127	13.127	0.000	98	252567	10.0	11.5	
119 n-Butylbenzene	92	13.280	13.280	0.000	97	1422941	10.0	9.97	
120 1,2-Dichlorobenzene	146	13.310	13.310	0.000	99	1568396	10.0	10.2	
122 1,2-Dibromo-3-Chloropropane	155	13.853	13.853	0.000	90	102637	10.0	11.8	
123 1,3,5-Trichlorobenzene	180	13.981	13.981	0.000	97	1275544	10.0	10.1	
124 1,2,4-Trichlorobenzene	180	14.401	14.401	0.000	94	1081035	10.0	10.2	
125 Hexachlorobutadiene	225	14.487	14.487	0.000	95	473174	10.0	9.82	
126 Naphthalene	128	14.584	14.584	0.000	96	1835388	10.0	10.1	
127 1,2,3-Trichlorobenzene	180	14.725	14.725	0.000	95	913590	10.0	9.82	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

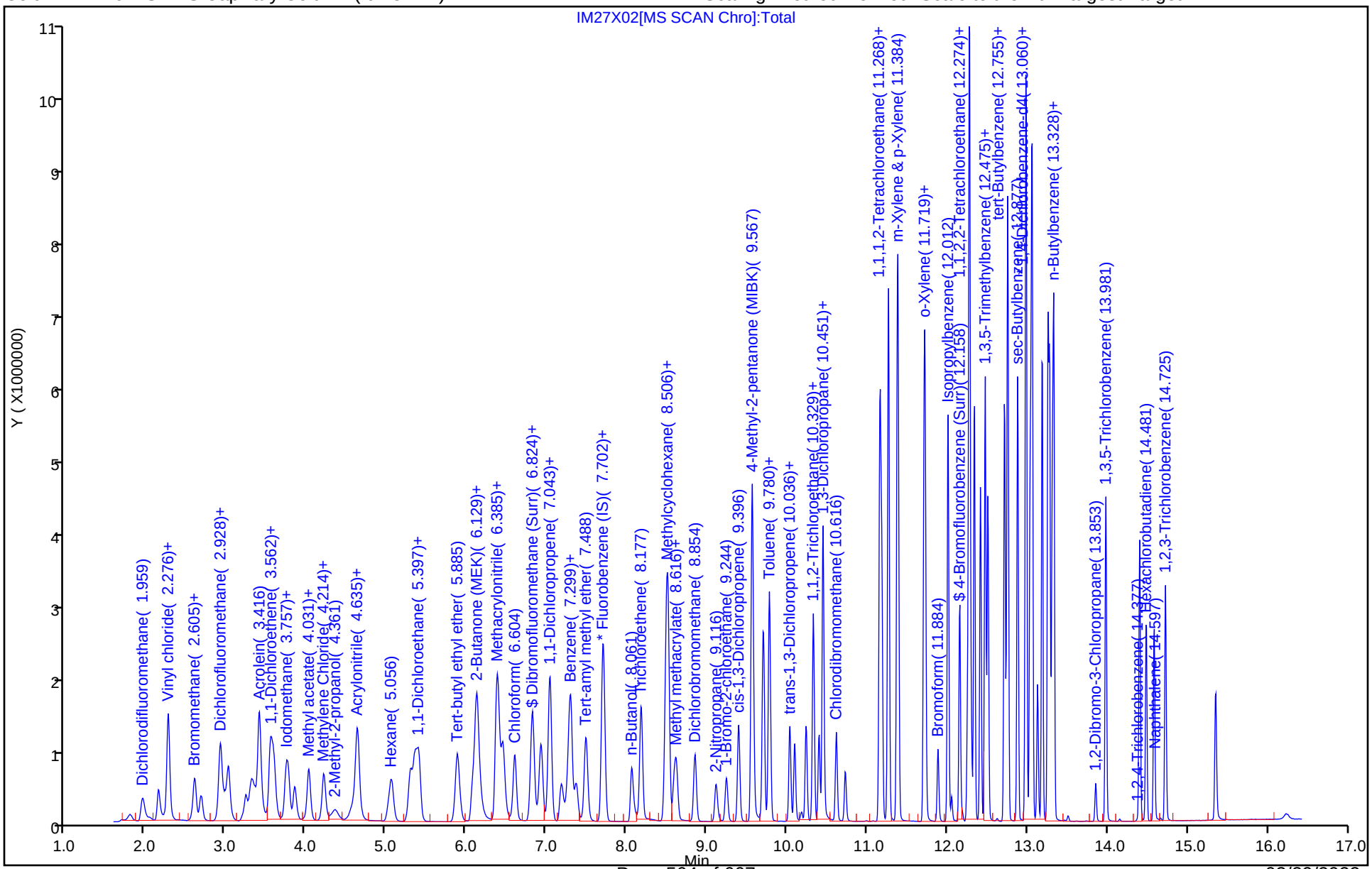
MSV_LL_#1_826_00038	Amount Added: 20.00	Units: uL	
MSV_LL_#2_826_00043	Amount Added: 20.00	Units: uL	
MSV_LL_GAS826_00073	Amount Added: 20.00	Units: uL	
MSV_LLcentISS_00004	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 27-Mar-2022 11:07:29 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X02.D				
Injection Date:	27-Mar-2022 09:13:30	Instrument ID:	19930	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:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

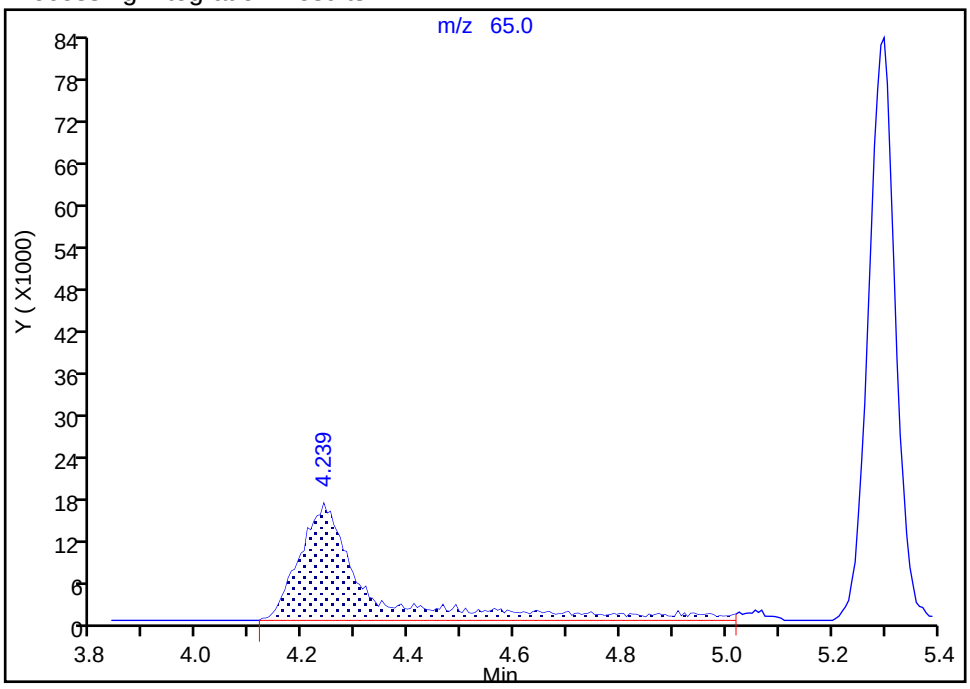
Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X02.D
Injection Date: 27-Mar-2022 09:13:30 Instrument ID: 19930
Lims ID: CCVIS VSTD10
Client ID:
Operator ID: KNK41612 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

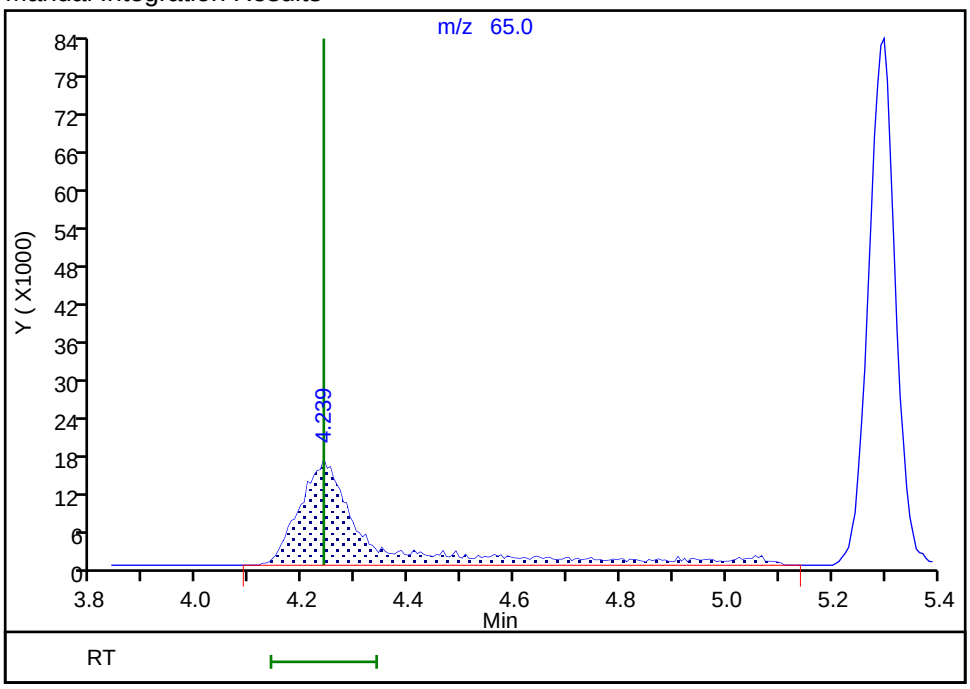
Processing Integration Results

RT: 4.24
Area: 149287
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 4.24
Area: 153769
Amount: 50.000000
Amount Units: ug/l



Reviewer: kephartk, 27-Mar-2022 09:50:45
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

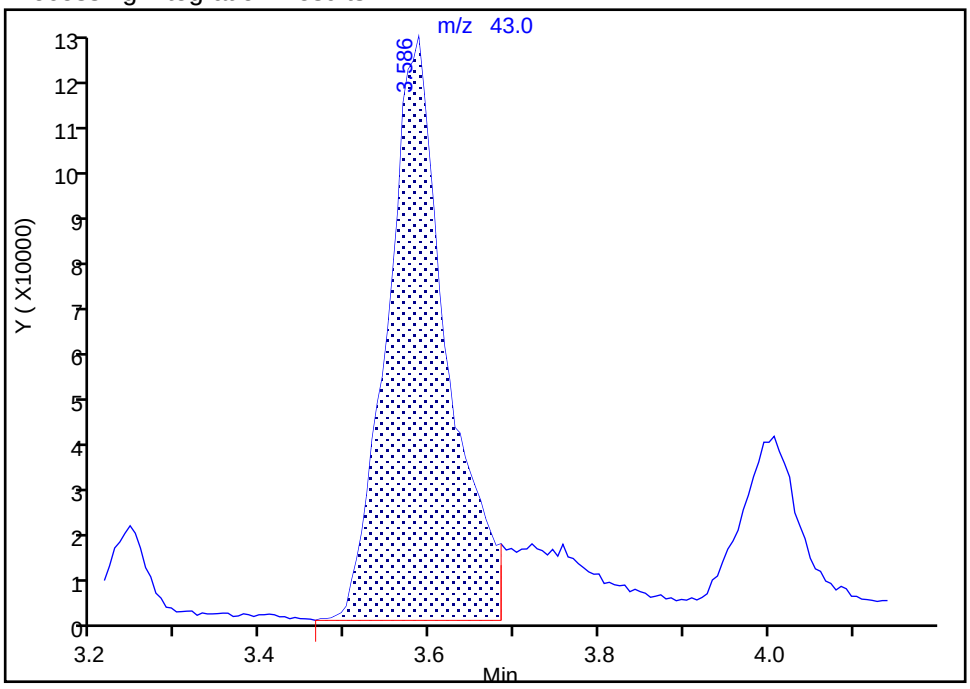
Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X02.D
Injection Date: 27-Mar-2022 09:13:30 Instrument ID: 19930
Lims ID: CCVIS VSTD10
Client ID:
Operator ID: KNK41612 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

15 Acetone, CAS: 67-64-1

Signal: 1

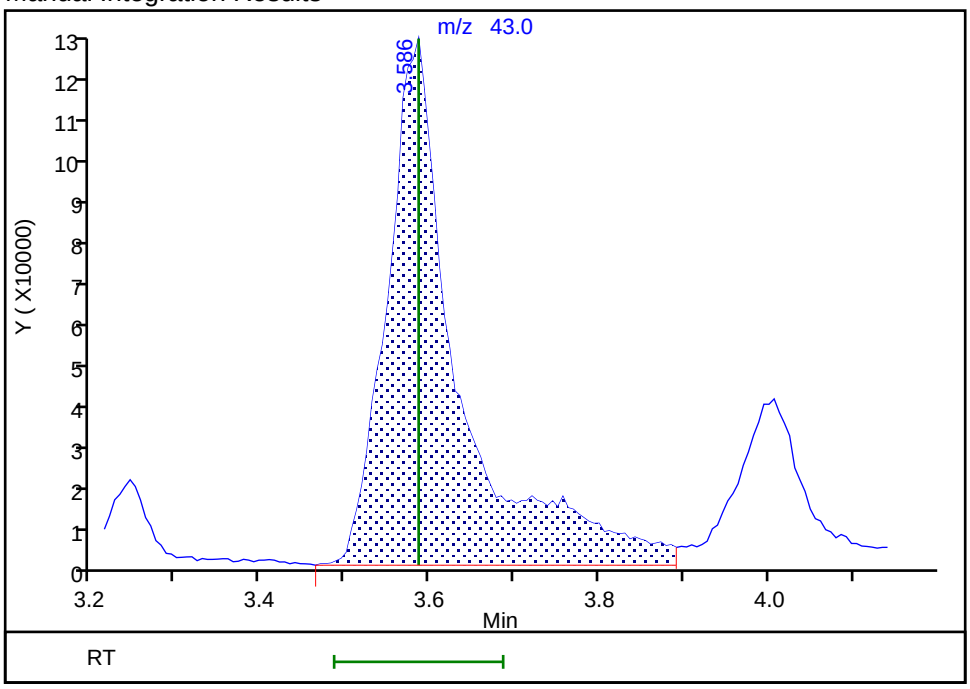
Processing Integration Results

RT: 3.59
Area: 618088
Amount: 76.327524
Amount Units: ug/l



Manual Integration Results

RT: 3.59
Area: 749255
Amount: 89.828410
Amount Units: ug/l



Reviewer: kephartk, 27-Mar-2022 09:50:14
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

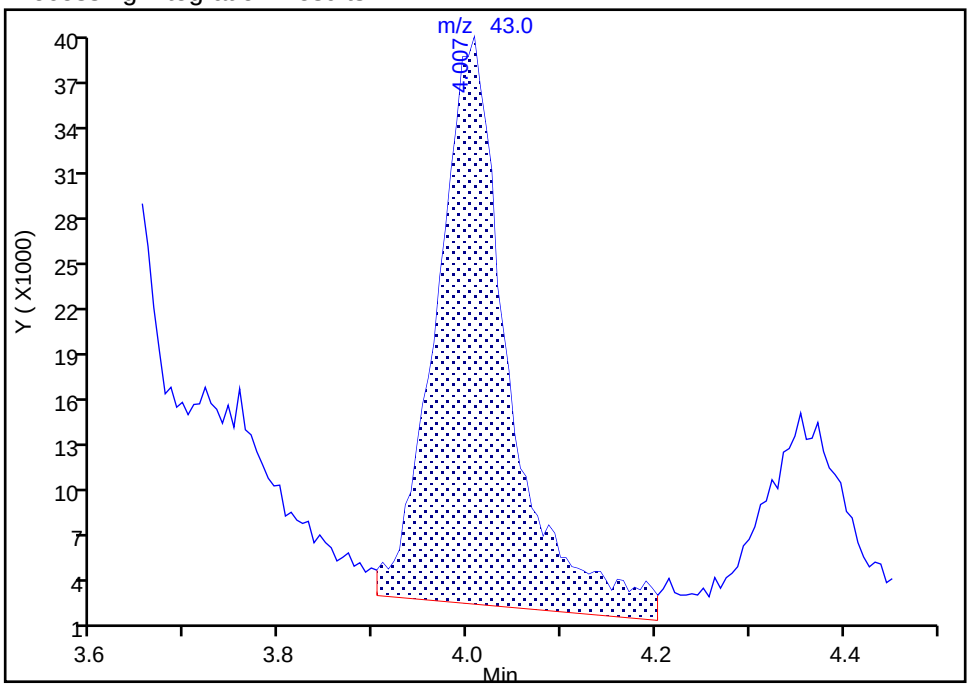
Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X02.D				
Injection Date:	27-Mar-2022 09:13:30	Instrument ID:	19930		
Lims ID:	CCVIS VSTD10				
Client ID:					
Operator ID:	KNK41612	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

21 Methyl acetate, CAS: 79-20-9

Signal: 1

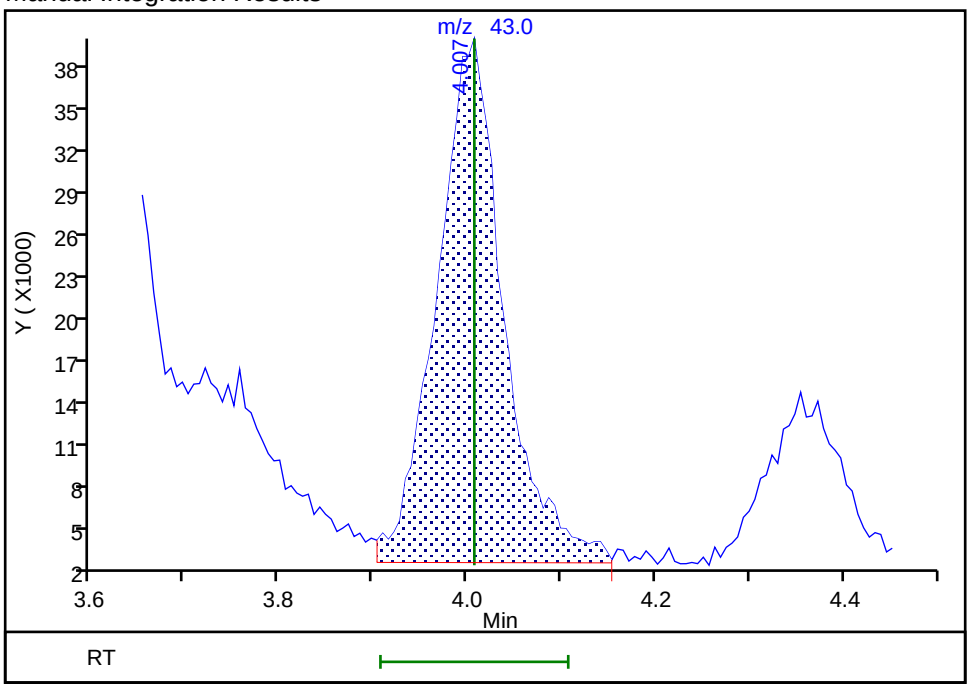
Processing Integration Results

RT: 4.01
Area: 202633
Amount: 10.348482
Amount Units: ug/l



Manual Integration Results

RT: 4.01
Area: 184187
Amount: 9.116172
Amount Units: ug/l



Reviewer: kephartk, 27-Mar-2022 09:50:36
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

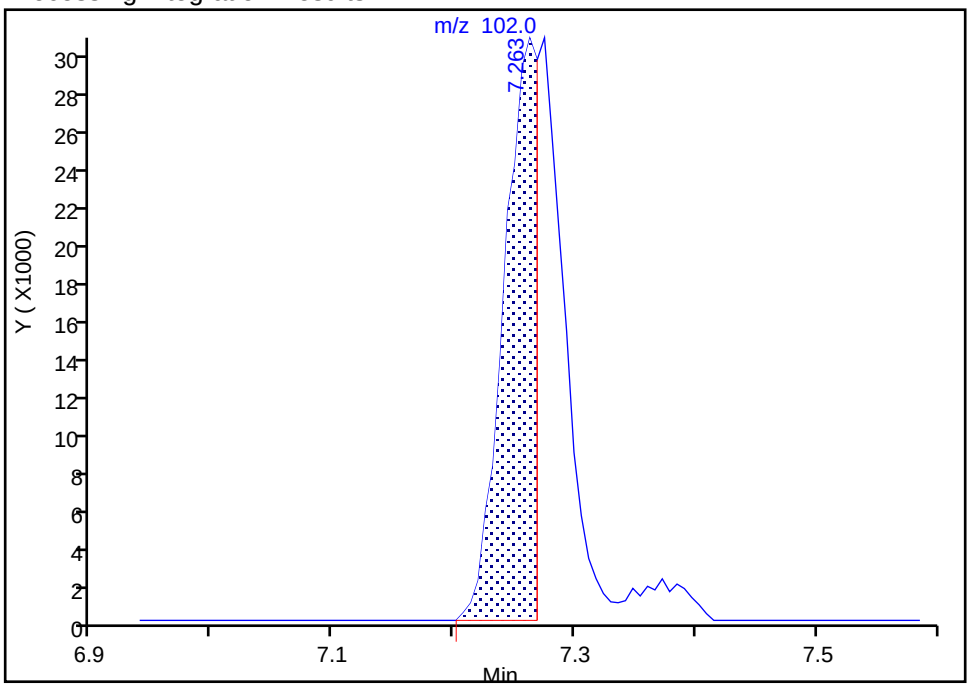
Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X02.D				
Injection Date:	27-Mar-2022 09:13:30	Instrument ID:	19930		
Lims ID:	CCVIS VSTD10				
Client ID:					
Operator ID:	KNK41612	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

$ 53 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

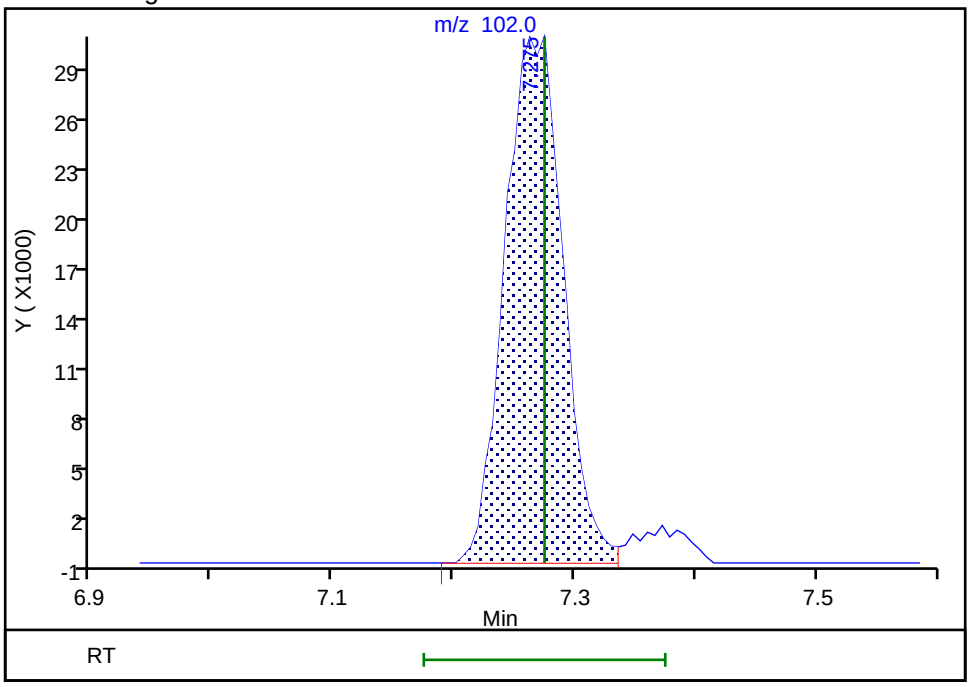
Processing Integration Results

RT: 7.26
Area: 60474
Amount: 6.086477
Amount Units: ug/l



Manual Integration Results

RT: 7.27
Area: 102452
Amount: 10.311403
Amount Units: ug/l



Reviewer: kephartk, 27-Mar-2022 09:51:22
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

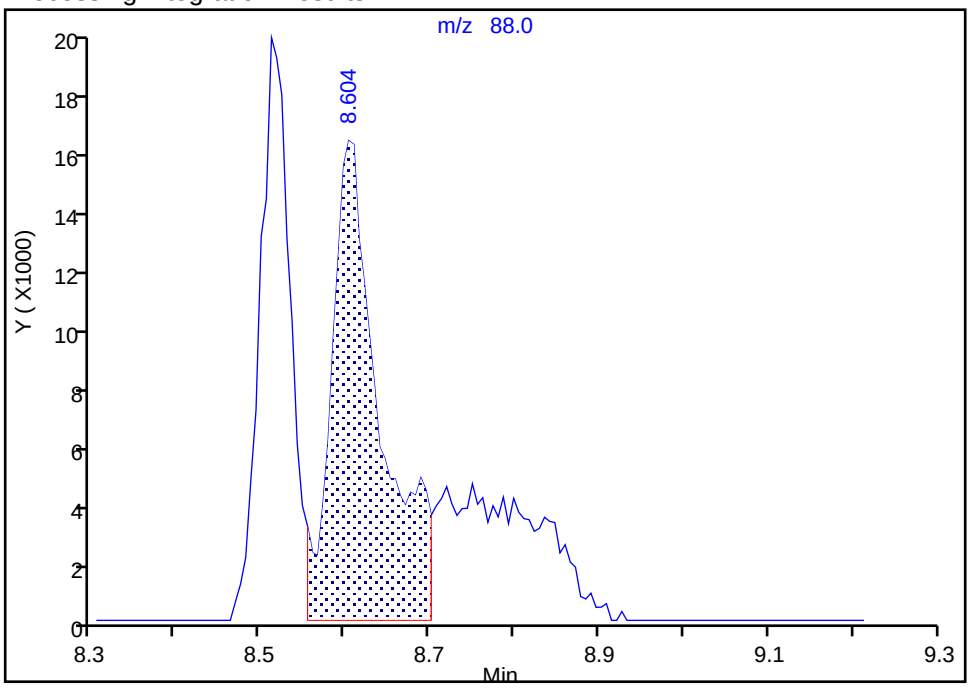
Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X02.D				
Injection Date:	27-Mar-2022 09:13:30	Instrument ID:	19930		
Lims ID:	CCVIS VSTD10				
Client ID:					
Operator ID:	KNK41612	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

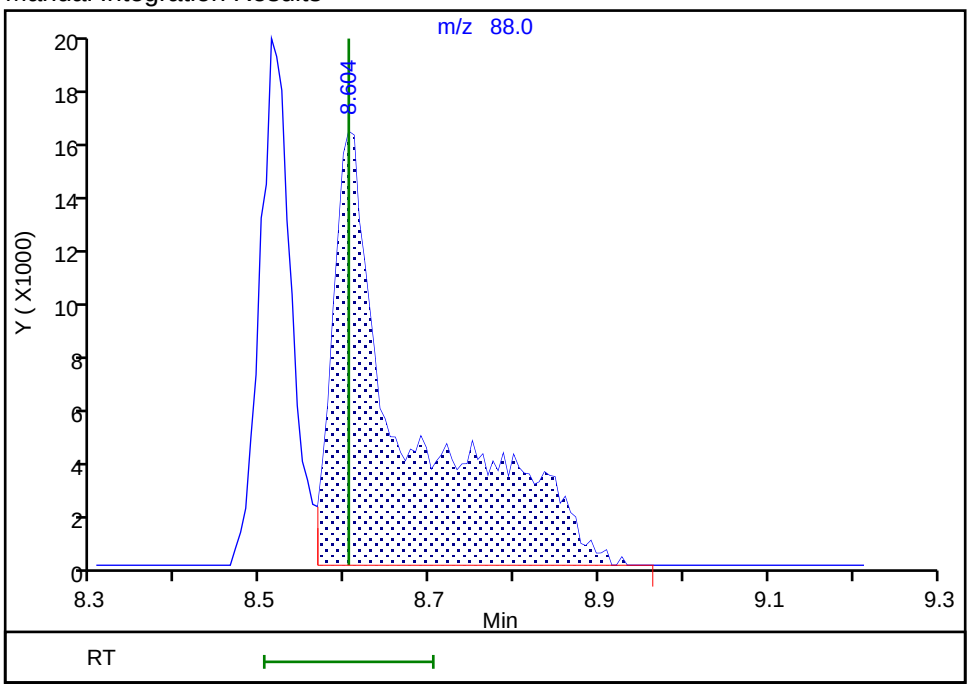
Processing Integration Results

RT: 8.60
Area: 63604
Amount: 300.4883
Amount Units: ug/l



Manual Integration Results

RT: 8.60
Area: 97812
Amount: 462.0992
Amount Units: ug/l



Reviewer: kephartk, 27-Mar-2022 09:51:43
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-77437-1

SDG No.:

Lab Sample ID: CCVIS 410-238139/3 Calibration Date: 03/28/2022 09:23

Instrument ID: 19930 Calib Start Date: 03/15/2022 01:15

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 03/15/2022 03:22

Lab File ID: IM28X02.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	0.3731	0.3349	0.1000	8.98	10.0	-10.2	20.0
Chloromethane	Ave	0.3846	0.3184	0.1000	8.28	10.0	-17.2	20.0
Vinyl chloride	Ave	0.4063	0.3493	0.1000	8.60	10.0	-14.0	20.0
1,3-Butadiene	Ave	0.3972	0.3582		9.02	10.0	-9.8	20.0
Bromomethane	Ave	0.3364	0.3141	0.1000	9.34	10.0	-6.6	20.0
Chloroethane	Ave	0.2471	0.2287	0.1000	9.25	10.0	-7.5	20.0
Dichlorofluoromethane	Ave	0.6215	0.5814		9.35	10.0	-6.5	20.0
Trichlorofluoromethane	Ave	0.6039	0.5954	0.1000	9.86	10.0	-1.4	20.0
Ethyl ether	Ave	0.1668	0.1635		9.80	10.0	-2.0	20.0
Freon 123a	Ave	0.3469	0.3268		9.42	10.0	-5.8	20.0
Acrolein	Ave	2.007	1.742		434	500	-13.2	20.0
1,1-Dichloroethene	Ave	0.2623	0.2395	0.1000	9.13	10.0	-8.7	20.0
Acetone	Ave	2.712	2.557	0.1000	94.3	100	-5.7	20.0
Freon 113	Ave	0.2754	0.2480	0.1000	9.01	10.0	-9.9	20.0
Methyl iodide	Ave	0.5377	0.5050		9.39	10.0	-6.1	20.0
Ethyl bromide	Ave	0.2505	0.2476		9.88	10.0	-1.1	20.0
Carbon disulfide	Ave	0.5882	0.5015	0.1000	8.53	10.0	-14.7	20.0
Methyl acetate	Lin		5.764	0.1000	8.77	10.0	-12.3	20.0
Allyl chloride	Ave	0.3717	0.2985		8.03	10.0	-19.7	20.0
Methylene Chloride	Ave	0.2743	0.2532	0.1000	9.23	10.0	-7.7	20.0
t-Butyl alcohol	Ave	1.001	1.098		219	200	9.6	20.0
Acrylonitrile	Ave	3.192	3.101		24.3	25.0	-2.9	20.0
Methyl tert-butyl ether	Ave	0.6851	0.6375	0.1000	9.31	10.0	-6.9	20.0
trans-1,2-Dichloroethene	Ave	0.2975	0.2698	0.1000	9.07	10.0	-9.3	20.0
n-Hexane	Ave	0.3607	0.2956		8.19	10.0	-18.1	20.0
1,1-Dichloroethane	Ave	0.5092	0.4582	0.2000	9.00	10.0	-10.0	20.0
di-Isopropyl ether	Ave	0.7950	0.6844		8.61	10.0	-13.9	20.0
2-Chloro-1,3-butadiene	Ave	0.4147	0.3628		8.75	10.0	-12.5	20.0
Ethyl t-butyl ether	Ave	0.8093	0.7040		8.70	10.0	-13.0	20.0
2-Butanone (MEK)	Ave	4.701	4.241	0.1000	90.2	100	-9.8	20.0
cis-1,2-Dichloroethene	Ave	0.3399	0.3081	0.1000	9.06	10.0	-9.4	20.0
2,2-Dichloropropane	Ave	0.4723	0.4329		9.17	10.0	-8.3	20.0
Propionitrile	Ave	1.204	1.221		203	200	1.4	20.0
Methacrylonitrile	Ave	4.811	4.335		90.1	100	-9.9	20.0
Bromochloromethane	Ave	0.1559	0.1531		9.82	10.0	-1.8	20.0
Tetrahydrofuran	Ave	1.330	1.279		48.1	50.0	-3.8	20.0
Chloroform	Ave	0.5483	0.5123	0.2000	9.34	10.0	-6.6	20.0
1,1,1-Trichloroethane	Ave	0.5319	0.4877	0.1000	9.17	10.0	-8.3	20.0
Cyclohexane	Ave	0.4471	0.3727	0.1000	8.33	10.0	-16.7	20.0
Carbon tetrachloride	Ave	0.4919	0.4645	0.1000	9.44	10.0	-5.6	20.0
1,1-Dichloropropene	Ave	0.4103	0.3742		9.12	10.0	-8.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-77437-1

SDG No.:

Lab Sample ID: CCVIS 410-238139/3 Calibration Date: 03/28/2022 09:23

Instrument ID: 19930 Calib Start Date: 03/15/2022 01:15

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 03/15/2022 03:22

Lab File ID: IM28X02.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	0.3377	0.3527		522	500	4.5	20.0
Benzene	Ave	1.178	1.083	0.5000	9.19	10.0	-8.1	20.0
1,2-Dichloroethane	Ave	0.3285	0.3196	0.1000	9.73	10.0	-2.7	20.0
t-Amyl methyl ether	Ave	0.7552	0.6976		9.24	10.0	-7.6	20.0
n-Heptane	Ave	0.3853	0.3036		7.88	10.0	-21.2*	20.0
n-Butanol	Ave	0.2671	0.3104		1020	875	16.2	20.0
Trichloroethene	Ave	0.3385	0.3167	0.2000	9.36	10.0	-6.4	20.0
Methylcyclohexane	Ave	0.5399	0.4744	0.1000	8.79	10.0	-12.1	20.0
1,2-Dichloropropane	Ave	0.2824	0.2710	0.1000	9.60	10.0	-4.0	20.0
Methyl methacrylate	Ave	9.116	8.155		8.95	10.0	-10.5	20.0
1,4-Dioxane	Ave	0.0688	0.0780	0.0050	567	500	13.3	20.0
Dibromomethane	Ave	0.1563	0.1559		9.97	10.0	-0.3	20.0
Bromodichloromethane	Ave	0.3729	0.3732	0.2000	10.0	10.0	0.1	20.0
2-Nitropropane	Ave	2.832	2.675		47.2	50.0	-5.6	20.0
1-Bromo-2-chloroethane	Ave	0.2672	0.3002		11.2	10.0	12.4	20.0
cis-1,3-Dichloropropene	Ave	0.4391	0.4280	0.2000	9.75	10.0	-2.5	20.0
4-Methyl-2-pentanone (MIBK)	Ave	12.43	11.32	0.1000	91.1	100	-8.9	20.0
Toluene	Ave	0.9434	0.8944	0.4000	9.48	10.0	-5.2	20.0
trans-1,3-Dichloropropene	Ave	0.4237	0.4355	0.1000	10.3	10.0	2.8	20.0
Ethyl methacrylate	Ave	0.3286	0.3414		10.4	10.0	3.9	20.0
1,1,2-Trichloroethane	Ave	0.2585	0.2654	0.1000	10.3	10.0	2.7	20.0
Tetrachloroethene	Ave	0.5425	0.5318	0.2000	9.80	10.0	-2.0	20.0
1,3-Dichloropropane	Ave	0.4157	0.4212		10.1	10.0	1.3	20.0
2-Hexanone	Ave	8.351	8.023	0.1000	96.1	100	-3.9	20.0
Dibromochloromethane	Ave	0.3508	0.3786		10.8	10.0	7.9	20.0
1,2-Dibromoethane (EDB)	Ave	0.2510	0.2657	0.1000	10.6	10.0	5.9	20.0
1-Chlorohexane	Ave	0.5715	0.5247		9.18	10.0	-8.2	20.0
Chlorobenzene	Ave	1.117	1.103	0.5000	9.88	10.0	-1.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.4123	0.4297		10.4	10.0	4.2	20.0
Ethylbenzene	Ave	1.867	1.825	0.1000	9.78	10.0	-2.2	20.0
m&p-Xylene	Ave	0.7645	0.7430	0.1000	19.4	20.0	-2.8	20.0
o-Xylene	Ave	0.7524	0.7344	0.3000	9.76	10.0	-2.4	20.0
Styrene	Ave	1.172	1.183	0.3000	10.1	10.0	1.0	20.0
Bromoform	Ave	0.2160	0.2517	0.1000	11.7	10.0	16.5	20.0
Isopropylbenzene	Ave	1.964	1.924	0.1000	9.80	10.0	-2.0	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5291	0.5515	0.3000	10.4	10.0	4.2	20.0
Bromobenzene	Ave	0.8414	0.8431		10.0	10.0	0.2	20.0
trans-1,4-Dichloro-2-butene	Ave	4.486	4.340		96.8	100	-3.2	20.0
1,2,3-Trichloropropane	Ave	0.1566	0.1619		10.3	10.0	3.4	20.0
N-Propylbenzene	Ave	3.670	3.554		9.68	10.0	-3.2	20.0
2-Chlorotoluene	Ave	0.8070	0.7907		9.80	10.0	-2.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-77437-1

SDG No.:

Lab Sample ID: CCVIS 410-238139/3 Calibration Date: 03/28/2022 09:23

Instrument ID: 19930 Calib Start Date: 03/15/2022 01:15

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 03/15/2022 03:22

Lab File ID: IM28X02.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	2.716	2.612		9.62	10.0	-3.8	20.0
4-Chlorotoluene	Ave	0.8245	0.8139		9.87	10.0	-1.3	20.0
tert-Butylbenzene	Ave	0.6545	0.6343		9.69	10.0	-3.1	20.0
Pentachloroethane	Ave	0.5376	0.5829		10.8	10.0	8.4	20.0
1,2,4-Trimethylbenzene	Ave	2.739	2.671		9.75	10.0	-2.5	20.0
sec-Butylbenzene	Ave	3.467	3.334		9.62	10.0	-3.8	20.0
1,3-Dichlorobenzene	Ave	1.638	1.660	0.6000	10.1	10.0	1.3	20.0
p-Isopropyltoluene	Ave	3.120	3.095		9.92	10.0	-0.8	20.0
1,4-Dichlorobenzene	Ave	1.674	1.669	0.5000	9.97	10.0	-0.3	20.0
1,2,3-Trimethylbenzene	Ave	1.265	1.206		9.53	10.0	-4.7	20.0
Benzyl chloride	Ave	0.2140	0.2508		11.7	10.0	17.2	20.0
n-Butylbenzene	Ave	1.385	1.417		10.2	10.0	2.3	20.0
1,2-Dichlorobenzene	Ave	1.493	1.560	0.4000	10.4	10.0	4.5	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0846	0.1028	0.0500	12.1	10.0	21.4*	20.0
1,3,5-Trichlorobenzene	Ave	1.224	1.253		10.2	10.0	2.4	20.0
1,2,4-Trichlorobenzene	Ave	1.031	1.079	0.2000	10.5	10.0	4.7	20.0
Hexachlorobutadiene	Ave	0.4676	0.4741		10.1	10.0	1.4	20.0
Naphthalene	Ave	1.764	1.837		10.4	10.0	4.1	20.0
1,2,3-Trichlorobenzene	Ave	0.9029	0.9072		10.0	10.0	0.5	20.0
Dibromofluoromethane (Surr)	Ave	0.2707	0.2770		10.2	10.0	2.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0482	0.0522		10.8	10.0	8.2	20.0
Toluene-d8 (Surr)	Ave	1.217	1.225		10.1	10.0	0.6	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4719	0.4528		9.60	10.0	-4.0	20.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X02.D
Lims ID: CCVIS VSTD10
Client ID:
Sample Type: CCVIS
Inject. Date: 28-Mar-2022 09:23:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053457-003
Misc. Info.: CCVIS
Operator ID: KNK41612 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 10:30:55 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1632

First Level Reviewer: kephartk Date: 28-Mar-2022 10:06:53

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1	Dichlorodifluoromethane	85	1.965	1.965	0.000	99	650913	10.0	8.98	
4	Chloromethane	50	2.166	2.166	0.000	99	618958	10.0	8.28	
5	Vinyl chloride	62	2.282	2.282	0.000	98	678897	10.0	8.60	
6	Butadiene	39	2.288	2.288	0.000	90	696295	10.0	9.02	
7	Bromomethane	94	2.617	2.617	0.000	92	610544	10.0	9.34	
8	Chloroethane	64	2.696	2.696	0.000	99	444582	10.0	9.25	
9	Dichlorofluoromethane	67	2.934	2.934	0.000	97	1130064	10.0	9.35	
10	Trichlorofluoromethane	101	2.946	2.946	0.000	97	1157301	10.0	9.86	
11	Ethyl ether	59	3.257	3.257	0.000	89	317771	10.0	9.80	
12	1,2-Dichloro-1,1,2-trifluoroetha	67	3.324	3.324	0.000	89	635183	10.0	9.42	
13	Acrolein	56	3.428	3.428	0.000	99	2798780	500.0	434.0	
14	1,1-Dichloroethene	96	3.562	3.562	0.000	96	465621	10.0	9.13	
15	Acetone	43	3.599	3.599	0.000	100	821452	100.0	94.3	M
16	112TCTFE	101	3.599	3.599	0.000	86	482083	10.0	9.01	
17	Iodomethane	142	3.757	3.757	0.000	99	981648	10.0	9.39	
18	Ethyl bromide	108	3.788	3.788	0.000	99	481188	10.0	9.88	
19	Carbon disulfide	76	3.867	3.867	0.000	100	974776	10.0	8.53	
21	Methyl acetate	43	4.019	4.019	0.000	57	185204	10.0	8.77	
22	3-Chloro-1-propene	41	4.044	4.044	0.000	85	580206	10.0	8.03	
23	Methylene Chloride	84	4.233	4.233	0.000	88	492225	10.0	9.23	
* 24	t-Butyl alcohol-d10 (IS)	65	4.251	4.251	0.000	97	160650	50.0	50.0	M
25	2-Methyl-2-propanol	59	4.367	4.367	0.000	98	705287	200.0	219.2	
26	Acrylonitrile	53	4.574	4.574	0.000	99	249071	25.0	24.3	
27	Methyl tert-butyl ether	73	4.635	4.635	0.000	95	1239246	10.0	9.31	
28	trans-1,2-Dichloroethene	96	4.647	4.647	0.000	96	524542	10.0	9.07	
29	Hexane	57	5.068	5.068	0.000	92	574541	10.0	8.19	
31	1,1-Dichloroethane	63	5.299	5.299	0.000	96	890749	10.0	9.00	
32	Isopropyl ether	45	5.367	5.367	0.000	91	1330418	10.0	8.61	
33	2-Chloro-1,3-butadiene	53	5.415	5.415	0.000	91	705292	10.0	8.75	
34	Tert-butyl ethyl ether	59	5.891	5.891	0.000	96	1368462	10.0	8.70	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.092	6.092	0.000	99	1362757	100.0	90.2	
37 cis-1,2-Dichloroethene	96	6.129	6.129	0.000	80	598909	10.0	9.06	
38 2,2-Dichloropropane	77	6.147	6.147	0.000	87	841449	10.0	9.17	
40 Propionitrile	54	6.177	6.177	0.000	99	784403	200.0	202.8	
42 Methacrylonitrile	67	6.397	6.397	0.000	89	1392882	100.0	90.1	
43 Chlorobromomethane	128	6.458	6.458	0.000	84	297601	10.0	9.82	
44 Tetrahydrofuran	71	6.476	6.476	0.000	77	205457	50.0	48.1	
45 Chloroform	83	6.610	6.610	0.000	94	995762	10.0	9.34	
$ 46 Dibromofluoromethane (Surr)	113	6.824	6.824	0.000	94	538540	10.0	10.2	
47 1,1,1-Trichloroethane	97	6.836	6.836	0.000	98	948091	10.0	9.17	
48 Cyclohexane	56	6.933	6.933	0.000	89	724434	10.0	8.33	
50 Carbon tetrachloride	117	7.043	7.043	0.000	96	902991	10.0	9.44	
51 1,1-Dichloropropene	75	7.049	7.049	0.000	93	727355	10.0	9.12	
52 Isobutyl alcohol	41	7.189	7.189	0.000	92	566680	500.0	522.3	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.275	7.275	0.000	88	101385	10.0	10.8	
54 Benzene	78	7.305	7.305	0.000	96	2104366	10.0	9.19	
56 1,2-Dichloroethane	62	7.378	7.378	0.000	98	621274	10.0	9.73	
57 Tert-amyl methyl ether	73	7.494	7.494	0.000	98	1356044	10.0	9.24	
* 58 Fluorobenzene (IS)	96	7.708	7.708	0.000	99	1943850	10.0	10.0	
59 n-Heptane	43	7.714	7.714	0.000	89	590211	10.0	7.88	
60 n-Butanol	56	8.067	8.067	0.000	89	872783	875.0	1017.0	
61 Trichloroethene	95	8.183	8.183	0.000	94	615699	10.0	9.36	
62 Methylcyclohexane	83	8.494	8.494	0.000	89	922213	10.0	8.79	
63 1,2-Dichloropropane	63	8.512	8.512	0.000	84	526847	10.0	9.60	
64 Methyl methacrylate	69	8.598	8.598	0.000	84	262015	10.0	8.95	
65 1,4-Dioxane	88	8.604	8.604	0.000	37	125287	500.0	566.5	M
66 Dibromomethane	93	8.622	8.622	0.000	89	302980	10.0	9.97	
68 Dichlorobromomethane	83	8.860	8.860	0.000	99	725493	10.0	10.0	
69 2-Nitropropane	41	9.116	9.116	0.000	100	429721	50.0	47.2	
72 1-Bromo-2-chloroethane	63	9.244	9.244	0.000	98	583529	10.0	11.2	
73 cis-1,3-Dichloropropene	75	9.396	9.396	0.000	95	831926	10.0	9.75	
74 4-Methyl-2-pentanone (MIBK)	43	9.567	9.567	0.000	96	3638144	100.0	91.1	
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1983048	10.0	10.1	
76 Toluene	92	9.780	9.780	0.000	98	1448150	10.0	9.48	
78 trans-1,3-Dichloropropene	75	10.036	10.036	0.000	93	705147	10.0	10.3	
79 Ethyl methacrylate	69	10.097	10.097	0.000	87	552747	10.0	10.4	
80 1,1,2-Trichloroethane	97	10.244	10.244	0.000	91	429745	10.0	10.3	
81 Tetrachloroethene	166	10.329	10.329	0.000	97	861041	10.0	9.80	
82 1,3-Dichloropropane	76	10.402	10.402	0.000	89	681968	10.0	10.1	
83 2-Hexanone	43	10.451	10.451	0.000	96	2577938	100.0	96.1	
85 Chlorodibromomethane	129	10.616	10.616	0.000	89	613045	10.0	10.8	
86 Ethylene Dibromide	107	10.731	10.731	0.000	99	430183	10.0	10.6	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	84	1619171	10.0	10.0	
88 1-Chlorohexane	91	11.164	11.164	0.000	94	849637	10.0	9.18	
90 Chlorobenzene	112	11.182	11.182	0.000	97	1785486	10.0	9.88	
91 1,1,1,2-Tetrachloroethane	131	11.268	11.268	0.000	94	695757	10.0	10.4	
92 Ethylbenzene	91	11.268	11.268	0.000	98	2955157	10.0	9.78	
93 m-Xylene & p-Xylene	106	11.384	11.384	0.000	100	2406095	20.0	19.4	
94 o-Xylene	106	11.713	11.713	0.000	96	1189140	10.0	9.76	
95 Styrene	104	11.725	11.725	0.000	94	1916274	10.0	10.1	
96 Bromoform	173	11.884	11.884	0.000	98	407551	10.0	11.7	
97 Isopropylbenzene	105	12.012	12.012	0.000	95	3115718	10.0	9.80	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	733223	10.0	9.60	
101 1,1,2,2-Tetrachloroethane	83	12.255	12.255	0.000	95	552713	10.0	10.4	
102 Bromobenzene	156	12.274	12.274	0.000	96	844989	10.0	10.0	
103 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	92	1394432	100.0	96.8	
104 1,2,3-Trichloropropane	110	12.298	12.298	0.000	82	162319	10.0	10.3	
105 N-Propylbenzene	91	12.341	12.341	0.000	98	3561714	10.0	9.68	
106 2-Chlorotoluene	126	12.414	12.414	0.000	97	792483	10.0	9.80	
107 1,3,5-Trimethylbenzene	105	12.475	12.475	0.000	94	2617830	10.0	9.62	
108 4-Chlorotoluene	126	12.511	12.511	0.000	96	815733	10.0	9.87	
109 tert-Butylbenzene	134	12.719	12.719	0.000	92	635705	10.0	9.69	
110 Pentachloroethane	167	12.749	12.749	0.000	92	584246	10.0	10.8	
111 1,2,4-Trimethylbenzene	105	12.755	12.755	0.000	96	2676663	10.0	9.75	
112 sec-Butylbenzene	105	12.877	12.877	0.000	94	3341393	10.0	9.62	
113 1,3-Dichlorobenzene	146	12.981	12.981	0.000	99	1663535	10.0	10.1	
114 4-Isopropyltoluene	119	12.987	12.987	0.000	97	3101726	10.0	9.92	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	92	1002286	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.054	13.054	0.000	95	1672956	10.0	9.97	
117 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	98	1209081	10.0	9.53	
118 Benzyl chloride	126	13.127	13.127	0.000	98	251420	10.0	11.7	
119 n-Butylbenzene	92	13.280	13.280	0.000	97	1419899	10.0	10.2	
120 1,2-Dichlorobenzene	146	13.310	13.310	0.000	99	1563927	10.0	10.4	
122 1,2-Dibromo-3-Chloropropane	155	13.853	13.853	0.000	91	102993	10.0	12.1	
123 1,3,5-Trichlorobenzene	180	13.981	13.981	0.000	97	1255874	10.0	10.2	
124 1,2,4-Trichlorobenzene	180	14.401	14.401	0.000	94	1081826	10.0	10.5	
125 Hexachlorobutadiene	225	14.487	14.487	0.000	94	475165	10.0	10.1	
126 Naphthalene	128	14.584	14.584	0.000	97	1841180	10.0	10.4	
127 1,2,3-Trichlorobenzene	180	14.724	14.724	0.000	95	909261	10.0	10.0	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	
204 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_00038	Amount Added: 20.00	Units: uL	
MSV_LL_#2_826_00043	Amount Added: 20.00	Units: uL	
MSV_LL_GAS826_00073	Amount Added: 20.00	Units: uL	
MSV_LLcentISS_00004	Amount Added: 5.00	Units: uL	Run Reagent

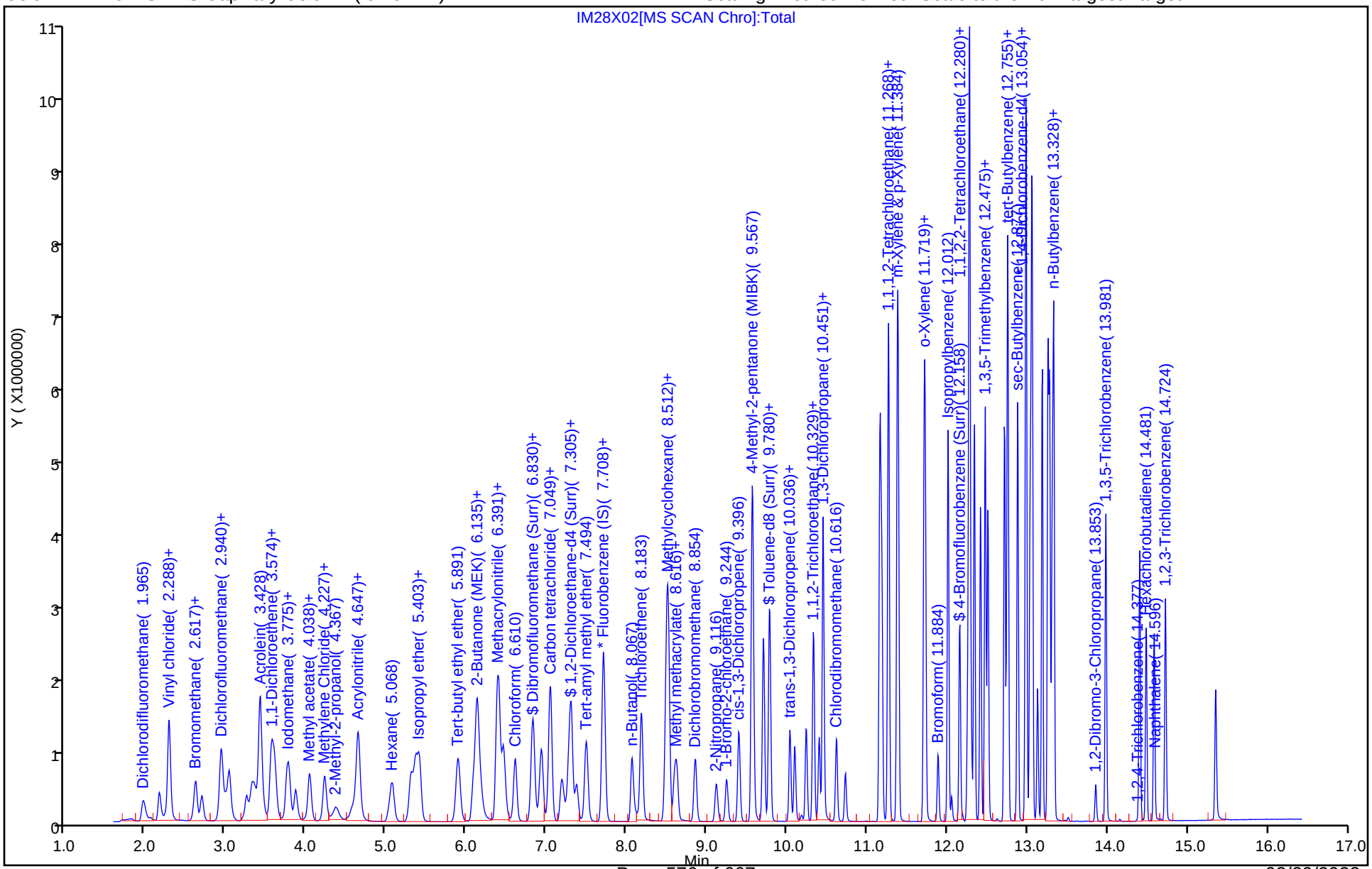
Report Date: 28-Mar-2022 10:30:55 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X02.D

Injection Date:	28-Mar-2022 09:23:30	Instrument ID:	19930	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:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

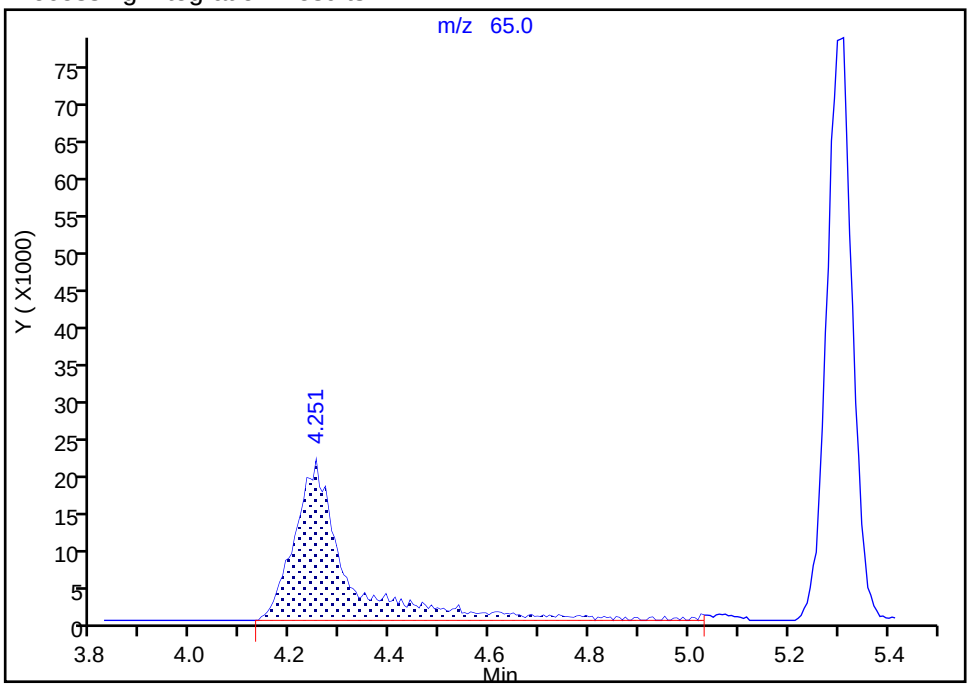
Data File: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X02.D
Injection Date: 28-Mar-2022 09:23:30 Instrument ID: 19930
Lims ID: CCVIS VSTD10
Client ID:
Operator ID: KNK41612 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

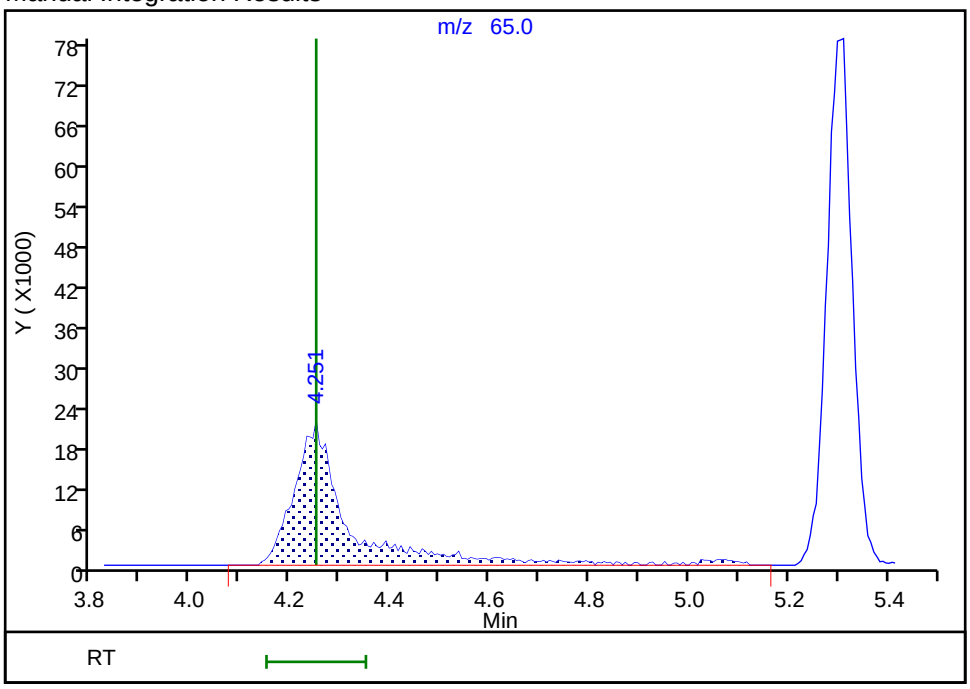
Processing Integration Results

RT: 4.25
Area: 157567
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 4.25
Area: 160650
Amount: 50.000000
Amount Units: ug/l



Reviewer: kephartk, 28-Mar-2022 10:00:11
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

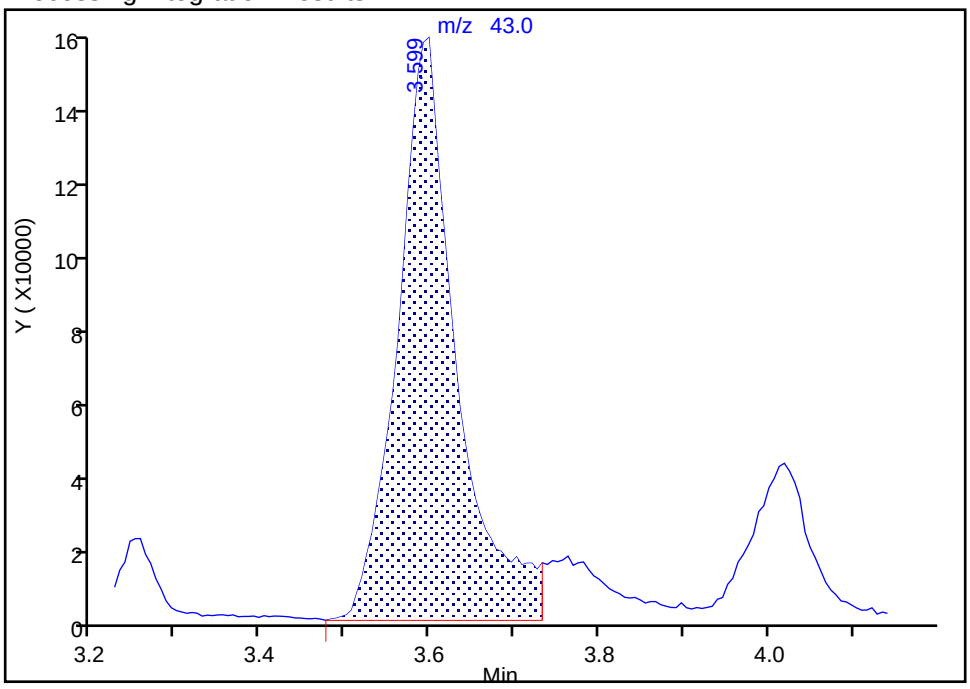
Data File:	\\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X02.D				
Injection Date:	28-Mar-2022 09:23:30	Instrument ID:	19930		
Lims ID:	CCVIS VSTD10				
Client ID:					
Operator ID:	KNK41612	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

15 Acetone, CAS: 67-64-1

Signal: 1

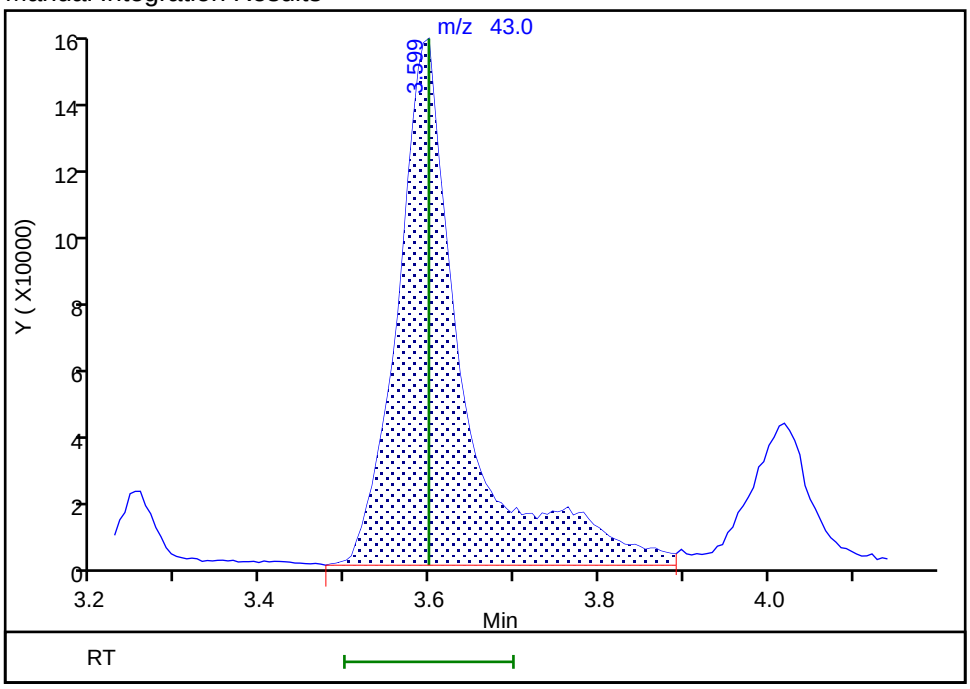
Processing Integration Results

RT: 3.60
Area: 732973
Amount: 85.758182
Amount Units: ug/l



Manual Integration Results

RT: 3.60
Area: 821452
Amount: 94.265834
Amount Units: ug/l



Reviewer: kephartk, 28-Mar-2022 10:00:02
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

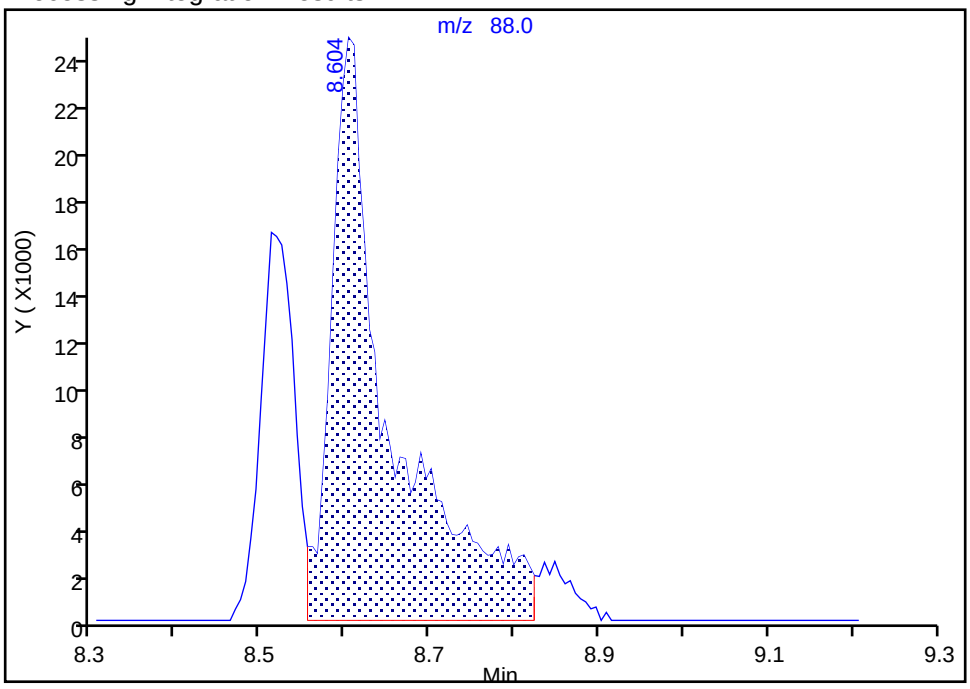
Data File:	\\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X02.D				
Injection Date:	28-Mar-2022 09:23:30	Instrument ID:	19930		
Lims ID:	CCVIS VSTD10				
Client ID:					
Operator ID:	KNK41612	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

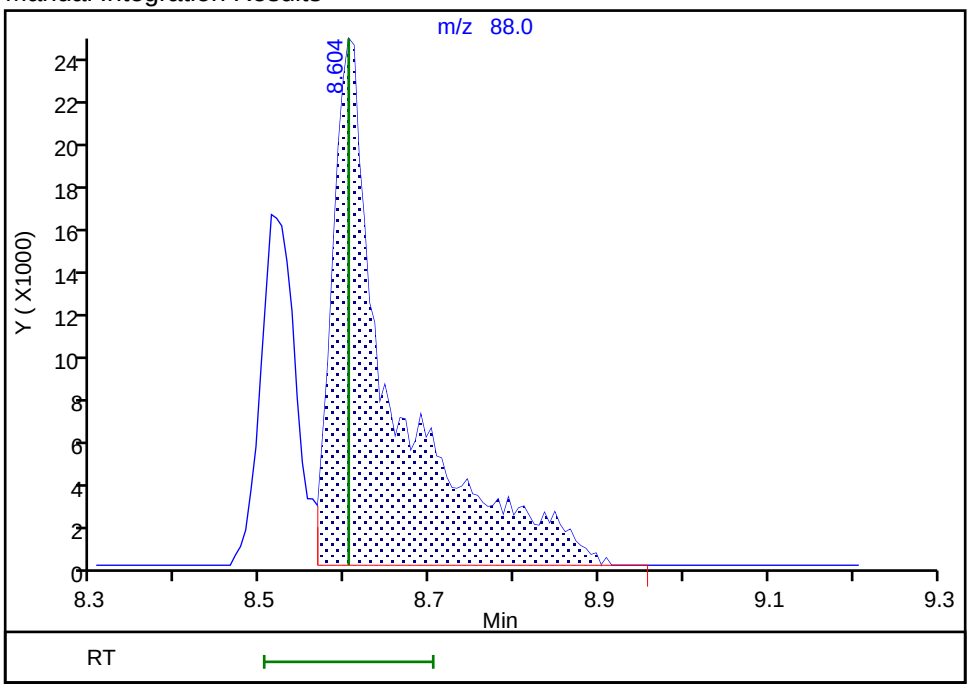
Processing Integration Results

RT: 8.60
Area: 120901
Amount: 546.7150
Amount Units: ug/l



Manual Integration Results

RT: 8.60
Area: 125287
Amount: 566.5486
Amount Units: ug/l



Reviewer: kephartk, 28-Mar-2022 10:00:36
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14T01.D				
Lims ID:	bfb				
Client ID:					
Sample Type:	BFB				
Inject. Date:	14-Mar-2022 21:24:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	410-0052441-001				
Misc. Info.:	BFB				
Operator ID:	mec29284	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20220314-52441.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	16-Mar-2022 10:12:27	Calib Date:	15-Mar-2022 03:22:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1676				
First Level Reviewer: campbellme		Date:	14-Mar-2022 21:42:20		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 145 BFB	95	5.172	5.172	0.000	0	134505	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

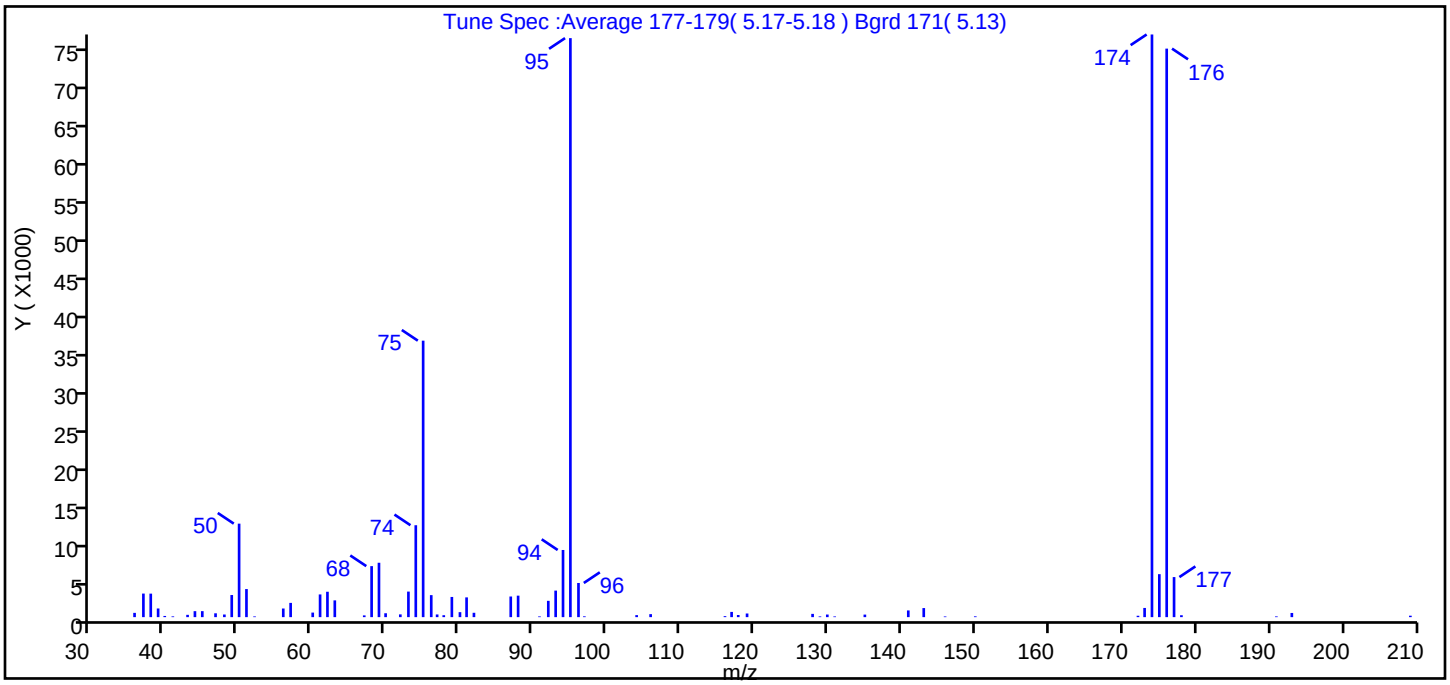
MSV_V_BFB_00007 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14T01.D
Injection Date: 14-Mar-2022 21:24:30 Instrument ID: 19930
Lims ID: bfb
Client ID:
Operator ID: mec29284 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Tune Method: BFB Method 8260

$ 145 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.1
75	30 to 60% of m/z 95	47.8
96	5 to 9% of m/z 95	5.9
173	Less than 2% of m/z 174	1.6 (1.6)
174	50 to 120% of m/z 95	100.6
175	5 to 9% of m/z 174	7.4 (7.4)
176	Greater than 95% but less than 101% of m/z 174	98.2 (97.6)
177	5 to 9% of m/z 176	6.9 (7.0)

Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14T01.D\8260 25ml HP31.rslt\spectra.d
Injection Date: 14-Mar-2022 21:24:30
Spectrum: Tune Spec :Average 177-179(5.17-5.18) Bgrd 171(5.13)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 70

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	561	61.00	2979	87.00	2708	131.00	92
37.00	3093	62.00	3331	88.00	2819	135.00	335
38.00	3084	63.00	2200	91.00	96	141.00	880
39.00	1137	67.00	230	92.00	2140	143.00	1190
40.00	156	68.00	6693	93.00	3482	146.00	89
41.00	99	69.00	7135	94.00	8811	150.00	104
43.00	303	70.00	511	95.00	75960	172.00	182
44.00	784	72.00	362	96.00	4482	173.00	1206
45.00	787	73.00	3353	97.00	105	174.00	76440
47.00	504	74.00	12059	104.00	265	175.00	5638
48.00	346	75.00	36272	106.00	394	176.00	74584
49.00	2901	76.00	2888	116.00	130	177.00	5256
50.00	12267	77.00	352	117.00	687	178.00	251
51.00	3684	78.00	253	118.00	280	191.00	97
52.00	93	79.00	2648	119.00	478	193.00	548
56.00	1133	80.00	654	128.00	429	209.00	189
57.00	1870	81.00	2592	129.00	92		
60.00	599	82.00	572	130.00	342		

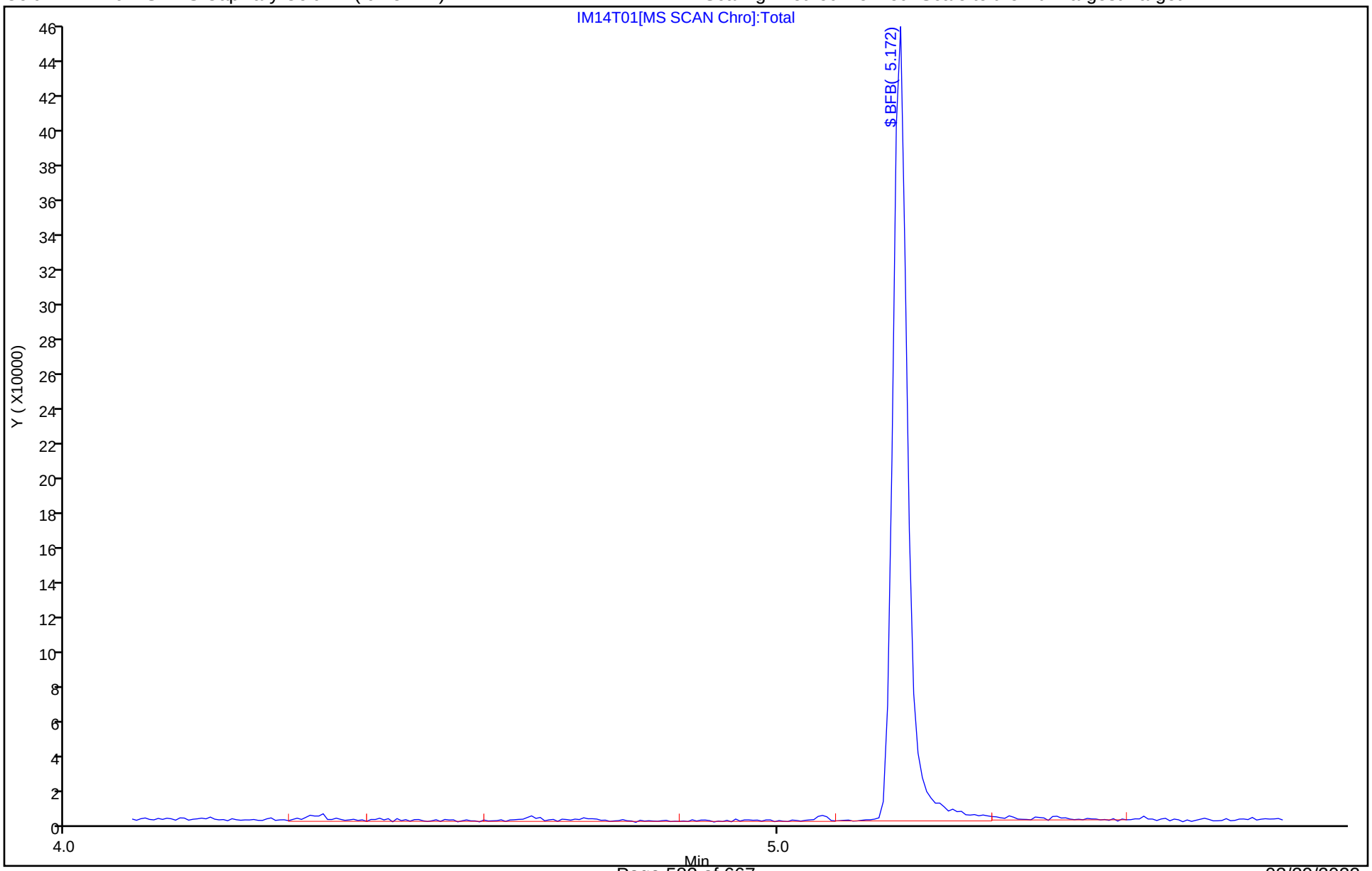
Report Date: 16-Mar-2022 10:12:27 Chrom Revision: 2.3 16-Feb-2022 17:52:00

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14T01.D

Injection Date:	14-Mar-2022 21:24:30	Instrument ID:	19930	Operator ID:	mec29284
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27T01.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	27-Mar-2022 08:37:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	410-0053417-001				
Misc. Info.:	BFB				
Operator ID:	KNK41612	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	27-Mar-2022 11:07:27	Calib Date:	15-Mar-2022 03:22:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1606				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 145 BFB	95	5.172	5.172	0.000	0	45699	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

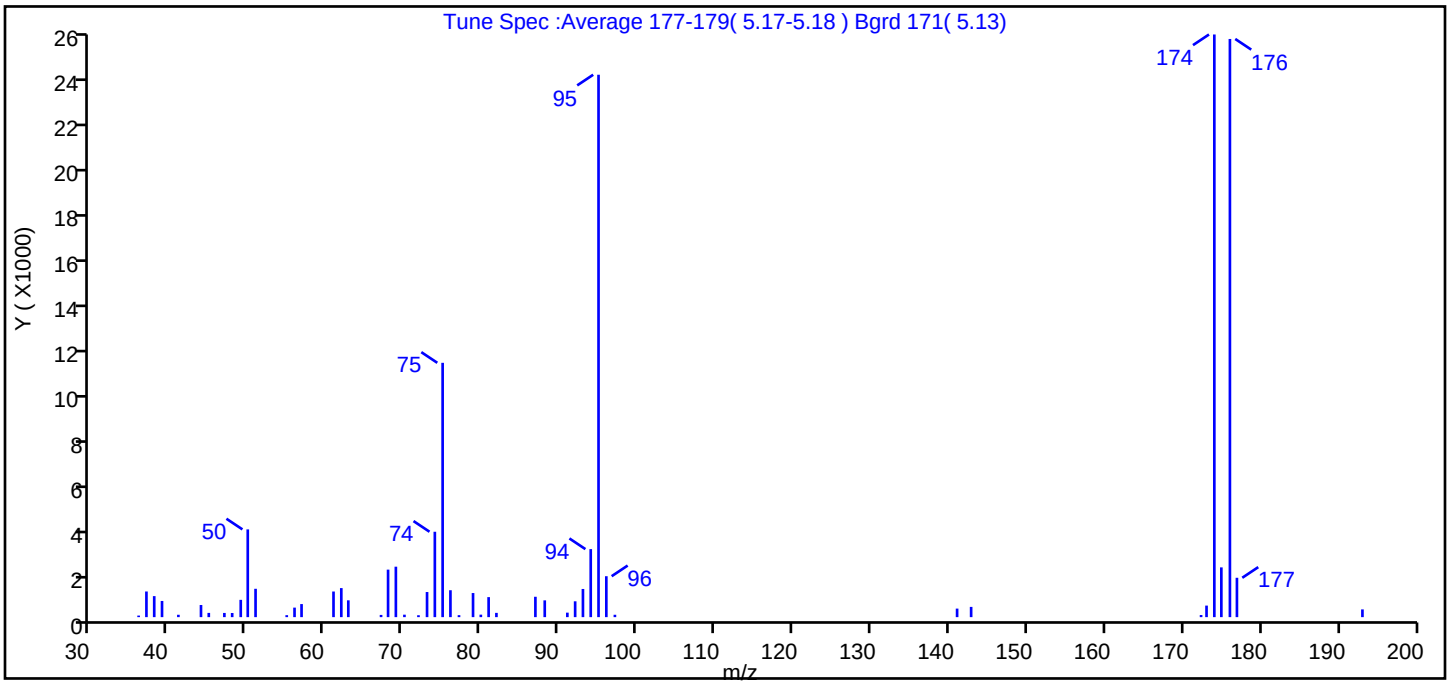
MSV_V_BFB_00007 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27T01.D
Injection Date: 27-Mar-2022 08:37:30 Instrument ID: 19930
Lims ID: BFB
Client ID:
Operator ID: KNK41612 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Tune Method: BFB Method 8260

$ 145 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	46.9
96	5 to 9% of m/z 95	7.5
173	Less than 2% of m/z 174	2.1 (2.0)
174	50 to 120% of m/z 95	107.4
175	5 to 9% of m/z 174	9.2 (8.5)
176	Greater than 95% but less than 101% of m/z 174	106.6 (99.2)
177	5 to 9% of m/z 176	7.3 (6.8)

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27T01.D\8260 25ml HP31.rslt\spectra.d
Injection Date: 27-Mar-2022 08:37:30
Spectrum: Tune Spec :Average 177-179(5.17-5.18) Bgrd 171(5.13)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 50

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	70	56.00	424	76.00	1198	96.00	1822
37.00	1142	57.00	582	77.00	88	97.00	106
38.00	936	61.00	1141	79.00	1073	141.00	380
39.00	720	62.00	1293	80.00	111	143.00	456
41.00	106	63.00	749	81.00	891	172.00	94
44.00	540	67.00	99	82.00	190	173.00	514
45.00	189	68.00	2115	87.00	907	174.00	25936
47.00	187	69.00	2246	88.00	747	175.00	2215
48.00	184	70.00	110	91.00	200	176.00	25736
49.00	770	72.00	85	92.00	705	177.00	1752
50.00	3906	73.00	1118	93.00	1254	193.00	345
51.00	1262	74.00	3801	94.00	3028		
55.00	88	75.00	11321	95.00	24144		

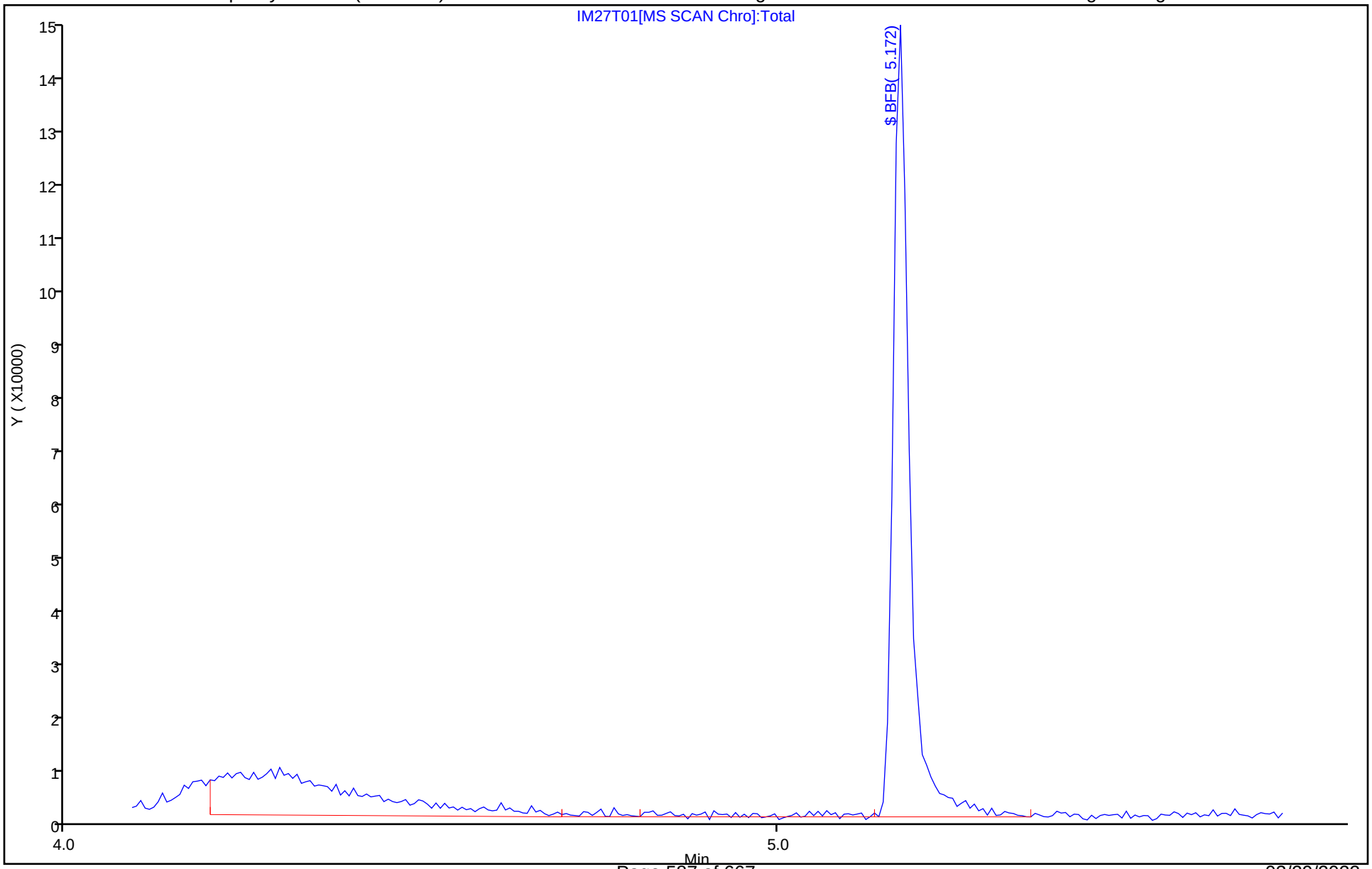
Report Date: 27-Mar-2022 11:07:28 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27T01.D

Injection Date:	27-Mar-2022 08:37:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28T01.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	28-Mar-2022 08:48:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	410-0053457-001				
Misc. Info.:	BFB				
Operator ID:	KNK41612	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20220328-53457.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	28-Mar-2022 10:30:53	Calib Date:	15-Mar-2022 03:22:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1632				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 145 BFB	95	5.172	5.172	0.000	0	130878	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

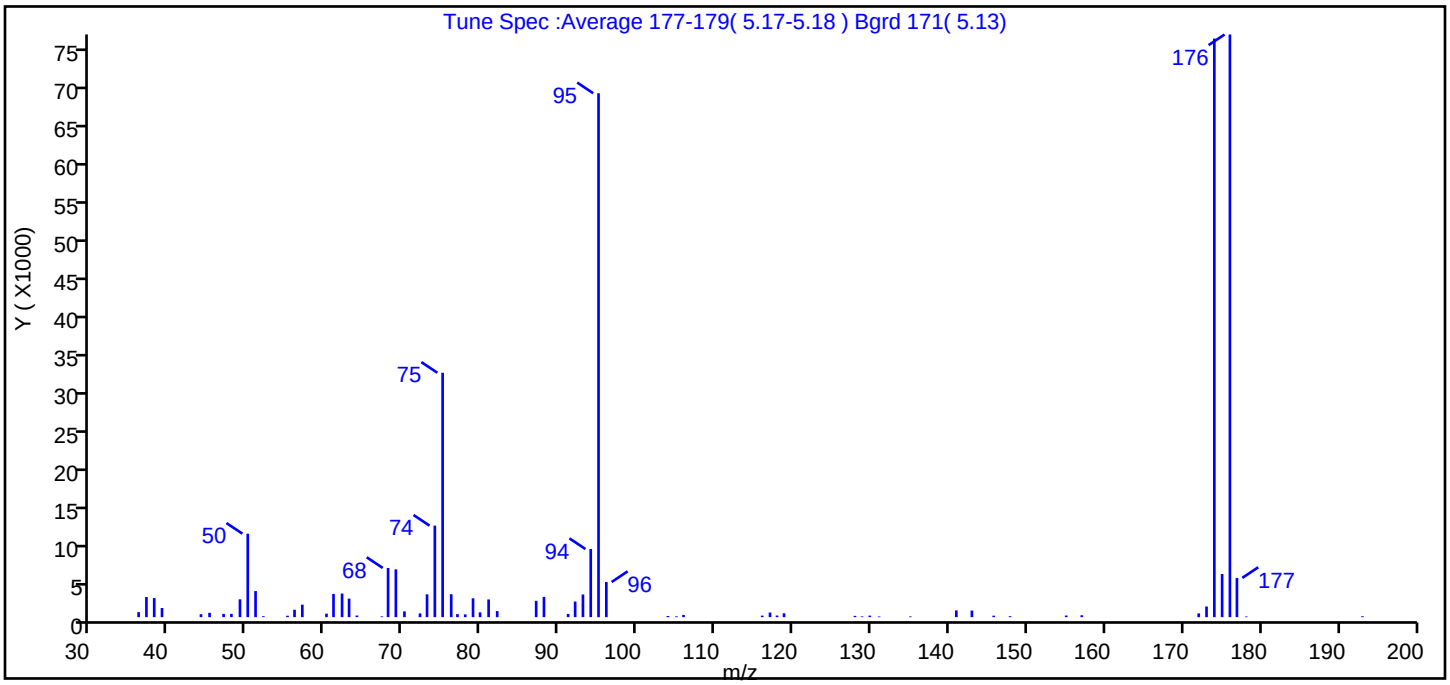
MSV_V_BFB_00007 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28T01.D
Injection Date: 28-Mar-2022 08:48:30 Instrument ID: 19930
Lims ID: BFB
Client ID:
Operator ID: KNK41612 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Tune Method: BFB Method 8260

$ 145 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.9
75	30 to 60% of m/z 95	46.6
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	2.0 (1.8)
174	50 to 120% of m/z 95	110.4
175	5 to 9% of m/z 174	8.2 (7.5)
176	Greater than 95% but less than 101% of m/z 174	111.2 (100.7)
177	5 to 9% of m/z 176	7.5 (6.7)

Data File: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28T01.D\8260 25ml HP31.rslt\spectra.d
Injection Date: 28-Mar-2022 08:48:30
Spectrum: Tune Spec :Average 177-179(5.17-5.18) Bgrd 171(5.13)
Base Peak: 176.00
Minimum % Base Peak: 0
Number of Points: 69

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	652	63.00	2421	88.00	2645	135.00	90
37.00	2625	64.00	212	91.00	418	141.00	876
38.00	2488	67.00	98	92.00	2038	143.00	861
39.00	1193	68.00	6424	93.00	2964	146.00	190
44.00	384	69.00	6244	94.00	8895	148.00	122
45.00	565	70.00	752	95.00	68408	155.00	213
47.00	430	72.00	487	96.00	4588	157.00	245
48.00	429	73.00	2980	104.00	150	172.00	490
49.00	2327	74.00	11949	105.00	104	173.00	1388
50.00	10895	75.00	31912	106.00	286	174.00	75544
51.00	3408	76.00	2991	116.00	199	175.00	5636
52.00	119	77.00	398	117.00	596	176.00	76080
55.00	187	78.00	360	118.00	208	177.00	5122
56.00	967	79.00	2459	119.00	502	178.00	86
57.00	1629	80.00	623	128.00	167	193.00	116
60.00	452	81.00	2311	129.00	96		
61.00	3030	82.00	791	130.00	199		
62.00	3080	87.00	2130	131.00	89		

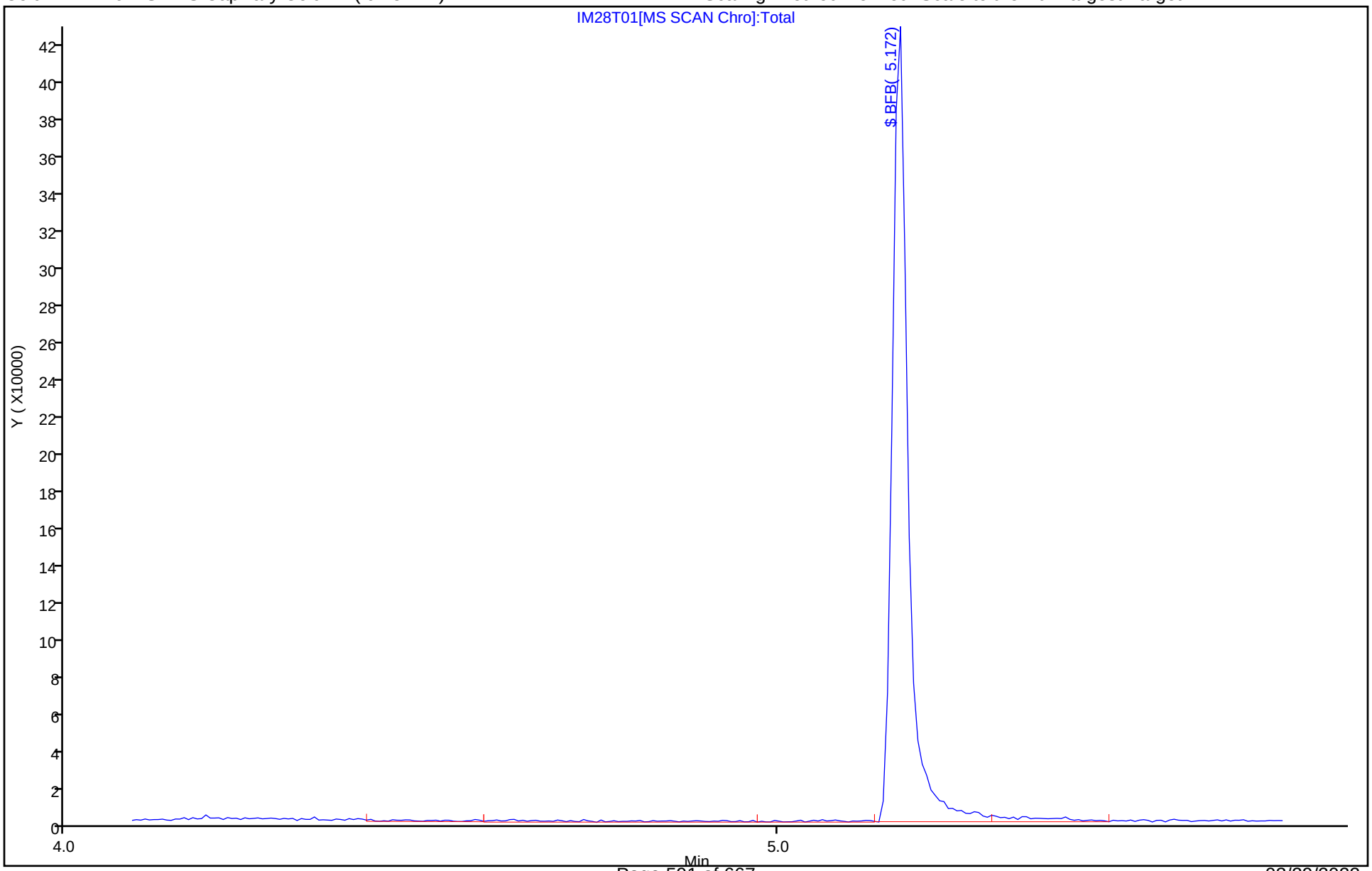
Report Date: 28-Mar-2022 10:30:53 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28T01.D

Injection Date:	28-Mar-2022 08:48:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-237993/7

Matrix: Water Lab File ID: IM27X06.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 10:37

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	ND		5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-237993/7

Matrix: Water Lab File ID: IM27X06.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 10:37

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		80-120
460-00-4	4-Bromofluorobenzene (Surr)	92		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X06.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 27-Mar-2022 10:37:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-007
Misc. Info.: MB
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 09:37:12 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

First Level Reviewer: kephartk Date: 27-Mar-2022 11:07:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85		1.959					ND	
2 Chlorodifluoromethane	51		1.971					ND	
3 Dimethyl ether	45		2.044					ND	
4 Chloromethane	50		2.154					ND	
5 Vinyl chloride	62		2.270					ND	
6 Butadiene	39		2.276					ND	7
7 Bromomethane	94		2.605					ND	
8 Chloroethane	64		2.684					ND	
9 Dichlorofluoromethane	67		2.928					ND	
10 Trichlorofluoromethane	101		2.934					ND	
11 Ethyl ether	59		3.245					ND	
12 1,2-Dichloro-1,1,2-trifluoroetha	67		3.318					ND	
13 Acrolein	56		3.416					ND	
14 1,1-Dichloroethene	96		3.556					ND	
15 Acetone	43		3.586					ND	7
16 112TCTFE	101		3.593					ND	
17 Iodomethane	142		3.751					ND	
18 Ethyl bromide	108		3.775					ND	
19 Carbon disulfide	76		3.855					ND	7
20 Acetonitrile	41		4.001					ND	
21 Methyl acetate	43		4.007					ND	
22 3-Chloro-1-propene	41		4.031					ND	
23 Methylene Chloride	84		4.214					ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.251	4.239	0.012	29	157821	50.0	50.0	
25 2-Methyl-2-propanol	59		4.361					ND	
26 Acrylonitrile	53		4.556					ND	
27 Methyl tert-butyl ether	73		4.623					ND	
28 trans-1,2-Dichloroethene	96		4.641					ND	
29 Hexane	57		5.056					ND	7
30 Vinyl acetate	43		5.299					ND	
31 1,1-Dichloroethane	63		5.300					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Isopropyl ether	45		5.361				ND		
33 2-Chloro-1,3-butadiene	53		5.403				ND		
34 Tert-butyl ethyl ether	59		5.885				ND		
36 2-Butanone (MEK)	43		6.080				ND		7
37 cis-1,2-Dichloroethene	96		6.123				ND		
38 2,2-Dichloropropane	77		6.135				ND		
S 35 1,2-Dichloroethene, Total	100		6.155				ND		7
39 Ethyl acetate	43		6.165				ND		
40 Propionitrile	54		6.171				ND		
41 Methyl acrylate	55		6.220				ND		
42 Methacrylonitrile	67		6.385				ND		
43 Chlorobromomethane	128		6.458				ND		
44 Tetrahydrofuran	71		6.470				ND		
45 Chloroform	83		6.598				ND		
$ 46 Dibromofluoromethane (Surr)	113	6.818	6.811	0.007	94	522174	10.0	10.1	
47 1,1,1-Trichloroethane	97		6.830				ND		
48 Cyclohexane	56		6.927				ND		
49 1-Chlorobutane	56		7.019				ND		
51 1,1-Dichloropropene	75		7.037				ND		
50 Carbon tetrachloride	117		7.043				ND		
52 Isobutyl alcohol	41		7.183				ND		
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.269	7.275	-0.006	67	97267	10.0	10.6	
54 Benzene	78		7.299				ND		
56 1,2-Dichloroethane	62		7.366				ND		
55 Isopropyl acetate	43		7.390				ND		
57 Tert-amyl methyl ether	73		7.488				ND		
* 58 Fluorobenzene (IS)	96	7.701	7.702	-0.001	99	1905478	10.0	10.0	
59 n-Heptane	43		7.714				ND		U
60 n-Butanol	56		8.061				ND		
61 Trichloroethene	95		8.177				ND		
62 Methylcyclohexane	83		8.494				ND		7
63 1,2-Dichloropropane	63		8.512				ND		
64 Methyl methacrylate	69		8.592				ND		
65 1,4-Dioxane	88		8.604				ND		
66 Dibromomethane	93		8.616				ND		
67 n-Propyl acetate	43		8.677				ND		
68 Dichlorobromomethane	83		8.854				ND		
69 2-Nitropropane	41		9.116				ND		
71 2-Chloroethyl vinyl ether	63		9.219				ND		
70 Chloroacetonitrile	75		9.226				ND		
72 1-Bromo-2-chloroethane	63		9.244				ND		
73 cis-1,3-Dichloropropene	75		9.396				ND		
74 4-Methyl-2-pentanone (MIBK)	43		9.567				ND		
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1880561	10.0	10.1	
76 Toluene	92		9.780				ND		
78 trans-1,3-Dichloropropene	75		10.036				ND		
S 77 1,3-Dichloropropene, Total	100		10.060				ND		7
79 Ethyl methacrylate	69		10.097				ND		
80 1,1,2-Trichloroethane	97		10.238				ND		
81 Tetrachloroethene	166		10.329				ND		
82 1,3-Dichloropropane	76		10.402				ND		
83 2-Hexanone	43		10.451				ND		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 n-Butyl acetate	43		10.579					ND	
85 Chlorodibromomethane	129		10.616					ND	
86 Ethylene Dibromide	107		10.725					ND	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	83	1536431	10.0	10.0	
88 1-Chlorohexane	91		11.164					ND	7
90 Chlorobenzene	112		11.183					ND	
S 89 Xylenes, Total	106		11.245					ND	7
91 1,1,1,2-Tetrachloroethane	131		11.268					ND	
92 Ethylbenzene	91		11.268					ND	
93 m-Xylene & p-Xylene	106		11.384					ND	
94 o-Xylene	106		11.713					ND	
95 Styrene	104		11.725					ND	
96 Bromoform	173		11.884					ND	
97 Isopropylbenzene	105		12.012					ND	
98 cis-1,4-Dichloro-2-butene	88		12.060					ND	
99 Cyclohexanone	55		12.097					ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	669661	10.0	9.24	
101 1,1,2,2-Tetrachloroethane	83		12.256					ND	
102 Bromobenzene	156		12.274					ND	
103 trans-1,4-Dichloro-2-butene	53		12.280					ND	
104 1,2,3-Trichloropropane	110		12.298					ND	
105 N-Propylbenzene	91		12.341					ND	
106 2-Chlorotoluene	126		12.414					ND	
107 1,3,5-Trimethylbenzene	105		12.475					ND	
108 4-Chlorotoluene	126		12.505					ND	
109 tert-Butylbenzene	134		12.719					ND	7
110 Pentachloroethane	167		12.749					ND	
111 1,2,4-Trimethylbenzene	105		12.755					ND	
112 sec-Butylbenzene	105		12.877					ND	7
113 1,3-Dichlorobenzene	146		12.981					ND	7
114 4-Isopropyltoluene	119		12.987					ND	7
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	92	905273	10.0	10.0	
116 1,4-Dichlorobenzene	146		13.054					ND	7
117 1,2,3-Trimethylbenzene	120		13.060					ND	7
118 Benzyl chloride	126		13.127					ND	
119 n-Butylbenzene	92		13.280					ND	7
120 1,2-Dichlorobenzene	146		13.310					ND	
121 Hexachloroethane	117		13.542					ND	
122 1,2-Dibromo-3-Chloropropane	155		13.853					ND	
123 1,3,5-Trichlorobenzene	180		13.981					ND	7
124 1,2,4-Trichlorobenzene	180	14.432	14.401	0.031	83	2924		0.0313	
125 Hexachlorobutadiene	225	14.487	14.487	0.000	90	3374		0.0797	
126 Naphthalene	128		14.584					ND	7
127 1,2,3-Trichlorobenzene	180		14.725					ND	
128 Dodecane	57		0.000					ND	
138 1,1-Dichloro-1-fluoroethane	1		0.000					ND	
137 2-Methylnaphthalene	142		0.000					ND	
135 p-Diethylbenzene	1		0.000					ND	
136 2-Chloro-1,1,1-Trifluoroethane	1		0.000					ND	
144 2-ethoxy-2-methyl butane	1		0.000					ND	
205 1,1-Dichloroacetone	1		0.000					ND	
143 n-Decane	57		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
139 1-Bromo-3-Chloropropane	1		0.000					ND	
210 Hexachloroethane TIC	1		0.000					ND	
203 Propargyl alcohol TIC	1		0.000					ND	
202 1,3-Dichloro-2-propanol TIC	1		0.000					ND	
142 2-Bromo-1-chloropropane	1		0.000					ND	
206 Pentachloroethane TIC	1		0.000					ND	
204 Pentane	43		0.000					ND	
130 Chlorotrifluoroethene	1		0.000					ND	
207 Acetonitrile TIC	1		0.000					ND	
129 Propene oxide	1		0.000					ND	
141 1-Chloropropane	1		0.000					ND	
134 Isopropyl alcohol	45		0.000					ND	
133 t-Amyl alcohol	1		0.000					ND	
132 Methylal	1		0.000					ND	
131 tert-Butyl Formate	1		0.000					ND	
140 Ethanol	45		3.269					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_LLcentISS_00004 Amount Added: 5.00 Units: uL Run Reagent

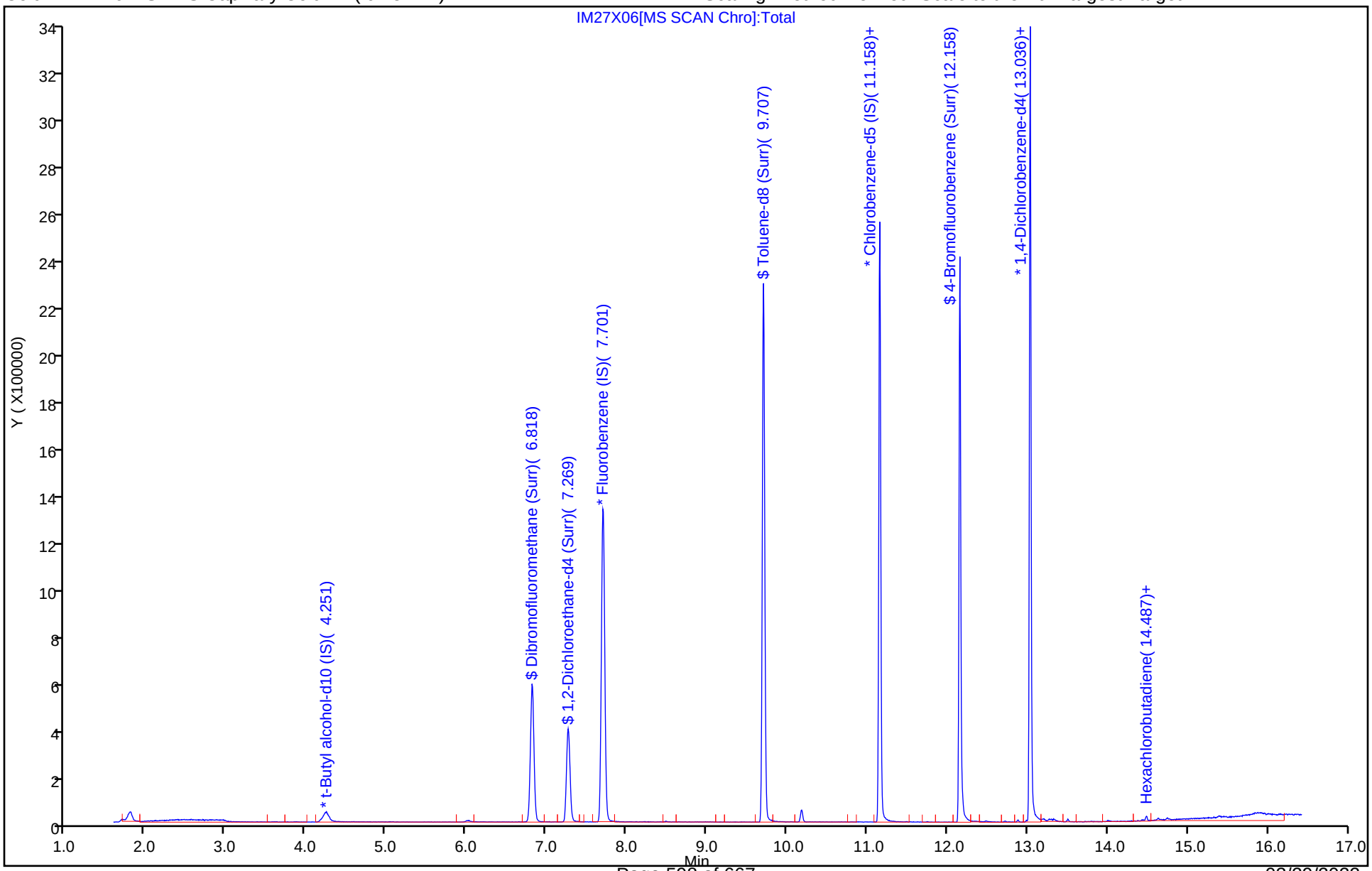
Report Date: 28-Mar-2022 09:37:12 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X06.D

Injection Date:	27-Mar-2022 10:37:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X06.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	27-Mar-2022 10:37:30	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0053417-007				
Misc. Info.:	MB				
Operator ID:	KNK41612	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	28-Mar-2022 09:37:12	Calib Date:	15-Mar-2022 03:22:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1659				

First Level Reviewer: kephartk Date: 27-Mar-2022 11:07:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.1	101.23
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.6	105.86
$ 75 Toluene-d8 (Surr)	10.0	10.1	100.58
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.24	92.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-238139/7

Matrix: Water Lab File ID: IM28X06.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 03/28/2022 10:47

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 238139 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	ND		5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-238139/7

Matrix: Water Lab File ID: IM28X06.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 03/28/2022 10:47

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 238139 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-120
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X06.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 28-Mar-2022 10:47:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053457-007
Misc. Info.: MB
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 09:51:21 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1632

First Level Reviewer: kephartk Date: 28-Mar-2022 11:48:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85		1.965					ND	
2 Chlorodifluoromethane	51		1.971					ND	
3 Dimethyl ether	45		2.044					ND	
4 Chloromethane	50		2.166					ND	
5 Vinyl chloride	62		2.282					ND	
6 Butadiene	39		2.288					ND	7
7 Bromomethane	94		2.617					ND	
8 Chloroethane	64		2.696					ND	
9 Dichlorofluoromethane	67		2.934					ND	
10 Trichlorofluoromethane	101		2.946					ND	
11 Ethyl ether	59		3.257					ND	
12 1,2-Dichloro-1,1,2-trifluoroetha	67		3.324					ND	
13 Acrolein	56		3.428					ND	
14 1,1-Dichloroethene	96		3.562					ND	
15 Acetone	43		3.599					ND	7
16 112TCTFE	101		3.599					ND	
17 Iodomethane	142		3.757					ND	
18 Ethyl bromide	108		3.788					ND	
19 Carbon disulfide	76		3.867					ND	7
20 Acetonitrile	41		4.001					ND	
21 Methyl acetate	43		4.019					ND	
22 3-Chloro-1-propene	41		4.044					ND	
23 Methylene Chloride	84		4.233					ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.245	4.251	-0.006	23	154884	50.0	50.0	
25 2-Methyl-2-propanol	59		4.367					ND	
26 Acrylonitrile	53		4.574					ND	
27 Methyl tert-butyl ether	73		4.635					ND	
28 trans-1,2-Dichloroethene	96		4.647					ND	
29 Hexane	57		5.068					ND	7
30 Vinyl acetate	43		5.299					ND	
31 1,1-Dichloroethane	63		5.299					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Isopropyl ether	45		5.367					ND	
33 2-Chloro-1,3-butadiene	53		5.415					ND	
34 Tert-butyl ethyl ether	59		5.891					ND	7
36 2-Butanone (MEK)	43		6.092					ND	
37 cis-1,2-Dichloroethene	96		6.129					ND	
38 2,2-Dichloropropane	77		6.147					ND	
S 35 1,2-Dichloroethene, Total	100		6.155					ND	7
39 Ethyl acetate	43		6.165					ND	
40 Propionitrile	54		6.177					ND	
41 Methyl acrylate	55		6.220					ND	
42 Methacrylonitrile	67		6.397					ND	
43 Chlorobromomethane	128		6.458					ND	
44 Tetrahydrofuran	71		6.476					ND	
45 Chloroform	83		6.610					ND	
$ 46 Dibromofluoromethane (Surr)	113	6.817	6.824	-0.007	94	495836	10.0	10.2	
47 1,1,1-Trichloroethane	97		6.836					ND	
48 Cyclohexane	56		6.933					ND	
49 1-Chlorobutane	56		7.019					ND	
50 Carbon tetrachloride	117		7.043					ND	
51 1,1-Dichloropropene	75		7.049					ND	
52 Isobutyl alcohol	41		7.189					ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.269	7.275	-0.006	67	90477	10.0	10.4	
54 Benzene	78		7.305					ND	
56 1,2-Dichloroethane	62		7.378					ND	
55 Isopropyl acetate	43		7.390					ND	
57 Tert-amyl methyl ether	73		7.494					ND	
* 58 Fluorobenzene (IS)	96	7.708	7.708	0.000	99	1804144	10.0	10.0	
59 n-Heptane	43	7.708	7.714	-0.006	36	2804		0.0403	
60 n-Butanol	56		8.067					ND	
61 Trichloroethene	95		8.183					ND	
62 Methylcyclohexane	83		8.494					ND	7
63 1,2-Dichloropropane	63		8.512					ND	
64 Methyl methacrylate	69		8.598					ND	
65 1,4-Dioxane	88		8.604					ND	
66 Dibromomethane	93		8.622					ND	
67 n-Propyl acetate	43		8.677					ND	
68 Dichlorobromomethane	83		8.860					ND	
69 2-Nitropropane	41		9.116					ND	
71 2-Chloroethyl vinyl ether	63		9.219					ND	
70 Chloroacetonitrile	75		9.226					ND	
72 1-Bromo-2-chloroethane	63		9.244					ND	
73 cis-1,3-Dichloropropene	75		9.396					ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.567					ND	7
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1798142	10.0	10.1	
76 Toluene	92		9.780					ND	
78 trans-1,3-Dichloropropene	75		10.036					ND	
S 77 1,3-Dichloropropene, Total	100		10.060					ND	7
79 Ethyl methacrylate	69		10.097					ND	
80 1,1,2-Trichloroethane	97		10.244					ND	
81 Tetrachloroethene	166		10.329					ND	
82 1,3-Dichloropropane	76		10.402					ND	
83 2-Hexanone	43		10.451					ND	

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
	84 n-Butyl acetate	43		10.579					ND	
	85 Chlorodibromomethane	129		10.616					ND	
	86 Ethylene Dibromide	107		10.731					ND	
*	87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	83	1464798	10.0	10.0	
	88 1-Chlorohexane	91		11.164					ND	7
	90 Chlorobenzene	112		11.182					ND	
S	89 Xylenes, Total	106		11.245					ND	7
	91 1,1,1,2-Tetrachloroethane	131		11.268					ND	
	92 Ethylbenzene	91		11.268					ND	
	93 m-Xylene & p-Xylene	106		11.384					ND	
	94 o-Xylene	106		11.713					ND	
	95 Styrene	104		11.725					ND	
	96 Bromoform	173		11.884					ND	
	97 Isopropylbenzene	105		12.012					ND	
	98 cis-1,4-Dichloro-2-butene	88		12.060					ND	
	99 Cyclohexanone	55		12.097					ND	
$	100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	642521	10.0	9.29	
	101 1,1,2,2-Tetrachloroethane	83		12.255					ND	
	102 Bromobenzene	156		12.274					ND	
	103 trans-1,4-Dichloro-2-butene	53		12.280					ND	
	104 1,2,3-Trichloropropane	110		12.298					ND	
	105 N-Propylbenzene	91		12.341					ND	
	106 2-Chlorotoluene	126		12.414					ND	
	107 1,3,5-Trimethylbenzene	105		12.475					ND	7
	108 4-Chlorotoluene	126		12.511					ND	
	109 tert-Butylbenzene	134		12.719					ND	7
	110 Pentachloroethane	167		12.749					ND	
	111 1,2,4-Trimethylbenzene	105		12.755					ND	7
	112 sec-Butylbenzene	105		12.877					ND	7
	113 1,3-Dichlorobenzene	146		12.981					ND	7
	114 4-Isopropyltoluene	119		12.987					ND	7
*	115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	92	876933	10.0	10.0	
	116 1,4-Dichlorobenzene	146		13.054					ND	7
	117 1,2,3-Trimethylbenzene	120		13.060					ND	7
	118 Benzyl chloride	126		13.127					ND	
	119 n-Butylbenzene	92		13.280					ND	7
	120 1,2-Dichlorobenzene	146		13.310					ND	
	121 Hexachloroethane	117		13.542					ND	
	122 1,2-Dibromo-3-Chloropropane	155		13.853					ND	
	123 1,3,5-Trichlorobenzene	180		13.981					ND	7
	124 1,2,4-Trichlorobenzene	180		14.401					ND	
	125 Hexachlorobutadiene	225	14.487	14.487	0.000	91	3002		0.0732	
	126 Naphthalene	128		14.584					ND	7
	127 1,2,3-Trichlorobenzene	180	14.749	14.724	0.025	87	3115		0.0393	
	128 Dodecane	57		0.000					ND	
	205 1,1-Dichloroacetone	1		0.000					ND	
	143 n-Decane	57		0.000					ND	
	139 1-Bromo-3-Chloropropane	1		0.000					ND	
	210 Hexachloroethane TIC	1		0.000					ND	
	203 Propargyl alcohol TIC	1		0.000					ND	
	202 1,3-Dichloro-2-propanol TIC	1		0.000					ND	
	138 1,1-Dichloro-1-fluoroethane	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
137 2-Methylnaphthalene	142		0.000					ND	
135 p-Diethylbenzene	1		0.000					ND	
136 2-Chloro-1,1,1-Trifluoroethane	1		0.000					ND	
144 2-ethoxy-2-methyl butane	1		0.000					ND	
134 Isopropyl alcohol	45		0.000					ND	
133 t-Amyl alcohol	1		0.000					ND	
132 Methylal	1		0.000					ND	
131 tert-Butyl Formate	1		0.000					ND	
142 2-Bromo-1-chloropropane	1		0.000					ND	
206 Pentachloroethane TIC	1		0.000					ND	
204 Pentane	43		0.000					ND	
130 Chlorotrifluoroethene	1		0.000					ND	
207 Acetonitrile TIC	1		0.000					ND	
129 Propene oxide	1		0.000					ND	
141 1-Chloropropane	1		0.000					ND	
140 Ethanol	45		3.269					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_LLcentISS_00004 Amount Added: 5.00 Units: uL Run Reagent

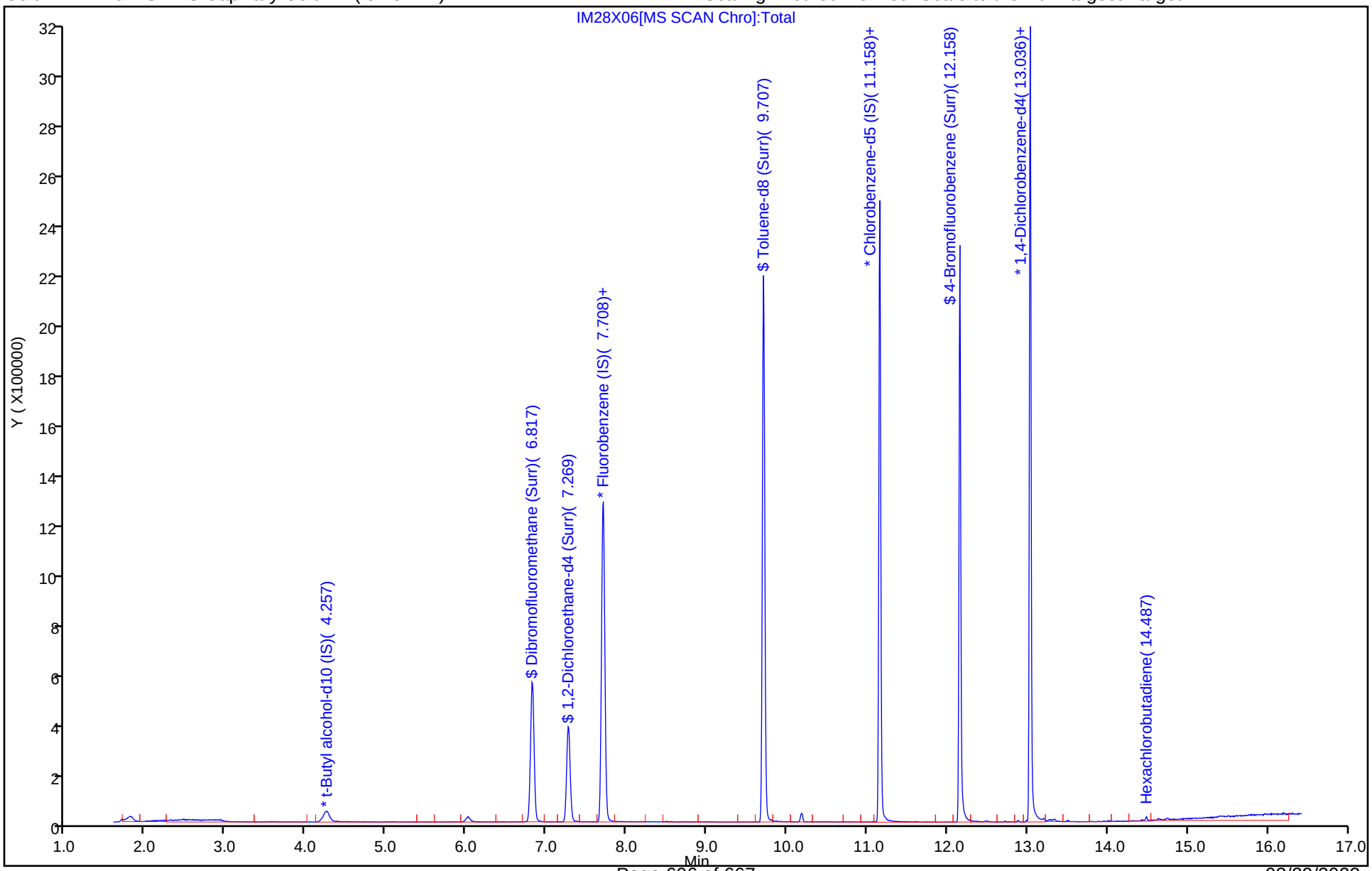
Report Date: 28-Mar-2022 11:55:00 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X06.D

Injection Date:	28-Mar-2022 10:47:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X06.D				
Lims ID:	MB				
Client ID:					
Sample Type:	MB				
Inject. Date:	28-Mar-2022 10:47:30	ALS Bottle#:	6	Worklist Smp#:	7
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0053457-007				
Misc. Info.:	MB				
Operator ID:	KNK41612	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20220328-53457.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	28-Mar-2022 09:51:21	Calib Date:	15-Mar-2022 03:22:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1632				
First Level Reviewer: kephartk		Date:	28-Mar-2022 11:48:22		

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.2	101.53
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	104.00
$ 75 Toluene-d8 (Surr)	10.0	10.1	100.87
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.29	92.94

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-237993/4

Matrix: Water Lab File ID: IM27X03.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 09:34

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.07		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.67		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	5.32		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.18		0.50	0.060
75-34-3	1,1-Dichloroethane	4.45		0.50	0.070
75-35-4	1,1-Dichloroethene	4.93		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	5.35		0.50	0.060
107-06-2	1,2-Dichloroethane	4.74		0.50	0.050
78-87-5	1,2-Dichloropropane	4.76		0.50	0.060
78-93-3	2-Butanone (MEK)	64.3		5.0	0.60
591-78-6	2-Hexanone	68.4		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	63.3		5.0	0.70
67-64-1	Acetone	63.0		5.0	0.90
71-43-2	Benzene	4.64		0.50	0.050
74-97-5	Bromochloromethane	5.03		0.50	0.050
75-27-4	Bromodichloromethane	4.98		0.50	0.050
75-25-2	Bromoform	5.77		1.0	0.30
74-83-9	Bromomethane	4.48		0.50	0.070
75-15-0	Carbon disulfide	5.09		1.0	0.060
56-23-5	Carbon tetrachloride	4.78		0.50	0.070
108-90-7	Chlorobenzene	4.91		0.50	0.060
75-00-3	Chloroethane	4.57		0.50	0.070
67-66-3	Chloroform	4.63		0.50	0.090
74-87-3	Chloromethane	4.25		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	4.73		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.68		0.50	0.050
124-48-1	Dibromochloromethane	5.33		0.50	0.070
100-41-4	Ethylbenzene	4.79		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.74		0.50	0.050
75-09-2	Methylene Chloride	4.73		0.50	0.070
100-42-5	Styrene	4.85		0.50	0.050
127-18-4	Tetrachloroethene	4.98		0.50	0.060
108-88-3	Toluene	4.77		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.63		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	5.16		0.50	0.060
79-01-6	Trichloroethene	4.62		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-237993/4

Matrix: Water Lab File ID: IM27X03.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 09:34

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.25		0.50	0.10
1330-20-7	Xylenes, Total	14.5		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	102		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 27-Mar-2022 09:34:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-004
Misc. Info.: LCS
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 27-Mar-2022 11:07:29 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1606

First Level Reviewer: kephartk Date: 27-Mar-2022 10:02:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.959	1.959	0.000	99	309531	5.00	4.29	
4 Chloromethane	50	2.154	2.154	0.000	99	316134	5.00	4.25	
5 Vinyl chloride	62	2.270	2.270	0.000	98	333458	5.00	4.25	
6 Butadiene	39	2.276	2.276	0.000	92	297779	5.00	3.88	
7 Bromomethane	94	2.611	2.605	0.006	92	291295	5.00	4.48	
8 Chloroethane	64	2.690	2.684	0.006	100	218155	5.00	4.57	
9 Dichlorofluoromethane	67	2.928	2.928	0.000	97	572657	5.00	4.77	
10 Trichlorofluoromethane	101	2.946	2.934	0.012	97	542769	5.00	4.65	
11 Ethyl ether	59	3.251	3.245	0.006	88	183192	4.97	5.68	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.324	3.318	0.006	87	299662	5.00	4.47	
13 Acrolein	56	3.422	3.416	0.006	99	183110	37.5	33.5	
14 1,1-Dichloroethene	96	3.556	3.556	0.000	97	250186	5.00	4.93	
15 Acetone	43	3.586	3.586	0.000	99	465757	62.5	63.0	
16 112TCTFE	101	3.592	3.593	-0.001	85	267919	5.00	5.03	
17 Iodomethane	142	3.751	3.751	0.000	99	546235	5.00	5.26	
18 Ethyl bromide	108	3.781	3.775	0.006	98	218233	4.99	4.51	
19 Carbon disulfide	76	3.861	3.855	0.006	99	578911	5.00	5.09	
21 Methyl acetate	43	4.019	4.007	0.012	96	96721	5.00	5.34	
22 3-Chloro-1-propene	41	4.031	4.031	0.000	87	318303	5.00	4.43	
23 Methylene Chloride	84	4.220	4.214	0.006	88	250915	5.00	4.73	
* 24 t-Butyl alcohol-d10 (IS)	65	4.239	4.239	0.000	97	136346	50.0	50.0	
25 2-Methyl-2-propanol	59	4.367	4.361	0.006	98	173135	50.0	63.4	
26 Acrylonitrile	53	4.562	4.556	0.006	99	240972	25.0	27.7	
27 Methyl tert-butyl ether	73	4.635	4.623	0.012	95	627814	5.00	4.74	
28 trans-1,2-Dichloroethene	96	4.647	4.641	0.006	95	266564	5.00	4.63	
29 Hexane	57	5.068	5.056	0.012	92	308622	5.00	4.43	
31 1,1-Dichloroethane	63	5.299	5.300	-0.001	96	437620	5.00	4.45	
32 Isopropyl ether	45	5.360	5.361	0.000	91	688090	5.00	4.48	
33 2-Chloro-1,3-butadiene	53	5.409	5.403	0.006	92	373822	5.00	4.66	
34 Tert-butyl ethyl ether	59	5.891	5.885	0.006	96	718078	5.00	4.59	
36 2-Butanone (MEK)	43	6.086	6.080	0.006	99	824449	62.5	64.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 cis-1,2-Dichloroethene	96	6.135	6.123	0.012	80	310478	5.00	4.73	
38 2,2-Dichloropropane	77	6.141	6.135	0.006	86	435306	5.00	4.77	
40 Propionitrile	54	6.189	6.171	0.018	99	125009	37.5	38.1	
42 Methacrylonitrile	67	6.391	6.385	0.006	90	502821	37.5	38.3	
43 Chlorobromomethane	128	6.452	6.458	-0.006	84	151719	5.00	5.03	
44 Tetrahydrofuran	71	6.470	6.470	0.000	80	101748	25.0	28.1	
45 Chloroform	83	6.604	6.598	0.006	93	491052	5.00	4.63	
$ 46 Dibromofluoromethane (Surr)	113	6.817	6.811	0.006	94	527217	10.0	10.1	
47 1,1,1-Trichloroethane	97	6.830	6.830	0.000	98	480307	5.00	4.67	
48 Cyclohexane	56	6.933	6.927	0.006	89	378725	5.00	4.38	
51 1,1-Dichloropropene	75	7.043	7.037	0.006	93	370782	5.00	4.67	
50 Carbon tetrachloride	117	7.037	7.043	-0.006	96	454633	5.00	4.78	
52 Isobutyl alcohol	41	7.195	7.183	0.012	90	132861	125.0	144.3	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.269	7.275	-0.006	86	95405	10.0	10.2	
54 Benzene	78	7.305	7.299	0.006	96	1057567	5.00	4.64	
56 1,2-Dichloroethane	62	7.378	7.366	0.012	98	301093	5.00	4.74	
57 Tert-amyl methyl ether	73	7.494	7.488	0.006	98	682641	5.00	4.68	
* 58 Fluorobenzene (IS)	96	7.707	7.702	0.005	99	1933062	10.0	10.0	
59 n-Heptane	43	7.714	7.714	0.000	84	303200	5.00	4.07	
60 n-Butanol	56	8.067	8.061	0.006	87	237463	250.0	326.0	
61 Trichloroethene	95	8.183	8.177	0.006	95	302267	5.00	4.62	
62 Methylcyclohexane	83	8.488	8.494	-0.006	90	467247	5.00	4.48	
63 1,2-Dichloropropane	63	8.506	8.512	-0.006	96	259951	5.00	4.76	
64 Methyl methacrylate	69	8.598	8.592	0.006	82	125754	5.00	5.06	
65 1,4-Dioxane	88	8.604	8.604	0.000	31	28904	125.0	154.0	M
66 Dibromomethane	93	8.622	8.616	0.006	89	145200	5.00	4.81	
68 Dichlorobromomethane	83	8.854	8.854	0.000	99	359280	5.00	4.98	
69 2-Nitropropane	41	9.116	9.116	0.000	98	38977	5.00	5.05	
72 1-Bromo-2-chloroethane	63	9.250	9.244	0.006	98	261411	5.00	5.06	
73 cis-1,3-Dichloropropene	75	9.402	9.396	0.006	96	397509	5.00	4.68	
74 4-Methyl-2-pentanone (MIBK)	43	9.567	9.567	0.000	96	2145674	62.5	63.3	
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1935464	10.0	10.2	
76 Toluene	92	9.780	9.780	0.000	98	704352	5.00	4.77	
78 trans-1,3-Dichloropropene	75	10.036	10.036	0.000	93	342171	5.00	5.16	
79 Ethyl methacrylate	69	10.097	10.097	0.000	86	267947	5.00	5.21	
80 1,1,2-Trichloroethane	97	10.244	10.238	0.006	91	209529	5.00	5.18	
81 Tetrachloroethene	166	10.329	10.329	0.000	97	423215	5.00	4.98	
82 1,3-Dichloropropane	76	10.402	10.402	0.000	88	328276	5.00	5.04	
83 2-Hexanone	43	10.451	10.451	0.000	96	1557032	62.5	68.4	
85 Chlorodibromomethane	129	10.615	10.616	-0.001	89	292956	5.00	5.33	
86 Ethylene Dibromide	107	10.731	10.725	0.006	99	210176	5.00	5.35	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	84	1565908	10.0	10.0	
88 1-Chlorohexane	91	11.164	11.164	0.000	94	411605	5.00	4.60	
90 Chlorobenzene	112	11.182	11.183	-0.001	97	857913	5.00	4.91	
91 1,1,1,2-Tetrachloroethane	131	11.262	11.268	-0.006	96	327301	5.00	5.07	
92 Ethylbenzene	91	11.268	11.268	0.000	98	1401023	5.00	4.79	
93 m-Xylene & p-Xylene	106	11.384	11.384	0.000	99	1161419	10.0	9.70	
94 o-Xylene	106	11.713	11.713	0.000	96	559593	5.00	4.75	
95 Styrene	104	11.725	11.725	0.000	94	890065	5.00	4.85	
96 Bromoform	173	11.883	11.884	-0.001	98	195170	5.00	5.77	
97 Isopropylbenzene	105	12.012	12.012	0.000	95	1510564	5.00	4.91	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	95	689370	10.0	9.33	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 1,1,2,2-Tetrachloroethane	83	12.255	12.256	-0.001	95	266386	5.00	5.32	
102 Bromobenzene	156	12.274	12.274	0.000	92	412177	5.00	5.17	
103 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	92	307415	25.0	25.1	
104 1,2,3-Trichloropropane	110	12.304	12.298	0.006	84	75210	5.00	5.07	
105 N-Propylbenzene	91	12.341	12.341	0.000	98	1706196	5.00	4.91	
106 2-Chlorotoluene	126	12.414	12.414	0.000	98	378667	5.00	4.96	
107 1,3,5-Trimethylbenzene	105	12.475	12.475	0.000	95	1242935	5.00	4.83	
108 4-Chlorotoluene	126	12.511	12.505	0.006	96	386819	5.00	4.95	
109 tert-Butylbenzene	134	12.713	12.719	-0.006	91	295608	5.00	4.77	
111 1,2,4-Trimethylbenzene	105	12.761	12.755	0.006	97	1263034	5.00	4.87	
112 sec-Butylbenzene	105	12.877	12.877	0.000	94	1629050	5.00	4.96	
113 1,3-Dichlorobenzene	146	12.981	12.981	0.000	99	772944	5.00	4.98	
114 4-Isopropyltoluene	119	12.987	12.987	0.000	97	1474962	5.00	4.99	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	93	946897	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.054	13.054	0.000	96	791887	5.00	5.00	
117 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	98	576413	5.00	4.81	
118 Benzyl chloride	126	13.127	13.127	0.000	98	115817	5.00	5.71	
119 n-Butylbenzene	92	13.280	13.280	0.000	97	645370	5.00	4.92	
120 1,2-Dichlorobenzene	146	13.310	13.310	0.000	99	726929	5.00	5.14	
122 1,2-Dibromo-3-Chloropropane	155	13.853	13.853	0.000	91	48488	5.00	6.05	
123 1,3,5-Trichlorobenzene	180	13.981	13.981	0.000	97	610277	5.00	5.27	
124 1,2,4-Trichlorobenzene	180	14.401	14.401	0.000	94	518835	5.00	5.31	
125 Hexachlorobutadiene	225	14.487	14.487	0.000	95	222856	5.00	5.03	
126 Naphthalene	128	14.584	14.584	0.000	97	908565	5.00	5.44	
127 1,2,3-Trichlorobenzene	180	14.724	14.725	-0.001	95	455705	5.00	5.33	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
134 Isopropyl alcohol	45		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_00045	Amount Added:	12.50	Units: uL	
MSV_LCS_ACROL_00049	Amount Added:	12.50	Units: uL	
MSV_QC_Gas826_00071	Amount Added:	12.50	Units: uL	
MSV_LCS_EE_00002	Amount Added:	12.50	Units: uL	
MSV_LCS_ETBR_00001	Amount Added:	12.50	Units: uL	
MSV_LLcentISS_00004	Amount Added:	5.00	Units: uL	Run Reagent

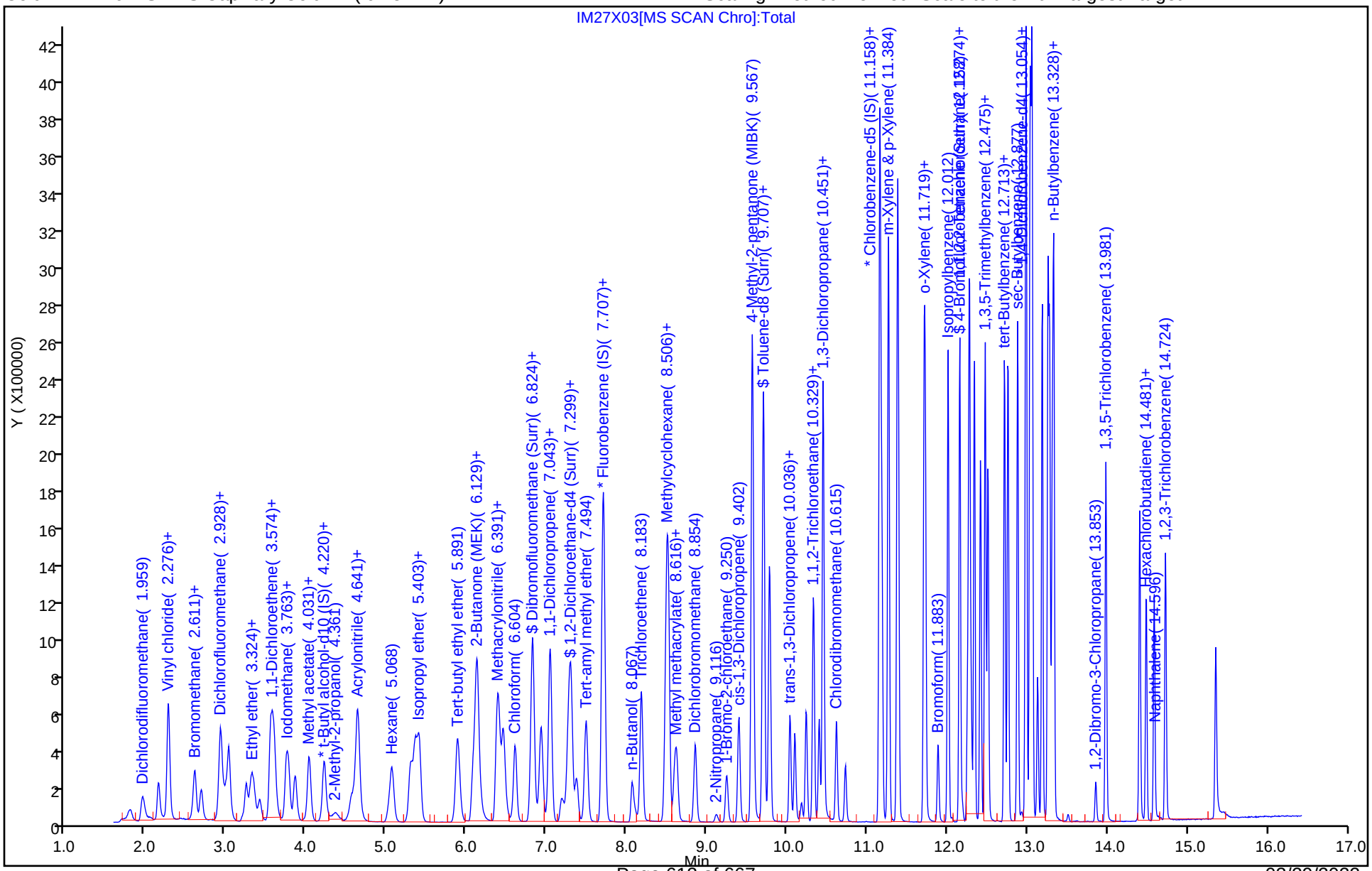
Report Date: 27-Mar-2022 11:07:33 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X03.D

Injection Date:	27-Mar-2022 09:34:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 27-Mar-2022 09:34:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-004
Misc. Info.: LCS
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 27-Mar-2022 11:07:29 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1606

First Level Reviewer: kephartk Date: 27-Mar-2022 10:02:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.1	100.75
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.35
$ 75 Toluene-d8 (Surr)	10.0	10.2	101.57
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.33	93.28

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-238139/4

Matrix: Water Lab File ID: IM28X03.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 03/28/2022 09:44

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 238139 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.30		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.91		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	5.32		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.24		0.50	0.060
75-34-3	1,1-Dichloroethane	4.73		0.50	0.070
75-35-4	1,1-Dichloroethene	5.20		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	5.51		0.50	0.060
107-06-2	1,2-Dichloroethane	5.03		0.50	0.050
78-87-5	1,2-Dichloropropane	4.95		0.50	0.060
78-93-3	2-Butanone (MEK)	54.4		5.0	0.60
591-78-6	2-Hexanone	55.5		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	52.7		5.0	0.70
67-64-1	Acetone	55.8		5.0	0.90
71-43-2	Benzene	4.95		0.50	0.050
74-97-5	Bromochloromethane	5.41		0.50	0.050
75-27-4	Bromodichloromethane	5.17		0.50	0.050
75-25-2	Bromoform	5.74		1.0	0.30
74-83-9	Bromomethane	4.69		0.50	0.070
75-15-0	Carbon disulfide	5.45		1.0	0.060
56-23-5	Carbon tetrachloride	5.07		0.50	0.070
108-90-7	Chlorobenzene	5.11		0.50	0.060
75-00-3	Chloroethane	4.71		0.50	0.070
67-66-3	Chloroform	4.88		0.50	0.090
74-87-3	Chloromethane	4.18		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	4.97		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.91		0.50	0.050
124-48-1	Dibromochloromethane	5.40		0.50	0.070
100-41-4	Ethylbenzene	5.03		0.50	0.060
1634-04-4	Methyl tert-butyl ether	5.00		0.50	0.050
75-09-2	Methylene Chloride	5.09		0.50	0.070
100-42-5	Styrene	5.13		0.50	0.050
127-18-4	Tetrachloroethene	5.22		0.50	0.060
108-88-3	Toluene	5.05		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.87		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	5.48		0.50	0.060
79-01-6	Trichloroethene	4.92		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-238139/4

Matrix: Water Lab File ID: IM28X03.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 03/28/2022 09:44

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 238139 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.37		0.50	0.10
1330-20-7	Xylenes, Total	15.2		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-120
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 28-Mar-2022 09:44:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053457-004
Misc. Info.: LCS
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 10:30:55 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1632

First Level Reviewer: kephartk Date: 28-Mar-2022 10:09:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.959	1.965	-0.006	99	298625	5.00	4.42	
4 Chloromethane	50	2.160	2.166	-0.006	99	291345	5.00	4.18	
5 Vinyl chloride	62	2.276	2.282	-0.006	98	321901	5.00	4.37	
6 Butadiene	39	2.282	2.288	-0.006	90	313256	5.00	4.35	
7 Bromomethane	94	2.617	2.617	0.000	93	285685	5.00	4.69	
8 Chloroethane	64	2.696	2.696	0.000	100	210854	5.00	4.71	
9 Dichlorofluoromethane	67	2.928	2.934	-0.006	97	552925	5.00	4.91	
10 Trichlorofluoromethane	101	2.940	2.946	-0.006	96	541717	5.00	4.95	
11 Ethyl ether	59	3.251	3.257	-0.006	88	173013	4.97	5.73	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.324	3.324	0.000	87	293092	5.00	4.66	
13 Acrolein	56	3.422	3.428	-0.006	98	186414	37.5	28.8	
14 1,1-Dichloroethene	96	3.562	3.562	0.000	96	247310	5.00	5.20	
15 Acetone	43	3.593	3.599	-0.006	100	488830	62.5	55.8	
16 112TCTFE	101	3.599	3.599	0.000	85	281723	5.00	5.65	
17 Iodomethane	142	3.757	3.757	0.000	99	548890	5.00	5.64	
18 Ethyl bromide	108	3.782	3.788	-0.006	98	207109	4.99	4.57	
19 Carbon disulfide	76	3.861	3.867	-0.006	100	580374	5.00	5.45	
21 Methyl acetate	43	4.013	4.019	-0.006	95	104517	5.00	4.87	
22 3-Chloro-1-propene	41	4.038	4.044	-0.006	85	316656	5.00	4.70	
23 Methylene Chloride	84	4.227	4.233	-0.006	89	252943	5.00	5.09	
* 24 t-Butyl alcohol-d10 (IS)	65	4.245	4.251	-0.006	97	161366	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.367	4.367	0.000	100	175684	50.0	54.4	
26 Acrylonitrile	53	4.562	4.574	-0.012	99	238732	25.0	23.2	
27 Methyl tert-butyl ether	73	4.635	4.635	0.000	95	620227	5.00	5.00	
28 trans-1,2-Dichloroethene	96	4.647	4.647	0.000	97	262473	5.00	4.87	
29 Hexane	57	5.074	5.068	0.006	92	320265	5.00	4.90	
31 1,1-Dichloroethane	63	5.300	5.299	0.001	96	436015	5.00	4.73	
32 Isopropyl ether	45	5.361	5.367	-0.006	91	674533	5.00	4.68	
33 2-Chloro-1,3-butadiene	53	5.409	5.415	-0.006	92	369166	5.00	4.91	
34 Tert-butyl ethyl ether	59	5.891	5.891	0.000	96	699416	5.00	4.77	
36 2-Butanone (MEK)	43	6.098	6.092	0.006	100	826087	62.5	54.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 cis-1,2-Dichloroethene	96	6.129	6.129	0.000	86	306295	5.00	4.97	
38 2,2-Dichloropropane	77	6.141	6.147	-0.006	87	430188	5.00	5.03	
40 Propionitrile	54	6.184	6.177	0.007	98	139356	37.5	35.9	
42 Methacrylonitrile	67	6.397	6.397	0.000	88	498720	37.5	32.1	
43 Chlorobromomethane	128	6.458	6.458	0.000	84	152745	5.00	5.41	
44 Tetrahydrofuran	71	6.476	6.476	0.000	77	103366	25.0	24.1	
45 Chloroform	83	6.610	6.610	0.000	93	484761	5.00	4.88	
$ 46 Dibromofluoromethane (Surr)	113	6.818	6.824	-0.006	94	502413	10.0	10.2	
47 1,1,1-Trichloroethane	97	6.836	6.836	0.000	98	472959	5.00	4.91	
48 Cyclohexane	56	6.933	6.933	0.000	90	387167	5.00	4.78	
50 Carbon tetrachloride	117	7.043	7.043	0.000	96	451594	5.00	5.07	
51 1,1-Dichloropropene	75	7.043	7.049	-0.006	93	368955	5.00	4.96	
52 Isobutyl alcohol	41	7.196	7.189	0.007	90	140047	125.0	128.5	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.269	7.275	-0.006	85	91875	10.0	10.5	
54 Benzene	78	7.305	7.305	0.000	97	1055795	5.00	4.95	
56 1,2-Dichloroethane	62	7.372	7.378	-0.006	97	299551	5.00	5.03	
57 Tert-amyl methyl ether	73	7.494	7.494	0.000	98	660921	5.00	4.83	
* 58 Fluorobenzene (IS)	96	7.702	7.708	-0.006	99	1811368	10.0	10.0	
59 n-Heptane	43	7.720	7.714	0.006	90	318875	5.00	4.57	
60 n-Butanol	56	8.073	8.067	0.006	87	237644	250.0	275.7	
61 Trichloroethene	95	8.183	8.183	0.000	94	301632	5.00	4.92	
62 Methylcyclohexane	83	8.494	8.494	0.000	89	481810	5.00	4.93	
63 1,2-Dichloropropane	63	8.512	8.512	0.000	93	253258	5.00	4.95	
64 Methyl methacrylate	69	8.598	8.598	0.000	83	126321	5.00	4.29	
65 1,4-Dioxane	88	8.604	8.604	0.000	32	34877	125.0	157.0	M
66 Dibromomethane	93	8.622	8.622	0.000	89	142245	5.00	5.02	
68 Dichlorobromomethane	83	8.854	8.860	-0.006	99	349089	5.00	5.17	
69 2-Nitropropane	41	9.116	9.116	0.000	96	37617	5.00	4.12	
72 1-Bromo-2-chloroethane	63	9.244	9.244	0.000	98	258418	5.00	5.34	
73 cis-1,3-Dichloropropene	75	9.396	9.396	0.000	95	390799	5.00	4.91	
74 4-Methyl-2-pentanone (MIBK)	43	9.567	9.567	0.000	96	2114814	62.5	52.7	
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1835217	10.0	10.1	
76 Toluene	92	9.780	9.780	0.000	98	708692	5.00	5.05	
78 trans-1,3-Dichloropropene	75	10.036	10.036	0.000	93	345384	5.00	5.48	
79 Ethyl methacrylate	69	10.097	10.097	0.000	87	256266	5.00	5.25	
80 1,1,2-Trichloroethane	97	10.238	10.244	-0.006	92	201347	5.00	5.24	
81 Tetrachloroethene	166	10.329	10.329	0.000	97	420885	5.00	5.22	
82 1,3-Dichloropropane	76	10.402	10.402	0.000	89	328505	5.00	5.32	
83 2-Hexanone	43	10.451	10.451	0.000	96	1496528	62.5	55.5	
85 Chlorodibromomethane	129	10.616	10.616	0.000	89	281638	5.00	5.40	
86 Ethylene Dibromide	107	10.731	10.731	0.000	99	205684	5.00	5.51	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	85	1486505	10.0	10.0	
88 1-Chlorohexane	91	11.164	11.164	0.000	94	401983	5.00	4.73	
90 Chlorobenzene	112	11.183	11.182	0.001	97	848642	5.00	5.11	
91 1,1,1,2-Tetrachloroethane	131	11.262	11.268	-0.006	94	325119	5.00	5.30	
92 Ethylbenzene	91	11.268	11.268	0.000	98	1394558	5.00	5.03	
93 m-Xylene & p-Xylene	106	11.384	11.384	0.000	99	1153924	10.0	10.2	
94 o-Xylene	106	11.713	11.713	0.000	96	555268	5.00	4.96	
95 Styrene	104	11.725	11.725	0.000	94	893948	5.00	5.13	
96 Bromoform	173	11.884	11.884	0.000	98	184394	5.00	5.74	
97 Isopropylbenzene	105	12.012	12.012	0.000	95	1501112	5.00	5.14	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	666744	10.0	9.50	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 1,1,2,2-Tetrachloroethane	83	12.256	12.255	0.001	95	260660	5.00	5.32	
102 Bromobenzene	156	12.274	12.274	0.000	92	406229	5.00	5.22	
103 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	93	286002	25.0	19.8	
104 1,2,3-Trichloropropane	110	12.298	12.298	0.000	84	76897	5.00	5.30	
105 N-Propylbenzene	91	12.341	12.341	0.000	98	1677011	5.00	4.94	
106 2-Chlorotoluene	126	12.414	12.414	0.000	98	383598	5.00	5.14	
107 1,3,5-Trimethylbenzene	105	12.475	12.475	0.000	95	1249075	5.00	4.97	
108 4-Chlorotoluene	126	12.512	12.511	0.001	96	387167	5.00	5.07	
109 tert-Butylbenzene	134	12.719	12.719	0.000	91	291243	5.00	4.81	
111 1,2,4-Trimethylbenzene	105	12.755	12.755	0.000	97	1262032	5.00	4.98	
112 sec-Butylbenzene	105	12.877	12.877	0.000	94	1633264	5.00	5.09	
113 1,3-Dichlorobenzene	146	12.981	12.981	0.000	99	766435	5.00	5.05	
114 4-Isopropyltoluene	119	12.987	12.987	0.000	97	1468561	5.00	5.08	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	93	925704	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.054	13.054	0.000	96	793091	5.00	5.12	
117 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	98	574902	5.00	4.91	
118 Benzyl chloride	126	13.127	13.127	0.000	98	111704	5.00	5.64	
119 n-Butylbenzene	92	13.280	13.280	0.000	97	653220	5.00	5.10	
120 1,2-Dichlorobenzene	146	13.310	13.310	0.000	99	720131	5.00	5.21	
122 1,2-Dibromo-3-Chloropropane	155	13.853	13.853	0.000	90	48787	5.00	6.23	
123 1,3,5-Trichlorobenzene	180	13.981	13.981	0.000	97	587140	5.00	5.18	
124 1,2,4-Trichlorobenzene	180	14.401	14.401	0.000	93	510815	5.00	5.35	
125 Hexachlorobutadiene	225	14.487	14.487	0.000	95	225593	5.00	5.21	
126 Naphthalene	128	14.584	14.584	0.000	96	896880	5.00	5.49	
127 1,2,3-Trichlorobenzene	180	14.725	14.724	0.001	95	450085	5.00	5.39	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
134 Isopropyl alcohol	45		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_00046	Amount Added:	12.50	Units: uL	
MSV_LCS_ACROL_00050	Amount Added:	12.50	Units: uL	
MSV_QC_Gas826_00071	Amount Added:	12.50	Units: uL	
MSV_LCS_EE_00002	Amount Added:	12.50	Units: uL	
MSV_LCS_ETBR_00001	Amount Added:	12.50	Units: uL	
MSV_LLcentISS_00004	Amount Added:	5.00	Units: uL	Run Reagent

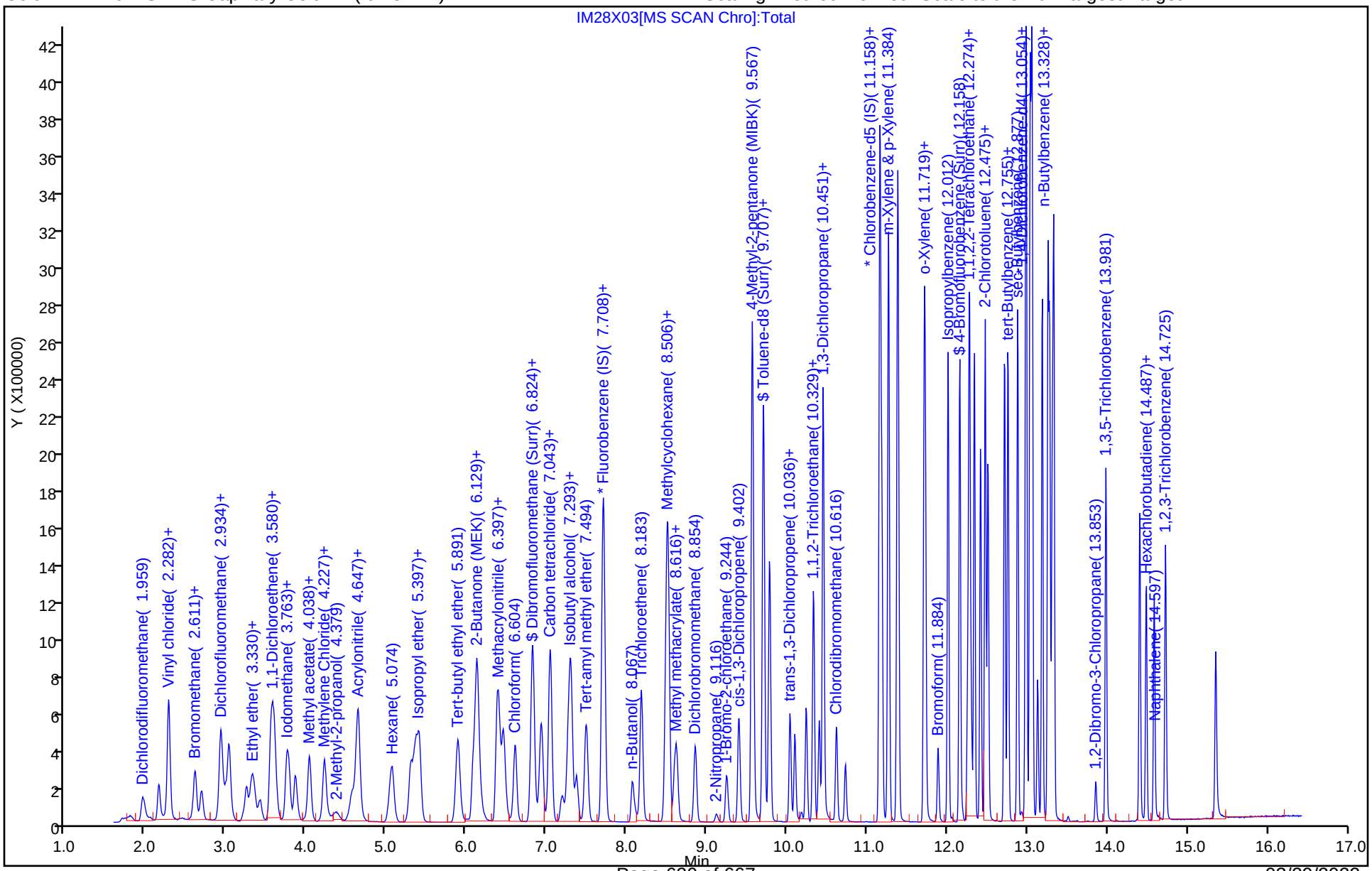
Report Date: 28-Mar-2022 10:31:00 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X03.D

Injection Date:	28-Mar-2022 09:44:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X03.D				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	28-Mar-2022 09:44:30	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0053457-004				
Misc. Info.:	LCS				
Operator ID:	KNK41612	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20220328-53457.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	28-Mar-2022 10:30:55	Calib Date:	15-Mar-2022 03:22:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1632				
First Level Reviewer: kephartk		Date:	28-Mar-2022 10:09:28		

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.2	102.46
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	105.18
$ 75 Toluene-d8 (Surr)	10.0	10.1	101.45
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.50	95.04

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

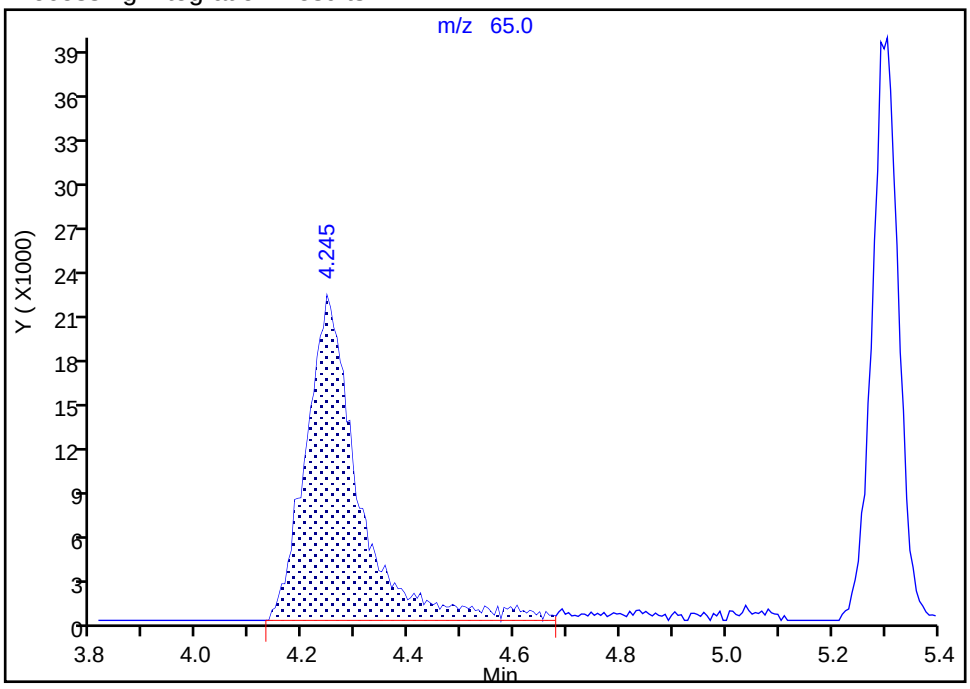
Data File: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X03.D
Injection Date: 28-Mar-2022 09:44:30 Instrument ID: 19930
Lims ID: LCS
Client ID:
Operator ID: KNK41612 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

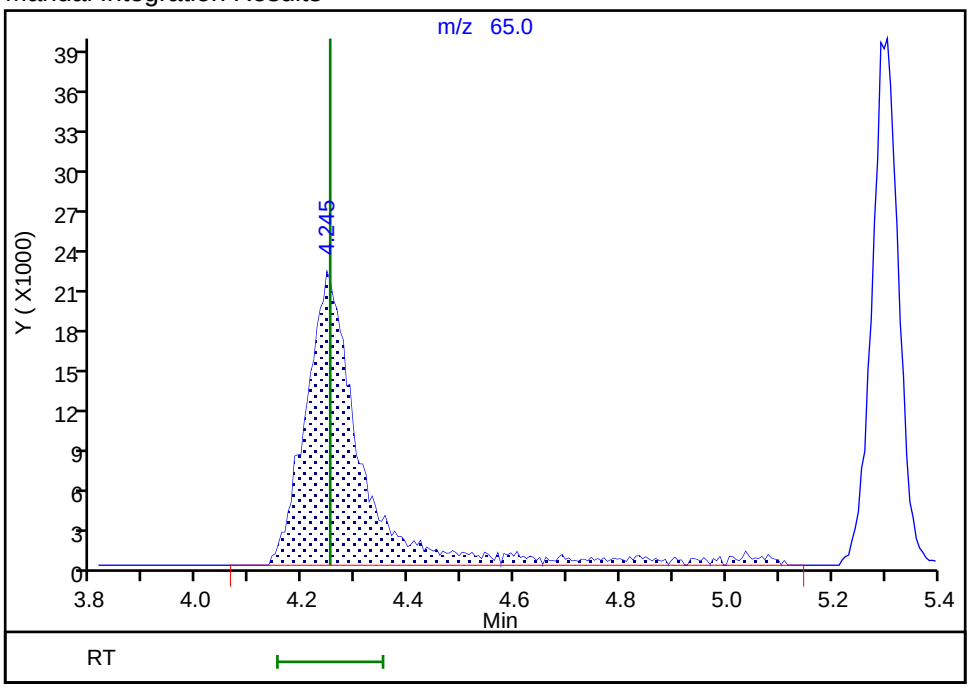
Processing Integration Results

RT: 4.24
Area: 150586
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 4.24
Area: 161366
Amount: 50.000000
Amount Units: ug/l



Reviewer: kephartk, 28-Mar-2022 10:08:50
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 410-237993/5

Matrix: Water Lab File ID: IM27X04.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 09:55

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.16		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.72		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	5.33		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.11		0.50	0.060
75-34-3	1,1-Dichloroethane	4.54		0.50	0.070
75-35-4	1,1-Dichloroethene	4.98		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	5.43		0.50	0.060
107-06-2	1,2-Dichloroethane	4.76		0.50	0.050
78-87-5	1,2-Dichloropropane	4.69		0.50	0.060
78-93-3	2-Butanone (MEK)	64.8		5.0	0.60
591-78-6	2-Hexanone	68.7		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	63.4		5.0	0.70
67-64-1	Acetone	62.1		5.0	0.90
71-43-2	Benzene	4.73		0.50	0.050
74-97-5	Bromochloromethane	5.14		0.50	0.050
75-27-4	Bromodichloromethane	4.93		0.50	0.050
75-25-2	Bromoform	5.79		1.0	0.30
74-83-9	Bromomethane	4.48		0.50	0.070
75-15-0	Carbon disulfide	5.07		1.0	0.060
56-23-5	Carbon tetrachloride	4.79		0.50	0.070
108-90-7	Chlorobenzene	4.96		0.50	0.060
75-00-3	Chloroethane	4.52		0.50	0.070
67-66-3	Chloroform	4.74		0.50	0.090
74-87-3	Chloromethane	4.26		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	4.76		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.72		0.50	0.050
124-48-1	Dibromochloromethane	5.38		0.50	0.070
100-41-4	Ethylbenzene	4.88		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.80		0.50	0.050
75-09-2	Methylene Chloride	4.78		0.50	0.070
100-42-5	Styrene	4.93		0.50	0.050
127-18-4	Tetrachloroethene	4.98		0.50	0.060
108-88-3	Toluene	4.86		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.68		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	5.24		0.50	0.060
79-01-6	Trichloroethene	4.69		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 410-237993/5

Matrix: Water Lab File ID: IM27X04.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 09:55

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.20		0.50	0.10
1330-20-7	Xylenes, Total	14.7		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	102		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X04.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 27-Mar-2022 09:55:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-005
Misc. Info.: LCSD
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 27-Mar-2022 11:07:29 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1606

First Level Reviewer: kephartk Date: 27-Mar-2022 10:23:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.959	1.959	0.000	99	308583	5.00	4.33	
4 Chloromethane	50	2.154	2.154	0.000	99	313416	5.00	4.26	
5 Vinyl chloride	62	2.270	2.270	0.000	98	326628	5.00	4.20	
6 Butadiene	39	2.282	2.276	0.006	92	289331	5.00	3.81	
7 Bromomethane	94	2.611	2.605	0.006	91	287924	5.00	4.48	
8 Chloroethane	64	2.690	2.684	0.006	99	213697	5.00	4.52	
9 Dichlorofluoromethane	67	2.928	2.928	0.000	97	560969	5.00	4.72	
10 Trichlorofluoromethane	101	2.940	2.934	0.006	98	527201	5.00	4.57	
11 Ethyl ether	59	3.251	3.245	0.006	89	180603	4.97	5.66	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.324	3.318	0.006	91	294540	5.00	4.44	
13 Acrolein	56	3.428	3.416	0.012	98	185722	37.5	33.8	
14 1,1-Dichloroethene	96	3.556	3.556	0.000	96	249895	5.00	4.98	
15 Acetone	43	3.586	3.586	0.000	100	461372	62.5	62.1	
16 112TCTFE	101	3.592	3.593	-0.001	86	268242	5.00	5.09	
17 Iodomethane	142	3.751	3.751	0.000	99	549411	5.00	5.34	
18 Ethyl bromide	108	3.781	3.775	0.006	99	221616	4.99	4.63	
19 Carbon disulfide	76	3.861	3.855	0.006	99	570386	5.00	5.07	
21 Methyl acetate	43	4.013	4.007	0.006	20	93138	5.00	5.11	M
22 3-Chloro-1-propene	41	4.037	4.031	0.006	86	319773	5.00	4.50	
23 Methylene Chloride	84	4.226	4.214	0.012	88	250794	5.00	4.78	
* 24 t-Butyl alcohol-d10 (IS)	65	4.239	4.239	0.000	96	137051	50.0	50.0	
25 2-Methyl-2-propanol	59	4.367	4.361	0.006	99	174036	50.0	63.4	
26 Acrylonitrile	53	4.562	4.556	0.006	99	243635	25.0	27.8	
27 Methyl tert-butyl ether	73	4.623	4.623	0.000	94	628400	5.00	4.80	
28 trans-1,2-Dichloroethene	96	4.647	4.641	0.006	96	266336	5.00	4.68	
29 Hexane	57	5.068	5.056	0.012	92	301941	5.00	4.38	
31 1,1-Dichloroethane	63	5.306	5.300	0.006	96	441819	5.00	4.54	
32 Isopropyl ether	45	5.360	5.361	0.000	91	682396	5.00	4.49	
33 2-Chloro-1,3-butadiene	53	5.409	5.403	0.006	91	371399	5.00	4.68	
34 Tert-butyl ethyl ether	59	5.885	5.885	0.000	96	715124	5.00	4.62	
36 2-Butanone (MEK)	43	6.086	6.080	0.006	99	834948	62.5	64.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 cis-1,2-Dichloroethene	96	6.129	6.123	0.006	80	309213	5.00	4.76	
38 2,2-Dichloropropane	77	6.135	6.135	0.000	87	431597	5.00	4.78	
40 Propionitrile	54	6.177	6.171	0.006	97	125502	37.5	38.0	
42 Methacrylonitrile	67	6.391	6.385	0.006	89	502923	37.5	38.1	
43 Chlorobromomethane	128	6.458	6.458	0.000	83	153217	5.00	5.14	
44 Tetrahydrofuran	71	6.464	6.470	-0.006	77	104026	25.0	28.5	
45 Chloroform	83	6.604	6.598	0.006	93	497090	5.00	4.74	
$ 46 Dibromofluoromethane (Surr)	113	6.817	6.811	0.006	94	521647	10.0	10.1	
47 1,1,1-Trichloroethane	97	6.830	6.830	0.000	98	480354	5.00	4.72	
48 Cyclohexane	56	6.927	6.927	0.000	89	370521	5.00	4.33	
51 1,1-Dichloropropene	75	7.049	7.037	0.012	93	366511	5.00	4.67	
50 Carbon tetrachloride	117	7.043	7.043	0.000	96	450086	5.00	4.79	
52 Isobutyl alcohol	41	7.195	7.183	0.012	94	127403	125.0	137.7	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.275	7.275	0.000	95	96498	10.0	10.5	
54 Benzene	78	7.305	7.299	0.006	97	1064805	5.00	4.73	
56 1,2-Dichloroethane	62	7.378	7.366	0.012	98	299127	5.00	4.76	
57 Tert-amyl methyl ether	73	7.494	7.488	0.006	98	681496	5.00	4.72	
* 58 Fluorobenzene (IS)	96	7.707	7.702	0.005	99	1911886	10.0	10.0	
59 n-Heptane	43	7.720	7.714	0.006	85	298001	5.00	4.05	
60 n-Butanol	56	8.067	8.061	0.006	88	233590	250.0	319.1	
61 Trichloroethene	95	8.183	8.177	0.006	94	303716	5.00	4.69	
62 Methylcyclohexane	83	8.494	8.494	0.000	90	459168	5.00	4.45	
63 1,2-Dichloropropane	63	8.512	8.512	0.000	94	253178	5.00	4.69	
64 Methyl methacrylate	69	8.598	8.592	0.006	83	124056	5.00	4.97	
65 1,4-Dioxane	88	8.610	8.604	0.006	31	28755	125.0	152.4	M
66 Dibromomethane	93	8.622	8.616	0.006	90	147684	5.00	4.94	
68 Dichlorobromomethane	83	8.854	8.854	0.000	98	351111	5.00	4.93	
69 2-Nitropropane	41	9.116	9.116	0.000	96	38637	5.00	4.98	
72 1-Bromo-2-chloroethane	63	9.250	9.244	0.006	98	268781	5.00	5.26	
73 cis-1,3-Dichloropropene	75	9.402	9.396	0.006	95	395915	5.00	4.72	
74 4-Methyl-2-pentanone (MIBK)	43	9.567	9.567	0.000	96	2162234	62.5	63.4	
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1914483	10.0	10.2	
76 Toluene	92	9.786	9.780	0.006	98	709543	5.00	4.86	
78 trans-1,3-Dichloropropene	75	10.036	10.036	0.000	93	343758	5.00	5.24	
79 Ethyl methacrylate	69	10.097	10.097	0.000	87	262721	5.00	5.17	
80 1,1,2-Trichloroethane	97	10.244	10.238	0.006	91	204380	5.00	5.11	
81 Tetrachloroethene	166	10.335	10.329	0.006	97	417861	5.00	4.98	
82 1,3-Dichloropropane	76	10.402	10.402	0.000	89	330266	5.00	5.14	
83 2-Hexanone	43	10.451	10.451	0.000	96	1572476	62.5	68.7	
85 Chlorodibromomethane	129	10.615	10.616	-0.001	89	292173	5.00	5.38	
86 Ethylene Dibromide	107	10.731	10.725	0.006	98	210886	5.00	5.43	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	85	1547013	10.0	10.0	
88 1-Chlorohexane	91	11.164	11.164	0.000	94	404442	5.00	4.57	
90 Chlorobenzene	112	11.182	11.183	-0.001	98	857545	5.00	4.96	
91 1,1,1,2-Tetrachloroethane	131	11.268	11.268	0.000	95	329195	5.00	5.16	
92 Ethylbenzene	91	11.268	11.268	0.000	98	1408344	5.00	4.88	
93 m-Xylene & p-Xylene	106	11.384	11.384	0.000	99	1168728	10.0	9.88	
94 o-Xylene	106	11.713	11.713	0.000	97	561536	5.00	4.82	
95 Styrene	104	11.725	11.725	0.000	94	893438	5.00	4.93	
96 Bromoform	173	11.883	11.884	-0.001	98	193399	5.00	5.79	
97 Isopropylbenzene	105	12.012	12.012	0.000	95	1487467	5.00	4.90	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	687063	10.0	9.41	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 1,1,2,2-Tetrachloroethane	83	12.255	12.256	-0.001	95	265024	5.00	5.33	
102 Bromobenzene	156	12.274	12.274	0.000	91	413092	5.00	5.23	
103 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	92	310552	25.0	25.3	
104 1,2,3-Trichloropropane	110	12.298	12.298	0.000	83	76109	5.00	5.17	
105 N-Propylbenzene	91	12.341	12.341	0.000	98	1695903	5.00	4.92	
106 2-Chlorotoluene	126	12.414	12.414	0.000	98	377428	5.00	4.98	
107 1,3,5-Trimethylbenzene	105	12.475	12.475	0.000	94	1239841	5.00	4.86	
108 4-Chlorotoluene	126	12.511	12.505	0.006	96	392757	5.00	5.07	
109 tert-Butylbenzene	134	12.719	12.719	0.000	91	293280	5.00	4.77	
111 1,2,4-Trimethylbenzene	105	12.761	12.755	0.006	97	1250188	5.00	4.86	
112 sec-Butylbenzene	105	12.877	12.877	0.000	94	1594876	5.00	4.90	
113 1,3-Dichlorobenzene	146	12.981	12.981	0.000	99	754247	5.00	4.90	
114 4-Isopropyltoluene	119	12.987	12.987	0.000	97	1443162	5.00	4.92	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	93	939267	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.054	13.054	0.000	96	788671	5.00	5.02	
117 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	98	578316	5.00	4.87	
118 Benzyl chloride	126	13.127	13.127	0.000	98	114502	5.00	5.70	
119 n-Butylbenzene	92	13.280	13.280	0.000	97	633779	5.00	4.87	
120 1,2-Dichlorobenzene	146	13.310	13.310	0.000	99	716219	5.00	5.11	
122 1,2-Dibromo-3-Chloropropane	155	13.859	13.853	0.006	92	48470	5.00	6.10	
123 1,3,5-Trichlorobenzene	180	13.981	13.981	0.000	97	589604	5.00	5.13	
124 1,2,4-Trichlorobenzene	180	14.401	14.401	0.000	94	506209	5.00	5.23	
125 Hexachlorobutadiene	225	14.487	14.487	0.000	94	221502	5.00	5.04	
126 Naphthalene	128	14.584	14.584	0.000	96	899537	5.00	5.43	
127 1,2,3-Trichlorobenzene	180	14.724	14.725	-0.001	95	448184	5.00	5.28	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
134 Isopropyl alcohol	45		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_00045	Amount Added:	12.50	Units: uL	
MSV_LCS_ACROL_00049	Amount Added:	12.50	Units: uL	
MSV_QC_Gas826_00071	Amount Added:	12.50	Units: uL	
MSV_LCS_EE_00002	Amount Added:	12.50	Units: uL	
MSV_LCS_ETBR_00001	Amount Added:	12.50	Units: uL	
MSV_LLcentISS_00004	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 27-Mar-2022 11:07:36 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X04.D

Injection Date: 27-Mar-2022 09:55:30 Instrument ID: 19930 Operator ID: KNK41612

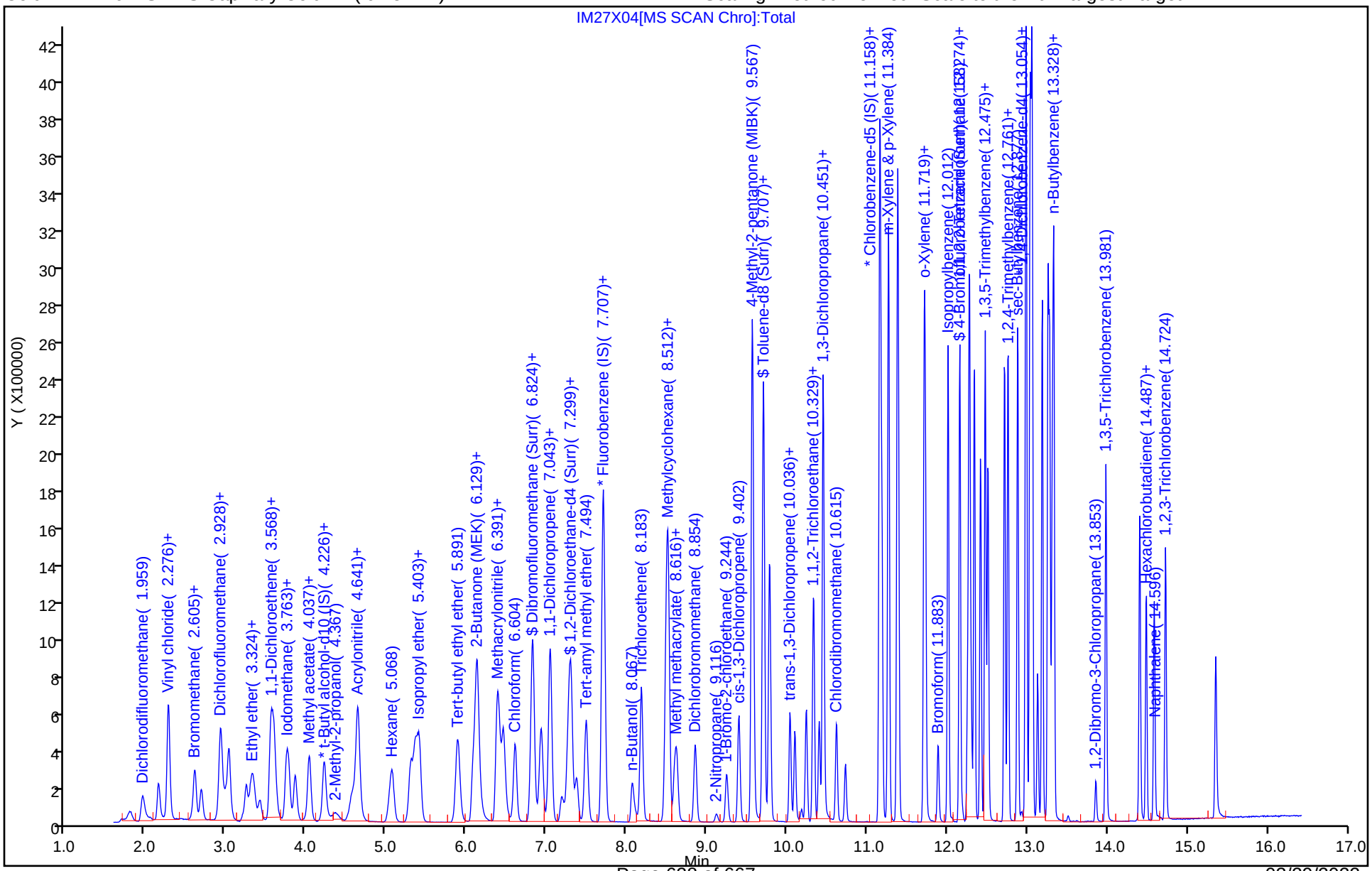
Lims ID: LCSD Worklist Smp#: 5

Client ID:

Purge Vol: 25.000 mL Dil. Factor: 1.0000 ALS Bottle#: 4

Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X04.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 27-Mar-2022 09:55:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-005
Misc. Info.: LCSD
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 27-Mar-2022 11:07:29 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1606

First Level Reviewer: kephartk Date: 27-Mar-2022 10:23:07

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.1	100.79
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	104.67
$ 75 Toluene-d8 (Surr)	10.0	10.2	101.69
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.41	94.11

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 410-238139/5

Matrix: Water Lab File ID: IM28X04.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 03/28/2022 10:05

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 238139 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.24		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.83		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	5.23		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.33		0.50	0.060
75-34-3	1,1-Dichloroethane	4.67		0.50	0.070
75-35-4	1,1-Dichloroethene	5.23		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	5.42		0.50	0.060
107-06-2	1,2-Dichloroethane	5.09		0.50	0.050
78-87-5	1,2-Dichloropropane	4.94		0.50	0.060
78-93-3	2-Butanone (MEK)	55.6		5.0	0.60
591-78-6	2-Hexanone	56.7		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	53.3		5.0	0.70
67-64-1	Acetone	54.6		5.0	0.90
71-43-2	Benzene	4.93		0.50	0.050
74-97-5	Bromochloromethane	5.21		0.50	0.050
75-27-4	Bromodichloromethane	5.13		0.50	0.050
75-25-2	Bromoform	5.56		1.0	0.30
74-83-9	Bromomethane	4.67		0.50	0.070
75-15-0	Carbon disulfide	5.45		1.0	0.060
56-23-5	Carbon tetrachloride	4.93		0.50	0.070
108-90-7	Chlorobenzene	5.09		0.50	0.060
75-00-3	Chloroethane	4.74		0.50	0.070
67-66-3	Chloroform	4.89		0.50	0.090
74-87-3	Chloromethane	4.01		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	4.83		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.77		0.50	0.050
124-48-1	Dibromochloromethane	5.24		0.50	0.070
100-41-4	Ethylbenzene	5.03		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.94		0.50	0.050
75-09-2	Methylene Chloride	4.99		0.50	0.070
100-42-5	Styrene	5.05		0.50	0.050
127-18-4	Tetrachloroethene	5.19		0.50	0.060
108-88-3	Toluene	5.03		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.85		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	5.26		0.50	0.060
79-01-6	Trichloroethene	4.87		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 410-238139/5

Matrix: Water Lab File ID: IM28X04.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 03/28/2022 10:05

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 238139 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.27		0.50	0.10
1330-20-7	Xylenes, Total	15.0		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	102		80-120
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X04.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 28-Mar-2022 10:05:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053457-005
Misc. Info.: LCSD
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 10:30:55 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1632

First Level Reviewer: kephartk Date: 28-Mar-2022 10:30:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.953	1.965	-0.012	99	297408	5.00	4.35	
4 Chloromethane	50	2.148	2.166	-0.018	99	282134	5.00	4.01	
5 Vinyl chloride	62	2.264	2.282	-0.018	98	318051	5.00	4.27	
6 Butadiene	39	2.270	2.288	-0.018	90	318511	5.00	4.38	
7 Bromomethane	94	2.599	2.617	-0.018	92	287576	5.00	4.67	
8 Chloroethane	64	2.678	2.696	-0.018	99	214647	5.00	4.74	
9 Dichlorofluoromethane	67	2.922	2.934	-0.012	97	559050	5.00	4.91	
10 Trichlorofluoromethane	101	2.928	2.946	-0.018	98	552607	5.00	5.00	
11 Ethyl ether	59	3.239	3.257	-0.018	89	176677	4.97	5.78	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.312	3.324	-0.012	87	289037	5.00	4.55	
13 Acrolein	56	3.416	3.428	-0.012	98	186733	37.5	29.7	
14 1,1-Dichloroethene	96	3.550	3.562	-0.012	97	251155	5.00	5.23	
15 Acetone	43	3.574	3.599	-0.025	99	464230	62.5	54.6	
16 112TCTFE	101	3.586	3.599	-0.013	82	282443	5.00	5.60	
17 Iodomethane	142	3.745	3.757	-0.012	99	550094	5.00	5.59	
18 Ethyl bromide	108	3.769	3.788	-0.019	99	213053	4.99	4.64	
19 Carbon disulfide	76	3.849	3.867	-0.018	100	587364	5.00	5.45	
21 Methyl acetate	43	4.001	4.019	-0.018	97	92142	5.00	4.40	
22 3-Chloro-1-propene	41	4.025	4.044	-0.019	85	315852	5.00	4.64	
23 Methylene Chloride	84	4.214	4.233	-0.019	88	250740	5.00	4.99	
* 24 t-Butyl alcohol-d10 (IS)	65	4.227	4.251	-0.024	97	156791	50.0	50.0	M
25 2-Methyl-2-propanol	59	4.361	4.367	-0.006	99	176030	50.0	56.1	
26 Acrylonitrile	53	4.556	4.574	-0.018	97	236688	25.0	23.6	
27 Methyl tert-butyl ether	73	4.623	4.635	-0.012	95	620439	5.00	4.94	
28 trans-1,2-Dichloroethene	96	4.635	4.647	-0.012	96	264110	5.00	4.85	
29 Hexane	57	5.056	5.068	-0.012	93	325839	5.00	4.93	
31 1,1-Dichloroethane	63	5.287	5.299	-0.012	96	435257	5.00	4.67	
32 Isopropyl ether	45	5.354	5.367	-0.013	90	669235	5.00	4.60	
33 2-Chloro-1,3-butadiene	53	5.403	5.415	-0.012	91	369473	5.00	4.86	
34 Tert-butyl ethyl ether	59	5.885	5.891	-0.006	98	699586	5.00	4.72	
36 2-Butanone (MEK)	43	6.086	6.092	-0.006	99	819895	62.5	55.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 cis-1,2-Dichloroethene	96	6.116	6.129	-0.013	79	300572	5.00	4.83	
38 2,2-Dichloropropane	77	6.129	6.147	-0.018	75	422892	5.00	4.89	
40 Propionitrile	54	6.171	6.177	-0.006	97	138565	37.5	36.7	
42 Methacrylonitrile	67	6.385	6.397	-0.012	89	494916	37.5	32.8	
43 Chlorobromomethane	128	6.452	6.458	-0.006	83	148612	5.00	5.21	
44 Tetrahydrofuran	71	6.464	6.476	-0.012	81	101165	25.0	24.3	
45 Chloroform	83	6.598	6.610	-0.012	93	491315	5.00	4.89	
$ 46 Dibromofluoromethane (Surr)	113	6.818	6.824	-0.006	94	504296	10.0	10.2	
47 1,1,1-Trichloroethane	97	6.830	6.836	-0.006	98	470935	5.00	4.83	
48 Cyclohexane	56	6.921	6.933	-0.012	90	391055	5.00	4.78	
50 Carbon tetrachloride	117	7.037	7.043	-0.006	96	444148	5.00	4.93	
51 1,1-Dichloropropene	75	7.037	7.049	-0.012	93	366113	5.00	4.87	
52 Isobutyl alcohol	41	7.189	7.189	0.000	89	129486	125.0	122.3	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.263	7.275	-0.012	84	92619	10.0	10.5	
54 Benzene	78	7.299	7.305	-0.006	96	1063392	5.00	4.93	
56 1,2-Dichloroethane	62	7.372	7.378	-0.006	98	306183	5.00	5.09	
57 Tert-amyl methyl ether	73	7.488	7.494	-0.006	98	660929	5.00	4.78	
* 58 Fluorobenzene (IS)	96	7.701	7.708	-0.007	99	1831413	10.0	10.0	
59 n-Heptane	43	7.714	7.714	0.000	85	317501	5.00	4.50	
60 n-Butanol	56	8.067	8.067	0.000	89	229388	250.0	273.9	
61 Trichloroethene	95	8.177	8.183	-0.006	95	302007	5.00	4.87	
62 Methylcyclohexane	83	8.488	8.494	-0.006	90	489430	5.00	4.95	
63 1,2-Dichloropropane	63	8.506	8.512	-0.006	95	255577	5.00	4.94	
64 Methyl methacrylate	69	8.598	8.598	0.000	83	122601	5.00	4.29	
65 1,4-Dioxane	88	8.598	8.604	-0.006	33	36168	125.0	167.6	M
66 Dibromomethane	93	8.616	8.622	-0.006	89	144536	5.00	5.05	
68 Dichlorobromomethane	83	8.854	8.860	-0.006	99	350153	5.00	5.13	
69 2-Nitropropane	41	9.116	9.116	0.000	97	37028	5.00	4.17	
72 1-Bromo-2-chloroethane	63	9.244	9.244	0.000	98	256621	5.00	5.24	
73 cis-1,3-Dichloropropene	75	9.396	9.396	0.000	95	383322	5.00	4.77	
74 4-Methyl-2-pentanone (MIBK)	43	9.567	9.567	0.000	96	2076897	62.5	53.3	
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1843090	10.0	10.1	
76 Toluene	92	9.780	9.780	0.000	98	709206	5.00	5.03	
78 trans-1,3-Dichloropropene	75	10.036	10.036	0.000	94	333179	5.00	5.26	
79 Ethyl methacrylate	69	10.097	10.097	0.000	87	251920	5.00	5.13	
80 1,1,2-Trichloroethane	97	10.238	10.244	-0.006	90	205729	5.00	5.33	
81 Tetrachloroethene	166	10.329	10.329	0.000	97	420991	5.00	5.19	
82 1,3-Dichloropropane	76	10.402	10.402	0.000	89	324537	5.00	5.22	
83 2-Hexanone	43	10.451	10.451	0.000	96	1483668	62.5	56.7	
85 Chlorodibromomethane	129	10.616	10.616	0.000	89	274565	5.00	5.24	
86 Ethylene Dibromide	107	10.731	10.731	0.000	99	203447	5.00	5.42	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	84	1494337	10.0	10.0	
88 1-Chlorohexane	91	11.164	11.164	0.000	93	408642	5.00	4.79	
90 Chlorobenzene	112	11.183	11.182	0.001	97	848529	5.00	5.09	
91 1,1,1,2-Tetrachloroethane	131	11.268	11.268	0.000	96	322607	5.00	5.24	
92 Ethylbenzene	91	11.268	11.268	0.000	98	1403371	5.00	5.03	
93 m-Xylene & p-Xylene	106	11.384	11.384	0.000	99	1154067	10.0	10.1	
94 o-Xylene	106	11.713	11.713	0.000	96	555838	5.00	4.94	
95 Styrene	104	11.725	11.725	0.000	95	884156	5.00	5.05	
96 Bromoform	173	11.884	11.884	0.000	98	179557	5.00	5.56	
97 Isopropylbenzene	105	12.012	12.012	0.000	95	1498050	5.00	5.11	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	663063	10.0	9.40	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 1,1,2,2-Tetrachloroethane	83	12.255	12.255	0.000	95	253896	5.00	5.23	
102 Bromobenzene	156	12.274	12.274	0.000	92	404094	5.00	5.24	
103 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	94	285623	25.0	20.3	
104 1,2,3-Trichloropropane	110	12.298	12.298	0.000	84	75172	5.00	5.23	
105 N-Propylbenzene	91	12.341	12.341	0.000	98	1691081	5.00	5.02	
106 2-Chlorotoluene	126	12.414	12.414	0.000	97	374955	5.00	5.07	
107 1,3,5-Trimethylbenzene	105	12.475	12.475	0.000	95	1222524	5.00	4.91	
108 4-Chlorotoluene	126	12.505	12.511	-0.006	97	381552	5.00	5.05	
109 tert-Butylbenzene	134	12.713	12.719	-0.006	91	285782	5.00	4.76	
111 1,2,4-Trimethylbenzene	105	12.755	12.755	0.000	97	1236963	5.00	4.92	
112 sec-Butylbenzene	105	12.877	12.877	0.000	94	1629696	5.00	5.13	
113 1,3-Dichlorobenzene	146	12.981	12.981	0.000	99	760070	5.00	5.06	
114 4-Isopropyltoluene	119	12.987	12.987	0.000	97	1459338	5.00	5.10	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	92	917227	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.054	13.054	0.000	95	780102	5.00	5.08	
117 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	98	565976	5.00	4.88	
118 Benzyl chloride	126	13.127	13.127	0.000	98	106470	5.00	5.42	
119 n-Butylbenzene	92	13.280	13.280	0.000	96	636345	5.00	5.01	
120 1,2-Dichlorobenzene	146	13.310	13.310	0.000	99	708066	5.00	5.17	
122 1,2-Dibromo-3-Chloropropane	155	13.853	13.853	0.000	90	44661	5.00	5.75	
123 1,3,5-Trichlorobenzene	180	13.981	13.981	0.000	97	584017	5.00	5.20	
124 1,2,4-Trichlorobenzene	180	14.401	14.401	0.000	93	499196	5.00	5.28	
125 Hexachlorobutadiene	225	14.487	14.487	0.000	95	220704	5.00	5.15	
126 Naphthalene	128	14.584	14.584	0.000	97	850979	5.00	5.26	
127 1,2,3-Trichlorobenzene	180	14.725	14.724	0.001	95	432269	5.00	5.22	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
134 Isopropyl alcohol	45		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_00046	Amount Added:	12.50	Units: uL	
MSV_LCS_ACROL_00050	Amount Added:	12.50	Units: uL	
MSV_QC_Gas826_00071	Amount Added:	12.50	Units: uL	
MSV_LCS_EE_00002	Amount Added:	12.50	Units: uL	
MSV_LCS_ETBR_00001	Amount Added:	12.50	Units: uL	
MSV_LLcentISS_00004	Amount Added:	5.00	Units: uL	Run Reagent

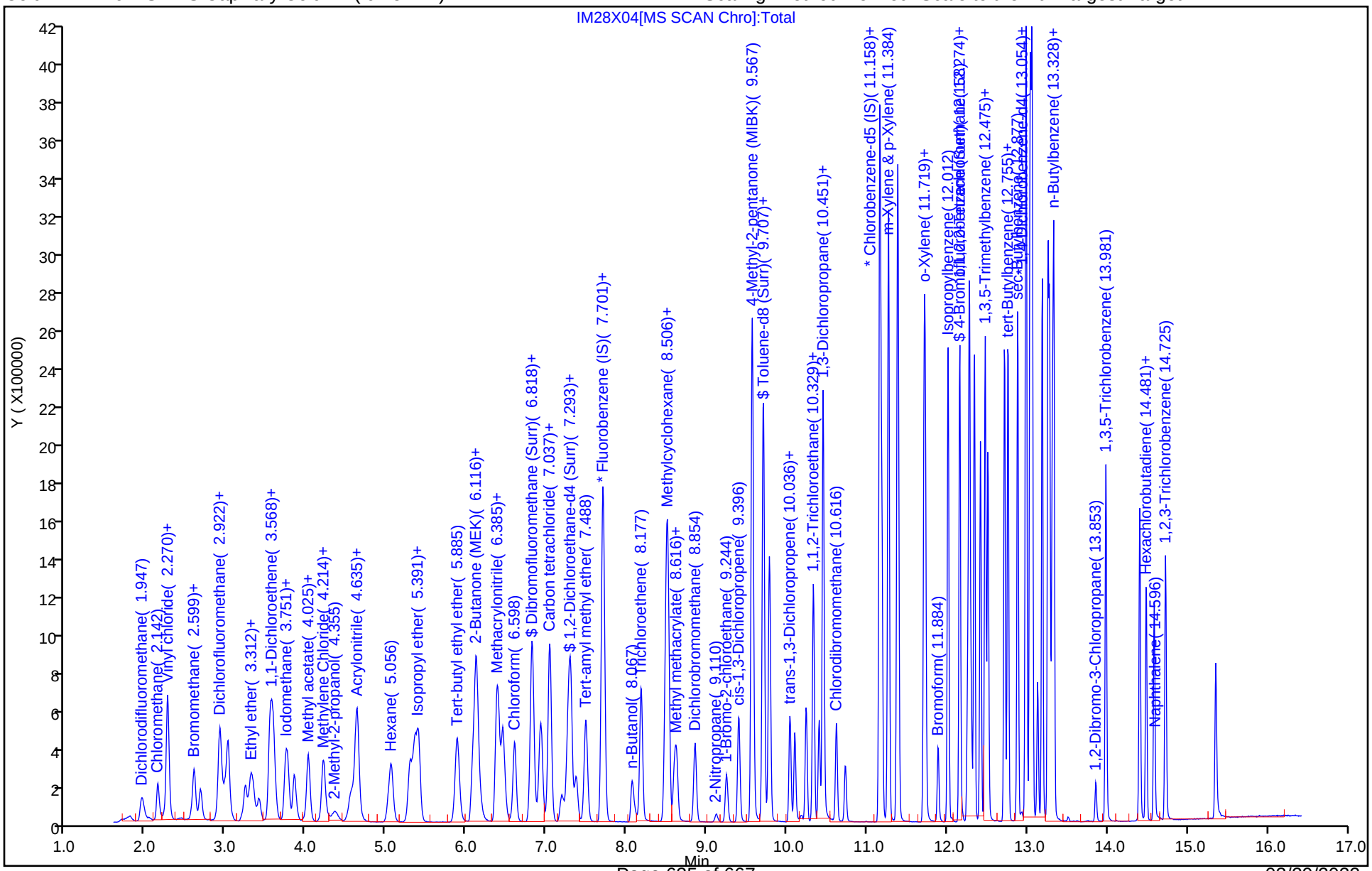
Report Date: 28-Mar-2022 10:31:05 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X04.D

Injection Date:	28-Mar-2022 10:05:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	LCSD			Worklist Smp#:	5
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X04.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 28-Mar-2022 10:05:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053457-005
Misc. Info.: LCSD
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 10:30:55 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1632

First Level Reviewer: kephartk Date: 28-Mar-2022 10:30:05

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.2	101.72
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	104.88
$ 75 Toluene-d8 (Surr)	10.0	10.1	101.35
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.40	94.02

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

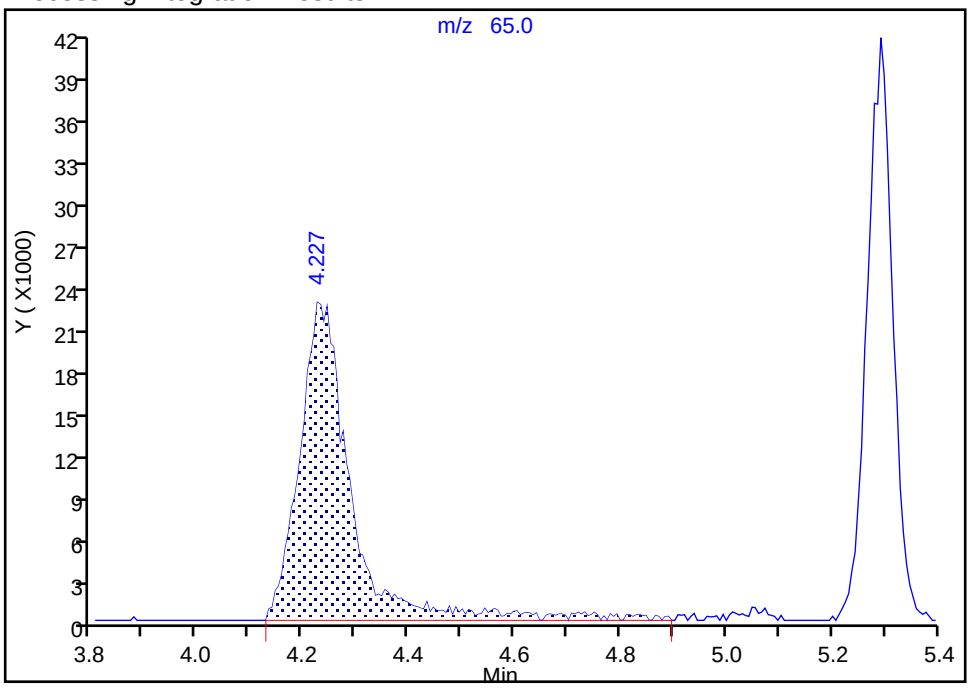
Data File: \\chromfs\Lancaster\ChromData\19930\20220328-53457.b\IM28X04.D
Injection Date: 28-Mar-2022 10:05:30 Instrument ID: 19930
Lims ID: LCSD
Client ID:
Operator ID: KNK41612 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

* 24 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

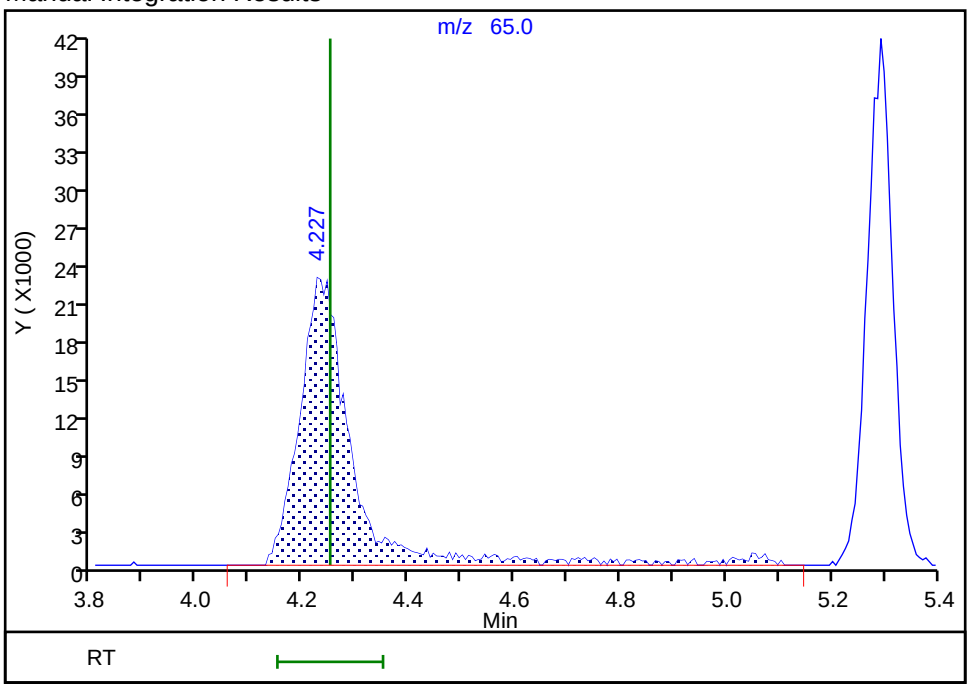
Processing Integration Results

RT: 4.23
Area: 152481
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 4.23
Area: 156791
Amount: 50.000000
Amount Units: ug/l



Reviewer: kephartk, 28-Mar-2022 10:29:28
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MS Lab Sample ID: 410-77437-6 MS

Matrix: Water Lab File ID: IM27X18.D

Analysis Method: 8260D Date Collected: 03/24/2022 11:30

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 14:52

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.30		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.43		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	5.22		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.31		0.50	0.060
75-34-3	1,1-Dichloroethane	4.95		0.50	0.070
75-35-4	1,1-Dichloroethene	5.82		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	5.42		0.50	0.060
107-06-2	1,2-Dichloroethane	4.89		0.50	0.050
78-87-5	1,2-Dichloropropane	4.93		0.50	0.060
78-93-3	2-Butanone (MEK)	52.7		5.0	0.60
591-78-6	2-Hexanone	54.0		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	51.2		5.0	0.70
67-64-1	Acetone	51.0		5.0	0.90
71-43-2	Benzene	5.06		0.50	0.050
74-97-5	Bromochloromethane	5.40		0.50	0.050
75-27-4	Bromodichloromethane	5.07		0.50	0.050
75-25-2	Bromoform	5.37		1.0	0.30
74-83-9	Bromomethane	4.78		0.50	0.070
75-15-0	Carbon disulfide	5.69		1.0	0.060
56-23-5	Carbon tetrachloride	5.42		0.50	0.070
108-90-7	Chlorobenzene	5.17		0.50	0.060
75-00-3	Chloroethane	4.82		0.50	0.070
67-66-3	Chloroform	5.21		0.50	0.090
74-87-3	Chloromethane	4.36		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	6.87		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.73		0.50	0.050
124-48-1	Dibromochloromethane	5.27		0.50	0.070
100-41-4	Ethylbenzene	5.09		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.95		0.50	0.050
75-09-2	Methylene Chloride	5.12		0.50	0.070
100-42-5	Styrene	5.05		0.50	0.050
127-18-4	Tetrachloroethene	12.0		0.50	0.060
108-88-3	Toluene	5.11		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	5.19		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	5.19		0.50	0.060
79-01-6	Trichloroethene	6.76		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MS Lab Sample ID: 410-77437-6 MS

Matrix: Water Lab File ID: IM27X18.D

Analysis Method: 8260D Date Collected: 03/24/2022 11:30

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 14:52

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.45		0.50	0.10
1330-20-7	Xylenes, Total	15.3		1.0	0.15

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)	104		80-120
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X18.D
Lims ID: 410-77437-A-6 MS
Client ID: HD-COD-SW-15-0/1-0
Sample Type: MS
Inject. Date: 27-Mar-2022 14:52:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-019
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 09:55:11 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 09:55:11

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1	Dichlorodifluoromethane	85	1.959	1.959	0.000	99	346944	5.00	5.08	
4	Chloromethane	50	2.160	2.154	0.006	99	306706	5.00	4.36	
5	Vinyl chloride	62	2.270	2.270	0.000	98	330678	5.00	4.45	
6	Butadiene	39	2.282	2.276	0.006	92	320500	5.00	4.41	
7	Bromomethane	94	2.611	2.605	0.006	92	294571	5.00	4.78	
8	Chloroethane	64	2.690	2.684	0.006	99	217890	5.00	4.82	
9	Dichlorofluoromethane	67	2.928	2.928	0.000	97	574433	5.00	5.05	
10	Trichlorofluoromethane	101	2.946	2.934	0.012	94	598555	5.00	5.42	
11	Ethyl ether	59	3.245	3.245	0.000	89	172838	4.98	5.66	
12	1,2-Dichloro-1,1,2-trifluoroetha	67	3.330	3.318	0.012	88	321584	5.00	5.07	
13	Acrolein	56	3.422	3.416	0.006	98	180984	37.5	28.5	
14	1,1-Dichloroethene	96	3.562	3.556	0.006	96	279453	5.00	5.82	
15	Acetone	43	3.592	3.586	0.006	100	437649	62.6	51.0	
16	112TCTFE	101	3.599	3.593	0.005	86	314730	5.00	6.25	
17	Iodomethane	142	3.757	3.751	0.006	99	571268	5.00	5.81	
18	Ethyl bromide	108	3.781	3.775	0.006	99	231623	5.00	5.05	
19	Carbon disulfide	76	3.861	3.855	0.006	100	612925	5.00	5.69	
21	Methyl acetate	43	4.013	4.007	0.006	96	88623	5.00	4.19	
22	3-Chloro-1-propene	41	4.037	4.031	0.006	85	321313	5.00	4.72	
23	Methylene Chloride	84	4.226	4.214	0.012	89	257113	5.00	5.12	
* 24	t-Butyl alcohol-d10 (IS)	65	4.251	4.239	0.012	97	158188	50.0	50.0	
25	2-Methyl-2-propanol	59	4.367	4.361	0.006	98	171375	50.0	54.1	
26	Acrylonitrile	53	4.562	4.556	0.006	99	234792	25.0	23.2	
27	Methyl tert-butyl ether	73	4.635	4.623	0.012	94	620550	5.00	4.95	
28	trans-1,2-Dichloroethene	96	4.647	4.641	0.006	96	282295	5.00	5.19	
29	Hexane	57	5.068	5.056	0.012	91	347816	5.00	5.27	
31	1,1-Dichloroethane	63	5.299	5.300	-0.001	96	461207	5.00	4.95	
32	Isopropyl ether	45	5.360	5.361	0.000	91	659087	5.00	4.53	
33	2-Chloro-1,3-butadiene	53	5.409	5.403	0.006	91	388801	5.00	5.12	
34	Tert-butyl ethyl ether	59	5.885	5.885	0.000	96	695349	5.00	4.70	
36	2-Butanone (MEK)	43	6.092	6.080	0.012	99	783602	62.6	52.7	
37	cis-1,2-Dichloroethene	96	6.129	6.123	0.005	79	427065	5.00	6.87	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 2,2-Dichloropropane	77	6.141	6.135	0.006	88	446051	5.00	5.16	
40 Propionitrile	54	6.177	6.171	0.006	98	126065	37.5	33.1	
42 Methacrylonitrile	67	6.391	6.385	0.006	88	492096	37.5	32.3	
43 Chlorobromomethane	128	6.458	6.458	0.000	83	154075	5.00	5.40	
44 Tetrahydrofuran	71	6.476	6.470	0.006	81	99570	25.0	23.7	
45 Chloroform	83	6.604	6.598	0.006	93	523051	5.00	5.21	
$ 46 Dibromofluoromethane (Surr)	113	6.817	6.811	0.006	94	515783	10.0	10.4	
47 1,1,1-Trichloroethane	97	6.830	6.830	0.000	97	528261	5.00	5.43	
48 Cyclohexane	56	6.933	6.927	0.006	88	423974	5.00	5.18	
51 1,1-Dichloropropene	75	7.043	7.037	0.006	93	387115	5.00	5.16	
50 Carbon tetrachloride	117	7.049	7.043	0.006	96	487501	5.00	5.42	
52 Isobutyl alcohol	41	7.195	7.183	0.012	90	129556	125.1	121.3	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.269	7.275	-0.006	85	94239	10.0	10.7	
54 Benzene	78	7.299	7.299	0.000	96	1091661	5.00	5.06	
56 1,2-Dichloroethane	62	7.372	7.366	0.006	98	293851	5.00	4.89	
57 Tert-amyl methyl ether	73	7.494	7.488	0.006	98	659764	5.00	4.77	
* 58 Fluorobenzene (IS)	96	7.701	7.702	-0.001	99	1829943	10.0	10.0	
59 n-Heptane	43	7.720	7.714	0.006	88	342934	5.00	4.86	
60 n-Butanol	56	8.073	8.061	0.012	89	220053	250.2	260.4	
61 Trichloroethene	95	8.183	8.177	0.006	94	418701	5.00	6.76	
62 Methylcyclohexane	83	8.494	8.494	0.000	91	533493	5.00	5.40	
63 1,2-Dichloropropane	63	8.512	8.512	0.000	76	254821	5.00	4.93	
64 Methyl methacrylate	69	8.598	8.592	0.006	83	124204	5.00	4.31	
65 1,4-Dioxane	88	8.610	8.604	0.006	32	35498	125.1	163.0	M
66 Dibromomethane	93	8.622	8.616	0.006	89	143849	5.00	5.03	
68 Dichlorobromomethane	83	8.854	8.854	0.000	99	345849	5.00	5.07	
69 2-Nitropropane	41	9.128	9.116	0.012	98	35617	5.00	3.98	
72 1-Bromo-2-chloroethane	63	9.250	9.244	0.006	98	259593	5.00	5.31	
73 cis-1,3-Dichloropropene	75	9.396	9.396	0.000	95	380230	5.00	4.73	
74 4-Methyl-2-pentanone (MIBK)	43	9.567	9.567	0.000	96	2012945	62.6	51.2	
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1833227	10.0	10.1	
76 Toluene	92	9.780	9.780	0.000	98	721584	5.00	5.11	
78 trans-1,3-Dichloropropene	75	10.036	10.036	0.000	93	329288	5.00	5.19	
79 Ethyl methacrylate	69	10.097	10.097	0.000	86	247213	5.00	5.03	
80 1,1,2-Trichloroethane	97	10.237	10.238	-0.001	91	205667	5.00	5.31	
81 Tetrachloroethene	166	10.329	10.329	0.000	98	976564	5.00	12.0	
82 1,3-Dichloropropane	76	10.402	10.402	0.000	88	322143	5.00	5.18	
83 2-Hexanone	43	10.451	10.451	0.000	96	1426576	62.6	54.0	
85 Chlorodibromomethane	129	10.615	10.616	-0.001	89	276777	5.00	5.27	
86 Ethylene Dibromide	107	10.731	10.725	0.006	99	203574	5.00	5.42	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	84	1496832	10.0	10.0	
88 1-Chlorohexane	91	11.164	11.164	0.000	93	426332	5.00	4.98	
90 Chlorobenzene	112	11.182	11.183	-0.001	97	864073	5.00	5.17	
91 1,1,1,2-Tetrachloroethane	131	11.268	11.268	0.000	94	327358	5.00	5.30	
92 Ethylbenzene	91	11.268	11.268	0.000	98	1420847	5.00	5.09	
93 m-Xylene & p-Xylene	106	11.384	11.384	0.000	99	1175837	10.0	10.3	
94 o-Xylene	106	11.713	11.713	0.000	96	562667	5.00	5.00	
95 Styrene	104	11.731	11.725	0.006	95	885538	5.00	5.05	
96 Bromoform	173	11.890	11.884	0.006	98	173789	5.00	5.37	
97 Isopropylbenzene	105	12.012	12.012	0.000	95	1523950	5.00	5.18	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	667103	10.0	9.44	
101 1,1,2,2-Tetrachloroethane	83	12.255	12.256	-0.001	95	251034	5.00	5.22	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 Bromobenzene	156	12.274	12.274	0.000	92	410093	5.00	5.37	
103 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	92	272658	25.0	19.2	
104 1,2,3-Trichloropropane	110	12.298	12.298	0.000	83	75060	5.00	5.28	
105 N-Propylbenzene	91	12.341	12.341	0.000	98	1698096	5.00	5.10	
106 2-Chlorotoluene	126	12.414	12.414	0.000	98	382178	5.00	5.22	
107 1,3,5-Trimethylbenzene	105	12.475	12.475	0.000	94	1229555	5.00	4.99	
108 4-Chlorotoluene	126	12.511	12.505	0.006	96	388965	5.00	5.20	
109 tert-Butylbenzene	134	12.719	12.719	0.000	91	293971	5.00	4.95	
111 1,2,4-Trimethylbenzene	105	12.755	12.755	0.000	97	1247217	5.00	5.02	
112 sec-Butylbenzene	105	12.877	12.877	0.000	94	1645902	5.00	5.23	
113 1,3-Dichlorobenzene	146	12.981	12.981	0.000	98	764533	5.00	5.14	
114 4-Isopropyltoluene	119	12.987	12.987	0.000	97	1465370	5.00	5.17	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	92	908011	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.054	13.054	0.000	96	781365	5.00	5.14	
117 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	98	568123	5.00	4.94	
118 Benzyl chloride	126	13.133	13.127	0.006	98	101447	5.00	5.22	
119 n-Butylbenzene	92	13.280	13.280	0.000	97	635488	5.00	5.05	
120 1,2-Dichlorobenzene	146	13.310	13.310	0.000	99	706296	5.00	5.21	
122 1,2-Dibromo-3-Chloropropane	155	13.859	13.853	0.006	89	44601	5.00	5.80	
123 1,3,5-Trichlorobenzene	180	13.981	13.981	0.000	97	578453	5.00	5.21	
124 1,2,4-Trichlorobenzene	180	14.401	14.401	0.000	94	483431	5.00	5.16	
125 Hexachlorobutadiene	225	14.487	14.487	0.000	94	224261	5.00	5.28	
126 Naphthalene	128	14.584	14.584	0.000	96	828378	5.00	5.17	
127 1,2,3-Trichlorobenzene	180	14.724	14.725	-0.001	95	422969	5.00	5.16	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	
204 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_EE_00002	Amount Added:	5.38	Units: uL	
MSV_LCS_ETBR_00001	Amount Added:	5.38	Units: uL	
MSV_LCS_VOC#1_00045	Amount Added:	5.38	Units: uL	
MSV_LCS_ACROL_00049	Amount Added:	5.38	Units: uL	
MSV_QC_Gas826_00071	Amount Added:	5.38	Units: uL	
MSV_LLcentISS_00004	Amount Added:	5.00	Units: uL	Run Reagent

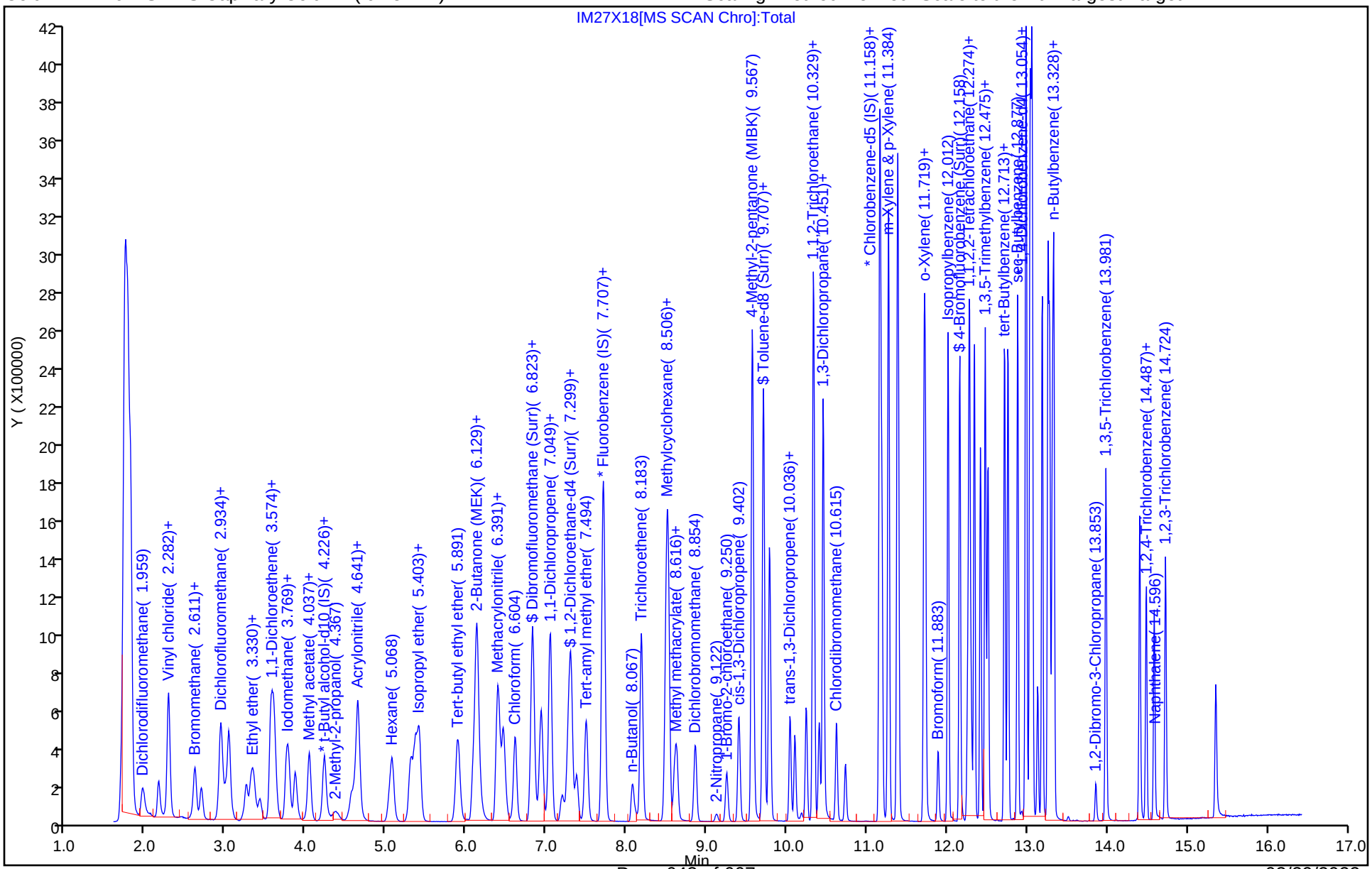
Report Date: 28-Mar-2022 09:55:12 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X18.D

Injection Date:	27-Mar-2022 14:52:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	410-77437-A-6 MS			Worklist Smp#:	19
Client ID:	HD-COD-SW-15-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X18.D				
Lims ID:	410-77437-A-6 MS				
Client ID:	HD-COD-SW-15-0/1-0				
Sample Type:	MS				
Inject. Date:	27-Mar-2022 14:52:30	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0053417-019				
Operator ID:	KNK41612	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	28-Mar-2022 09:55:11	Calib Date:	15-Mar-2022 03:22:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1659				

First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 09:55:11

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.4	104.12
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.7	106.80
$ 75 Toluene-d8 (Surr)	10.0	10.1	100.64
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.44	94.44

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MSD Lab Sample ID: 410-77437-6 MSD

Matrix: Water Lab File ID: IM27X19.D

Analysis Method: 8260D Date Collected: 03/24/2022 11:30

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 15:13

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.44		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.45		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	5.26		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.42		0.50	0.060
75-34-3	1,1-Dichloroethane	4.99		0.50	0.070
75-35-4	1,1-Dichloroethene	5.88		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	5.51		0.50	0.060
107-06-2	1,2-Dichloroethane	4.92		0.50	0.050
78-87-5	1,2-Dichloropropane	5.08		0.50	0.060
78-93-3	2-Butanone (MEK)	54.3		5.0	0.60
591-78-6	2-Hexanone	56.4		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	52.6		5.0	0.70
67-64-1	Acetone	55.4		5.0	0.90
71-43-2	Benzene	5.09		0.50	0.050
74-97-5	Bromochloromethane	5.36		0.50	0.050
75-27-4	Bromodichloromethane	5.20		0.50	0.050
75-25-2	Bromoform	5.57		1.0	0.30
74-83-9	Bromomethane	5.00		0.50	0.070
75-15-0	Carbon disulfide	5.77		1.0	0.060
56-23-5	Carbon tetrachloride	5.47		0.50	0.070
108-90-7	Chlorobenzene	5.30		0.50	0.060
75-00-3	Chloroethane	5.14		0.50	0.070
67-66-3	Chloroform	5.29		0.50	0.090
74-87-3	Chloromethane	4.44		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	6.92		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.81		0.50	0.050
124-48-1	Dibromochloromethane	5.36		0.50	0.070
100-41-4	Ethylbenzene	5.24		0.50	0.060
1634-04-4	Methyl tert-butyl ether	5.02		0.50	0.050
75-09-2	Methylene Chloride	5.22		0.50	0.070
100-42-5	Styrene	5.18		0.50	0.050
127-18-4	Tetrachloroethene	12.3		0.50	0.060
108-88-3	Toluene	5.21		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	5.15		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	5.27		0.50	0.060
79-01-6	Trichloroethene	6.83		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-77437-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MSD Lab Sample ID: 410-77437-6 MSD

Matrix: Water Lab File ID: IM27X19.D

Analysis Method: 8260D Date Collected: 03/24/2022 11:30

Sample wt/vol: 25(mL) Date Analyzed: 03/27/2022 15:13

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 237993 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.71		0.50	0.10
1330-20-7	Xylenes, Total	15.6		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	104		80-120
2037-26-5	Toluene-d8 (Surr)	102		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X19.D
Lims ID: 410-77437-A-6 MSD
Client ID: HD-COD-SW-15-0/1-0
Sample Type: MSD
Inject. Date: 27-Mar-2022 15:13:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0053417-020
Operator ID: KNK41612 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 28-Mar-2022 09:56:34 Calib Date: 15-Mar-2022 03:22:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1659

First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 09:56:34

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1	Dichlorodifluoromethane	85	1.959	1.959	0.000	99	357799	5.00	5.26	
4	Chloromethane	50	2.154	2.154	0.000	98	311490	5.00	4.44	
5	Vinyl chloride	62	2.270	2.270	0.000	98	348843	5.00	4.71	
6	Butadiene	39	2.276	2.276	0.000	91	347656	5.00	4.80	
7	Bromomethane	94	2.605	2.605	0.000	92	307130	5.00	5.00	
8	Chloroethane	64	2.690	2.684	0.006	99	231822	5.00	5.14	
9	Dichlorofluoromethane	67	2.928	2.928	0.000	97	594794	5.00	5.24	
10	Trichlorofluoromethane	101	2.934	2.934	0.000	96	617454	5.00	5.60	
11	Ethyl ether	59	3.245	3.245	0.000	88	183081	4.98	6.02	
12	1,2-Dichloro-1,1,2-trifluoroetha	67	3.324	3.318	0.006	87	326886	5.00	5.16	
13	Acrolein	56	3.422	3.416	0.006	98	183266	37.5	29.7	
14	1,1-Dichloroethene	96	3.556	3.556	0.000	96	281628	5.00	5.88	
15	Acetone	43	3.587	3.586	0.001	100	461506	62.6	55.4	
16	112TCTFE	101	3.599	3.593	0.006	86	315601	5.00	6.28	
17	Iodomethane	142	3.751	3.751	0.000	99	577547	5.00	5.89	
18	Ethyl bromide	108	3.782	3.775	0.007	99	230529	5.00	5.04	
19	Carbon disulfide	76	3.861	3.855	0.006	100	619506	5.00	5.77	
21	Methyl acetate	43	4.007	4.007	0.000	98	85748	5.00	4.18	
22	3-Chloro-1-propene	41	4.038	4.031	0.007	86	329580	5.00	4.86	
23	Methylene Chloride	84	4.227	4.214	0.013	88	261089	5.00	5.22	
* 24	t-Butyl alcohol-d10 (IS)	65	4.239	4.239	0.000	97	153603	50.0	50.0	
25	2-Methyl-2-propanol	59	4.361	4.361	0.000	98	162714	50.0	52.9	
26	Acrylonitrile	53	4.562	4.556	0.006	97	230322	25.0	23.5	
27	Methyl tert-butyl ether	73	4.629	4.623	0.006	94	627355	5.00	5.02	
28	trans-1,2-Dichloroethene	96	4.641	4.641	0.000	96	279391	5.00	5.15	
29	Hexane	57	5.062	5.056	0.006	91	358402	5.00	5.44	
31	1,1-Dichloroethane	63	5.300	5.300	0.000	96	463450	5.00	4.99	
32	Isopropyl ether	45	5.361	5.361	0.001	91	672564	5.00	4.64	
33	2-Chloro-1,3-butadiene	53	5.409	5.403	0.006	92	395783	5.00	5.23	
34	Tert-butyl ethyl ether	59	5.891	5.885	0.006	96	703712	5.00	4.77	
36	2-Butanone (MEK)	43	6.092	6.080	0.012	99	783663	62.6	54.3	
37	cis-1,2-Dichloroethene	96	6.129	6.123	0.006	81	429418	5.00	6.92	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
38 2,2-Dichloropropane	77	6.135	6.135	0.000	87	452186	5.00	5.25	
40 Propionitrile	54	6.184	6.171	0.013	98	134927	37.5	36.5	
42 Methacrylonitrile	67	6.385	6.385	0.000	90	482642	37.5	32.7	
43 Chlorobromomethane	128	6.458	6.458	0.000	84	152523	5.00	5.36	
44 Tetrahydrofuran	71	6.470	6.470	0.000	86	98269	25.0	24.1	
45 Chloroform	83	6.604	6.598	0.006	93	529704	5.00	5.29	
$ 46 Dibromofluoromethane (Surr)	113	6.818	6.811	0.007	94	511598	10.0	10.4	
47 1,1,1-Trichloroethane	97	6.830	6.830	0.000	97	528677	5.00	5.45	
48 Cyclohexane	56	6.927	6.927	0.000	88	433800	5.00	5.32	
51 1,1-Dichloropropene	75	7.043	7.037	0.006	93	395321	5.00	5.28	
50 Carbon tetrachloride	117	7.043	7.043	0.000	96	491348	5.00	5.47	
52 Isobutyl alcohol	41	7.189	7.183	0.006	92	126966	125.1	122.4	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.269	7.275	-0.006	87	93501	10.0	10.6	
54 Benzene	78	7.305	7.299	0.006	97	1094649	5.00	5.09	
56 1,2-Dichloroethane	62	7.366	7.366	0.000	98	294989	5.00	4.92	
57 Tert-amyl methyl ether	73	7.494	7.488	0.006	98	662060	5.00	4.80	
* 58 Fluorobenzene (IS)	96	7.702	7.702	0.000	99	1824848	10.0	10.0	
59 n-Heptane	43	7.714	7.714	0.000	88	350396	5.00	4.98	
60 n-Butanol	56	8.073	8.061	0.012	89	220196	250.2	268.4	
61 Trichloroethene	95	8.183	8.177	0.006	94	422106	5.00	6.83	
62 Methylcyclohexane	83	8.488	8.494	-0.006	90	538150	5.00	5.46	
63 1,2-Dichloropropane	63	8.506	8.512	-0.006	87	261937	5.00	5.08	
64 Methyl methacrylate	69	8.592	8.592	0.000	87	122623	5.00	4.38	
65 1,4-Dioxane	88	8.604	8.604	0.000	32	33482	125.1	158.4	M
66 Dibromomethane	93	8.622	8.616	0.006	88	148920	5.00	5.22	
68 Dichlorobromomethane	83	8.854	8.854	0.000	99	353955	5.00	5.20	
69 2-Nitropropane	41	9.128	9.116	0.012	97	34763	5.00	4.00	
72 1-Bromo-2-chloroethane	63	9.244	9.244	0.000	98	261294	5.00	5.36	
73 cis-1,3-Dichloropropene	75	9.396	9.396	0.000	95	385216	5.00	4.81	
74 4-Methyl-2-pentanone (MIBK)	43	9.567	9.567	0.000	96	2009757	62.6	52.6	
$ 75 Toluene-d8 (Surr)	98	9.707	9.707	0.000	93	1849600	10.0	10.2	
76 Toluene	92	9.780	9.780	0.000	98	732712	5.00	5.21	
78 trans-1,3-Dichloropropene	75	10.036	10.036	0.000	93	332906	5.00	5.27	
79 Ethyl methacrylate	69	10.097	10.097	0.000	87	255708	5.00	5.22	
80 1,1,2-Trichloroethane	97	10.238	10.238	0.000	91	208574	5.00	5.42	
81 Tetrachloroethene	166	10.329	10.329	0.000	97	992673	5.00	12.3	
82 1,3-Dichloropropane	76	10.402	10.402	0.000	89	323377	5.00	5.22	
83 2-Hexanone	43	10.451	10.451	0.000	96	1447577	62.6	56.4	
85 Chlorodibromomethane	129	10.616	10.616	0.000	88	279880	5.00	5.36	
86 Ethylene Dibromide	107	10.731	10.725	0.006	97	206128	5.00	5.51	
* 87 Chlorobenzene-d5 (IS)	117	11.158	11.158	0.000	83	1489884	10.0	10.0	
88 1-Chlorohexane	91	11.164	11.164	0.000	93	437326	5.00	5.14	
90 Chlorobenzene	112	11.183	11.183	0.000	98	881353	5.00	5.30	
91 1,1,1,2-Tetrachloroethane	131	11.262	11.268	-0.006	93	334048	5.00	5.44	
92 Ethylbenzene	91	11.268	11.268	0.000	98	1458494	5.00	5.24	
93 m-Xylene & p-Xylene	106	11.384	11.384	0.000	99	1194798	10.0	10.5	
94 o-Xylene	106	11.713	11.713	0.000	96	575265	5.00	5.13	
95 Styrene	104	11.725	11.725	0.000	95	903392	5.00	5.18	
96 Bromoform	173	11.890	11.884	0.006	98	179156	5.00	5.57	
97 Isopropylbenzene	105	12.012	12.012	0.000	95	1551158	5.00	5.30	
$ 100 4-Bromofluorobenzene (Surr)	95	12.158	12.158	0.000	96	672527	10.0	9.56	
101 1,1,2,2-Tetrachloroethane	83	12.256	12.256	0.000	95	255760	5.00	5.26	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
102 Bromobenzene	156	12.274	12.274	0.000	92	415199	5.00	5.37	
103 trans-1,4-Dichloro-2-butene	53	12.280	12.280	0.000	93	275134	25.0	20.0	
104 1,2,3-Trichloropropane	110	12.304	12.298	0.006	84	75201	5.00	5.23	
105 N-Propylbenzene	91	12.341	12.341	0.000	98	1760032	5.00	5.22	
106 2-Chlorotoluene	126	12.414	12.414	0.000	98	389774	5.00	5.26	
107 1,3,5-Trimethylbenzene	105	12.475	12.475	0.000	94	1267148	5.00	5.08	
108 4-Chlorotoluene	126	12.512	12.505	0.007	96	394379	5.00	5.21	
109 tert-Butylbenzene	134	12.713	12.719	-0.006	91	303603	5.00	5.05	
111 1,2,4-Trimethylbenzene	105	12.755	12.755	0.000	97	1270517	5.00	5.05	
112 sec-Butylbenzene	105	12.877	12.877	0.000	94	1677634	5.00	5.27	
113 1,3-Dichlorobenzene	146	12.981	12.981	0.000	98	775639	5.00	5.16	
114 4-Isopropyltoluene	119	12.987	12.987	0.000	97	1508873	5.00	5.27	
* 115 1,4-Dichlorobenzene-d4	152	13.036	13.036	0.000	93	918125	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.054	13.054	0.000	95	785289	5.00	5.11	
117 1,2,3-Trimethylbenzene	120	13.060	13.060	0.000	98	588002	5.00	5.06	
118 Benzyl chloride	126	13.127	13.127	0.000	98	101922	5.00	5.19	
119 n-Butylbenzene	92	13.280	13.280	0.000	96	667558	5.00	5.25	
120 1,2-Dichlorobenzene	146	13.310	13.310	0.000	99	730725	5.00	5.33	
122 1,2-Dibromo-3-Chloropropane	155	13.853	13.853	0.000	91	43844	5.00	5.64	
123 1,3,5-Trichlorobenzene	180	13.981	13.981	0.000	97	597628	5.00	5.32	
124 1,2,4-Trichlorobenzene	180	14.401	14.401	0.000	94	504189	5.00	5.33	
125 Hexachlorobutadiene	225	14.487	14.487	0.000	94	229714	5.00	5.35	
126 Naphthalene	128	14.584	14.584	0.000	96	862981	5.00	5.33	
127 1,2,3-Trichlorobenzene	180	14.725	14.725	0.000	95	438378	5.00	5.29	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	
204 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_EE_00002	Amount Added:	5.38	Units: uL	
MSV_LCS_ETBR_00001	Amount Added:	5.38	Units: uL	
MSV_LCS_VOC#1_00045	Amount Added:	5.38	Units: uL	
MSV_LCS_ACROL_00049	Amount Added:	5.38	Units: uL	
MSV_QC_Gas826_00071	Amount Added:	5.38	Units: uL	
MSV_LLcentISS_00004	Amount Added:	5.00	Units: uL	Run Reagent

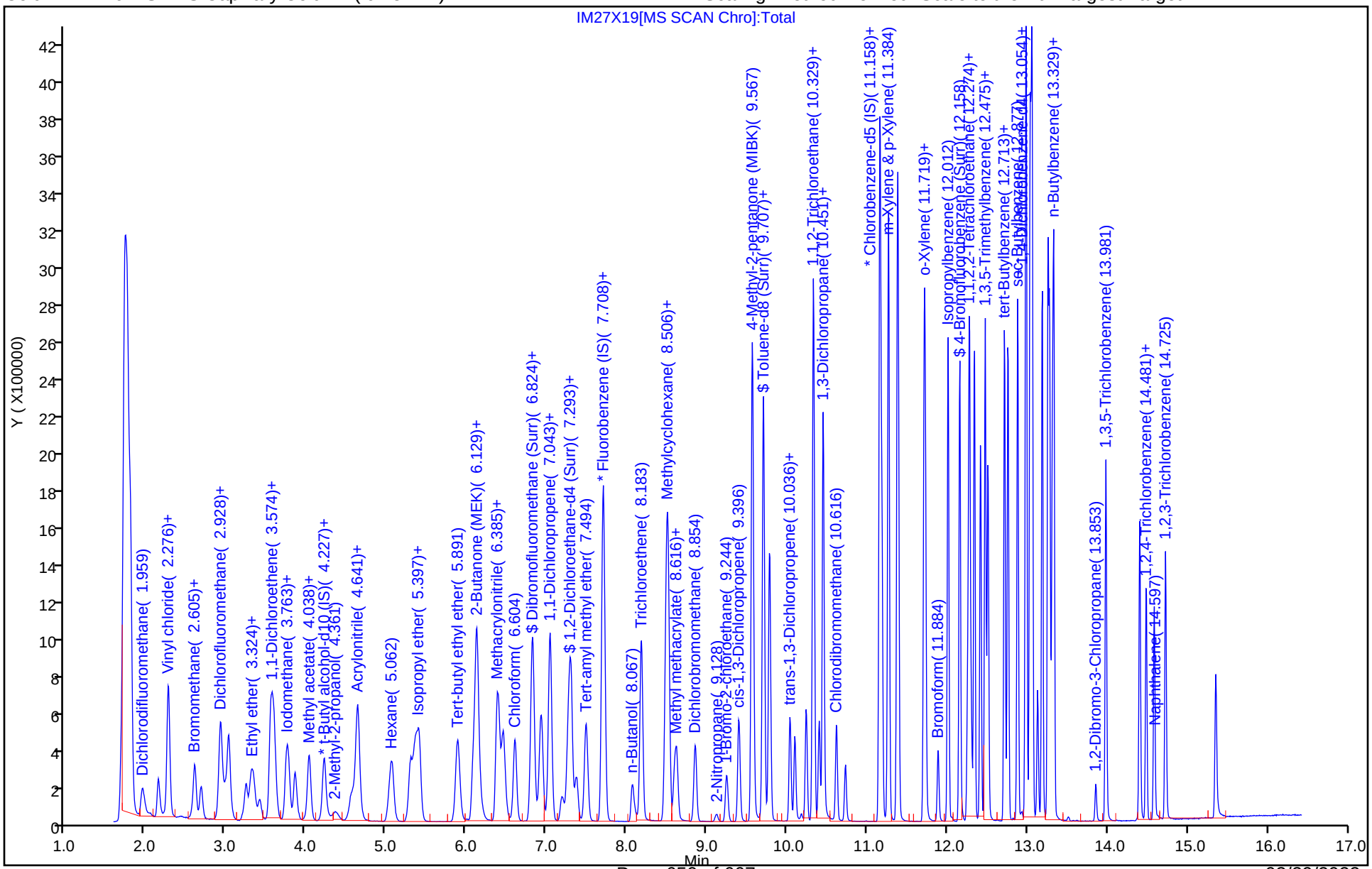
Report Date: 28-Mar-2022 09:56:34 Chrom Revision: 2.3 18-Mar-2022 09:07:22

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X19.D

Injection Date:	27-Mar-2022 15:13:30	Instrument ID:	19930	Operator ID:	KNK41612
Lims ID:	410-77437-A-6 MSD			Worklist Smp#:	20
Client ID:	HD-COD-SW-15-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\IM27X19.D				
Lims ID:	410-77437-A-6 MSD				
Client ID:	HD-COD-SW-15-0/1-0				
Sample Type:	MSD				
Inject. Date:	27-Mar-2022 15:13:30	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0053417-020				
Operator ID:	KNK41612	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20220327-53417.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	28-Mar-2022 09:56:34	Calib Date:	15-Mar-2022 03:22:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20220314-52441.b\IM14I37.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1659				

First Level Reviewer: kaewrungrueangp Date: 28-Mar-2022 09:56:34

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.4	103.57
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.6	106.26
$ 75 Toluene-d8 (Surr)	10.0	10.2	102.01
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.56	95.65

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-77437-1

SDG No.:

Instrument ID: 19930 Start Date: 03/14/2022 21:24

Analysis Batch Number: 233459 End Date: 03/15/2022 03:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-233459/1		03/14/2022 21:24	1	IM14T01.D	R-624SilMS 30m 0.25(mm)
IC 410-233459/3		03/14/2022 22:05	1		R-624SilMS 30m 0.25(mm)
IC 410-233459/4		03/14/2022 22:26	1		R-624SilMS 30m 0.25(mm)
IC 410-233459/5		03/14/2022 22:47	1		R-624SilMS 30m 0.25(mm)
IC 410-233459/6		03/14/2022 23:08	1		R-624SilMS 30m 0.25(mm)
IC 410-233459/7		03/14/2022 23:29	1		R-624SilMS 30m 0.25(mm)
IC 410-233459/8		03/14/2022 23:50	1		R-624SilMS 30m 0.25(mm)
IC 410-233459/9		03/15/2022 00:12	1		R-624SilMS 30m 0.25(mm)
ICV 410-233459/10		03/15/2022 00:33	1		R-624SilMS 30m 0.25(mm)
IC 410-233459/12		03/15/2022 01:15	1	IM14I31.D	R-624SilMS 30m 0.25(mm)
ICIS 410-233459/13		03/15/2022 01:36	1	IM14I32.D	R-624SilMS 30m 0.25(mm)
IC 410-233459/14		03/15/2022 01:58	1	IM14I33.D	R-624SilMS 30m 0.25(mm)
IC 410-233459/15		03/15/2022 02:19	1	IM14I34.D	R-624SilMS 30m 0.25(mm)
IC 410-233459/16		03/15/2022 02:40	1	IM14I35.D	R-624SilMS 30m 0.25(mm)
IC 410-233459/17		03/15/2022 03:01	1	IM14I36.D	R-624SilMS 30m 0.25(mm)
IC 410-233459/18		03/15/2022 03:22	1	IM14I37.D	R-624SilMS 30m 0.25(mm)
ICV 410-233459/19		03/15/2022 03:43	1	IM14V01.D	R-624SilMS 30m 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-77437-1

SDG No.:

Instrument ID: 19930 Start Date: 03/27/2022 08:37

Analysis Batch Number: 237993 End Date: 03/27/2022 19:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-237993/1		03/27/2022 08:37	1	IM27T01.D	R-624SilMS 30m 0.25(mm)
CCVIS 410-237993/3		03/27/2022 09:13	1	IM27X02.D	R-624SilMS 30m 0.25(mm)
LCS 410-237993/4		03/27/2022 09:34	1	IM27X03.D	R-624SilMS 30m 0.25(mm)
LCSD 410-237993/5		03/27/2022 09:55	1	IM27X04.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		03/27/2022 10:16	1		R-624SilMS 30m 0.25(mm)
MB 410-237993/7		03/27/2022 10:37	1	IM27X06.D	R-624SilMS 30m 0.25(mm)
410-77437-14	HD-QC1-0/1-2	03/27/2022 10:59	1	IM27X07.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		03/27/2022 12:03	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		03/27/2022 12:24	1		R-624SilMS 30m 0.25(mm)
410-77437-1	HD-COD-SW-6-0/1-0	03/27/2022 12:45	1	IM27X12.D	R-624SilMS 30m 0.25(mm)
410-77437-2	HD-COD-SW-7-0/1-0	03/27/2022 13:06	1	IM27X13.D	R-624SilMS 30m 0.25(mm)
410-77437-3	HD-COD-SW-8-0/1-0	03/27/2022 13:27	1	IM27X14.D	R-624SilMS 30m 0.25(mm)
410-77437-4	HD-COD-SW-28-0/1-0	03/27/2022 13:48	1	IM27X15.D	R-624SilMS 30m 0.25(mm)
410-77437-5	HD-COD-SW-13-0/1-0	03/27/2022 14:09	1	IM27X16.D	R-624SilMS 30m 0.25(mm)
410-77437-6	HD-COD-SW-15-0/1-0	03/27/2022 14:31	1	IM27X17.D	R-624SilMS 30m 0.25(mm)
410-77437-6 MS	HD-COD-SW-15-0/1-0 MS	03/27/2022 14:52	1	IM27X18.D	R-624SilMS 30m 0.25(mm)
410-77437-6 MSD	HD-COD-SW-15-0/1-0 MSD	03/27/2022 15:13	1	IM27X19.D	R-624SilMS 30m 0.25(mm)
410-77437-7	HD-COD-SW-16-0/1-0	03/27/2022 15:56	1	IM27X21.D	R-624SilMS 30m 0.25(mm)
410-77437-8	HD-COD-SW-17-0/1-0	03/27/2022 16:17	1	IM27X22.D	R-624SilMS 30m 0.25(mm)
410-77437-9	HD-COD-SW-26-0/1-0	03/27/2022 16:38	1	IM27X23.D	R-624SilMS 30m 0.25(mm)
410-77437-10	HD-COD-SW-27-0/1-0	03/27/2022 16:59	1	IM27X24.D	R-624SilMS 30m 0.25(mm)
410-77437-11	HD-COD-SW-9-0/1-0	03/27/2022 17:20	1	IM27X25.D	R-624SilMS 30m 0.25(mm)
410-77437-12	HD-COD-SW-29-0/1-0	03/27/2022 17:41	1	IM27X26.D	R-624SilMS 30m 0.25(mm)
410-77437-13	HD-QC1-0/1-1	03/27/2022 18:02	1	IM27X27.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		03/27/2022 19:06	20		R-624SilMS 30m 0.25(mm)
ZZZZZ		03/27/2022 19:27	200		R-624SilMS 30m 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-77437-1

SDG No.:

Instrument ID: 19930 Start Date: 03/28/2022 08:48

Analysis Batch Number: 238139 End Date: 03/28/2022 19:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-238139/1		03/28/2022 08:48	1	IM28T01.D	R-624SilMS 30m 0.25(mm)
CCVIS 410-238139/3		03/28/2022 09:23	1	IM28X02.D	R-624SilMS 30m 0.25(mm)
LCS 410-238139/4		03/28/2022 09:44	1	IM28X03.D	R-624SilMS 30m 0.25(mm)
LCSD 410-238139/5		03/28/2022 10:05	1	IM28X04.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 10:26	1		R-624SilMS 30m 0.25(mm)
MB 410-238139/7		03/28/2022 10:47	1	IM28X06.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 11:09	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 11:30	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 11:51	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 12:13	50		R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 12:34	500		R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 12:55	50		R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 13:16	500		R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 13:37	5		R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 13:58	50		R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 14:19	20		R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 14:41	20		R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 15:02	20		R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 15:44	200		R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 16:06	20		R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 16:27	200		R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 16:48	20		R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 17:09	200		R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 17:30	100		R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 17:51	1000		R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 18:12	100		R-624SilMS 30m 0.25(mm)
410-77437-8 DL	HD-COD-SW-17-0/1-0 DL	03/28/2022 18:34	10	IM28X28.D	R-624SilMS 30m 0.25(mm)
410-77437-13 DL	HD-QC1-0/1-1 DL	03/28/2022 18:55	10	IM28X29.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 19:16	2000		R-624SilMS 30m 0.25(mm)
ZZZZZ		03/28/2022 19:37	100		R-624SilMS 30m 0.25(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-77437-1

SDG No.:

Batch Number: 233459 Batch Start Date: 03/14/22 21:24 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Lot#Vial	MSV_LCS_ACROL 00048	MSV_LCS_EE 00002	MSV_LCS_ETBR 00001
BFB 410-233459/1		8260D		1 uL	1 uL				
IC 410-233459/12		8260D		25 mL	25 mL	2622			
ICIS 410-233459/13		8260D		25 mL	25 mL	2622			
IC 410-233459/14		8260D		25 mL	25 mL	2622			
IC 410-233459/15		8260D		25 mL	25 mL	2622			
IC 410-233459/16		8260D		25 mL	25 mL	2622			
IC 410-233459/17		8260D		25 mL	25 mL	2622			
IC 410-233459/18		8260D		25 mL	25 mL	2622			
ICV 410-233459/19		8260D		25 mL	25 mL	2622	12.5 uL	12.5 uL	12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LCS_Penta 00013	MSV_LCS_VOC#1 00044	MSV_LL_#1_826 00038	MSV_LL_#2_826 00042	MSV_LL_GAS826 00072	MSV_LLcentISS 00004
BFB 410-233459/1		8260D							
IC 410-233459/12		8260D				25 uL	25 uL	25 uL	5 uL
ICIS 410-233459/13		8260D				10 uL	10 uL	10 uL	5 uL
IC 410-233459/14		8260D				5 uL	5 uL	5 uL	5 uL
IC 410-233459/15		8260D				2 uL	2 uL	2 uL	5 uL
IC 410-233459/16		8260D				2 uL	2 uL	2 uL	5 uL
IC 410-233459/17		8260D				2 uL	2 uL	2 uL	5 uL
IC 410-233459/18		8260D				2 uL	2 uL	2 uL	5 uL
ICV 410-233459/19		8260D		12.5 uL	12.5 uL				5 uL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-77437-1

SDG No.:

Batch Number: 233459 Batch Start Date: 03/14/22 21:24 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QC_Gas826 00070	MSV_V_BFB 00007				
BFB 410-233459/1		8260D			1 uL				
IC 410-233459/12		8260D							
ICIS 410-233459/13		8260D							
IC 410-233459/14		8260D							
IC 410-233459/15		8260D							
IC 410-233459/16		8260D							
IC 410-233459/17		8260D							
IC 410-233459/18		8260D							
ICV 410-233459/19		8260D		12.5 uL					

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-77437-1

SDG No.:

Batch Number: 237993 Batch Start Date: 03/27/22 08:37 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloCheck	Headspace	Lot#Vial
BFB 410-237993/1		8260D		1 uL	1 uL				
CCVIS 410-237993/3		8260D		25 mL	25 mL				2634
LCS 410-237993/4		8260D		25 mL	25 mL				2634
LCSD 410-237993/5		8260D		25 mL	25 mL				2634
MB 410-237993/7		8260D		25 mL	25 mL				2634
410-77437-A-14	HD-QC1-0/1-2	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-77437-A-1	HD-COD-SW-6-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-77437-A-2	HD-COD-SW-7-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-77437-A-3	HD-COD-SW-8-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-77437-A-4	HD-COD-SW-9-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-77437-A-5	HD-COD-SW-13-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-77437-A-6	HD-COD-SW-15-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-77437-A-6 MS	HD-COD-SW-15-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-77437-A-6 MSD	HD-COD-SW-15-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-77437-A-7	HD-COD-SW-16-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-77437-A-8	HD-COD-SW-17-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-77437-A-9	HD-COD-SW-26-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-77437-A-10	HD-COD-SW-27-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-77437-A-11	HD-COD-SW-28-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-77437-A-12	HD-COD-SW-29-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-77437-A-13	HD-QC1-0/1-1	8260D	T	25 mL	25 mL	<2 SU	N	N	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-77437-1

SDG No.:

Batch Number: 237993 Batch Start Date: 03/27/22 08:37 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LCS_ACROL 00049	MSV_LCS_EE 00002	MSV_LCS_ETBR 00001	MSV_LCS_VOC#1 00045	MSV_LL_#1_826 00038	MSV_LL_#2_826 00043
BFB 410-237993/1		8260D							
CCVIS 410-237993/3		8260D						20 uL	20 uL
LCS 410-237993/4		8260D		12.5 uL	12.5 uL	12.5 uL	12.5 uL		
LCSD 410-237993/5		8260D		12.5 uL	12.5 uL	12.5 uL	12.5 uL		
MB 410-237993/7		8260D							
410-77437-A-14	HD-QC1-0/1-2	8260D	T						
410-77437-A-1	HD-COD-SW-6-0/1-0	8260D	T						
410-77437-A-2	HD-COD-SW-7-0/1-0	8260D	T						
410-77437-A-3	HD-COD-SW-8-0/1-0	8260D	T						
410-77437-A-4	HD-COD-SW-9-0/1-0	8260D	T						
410-77437-A-5	HD-COD-SW-13-0/1-0	8260D	T						
410-77437-A-6	HD-COD-SW-15-0/1-0	8260D	T						
410-77437-A-6 MS	HD-COD-SW-15-0/1-0	8260D	T	5.38 uL	5.38 uL	5.38 uL	5.38 uL		
410-77437-A-6 MSD	HD-COD-SW-15-0/1-0	8260D	T	5.38 uL	5.38 uL	5.38 uL	5.38 uL		
410-77437-A-7	HD-COD-SW-16-0/1-0	8260D	T						
410-77437-A-8	HD-COD-SW-17-0/1-0	8260D	T						
410-77437-A-9	HD-COD-SW-26-0/1-0	8260D	T						
410-77437-A-10	HD-COD-SW-27-0/1-0	8260D	T						
410-77437-A-11	HD-COD-SW-28-0/1-0	8260D	T						
410-77437-A-12	HD-COD-SW-29-0/1-0	8260D	T						
410-77437-A-13	HD-QC1-0/1-1	8260D	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-77437-1

SDG No.:

Batch Number: 237993 Batch Start Date: 03/27/22 08:37 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LL_GAS826 00073	MSV_LLcentISS 00004	MSV_QC_Gas826 00071	MSV_V_BFB 00007		
BFB 410-237993/1		8260D					1 uL		
CCVIS 410-237993/3		8260D		20 uL	5 uL				
LCS 410-237993/4		8260D			5 uL	12.5 uL			
LCSD 410-237993/5		8260D			5 uL	12.5 uL			
MB 410-237993/7		8260D			5 uL				
410-77437-A-14	HD-QC1-0/1-2	8260D	T		5 uL				
410-77437-A-1	HD-COD-SW-6-0/1-0	8260D	T		5 uL				
410-77437-A-2	HD-COD-SW-7-0/1-0	8260D	T		5 uL				
410-77437-A-3	HD-COD-SW-8-0/1-0	8260D	T		5 uL				
410-77437-A-4	HD-COD-SW-9-0/1-0	8260D	T		5 uL				
410-77437-A-5	HD-COD-SW-13-0/1-0	8260D	T		5 uL				
410-77437-A-6	HD-COD-SW-15-0/1-0	8260D	T		5 uL				
410-77437-A-6 MS	HD-COD-SW-15-0/1-0	8260D	T		5 uL	5.38 uL			
410-77437-A-6 MSD	HD-COD-SW-15-0/1-0	8260D	T		5 uL	5.38 uL			
410-77437-A-7	HD-COD-SW-16-0/1-0	8260D	T		5 uL				
410-77437-A-8	HD-COD-SW-17-0/1-0	8260D	T		5 uL				
410-77437-A-9	HD-COD-SW-26-0/1-0	8260D	T		5 uL				
410-77437-A-10	HD-COD-SW-27-0/1-0	8260D	T		5 uL				
410-77437-A-11	HD-COD-SW-28-0/1-0	8260D	T		5 uL				
410-77437-A-12	HD-COD-SW-29-0/1-0	8260D	T		5 uL				
410-77437-A-13	HD-QC1-0/1-1	8260D	T		5 uL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-77437-1

SDG No.:

Batch Number: 237993 Batch Start Date: 03/27/22 08:37 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date:

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-77437-1

SDG No.:

Batch Number: 238139 Batch Start Date: 03/28/22 08:48 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloCheck	Headspace	Lot#Vial
BFB 410-238139/1		8260D		1 uL	1 uL				
CCVIS 410-238139/3		8260D		25 mL	25 mL				2634
LCS 410-238139/4		8260D		25 mL	25 mL				2634
LCSD 410-238139/5		8260D		25 mL	25 mL				2634
MB 410-238139/7		8260D		25 mL	25 mL				2634
410-77437-B-8	HD-COD-SW-17-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	2634
410-77437-B-13	HD-QC1-0/1-1	8260D	T	25 mL	25 mL	<2 SU	N	N	2634

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LCS_ACROL 00050	MSV_LCS_EE 00002	MSV_LCS_ETBR 00001	MSV_LCS_VOC#1 00046	MSV_LL_#1_826 00038	MSV_LL_#2_826 00043
BFB 410-238139/1		8260D							
CCVIS 410-238139/3		8260D						20 uL	20 uL
LCS 410-238139/4		8260D		12.5 uL	12.5 uL	12.5 uL	12.5 uL		
LCSD 410-238139/5		8260D		12.5 uL	12.5 uL	12.5 uL	12.5 uL		
MB 410-238139/7		8260D							
410-77437-B-8	HD-COD-SW-17-0/1-0	8260D	T						
410-77437-B-13	HD-QC1-0/1-1	8260D	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LL_GAS826 00073	MSV_LLcentISS 00004	MSV_QC_Gas826 00071	MSV_V_BFB 00007		
BFB 410-238139/1		8260D					1 uL		
CCVIS 410-238139/3		8260D		20 uL	5 uL				
LCS 410-238139/4		8260D			5 uL	12.5 uL			
LCSD 410-238139/5		8260D			5 uL	12.5 uL			
MB 410-238139/7		8260D			5 uL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-77437-1

SDG No.:

Batch Number: 238139 Batch Start Date: 03/28/22 08:48 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LL_GAS826 00073	MSV_LLcentISS 00004	MSV_QC_Gas826 00071	MSV_V_BFB 00007		
410-77437-B-8	HD-COD-SW-17-0/1 -0	8260D	T		5 uL				
410-77437-B-13	HD-QC1-0/1-1	8260D	T		5 uL				

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

180504
Harrisburg, PA

410-77437 Chain of Custody

Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # _____ Group # _____ Sample # _____

Client:	Groundwater Sciences Corporation		
Project Name/#:	fYNOP Monthly Surface Water	Site ID #:	fYNOP, York PA
Project Manager:	Chris O'Neil	P.O. #:	10012.49
Sampler:	Casey Littlefield / Erin Peeling	PWSID #:	N/A
Phone #:	(717) 901-8176 / (717) 756-1246	Quote #:	
State where samples were collected:	York, PA	For Compliance:	Yes ☐ No ☑

Sample Identification	Collection Date	Collection Time	Grab	Composite	Matrix: Soil ☐ Sediment ☐ Tissue ☐	Water ☐ Potable ☐ Ground ☑ Surface ☐ NPDES	Other:	Total # of Containers	Analyses Requested: Preservation Codes H — Aqueous VOCs via 8260D (low level - 25 ml purge)
HD-COD-SW-6-0/1-0	3/24/22	1010	X			X		3	X
HD-COD-SW-7-0/1-0		1105	X			X		3	X
HD-COD-SW-8-0/1-0		0905	X			X		3	X
HD-COD-SW-9-0/1-0		1210	X			X		3	X
HD-COD-SW-13-0/1-0		0920	X			X		3	X
HD-COD-SW-15-0/1-0		1130	X			X		3	X
HD-COD-SW-15-0/1-0 MS		1130	X			X		3	X
HD-COD-SW-15-0/1-0 MSD		1130	X			X		3	X
HD-COD-SW-16-0/1-0		0940	X			X		3	X
HD-COD-SW-17-0/1-0		0955	X			X		3	X

For Lab Use Only
SF #: _____
SCR #: _____

Preservation Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 P = H_3PO_4
O = Other

Remarks

Turnaround Time Requested (TAT) (please check): Standard ☑ Rush ☐
(Rush TAT is subject to laboratory approval and surcharges.)

Date results are needed:

Rush results requested by (please check): E-Mail ☐ Phone ☐

E-mail Address:

Phone:

Data Package Options (please check if required)

Type I (Validation/non-CLP)	☐	MA MCP	☐
Type III (Reduced non-CLP)	☐	CT RCP	☐
Type VI (Raw Data Only)	☐	TX TRRP-13	☐
NJ DKQP	☐	NYSDEC Category	☐ A or ☐ B

EDD Required? Yes ☑ No ☐ If yes, format: _ CLP Like Deliverables, Project Specific Analyte List

Relinquished by:	Date	Time	Received by:	Date	Time
	3/24/22	1305		3/24/22	1305
	3/24/22	1403		3/24/22	1403
	3/24/22	1532			
				3/24/22	1532

Relinquished by Commercial Carrier:

UPS _____ FedEx _____ Other _____

Temperature upon receipt 0.9 °C

180504

Harrisburg, PA

Environmental Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # _____ Group # _____ Sample # _____

Client:	Groundwater Sciences Corporation		
Project Name/#:	fYNOP Monthly Surface Water	Site ID #:	fYNOP, York PA
Project Manager:	Chris O'Neil	P.O. #:	10012.49
Sampler:	Casey Littlefield / Erin Peeling	PWSID #:	N/A
Phone #:	(717) 901-8176 / (717) 756-1246	Quote #:	
State where samples were collected: York, PA	For Compliance: Yes ☐ No ☑		

Sample Identification	Collection Date	Collection Time	Grab	Composite	Matrix: Soil	Sediment	Tissue	Water: Potable	Ground	Surface	NPDES	Other: Trip Blank	Total # of Containers	Analyses Requested: Aqueous VOCs via 8260D (low level - 25 ml purge)	Preservation Codes: H	Remarks
HD-COD-SW-26-0/1-0	3/24/22	1025	X					X					3	X		
HD-COD-SW-27-0/1-0		1120	X					X					3	X		
HD-COD-SW-28-0/1-0		1200	X					X					3	X		
HD-COD-SW-29-0/1-0		0855	X					X					3	X		
HD-QC1-0/1-1		1200	X					X					3	X		
HD-QC1-0/1-2	3/23/22	—	X									X	2	X		Trip Blank

For Lab Use Only

SF #: _____

SCR #: _____

Preservation Codes

H = HCl T = Thiosulfate

N = HNO_3 B = NaOH

S = H_2SO_4 P = H_3PO_4

O = Other

Turnaround Time Requested (TAT) (please check): Standard ☑ Rush ☐

(Rush TAT is subject to laboratory approval and surcharges.)

Date results are needed:

Rush results requested by (please check): E-Mail ☐ Phone ☐

E-mail Address:

Phone:

Data Package Options (please check if required)

Type I (Validation/non-CLP) ☐ MA MCP ☐

Type III (Reduced non-CLP) ☐ CT RCP ☐

Type VI (Raw Data Only) ☐ TX TRRP-13 ☐

NJ DKQP ☐ NYSDEC Category ☐ A or ☐ B

EDD Required? Yes ☑ No ☐ If yes, format: CLP Like Deliverables, Project Specific Analyte List

Relinquished by:	Date	Time	Received by:	Date	Time
	3/24/22	1305		3/24/22	1305
	3/24/22	1453		3/24/22	1453
	3/24/22	1532			
				3/24/22	1542

Relinquished by Commercial Carrier:

UPS _____ FedEx _____ Other _____

Temperature upon receipt 0.9 °C

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 410-77437-1

Login Number: 77437
List Number: 1
Creator: Jeremiah, Cory T

List Source: Eurofins Lancaster Laboratories Env, LLC

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
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	

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 410-77437-1

Login Number: 77437
List Number: 2
Creator: Renner, Melissa

List Source: Eurofins Lancaster Laboratories Env, LLC

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		