ANALYTICAL REPORT

Job Number: 410-56784-1

Job Description: MONTHY SURFACE WATER SAMPLING EVENT

For:
Groundwater Sciences Corporation
2601 Market Place Street, Suite 310
Harrisburg, PA 17110-9307

Attention: Christopher O'Neil

Approved for release.
Marrissa C Williams
Project Manager
10/6/2021 10:02 AM

Marrissa C Williams, Project Manager
2425 New Holland Pike, Lancaster, PA, 17601
(717)556-7246
Marrissa.Williams@eurofinset.com
10/06/2021

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

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

Table of Contents

Table of Contents

Qualifiers

GC/MS VOA

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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
410-56784-1

Receipt
The samples were received on 9/25/2021 10:18 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.8°C

Receipt Exceptions
A trip blank was not submitted for analysis with this sample shipment; and was not listed on the Chain of Custody (COC).

GC/MS VOA
Method 8260D_LL: The continuing calibration verification (CCV) associated with batch 410-178764 recovered above the upper control limit for 2-Butanone, 2-Hexanone, 4-Methyl-2-pentanone and Acetone. Non-detects are reported. Any detection is considered estimated.

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

Detection Summary

Client: Groundwater Sciences Corporation
Job ID: 410-56784-1
Project/Site: MONTHY SURFACE WATER SAMPLING EVENT

Client Sample ID: HD-COD-SW-29-0/1-0 — Lab Sample ID: 410-56784-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.4	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.057	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.080	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.078	J	0.50	0.070	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-8-0/1-0 — Lab Sample ID: 410-56784-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.2	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.068	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.11	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.11	J	0.50	0.070	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-13-0/1-0 — Lab Sample ID: 410-56784-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.4	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.088	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.15	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.081	J	0.50	0.070	ug/L	1		8260D	Total/NA
Trichloroethene	0.16	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-16-0/1-0 — Lab Sample ID: 410-56784-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.4	J	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.078	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.15	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.10	J	0.50	0.070	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-17-0/1-0 — Lab Sample ID: 410-56784-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.64		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	0.085	J	0.50	0.060	ug/L	1		8260D	Total/NA
Acetone	0.94	J	5.0	0.90	ug/L	1		8260D	Total/NA
Chloroform	0.092	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.97		0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	9.0		0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	2.5		0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-6-0/1-0 — Lab Sample ID: 410-56784-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.1	J	5.0	0.90	ug/L	1		8260D	Total/NA
Toluene	0.088	J	0.50	0.070	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-15-0/1-0 — Lab Sample ID: 410-56784-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.16	J	0.50	0.060	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	0.083	J	0.50	0.070	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.12	J	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-15-0/1-0 (Continued)
Lab Sample ID: 410-56784-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.29	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.85		0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	2.9		0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.088	J	0.50	0.070	ug/L	1		8260D	Total/NA
Trichloroethene	0.95		0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-27-0/1-0
Lab Sample ID: 410-56784-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.4	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
Toluene	0.089	J	0.50	0.070	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-28-0/1-0
Lab Sample ID: 410-56784-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.3	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA
Chloroform	0.15	J	0.50	0.090	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.090	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.18	J	0.50	0.070	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-7-0/1-0
Lab Sample ID: 410-56784-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.6	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.071	J	0.50	0.050	ug/L	1		8260D	Total/NA
Toluene	0.084	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-9-0/1-0
Lab Sample ID: 410-56784-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.2	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA
Chloroform	0.12	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.080	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.090	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.29	J	0.50	0.070	ug/L	1		8260D	Total/NA
Trichloroethene	0.11	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-QC1-0/1-1
Lab Sample ID: 410-56784-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.68		0.50	0.060	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	0.14	J	0.50	0.070	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.088	J	0.50	0.060	ug/L	1		8260D	Total/NA
Acetone	0.91	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA
Chloroform	0.099	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	1.1		0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	9.7		0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	2.6		0.50	0.060	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Groundwater Sciences Corporation
Job ID: 410-56784-1
Project/Site: MONTHY SURFACE WATER SAMPLING EVENT

Client Sample ID: HD-COD-SW-26-0/1-0
Lab Sample ID: 410-56784-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.0	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA
Chloroform	0.18	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.065	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.74		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-QC1-0/1-2
Lab Sample ID: 410-56784-14

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: HD-COD-SW-29-0/1-0
Lab Sample ID: 410-56784-1

Date Collected: 09/24/21 08:30
Matrix: Water
Date Received: 09/25/21 10:18

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			10/01/21 15:32	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			10/01/21 15:32	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			10/01/21 15:32	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			10/01/21 15:32	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			10/01/21 15:32	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			10/01/21 15:32	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			10/01/21 15:32	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			10/01/21 15:32	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			10/01/21 15:32	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			10/01/21 15:32	1
2-Hexanone	ND		5.0	0.60	ug/L			10/01/21 15:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			10/01/21 15:32	1
Acetone	**1.4**	**J**	5.0	0.90	ug/L			10/01/21 15:32	1
Benzene	ND		0.50	0.050	ug/L			10/01/21 15:32	1
Bromochloromethane	ND		0.50	0.050	ug/L			10/01/21 15:32	1
Bromodichloromethane	ND		0.50	0.050	ug/L			10/01/21 15:32	1
Bromoform	ND		1.0	0.30	ug/L			10/01/21 15:32	1
Bromomethane	ND		0.50	0.070	ug/L			10/01/21 15:32	1
Carbon disulfide	ND		1.0	0.060	ug/L			10/01/21 15:32	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			10/01/21 15:32	1
Chlorobenzene	ND		0.50	0.060	ug/L			10/01/21 15:32	1
Chloroethane	ND		0.50	0.070	ug/L			10/01/21 15:32	1
Chloroform	ND		0.50	0.090	ug/L			10/01/21 15:32	1
Chloromethane	ND		0.50	0.060	ug/L			10/01/21 15:32	1
cis-1,2-Dichloroethene	**0.057**	**J**	0.50	0.050	ug/L			10/01/21 15:32	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			10/01/21 15:32	1
Dibromochloromethane	ND		0.50	0.070	ug/L			10/01/21 15:32	1
Ethylbenzene	ND		0.50	0.060	ug/L			10/01/21 15:32	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			10/01/21 15:32	1
Methylene Chloride	ND		0.50	0.070	ug/L			10/01/21 15:32	1
Styrene	ND		0.50	0.050	ug/L			10/01/21 15:32	1
Tetrachloroethene	**0.080**	**J**	0.50	0.060	ug/L			10/01/21 15:32	1
Toluene	**0.078**	**J**	0.50	0.070	ug/L			10/01/21 15:32	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			10/01/21 15:32	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			10/01/21 15:32	1
Trichloroethene	ND		0.50	0.060	ug/L			10/01/21 15:32	1
Vinyl chloride	ND		0.50	0.10	ug/L			10/01/21 15:32	1
Xylenes, Total	ND		1.0	0.15	ug/L			10/01/21 15:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*80 - 120*		*10/01/21 15:32*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*10/01/21 15:32*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*10/01/21 15:32*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/01/21 15:32*	*1*

Client Sample ID: HD-COD-SW-8-0/1-0
Lab Sample ID: 410-56784-2

Date Collected: 09/24/21 08:45
Matrix: Water
Date Received: 09/25/21 10:18

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			10/01/21 15:54	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			10/01/21 15:54	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			10/01/21 15:54	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			10/01/21 15:54	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			10/01/21 15:54	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			10/01/21 15:54	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			10/01/21 15:54	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			10/01/21 15:54	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			10/01/21 15:54	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			10/01/21 15:54	1
2-Hexanone	ND		5.0	0.60	ug/L			10/01/21 15:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			10/01/21 15:54	1
Acetone	**1.2**	**J**	5.0	0.90	ug/L			10/01/21 15:54	1
Benzene	ND		0.50	0.050	ug/L			10/01/21 15:54	1
Bromochloromethane	ND		0.50	0.050	ug/L			10/01/21 15:54	1
Bromodichloromethane	ND		0.50	0.050	ug/L			10/01/21 15:54	1
Bromoform	ND		1.0	0.30	ug/L			10/01/21 15:54	1
Bromomethane	ND		0.50	0.070	ug/L			10/01/21 15:54	1
Carbon disulfide	ND		1.0	0.060	ug/L			10/01/21 15:54	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			10/01/21 15:54	1
Chlorobenzene	ND		0.50	0.060	ug/L			10/01/21 15:54	1
Chloroethane	ND		0.50	0.070	ug/L			10/01/21 15:54	1
Chloroform	ND		0.50	0.090	ug/L			10/01/21 15:54	1
Chloromethane	ND		0.50	0.060	ug/L			10/01/21 15:54	1
cis-1,2-Dichloroethene	**0.068**	**J**	0.50	0.050	ug/L			10/01/21 15:54	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			10/01/21 15:54	1
Dibromochloromethane	ND		0.50	0.070	ug/L			10/01/21 15:54	1
Ethylbenzene	ND		0.50	0.060	ug/L			10/01/21 15:54	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			10/01/21 15:54	1
Methylene Chloride	ND		0.50	0.070	ug/L			10/01/21 15:54	1
Styrene	ND		0.50	0.050	ug/L			10/01/21 15:54	1
Tetrachloroethene	**0.11**	**J**	0.50	0.060	ug/L			10/01/21 15:54	1
Toluene	**0.11**	**J**	0.50	0.070	ug/L			10/01/21 15:54	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			10/01/21 15:54	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			10/01/21 15:54	1
Trichloroethene	ND		0.50	0.060	ug/L			10/01/21 15:54	1
Vinyl chloride	ND		0.50	0.10	ug/L			10/01/21 15:54	1
Xylenes, Total	ND		1.0	0.15	ug/L			10/01/21 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*		*10/01/21 15:54*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*10/01/21 15:54*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 120*		*10/01/21 15:54*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/01/21 15:54*	*1*

Client Sample ID: HD-COD-SW-13-0/1-0
Lab Sample ID: 410-56784-3

Date Collected: 09/24/21 09:10
Matrix: Water
Date Received: 09/25/21 10:18

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			10/01/21 16:16	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			10/01/21 16:16	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			10/01/21 16:16	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			10/01/21 16:16	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			10/01/21 16:16	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			10/01/21 16:16	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			10/01/21 16:16	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			10/01/21 16:16	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			10/01/21 16:16	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			10/01/21 16:16	1
2-Hexanone	ND		5.0	0.60	ug/L			10/01/21 16:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			10/01/21 16:16	1
Acetone	**1.4**	**J**	5.0	0.90	ug/L			10/01/21 16:16	1
Benzene	ND		0.50	0.050	ug/L			10/01/21 16:16	1
Bromochloromethane	ND		0.50	0.050	ug/L			10/01/21 16:16	1
Bromodichloromethane	ND		0.50	0.050	ug/L			10/01/21 16:16	1
Bromoform	ND		1.0	0.30	ug/L			10/01/21 16:16	1
Bromomethane	ND		0.50	0.070	ug/L			10/01/21 16:16	1
Carbon disulfide	ND		1.0	0.060	ug/L			10/01/21 16:16	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			10/01/21 16:16	1
Chlorobenzene	ND		0.50	0.060	ug/L			10/01/21 16:16	1
Chloroethane	ND		0.50	0.070	ug/L			10/01/21 16:16	1
Chloroform	ND		0.50	0.090	ug/L			10/01/21 16:16	1
Chloromethane	ND		0.50	0.060	ug/L			10/01/21 16:16	1
cis-1,2-Dichloroethene	**0.088**	**J**	0.50	0.050	ug/L			10/01/21 16:16	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			10/01/21 16:16	1
Dibromochloromethane	ND		0.50	0.070	ug/L			10/01/21 16:16	1
Ethylbenzene	ND		0.50	0.060	ug/L			10/01/21 16:16	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			10/01/21 16:16	1
Methylene Chloride	ND		0.50	0.070	ug/L			10/01/21 16:16	1
Styrene	ND		0.50	0.050	ug/L			10/01/21 16:16	1
Tetrachloroethene	**0.15**	**J**	0.50	0.060	ug/L			10/01/21 16:16	1
Toluene	**0.081**	**J**	0.50	0.070	ug/L			10/01/21 16:16	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			10/01/21 16:16	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			10/01/21 16:16	1
Trichloroethene	**0.16**	**J**	0.50	0.060	ug/L			10/01/21 16:16	1
Vinyl chloride	ND		0.50	0.10	ug/L			10/01/21 16:16	1
Xylenes, Total	ND		1.0	0.15	ug/L			10/01/21 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*		*10/01/21 16:16*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*10/01/21 16:16*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 120*		*10/01/21 16:16*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/01/21 16:16*	*1*

Client Sample ID: HD-COD-SW-16-0/1-0
Lab Sample ID: 410-56784-4

Date Collected: 09/24/21 09:30
Matrix: Water
Date Received: 09/25/21 10:18

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			10/01/21 16:38	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			10/01/21 16:38	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			10/01/21 16:38	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			10/01/21 16:38	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			10/01/21 16:38	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			10/01/21 16:38	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			10/01/21 16:38	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			10/01/21 16:38	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			10/01/21 16:38	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			10/01/21 16:38	1
2-Hexanone	ND		5.0	0.60	ug/L			10/01/21 16:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			10/01/21 16:38	1
Acetone	**1.4**	**J**	5.0	0.90	ug/L			10/01/21 16:38	1
Benzene	ND		0.50	0.050	ug/L			10/01/21 16:38	1
Bromochloromethane	ND		0.50	0.050	ug/L			10/01/21 16:38	1
Bromodichloromethane	ND		0.50	0.050	ug/L			10/01/21 16:38	1
Bromoform	ND		1.0	0.30	ug/L			10/01/21 16:38	1
Bromomethane	ND		0.50	0.070	ug/L			10/01/21 16:38	1
Carbon disulfide	ND		1.0	0.060	ug/L			10/01/21 16:38	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			10/01/21 16:38	1
Chlorobenzene	ND		0.50	0.060	ug/L			10/01/21 16:38	1
Chloroethane	ND		0.50	0.070	ug/L			10/01/21 16:38	1
Chloroform	ND		0.50	0.090	ug/L			10/01/21 16:38	1
Chloromethane	ND		0.50	0.060	ug/L			10/01/21 16:38	1
cis-1,2-Dichloroethene	**0.078**	**J**	0.50	0.050	ug/L			10/01/21 16:38	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			10/01/21 16:38	1
Dibromochloromethane	ND		0.50	0.070	ug/L			10/01/21 16:38	1
Ethylbenzene	ND		0.50	0.060	ug/L			10/01/21 16:38	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			10/01/21 16:38	1
Methylene Chloride	ND		0.50	0.070	ug/L			10/01/21 16:38	1
Styrene	ND		0.50	0.050	ug/L			10/01/21 16:38	1
Tetrachloroethene	**0.15**	**J**	0.50	0.060	ug/L			10/01/21 16:38	1
Toluene	**0.10**	**J**	0.50	0.070	ug/L			10/01/21 16:38	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			10/01/21 16:38	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			10/01/21 16:38	1
Trichloroethene	ND		0.50	0.060	ug/L			10/01/21 16:38	1
Vinyl chloride	ND		0.50	0.10	ug/L			10/01/21 16:38	1
Xylenes, Total	ND		1.0	0.15	ug/L			10/01/21 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*10/01/21 16:38*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*10/01/21 16:38*	*1*
Dibromofluoromethane (Surr)	*95*		*80 - 120*		*10/01/21 16:38*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/01/21 16:38*	*1*

Client Sample ID: HD-COD-SW-17-0/1-0
Lab Sample ID: 410-56784-5

Date Collected: 09/24/21 09:45
Matrix: Water
Date Received: 09/25/21 10:18

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			10/01/21 17:00	1
1,1,1-Trichloroethane	**0.64**		0.50	0.060	ug/L			10/01/21 17:00	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			10/01/21 17:00	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			10/01/21 17:00	1
1,1-Dichloroethane	**0.13**	**J**	0.50	0.070	ug/L			10/01/21 17:00	1
1,1-Dichloroethene	**0.085**	**J**	0.50	0.060	ug/L			10/01/21 17:00	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			10/01/21 17:00	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			10/01/21 17:00	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			10/01/21 17:00	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			10/01/21 17:00	1
2-Hexanone	ND		5.0	0.60	ug/L			10/01/21 17:00	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			10/01/21 17:00	1
Acetone	**0.94**	**J**	5.0	0.90	ug/L			10/01/21 17:00	1
Benzene	ND		0.50	0.050	ug/L			10/01/21 17:00	1
Bromochloromethane	ND		0.50	0.050	ug/L			10/01/21 17:00	1
Bromodichloromethane	ND		0.50	0.050	ug/L			10/01/21 17:00	1
Bromoform	ND		1.0	0.30	ug/L			10/01/21 17:00	1
Bromomethane	ND		0.50	0.070	ug/L			10/01/21 17:00	1
Carbon disulfide	ND		1.0	0.060	ug/L			10/01/21 17:00	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			10/01/21 17:00	1
Chlorobenzene	ND		0.50	0.060	ug/L			10/01/21 17:00	1
Chloroethane	ND		0.50	0.070	ug/L			10/01/21 17:00	1
Chloroform	**0.092**	**J**	0.50	0.090	ug/L			10/01/21 17:00	1
Chloromethane	ND		0.50	0.060	ug/L			10/01/21 17:00	1
cis-1,2-Dichloroethene	**0.97**		0.50	0.050	ug/L			10/01/21 17:00	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			10/01/21 17:00	1
Dibromochloromethane	ND		0.50	0.070	ug/L			10/01/21 17:00	1
Ethylbenzene	ND		0.50	0.060	ug/L			10/01/21 17:00	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			10/01/21 17:00	1
Methylene Chloride	ND		0.50	0.070	ug/L			10/01/21 17:00	1
Styrene	ND		0.50	0.050	ug/L			10/01/21 17:00	1
Tetrachloroethene	**9.0**		0.50	0.060	ug/L			10/01/21 17:00	1
Toluene	ND		0.50	0.070	ug/L			10/01/21 17:00	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			10/01/21 17:00	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			10/01/21 17:00	1
Trichloroethene	**2.5**		0.50	0.060	ug/L			10/01/21 17:00	1
Vinyl chloride	ND		0.50	0.10	ug/L			10/01/21 17:00	1
Xylenes, Total	ND		1.0	0.15	ug/L			10/01/21 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*		*10/01/21 17:00*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*10/01/21 17:00*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*10/01/21 17:00*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/01/21 17:00*	*1*

Client Sample ID: HD-COD-SW-6-0/1-0
Lab Sample ID: 410-56784-6

Date Collected: 09/24/21 10:15
Matrix: Water
Date Received: 09/25/21 10:18

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			10/01/21 17:22	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			10/01/21 17:22	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			10/01/21 17:22	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			10/01/21 17:22	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			10/01/21 17:22	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			10/01/21 17:22	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			10/01/21 17:22	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			10/01/21 17:22	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			10/01/21 17:22	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			10/01/21 17:22	1
2-Hexanone	ND		5.0	0.60	ug/L			10/01/21 17:22	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			10/01/21 17:22	1
Acetone	**1.1**	**J**	5.0	0.90	ug/L			10/01/21 17:22	1
Benzene	ND		0.50	0.050	ug/L			10/01/21 17:22	1
Bromochloromethane	ND		0.50	0.050	ug/L			10/01/21 17:22	1
Bromodichloromethane	ND		0.50	0.050	ug/L			10/01/21 17:22	1
Bromoform	ND		1.0	0.30	ug/L			10/01/21 17:22	1
Bromomethane	ND		0.50	0.070	ug/L			10/01/21 17:22	1
Carbon disulfide	ND		1.0	0.060	ug/L			10/01/21 17:22	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			10/01/21 17:22	1
Chlorobenzene	ND		0.50	0.060	ug/L			10/01/21 17:22	1
Chloroethane	ND		0.50	0.070	ug/L			10/01/21 17:22	1
Chloroform	ND		0.50	0.090	ug/L			10/01/21 17:22	1
Chloromethane	ND		0.50	0.060	ug/L			10/01/21 17:22	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			10/01/21 17:22	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			10/01/21 17:22	1
Dibromochloromethane	ND		0.50	0.070	ug/L			10/01/21 17:22	1
Ethylbenzene	ND		0.50	0.060	ug/L			10/01/21 17:22	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			10/01/21 17:22	1
Methylene Chloride	ND		0.50	0.070	ug/L			10/01/21 17:22	1
Styrene	ND		0.50	0.050	ug/L			10/01/21 17:22	1
Tetrachloroethene	ND		0.50	0.060	ug/L			10/01/21 17:22	1
Toluene	**0.088**	**J**	0.50	0.070	ug/L			10/01/21 17:22	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			10/01/21 17:22	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			10/01/21 17:22	1
Trichloroethene	ND		0.50	0.060	ug/L			10/01/21 17:22	1
Vinyl chloride	ND		0.50	0.10	ug/L			10/01/21 17:22	1
Xylenes, Total	ND		1.0	0.15	ug/L			10/01/21 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*		*10/01/21 17:22*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*10/01/21 17:22*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 120*		*10/01/21 17:22*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/01/21 17:22*	*1*

Client Sample ID: HD-COD-SW-15-0/1-0
Lab Sample ID: 410-56784-7

Date Collected: 09/24/21 11:30
Matrix: Water
Date Received: 09/25/21 10:18

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			10/01/21 13:42	1
1,1,1-Trichloroethane	**0.16**	**J**	0.50	0.060	ug/L			10/01/21 13:42	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			10/01/21 13:42	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			10/01/21 13:42	1
1,1-Dichloroethane	**0.083**	**J**	0.50	0.070	ug/L			10/01/21 13:42	1
1,1-Dichloroethene	**0.12**	**J**	0.50	0.060	ug/L			10/01/21 13:42	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			10/01/21 13:42	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			10/01/21 13:42	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			10/01/21 13:42	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			10/01/21 13:42	1
2-Hexanone	ND		5.0	0.60	ug/L			10/01/21 13:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			10/01/21 13:42	1
Acetone	ND		5.0	0.90	ug/L			10/01/21 13:42	1
Benzene	ND		0.50	0.050	ug/L			10/01/21 13:42	1
Bromochloromethane	ND		0.50	0.050	ug/L			10/01/21 13:42	1
Bromodichloromethane	ND		0.50	0.050	ug/L			10/01/21 13:42	1
Bromoform	ND		1.0	0.30	ug/L			10/01/21 13:42	1
Bromomethane	ND		0.50	0.070	ug/L			10/01/21 13:42	1
Carbon disulfide	ND		1.0	0.060	ug/L			10/01/21 13:42	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			10/01/21 13:42	1
Chlorobenzene	ND		0.50	0.060	ug/L			10/01/21 13:42	1
Chloroethane	ND		0.50	0.070	ug/L			10/01/21 13:42	1
Chloroform	**0.29**	**J**	0.50	0.090	ug/L			10/01/21 13:42	1
Chloromethane	ND		0.50	0.060	ug/L			10/01/21 13:42	1
cis-1,2-Dichloroethene	**0.85**		0.50	0.050	ug/L			10/01/21 13:42	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			10/01/21 13:42	1
Dibromochloromethane	ND		0.50	0.070	ug/L			10/01/21 13:42	1
Ethylbenzene	ND		0.50	0.060	ug/L			10/01/21 13:42	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			10/01/21 13:42	1
Methylene Chloride	ND		0.50	0.070	ug/L			10/01/21 13:42	1
Styrene	ND		0.50	0.050	ug/L			10/01/21 13:42	1
Tetrachloroethene	**2.9**		0.50	0.060	ug/L			10/01/21 13:42	1
Toluene	**0.088**	**J**	0.50	0.070	ug/L			10/01/21 13:42	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			10/01/21 13:42	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			10/01/21 13:42	1
Trichloroethene	**0.95**		0.50	0.060	ug/L			10/01/21 13:42	1
Vinyl chloride	ND		0.50	0.10	ug/L			10/01/21 13:42	1
Xylenes, Total	ND		1.0	0.15	ug/L			10/01/21 13:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*80 - 120*		*10/01/21 13:42*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*10/01/21 13:42*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 120*		*10/01/21 13:42*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/01/21 13:42*	*1*

Client Sample ID: HD-COD-SW-27-0/1-0
Lab Sample ID: 410-56784-8

Date Collected: 09/24/21 11:20
Matrix: Water
Date Received: 09/25/21 10:18

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			10/01/21 17:44	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			10/01/21 17:44	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			10/01/21 17:44	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			10/01/21 17:44	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			10/01/21 17:44	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			10/01/21 17:44	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			10/01/21 17:44	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			10/01/21 17:44	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			10/01/21 17:44	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			10/01/21 17:44	1
2-Hexanone	ND		5.0	0.60	ug/L			10/01/21 17:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			10/01/21 17:44	1
Acetone	**1.4**	**J**	5.0	0.90	ug/L			10/01/21 17:44	1
Benzene	ND		0.50	0.050	ug/L			10/01/21 17:44	1
Bromochloromethane	ND		0.50	0.050	ug/L			10/01/21 17:44	1
Bromodichloromethane	ND		0.50	0.050	ug/L			10/01/21 17:44	1
Bromoform	ND		1.0	0.30	ug/L			10/01/21 17:44	1
Bromomethane	ND		0.50	0.070	ug/L			10/01/21 17:44	1
Carbon disulfide	ND		1.0	0.060	ug/L			10/01/21 17:44	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			10/01/21 17:44	1
Chlorobenzene	ND		0.50	0.060	ug/L			10/01/21 17:44	1
Chloroethane	ND		0.50	0.070	ug/L			10/01/21 17:44	1
Chloroform	ND		0.50	0.090	ug/L			10/01/21 17:44	1
Chloromethane	ND		0.50	0.060	ug/L			10/01/21 17:44	1
cis-1,2-Dichloroethene	**0.070**	**J**	0.50	0.050	ug/L			10/01/21 17:44	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			10/01/21 17:44	1
Dibromochloromethane	ND		0.50	0.070	ug/L			10/01/21 17:44	1
Ethylbenzene	ND		0.50	0.060	ug/L			10/01/21 17:44	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			10/01/21 17:44	1
Methylene Chloride	ND		0.50	0.070	ug/L			10/01/21 17:44	1
Styrene	ND		0.50	0.050	ug/L			10/01/21 17:44	1
Tetrachloroethene	ND		0.50	0.060	ug/L			10/01/21 17:44	1
Toluene	**0.089**	**J**	0.50	0.070	ug/L			10/01/21 17:44	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			10/01/21 17:44	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			10/01/21 17:44	1
Trichloroethene	ND		0.50	0.060	ug/L			10/01/21 17:44	1
Vinyl chloride	ND		0.50	0.10	ug/L			10/01/21 17:44	1
Xylenes, Total	ND		1.0	0.15	ug/L			10/01/21 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*10/01/21 17:44*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*10/01/21 17:44*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*10/01/21 17:44*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/01/21 17:44*	*1*

Client Sample ID: HD-COD-SW-28-0/1-0
Lab Sample ID: 410-56784-9

Date Collected: 09/24/21 12:45
Matrix: Water
Date Received: 09/25/21 10:18

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			10/05/21 14:01	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			10/05/21 14:01	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			10/05/21 14:01	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			10/05/21 14:01	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			10/05/21 14:01	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			10/05/21 14:01	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			10/05/21 14:01	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			10/05/21 14:01	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			10/05/21 14:01	1
2-Butanone (MEK)	ND	^c	5.0	0.60	ug/L			10/05/21 14:01	1
2-Hexanone	ND	^c	5.0	0.60	ug/L			10/05/21 14:01	1
4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	0.70	ug/L			10/05/21 14:01	1
Acetone	**3.3**	**J ^c**	5.0	0.90	ug/L			10/05/21 14:01	1
Benzene	ND		0.50	0.050	ug/L			10/05/21 14:01	1
Bromochloromethane	ND		0.50	0.050	ug/L			10/05/21 14:01	1
Bromodichloromethane	ND		0.50	0.050	ug/L			10/05/21 14:01	1
Bromoform	ND		1.0	0.30	ug/L			10/05/21 14:01	1
Bromomethane	ND		0.50	0.070	ug/L			10/05/21 14:01	1
Carbon disulfide	ND		1.0	0.060	ug/L			10/05/21 14:01	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			10/05/21 14:01	1
Chlorobenzene	ND		0.50	0.060	ug/L			10/05/21 14:01	1
Chloroethane	ND		0.50	0.070	ug/L			10/05/21 14:01	1
Chloroform	**0.15**	**J**	0.50	0.090	ug/L			10/05/21 14:01	1
Chloromethane	ND		0.50	0.060	ug/L			10/05/21 14:01	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			10/05/21 14:01	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			10/05/21 14:01	1
Dibromochloromethane	ND		0.50	0.070	ug/L			10/05/21 14:01	1
Ethylbenzene	ND		0.50	0.060	ug/L			10/05/21 14:01	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			10/05/21 14:01	1
Methylene Chloride	ND		0.50	0.070	ug/L			10/05/21 14:01	1
Styrene	ND		0.50	0.050	ug/L			10/05/21 14:01	1
Tetrachloroethene	**0.090**	**J**	0.50	0.060	ug/L			10/05/21 14:01	1
Toluene	**0.18**	**J**	0.50	0.070	ug/L			10/05/21 14:01	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			10/05/21 14:01	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			10/05/21 14:01	1
Trichloroethene	ND		0.50	0.060	ug/L			10/05/21 14:01	1
Vinyl chloride	ND		0.50	0.10	ug/L			10/05/21 14:01	1
Xylenes, Total	ND		1.0	0.15	ug/L			10/05/21 14:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*80 - 120*		*10/05/21 14:01*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*10/05/21 14:01*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*10/05/21 14:01*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/05/21 14:01*	*1*

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

Lab Sample ID: 410-56784-10

Date Collected: 09/24/21 11:05

Matrix: Water

Date Received: 09/25/21 10:18

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			10/05/21 14:23	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			10/05/21 14:23	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			10/05/21 14:23	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			10/05/21 14:23	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			10/05/21 14:23	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			10/05/21 14:23	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			10/05/21 14:23	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			10/05/21 14:23	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			10/05/21 14:23	1
2-Butanone (MEK)	ND	^c	5.0	0.60	ug/L			10/05/21 14:23	1
2-Hexanone	ND	^c	5.0	0.60	ug/L			10/05/21 14:23	1
4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	0.70	ug/L			10/05/21 14:23	1
Acetone	**1.6**	**J ^c**	5.0	0.90	ug/L			10/05/21 14:23	1
Benzene	ND		0.50	0.050	ug/L			10/05/21 14:23	1
Bromochloromethane	ND		0.50	0.050	ug/L			10/05/21 14:23	1
Bromodichloromethane	ND		0.50	0.050	ug/L			10/05/21 14:23	1
Bromoform	ND		1.0	0.30	ug/L			10/05/21 14:23	1
Bromomethane	ND		0.50	0.070	ug/L			10/05/21 14:23	1
Carbon disulfide	ND		1.0	0.060	ug/L			10/05/21 14:23	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			10/05/21 14:23	1
Chlorobenzene	ND		0.50	0.060	ug/L			10/05/21 14:23	1
Chloroethane	ND		0.50	0.070	ug/L			10/05/21 14:23	1
Chloroform	ND		0.50	0.090	ug/L			10/05/21 14:23	1
Chloromethane	ND		0.50	0.060	ug/L			10/05/21 14:23	1
cis-1,2-Dichloroethene	**0.071**	**J**	0.50	0.050	ug/L			10/05/21 14:23	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			10/05/21 14:23	1
Dibromochloromethane	ND		0.50	0.070	ug/L			10/05/21 14:23	1
Ethylbenzene	ND		0.50	0.060	ug/L			10/05/21 14:23	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			10/05/21 14:23	1
Methylene Chloride	ND		0.50	0.070	ug/L			10/05/21 14:23	1
Styrene	ND		0.50	0.050	ug/L			10/05/21 14:23	1
Tetrachloroethene	ND		0.50	0.060	ug/L			10/05/21 14:23	1
Toluene	**0.084**	**J**	0.50	0.070	ug/L			10/05/21 14:23	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			10/05/21 14:23	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			10/05/21 14:23	1
Trichloroethene	**0.13**	**J**	0.50	0.060	ug/L			10/05/21 14:23	1
Vinyl chloride	ND		0.50	0.10	ug/L			10/05/21 14:23	1
Xylenes, Total	ND		1.0	0.15	ug/L			10/05/21 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*10/05/21 14:23*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*10/05/21 14:23*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*10/05/21 14:23*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/05/21 14:23*	*1*

Client Sample ID: HD-COD-SW-9-0/1-0
Lab Sample ID: 410-56784-11

Date Collected: 09/24/21 12:30
Matrix: Water
Date Received: 09/25/21 10:18

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			10/05/21 14:45	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			10/05/21 14:45	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			10/05/21 14:45	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			10/05/21 14:45	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			10/05/21 14:45	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			10/05/21 14:45	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			10/05/21 14:45	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			10/05/21 14:45	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			10/05/21 14:45	1
2-Butanone (MEK)	ND	^c	5.0	0.60	ug/L			10/05/21 14:45	1
2-Hexanone	ND	^c	5.0	0.60	ug/L			10/05/21 14:45	1
4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	0.70	ug/L			10/05/21 14:45	1
Acetone	**3.2**	**J ^c**	5.0	0.90	ug/L			10/05/21 14:45	1
Benzene	ND		0.50	0.050	ug/L			10/05/21 14:45	1
Bromochloromethane	ND		0.50	0.050	ug/L			10/05/21 14:45	1
Bromodichloromethane	ND		0.50	0.050	ug/L			10/05/21 14:45	1
Bromoform	ND		1.0	0.30	ug/L			10/05/21 14:45	1
Bromomethane	ND		0.50	0.070	ug/L			10/05/21 14:45	1
Carbon disulfide	ND		1.0	0.060	ug/L			10/05/21 14:45	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			10/05/21 14:45	1
Chlorobenzene	ND		0.50	0.060	ug/L			10/05/21 14:45	1
Chloroethane	ND		0.50	0.070	ug/L			10/05/21 14:45	1
Chloroform	**0.12**	**J**	0.50	0.090	ug/L			10/05/21 14:45	1
Chloromethane	ND		0.50	0.060	ug/L			10/05/21 14:45	1
cis-1,2-Dichloroethene	**0.080**	**J**	0.50	0.050	ug/L			10/05/21 14:45	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			10/05/21 14:45	1
Dibromochloromethane	ND		0.50	0.070	ug/L			10/05/21 14:45	1
Ethylbenzene	ND		0.50	0.060	ug/L			10/05/21 14:45	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			10/05/21 14:45	1
Methylene Chloride	ND		0.50	0.070	ug/L			10/05/21 14:45	1
Styrene	ND		0.50	0.050	ug/L			10/05/21 14:45	1
Tetrachloroethene	**0.090**	**J**	0.50	0.060	ug/L			10/05/21 14:45	1
Toluene	**0.29**	**J**	0.50	0.070	ug/L			10/05/21 14:45	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			10/05/21 14:45	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			10/05/21 14:45	1
Trichloroethene	**0.11**	**J**	0.50	0.060	ug/L			10/05/21 14:45	1
Vinyl chloride	ND		0.50	0.10	ug/L			10/05/21 14:45	1
Xylenes, Total	ND		1.0	0.15	ug/L			10/05/21 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*10/05/21 14:45*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*10/05/21 14:45*	*1*
Dibromofluoromethane (Surr)	*95*		*80 - 120*		*10/05/21 14:45*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/05/21 14:45*	*1*

Client Sample ID: HD-QC1-0/1-1
Lab Sample ID: 410-56784-12

Date Collected: 09/24/21 08:00
Matrix: Water
Date Received: 09/25/21 10:18

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			10/05/21 15:07	1
1,1,1-Trichloroethane	**0.68**		0.50	0.060	ug/L			10/05/21 15:07	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			10/05/21 15:07	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			10/05/21 15:07	1
1,1-Dichloroethane	**0.14**	**J**	0.50	0.070	ug/L			10/05/21 15:07	1
1,1-Dichloroethene	**0.088**	**J**	0.50	0.060	ug/L			10/05/21 15:07	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			10/05/21 15:07	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			10/05/21 15:07	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			10/05/21 15:07	1
2-Butanone (MEK)	ND	^c	5.0	0.60	ug/L			10/05/21 15:07	1
2-Hexanone	ND	^c	5.0	0.60	ug/L			10/05/21 15:07	1
4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	0.70	ug/L			10/05/21 15:07	1
Acetone	**0.91**	**J ^c**	5.0	0.90	ug/L			10/05/21 15:07	1
Benzene	ND		0.50	0.050	ug/L			10/05/21 15:07	1
Bromochloromethane	ND		0.50	0.050	ug/L			10/05/21 15:07	1
Bromodichloromethane	ND		0.50	0.050	ug/L			10/05/21 15:07	1
Bromoform	ND		1.0	0.30	ug/L			10/05/21 15:07	1
Bromomethane	ND		0.50	0.070	ug/L			10/05/21 15:07	1
Carbon disulfide	ND		1.0	0.060	ug/L			10/05/21 15:07	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			10/05/21 15:07	1
Chlorobenzene	ND		0.50	0.060	ug/L			10/05/21 15:07	1
Chloroethane	ND		0.50	0.070	ug/L			10/05/21 15:07	1
Chloroform	**0.099**	**J**	0.50	0.090	ug/L			10/05/21 15:07	1
Chloromethane	ND		0.50	0.060	ug/L			10/05/21 15:07	1
cis-1,2-Dichloroethene	**1.1**		0.50	0.050	ug/L			10/05/21 15:07	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			10/05/21 15:07	1
Dibromochloromethane	ND		0.50	0.070	ug/L			10/05/21 15:07	1
Ethylbenzene	ND		0.50	0.060	ug/L			10/05/21 15:07	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			10/05/21 15:07	1
Methylene Chloride	ND		0.50	0.070	ug/L			10/05/21 15:07	1
Styrene	ND		0.50	0.050	ug/L			10/05/21 15:07	1
Tetrachloroethene	**9.7**		0.50	0.060	ug/L			10/05/21 15:07	1
Toluene	ND		0.50	0.070	ug/L			10/05/21 15:07	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			10/05/21 15:07	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			10/05/21 15:07	1
Trichloroethene	**2.6**		0.50	0.060	ug/L			10/05/21 15:07	1
Vinyl chloride	ND		0.50	0.10	ug/L			10/05/21 15:07	1
Xylenes, Total	ND		1.0	0.15	ug/L			10/05/21 15:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*10/05/21 15:07*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*10/05/21 15:07*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*10/05/21 15:07*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/05/21 15:07*	*1*

Client Sample ID: HD-COD-SW-26-0/1-0
Lab Sample ID: 410-56784-13

Date Collected: 09/24/21 10:35
Matrix: Water
Date Received: 09/25/21 10:18

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			10/05/21 15:29	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			10/05/21 15:29	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			10/05/21 15:29	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			10/05/21 15:29	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			10/05/21 15:29	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			10/05/21 15:29	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			10/05/21 15:29	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			10/05/21 15:29	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			10/05/21 15:29	1
2-Butanone (MEK)	ND	^c	5.0	0.60	ug/L			10/05/21 15:29	1
2-Hexanone	ND	^c	5.0	0.60	ug/L			10/05/21 15:29	1
4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	0.70	ug/L			10/05/21 15:29	1
Acetone	**1.0**	**J ^c**	5.0	0.90	ug/L			10/05/21 15:29	1
Benzene	ND		0.50	0.050	ug/L			10/05/21 15:29	1
Bromochloromethane	ND		0.50	0.050	ug/L			10/05/21 15:29	1
Bromodichloromethane	ND		0.50	0.050	ug/L			10/05/21 15:29	1
Bromoform	ND		1.0	0.30	ug/L			10/05/21 15:29	1
Bromomethane	ND		0.50	0.070	ug/L			10/05/21 15:29	1
Carbon disulfide	ND		1.0	0.060	ug/L			10/05/21 15:29	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			10/05/21 15:29	1
Chlorobenzene	ND		0.50	0.060	ug/L			10/05/21 15:29	1
Chloroethane	ND		0.50	0.070	ug/L			10/05/21 15:29	1
Chloroform	**0.18**	**J**	0.50	0.090	ug/L			10/05/21 15:29	1
Chloromethane	ND		0.50	0.060	ug/L			10/05/21 15:29	1
cis-1,2-Dichloroethene	**0.065**	**J**	0.50	0.050	ug/L			10/05/21 15:29	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			10/05/21 15:29	1
Dibromochloromethane	ND		0.50	0.070	ug/L			10/05/21 15:29	1
Ethylbenzene	ND		0.50	0.060	ug/L			10/05/21 15:29	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			10/05/21 15:29	1
Methylene Chloride	ND		0.50	0.070	ug/L			10/05/21 15:29	1
Styrene	ND		0.50	0.050	ug/L			10/05/21 15:29	1
Tetrachloroethene	**0.74**		0.50	0.060	ug/L			10/05/21 15:29	1
Toluene	ND		0.50	0.070	ug/L			10/05/21 15:29	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			10/05/21 15:29	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			10/05/21 15:29	1
Trichloroethene	**0.12**	**J**	0.50	0.060	ug/L			10/05/21 15:29	1
Vinyl chloride	ND		0.50	0.10	ug/L			10/05/21 15:29	1
Xylenes, Total	ND		1.0	0.15	ug/L			10/05/21 15:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*10/05/21 15:29*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*10/05/21 15:29*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*10/05/21 15:29*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/05/21 15:29*	*1*

Client Sample ID: HD-QC1-0/1-2
Lab Sample ID: 410-56784-14

Date Collected: 09/24/21 00:00
Matrix: Water
Date Received: 09/25/21 10:18

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			10/05/21 13:16	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			10/05/21 13:16	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			10/05/21 13:16	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			10/05/21 13:16	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			10/05/21 13:16	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			10/05/21 13:16	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			10/05/21 13:16	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			10/05/21 13:16	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			10/05/21 13:16	1
2-Butanone (MEK)	ND	^c	5.0	0.60	ug/L			10/05/21 13:16	1
2-Hexanone	ND	^c	5.0	0.60	ug/L			10/05/21 13:16	1
4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	0.70	ug/L			10/05/21 13:16	1
Acetone	ND	^c	5.0	0.90	ug/L			10/05/21 13:16	1
Benzene	ND		0.50	0.050	ug/L			10/05/21 13:16	1
Bromochloromethane	ND		0.50	0.050	ug/L			10/05/21 13:16	1
Bromodichloromethane	ND		0.50	0.050	ug/L			10/05/21 13:16	1
Bromoform	ND		1.0	0.30	ug/L			10/05/21 13:16	1
Bromomethane	ND		0.50	0.070	ug/L			10/05/21 13:16	1
Carbon disulfide	ND		1.0	0.060	ug/L			10/05/21 13:16	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			10/05/21 13:16	1
Chlorobenzene	ND		0.50	0.060	ug/L			10/05/21 13:16	1
Chloroethane	ND		0.50	0.070	ug/L			10/05/21 13:16	1
Chloroform	ND		0.50	0.090	ug/L			10/05/21 13:16	1
Chloromethane	ND		0.50	0.060	ug/L			10/05/21 13:16	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			10/05/21 13:16	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			10/05/21 13:16	1
Dibromochloromethane	ND		0.50	0.070	ug/L			10/05/21 13:16	1
Ethylbenzene	ND		0.50	0.060	ug/L			10/05/21 13:16	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			10/05/21 13:16	1
Methylene Chloride	ND		0.50	0.070	ug/L			10/05/21 13:16	1
Styrene	ND		0.50	0.050	ug/L			10/05/21 13:16	1
Tetrachloroethene	ND		0.50	0.060	ug/L			10/05/21 13:16	1
Toluene	ND		0.50	0.070	ug/L			10/05/21 13:16	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			10/05/21 13:16	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			10/05/21 13:16	1
Trichloroethene	ND		0.50	0.060	ug/L			10/05/21 13:16	1
Vinyl chloride	ND		0.50	0.10	ug/L			10/05/21 13:16	1
Xylenes, Total	ND		1.0	0.15	ug/L			10/05/21 13:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*10/05/21 13:16*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*10/05/21 13:16*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 120*		*10/05/21 13:16*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/05/21 13:16*	*1*

Default Detection Limits

Client: Groundwater Sciences Corporation
Job ID: 410-56784-1
Project/Site: MONTHY SURFACE WATER SAMPLING EVENT

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
Job ID: 410-56784-1
Project/Site: MONTHY SURFACE WATER SAMPLING EVENT

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)
410-56784-1	HD-COD-SW-29-0/1-0	97	98	97	96
410-56784-2	HD-COD-SW-8-0/1-0	98	97	96	96
410-56784-3	HD-COD-SW-13-0/1-0	98	98	96	96
410-56784-4	HD-COD-SW-16-0/1-0	99	98	95	97
410-56784-5	HD-COD-SW-17-0/1-0	98	98	97	96
410-56784-6	HD-COD-SW-6-0/1-0	98	99	96	96
410-56784-7	HD-COD-SW-15-0/1-0	97	97	96	96
410-56784-7 MS	HD-COD-SW-15-0/1-0 MS	94	99	96	98
410-56784-7 MSD	HD-COD-SW-15-0/1-0 MSD	96	100	96	98
410-56784-8	HD-COD-SW-27-0/1-0	99	97	98	96
410-56784-9	HD-COD-SW-28-0/1-0	97	99	97	95
410-56784-10	HD-COD-SW-7-0/1-0	99	97	97	95
410-56784-11	HD-COD-SW-9-0/1-0	100	98	95	96
410-56784-12	HD-QC1-0/1-1	99	97	98	96
410-56784-13	HD-COD-SW-26-0/1-0	99	98	97	96
410-56784-14	HD-QC1-0/1-2	101	98	96	96
LCS 410-177560/4	Lab Control Sample	95	100	95	98
LCS 410-178764/4	Lab Control Sample	99	99	96	98
LCSD 410-177560/5	Lab Control Sample Dup	97	99	97	97
LCSD 410-178764/5	Lab Control Sample Dup	97	100	95	97
MB 410-177560/7	Method Blank	99	99	96	97
MB 410-178764/7	Method Blank	96	99	98	96

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 410-177560/7
Matrix: Water
Analysis Batch: 177560

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			10/01/21 10:01	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			10/01/21 10:01	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			10/01/21 10:01	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			10/01/21 10:01	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			10/01/21 10:01	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			10/01/21 10:01	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			10/01/21 10:01	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			10/01/21 10:01	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			10/01/21 10:01	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			10/01/21 10:01	1
2-Hexanone	ND		5.0	0.60	ug/L			10/01/21 10:01	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			10/01/21 10:01	1
Acetone	ND		5.0	0.90	ug/L			10/01/21 10:01	1
Benzene	ND		0.50	0.050	ug/L			10/01/21 10:01	1
Bromochloromethane	ND		0.50	0.050	ug/L			10/01/21 10:01	1
Bromodichloromethane	ND		0.50	0.050	ug/L			10/01/21 10:01	1
Bromoform	ND		1.0	0.30	ug/L			10/01/21 10:01	1
Bromomethane	ND		0.50	0.070	ug/L			10/01/21 10:01	1
Carbon disulfide	ND		1.0	0.060	ug/L			10/01/21 10:01	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			10/01/21 10:01	1
Chlorobenzene	ND		0.50	0.060	ug/L			10/01/21 10:01	1
Chloroethane	ND		0.50	0.070	ug/L			10/01/21 10:01	1
Chloroform	ND		0.50	0.090	ug/L			10/01/21 10:01	1
Chloromethane	ND		0.50	0.060	ug/L			10/01/21 10:01	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			10/01/21 10:01	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			10/01/21 10:01	1
Dibromochloromethane	ND		0.50	0.070	ug/L			10/01/21 10:01	1
Ethylbenzene	ND		0.50	0.060	ug/L			10/01/21 10:01	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			10/01/21 10:01	1
Methylene Chloride	ND		0.50	0.070	ug/L			10/01/21 10:01	1
Styrene	ND		0.50	0.050	ug/L			10/01/21 10:01	1
Tetrachloroethene	ND		0.50	0.060	ug/L			10/01/21 10:01	1
Toluene	ND		0.50	0.070	ug/L			10/01/21 10:01	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			10/01/21 10:01	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			10/01/21 10:01	1
Trichloroethene	ND		0.50	0.060	ug/L			10/01/21 10:01	1
Vinyl chloride	ND		0.50	0.10	ug/L			10/01/21 10:01	1
Xylenes, Total	ND		1.0	0.15	ug/L			10/01/21 10:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*10/01/21 10:01*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*10/01/21 10:01*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 120*		*10/01/21 10:01*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/01/21 10:01*	*1*

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

Lab Sample ID: LCS 410-177560/4
Matrix: Water
Analysis Batch: 177560

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	4.77		ug/L		95	71 - 134
1,1,1-Trichloroethane	5.00	4.73		ug/L		95	78 - 126
1,1,2,2-Tetrachloroethane	5.00	5.27		ug/L		105	75 - 123
1,1,2-Trichloroethane	5.00	5.05		ug/L		101	80 - 120
1,1-Dichloroethane	5.00	4.46		ug/L		89	74 - 120
1,1-Dichloroethene	5.00	4.98		ug/L		100	80 - 131
1,2-Dibromoethane (EDB)	5.00	4.96		ug/L		99	80 - 120
1,2-Dichloroethane	5.00	4.44		ug/L		89	69 - 122
1,2-Dichloropropane	5.00	4.50		ug/L		90	80 - 120
2-Butanone (MEK)	62.5	64.1		ug/L		103	59 - 141
2-Hexanone	62.5	68.7		ug/L		110	52 - 140
4-Methyl-2-pentanone (MIBK)	62.5	64.9		ug/L		104	55 - 140
Acetone	62.5	54.4		ug/L		87	60 - 146
Benzene	5.00	4.69		ug/L		94	80 - 120
Bromochloromethane	5.00	4.77		ug/L		95	80 - 120
Bromodichloromethane	5.00	4.83		ug/L		97	73 - 124
Bromoform	5.00	4.42		ug/L		88	49 - 144
Bromomethane	5.00	4.82		ug/L		96	60 - 136
Carbon disulfide	5.00	4.76		ug/L		95	67 - 130
Carbon tetrachloride	5.00	4.60		ug/L		92	64 - 141
Chlorobenzene	5.00	4.73		ug/L		95	80 - 120
Chloroethane	5.00	4.53		ug/L		91	63 - 120
Chloroform	5.00	4.79		ug/L		96	80 - 120
Chloromethane	5.00	4.40		ug/L		88	56 - 124
cis-1,2-Dichloroethene	5.00	4.95		ug/L		99	80 - 122
cis-1,3-Dichloropropene	5.00	4.59		ug/L		92	67 - 121
Dibromochloromethane	5.00	4.72		ug/L		94	64 - 138
Ethylbenzene	5.00	4.88		ug/L		98	80 - 120
Methyl tert-butyl ether	5.00	4.86		ug/L		97	69 - 120
Methylene Chloride	5.00	4.78		ug/L		96	80 - 120
Styrene	5.00	5.06		ug/L		101	80 - 120
Tetrachloroethene	5.00	4.29		ug/L		86	80 - 120
Toluene	5.00	4.88		ug/L		98	80 - 120
trans-1,2-Dichloroethene	5.00	4.75		ug/L		95	80 - 122
trans-1,3-Dichloropropene	5.00	4.99		ug/L		100	61 - 129
Trichloroethene	5.00	4.62		ug/L		92	80 - 120
Vinyl chloride	5.00	4.40		ug/L		88	60 - 125
Xylenes, Total	15.0	14.7		ug/L		98	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*95*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*

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

Lab Sample ID: LCSD 410-177560/5
Matrix: Water
Analysis Batch: 177560

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	4.76		ug/L		95	71 - 134	0	30
1,1,1-Trichloroethane			5.00	4.72		ug/L		94	78 - 126	0	30
1,1,2,2-Tetrachloroethane			5.00	5.39		ug/L		108	75 - 123	2	30
1,1,2-Trichloroethane			5.00	4.96		ug/L		99	80 - 120	2	30
1,1-Dichloroethane			5.00	4.43		ug/L		89	74 - 120	1	30
1,1-Dichloroethene			5.00	5.10		ug/L		102	80 - 131	2	30
1,2-Dibromoethane (EDB)			5.00	4.90		ug/L		98	80 - 120	1	30
1,2-Dichloroethane			5.00	4.41		ug/L		88	69 - 122	1	30
1,2-Dichloropropane			5.00	4.42		ug/L		88	80 - 120	2	30
2-Butanone (MEK)			62.5	57.6		ug/L		92	59 - 141	11	30
2-Hexanone			62.5	60.3		ug/L		96	52 - 140	13	30
4-Methyl-2-pentanone (MIBK)			62.5	58.2		ug/L		93	55 - 140	11	30
Acetone			62.5	55.9		ug/L		89	60 - 146	3	30
Benzene			5.00	4.68		ug/L		94	80 - 120	0	30
Bromochloromethane			5.00	4.84		ug/L		97	80 - 120	1	30
Bromodichloromethane			5.00	4.83		ug/L		97	73 - 124	0	30
Bromoform			5.00	4.38		ug/L		88	49 - 144	1	30
Bromomethane			5.00	4.79		ug/L		96	60 - 136	1	30
Carbon disulfide			5.00	4.77		ug/L		95	67 - 130	0	30
Carbon tetrachloride			5.00	4.59		ug/L		92	64 - 141	0	30
Chlorobenzene			5.00	4.70		ug/L		94	80 - 120	1	30
Chloroethane			5.00	4.48		ug/L		90	63 - 120	1	30
Chloroform			5.00	4.75		ug/L		95	80 - 120	1	30
Chloromethane			5.00	4.41		ug/L		88	56 - 124	0	30
cis-1,2-Dichloroethene			5.00	4.92		ug/L		98	80 - 122	1	30
cis-1,3-Dichloropropene			5.00	4.61		ug/L		92	67 - 121	0	30
Dibromochloromethane			5.00	4.68		ug/L		94	64 - 138	1	30
Ethylbenzene			5.00	4.79		ug/L		96	80 - 120	2	30
Methyl tert-butyl ether			5.00	4.85		ug/L		97	69 - 120	0	30
Methylene Chloride			5.00	4.85		ug/L		97	80 - 120	2	30
Styrene			5.00	4.99		ug/L		100	80 - 120	1	30
Tetrachloroethene			5.00	4.31		ug/L		86	80 - 120	1	30
Toluene			5.00	4.87		ug/L		97	80 - 120	0	30
trans-1,2-Dichloroethene			5.00	4.89		ug/L		98	80 - 122	3	30
trans-1,3-Dichloropropene			5.00	4.95		ug/L		99	61 - 129	1	30
Trichloroethene			5.00	4.61		ug/L		92	80 - 120	0	30
Vinyl chloride			5.00	4.50		ug/L		90	60 - 125	2	30
Xylenes, Total			15.0	14.5		ug/L		97	80 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*80 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

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

Lab Sample ID: 410-56784-7 MS
Matrix: Water
Analysis Batch: 177560

Client Sample ID: HD-COD-SW-15-0/1-0 MS
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	5.10		ug/L		102	71 - 134
1,1,1-Trichloroethane	0.16	J	5.00	5.62		ug/L		109	78 - 126
1,1,2,2-Tetrachloroethane	ND		5.00	5.57		ug/L		111	75 - 123
1,1,2-Trichloroethane	ND		5.00	5.37		ug/L		107	80 - 120
1,1-Dichloroethane	0.083	J	5.00	5.03		ug/L		99	74 - 120
1,1-Dichloroethene	0.12	J	5.00	6.03		ug/L		118	80 - 131
1,2-Dibromoethane (EDB)	ND		5.00	5.19		ug/L		104	80 - 120
1,2-Dichloroethane	ND		5.00	4.91		ug/L		98	69 - 122
1,2-Dichloropropane	ND		5.00	4.90		ug/L		98	80 - 120
2-Butanone (MEK)	ND		62.6	62.0		ug/L		99	59 - 141
2-Hexanone	ND		62.6	64.9		ug/L		104	52 - 140
4-Methyl-2-pentanone (MIBK)	ND		62.6	62.1		ug/L		99	55 - 140
Acetone	ND		62.6	55.8		ug/L		89	60 - 146
Benzene	ND		5.00	5.31		ug/L		106	80 - 120
Bromochloromethane	ND		5.00	5.35		ug/L		107	80 - 120
Bromodichloromethane	ND		5.00	5.14		ug/L		103	73 - 124
Bromoform	ND		5.00	4.57		ug/L		91	49 - 144
Bromomethane	ND		5.00	5.17		ug/L		103	60 - 136
Carbon disulfide	ND		5.00	5.54		ug/L		111	67 - 130
Carbon tetrachloride	ND		5.00	5.33		ug/L		106	64 - 141
Chlorobenzene	ND		5.00	5.30		ug/L		106	80 - 120
Chloroethane	ND		5.00	4.90		ug/L		98	63 - 120
Chloroform	0.29	J	5.00	5.66		ug/L		107	80 - 120
Chloromethane	ND		5.00	4.74		ug/L		95	80 - 120
cis-1,2-Dichloroethene	0.85		5.00	6.38		ug/L		111	80 - 122
cis-1,3-Dichloropropene	ND		5.00	4.86		ug/L		97	67 - 121
Dibromochloromethane	ND		5.00	4.93		ug/L		98	64 - 138
Ethylbenzene	ND		5.00	5.55		ug/L		111	80 - 120
Methyl tert-butyl ether	ND		5.00	5.21		ug/L		104	69 - 120
Methylene Chloride	ND		5.00	5.28		ug/L		106	80 - 120
Styrene	ND		5.00	5.59		ug/L		112	80 - 120
Tetrachloroethene	2.9		5.00	7.96		ug/L		102	80 - 120
Toluene	0.088	J	5.00	5.53		ug/L		109	80 - 120
trans-1,2-Dichloroethene	ND		5.00	5.52		ug/L		110	80 - 122
trans-1,3-Dichloropropene	ND		5.00	5.25		ug/L		105	61 - 129
Trichloroethene	0.95		5.00	6.11		ug/L		103	80 - 120
Vinyl chloride	ND		5.00	5.01		ug/L		100	60 - 125
Xylenes, Total	ND		15.0	16.7		ug/L		111	80 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*

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

Lab Sample ID: 410-56784-7 MSD
Matrix: Water
Analysis Batch: 177560

Client Sample ID: HD-COD-SW-15-0/1-0 MSD
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	5.15		ug/L		103	71 - 134	1	30
1,1,1-Trichloroethane	0.16	J	5.00	5.62		ug/L		109	78 - 126	0	30
1,1,2,2-Tetrachloroethane	ND		5.00	5.53		ug/L		110	75 - 123	1	30
1,1,2-Trichloroethane	ND		5.00	5.37		ug/L		107	80 - 120	0	30
1,1-Dichloroethane	0.083	J	5.00	5.01		ug/L		99	74 - 120	0	30
1,1-Dichloroethene	0.12	J	5.00	5.93		ug/L		116	80 - 131	2	30
1,2-Dibromoethane (EDB)	ND		5.00	5.24		ug/L		105	80 - 120	1	30
1,2-Dichloroethane	ND		5.00	4.82		ug/L		96	69 - 122	2	30
1,2-Dichloropropane	ND		5.00	4.85		ug/L		97	80 - 120	1	30
2-Butanone (MEK)	ND		62.6	61.0		ug/L		97	59 - 141	2	30
2-Hexanone	ND		62.6	64.0		ug/L		102	52 - 140	1	30
4-Methyl-2-pentanone (MIBK)	ND		62.6	60.9		ug/L		97	55 - 140	2	30
Acetone	ND		62.6	57.3		ug/L		92	60 - 146	3	30
Benzene	ND		5.00	5.25		ug/L		105	80 - 120	1	30
Bromochloromethane	ND		5.00	5.26		ug/L		105	80 - 120	2	30
Bromodichloromethane	ND		5.00	5.14		ug/L		103	73 - 124	0	30
Bromoform	ND		5.00	4.59		ug/L		92	49 - 144	1	30
Bromomethane	ND		5.00	5.21		ug/L		104	60 - 136	1	30
Carbon disulfide	ND		5.00	5.50		ug/L		110	67 - 130	1	30
Carbon tetrachloride	ND		5.00	5.32		ug/L		106	64 - 141	0	30
Chlorobenzene	ND		5.00	5.21		ug/L		104	80 - 120	2	30
Chloroethane	ND		5.00	4.88		ug/L		97	63 - 120	0	30
Chloroform	0.29	J	5.00	5.54		ug/L		105	80 - 120	2	30
Chloromethane	ND		5.00	4.89		ug/L		98	80 - 120	3	30
cis-1,2-Dichloroethene	0.85		5.00	6.34		ug/L		110	80 - 122	1	30
cis-1,3-Dichloropropene	ND		5.00	4.87		ug/L		97	67 - 121	0	30
Dibromochloromethane	ND		5.00	4.88		ug/L		97	64 - 138	1	30
Ethylbenzene	ND		5.00	5.46		ug/L		109	80 - 120	2	30
Methyl tert-butyl ether	ND		5.00	5.10		ug/L		102	69 - 120	2	30
Methylene Chloride	ND		5.00	5.17		ug/L		103	80 - 120	2	30
Styrene	ND		5.00	5.49		ug/L		110	80 - 120	2	30
Tetrachloroethene	2.9		5.00	7.89		ug/L		100	80 - 120	1	30
Toluene	0.088	J	5.00	5.57		ug/L		109	80 - 120	1	30
trans-1,2-Dichloroethene	ND		5.00	5.49		ug/L		110	80 - 122	1	30
trans-1,3-Dichloropropene	ND		5.00	5.25		ug/L		105	61 - 129	0	30
Trichloroethene	0.95		5.00	6.08		ug/L		103	80 - 120	1	30
Vinyl chloride	ND		5.00	5.00		ug/L		100	60 - 125	0	30
Xylenes, Total	ND		15.0	16.5		ug/L		110	80 - 120	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*

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

Lab Sample ID: MB 410-178764/7
Matrix: Water
Analysis Batch: 178764

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			10/05/21 10:50	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			10/05/21 10:50	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			10/05/21 10:50	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			10/05/21 10:50	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			10/05/21 10:50	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			10/05/21 10:50	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			10/05/21 10:50	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			10/05/21 10:50	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			10/05/21 10:50	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			10/05/21 10:50	1
2-Hexanone	ND		5.0	0.60	ug/L			10/05/21 10:50	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			10/05/21 10:50	1
Acetone	ND		5.0	0.90	ug/L			10/05/21 10:50	1
Benzene	ND		0.50	0.050	ug/L			10/05/21 10:50	1
Bromochloromethane	ND		0.50	0.050	ug/L			10/05/21 10:50	1
Bromodichloromethane	ND		0.50	0.050	ug/L			10/05/21 10:50	1
Bromoform	ND		1.0	0.30	ug/L			10/05/21 10:50	1
Bromomethane	ND		0.50	0.070	ug/L			10/05/21 10:50	1
Carbon disulfide	ND		1.0	0.060	ug/L			10/05/21 10:50	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			10/05/21 10:50	1
Chlorobenzene	ND		0.50	0.060	ug/L			10/05/21 10:50	1
Chloroethane	ND		0.50	0.070	ug/L			10/05/21 10:50	1
Chloroform	ND		0.50	0.090	ug/L			10/05/21 10:50	1
Chloromethane	ND		0.50	0.060	ug/L			10/05/21 10:50	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			10/05/21 10:50	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			10/05/21 10:50	1
Dibromochloromethane	ND		0.50	0.070	ug/L			10/05/21 10:50	1
Ethylbenzene	ND		0.50	0.060	ug/L			10/05/21 10:50	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			10/05/21 10:50	1
Methylene Chloride	ND		0.50	0.070	ug/L			10/05/21 10:50	1
Styrene	ND		0.50	0.050	ug/L			10/05/21 10:50	1
Tetrachloroethene	ND		0.50	0.060	ug/L			10/05/21 10:50	1
Toluene	ND		0.50	0.070	ug/L			10/05/21 10:50	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			10/05/21 10:50	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			10/05/21 10:50	1
Trichloroethene	ND		0.50	0.060	ug/L			10/05/21 10:50	1
Vinyl chloride	ND		0.50	0.10	ug/L			10/05/21 10:50	1
Xylenes, Total	ND		1.0	0.15	ug/L			10/05/21 10:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*80 - 120*		*10/05/21 10:50*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*10/05/21 10:50*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*10/05/21 10:50*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/05/21 10:50*	*1*

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

Lab Sample ID: LCS 410-178764/4
Matrix: Water
Analysis Batch: 178764

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	4.96		ug/L		99	71 - 134
1,1,1-Trichloroethane	5.00	4.96		ug/L		99	78 - 126
1,1,2,2-Tetrachloroethane	5.00	5.45		ug/L		109	75 - 123
1,1,2-Trichloroethane	5.00	5.18		ug/L		104	80 - 120
1,1-Dichloroethane	5.00	4.62		ug/L		92	74 - 120
1,1-Dichloroethene	5.00	5.37		ug/L		107	80 - 131
1,2-Dibromoethane (EDB)	5.00	5.14		ug/L		103	80 - 120
1,2-Dichloroethane	5.00	4.57		ug/L		91	69 - 122
1,2-Dichloropropane	5.00	4.65		ug/L		93	80 - 120
2-Butanone (MEK)	62.5	60.4		ug/L		97	59 - 141
2-Hexanone	62.5	62.6		ug/L		100	52 - 140
4-Methyl-2-pentanone (MIBK)	62.5	61.8		ug/L		99	55 - 140
Acetone	62.5	58.9		ug/L		94	60 - 146
Benzene	5.00	4.94		ug/L		99	80 - 120
Bromochloromethane	5.00	5.02		ug/L		100	80 - 120
Bromodichloromethane	5.00	5.05		ug/L		101	73 - 124
Bromoform	5.00	4.62		ug/L		92	49 - 144
Bromomethane	5.00	4.95		ug/L		99	60 - 136
Carbon disulfide	5.00	5.12		ug/L		102	67 - 130
Carbon tetrachloride	5.00	4.84		ug/L		97	64 - 141
Chlorobenzene	5.00	4.95		ug/L		99	80 - 120
Chloroethane	5.00	4.59		ug/L		92	63 - 120
Chloroform	5.00	5.08		ug/L		102	80 - 120
Chloromethane	5.00	4.46		ug/L		89	56 - 124
cis-1,2-Dichloroethene	5.00	5.14		ug/L		103	80 - 122
cis-1,3-Dichloropropene	5.00	4.75		ug/L		95	67 - 121
Dibromochloromethane	5.00	4.85		ug/L		97	64 - 138
Ethylbenzene	5.00	5.07		ug/L		101	80 - 120
Methyl tert-butyl ether	5.00	4.98		ug/L		100	69 - 120
Methylene Chloride	5.00	4.98		ug/L		100	80 - 120
Styrene	5.00	5.30		ug/L		106	80 - 120
Tetrachloroethene	5.00	4.55		ug/L		91	80 - 120
Toluene	5.00	5.07		ug/L		101	80 - 120
trans-1,2-Dichloroethene	5.00	5.15		ug/L		103	80 - 122
trans-1,3-Dichloropropene	5.00	5.15		ug/L		103	61 - 129
Trichloroethene	5.00	4.89		ug/L		98	80 - 120
Vinyl chloride	5.00	4.75		ug/L		95	60 - 125
Xylenes, Total	15.0	15.3		ug/L		102	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*

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

Lab Sample ID: LCSD 410-178764/5
Matrix: Water
Analysis Batch: 178764

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	4.80		ug/L		96	71 - 134	3	30
1,1,1-Trichloroethane			5.00	4.88		ug/L		98	78 - 126	2	30
1,1,2,2-Tetrachloroethane			5.00	5.51		ug/L		110	75 - 123	1	30
1,1,2-Trichloroethane			5.00	5.12		ug/L		102	80 - 120	1	30
1,1-Dichloroethane			5.00	4.53		ug/L		91	74 - 120	2	30
1,1-Dichloroethene			5.00	5.30		ug/L		106	80 - 131	1	30
1,2-Dibromoethane (EDB)			5.00	5.07		ug/L		101	80 - 120	1	30
1,2-Dichloroethane			5.00	4.61		ug/L		92	69 - 122	1	30
1,2-Dichloropropane			5.00	4.58		ug/L		92	80 - 120	1	30
2-Butanone (MEK)			62.5	56.7		ug/L		91	59 - 141	6	30
2-Hexanone			62.5	57.9		ug/L		93	52 - 140	8	30
4-Methyl-2-pentanone (MIBK)			62.5	56.2		ug/L		90	55 - 140	10	30
Acetone			62.5	55.1		ug/L		88	60 - 146	7	30
Benzene			5.00	4.82		ug/L		96	80 - 120	2	30
Bromochloromethane			5.00	4.94		ug/L		99	80 - 120	2	30
Bromodichloromethane			5.00	4.94		ug/L		99	73 - 124	2	30
Bromoform			5.00	4.65		ug/L		93	49 - 144	1	30
Bromomethane			5.00	4.67		ug/L		93	60 - 136	6	30
Carbon disulfide			5.00	5.01		ug/L		100	67 - 130	2	30
Carbon tetrachloride			5.00	4.70		ug/L		94	64 - 141	3	30
Chlorobenzene			5.00	4.87		ug/L		97	80 - 120	2	30
Chloroethane			5.00	4.54		ug/L		91	63 - 120	1	30
Chloroform			5.00	4.89		ug/L		98	80 - 120	4	30
Chloromethane			5.00	4.38		ug/L		88	56 - 124	2	30
cis-1,2-Dichloroethene			5.00	5.02		ug/L		100	80 - 122	3	30
cis-1,3-Dichloropropene			5.00	4.69		ug/L		94	67 - 121	1	30
Dibromochloromethane			5.00	4.77		ug/L		95	64 - 138	2	30
Ethylbenzene			5.00	4.95		ug/L		99	80 - 120	3	30
Methyl tert-butyl ether			5.00	4.94		ug/L		99	69 - 120	1	30
Methylene Chloride			5.00	4.91		ug/L		98	80 - 120	1	30
Styrene			5.00	5.14		ug/L		103	80 - 120	3	30
Tetrachloroethene			5.00	4.45		ug/L		89	80 - 120	2	30
Toluene			5.00	4.98		ug/L		100	80 - 120	2	30
trans-1,2-Dichloroethene			5.00	5.06		ug/L		101	80 - 122	2	30
trans-1,3-Dichloropropene			5.00	5.13		ug/L		103	61 - 129	1	30
Trichloroethene			5.00	4.73		ug/L		95	80 - 120	3	30
Vinyl chloride			5.00	4.58		ug/L		92	60 - 125	4	30
Xylenes, Total			15.0	15.0		ug/L		100	80 - 120	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*95*		*80 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

GC/MS VOA

Analysis Batch: 177560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-56784-1	HD-COD-SW-29-0/1-0	Total/NA	Water	8260D	
410-56784-2	HD-COD-SW-8-0/1-0	Total/NA	Water	8260D	
410-56784-3	HD-COD-SW-13-0/1-0	Total/NA	Water	8260D	
410-56784-4	HD-COD-SW-16-0/1-0	Total/NA	Water	8260D	
410-56784-5	HD-COD-SW-17-0/1-0	Total/NA	Water	8260D	
410-56784-6	HD-COD-SW-6-0/1-0	Total/NA	Water	8260D	
410-56784-7	HD-COD-SW-15-0/1-0	Total/NA	Water	8260D	
410-56784-8	HD-COD-SW-27-0/1-0	Total/NA	Water	8260D	
MB 410-177560/7	Method Blank	Total/NA	Water	8260D	
LCS 410-177560/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-177560/5	Lab Control Sample Dup	Total/NA	Water	8260D	
410-56784-7 MS	HD-COD-SW-15-0/1-0 MS	Total/NA	Water	8260D	
410-56784-7 MSD	HD-COD-SW-15-0/1-0 MSD	Total/NA	Water	8260D	

Analysis Batch: 178764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-56784-9	HD-COD-SW-28-0/1-0	Total/NA	Water	8260D	
410-56784-10	HD-COD-SW-7-0/1-0	Total/NA	Water	8260D	
410-56784-11	HD-COD-SW-9-0/1-0	Total/NA	Water	8260D	
410-56784-12	HD-QC1-0/1-1	Total/NA	Water	8260D	
410-56784-13	HD-COD-SW-26-0/1-0	Total/NA	Water	8260D	
410-56784-14	HD-QC1-0/1-2	Total/NA	Water	8260D	
MB 410-178764/7	Method Blank	Total/NA	Water	8260D	
LCS 410-178764/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-178764/5	Lab Control Sample Dup	Total/NA	Water	8260D	

Client Sample ID: HD-COD-SW-29-0/1-0
Lab Sample ID: 410-56784-1
Date Collected: 09/24/21 08:30
Matrix: Water
Date Received: 09/25/21 10:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	177560	10/01/21 15:32	J5QQ	ELLE

Client Sample ID: HD-COD-SW-8-0/1-0
Lab Sample ID: 410-56784-2
Date Collected: 09/24/21 08:45
Matrix: Water
Date Received: 09/25/21 10:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	177560	10/01/21 15:54	J5QQ	ELLE

Client Sample ID: HD-COD-SW-13-0/1-0
Lab Sample ID: 410-56784-3
Date Collected: 09/24/21 09:10
Matrix: Water
Date Received: 09/25/21 10:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	177560	10/01/21 16:16	J5QQ	ELLE

Client Sample ID: HD-COD-SW-16-0/1-0
Lab Sample ID: 410-56784-4
Date Collected: 09/24/21 09:30
Matrix: Water
Date Received: 09/25/21 10:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	177560	10/01/21 16:38	J5QQ	ELLE

Client Sample ID: HD-COD-SW-17-0/1-0
Lab Sample ID: 410-56784-5
Date Collected: 09/24/21 09:45
Matrix: Water
Date Received: 09/25/21 10:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	177560	10/01/21 17:00	J5QQ	ELLE

Client Sample ID: HD-COD-SW-6-0/1-0
Lab Sample ID: 410-56784-6
Date Collected: 09/24/21 10:15
Matrix: Water
Date Received: 09/25/21 10:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	177560	10/01/21 17:22	J5QQ	ELLE

Client Sample ID: HD-COD-SW-15-0/1-0
Lab Sample ID: 410-56784-7
Date Collected: 09/24/21 11:30
Matrix: Water
Date Received: 09/25/21 10:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	177560	10/01/21 13:42	J5QQ	ELLE

Client Sample ID: HD-COD-SW-27-0/1-0
Lab Sample ID: 410-56784-8
Date Collected: 09/24/21 11:20
Matrix: Water
Date Received: 09/25/21 10:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	177560	10/01/21 17:44	J5QQ	ELLE

Client Sample ID: HD-COD-SW-28-0/1-0
Lab Sample ID: 410-56784-9
Date Collected: 09/24/21 12:45
Matrix: Water
Date Received: 09/25/21 10:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	178764	10/05/21 14:01	J5QQ	ELLE

Client Sample ID: HD-COD-SW-7-0/1-0
Lab Sample ID: 410-56784-10
Date Collected: 09/24/21 11:05
Matrix: Water
Date Received: 09/25/21 10:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	178764	10/05/21 14:23	J5QQ	ELLE

Client Sample ID: HD-COD-SW-9-0/1-0
Lab Sample ID: 410-56784-11
Date Collected: 09/24/21 12:30
Matrix: Water
Date Received: 09/25/21 10:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	178764	10/05/21 14:45	J5QQ	ELLE

Client Sample ID: HD-QC1-0/1-1
Lab Sample ID: 410-56784-12
Date Collected: 09/24/21 08:00
Matrix: Water
Date Received: 09/25/21 10:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	178764	10/05/21 15:07	J5QQ	ELLE

Client Sample ID: HD-COD-SW-26-0/1-0
Lab Sample ID: 410-56784-13
Date Collected: 09/24/21 10:35
Matrix: Water
Date Received: 09/25/21 10:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	178764	10/05/21 15:29	J5QQ	ELLE

Client Sample ID: HD-QC1-0/1-2
Lab Sample ID: 410-56784-14
Date Collected: 09/24/21 00:00
Matrix: Water
Date Received: 09/25/21 10:18

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	178764	10/05/21 13:16	J5QQ	ELLE

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: 410-56784-1
Project/Site: MONTHY SURFACE WATER SAMPLING EVENT

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	01-31-22

Method Summary

Client: Groundwater Sciences Corporation
Job ID: 410-56784-1
Project/Site: MONTHY SURFACE WATER SAMPLING EVENT

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: MONTHY SURFACE WATER SAMPLING EVENT

Job ID: 410-56784-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-56784-1	HD-COD-SW-29-0/1-0	Water	09/24/21 08:30	09/25/21 10:18
410-56784-2	HD-COD-SW-8-0/1-0	Water	09/24/21 08:45	09/25/21 10:18
410-56784-3	HD-COD-SW-13-0/1-0	Water	09/24/21 09:10	09/25/21 10:18
410-56784-4	HD-COD-SW-16-0/1-0	Water	09/24/21 09:30	09/25/21 10:18
410-56784-5	HD-COD-SW-17-0/1-0	Water	09/24/21 09:45	09/25/21 10:18
410-56784-6	HD-COD-SW-6-0/1-0	Water	09/24/21 10:15	09/25/21 10:18
410-56784-7	HD-COD-SW-15-0/1-0	Water	09/24/21 11:30	09/25/21 10:18
410-56784-8	HD-COD-SW-27-0/1-0	Water	09/24/21 11:20	09/25/21 10:18
410-56784-9	HD-COD-SW-28-0/1-0	Water	09/24/21 12:45	09/25/21 10:18
410-56784-10	HD-COD-SW-7-0/1-0	Water	09/24/21 11:05	09/25/21 10:18
410-56784-11	HD-COD-SW-9-0/1-0	Water	09/24/21 12:30	09/25/21 10:18
410-56784-12	HD-QC1-0/1-1	Water	09/24/21 08:00	09/25/21 10:18
410-56784-13	HD-COD-SW-26-0/1-0	Water	09/24/21 10:35	09/25/21 10:18
410-56784-14	HD-QC1-0/1-2	Water	09/24/21 00:00	09/25/21 10:18

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-56784-1

SDG No.:

Instrument ID: 16334 Analysis Batch Number: 153227

Lab Sample ID: IC 410-153227/12 Client Sample ID:

Date Analyzed: 07/27/21 19:35 Lab File ID: GL27X12.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.96	Baseline	spositok	07/28/21 11:51
1,4-Dioxane	8.63	Incomplete Integration	spositok	07/28/21 11:57

Lab Sample ID: ICIS 410-153227/13 Client Sample ID:

Date Analyzed: 07/27/21 19:57 Lab File ID: GL27X13.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.95	Poor chromatography	spositok	07/28/21 11:53
1,4-Dioxane	8.65	Incomplete Integration	spositok	07/28/21 11:56

Lab Sample ID: IC 410-153227/14 Client Sample ID:

Date Analyzed: 07/27/21 20:19 Lab File ID: GL27X14.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.65	Incomplete Integration	spositok	07/28/21 11:55

Lab Sample ID: IC 410-153227/15 Client Sample ID:

Date Analyzed: 07/27/21 20:41 Lab File ID: GL27X15.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.65	Incomplete Integration	spositok	07/28/21 11:58

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-56784-1

SDG No.:

Instrument ID: 16334 Analysis Batch Number: 153227

Lab Sample ID: IC 410-153227/16 Client Sample ID:

Date Analyzed: 07/27/21 21:03 Lab File ID: GL27X16.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.95	Baseline	spositok	07/28/21 12:00
1,4-Dioxane	8.62	Incomplete Integration	spositok	07/28/21 12:00

Lab Sample ID: IC 410-153227/17 Client Sample ID:

Date Analyzed: 07/27/21 21:25 Lab File ID: GL27X17.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Ethyl ether	3.20	Incomplete Integration	spositok	07/28/21 12:01
Acetone	3.56	Poor chromatography	spositok	07/28/21 12:02
Carbon disulfide	3.81	Incomplete Integration	spositok	07/28/21 12:02
Methyl acetate	3.95	Baseline	spositok	07/28/21 12:02
1,1-Dichloroethane	5.23	Baseline	spositok	07/28/21 12:02
1,4-Dioxane	8.62	Incomplete Integration	spositok	07/28/21 12:01

Lab Sample ID: IC 410-153227/18 Client Sample ID:

Date Analyzed: 07/27/21 21:47 Lab File ID: GL27X18.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.97	Incomplete Integration	spositok	07/28/21 12:04
Freon 123a	3.31	Incomplete Integration	spositok	07/28/21 12:04
trans-1,2-Dichloroethene	4.56	Incomplete Integration	knouses	08/05/21 12:23
2-Chloro-1,3-butadiene	5.34	Incomplete Integration	spositok	07/28/21 12:04
1,1-Dichloropropene	6.98	Incomplete Integration	spositok	07/28/21 12:04
t-Amyl methyl ether	7.45	Incomplete Integration	spositok	07/28/21 12:04
1,4-Dioxane		Invalid Compound ID	spositok	07/28/21 12:05

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-56784-1

SDG No.:

Instrument ID: 16334 Analysis Batch Number: 153227

Lab Sample ID: ICV 410-153227/19 Client Sample ID:

Date Analyzed: 07/27/21 22:09 Lab File ID: GL27X19.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.67	Incomplete Integration	spositok	07/28/21 12:12

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-56784-1

SDG No.:

Instrument ID: 16334 Analysis Batch Number: 177560

Lab Sample ID: CCVIS 410-177560/3 Client Sample ID:

Date Analyzed: 10/01/21 08:31 Lab File ID: GO01X02.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.97	Incomplete Integration	knouses	10/01/21 09:39
Acetone	3.57	Incomplete Integration	knouses	10/01/21 09:39
1,4-Dioxane	8.62	Incomplete Integration	knouses	10/01/21 09:40

Lab Sample ID: 410-56784-7 Client Sample ID: HD-COD-SW-15-0/1-0

Date Analyzed: 10/01/21 13:42 Lab File ID: GO01X16.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.57	Split Peak	beckerk	10/01/21 18:57

Lab Sample ID: 410-56784-1 Client Sample ID: HD-COD-SW-29-0/1-0

Date Analyzed: 10/01/21 15:32 Lab File ID: GO01X21.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.57	Split Peak	beckerk	10/01/21 19:00
cis-1,2-Dichloroethene	6.08	Split Peak	beckerk	10/01/21 19:00
Chloroform	6.56	Split Peak	beckerk	10/01/21 19:00

Lab Sample ID: 410-56784-2 Client Sample ID: HD-COD-SW-8-0/1-0

Date Analyzed: 10/01/21 15:54 Lab File ID: GO01X22.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.56	Peak assignment corrected	beckerk	10/01/21 19:02

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-56784-1

SDG No.:

Instrument ID: 16334 Analysis Batch Number: 177560

Lab Sample ID: 410-56784-3 Client Sample ID: HD-COD-SW-13-0/1-0

Date Analyzed: 10/01/21 16:16 Lab File ID: GO01X23.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.59	Split Peak	beckerk	10/01/21 19:02
Chloroform	6.57	Split Peak	beckerk	10/01/21 19:03
Tetrachloroethene	10.31	Split Peak	beckerk	10/01/21 19:03

Lab Sample ID: 410-56784-4 Client Sample ID: HD-COD-SW-16-0/1-0

Date Analyzed: 10/01/21 16:38 Lab File ID: GO01X24.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.59	Split Peak	beckerk	10/01/21 19:05
Chloroform	6.57	Split Peak	beckerk	10/01/21 19:06

Lab Sample ID: 410-56784-5 Client Sample ID: HD-COD-SW-17-0/1-0

Date Analyzed: 10/01/21 17:00 Lab File ID: GO01X25.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.58	Split Peak	beckerk	10/01/21 19:06
Chloroform	6.57	Split Peak	beckerk	10/01/21 19:06
1,1,2-Trichloroethane		Invalid Compound ID	beckerk	10/01/21 19:07

Lab Sample ID: 410-56784-6 Client Sample ID: HD-COD-SW-6-0/1-0

Date Analyzed: 10/01/21 17:22 Lab File ID: GO01X26.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.58	Split Peak	beckerk	10/01/21 19:08
Chloroform	6.58	Split Peak	beckerk	10/01/21 19:08

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-56784-1

SDG No.:

Instrument ID: 16334 Analysis Batch Number: 177560

Lab Sample ID: 410-56784-8 Client Sample ID: HD-COD-SW-27-0/1-0

Date Analyzed: 10/01/21 17:44 Lab File ID: GO01X27.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.57	Split Peak	beckerk	10/01/21 19:09
cis-1,2-Dichloroethene	6.08	Split Peak	beckerk	10/01/21 19:09

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-56784-1

SDG No.:

Instrument ID: 16334 Analysis Batch Number: 178764

Lab Sample ID: CCVIS 410-178764/3 Client Sample ID:

Date Analyzed: 10/05/21 09:22 Lab File ID: GO05X02.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Butadiene	2.26	Incomplete Integration	knouses	10/05/21 10:09
Methyl acetate	3.96	Incomplete Integration	knouses	10/05/21 10:09
1,4-Dioxane	8.60	Incomplete Integration	knouses	10/05/21 10:14

Lab Sample ID: LCSD 410-178764/5 Client Sample ID:

Date Analyzed: 10/05/21 10:06 Lab File ID: GO05X04.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	2.14	Incomplete Integration	knouses	10/05/21 10:33

Lab Sample ID: MB 410-178764/7 Client Sample ID:

Date Analyzed: 10/05/21 10:50 Lab File ID: GO05X06.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane-d4 (Surr)	7.24	Incomplete Integration	knouses	10/05/21 11:45

Lab Sample ID: 410-56784-14 Client Sample ID: HD-QC1-0/1-2

Date Analyzed: 10/05/21 13:16 Lab File ID: GO05X12.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.56	Split Peak	beckerk	10/05/21 17:48

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-56784-1

SDG No.:

Instrument ID: 16334 Analysis Batch Number: 178764

Lab Sample ID: 410-56784-9 Client Sample ID: HD-COD-SW-28-0/1-0

Date Analyzed: 10/05/21 14:01 Lab File ID: GO05X14.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloromethane	2.15	Peak assignment corrected	beckerk	10/05/21 17:49
Acetone	3.59	Split Peak	beckerk	10/05/21 17:49
Methylene Chloride	4.18	Split Peak	beckerk	10/05/21 17:49

Lab Sample ID: 410-56784-10 Client Sample ID: HD-COD-SW-7-0/1-0

Date Analyzed: 10/05/21 14:23 Lab File ID: GO05X15.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.58	Split Peak	beckerk	10/05/21 17:50
cis-1,2-Dichloroethene	6.09	Split Peak	beckerk	10/05/21 17:50
Chloromethane		Invalid Compound ID	beckerk	10/05/21 17:50

Lab Sample ID: 410-56784-11 Client Sample ID: HD-COD-SW-9-0/1-0

Date Analyzed: 10/05/21 14:45 Lab File ID: GO05X16.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.59	Split Peak	beckerk	10/05/21 17:51
cis-1,2-Dichloroethene	6.08	Split Peak	beckerk	10/05/21 17:51
Chloromethane		Invalid Compound ID	beckerk	10/05/21 17:51

Lab Sample ID: 410-56784-12 Client Sample ID: HD-QC1-0/1-1

Date Analyzed: 10/05/21 15:07 Lab File ID: GO05X17.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.59	Split Peak	beckerk	10/05/21 17:52
1,1,2-Trichloroethane		Invalid Compound ID	beckerk	10/05/21 17:52

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-56784-1

SDG No.:

Instrument ID: 16334 Analysis Batch Number: 178764

Lab Sample ID: 410-56784-13 Client Sample ID: HD-COD-SW-26-0/1-0

Date Analyzed: 10/05/21 15:29 Lab File ID: GO05X18.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.57	Split Peak	beckerk	10/05/21 17:53

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MSV_29_826ISS_00020	12/28/21	06/28/21	Methanol, Lot DZ644	10 mL	MSV_8260_SS_00388	1 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL
					MSV_Cus826_IS_00322	1 mL	1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5 (IS)	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							t-Butyl alcohol-d10 (IS)	1250 ug/mL
.MSV_8260_SS_00388	12/28/21		Restek, Lot A0146938		(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_00322	12/28/21		Restek, Lot A0160586		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5 (IS)	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_29_826ISS_00023	03/01/22	09/01/21	Methanol, Lot DZ644	10 mL	MSV_Cus826_IS_00343	1 mL	1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5 (IS)	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							t-Butyl alcohol-d10 (IS)	1250 ug/mL
.MSV_Cus826_IS_00343	03/01/22		Restek, Lot A0160586		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5 (IS)	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_29_826ISS_00023	03/01/22	09/01/21	Methanol, Lot DZ644	10 mL	MSV_8260_SS_00434	1 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL
.MSV_8260_SS_00434	03/01/22		Restek, Lot A0163445		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
MSV_LCS_VOC#1_00011	08/26/21	07/27/21	Methanol, Lot DZ644	25 mL	MSV_M_MIX1SEC_00014	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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroform	40 ug/mL
							cis-1,2-Dichloroethene	40 ug/mL
							cis-1,3-Dichloropropene	40 ug/mL
							Dibromochloromethane	40 ug/mL
							Ethylbenzene	40 ug/mL
							Methylene Chloride	40 ug/mL
							Styrene	40 ug/mL
							Tetrachloroethene	40 ug/mL
							Toluene	40 ug/mL
							trans-1,2-Dichloroethene	40 ug/mL
							trans-1,3-Dichloropropene	40 ug/mL
							Trichloroethene	40 ug/mL
					MSV_M_MIX2SEC_00014	1 mL	Carbon disulfide	40 ug/mL
							Methyl tert-butyl ether	40 ug/mL
					MSV_Q_Ketones_00015	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_00014	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_00014	04/30/24		Restek, Lot A0171837		(Purchased Reagent)		Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
.MSV_Q_Ketones_00015	01/31/24		Restek, Lot A0167987		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
MSV_LCS_VOC#1_00020	10/27/21	09/27/21	Methanol, Lot DZ644	25 mL	MSV_M_MIX1SEC_00025	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_00025	1 mL	Carbon disulfide	40 ug/mL
							Methyl tert-butyl ether	40 ug/mL
					MSV_Q_Ketones_00025	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_00025	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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Methylene Chloride	1000 ug/mL
							Styrene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
.MSV_M_MIX2SEC_00025	04/30/24		Restek, Lot A0171837		(Purchased Reagent)		Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
.MSV_Q_Ketones_00025	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_00021	11/03/21	10/04/21	Methanol, Lot EB679	25 mL	MSV_M_MIX1SEC_00027	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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,3-Dichloropropene	40 ug/mL
							Trichloroethene	40 ug/mL
					MSV_M_MIX2SEC_00026	1 mL	Carbon disulfide	40 ug/mL
							Methyl tert-butyl ether	40 ug/mL
					MSV_Q_Ketones_00026	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_00027	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_00026	04/30/24		Restek, Lot A0171837		(Purchased Reagent)		Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
.MSV_Q_Ketones_00026	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_00011	08/26/21	07/27/21	Methanol, Lot DZ644	1 mL	MSV_CCV_VOC#1_00012	50 uL	Ethyl methacrylate	50.0022 ug/mL
							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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1

SDG No.:

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1,4-Dioxane	2500 ug/mL
							1-Chlorohexane	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							2-Nitropropane	250 ug/mL
							3-Chloro-1-propene	50 ug/mL
							Acrylonitrile	125 ug/mL
							Benzyl chloride	50 ug/mL
							Carbon disulfide	50 ug/mL
							Cyclohexane	50 ug/mL
							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_00011	200 uL	2-Butanone (MEK)	500 ug/mL
							2-Hexanone	500 ug/mL
							4-Methyl-2-pentanone (MIBK)	500 ug/mL
							Acetone	500 ug/mL
							Acrolein	2499.93 ug/mL
					MSV_V_VOA2_00097	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_00012	08/26/21	07/27/21	Methanol, Lot DZ644	5 mL	MSV_EM_Work_00001	1 mL	Ethyl methacrylate	1000.04 ug/mL
					MSV_MegaMIX#1_00011	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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1

SDG No.:

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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MSV_MegaMix#2_00011	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
							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_EM_Work_00001	11/24/21	05/24/21	Methanol, Lot DZ644	50 mL	MSV_EthylM_St_00001	4.938 mL	Ethyl methacrylate	5000.22 ug/mL
...MSV_EthylM_St_00001	11/24/21	05/24/21	Methanol, Lot DZ644	10 mL	MSV_EthylMeth_00001	0.5063 g	Ethyl methacrylate	50630 ug/mL
....MSV_EthylMeth_00001	01/31/23	Chem Service, Lot 11325900			(Purchased Reagent)		Ethyl methacrylate	1 g/g
..MSV_MegaMIX#1_00011	08/26/21	Restek, Lot A0171634			(Purchased Reagent)		1,1,1,2-Tetrachloroethane	5000 ug/mL
							1,1,1-Trichloroethane	5000 ug/mL
							1,1,2,2-Tetrachloroethane	5000 ug/mL
							1,1,2-Trichloroethane	5000 ug/mL
							1,1-Dichloroethane	5000 ug/mL
							1,1-Dichloroethene	5000 ug/mL
							1,1-Dichloropropene	5000 ug/mL
							1,2,3-Trichlorobenzene	5000 ug/mL
							1,2,3-Trichloropropane	5000 ug/mL
							1,2,4-Trichlorobenzene	5000 ug/mL
							1,2,4-Trimethylbenzene	5000 ug/mL
							1,2-Dibromo-3-Chloropropane	5000 ug/mL
							1,2-Dibromoethane (EDB)	5000 ug/mL
							1,2-Dichlorobenzene	5000 ug/mL
							1,2-Dichloroethane	5000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloropropane	5000 ug/mL
							1,3,5-Trimethylbenzene	5000 ug/mL
							1,3-Dichlorobenzene	5000 ug/mL
							1,3-Dichloropropane	5000 ug/mL
							1,4-Dichlorobenzene	5000 ug/mL
							2,2-Dichloropropane	5000 ug/mL
							2-Chlorotoluene	5000 ug/mL
							4-Chlorotoluene	5000 ug/mL
							4-Isopropyltoluene	5000 ug/mL
							Benzene	5000 ug/mL
							Bromobenzene	5000 ug/mL
							Bromochloromethane	5000 ug/mL
							Bromodichloromethane	5000 ug/mL
							Bromoform	5000 ug/mL
							Carbon tetrachloride	5000 ug/mL
							Chlorobenzene	5000 ug/mL
							Chloroform	5000 ug/mL
							cis-1,2-Dichloroethene	5000 ug/mL
							cis-1,3-Dichloropropene	5000 ug/mL
							Dibromochloromethane	5000 ug/mL
							Dibromomethane	5000 ug/mL
							Ethylbenzene	5000 ug/mL
							Hexachlorobutadiene	5000 ug/mL
							Isopropylbenzene	5000 ug/mL
							m-Xylene & p-Xylene	10000 ug/mL
							Methylene Chloride	5000 ug/mL
							n-Butylbenzene	5000 ug/mL
							N-Propylbenzene	5000 ug/mL
							Naphthalene	5000 ug/mL
							o-Xylene	5000 ug/mL
							sec-Butylbenzene	5000 ug/mL
							Styrene	5000 ug/mL
							tert-Butylbenzene	5000 ug/mL
							Tetrachloroethene	5000 ug/mL
							Toluene	5000 ug/mL
							trans-1,2-Dichloroethene	5000 ug/mL
							trans-1,3-Dichloropropene	5000 ug/mL
							Trichloroethene	5000 ug/mL
..MSV_MegaMix#2_00011	08/26/21		Restek, Lot A0172089		(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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acrylonitrile	12500 ug/mL
							Benzyl chloride	5000 ug/mL
							Carbon disulfide	5000 ug/mL
							Cyclohexane	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_00011	08/26/21	07/27/21	Methanol, Lot DZ644	5 mL	MSV_V_Ketones_00011	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_VACR_00018	0.5 mL	Acrolein	12499.6 ug/mL
..MSV_V_Ketones_00011	01/31/24		Restek, Lot A0168313		(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_VACR_00018	09/08/21	07/09/21	Methanol, Lot DZ644	10 mL	MSV_VACR_STK_00020	9.253 mL	Acrolein	124996 ug/mL
...MSV_VACR_STK_00020	09/08/21	07/09/21	Methanol, Lot DZ644	10 mL	MSV_ACROLEIN_00013	1.4417 g	Acrolein	135087 ug/mL
....MSV_ACROLEIN_00013	09/30/21		Chem Service, Lot 10804400		(Purchased Reagent)		Acrolein	0.937 g/g
.MSV_V_VOA2_00097	08/26/21	07/27/21	Methanol, Lot DZ644	5 mL	MSV_V#2B_00227	1 mL	1,4-Dioxane	12500 ug/mL
							2-Methyl-2-propanol	5000 ug/mL
							Isobutyl alcohol	12500 ug/mL
							Methacrylonitrile	2500 ug/mL
							n-Butanol	25000 ug/mL
							Propionitrile	5000 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
..MSV_V#2B_00227	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_#1_826_00019	10/27/21	09/27/21	Methanol, Lot DZ644	1 mL	MSV_CCV_VOC#1_00022	50 uL	1,1,1,2-Tetrachloroethane	50 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dibromoethane (EDB)	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Methylene Chloride	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Carbon disulfide	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
					MSV_CCV_VOC#3_00021	200 uL	2-Butanone (MEK)	500 ug/mL
							2-Hexanone	500 ug/mL
							4-Methyl-2-pentanone (MIBK)	500 ug/mL
							Acetone	500 ug/mL
.MSV_CCV_VOC#1_00022	10/27/21	09/27/21	Methanol, Lot DZ644	5 mL	MSV_MegaMIX#1_00020	1 mL	1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							Benzene	1000 ug/mL
							Bromochloromethane	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chloroform	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Methylene Chloride	1000 ug/mL
							Styrene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
					MSV_MegaMix#2_00020	1 mL	Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
..MSV_MegaMIX#1_00020	04/30/24		Restek, Lot A0171634		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	5000 ug/mL
							1,1,1-Trichloroethane	5000 ug/mL
							1,1,2,2-Tetrachloroethane	5000 ug/mL
							1,1,2-Trichloroethane	5000 ug/mL
							1,1-Dichloroethane	5000 ug/mL
							1,1-Dichloroethene	5000 ug/mL
							1,2-Dibromoethane (EDB)	5000 ug/mL
							1,2-Dichloroethane	5000 ug/mL
							1,2-Dichloropropane	5000 ug/mL
							Benzene	5000 ug/mL
							Bromochloromethane	5000 ug/mL
							Bromodichloromethane	5000 ug/mL
							Bromoform	5000 ug/mL
							Carbon tetrachloride	5000 ug/mL
							Chlorobenzene	5000 ug/mL
							Chloroform	5000 ug/mL
							cis-1,2-Dichloroethene	5000 ug/mL
							cis-1,3-Dichloropropene	5000 ug/mL
							Dibromochloromethane	5000 ug/mL
							Ethylbenzene	5000 ug/mL
							Methylene Chloride	5000 ug/mL
							Styrene	5000 ug/mL
							Tetrachloroethene	5000 ug/mL
							Toluene	5000 ug/mL
							trans-1,2-Dichloroethene	5000 ug/mL
							trans-1,3-Dichloropropene	5000 ug/mL
							Trichloroethene	5000 ug/mL
..MSV_MegaMix#2_00020	05/31/24		Restek, Lot A0172089		(Purchased Reagent)		Carbon disulfide	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
.MSV_CCV_VOC#3_00021	10/27/21	09/27/21	Methanol, Lot DZ644	5 mL	MSV_V_Ketones_00020	1 mL	2-Butanone (MEK)	2500 ug/mL
							2-Hexanone	2500 ug/mL
							4-Methyl-2-pentanone (MIBK)	2500 ug/mL
							Acetone	2500 ug/mL
..MSV_V_Ketones_00020	01/31/24		Restek, Lot A0168313		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
MSV_LL_#2_826_00011	08/05/21	07/27/21	Methanol, Lot DZ644	1 mL	MSV_V_EE_00005	50 uL	Ethyl ether	50.0035 ug/mL
					MSV_V_PentaCL_00004	10 uL	Pentachloroethane	50 ug/mL
.MSV_V_EE_00005	10/14/21	04/14/21	Methanol, Lot DZ644	100 mL	MSV_EE_MISCSK_00006	1.989 mL	Ethyl ether	1000.07 ug/mL
..MSV_EE_MISCSK_00006	10/14/21	04/14/21	Methanol, Lot DZ644	10 mL	MSV_EE_Neat_00005	0.5028 g	Ethyl ether	50280 ug/mL
...MSV_EE_Neat_00005	11/30/21		Chem Service, Lot 11028800		(Purchased Reagent)		Ethyl ether	1 g/g
.MSV_V_PentaCL_00004	08/18/21		Restek, Lot A0171341		(Purchased Reagent)		Pentachloroethane	5000 ug/mL
MSV_LL_GAS826_00018	08/03/21	07/27/21	Methanol, Lot DZ644	1 mL	MSV_CCV_GASES_00047	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_00047	08/03/21		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_00037	10/04/21	09/27/21	Methanol, Lot DZ644	1 mL	MSV_CCV_GASES_00079	25 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_CCV_GASES_00079	10/04/21		Restek, Lot A0172364		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_LL_GAS826_00038	10/07/21	09/30/21	Methanol, Lot DZ644	1 mL	MSV_CCV_GASES_00082	25 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_CCV_GASES_00082	10/07/21		Restek, Lot A0172364		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_QC_Gas826_00018	08/03/21	07/27/21	Methanol, Lot DZ644	1 mL	MSV_QC_2K_GAS_00020	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_QC_2K_GAS_00020	08/03/21		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_00038	10/04/21	09/27/21	Methanol, Lot DZ644	1 mL	MSV_QC_2K_GAS_00040	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_QC_2K_GAS_00040	10/04/21		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_00039	10/07/21	09/30/21	Methanol, Lot DZ644	1 mL	MSV_QC_2K_GAS_00046	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_QC_2K_GAS_00046	10/07/21		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_00006							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Xylenes, Total	
					MSV_VBFB_STK_00006	0.129 mL	BFB	49.8611 ug/mL
.MSV_VBFB_STK_00006	01/07/22	07/07/21	Methanol, Lot DZ644	10 mL	MSV_4BFB_NEAT_00006	0.9663 g	BFB	96630 ug/mL
..MSV_4BFB_NEAT_00006	02/28/25		Chem Service, Lot 10727100		(Purchased Reagent)		BFB	1 g/g

Reagent

MSV_8260_SS_00388

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 55671 **Lot No.:** A0146938

Description : 8260A Surrogate Mix

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

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

Expiration Date : March 31, 2022 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dibromofluoromethane		2,505.2 µg/mL	+/- 14.5653	µg/mL	Gravimetric
	CAS # 1868-53-7	(Lot 0012016)		+/- 140.4622	µg/mL	Unstressed
	Purity 99%			+/- 143.7488	µg/mL	Stressed
2	1,2-Dichloroethane-d4		2,517.2 µg/mL	+/- 14.6350	µg/mL	Gravimetric
	CAS # 17060-07-0	(Lot PR-26748)		+/- 141.1350	µg/mL	Unstressed
	Purity 99%			+/- 144.4374	µg/mL	Stressed
3	Toluene-d8		2,507.7 µg/mL	+/- 14.5798	µg/mL	Gravimetric
	CAS # 2037-26-5	(Lot PR-27311)		+/- 140.6024	µg/mL	Unstressed
	Purity 99%			+/- 143.8923	µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)		2,507.7 µg/mL	+/- 14.5798	µg/mL	Gravimetric
	CAS # 460-00-4	(Lot 20401KO)		+/- 140.6024	µg/mL	Unstressed
	Purity 99%			+/- 143.8923	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)

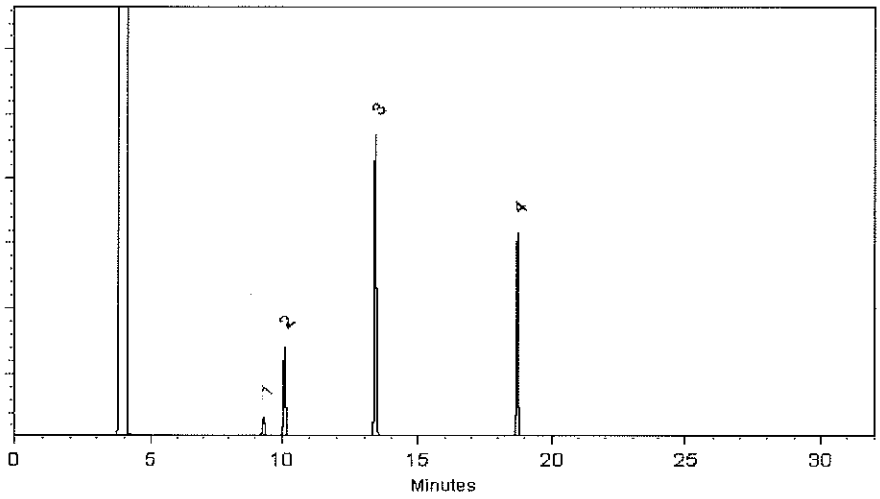
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Maggie Wang
Maggie Wang - Operations Technician I

Date Mixed: 12-Mar-2019 **Balance:** 1128342314

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 15-Mar-2019

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_8260_SS_00434

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.:** A0163445

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 : August 31, 2023 **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%	2,510.0 µg/mL	+/- 14.7301 µg/mL +/- 140.7475 µg/mL +/- 144.0401 µg/mL	Gravimetric Unstressed Stressed
2	1,2-Dichloroethane-d4 **CAS #** 17060-07-0 (Lot PR-29377) **Purity** 99%	2,520.0 µg/mL	+/- 14.7888 µg/mL +/- 141.3082 µg/mL +/- 144.6140 µg/mL	Gravimetric Unstressed Stressed
3	Toluene-d8 **CAS #** 2037-26-5 (Lot PR-30867) **Purity** 99%	2,518.8 µg/mL	+/- 14.7814 µg/mL +/- 141.2381 µg/mL +/- 144.5422 µg/mL	Gravimetric Unstressed Stressed
4	1-Bromo-4-fluorobenzene (BFB) **CAS #** 460-00-4 (Lot 20401KO) **Purity** 99%	2,513.8 µg/mL	+/- 14.7521 µg/mL +/- 140.9577 µg/mL +/- 144.2553 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)

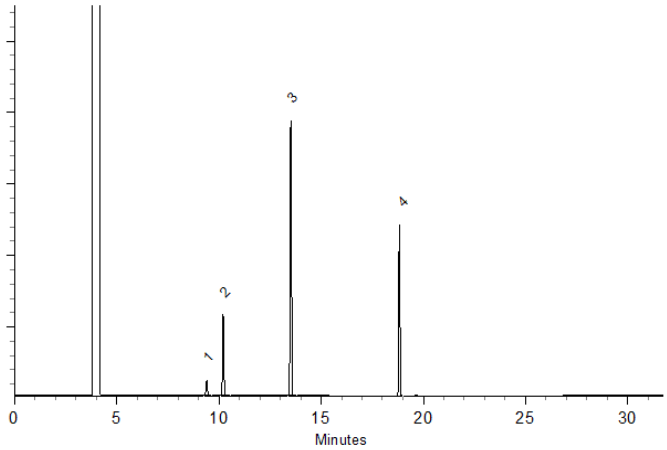
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Cory Meyer - Operations Tech I

Date Mixed: 12-Aug-2020 **Balance:** 1128360905

Justine Albertson - Operations Tech-ARM QC

Date Passed: 17-Aug-2020

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_00047

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

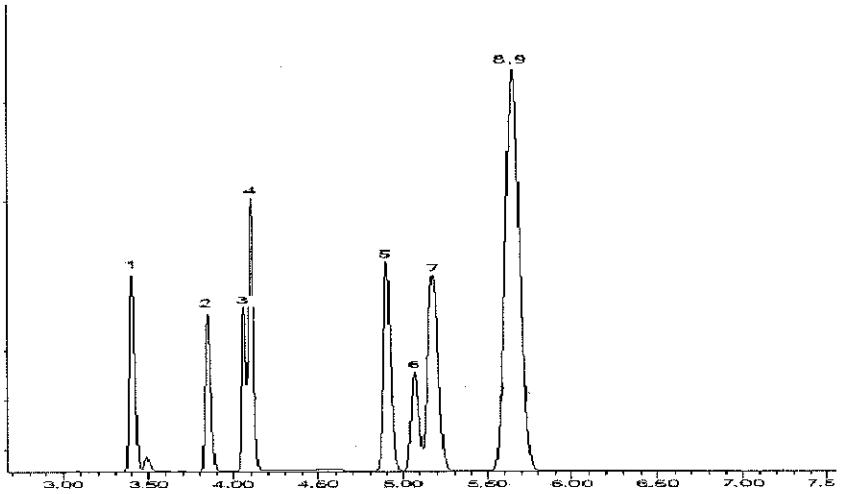
Carrier Gas:
helium-constant flow 2.0 mL/min.

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_00079

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

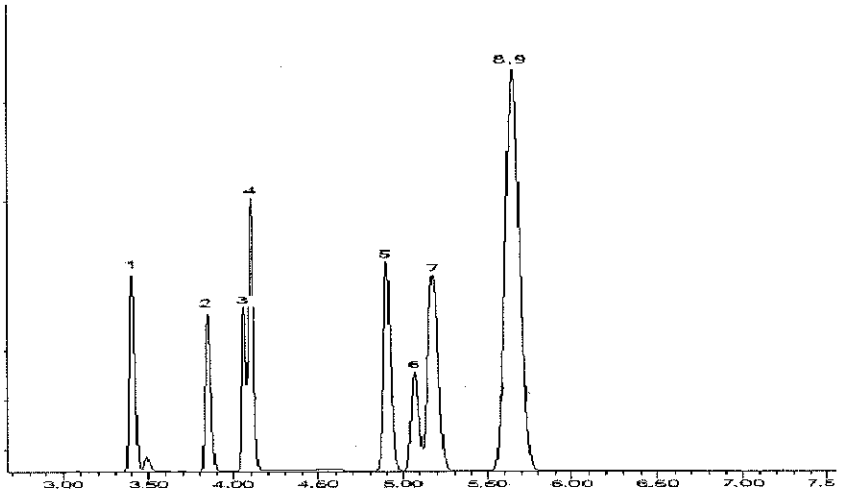
Carrier Gas:
helium-constant flow 2.0 mL/min.

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_00082

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

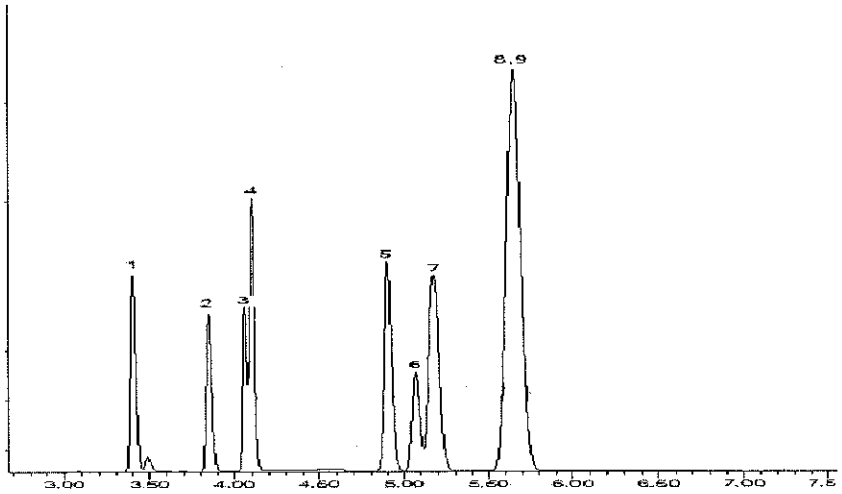
Carrier Gas:
helium-constant flow 2.0 mL/min.

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_Cus826_IS_00322

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

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 558267 **Lot No.:** A0160586

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 : May 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl Alcohol-d10		12,518.0	µg/mL	+/- 73.2956	µg/mL	Gravimetric
	CAS # 53001-22-2	(Lot PR-27803B)			+/- 268.1522	µg/mL	Unstressed
	Purity 99%				+/- 275.9398	µg/mL	Stressed
2	Fluorobenzene		2,506.0	µg/mL	+/- 14.7066	µg/mL	Gravimetric
	CAS # 462-06-6	(Lot BCBZ5549)			+/- 53.6910	µg/mL	Unstressed
	Purity 99%				+/- 55.2497	µg/mL	Stressed
3	Chlorobenzene-d5		2,512.0	µg/mL	+/- 14.7418	µg/mL	Gravimetric
	CAS # 3114-55-4	(Lot PR-29571)			+/- 53.8195	µg/mL	Unstressed
	Purity 99%				+/- 55.3820	µg/mL	Stressed
4	1,4-Dichlorobenzene-d4		2,520.0	µg/mL	+/- 14.7888	µg/mL	Gravimetric
	CAS # 3855-82-1	(Lot PR-30447)			+/- 53.9909	µg/mL	Unstressed
	Purity 99%				+/- 55.5584	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)

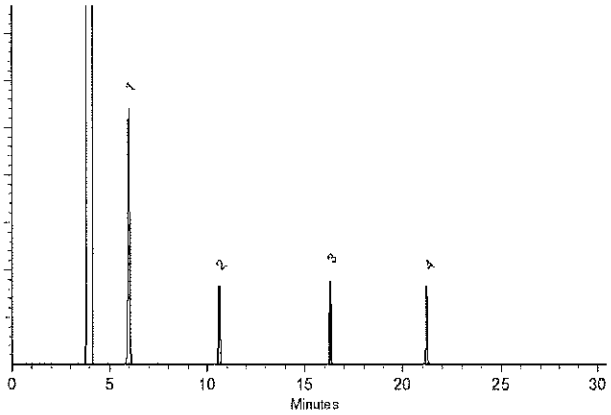
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Kylie Struble - Operations Technician I

Date Mixed: 05-May-2020 **Balance:** B707717271

Justine Albertson - Operations Tech-ARM QC

Date Passed: 06-May-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_Cus826_IS_00343

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

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 558267 **Lot No.:** A0160586

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 : May 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl Alcohol-d10		12,518.0	µg/mL	+/- 73.2956	µg/mL	Gravimetric
	CAS # 53001-22-2	(Lot PR-27803B)			+/- 268.1522	µg/mL	Unstressed
	Purity 99%				+/- 275.9398	µg/mL	Stressed
2	Fluorobenzene		2,506.0	µg/mL	+/- 14.7066	µg/mL	Gravimetric
	CAS # 462-06-6	(Lot BCBZ5549)			+/- 53.6910	µg/mL	Unstressed
	Purity 99%				+/- 55.2497	µg/mL	Stressed
3	Chlorobenzene-d5		2,512.0	µg/mL	+/- 14.7418	µg/mL	Gravimetric
	CAS # 3114-55-4	(Lot PR-29571)			+/- 53.8195	µg/mL	Unstressed
	Purity 99%				+/- 55.3820	µg/mL	Stressed
4	1,4-Dichlorobenzene-d4		2,520.0	µg/mL	+/- 14.7888	µg/mL	Gravimetric
	CAS # 3855-82-1	(Lot PR-30447)			+/- 53.9909	µg/mL	Unstressed
	Purity 99%				+/- 55.5584	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)

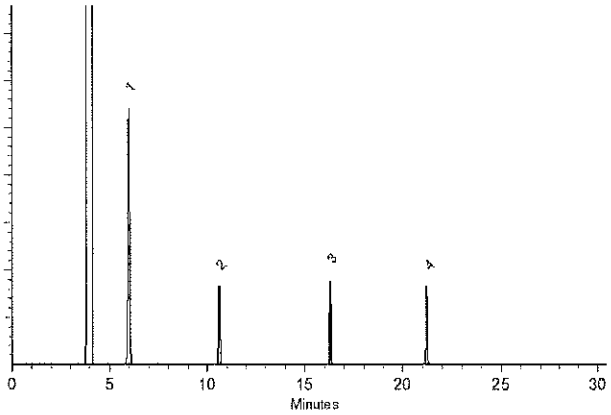
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Kylie Struble - Operations Technician I

Date Mixed: 05-May-2020 **Balance:** B707717271

Justine Albertson - Operations Tech-ARM QC

Date Passed: 06-May-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_EthylMeth_00001

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 methacrylate

CATALOG NUMBER	N-11903-1G
LOT NUMBER	11325900
DATE CERTIFIED	01/03/19
EXPIRATION DATE	01/31/23
CAS NUMBER	97-63-2
MOLECULAR FORMULA	C6H10O2
MOLECULAR WEIGHT	114.16
STORAGE	Refrigerator storage (2 - 8 °C)
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.

✓ Rec'd 5/21/2021 JMcB

Analytical Test	Value
% PURITY (GC/FID)	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

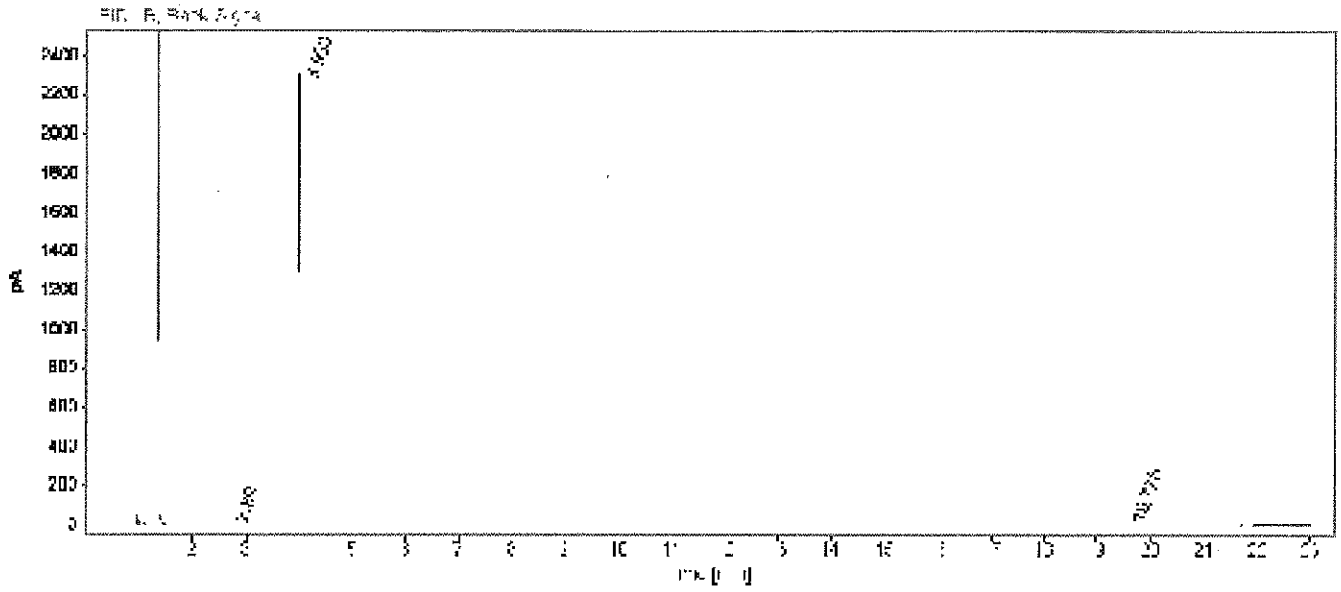
Print Date: 05/20/21

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\2018 DATA\1118\N-11803.D		
Sample name:	ethyl methacrylate		
Description:			
Acq. method:	MIX1.M		
		Location:	201
Instrument:	GC3	**Injection Vol:**	1.000
Injection date:	1/3/2019 7:57:33 AM	**# Of Injections:**	1
Column name:	HP-5ms Ultra Inert	**Diameter** 250.000 **Length** 30.000	**Particle Size** 0.250



Signal: FID1 B, Back Signal

RT [min]	Type	Width [min]	Area	Height	Area%
2.890	BB	0.0199	3.0313	2.2234	0.0820
3.983	BB	0.0236	3687.9575	2288.7249	99.8245
19.775	BB	0.0395	3.4535	1.2477	0.0935
		Sum	3694.4423		

PJLA Testing

Reagent

MSV_M_MIX1SEC_00014

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)

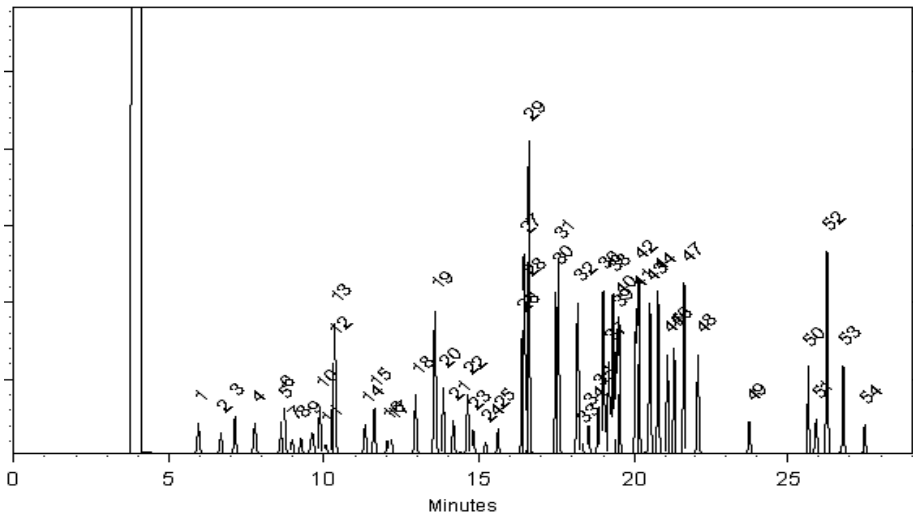
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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_MIX1SEC_00025

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)

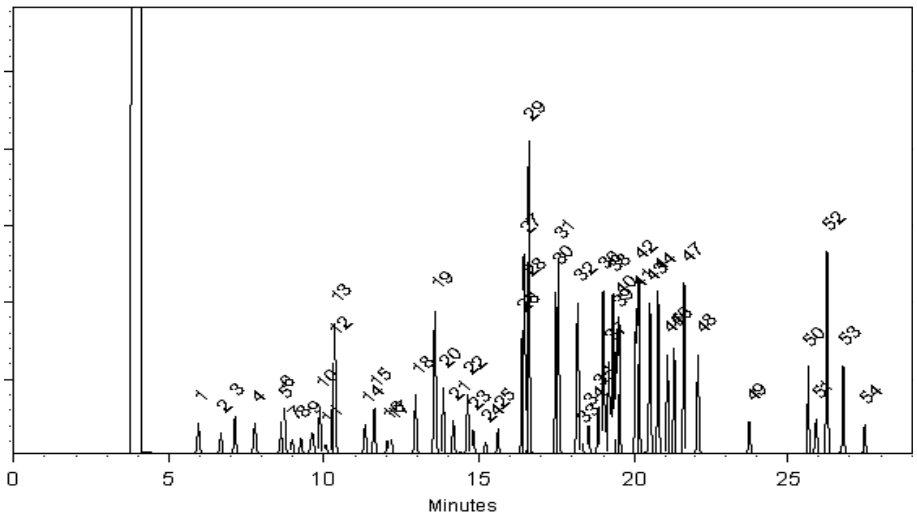
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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_MIX1SEC_00027

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)

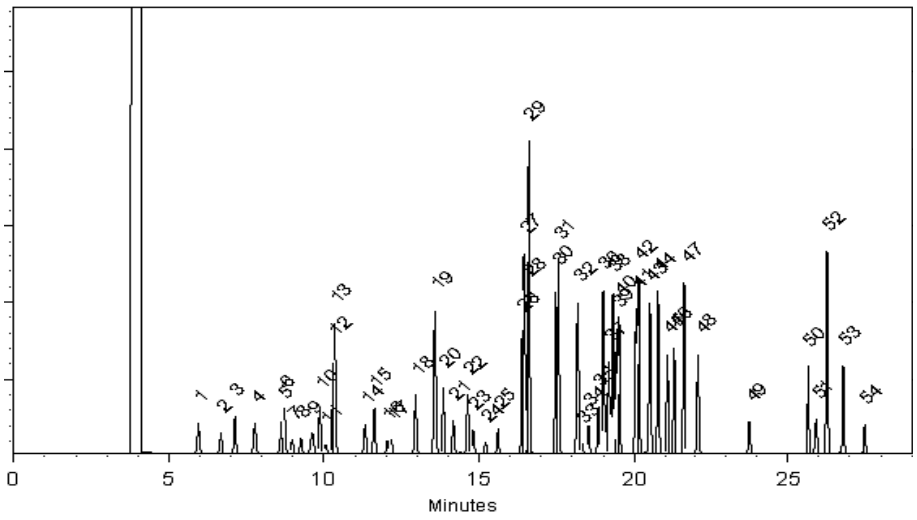
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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_MIX2SEC_00014

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)

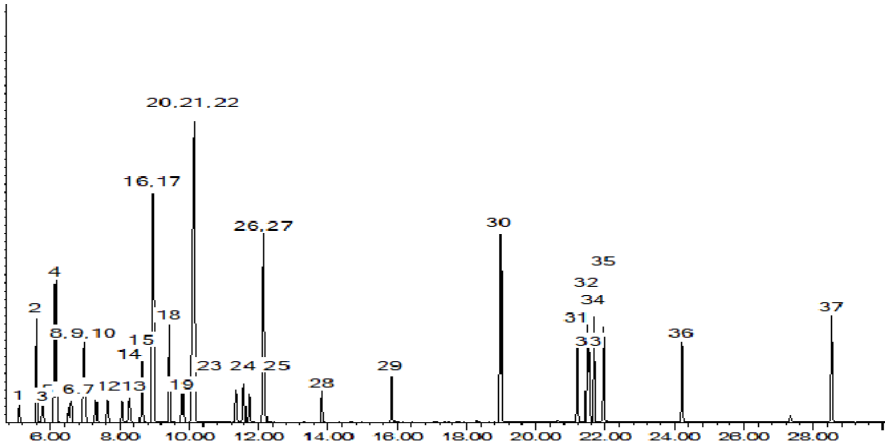
Carrier Gas:
helium-constant pressure 30 psi

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_00025

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)

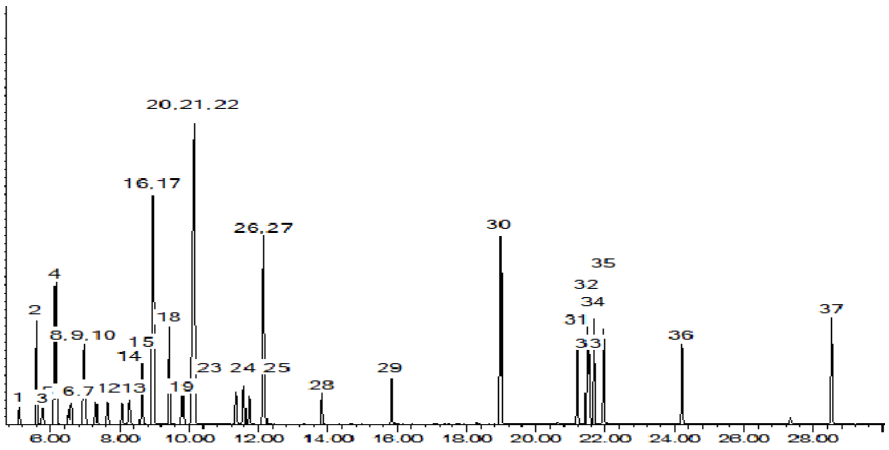
Carrier Gas:
helium-constant pressure 30 psi

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_00026

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)

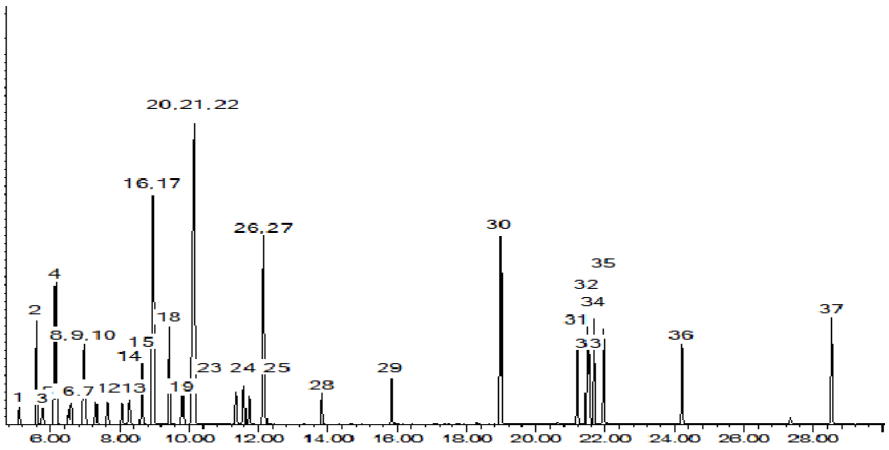
Carrier Gas:
helium-constant pressure 30 psi

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_00011

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)

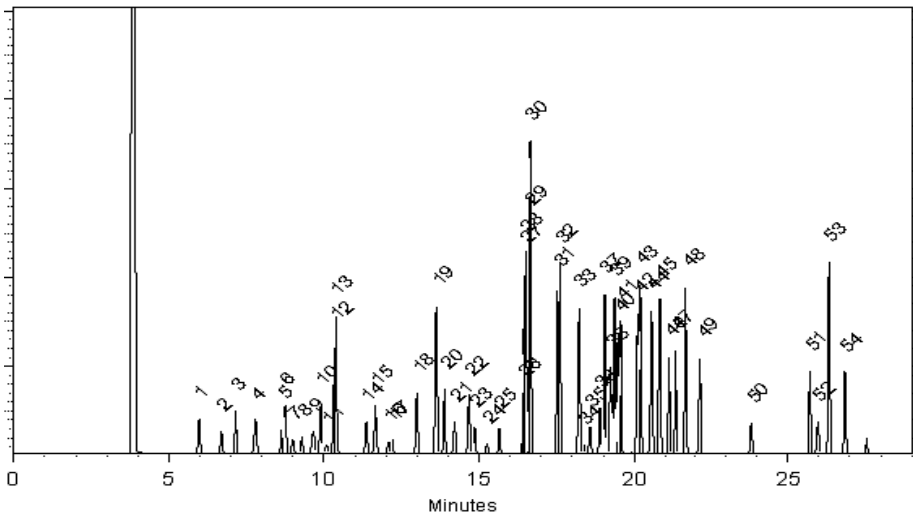
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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#1_00020

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)

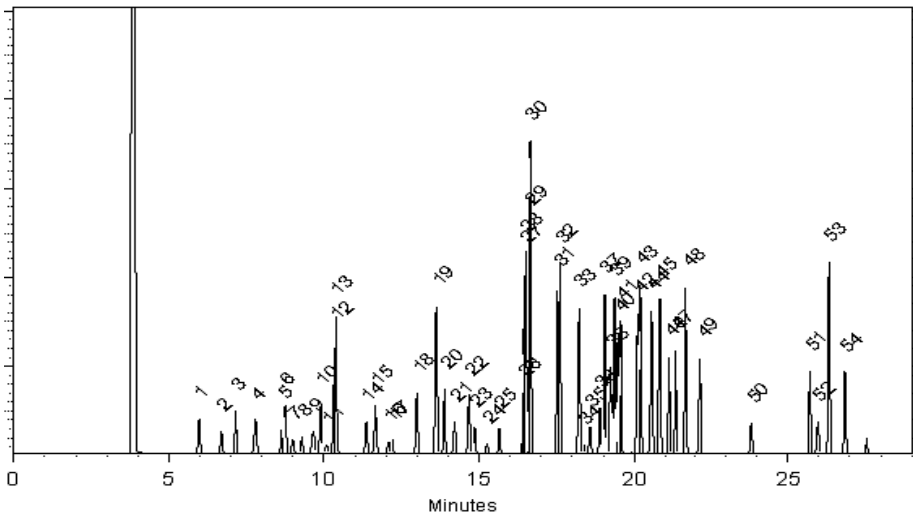
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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_00011

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

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.:** A0172089

Description : Custom VOC MegaMix® #2 Standard

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

X8
5/12/21

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	n-Pentane (C5)	5,015.5 µg/mL	+/- 31.9907 µg/mL	Gravimetric
	CAS # 109-66-0 (Lot SHBM2439)		+/- 248.4545 µg/mL	Unstressed
	Purity 99%		+/- 254.6155 µg/mL	Stressed
2	2-Propanol (isopropanol)	25,058.5 µg/mL	+/- 146.7230 µg/mL	Gravimetric
	CAS # 67-63-0 (Lot SHBM4333)		+/- 1,239.7116 µg/mL	Unstressed
	Purity 99%		+/- 1,270.5322 µg/mL	Stressed
3	1,1,2-Trichlorotrifluoroethane (CFC-113)	5,011.5 µg/mL	+/- 31.9652 µg/mL	Gravimetric
	CAS # 76-13-1 (Lot 00016133)		+/- 248.2564 µg/mL	Unstressed
	Purity 99%		+/- 254.4124 µg/mL	Stressed
4	tert-Butanol (TBA)	25,047.5 µg/mL	+/- 146.6586 µg/mL	Gravimetric
	CAS # 75-65-0 (Lot SHBM7694)		+/- 1,239.1674 µg/mL	Unstressed
	Purity 99%		+/- 1,269.9744 µg/mL	Stressed
5	Methyl acetate	5,006.8 µg/mL	+/- 31.9354 µg/mL	Gravimetric
	CAS # 79-20-9 (Lot SHBK5436)		+/- 248.0252 µg/mL	Unstressed
	Purity 99%		+/- 254.1755 µg/mL	Stressed
6	Iodomethane (methyl iodide)	5,011.2 µg/mL	+/- 31.9631 µg/mL	Gravimetric
	CAS # 74-88-4 (Lot RD210503)		+/- 248.2399 µg/mL	Unstressed
	Purity 99%		+/- 254.3955 µg/mL	Stressed
7	Allyl chloride (3-chloropropene)	5,007.0 µg/mL	+/- 31.9365 µg/mL	Gravimetric
	CAS # 107-05-1 (Lot RD210402)		+/- 248.0335 µg/mL	Unstressed
	Purity 99%		+/- 254.1839 µg/mL	Stressed

8	Carbon disulfide		5,014.7 µg/mL	+/-	31.9854	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot N28F701)		+/-	248.4132	µg/mL	Unstressed
	Purity 99%			+/-	254.5731	µg/mL	Stressed
9	Acrylonitrile		12,548.0 µg/mL	+/-	73.4713	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot M25F024)		+/-	620.7834	µg/mL	Unstressed
	Purity 99%			+/-	636.2168	µg/mL	Stressed
10	Methyl-tert-butyl ether (MTBE)		5,010.0 µg/mL	+/-	31.9556	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBM3541)		+/-	248.1821	µg/mL	Unstressed
	Purity 99%			+/-	254.3362	µg/mL	Stressed
11	n-Hexane (C6)		5,009.3 µg/mL	+/-	31.9514	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBL9879)		+/-	248.1490	µg/mL	Unstressed
	Purity 99%			+/-	254.3024	µg/mL	Stressed
12	Diisopropyl ether (DIPE)		5,015.0 µg/mL	+/-	31.9875	µg/mL	Gravimetric
	CAS # 108-20-3	(Lot SHBH1927V)		+/-	248.4298	µg/mL	Unstressed
	Purity 99%			+/-	254.5901	µg/mL	Stressed
13	Chloroprene (2-chloro-1,3-butadiene)		5,015.0 µg/mL	+/-	31.9875	µg/mL	Gravimetric
	CAS # 126-99-8	(Lot 210413JLM)		+/-	248.4298	µg/mL	Unstressed
	Purity 99%			+/-	254.5901	µg/mL	Stressed
14	Ethyl-tert-butyl ether (ETBE)		5,011.5 µg/mL	+/-	31.9652	µg/mL	Gravimetric
	CAS # 637-92-3	(Lot MKCM3774)		+/-	248.2564	µg/mL	Unstressed
	Purity 99%			+/-	254.4124	µg/mL	Stressed
15	Propionitrile		25,085.0 µg/mL	+/-	146.8782	µg/mL	Gravimetric
	CAS # 107-12-0	(Lot BCBW0865)		+/-	1,241.0227	µg/mL	Unstressed
	Purity 99%			+/-	1,271.8758	µg/mL	Stressed
16	Methacrylonitrile		12,528.0 µg/mL	+/-	73.3542	µg/mL	Gravimetric
	CAS # 126-98-7	(Lot 1012014)		+/-	619.7940	µg/mL	Unstressed
	Purity 99%			+/-	635.2027	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,555.0 µg/mL	+/-	366.2544	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot SHBM4836)		+/-	3,094.7625	µg/mL	Unstressed
	Purity 99%			+/-	3,171.7016	µg/mL	Stressed
18	Tetrahydrofuran		25,050.5 µg/mL	+/-	146.6762	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBM0434)		+/-	1,239.3159	µg/mL	Unstressed
	Purity 99%			+/-	1,270.1266	µg/mL	Stressed
19	Cyclohexane		5,017.5 µg/mL	+/-	32.0035	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot MKCF5831)		+/-	248.5536	µg/mL	Unstressed
	Purity 99%			+/-	254.7170	µg/mL	Stressed
20	1-Butanol		62,574.0 µg/mL	+/-	366.3656	µg/mL	Gravimetric
	CAS # 71-36-3	(Lot SHBM5061)		+/-	3,095.7025	µg/mL	Unstressed
	Purity 99%			+/-	3,172.6650	µg/mL	Stressed
21	tert-Amyl methyl ether (TAME)		5,012.5 µg/mL	+/-	31.9716	µg/mL	Gravimetric
	CAS # 994-05-8	(Lot HMBG7745V)		+/-	248.3059	µg/mL	Unstressed
	Purity 99%			+/-	254.4632	µg/mL	Stressed
22	n-Heptane (C7)		5,012.5 µg/mL	+/-	31.9716	µg/mL	Gravimetric
	CAS # 142-82-5	(Lot SHBL9221)		+/-	248.3059	µg/mL	Unstressed
	Purity 99%			+/-	254.4632	µg/mL	Stressed
23	tert-Amyl ethyl ether (TAEE)		5,012.7 µg/mL	+/-	31.9726	µg/mL	Gravimetric
	CAS # 919-94-8	(Lot 76U3A)		+/-	248.3142	µg/mL	Unstressed
	Purity 99%			+/-	254.4716	µg/mL	Stressed

24	Methylcyclohexane		5,015.2	µg/mL	+/-	31.9886	µg/mL	Gravimetric
	CAS # 108-87-2	(Lot SHBL0078)			+/-	248.4380	µg/mL	Unstressed
	Purity 99%				+/-	254.5985	µg/mL	Stressed
25	Methyl methacrylate		5,016.5	µg/mL	+/-	31.9971	µg/mL	Gravimetric
	CAS # 80-62-6	(Lot MKCN3027)			+/-	248.5041	µg/mL	Unstressed
	Purity 99%				+/-	254.6662	µg/mL	Stressed
26	1,4-Dioxane		62,582.5	µg/mL	+/-	366.4154	µg/mL	Gravimetric
	CAS # 123-91-1	(Lot SHBM5092)			+/-	3,096.1230	µg/mL	Unstressed
	Purity 99%				+/-	3,173.0960	µg/mL	Stressed
27	2-Nitropropane		25,020.2	µg/mL	+/-	146.4987	µg/mL	Gravimetric
	CAS # 79-46-9	(Lot BCCB9352)			+/-	1,237.8158	µg/mL	Unstressed
	Purity 97%				+/-	1,268.5893	µg/mL	Stressed
28	1-Chlorohexane		5,012.5	µg/mL	+/-	31.9718	µg/mL	Gravimetric
	CAS # 544-10-5	(Lot BCBS3368V)			+/-	248.3077	µg/mL	Unstressed
	Purity 98%				+/-	254.4650	µg/mL	Stressed
29	trans-1,4-dichloro-2-butene		12,532.9	µg/mL	+/-	73.3827	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot RD210331)			+/-	620.0352	µg/mL	Unstressed
	Purity 95%				+/-	635.4499	µg/mL	Stressed
30	1,2,3-Trimethylbenzene		5,009.9	µg/mL	+/-	31.9551	µg/mL	Gravimetric
	CAS # 526-73-8	(Lot 8776.10-36)			+/-	248.1783	µg/mL	Unstressed
	Purity 98%				+/-	254.3323	µg/mL	Stressed
31	1,3-Diethylbenzene		5,010.6	µg/mL	+/-	31.9593	µg/mL	Gravimetric
	CAS # 141-93-5	(Lot BCBT8967)			+/-	248.2106	µg/mL	Unstressed
	Purity 98%				+/-	254.3655	µg/mL	Stressed
32	Benzyl chloride		5,011.7	µg/mL	+/-	31.9663	µg/mL	Gravimetric
	CAS # 100-44-7	(Lot SHBH2102V)			+/-	248.2646	µg/mL	Unstressed
	Purity 99%				+/-	254.4209	µg/mL	Stressed
33	1,4-Diethylbenzene		5,008.5	µg/mL	+/-	31.9458	µg/mL	Gravimetric
	CAS # 105-05-5	(Lot RLHJK)			+/-	248.1055	µg/mL	Unstressed
	Purity 98%				+/-	254.2577	µg/mL	Stressed
34	1,2-Diethylbenzene		5,010.2	µg/mL	+/-	31.9567	µg/mL	Gravimetric
	CAS # 135-01-3	(Lot ECH2970181)			+/-	248.1903	µg/mL	Unstressed
	Purity 99%				+/-	254.3447	µg/mL	Stressed
35	1,3,5-Trichlorobenzene		5,012.0	µg/mL	+/-	31.9684	µg/mL	Gravimetric
	CAS # 108-70-3	(Lot 11319AS)			+/-	248.2811	µg/mL	Unstressed
	Purity 99%				+/-	254.4378	µg/mL	Stressed
36	2-Methylnaphthalene		5,009.0	µg/mL	+/-	31.9493	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot STBG8884)			+/-	248.1325	µg/mL	Unstressed
	Purity 99%				+/-	254.2855	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)

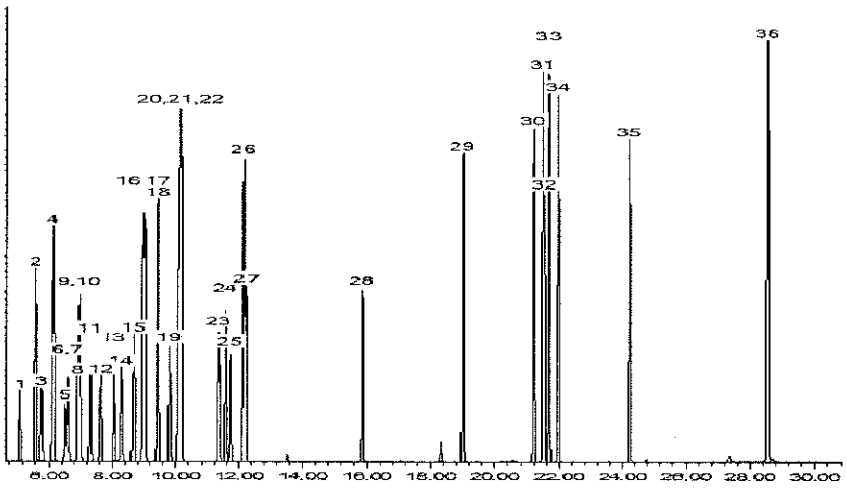
Carrier Gas:
hellum-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Miranda Kline

Miranda Kline - Operations Technician I

Date Mixed: 05-May-2021 **Balance:** B251644995

Alexis Shelow - Operations Tech I

Date Passed: 11-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#2_00020

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

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.:** A0172089

Description : Custom VOC MegaMix® #2 Standard

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

X8
5/12/21

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	n-Pentane (C5)	5,015.5 µg/mL	+/- 31.9907 µg/mL	Gravimetric
	CAS # 109-66-0 (Lot SHBM2439)		+/- 248.4545 µg/mL	Unstressed
	Purity 99%		+/- 254.6155 µg/mL	Stressed
2	2-Propanol (isopropanol)	25,058.5 µg/mL	+/- 146.7230 µg/mL	Gravimetric
	CAS # 67-63-0 (Lot SHBM4333)		+/- 1,239.7116 µg/mL	Unstressed
	Purity 99%		+/- 1,270.5322 µg/mL	Stressed
3	1,1,2-Trichlorotrifluoroethane (CFC-113)	5,011.5 µg/mL	+/- 31.9652 µg/mL	Gravimetric
	CAS # 76-13-1 (Lot 00016133)		+/- 248.2564 µg/mL	Unstressed
	Purity 99%		+/- 254.4124 µg/mL	Stressed
4	tert-Butanol (TBA)	25,047.5 µg/mL	+/- 146.6586 µg/mL	Gravimetric
	CAS # 75-65-0 (Lot SHBM7694)		+/- 1,239.1674 µg/mL	Unstressed
	Purity 99%		+/- 1,269.9744 µg/mL	Stressed
5	Methyl acetate	5,006.8 µg/mL	+/- 31.9354 µg/mL	Gravimetric
	CAS # 79-20-9 (Lot SHBK5436)		+/- 248.0252 µg/mL	Unstressed
	Purity 99%		+/- 254.1755 µg/mL	Stressed
6	Iodomethane (methyl iodide)	5,011.2 µg/mL	+/- 31.9631 µg/mL	Gravimetric
	CAS # 74-88-4 (Lot RD210503)		+/- 248.2399 µg/mL	Unstressed
	Purity 99%		+/- 254.3955 µg/mL	Stressed
7	Allyl chloride (3-chloropropene)	5,007.0 µg/mL	+/- 31.9365 µg/mL	Gravimetric
	CAS # 107-05-1 (Lot RD210402)		+/- 248.0335 µg/mL	Unstressed
	Purity 99%		+/- 254.1839 µg/mL	Stressed

8	Carbon disulfide		5,014.7	µg/mL	+/- 31.9854	µg/mL	Gravimetric
	CAS # 75-15-0	(Lot N28F701)			+/- 248.4132	µg/mL	Unstressed
	Purity 99%				+/- 254.5731	µg/mL	Stressed
9	Acrylonitrile		12,548.0	µg/mL	+/- 73.4713	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot M25F024)			+/- 620.7834	µg/mL	Unstressed
	Purity 99%				+/- 636.2168	µg/mL	Stressed
10	Methyl-tert-butyl ether (MTBE)		5,010.0	µg/mL	+/- 31.9556	µg/mL	Gravimetric
	CAS # 1634-04-4	(Lot SHBM3541)			+/- 248.1821	µg/mL	Unstressed
	Purity 99%				+/- 254.3362	µg/mL	Stressed
11	n-Hexane (C6)		5,009.3	µg/mL	+/- 31.9514	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBL9879)			+/- 248.1490	µg/mL	Unstressed
	Purity 99%				+/- 254.3024	µg/mL	Stressed
12	Diisopropyl ether (DIPE)		5,015.0	µg/mL	+/- 31.9875	µg/mL	Gravimetric
	CAS # 108-20-3	(Lot SHBH1927V)			+/- 248.4298	µg/mL	Unstressed
	Purity 99%				+/- 254.5901	µg/mL	Stressed
13	Chloroprene (2-chloro-1,3-butadiene)		5,015.0	µg/mL	+/- 31.9875	µg/mL	Gravimetric
	CAS # 126-99-8	(Lot 210413JLM)			+/- 248.4298	µg/mL	Unstressed
	Purity 99%				+/- 254.5901	µg/mL	Stressed
14	Ethyl-tert-butyl ether (ETBE)		5,011.5	µg/mL	+/- 31.9652	µg/mL	Gravimetric
	CAS # 637-92-3	(Lot MKCM3774)			+/- 248.2564	µg/mL	Unstressed
	Purity 99%				+/- 254.4124	µg/mL	Stressed
15	Propionitrile		25,085.0	µg/mL	+/- 146.8782	µg/mL	Gravimetric
	CAS # 107-12-0	(Lot BCBW0865)			+/- 1,241.0227	µg/mL	Unstressed
	Purity 99%				+/- 1,271.8758	µg/mL	Stressed
16	Methacrylonitrile		12,528.0	µg/mL	+/- 73.3542	µg/mL	Gravimetric
	CAS # 126-98-7	(Lot 1012014)			+/- 619.7940	µg/mL	Unstressed
	Purity 99%				+/- 635.2027	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		62,555.0	µg/mL	+/- 366.2544	µg/mL	Gravimetric
	CAS # 78-83-1	(Lot SHBM4836)			+/- 3,094.7625	µg/mL	Unstressed
	Purity 99%				+/- 3,171.7016	µg/mL	Stressed
18	Tetrahydrofuran		25,050.5	µg/mL	+/- 146.6762	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBM0434)			+/- 1,239.3159	µg/mL	Unstressed
	Purity 99%				+/- 1,270.1266	µg/mL	Stressed
19	Cyclohexane		5,017.5	µg/mL	+/- 32.0035	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot MKCF5831)			+/- 248.5536	µg/mL	Unstressed
	Purity 99%				+/- 254.7170	µg/mL	Stressed
20	1-Butanol		62,574.0	µg/mL	+/- 366.3656	µg/mL	Gravimetric
	CAS # 71-36-3	(Lot SHBM5061)			+/- 3,095.7025	µg/mL	Unstressed
	Purity 99%				+/- 3,172.6650	µg/mL	Stressed
21	tert-Amyl methyl ether (TAME)		5,012.5	µg/mL	+/- 31.9716	µg/mL	Gravimetric
	CAS # 994-05-8	(Lot HMBG7745V)			+/- 248.3059	µg/mL	Unstressed
	Purity 99%				+/- 254.4632	µg/mL	Stressed
22	n-Heptane (C7)		5,012.5	µg/mL	+/- 31.9716	µg/mL	Gravimetric
	CAS # 142-82-5	(Lot SHBL9221)			+/- 248.3059	µg/mL	Unstressed
	Purity 99%				+/- 254.4632	µg/mL	Stressed
23	tert-Amyl ethyl ether (TAEE)		5,012.7	µg/mL	+/- 31.9726	µg/mL	Gravimetric
	CAS # 919-94-8	(Lot 76U3A)			+/- 248.3142	µg/mL	Unstressed
	Purity 99%				+/- 254.4716	µg/mL	Stressed

24	Methylcyclohexane		5,015.2	µg/mL	+/-	31.9886	µg/mL	Gravimetric
	CAS # 108-87-2	(Lot SHBL0078)			+/-	248.4380	µg/mL	Unstressed
	Purity 99%				+/-	254.5985	µg/mL	Stressed
25	Methyl methacrylate		5,016.5	µg/mL	+/-	31.9971	µg/mL	Gravimetric
	CAS # 80-62-6	(Lot MKCN3027)			+/-	248.5041	µg/mL	Unstressed
	Purity 99%				+/-	254.6662	µg/mL	Stressed
26	1,4-Dioxane		62,582.5	µg/mL	+/-	366.4154	µg/mL	Gravimetric
	CAS # 123-91-1	(Lot SHBM5092)			+/-	3,096.1230	µg/mL	Unstressed
	Purity 99%				+/-	3,173.0960	µg/mL	Stressed
27	2-Nitropropane		25,020.2	µg/mL	+/-	146.4987	µg/mL	Gravimetric
	CAS # 79-46-9	(Lot BCCB9352)			+/-	1,237.8158	µg/mL	Unstressed
	Purity 97%				+/-	1,268.5893	µg/mL	Stressed
28	1-Chlorohexane		5,012.5	µg/mL	+/-	31.9718	µg/mL	Gravimetric
	CAS # 544-10-5	(Lot BCBS3368V)			+/-	248.3077	µg/mL	Unstressed
	Purity 98%				+/-	254.4650	µg/mL	Stressed
29	trans-1,4-dichloro-2-butene		12,532.9	µg/mL	+/-	73.3827	µg/mL	Gravimetric
	CAS # 110-57-6	(Lot RD210331)			+/-	620.0352	µg/mL	Unstressed
	Purity 95%				+/-	635.4499	µg/mL	Stressed
30	1,2,3-Trimethylbenzene		5,009.9	µg/mL	+/-	31.9551	µg/mL	Gravimetric
	CAS # 526-73-8	(Lot 8776.10-36)			+/-	248.1783	µg/mL	Unstressed
	Purity 98%				+/-	254.3323	µg/mL	Stressed
31	1,3-Diethylbenzene		5,010.6	µg/mL	+/-	31.9593	µg/mL	Gravimetric
	CAS # 141-93-5	(Lot BCBT8967)			+/-	248.2106	µg/mL	Unstressed
	Purity 98%				+/-	254.3655	µg/mL	Stressed
32	Benzyl chloride		5,011.7	µg/mL	+/-	31.9663	µg/mL	Gravimetric
	CAS # 100-44-7	(Lot SHBH2102V)			+/-	248.2646	µg/mL	Unstressed
	Purity 99%				+/-	254.4209	µg/mL	Stressed
33	1,4-Diethylbenzene		5,008.5	µg/mL	+/-	31.9458	µg/mL	Gravimetric
	CAS # 105-05-5	(Lot RLHJK)			+/-	248.1055	µg/mL	Unstressed
	Purity 98%				+/-	254.2577	µg/mL	Stressed
34	1,2-Diethylbenzene		5,010.2	µg/mL	+/-	31.9567	µg/mL	Gravimetric
	CAS # 135-01-3	(Lot ECH2970181)			+/-	248.1903	µg/mL	Unstressed
	Purity 99%				+/-	254.3447	µg/mL	Stressed
35	1,3,5-Trichlorobenzene		5,012.0	µg/mL	+/-	31.9684	µg/mL	Gravimetric
	CAS # 108-70-3	(Lot 11319AS)			+/-	248.2811	µg/mL	Unstressed
	Purity 99%				+/-	254.4378	µg/mL	Stressed
36	2-Methylnaphthalene		5,009.0	µg/mL	+/-	31.9493	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot STBG8884)			+/-	248.1325	µg/mL	Unstressed
	Purity 99%				+/-	254.2855	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)

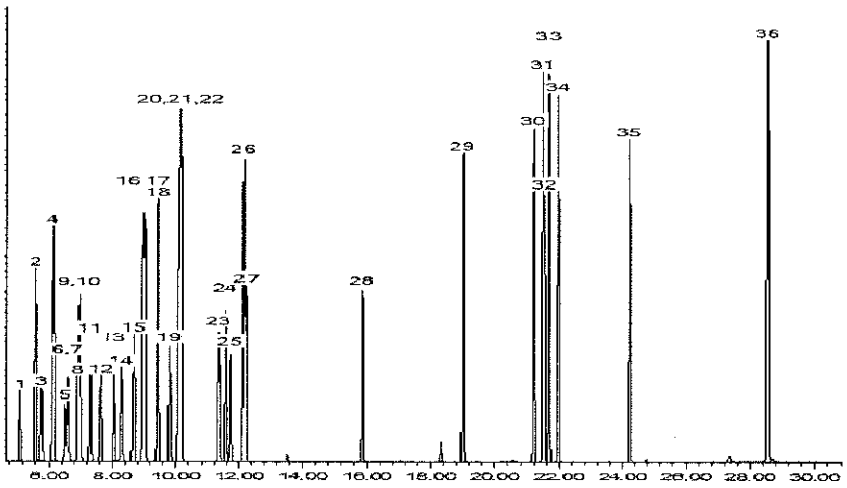
Carrier Gas:
hellum-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Miranda Kline

Miranda Kline - Operations Technician I

Date Mixed: 05-May-2021 **Balance:** B251644995

Alexis Shelow - Operations Tech I

Date Passed: 11-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_Q_Ketones_00015

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. : 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)

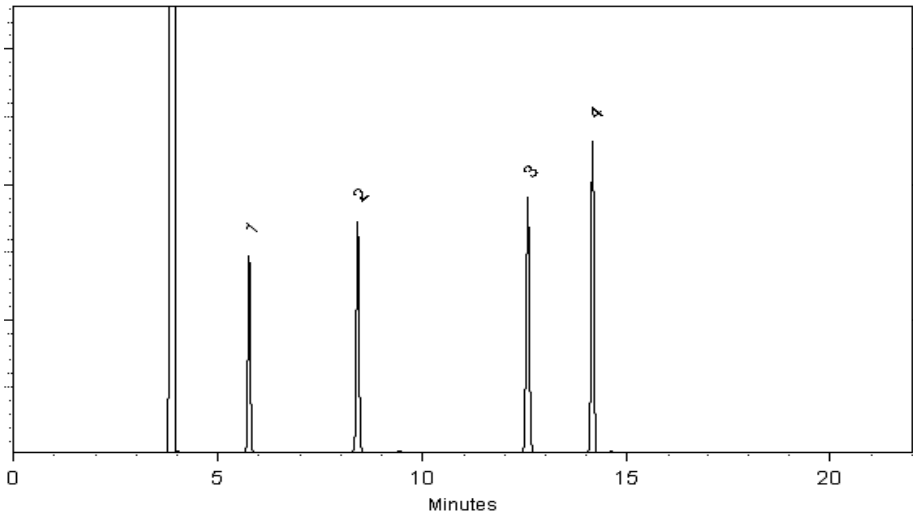
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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_00025

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. : 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)

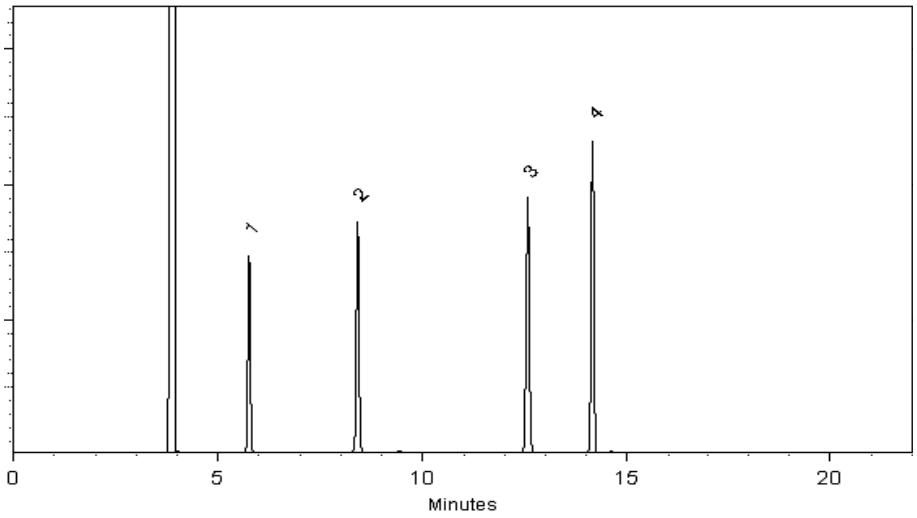
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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_00026

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. : 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)

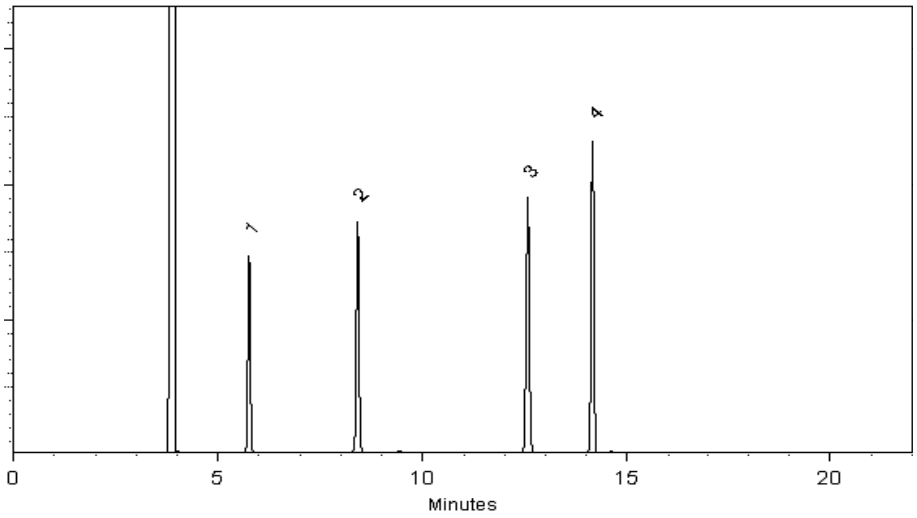
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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_QC_2K_GAS_00020

RESTEK® CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

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

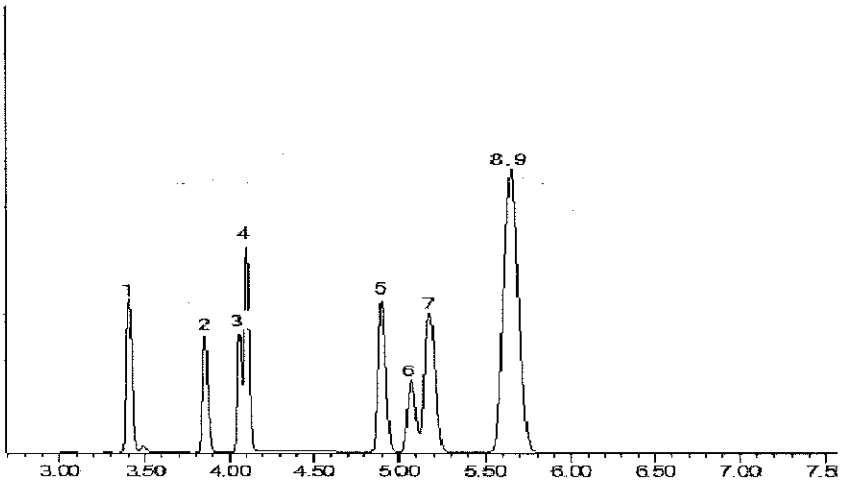
Carrier Gas:
helium-constant flow 2.0 mL/min.

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_00040

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

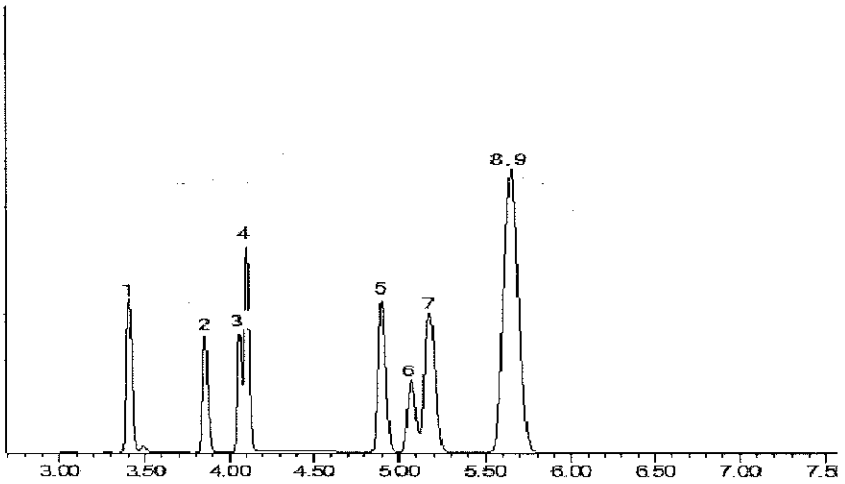
Carrier Gas:
helium-constant flow 2.0 mL/min.

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_00227

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

www.restek.com

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom V # 2B Standard

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

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

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

Ship: Ambient

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

Specific Reference Material Notes:

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

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

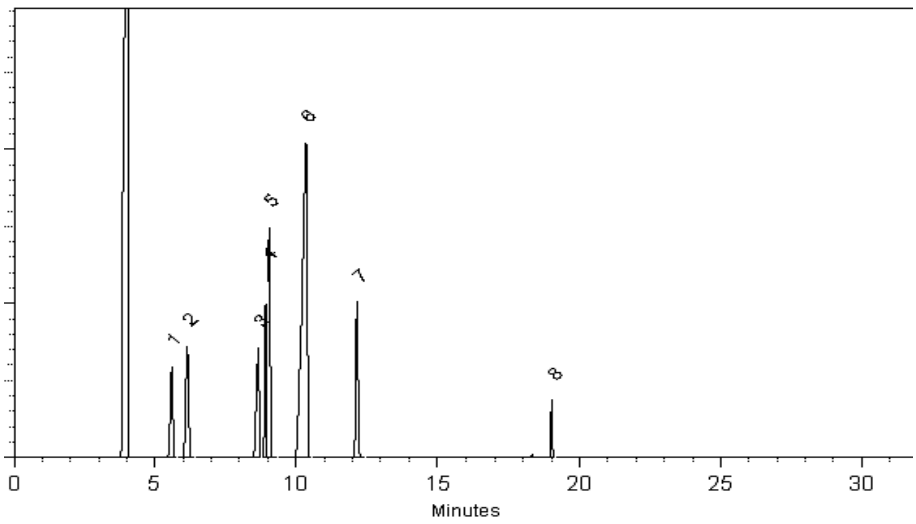
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Erik Strommer - Operations Tech I

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

Marlina Cowan - Operations Tech I

Date Passed: 23-Apr-2021

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

General Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/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_00011

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. : 569721 **Lot No.:** A0168313

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

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

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

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

Ship: Ambient

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

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

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

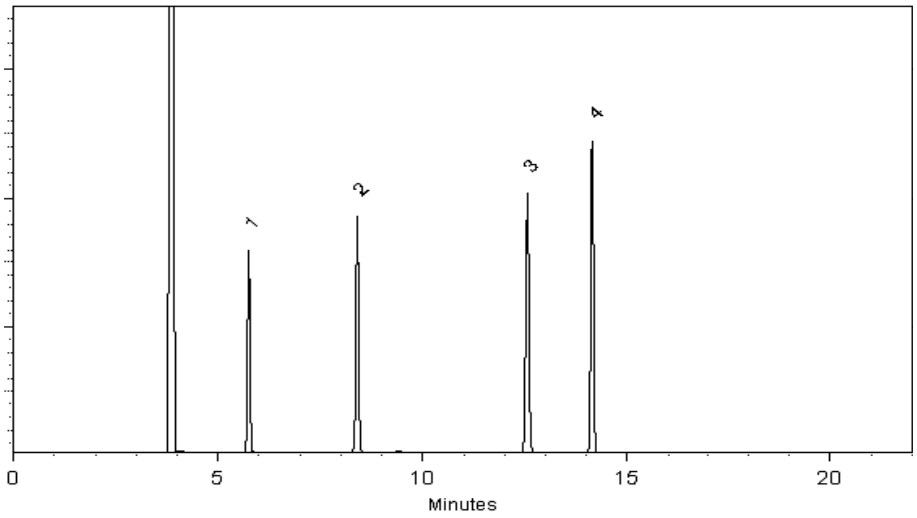
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Cathleen Soltis - Mix Technician

Date Mixed: 20-Jan-2021 **Balance:** B251644995

Alexis Shelow - Operations Tech I

Date Passed: 21-Jan-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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_Ketones_00020

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. : 569721 **Lot No.:** A0168313

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

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

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

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

Ship: Ambient

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

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

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

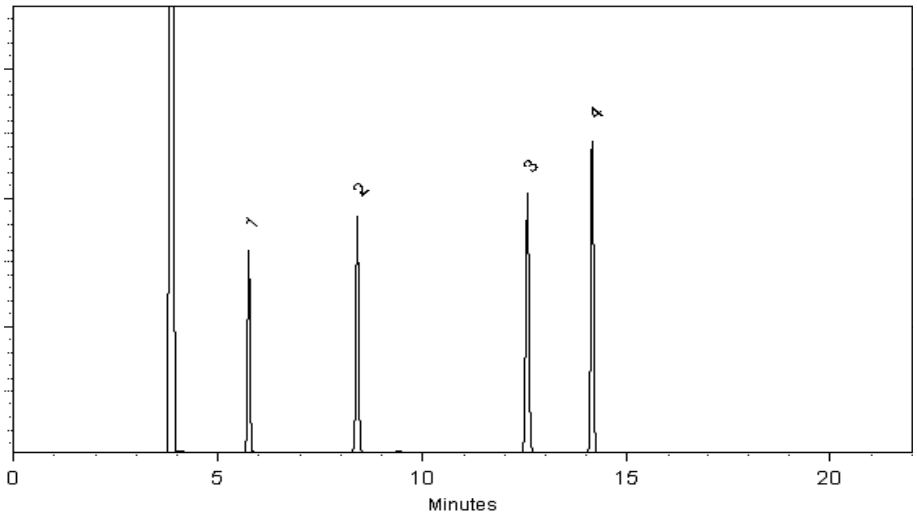
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Cathleen Soltis - Mix Technician

Date Mixed: 20-Jan-2021 **Balance:** B251644995

Alexis Shelow - Operations Tech I

Date Passed: 21-Jan-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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_00004

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. : 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)

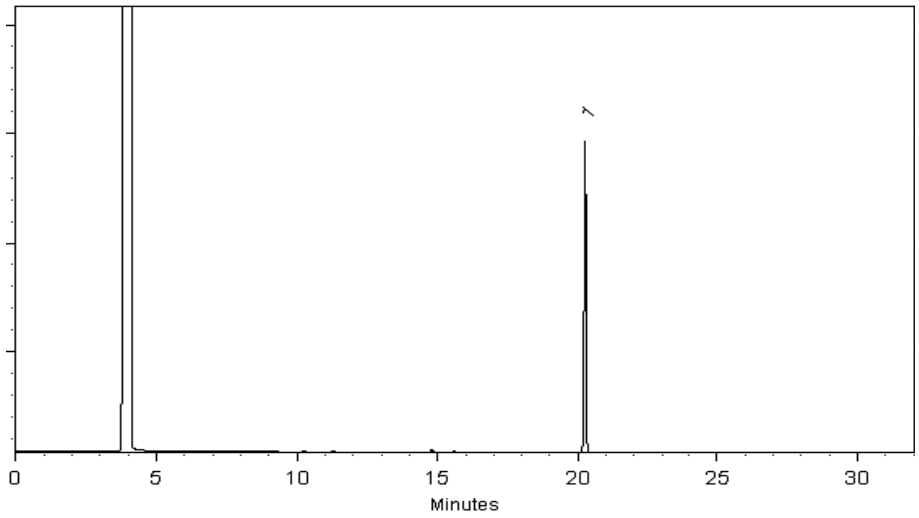
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.: 410-56784-1

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-29-0/1-0	410-56784-1	97	97	96	98
HD-COD-SW-8-0/1-0	410-56784-2	96	98	96	97
HD-COD-SW-13-0/1-0	410-56784-3	96	98	96	98
HD-COD-SW-16-0/1-0	410-56784-4	95	99	97	98
HD-COD-SW-17-0/1-0	410-56784-5	97	98	96	98
HD-COD-SW-6-0/1-0	410-56784-6	96	98	96	99
HD-COD-SW-15-0/1-0	410-56784-7	96	97	96	97
HD-COD-SW-27-0/1-0	410-56784-8	98	99	96	97
HD-COD-SW-28-0/1-0	410-56784-9	97	97	95	99
HD-COD-SW-7-0/1-0	410-56784-10	97	99	95	97
HD-COD-SW-9-0/1-0	410-56784-11	95	100	96	98
HD-QC1-0/1-1	410-56784-12	98	99	96	97
HD-COD-SW-26-0/1-0	410-56784-13	97	99	96	98
HD-QC1-0/1-2	410-56784-14	96	101	96	98
	MB 410-177560/7	96	99	97	99
	MB 410-178764/7	98	96	96	99
	LCS 410-177560/4	95	95	98	100
	LCS 410-178764/4	96	99	98	99
	LCSD 410-177560/5	97	97	97	99
	LCSD 410-178764/5	95	97	97	100
HD-COD-SW-15-0/1-0 MS MS	410-56784-7 MS	96	94	98	99
HD-COD-SW-15-0/1-0 MSD MSD	410-56784-7 MSD	96	96	98	100

	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.: 410-56784-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GO01X03.D

Lab ID: LCS 410-177560/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	4.77	95	71-134	
1,1,1-Trichloroethane	5.00	4.73	95	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.27	105	75-123	
1,1,2-Trichloroethane	5.00	5.05	101	80-120	
1,1-Dichloroethane	5.00	4.46	89	74-120	
1,1-Dichloroethene	5.00	4.98	100	80-131	
1,2-Dibromoethane (EDB)	5.00	4.96	99	80-120	
1,2-Dichloroethane	5.00	4.44	89	69-122	
1,2-Dichloropropane	5.00	4.50	90	80-120	
2-Butanone (MEK)	62.5	64.1	103	59-141	
2-Hexanone	62.5	68.7	110	52-140	
4-Methyl-2-pentanone (MIBK)	62.5	64.9	104	55-140	
Acetone	62.5	54.4	87	60-146	
Benzene	5.00	4.69	94	80-120	
Bromochloromethane	5.00	4.77	95	80-120	
Bromodichloromethane	5.00	4.83	97	73-124	
Bromoform	5.00	4.42	88	49-144	
Bromomethane	5.00	4.82	96	60-136	
Carbon disulfide	5.00	4.76	95	67-130	
Carbon tetrachloride	5.00	4.60	92	64-141	
Chlorobenzene	5.00	4.73	95	80-120	
Chloroethane	5.00	4.53	91	63-120	
Chloroform	5.00	4.79	96	80-120	
Chloromethane	5.00	4.40	88	56-124	
cis-1,2-Dichloroethene	5.00	4.95	99	80-122	
cis-1,3-Dichloropropene	5.00	4.59	92	67-121	
Dibromochloromethane	5.00	4.72	94	64-138	
Ethylbenzene	5.00	4.88	98	80-120	
Methyl tert-butyl ether	5.00	4.86	97	69-120	
Methylene Chloride	5.00	4.78	96	80-120	
Styrene	5.00	5.06	101	80-120	
Tetrachloroethene	5.00	4.29	86	80-120	
Toluene	5.00	4.88	98	80-120	
trans-1,2-Dichloroethene	5.00	4.75	95	80-122	
trans-1,3-Dichloropropene	5.00	4.99	100	61-129	
Trichloroethene	5.00	4.62	92	80-120	
Vinyl chloride	5.00	4.40	88	60-125	
Xylenes, Total	15.0	14.7	98	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.: 410-56784-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GO05X03.D

Lab ID: LCS 410-178764/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	4.96	99	71-134	
1,1,1-Trichloroethane	5.00	4.96	99	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.45	109	75-123	
1,1,2-Trichloroethane	5.00	5.18	104	80-120	
1,1-Dichloroethane	5.00	4.62	92	74-120	
1,1-Dichloroethene	5.00	5.37	107	80-131	
1,2-Dibromoethane (EDB)	5.00	5.14	103	80-120	
1,2-Dichloroethane	5.00	4.57	91	69-122	
1,2-Dichloropropane	5.00	4.65	93	80-120	
2-Butanone (MEK)	62.5	60.4	97	59-141	
2-Hexanone	62.5	62.6	100	52-140	
4-Methyl-2-pentanone (MIBK)	62.5	61.8	99	55-140	
Acetone	62.5	58.9	94	60-146	
Benzene	5.00	4.94	99	80-120	
Bromochloromethane	5.00	5.02	100	80-120	
Bromodichloromethane	5.00	5.05	101	73-124	
Bromoform	5.00	4.62	92	49-144	
Bromomethane	5.00	4.95	99	60-136	
Carbon disulfide	5.00	5.12	102	67-130	
Carbon tetrachloride	5.00	4.84	97	64-141	
Chlorobenzene	5.00	4.95	99	80-120	
Chloroethane	5.00	4.59	92	63-120	
Chloroform	5.00	5.08	102	80-120	
Chloromethane	5.00	4.46	89	56-124	
cis-1,2-Dichloroethene	5.00	5.14	103	80-122	
cis-1,3-Dichloropropene	5.00	4.75	95	67-121	
Dibromochloromethane	5.00	4.85	97	64-138	
Ethylbenzene	5.00	5.07	101	80-120	
Methyl tert-butyl ether	5.00	4.98	100	69-120	
Methylene Chloride	5.00	4.98	100	80-120	
Styrene	5.00	5.30	106	80-120	
Tetrachloroethene	5.00	4.55	91	80-120	
Toluene	5.00	5.07	101	80-120	
trans-1,2-Dichloroethene	5.00	5.15	103	80-122	
trans-1,3-Dichloropropene	5.00	5.15	103	61-129	
Trichloroethene	5.00	4.89	98	80-120	
Vinyl chloride	5.00	4.75	95	60-125	
Xylenes, Total	15.0	15.3	102	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Env, LLC Job No.: 410-56784-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GO01X04.D

Lab ID: LCSD 410-177560/5 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	4.76	95	0	30	71-134	
1,1,1-Trichloroethane	5.00	4.72	94	0	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.39	108	2	30	75-123	
1,1,2-Trichloroethane	5.00	4.96	99	2	30	80-120	
1,1-Dichloroethane	5.00	4.43	89	1	30	74-120	
1,1-Dichloroethene	5.00	5.10	102	2	30	80-131	
1,2-Dibromoethane (EDB)	5.00	4.90	98	1	30	80-120	
1,2-Dichloroethane	5.00	4.41	88	1	30	69-122	
1,2-Dichloropropane	5.00	4.42	88	2	30	80-120	
2-Butanone (MEK)	62.5	57.6	92	11	30	59-141	
2-Hexanone	62.5	60.3	96	13	30	52-140	
4-Methyl-2-pentanone (MIBK)	62.5	58.2	93	11	30	55-140	
Acetone	62.5	55.9	89	3	30	60-146	
Benzene	5.00	4.68	94	0	30	80-120	
Bromochloromethane	5.00	4.84	97	1	30	80-120	
Bromodichloromethane	5.00	4.83	97	0	30	73-124	
Bromoform	5.00	4.38	88	1	30	49-144	
Bromomethane	5.00	4.79	96	1	30	60-136	
Carbon disulfide	5.00	4.77	95	0	30	67-130	
Carbon tetrachloride	5.00	4.59	92	0	30	64-141	
Chlorobenzene	5.00	4.70	94	1	30	80-120	
Chloroethane	5.00	4.48	90	1	30	63-120	
Chloroform	5.00	4.75	95	1	30	80-120	
Chloromethane	5.00	4.41	88	0	30	56-124	
cis-1,2-Dichloroethene	5.00	4.92	98	1	30	80-122	
cis-1,3-Dichloropropene	5.00	4.61	92	0	30	67-121	
Dibromochloromethane	5.00	4.68	94	1	30	64-138	
Ethylbenzene	5.00	4.79	96	2	30	80-120	
Methyl tert-butyl ether	5.00	4.85	97	0	30	69-120	
Methylene Chloride	5.00	4.85	97	2	30	80-120	
Styrene	5.00	4.99	100	1	30	80-120	
Tetrachloroethene	5.00	4.31	86	1	30	80-120	
Toluene	5.00	4.87	97	0	30	80-120	
trans-1,2-Dichloroethene	5.00	4.89	98	3	30	80-122	
trans-1,3-Dichloropropene	5.00	4.95	99	1	30	61-129	
Trichloroethene	5.00	4.61	92	0	30	80-120	
Vinyl chloride	5.00	4.50	90	2	30	60-125	
Xylenes, Total	15.0	14.5	97	1	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.: 410-56784-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GO05X04.D

Lab ID: LCSD 410-178764/5 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	4.80	96	3	30	71-134	
1,1,1-Trichloroethane	5.00	4.88	98	2	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.51	110	1	30	75-123	
1,1,2-Trichloroethane	5.00	5.12	102	1	30	80-120	
1,1-Dichloroethane	5.00	4.53	91	2	30	74-120	
1,1-Dichloroethene	5.00	5.30	106	1	30	80-131	
1,2-Dibromoethane (EDB)	5.00	5.07	101	1	30	80-120	
1,2-Dichloroethane	5.00	4.61	92	1	30	69-122	
1,2-Dichloropropane	5.00	4.58	92	1	30	80-120	
2-Butanone (MEK)	62.5	56.7	91	6	30	59-141	
2-Hexanone	62.5	57.9	93	8	30	52-140	
4-Methyl-2-pentanone (MIBK)	62.5	56.2	90	10	30	55-140	
Acetone	62.5	55.1	88	7	30	60-146	
Benzene	5.00	4.82	96	2	30	80-120	
Bromochloromethane	5.00	4.94	99	2	30	80-120	
Bromodichloromethane	5.00	4.94	99	2	30	73-124	
Bromoform	5.00	4.65	93	1	30	49-144	
Bromomethane	5.00	4.67	93	6	30	60-136	
Carbon disulfide	5.00	5.01	100	2	30	67-130	
Carbon tetrachloride	5.00	4.70	94	3	30	64-141	
Chlorobenzene	5.00	4.87	97	2	30	80-120	
Chloroethane	5.00	4.54	91	1	30	63-120	
Chloroform	5.00	4.89	98	4	30	80-120	
Chloromethane	5.00	4.38	88	2	30	56-124	
cis-1,2-Dichloroethene	5.00	5.02	100	3	30	80-122	
cis-1,3-Dichloropropene	5.00	4.69	94	1	30	67-121	
Dibromochloromethane	5.00	4.77	95	2	30	64-138	
Ethylbenzene	5.00	4.95	99	3	30	80-120	
Methyl tert-butyl ether	5.00	4.94	99	1	30	69-120	
Methylene Chloride	5.00	4.91	98	1	30	80-120	
Styrene	5.00	5.14	103	3	30	80-120	
Tetrachloroethene	5.00	4.45	89	2	30	80-120	
Toluene	5.00	4.98	100	2	30	80-120	
trans-1,2-Dichloroethene	5.00	5.06	101	2	30	80-122	
trans-1,3-Dichloropropene	5.00	5.13	103	1	30	61-129	
Trichloroethene	5.00	4.73	95	3	30	80-120	
Vinyl chloride	5.00	4.58	92	4	30	60-125	
Xylenes, Total	15.0	15.0	100	2	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.: 410-56784-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GO01X17.D

Lab ID: 410-56784-7 MS Client ID: HD-COD-SW-15-0/1-0 MS MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	ND	5.10	102	71-134	
1,1,1-Trichloroethane	5.00	0.16 J	5.62	109	78-126	
1,1,2,2-Tetrachloroethane	5.00	ND	5.57	111	75-123	
1,1,2-Trichloroethane	5.00	ND	5.37	107	80-120	
1,1-Dichloroethane	5.00	0.083 J	5.03	99	74-120	
1,1-Dichloroethene	5.00	0.12 J	6.03	118	80-131	
1,2-Dibromoethane (EDB)	5.00	ND	5.19	104	80-120	
1,2-Dichloroethane	5.00	ND	4.91	98	69-122	
1,2-Dichloropropane	5.00	ND	4.90	98	80-120	
2-Butanone (MEK)	62.6	ND	62.0	99	59-141	
2-Hexanone	62.6	ND	64.9	104	52-140	
4-Methyl-2-pentanone (MIBK)	62.6	ND	62.1	99	55-140	
Acetone	62.6	ND	55.8	89	60-146	
Benzene	5.00	ND	5.31	106	80-120	
Bromochloromethane	5.00	ND	5.35	107	80-120	
Bromodichloromethane	5.00	ND	5.14	103	73-124	
Bromoform	5.00	ND	4.57	91	49-144	
Bromomethane	5.00	ND	5.17	103	60-136	
Carbon disulfide	5.00	ND	5.54	111	67-130	
Carbon tetrachloride	5.00	ND	5.33	106	64-141	
Chlorobenzene	5.00	ND	5.30	106	80-120	
Chloroethane	5.00	ND	4.90	98	63-120	
Chloroform	5.00	0.29 J	5.66	107	80-120	
Chloromethane	5.00	ND	4.74	95	80-120	
cis-1,2-Dichloroethene	5.00	0.85	6.38	111	80-122	
cis-1,3-Dichloropropene	5.00	ND	4.86	97	67-121	
Dibromochloromethane	5.00	ND	4.93	98	64-138	
Ethylbenzene	5.00	ND	5.55	111	80-120	
Methyl tert-butyl ether	5.00	ND	5.21	104	69-120	
Methylene Chloride	5.00	ND	5.28	106	80-120	
Styrene	5.00	ND	5.59	112	80-120	
Tetrachloroethene	5.00	2.9	7.96	102	80-120	
Toluene	5.00	0.088 J	5.53	109	80-120	
trans-1,2-Dichloroethene	5.00	ND	5.52	110	80-122	
trans-1,3-Dichloropropene	5.00	ND	5.25	105	61-129	
Trichloroethene	5.00	0.95	6.11	103	80-120	
Vinyl chloride	5.00	ND	5.01	100	60-125	
Xylenes, Total	15.0	ND	16.7	111	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Env, LLC Job No.: 410-56784-1

SDG No.:

Matrix: Water Level: Low Lab File ID: GO01X18.D

Lab ID: 410-56784-7 MSD Client ID: HD-COD-SW-15-0/1-0 MSD MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	5.15	103	1	30	71-134	
1,1,1-Trichloroethane	5.00	5.62	109	0	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.53	110	1	30	75-123	
1,1,2-Trichloroethane	5.00	5.37	107	0	30	80-120	
1,1-Dichloroethane	5.00	5.01	99	0	30	74-120	
1,1-Dichloroethene	5.00	5.93	116	2	30	80-131	
1,2-Dibromoethane (EDB)	5.00	5.24	105	1	30	80-120	
1,2-Dichloroethane	5.00	4.82	96	2	30	69-122	
1,2-Dichloropropane	5.00	4.85	97	1	30	80-120	
2-Butanone (MEK)	62.6	61.0	97	2	30	59-141	
2-Hexanone	62.6	64.0	102	1	30	52-140	
4-Methyl-2-pentanone (MIBK)	62.6	60.9	97	2	30	55-140	
Acetone	62.6	57.3	92	3	30	60-146	
Benzene	5.00	5.25	105	1	30	80-120	
Bromochloromethane	5.00	5.26	105	2	30	80-120	
Bromodichloromethane	5.00	5.14	103	0	30	73-124	
Bromoform	5.00	4.59	92	1	30	49-144	
Bromomethane	5.00	5.21	104	1	30	60-136	
Carbon disulfide	5.00	5.50	110	1	30	67-130	
Carbon tetrachloride	5.00	5.32	106	0	30	64-141	
Chlorobenzene	5.00	5.21	104	2	30	80-120	
Chloroethane	5.00	4.88	97	0	30	63-120	
Chloroform	5.00	5.54	105	2	30	80-120	
Chloromethane	5.00	4.89	98	3	30	80-120	
cis-1,2-Dichloroethene	5.00	6.34	110	1	30	80-122	
cis-1,3-Dichloropropene	5.00	4.87	97	0	30	67-121	
Dibromochloromethane	5.00	4.88	97	1	30	64-138	
Ethylbenzene	5.00	5.46	109	2	30	80-120	
Methyl tert-butyl ether	5.00	5.10	102	2	30	69-120	
Methylene Chloride	5.00	5.17	103	2	30	80-120	
Styrene	5.00	5.49	110	2	30	80-120	
Tetrachloroethene	5.00	7.89	100	1	30	80-120	
Toluene	5.00	5.57	109	1	30	80-120	
trans-1,2-Dichloroethene	5.00	5.49	110	1	30	80-122	
trans-1,3-Dichloropropene	5.00	5.25	105	0	30	61-129	
Trichloroethene	5.00	6.08	103	1	30	80-120	
Vinyl chloride	5.00	5.00	100	0	30	60-125	
Xylenes, Total	15.0	16.5	110	1	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 Job No.: 410-56784-1

SDG No.:

Lab File ID: GO01X06.D Lab Sample ID: MB 410-177560/7

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

Instrument ID: 16334 Date Analyzed: 10/01/2021 10:01

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 410-177560/4	GO01X03.D	10/01/2021 08:53
	LCSD 410-177560/5	GO01X04.D	10/01/2021 09:15
HD-COD-SW-15-0/1-0	410-56784-7	GO01X16.D	10/01/2021 13:42
HD-COD-SW-15-0/1-0 MS MS	410-56784-7 MS	GO01X17.D	10/01/2021 14:04
HD-COD-SW-15-0/1-0 MSD MSD	410-56784-7 MSD	GO01X18.D	10/01/2021 14:26
HD-COD-SW-29-0/1-0	410-56784-1	GO01X21.D	10/01/2021 15:32
HD-COD-SW-8-0/1-0	410-56784-2	GO01X22.D	10/01/2021 15:54
HD-COD-SW-13-0/1-0	410-56784-3	GO01X23.D	10/01/2021 16:16
HD-COD-SW-16-0/1-0	410-56784-4	GO01X24.D	10/01/2021 16:38
HD-COD-SW-17-0/1-0	410-56784-5	GO01X25.D	10/01/2021 17:00
HD-COD-SW-6-0/1-0	410-56784-6	GO01X26.D	10/01/2021 17:22
HD-COD-SW-27-0/1-0	410-56784-8	GO01X27.D	10/01/2021 17:44

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-56784-1

SDG No.:

Lab File ID: GO05X06.D Lab Sample ID: MB 410-178764/7

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

Instrument ID: 16334 Date Analyzed: 10/05/2021 10:50

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 410-178764/4	GO05X03.D	10/05/2021 09:44
	LCSD 410-178764/5	GO05X04.D	10/05/2021 10:06
HD-QC1-0/1-2	410-56784-14	GO05X12.D	10/05/2021 13:16
HD-COD-SW-28-0/1-0	410-56784-9	GO05X14.D	10/05/2021 14:01
HD-COD-SW-7-0/1-0	410-56784-10	GO05X15.D	10/05/2021 14:23
HD-COD-SW-9-0/1-0	410-56784-11	GO05X16.D	10/05/2021 14:45
HD-QC1-0/1-1	410-56784-12	GO05X17.D	10/05/2021 15:07
HD-COD-SW-26-0/1-0	410-56784-13	GO05X18.D	10/05/2021 15:29

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Lab File ID: GL27T02.D BFB Injection Date: 07/27/2021

Instrument ID: 16334 BFB Injection Time: 15:41

Analysis Batch No.: 153227

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.4	
75	30.0 - 60.0 % of mass 95	45.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.4	(0.4) 1
174	Greater than 50% of mass 95	87.4	
175	5.0 - 9.0 % of mass 174	7.1	(8.1) 1
176	95.0 - 101.0 % of mass 174	84.9	(97.1) 1
177	5.0 - 9.0 % of mass 176	5.5	(6.5) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 410-153227/12	GL27X12.D	07/27/2021	19:35
	ICIS 410-153227/13	GL27X13.D	07/27/2021	19:57
	IC 410-153227/14	GL27X14.D	07/27/2021	20:19
	IC 410-153227/15	GL27X15.D	07/27/2021	20:41
	IC 410-153227/16	GL27X16.D	07/27/2021	21:03
	IC 410-153227/17	GL27X17.D	07/27/2021	21:25
	IC 410-153227/18	GL27X18.D	07/27/2021	21:47
	ICV 410-153227/19	GL27X19.D	07/27/2021	22:09

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Lab File ID: GO01T01.D BFB Injection Date: 10/01/2021

Instrument ID: 16334 BFB Injection Time: 07:49

Analysis Batch No.: 177560

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.1	
75	30.0 - 60.0 % of mass 95	45.6	
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	0.0	(0.0) 1
174	Greater than 50% of mass 95	80.6	
175	5.0 - 9.0 % of mass 174	6.4	(7.9) 1
176	95.0 - 101.0 % of mass 174	77.7	(96.3) 1
177	5.0 - 9.0 % of mass 176	5.0	(6.4) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-177560/3	GO01X02.D	10/01/2021	8:31
	LCS 410-177560/4	GO01X03.D	10/01/2021	8:53
	LCSD 410-177560/5	GO01X04.D	10/01/2021	9:15
	MB 410-177560/7	GO01X06.D	10/01/2021	10:01
HD-COD-SW-15-0/1-0	410-56784-7	GO01X16.D	10/01/2021	13:42
HD-COD-SW-15-0/1-0 MS MS	410-56784-7 MS	GO01X17.D	10/01/2021	14:04
HD-COD-SW-15-0/1-0 MSD MSD	410-56784-7 MSD	GO01X18.D	10/01/2021	14:26
HD-COD-SW-29-0/1-0	410-56784-1	GO01X21.D	10/01/2021	15:32
HD-COD-SW-8-0/1-0	410-56784-2	GO01X22.D	10/01/2021	15:54
HD-COD-SW-13-0/1-0	410-56784-3	GO01X23.D	10/01/2021	16:16
HD-COD-SW-16-0/1-0	410-56784-4	GO01X24.D	10/01/2021	16:38
HD-COD-SW-17-0/1-0	410-56784-5	GO01X25.D	10/01/2021	17:00
HD-COD-SW-6-0/1-0	410-56784-6	GO01X26.D	10/01/2021	17:22
HD-COD-SW-27-0/1-0	410-56784-8	GO01X27.D	10/01/2021	17:44

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Lab File ID: GO05T01.D BFB Injection Date: 10/05/2021

Instrument ID: 16334 BFB Injection Time: 08:38

Analysis Batch No.: 178764

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.6	
75	30.0 - 60.0 % of mass 95	46.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	Greater than 50% of mass 95	79.6	
175	5.0 - 9.0 % of mass 174	6.5	(8.2) 1
176	95.0 - 101.0 % of mass 174	77.9	(97.8) 1
177	5.0 - 9.0 % of mass 176	5.5	(7.1) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-178764/3	GO05X02.D	10/05/2021	9:22
	LCS 410-178764/4	GO05X03.D	10/05/2021	9:44
	LCSD 410-178764/5	GO05X04.D	10/05/2021	10:06
	MB 410-178764/7	GO05X06.D	10/05/2021	10:50
HD-QC1-0/1-2	410-56784-14	GO05X12.D	10/05/2021	13:16
HD-COD-SW-28-0/1-0	410-56784-9	GO05X14.D	10/05/2021	14:01
HD-COD-SW-7-0/1-0	410-56784-10	GO05X15.D	10/05/2021	14:23
HD-COD-SW-9-0/1-0	410-56784-11	GO05X16.D	10/05/2021	14:45
HD-QC1-0/1-1	410-56784-12	GO05X17.D	10/05/2021	15:07
HD-COD-SW-26-0/1-0	410-56784-13	GO05X18.D	10/05/2021	15:29

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Sample No.: ICIS 410-153227/13 Date Analyzed: 07/27/2021 19:57

Instrument ID: 16334 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): GL27X13.D Heated Purge: (Y/N) N

Calibration ID: 29447

		TBAd10		FB		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		143636	4.25	1956692	7.66	1539325	11.15
UPPER LIMIT		287272	4.75	3913384	8.16	3078650	11.65
LOWER LIMIT		71818	3.75	978346	7.16	769663	10.65
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-153227/19		136619	4.26	1902658	7.66	1483632	11.15
CCVIS 410-177560/3		181375	4.26	2524501	7.67	1943523	11.13
CCVIS 410-178764/3		121755	4.25	2453780	7.67	1891914	11.13

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.: 410-56784-1

SDG No.:

Sample No.: ICIS 410-153227/13 Date Analyzed: 07/27/2021 19:57

Instrument ID: 16334 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): GL27X13.D Heated Purge: (Y/N) N

Calibration ID: 29447

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		901681	13.02				
UPPER LIMIT		1803362	13.52				
LOWER LIMIT		450841	12.52				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-153227/19		880820	13.03				
CCVIS 410-177560/3		1082521	13.00				
CCVIS 410-178764/3		1060326	13.00				

DCBd4 = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260D

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Sample No.: CCVIS 410-177560/3 Date Analyzed: 10/01/2021 08:31

Instrument ID: 16334 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): GO01X02.D Heated Purge: (Y/N) N

Calibration ID: 29447

		TBAd10		FB		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		181375	4.26	2524501	7.67	1943523	11.13
UPPER LIMIT		362750	4.76	5049002	8.17	3887046	11.63
LOWER LIMIT		90688	3.76	1262251	7.17	971762	10.63
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-177560/4		162450	4.26	2527444	7.67	1931521	11.13
LCSD 410-177560/5		185320	4.25	2531005	7.67	1951154	11.13
MB 410-177560/7		216430	4.26	2458929	7.67	1884752	11.13
410-56784-7	HD-COD-SW-15-0/1-0	176363	4.25	2373600	7.67	1839880	11.13
410-56784-7 MS	HD-COD-SW-15-0/1-0 MS MS	174458	4.24	2470352	7.67	1877169	11.13
410-56784-7 MSD	HD-COD-SW-15-0/1-0 MSD MSD	178274	4.25	2502065	7.67	1905201	11.13
410-56784-1	HD-COD-SW-29-0/1-0	196706	4.23	2418277	7.67	1861828	11.13
410-56784-2	HD-COD-SW-8-0/1-0	192963	4.24	2380917	7.67	1834580	11.13
410-56784-3	HD-COD-SW-13-0/1-0	195284	4.25	2386145	7.67	1830041	11.13
410-56784-4	HD-COD-SW-16-0/1-0	188075	4.25	2389241	7.67	1835240	11.13
410-56784-5	HD-COD-SW-17-0/1-0	192519	4.23	2362589	7.67	1833708	11.13
410-56784-6	HD-COD-SW-6-0/1-0	198365	4.26	2363252	7.67	1808183	11.13
410-56784-8	HD-COD-SW-27-0/1-0	192850	4.25	2352027	7.67	1810855	11.13

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.: 410-56784-1

SDG No.:

Sample No.: CCVIS 410-177560/3 Date Analyzed: 10/01/2021 08:31

Instrument ID: 16334 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): GO01X02.D Heated Purge: (Y/N) N

Calibration ID: 29447

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		1082521	13.00				
UPPER LIMIT		2165042	13.50				
LOWER LIMIT		541261	12.50				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-177560/4		1073517	13.00				
LCSD 410-177560/5		1070318	13.00				
MB 410-177560/7		1034406	13.00				
410-56784-7	HD-COD-SW-15-0/1-0	1001508	13.00				
410-56784-7 MS	HD-COD-SW-15-0/1-0 MS MS	1048855	13.00				
410-56784-7 MSD	HD-COD-SW-15-0/1-0 MSD MSD	1059177	13.00				
410-56784-1	HD-COD-SW-29-0/1-0	1016980	13.00				
410-56784-2	HD-COD-SW-8-0/1-0	1004964	13.00				
410-56784-3	HD-COD-SW-13-0/1-0	1013217	13.00				
410-56784-4	HD-COD-SW-16-0/1-0	998786	13.00				
410-56784-5	HD-COD-SW-17-0/1-0	997064	13.00				
410-56784-6	HD-COD-SW-6-0/1-0	991886	13.00				
410-56784-8	HD-COD-SW-27-0/1-0	1001668	13.00				

DCBd4 = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260D

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Sample No.: CCVIS 410-178764/3 Date Analyzed: 10/05/2021 09:22

Instrument ID: 16334 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): GO05X02.D Heated Purge: (Y/N) N

Calibration ID: 29447

		TBAd10		FB		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		121755	4.25	2453780	7.67	1891914	11.13
UPPER LIMIT		243510	4.75	4907560	8.17	3783828	11.63
LOWER LIMIT		60878	3.75	1226890	7.17	945957	10.63
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-178764/4		176471	4.26	2440572	7.67	1869881	11.13
LCSD 410-178764/5		190611	4.26	2458042	7.67	1886180	11.13
MB 410-178764/7		176826	4.25	2347303	7.67	1814473	11.13
410-56784-14	HD-QC1-0/1-2	186999	4.24	2333688	7.67	1803412	11.13
410-56784-9	HD-COD-SW-28-0/1-0	175743	4.25	2301526	7.67	1783425	11.13
410-56784-10	HD-COD-SW-7-0/1-0	181509	4.23	2314140	7.67	1793336	11.13
410-56784-11	HD-COD-SW-9-0/1-0	188282	4.25	2331424	7.67	1786601	11.13
410-56784-12	HD-QC1-0/1-1	183902	4.25	2305790	7.67	1793648	11.13
410-56784-13	HD-COD-SW-26-0/1-0	179641	4.25	2325800	7.67	1792827	11.13

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.: 410-56784-1

SDG No.:

Sample No.: CCVIS 410-178764/3 Date Analyzed: 10/05/2021 09:22

Instrument ID: 16334 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): GO05X02.D Heated Purge: (Y/N) N

Calibration ID: 29447

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		1060326	13.00				
UPPER LIMIT		2120652	13.50				
LOWER LIMIT		530163	12.50				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-178764/4		1047494	13.00				
LCSD 410-178764/5		1052425	13.00				
MB 410-178764/7		986570	13.00				
410-56784-14	HD-QC1-0/1-2	988561	13.00				
410-56784-9	HD-COD-SW-28-0/1-0	974072	13.00				
410-56784-10	HD-COD-SW-7-0/1-0	979121	13.00				
410-56784-11	HD-COD-SW-9-0/1-0	975345	13.00				
410-56784-12	HD-QC1-0/1-1	977295	13.00				
410-56784-13	HD-COD-SW-26-0/1-0	982093	13.00				

DCBd4 = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM VIII 8260D

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 410-56784-1

Matrix: Water Lab File ID: GO01X21.D

Analysis Method: 8260D Date Collected: 09/24/2021 08:30

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 15:32

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.: 177560 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	1.4	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		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	0.057	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	0.080	J	0.50	0.060
108-88-3	Toluene	0.078	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	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 410-56784-1

Matrix: Water Lab File ID: GO01X21.D

Analysis Method: 8260D Date Collected: 09/24/2021 08:30

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 15:32

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.: 177560 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)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	97		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X21.D
Lims ID: 410-56784-A-1
Client ID: HD-COD-SW-29-0/1-0
Sample Type: Client
Inject. Date: 01-Oct-2021 15:32:30 ALS Bottle#: 21 Worklist Smp#: 24
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040424-024
Misc. Info.: 410-56784-A-1
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Oct-2021 19:10:12 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1602

First Level Reviewer: beckerk Date: 01-Oct-2021 19:00:44

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
	5 Chloromethane	50		2.135				ND	
	8 Vinyl chloride	62		2.257				ND	
	9 Bromomethane	94		2.587				ND	
	10 Chloroethane	64		2.666				ND	
	19 1,1-Dichloroethene	96		3.507				ND	
	21 Acetone	43	3.574	3.568	0.006	97	13831	1.36	M
	25 Carbon disulfide	76		3.800				ND	7
	29 Methylene Chloride	84		4.172				ND	
*	30 t-Butyl alcohol-d10 (IS)	65	4.226	4.257	-0.031	96	196706	50.0	
	33 Methyl tert-butyl ether	73		4.574				ND	
	34 trans-1,2-Dichloroethene	96		4.580				ND	
	37 1,1-Dichloroethane	63		5.245				ND	
	41 2-Butanone (MEK)	43		6.055				ND	
	42 cis-1,2-Dichloroethene	96	6.080	6.086	-0.006	7	3596	0.0572	a
	49 Chlorobromomethane	128		6.409				ND	
	51 Chloroform	83	6.561	6.561	0.000	2	3053	0.0309	a
$	52 Dibromofluoromethane (Surr)	113	6.781	6.775	0.006	94	582206	9.66	
	53 1,1,1-Trichloroethane	97		6.787				ND	
	56 Carbon tetrachloride	117		6.994				ND	
$	59 1,2-Dichloroethane-d4 (Surr)	102	7.226	7.232	-0.006	38	130197	9.72	
	60 Benzene	78		7.256				ND	
	61 1,2-Dichloroethane	62		7.323				ND	
*	64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2418277	10.0	
	68 Trichloroethene	95		8.134				ND	
	70 1,2-Dichloropropane	63		8.470				ND	
	76 Dichlorobromomethane	83		8.817				ND	
	81 cis-1,3-Dichloropropene	75		9.366				ND	
	82 4-Methyl-2-pentanone (MIBK)	43		9.549				ND	7
$	83 Toluene-d8 (Surr)	98	9.677	9.671	0.006	93	2333424	9.62	
	84 Toluene	92	9.750	9.750	0.000	97	11603	0.0779	
	96 trans-1,3-Dichloropropene	75		10.012				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
99 1,1,2-Trichloroethane	97		10.213				ND	
100 Tetrachloroethene	166	10.298	10.298	0.000	94	5705	0.0805	
102 2-Hexanone	43		10.433				ND	7
104 Chlorodibromomethane	129		10.591				ND	
105 Ethylene Dibromide	107		10.695				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	84	1861828	10.0	
108 Chlorobenzene	112		11.158				ND	
110 1,1,1,2-Tetrachloroethane	131		11.237				ND	
111 Ethylbenzene	91		11.243				ND	7
S 109 Xylenes, Total	106				0		0.0890	
112 m-Xylene & p-Xylene	106	11.353	11.353	0.000	98	6692	0.0598	
113 o-Xylene	106	11.682	11.682	0.000	92	3224	0.0292	
114 Styrene	104		11.701				ND	7
115 Bromoform	173		11.853				ND	
$ 119 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	91	866984	9.78	
120 1,1,2,2-Tetrachloroethane	83		12.231				ND	
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	1016980	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_29_826ISS_00023 Amount Added: 1.00 Units: uL Run Reagent

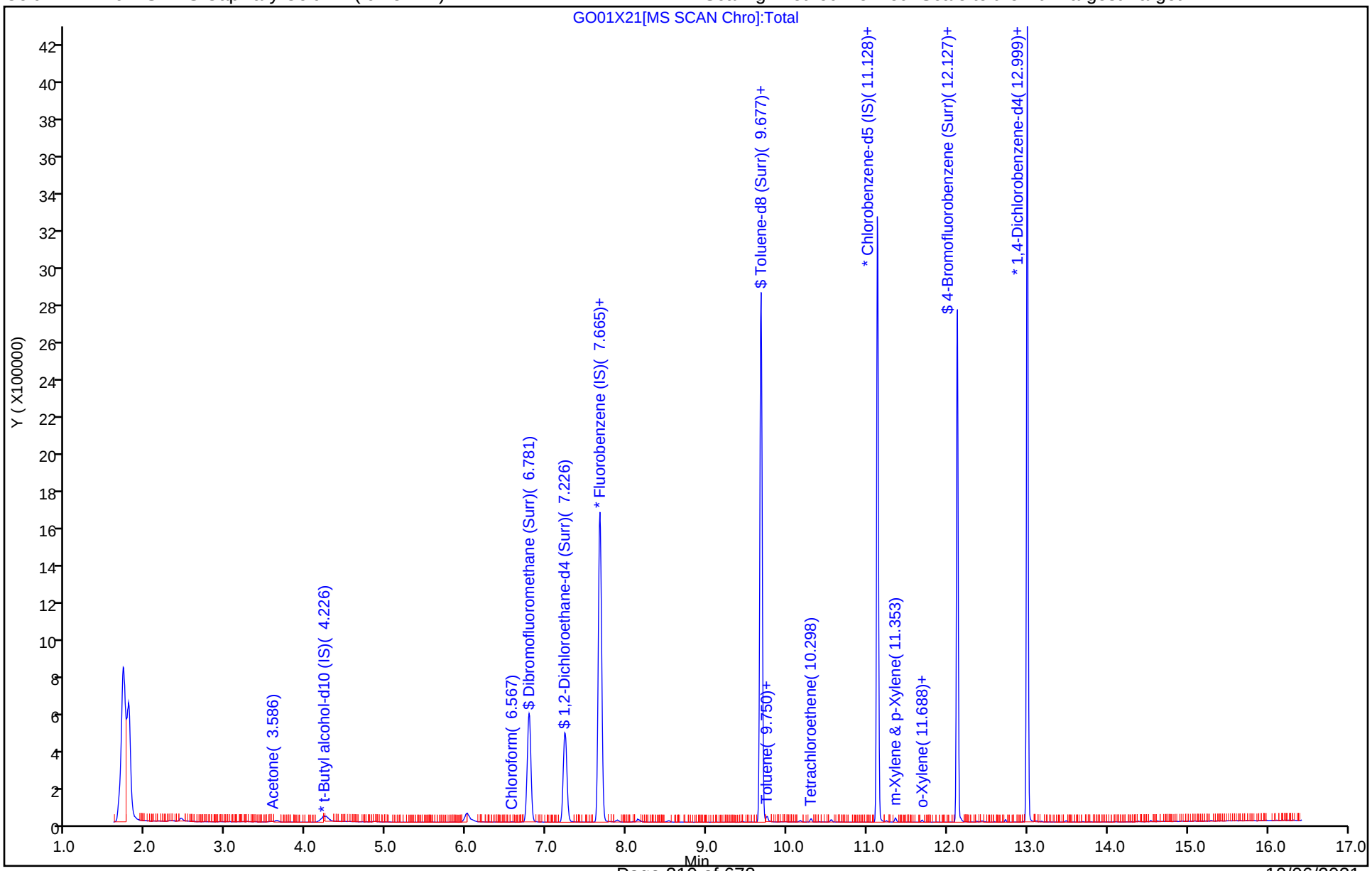
Report Date: 01-Oct-2021 19:10:22 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X21.D

Injection Date:	01-Oct-2021 15:32:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	410-56784-A-1	Lab Sample ID:	410-56784-1	Worklist Smp#:	24
Client ID:	HD-COD-SW-29-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X21.D				
Lims ID:	410-56784-A-1				
Client ID:	HD-COD-SW-29-0/1-0				
Sample Type:	Client				
Inject. Date:	01-Oct-2021 15:32:30	ALS Bottle#:	21	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0040424-024				
Misc. Info.:	410-56784-A-1				
Operator ID:	SRK36897	Instrument ID:	16334		
Method:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	01-Oct-2021 19:10:12	Calib Date:	27-Jul-2021 21:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1602				

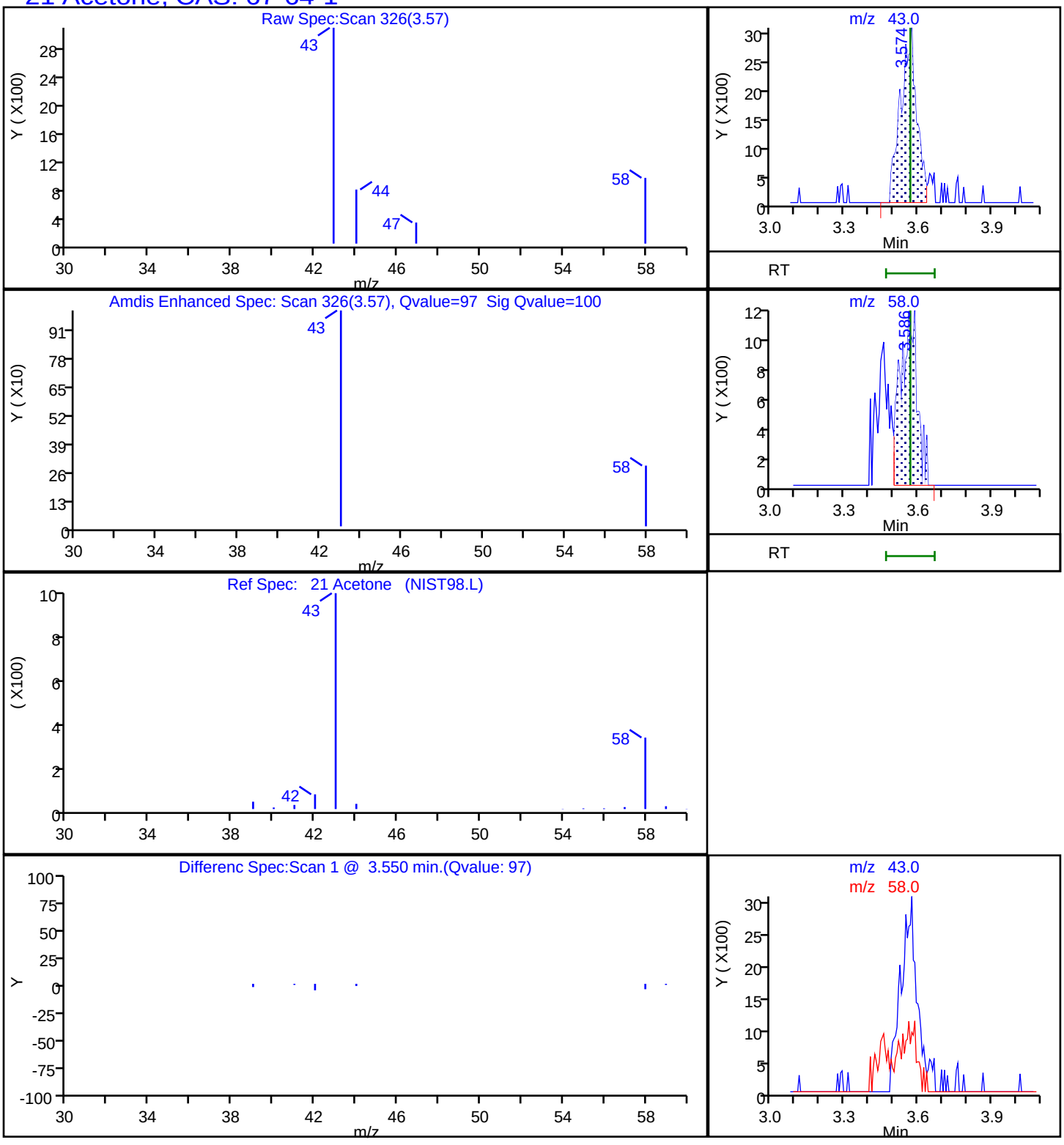
First Level Reviewer: beckerk Date: 01-Oct-2021 19:00:44

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	10.0	9.66	96.62
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.72	97.16
$ 83 Toluene-d8 (Surr)	10.0	9.62	96.24
$ 119 4-Bromofluorobenzene (Surr)	10.0	9.78	97.82

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X21.D				
Injection Date:	01-Oct-2021 15:32:30	Instrument ID:	16334		
Lims ID:	410-56784-A-1	Lab Sample ID:	410-56784-1		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	21	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

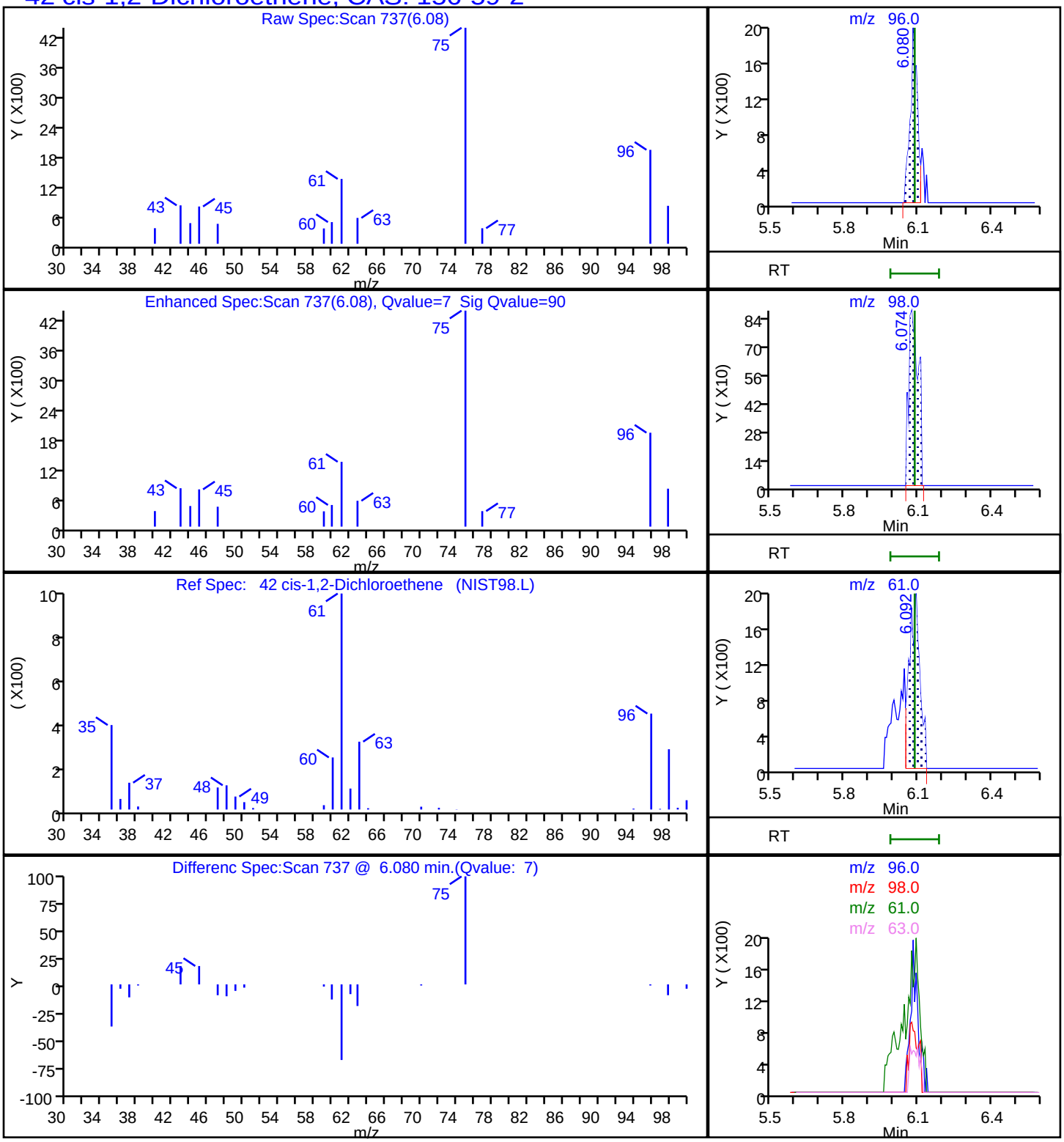
21 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X21.D				
Injection Date:	01-Oct-2021 15:32:30	Instrument ID:	16334		
Lims ID:	410-56784-A-1	Lab Sample ID:	410-56784-1		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	21	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

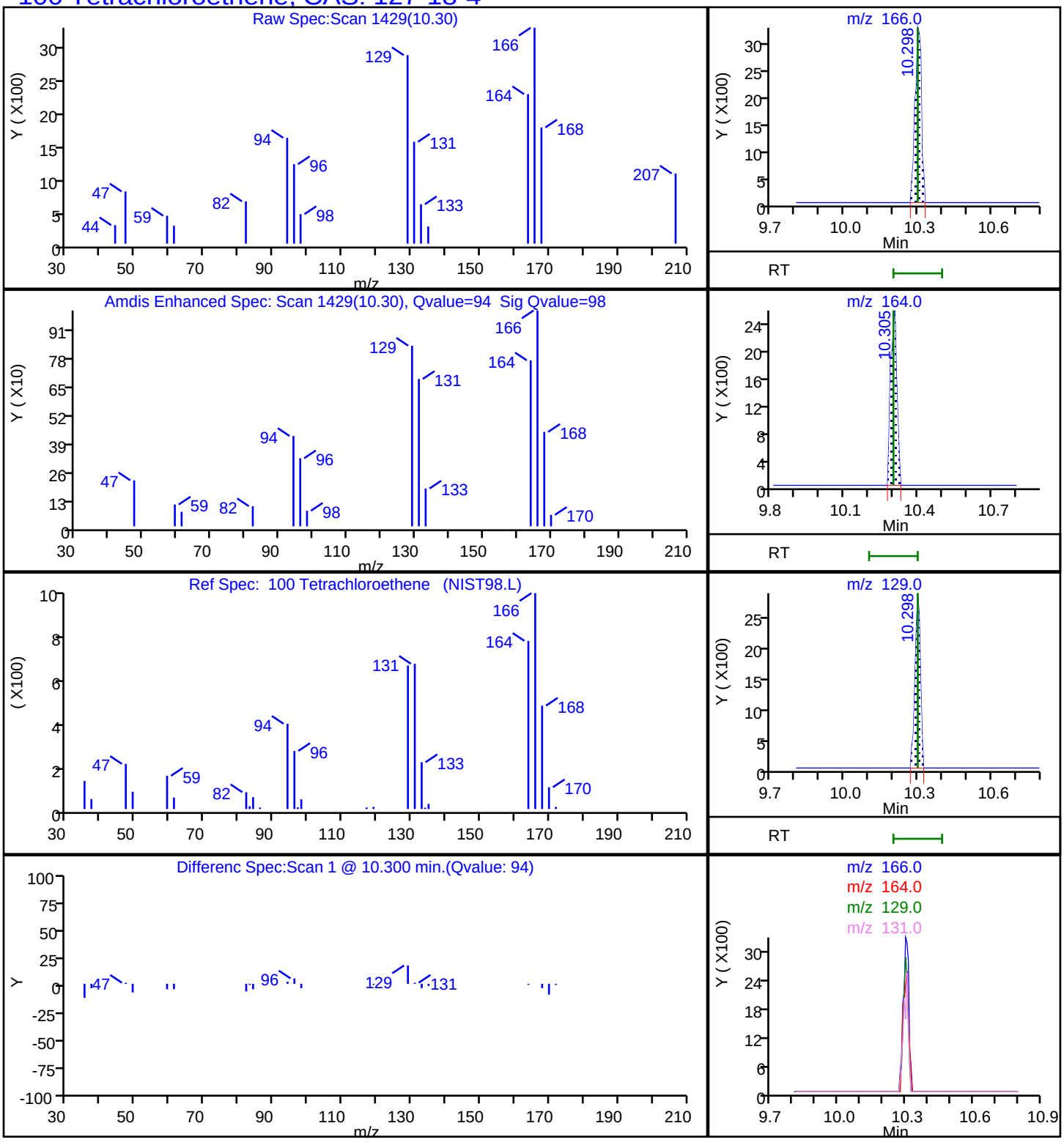
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X21.D				
Injection Date:	01-Oct-2021 15:32:30	Instrument ID:	16334		
Lims ID:	410-56784-A-1	Lab Sample ID:	410-56784-1		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	21	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

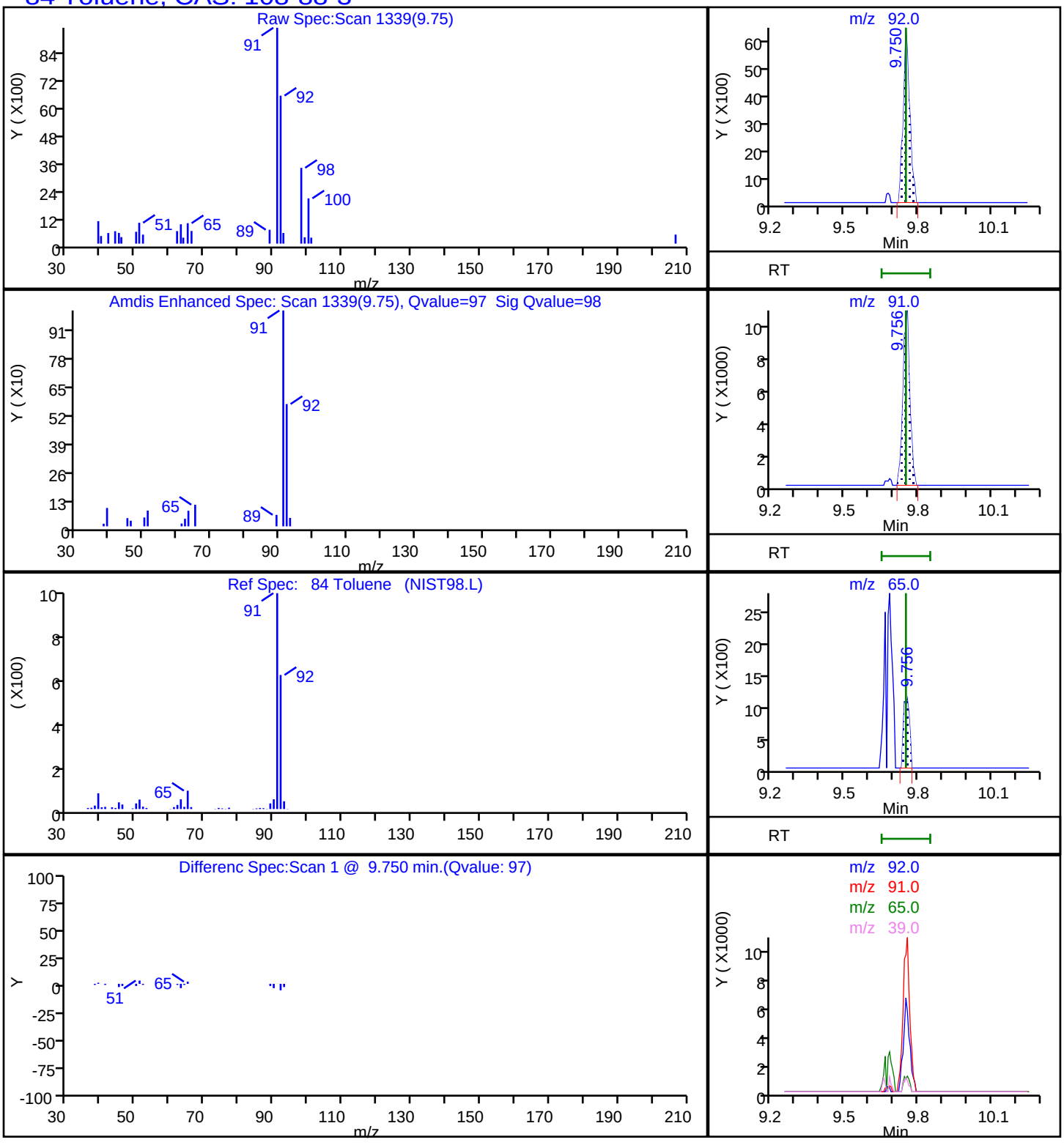
100 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X21.D				
Injection Date:	01-Oct-2021 15:32:30	Instrument ID:	16334		
Lims ID:	410-56784-A-1	Lab Sample ID:	410-56784-1		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	21	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

84 Toluene, CAS: 108-88-3



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

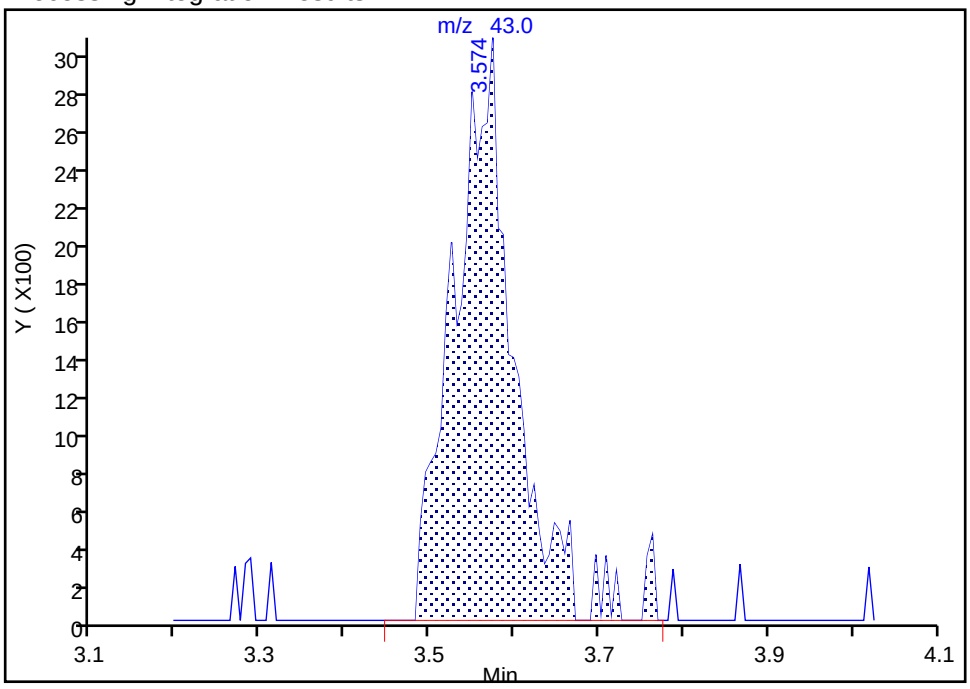
Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X21.D				
Injection Date:	01-Oct-2021 15:32:30	Instrument ID:	16334		
Lims ID:	410-56784-A-1	Lab Sample ID:	410-56784-1		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	21	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

21 Acetone, CAS: 67-64-1

Signal: 1

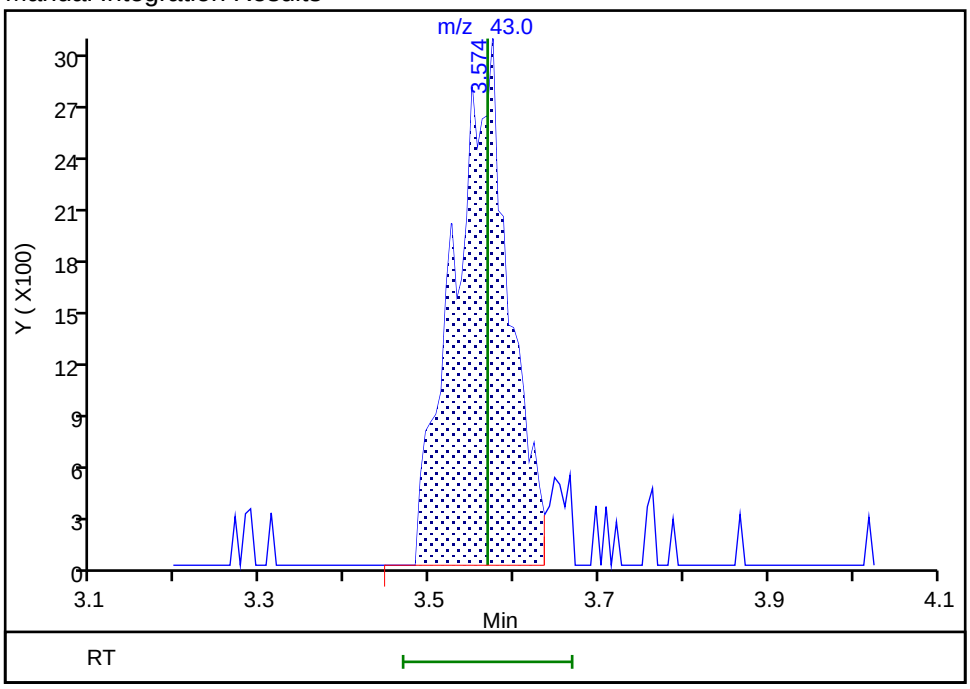
Processing Integration Results

RT: 3.57
Area: 15274
Amount: 1.499013
Amount Units: ug/l



Manual Integration Results

RT: 3.57
Area: 13831
Amount: 1.357394
Amount Units: ug/l



Reviewer: beckerk, 01-Oct-2021 19:00:14
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

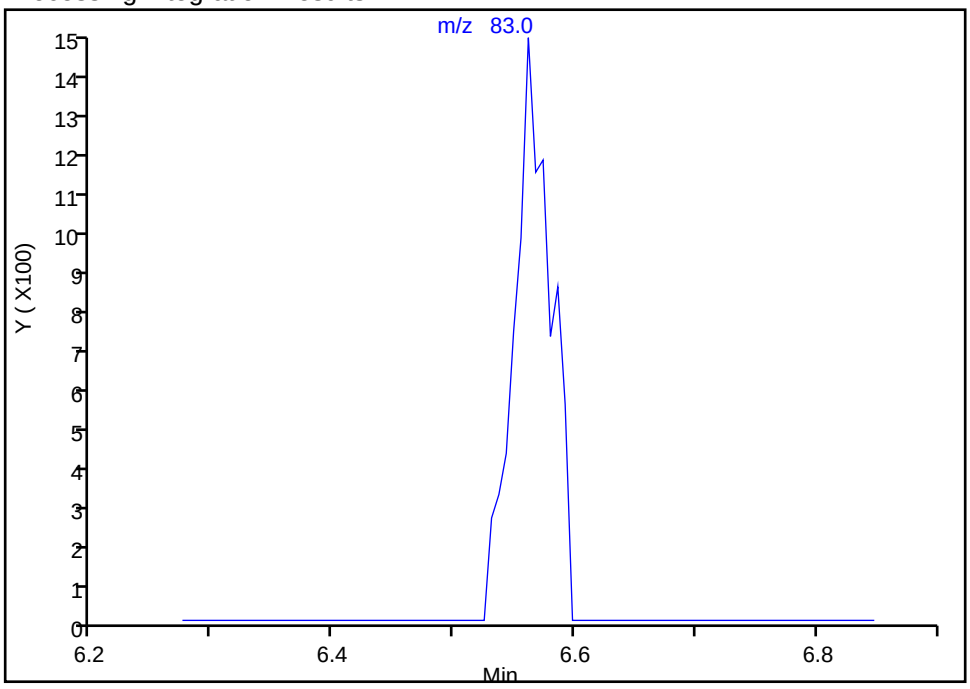
Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X21.D				
Injection Date:	01-Oct-2021 15:32:30	Instrument ID:	16334		
Lims ID:	410-56784-A-1	Lab Sample ID:	410-56784-1		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	21	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

51 Chloroform, CAS: 67-66-3

Signal: 1

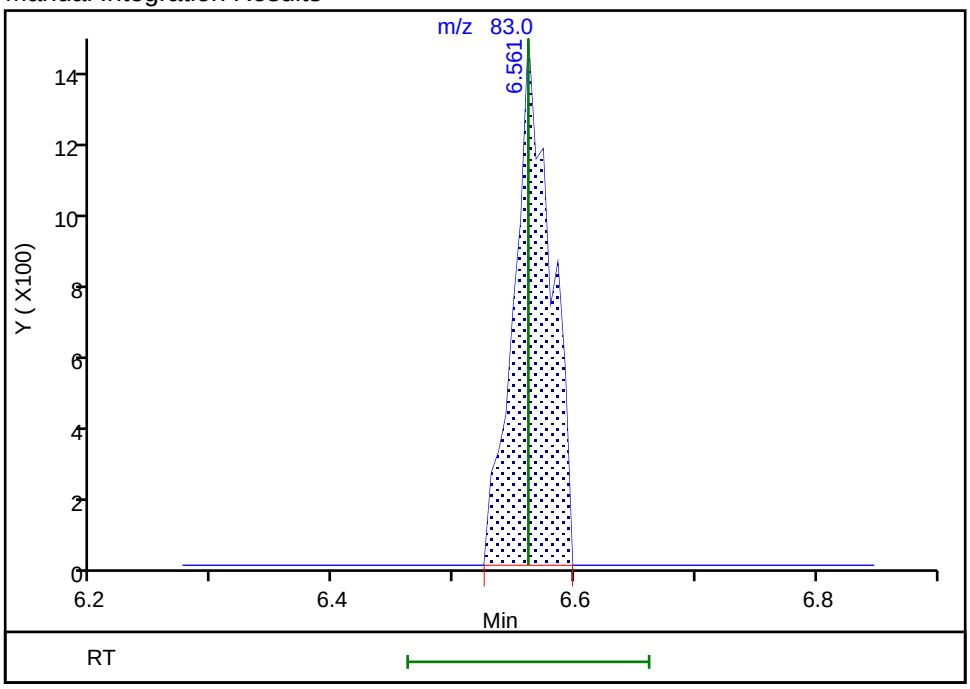
Not Detected
Expected RT: 6.56

Processing Integration Results



Manual Integration Results

RT: 6.56
Area: 3053
Amount: 0.030905
Amount Units: ug/l



Reviewer: beckerk, 01-Oct-2021 19:00:32
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

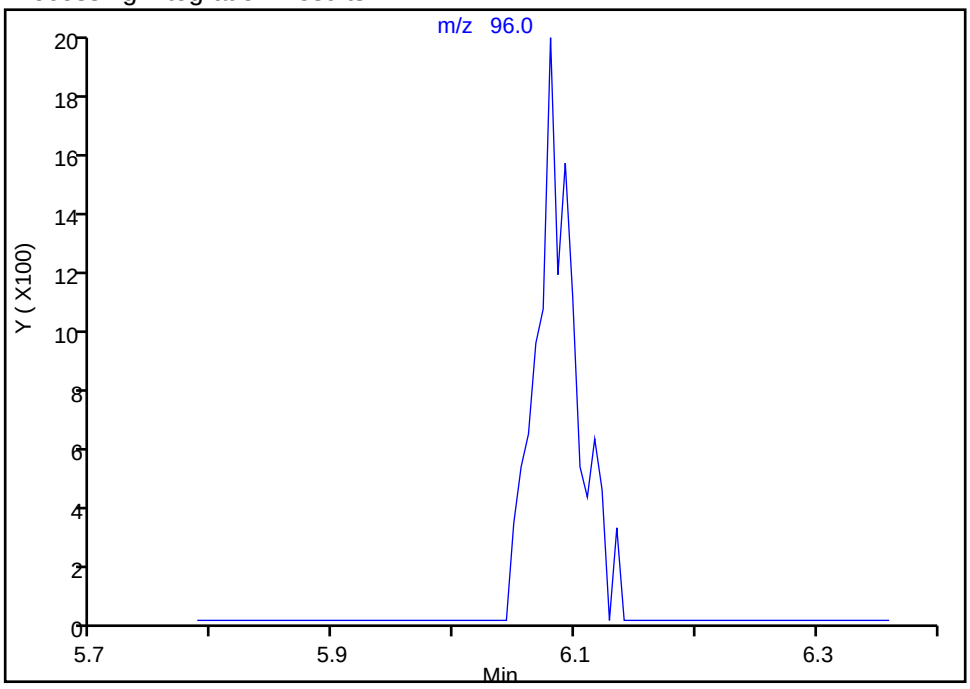
Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X21.D				
Injection Date:	01-Oct-2021 15:32:30	Instrument ID:	16334		
Lims ID:	410-56784-A-1	Lab Sample ID:	410-56784-1		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	21	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

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

Signal: 1

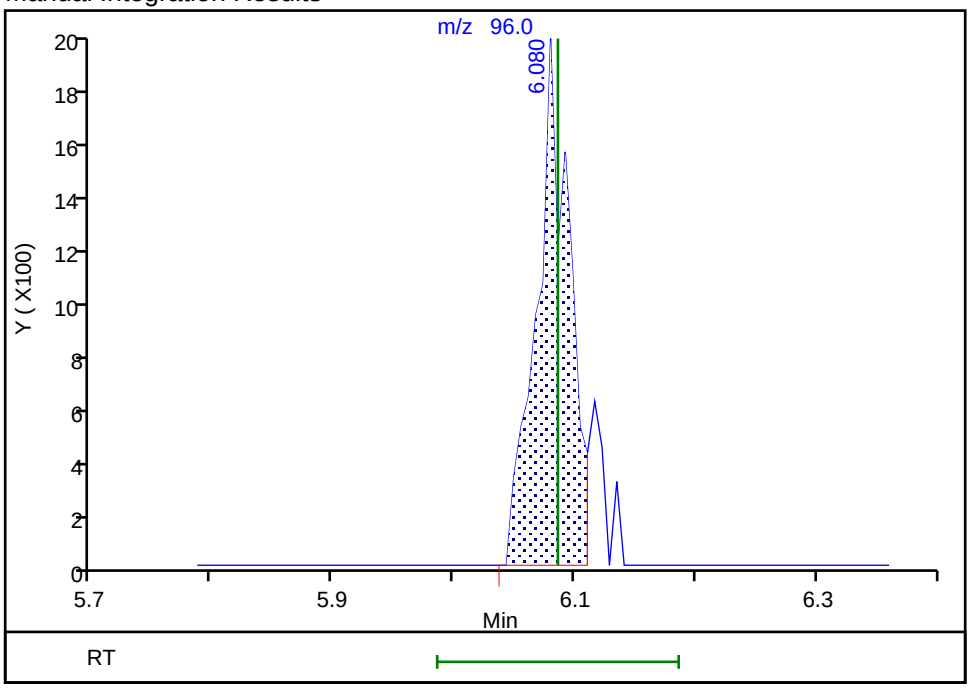
Not Detected
Expected RT: 6.09

Processing Integration Results



Manual Integration Results

RT: 6.08
Area: 3596
Amount: 0.057200
Amount Units: ug/l



Reviewer: beckerk, 01-Oct-2021 19:00:26
Audit Action: Assigned Compound ID Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 410-56784-2

Matrix: Water Lab File ID: GO01X22.D

Analysis Method: 8260D Date Collected: 09/24/2021 08:45

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 15:54

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.: 177560 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	1.2	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	0.068	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	0.11	J	0.50	0.060
108-88-3	Toluene	0.11	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	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 410-56784-2

Matrix: Water Lab File ID: GO01X22.D

Analysis Method: 8260D Date Collected: 09/24/2021 08:45

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 15:54

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.: 177560 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)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	96		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X22.D
Lims ID: 410-56784-A-2
Client ID: HD-COD-SW-8-0/1-0
Sample Type: Client
Inject. Date: 01-Oct-2021 15:54:30 ALS Bottle#: 22 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040424-025
Misc. Info.: 410-56784-A-2
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Oct-2021 19:10:12 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1602

First Level Reviewer: beckerk Date: 01-Oct-2021 19:02:39

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
	5 Chloromethane	50		2.135				ND	
	8 Vinyl chloride	62		2.257				ND	
	9 Bromomethane	94		2.587				ND	
	10 Chloroethane	64		2.666				ND	
	19 1,1-Dichloroethene	96		3.507				ND	
	21 Acetone	43	3.574	3.568	0.006	99	12192	1.22	
	25 Carbon disulfide	76		3.800				ND	7
	29 Methylene Chloride	84		4.172				ND	
*	30 t-Butyl alcohol-d10 (IS)	65	4.239	4.257	-0.018	94	192963	50.0	
	33 Methyl tert-butyl ether	73		4.574				ND	
	34 trans-1,2-Dichloroethene	96		4.580				ND	
	37 1,1-Dichloroethane	63		5.245				ND	
	41 2-Butanone (MEK)	43		6.055				ND	
	42 cis-1,2-Dichloroethene	96	6.086	6.086	0.000	16	4195	0.0678	
	49 Chlorobromomethane	128		6.409				ND	
	51 Chloroform	83	6.562	6.561	0.001	1	2129	0.0219	a
$	52 Dibromofluoromethane (Surr)	113	6.787	6.775	0.012	93	569093	9.59	
	53 1,1,1-Trichloroethane	97		6.787				ND	
	56 Carbon tetrachloride	117		6.994				ND	
$	59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	46	129152	9.79	
	60 Benzene	78		7.256				ND	7
	61 1,2-Dichloroethane	62		7.323				ND	
*	64 Fluorobenzene (IS)	96	7.671	7.665	0.006	99	2380917	10.0	
	68 Trichloroethene	95		8.134				ND	
	70 1,2-Dichloropropane	63		8.470				ND	
	76 Dichlorobromomethane	83		8.817				ND	
	81 cis-1,3-Dichloropropene	75		9.366				ND	
	82 4-Methyl-2-pentanone (MIBK)	43		9.549				ND	7
$	83 Toluene-d8 (Surr)	98	9.677	9.671	0.006	93	2290702	9.59	
	84 Toluene	92	9.756	9.750	0.006	99	15748	0.1073	
	96 trans-1,3-Dichloropropene	75		10.012				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
99 1,1,2-Trichloroethane	97		10.213				ND	
100 Tetrachloroethene	166	10.299	10.298	0.001	92	7585	0.1086	
102 2-Hexanone	43		10.433				ND	7
104 Chlorodibromomethane	129		10.591				ND	
105 Ethylene Dibromide	107		10.695				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.134	11.128	0.006	84	1834580	10.0	
108 Chlorobenzene	112		11.158				ND	
110 1,1,1,2-Tetrachloroethane	131		11.237				ND	
111 Ethylbenzene	91		11.243				ND	7
S 109 Xylenes, Total	106				0		0.1338	
112 m-Xylene & p-Xylene	106	11.359	11.353	0.006	99	9918	0.0900	
113 o-Xylene	106	11.689	11.682	0.007	96	4777	0.0438	
114 Styrene	104		11.701				ND	7
115 Bromoform	173		11.853				ND	
$ 119 4-Bromofluorobenzene (Surr)	95	12.128	12.121	0.007	91	847129	9.70	
120 1,1,2,2-Tetrachloroethane	83		12.231				ND	
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	1004964	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

a - User Assigned ID

Reagents:

MSV_29_826ISS_00023 Amount Added: 1.00 Units: uL Run Reagent

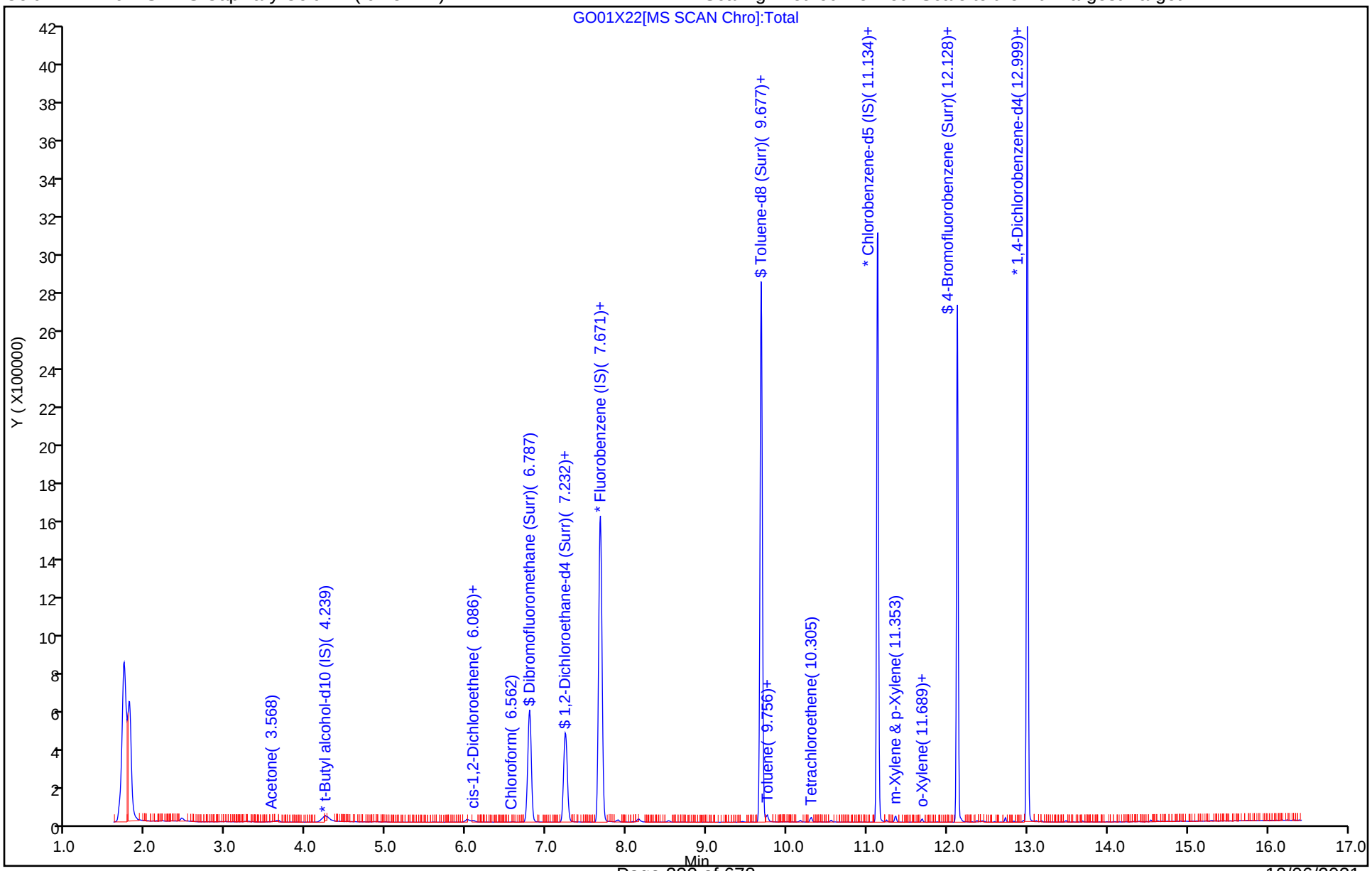
Report Date: 01-Oct-2021 19:10:24 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X22.D

Injection Date:	01-Oct-2021 15:54:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	410-56784-A-2	Lab Sample ID:	410-56784-2	Worklist Smp#:	25
Client ID:	HD-COD-SW-8-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X22.D
Lims ID: 410-56784-A-2
Client ID: HD-COD-SW-8-0/1-0
Sample Type: Client
Inject. Date: 01-Oct-2021 15:54:30 ALS Bottle#: 22 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040424-025
Misc. Info.: 410-56784-A-2
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Oct-2021 19:10:12 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1602

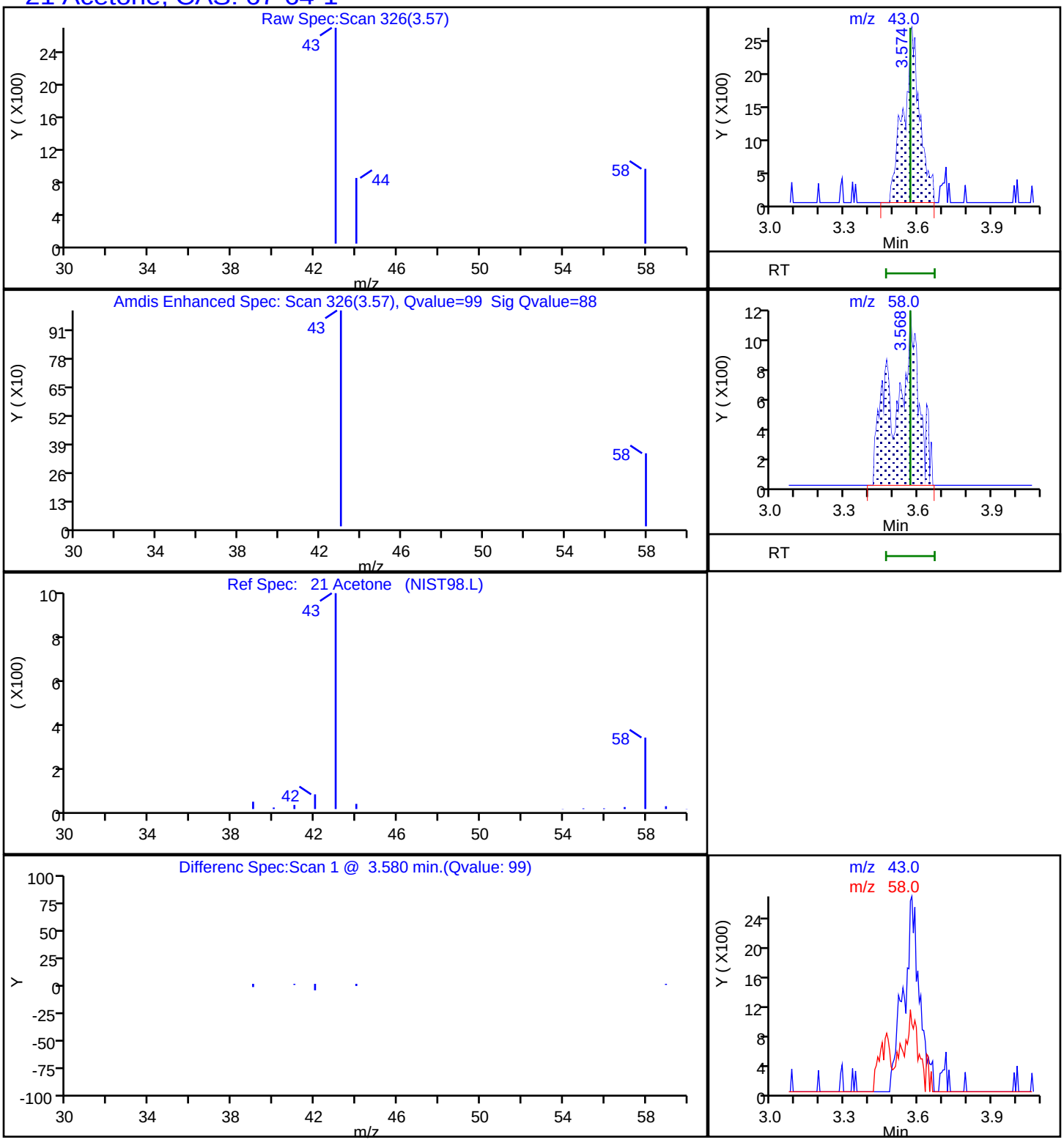
First Level Reviewer: beckerk Date: 01-Oct-2021 19:02:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	10.0	9.59	95.93
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.79	97.89
$ 83 Toluene-d8 (Surr)	10.0	9.59	95.88
$ 119 4-Bromofluorobenzene (Surr)	10.0	9.70	97.00

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X22.D				
Injection Date:	01-Oct-2021 15:54:30	Instrument ID:	16334		
Lims ID:	410-56784-A-2	Lab Sample ID:	410-56784-2		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	22	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

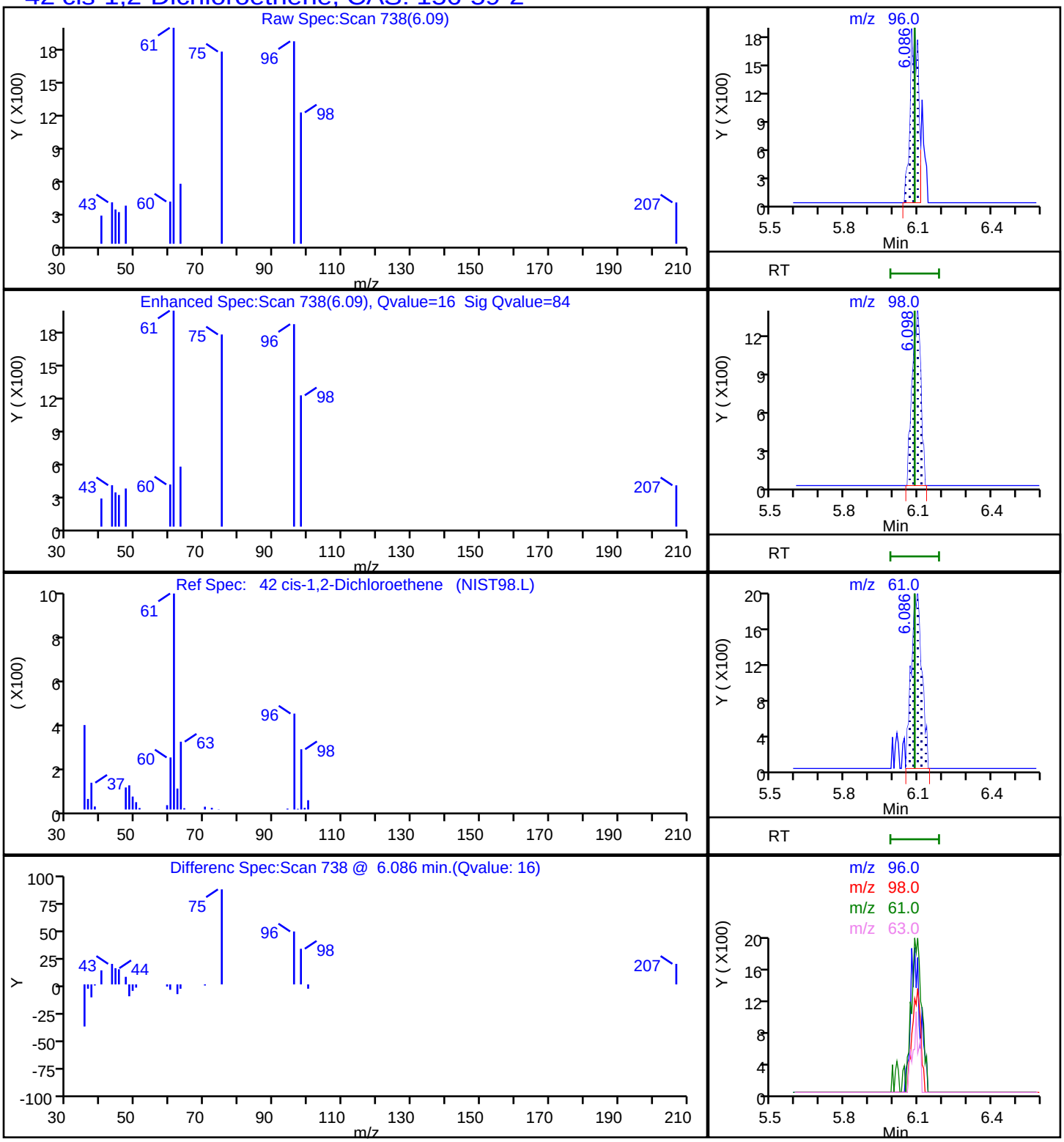
21 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X22.D
Injection Date: 01-Oct-2021 15:54:30 Instrument ID: 16334
Lims ID: 410-56784-A-2 Lab Sample ID: 410-56784-2
Client ID: HD-COD-SW-8-0/1-0
Operator ID: SRK36897 ALS Bottle#: 22 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

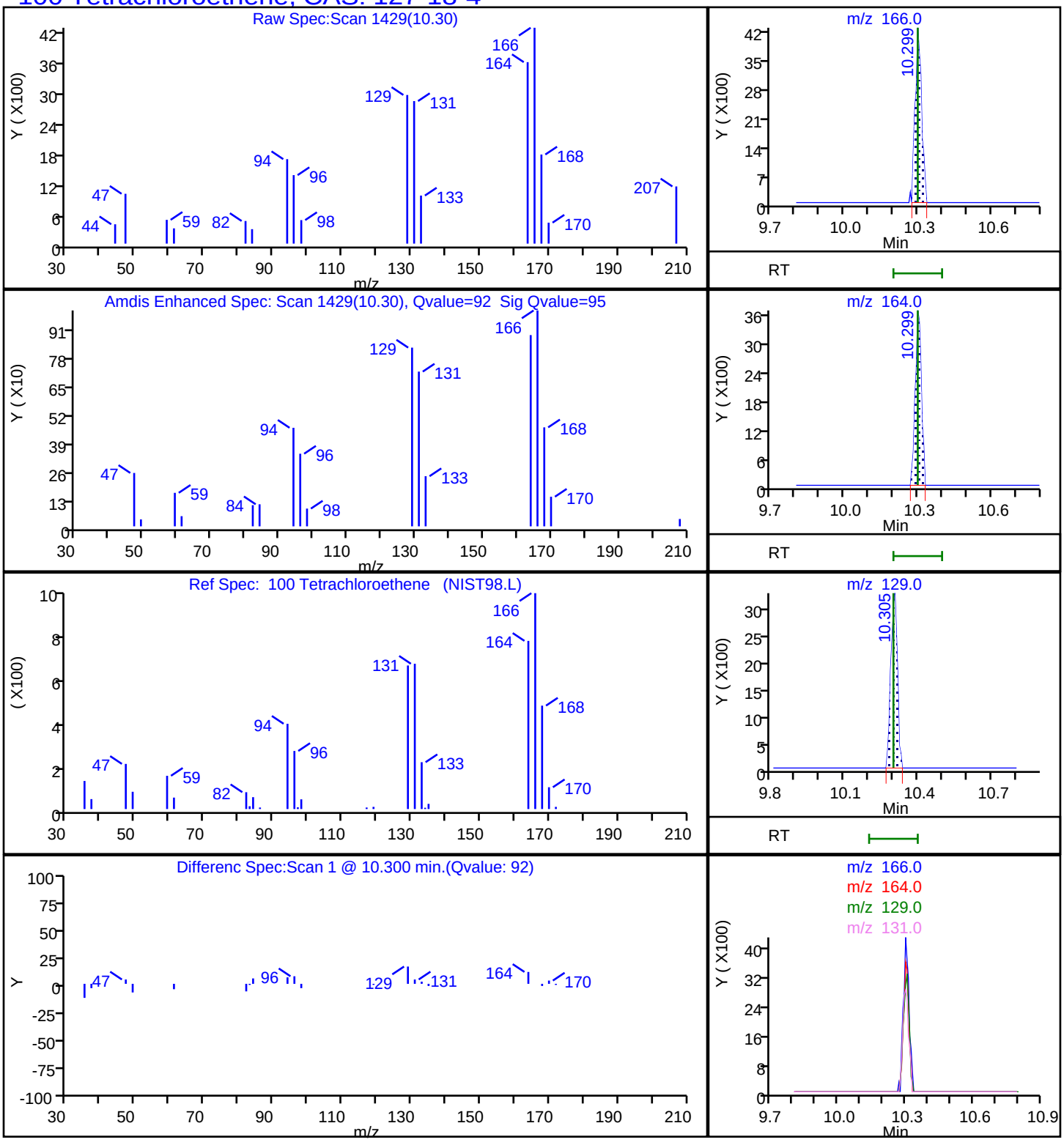
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X22.D				
Injection Date:	01-Oct-2021 15:54:30	Instrument ID:	16334		
Lims ID:	410-56784-A-2	Lab Sample ID:	410-56784-2		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	22	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

100 Tetrachloroethene, CAS: 127-18-4



Report Date: 01-Oct-2021 19:10:24 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X22.D

Injection Date: 01-Oct-2021 15:54:30 Instrument ID: 16334

Lims ID: 410-56784-A-2 Lab Sample ID: 410-56784-2

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

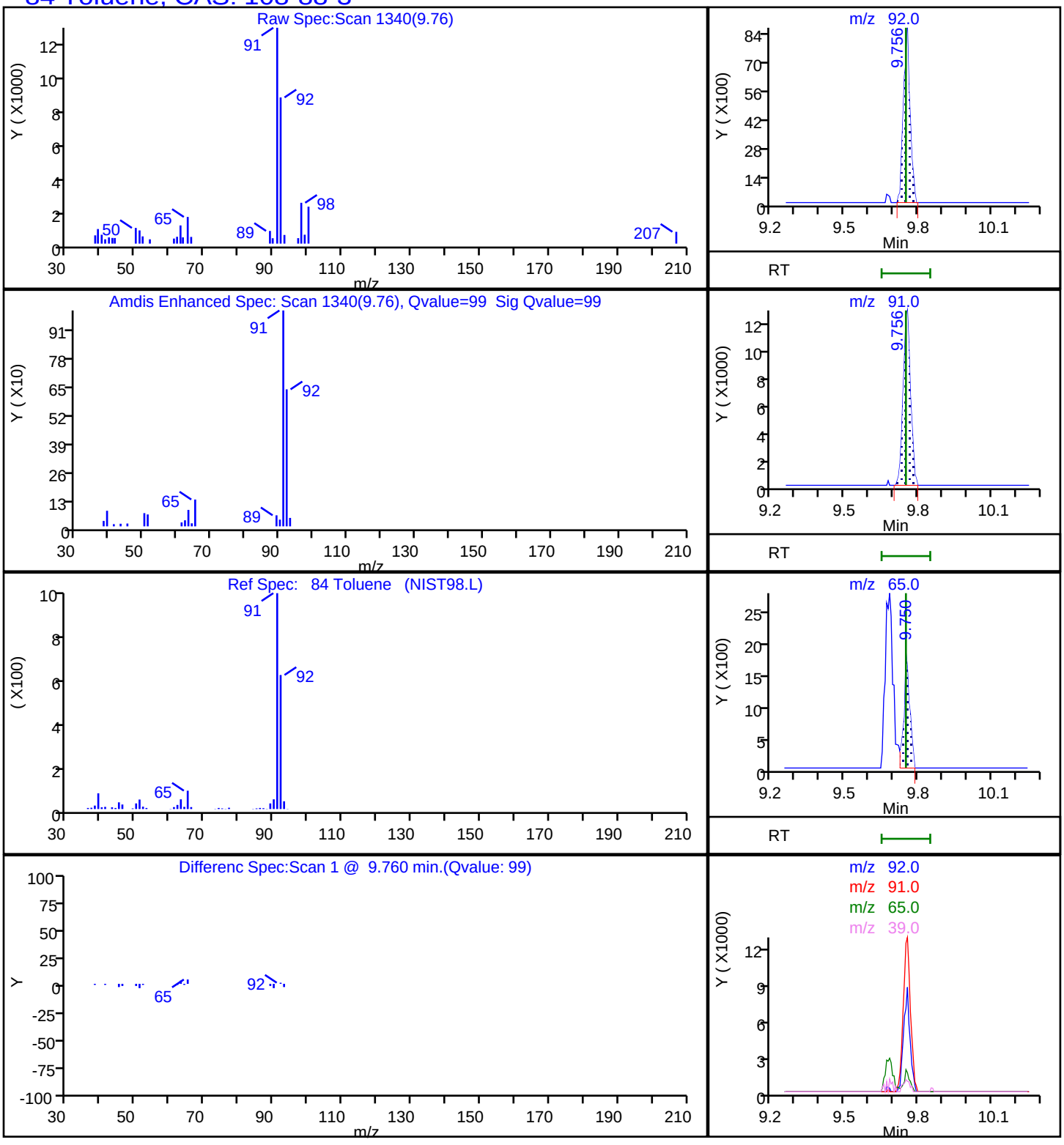
Operator ID: SRK36897 ALS Bottle#: 22 Worklist Smp#: 25

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_16334_25mL Limit Group: MSV - 8260C_D

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

84 Toluene, CAS: 108-88-3



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

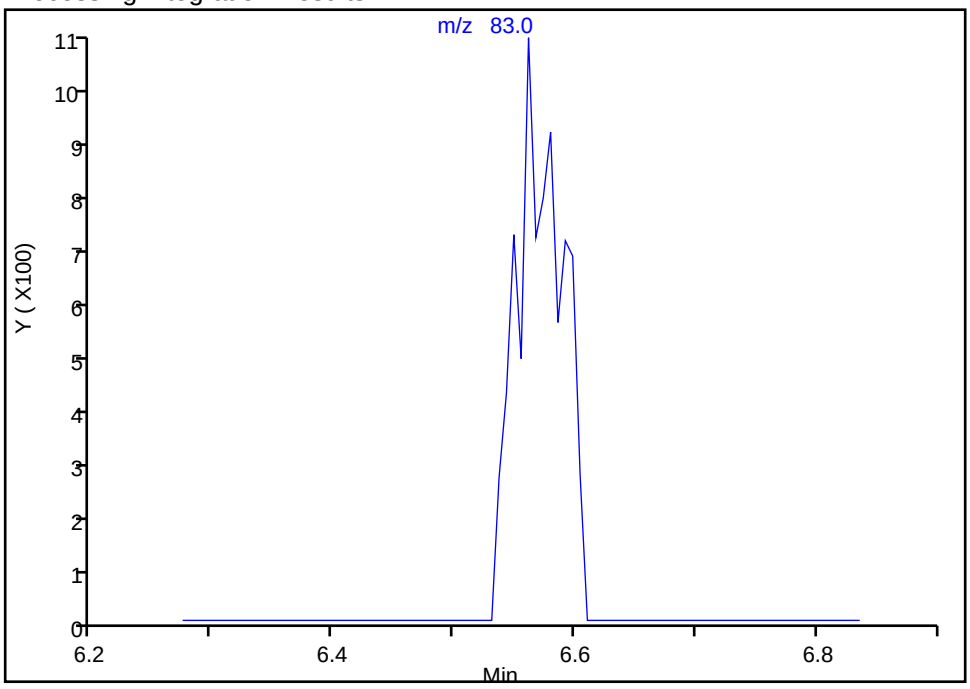
Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X22.D				
Injection Date:	01-Oct-2021 15:54:30	Instrument ID:	16334		
Lims ID:	410-56784-A-2	Lab Sample ID:	410-56784-2		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	22	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

51 Chloroform, CAS: 67-66-3

Signal: 1

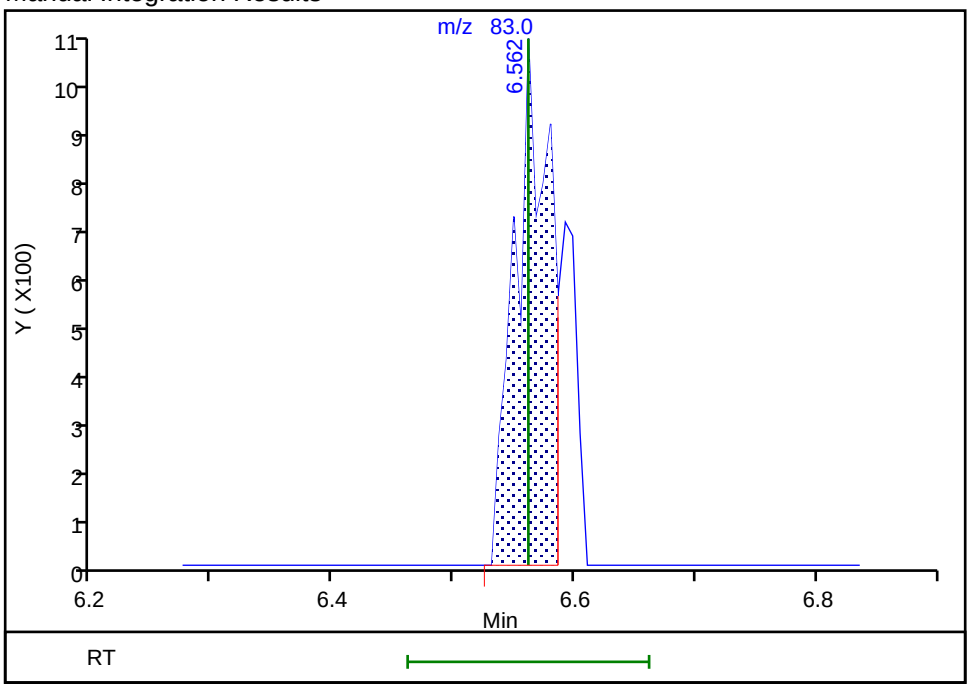
Not Detected
Expected RT: 6.56

Processing Integration Results



Manual Integration Results

RT: 6.56
Area: 2129
Amount: 0.021890
Amount Units: ug/l



Reviewer: beckerk, 01-Oct-2021 19:02:01
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.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 410-56784-3

Matrix: Water Lab File ID: GO01X23.D

Analysis Method: 8260D Date Collected: 09/24/2021 09:10

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 16:16

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.: 177560 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	1.4	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.070
75-15-0	Carbon disulfide	ND		1.0	0.060
56-23-5	Carbon tetrachloride	ND		0.50	0.070
108-90-7	Chlorobenzene	ND		0.50	0.060
75-00-3	Chloroethane	ND		0.50	0.070
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.088	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.15	J	0.50	0.060
108-88-3	Toluene	0.081	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	0.16	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 410-56784-3

Matrix: Water Lab File ID: GO01X23.D

Analysis Method: 8260D Date Collected: 09/24/2021 09:10

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 16:16

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.: 177560 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)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	96		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X23.D
Lims ID: 410-56784-A-3
Client ID: HD-COD-SW-13-0/1-0
Sample Type: Client
Inject. Date: 01-Oct-2021 16:16:30 ALS Bottle#: 23 Worklist Smp#: 26
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040424-026
Misc. Info.: 410-56784-A-3
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Oct-2021 19:10:12 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1602

First Level Reviewer: beckerk Date: 01-Oct-2021 19:05:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.135				ND	
8 Vinyl chloride	62		2.257				ND	
9 Bromomethane	94		2.587				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96		3.507				ND	
21 Acetone	43	3.593	3.568	0.025	20	14084	1.39	M
25 Carbon disulfide	76		3.800				ND	7
29 Methylene Chloride	84		4.172				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.245	4.257	-0.012	93	195284	50.0	
33 Methyl tert-butyl ether	73		4.574				ND	
34 trans-1,2-Dichloroethene	96		4.580				ND	
37 1,1-Dichloroethane	63		5.245				ND	
41 2-Butanone (MEK)	43		6.055				ND	
42 cis-1,2-Dichloroethene	96	6.092	6.086	0.006	25	5438	0.0877	
49 Chlorobromomethane	128		6.409				ND	
51 Chloroform	83	6.568	6.561	0.007	1	3216	0.0330	a
$ 52 Dibromofluoromethane (Surr)	113	6.787	6.775	0.012	93	569881	9.58	
53 1,1,1-Trichloroethane	97		6.787				ND	
56 Carbon tetrachloride	117		6.994				ND	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.238	7.232	0.006	42	129439	9.79	
60 Benzene	78		7.256				ND	7
61 1,2-Dichloroethane	62		7.323				ND	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2386145	10.0	
68 Trichloroethene	95	8.140	8.134	0.006	95	9997	0.1634	
70 1,2-Dichloropropane	63		8.470				ND	
76 Dichlorobromomethane	83		8.817				ND	
81 cis-1,3-Dichloropropene	75		9.366				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.549				ND	7
$ 83 Toluene-d8 (Surr)	98	9.677	9.671	0.006	93	2297406	9.64	
84 Toluene	92	9.750	9.750	0.000	99	11852	0.0810	
96 trans-1,3-Dichloropropene	75		10.012				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
99 1,1,2-Trichloroethane	97		10.213				ND	
100 Tetrachloroethene	166	10.305	10.298	0.007	81	10450	0.1499	Ma
102 2-Hexanone	43		10.433				ND	7
104 Chlorodibromomethane	129		10.591				ND	
105 Ethylene Dibromide	107		10.695				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.134	11.128	0.006	84	1830041	10.0	
108 Chlorobenzene	112		11.158				ND	
110 1,1,1,2-Tetrachloroethane	131		11.237				ND	
111 Ethylbenzene	91		11.243				ND	7
S 109 Xylenes, Total	106				0		0.0965	
112 m-Xylene & p-Xylene	106	11.359	11.353	0.006	98	7421	0.0675	
113 o-Xylene	106	11.689	11.682	0.007	89	3148	0.0290	
114 Styrene	104		11.701				ND	
115 Bromoform	173		11.853				ND	
$ 119 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	91	855139	9.82	
120 1,1,2,2-Tetrachloroethane	83		12.231				ND	
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	1013217	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_29_826ISS_00023 Amount Added: 1.00 Units: uL Run Reagent

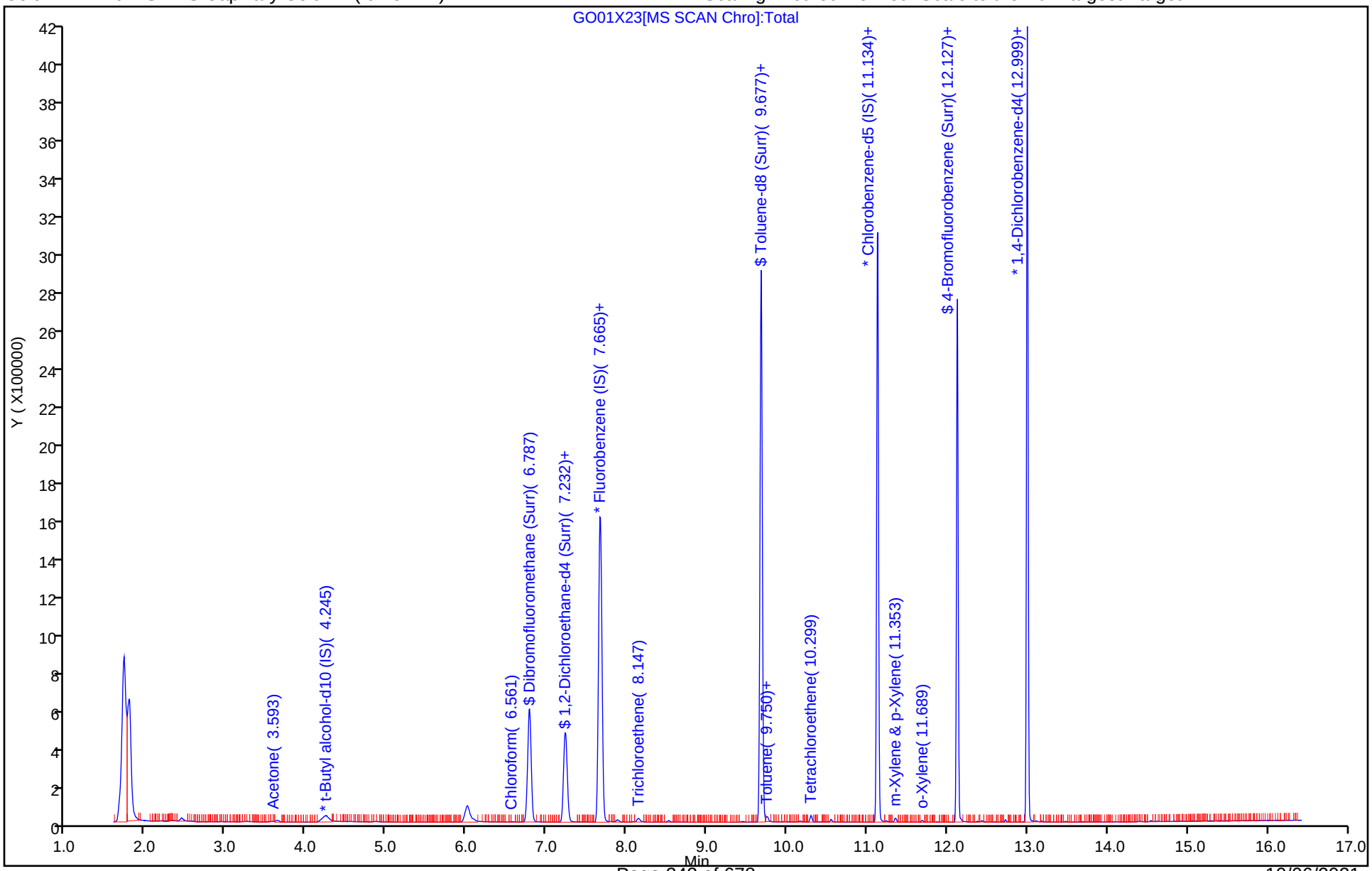
Report Date: 01-Oct-2021 19:10:25 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X23.D

Injection Date:	01-Oct-2021 16:16:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	410-56784-A-3	Lab Sample ID:	410-56784-3	Worklist Smp#:	26
Client ID:	HD-COD-SW-13-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

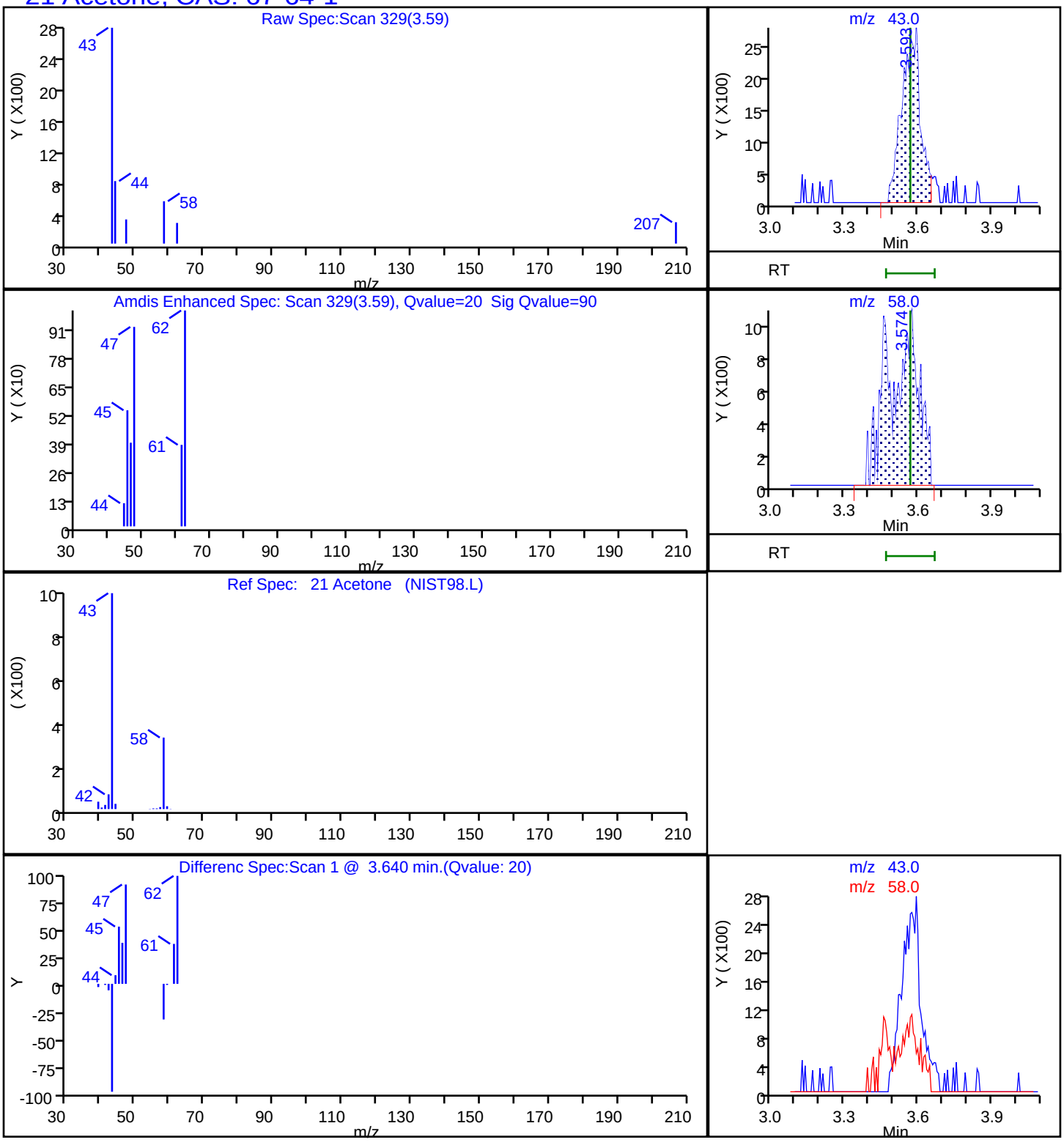
Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X23.D				
Lims ID:	410-56784-A-3				
Client ID:	HD-COD-SW-13-0/1-0				
Sample Type:	Client				
Inject. Date:	01-Oct-2021 16:16:30	ALS Bottle#:	23	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0040424-026				
Misc. Info.:	410-56784-A-3				
Operator ID:	SRK36897	Instrument ID:	16334		
Method:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	01-Oct-2021 19:10:12	Calib Date:	27-Jul-2021 21:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1602				
First Level Reviewer: beckerk		Date:	01-Oct-2021 19:05:30		

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	10.0	9.58	95.85
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.79	97.89
$ 83 Toluene-d8 (Surr)	10.0	9.64	96.40
$ 119 4-Bromofluorobenzene (Surr)	10.0	9.82	98.16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X23.D				
Injection Date:	01-Oct-2021 16:16:30	Instrument ID:	16334		
Lims ID:	410-56784-A-3	Lab Sample ID:	410-56784-3		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	23	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

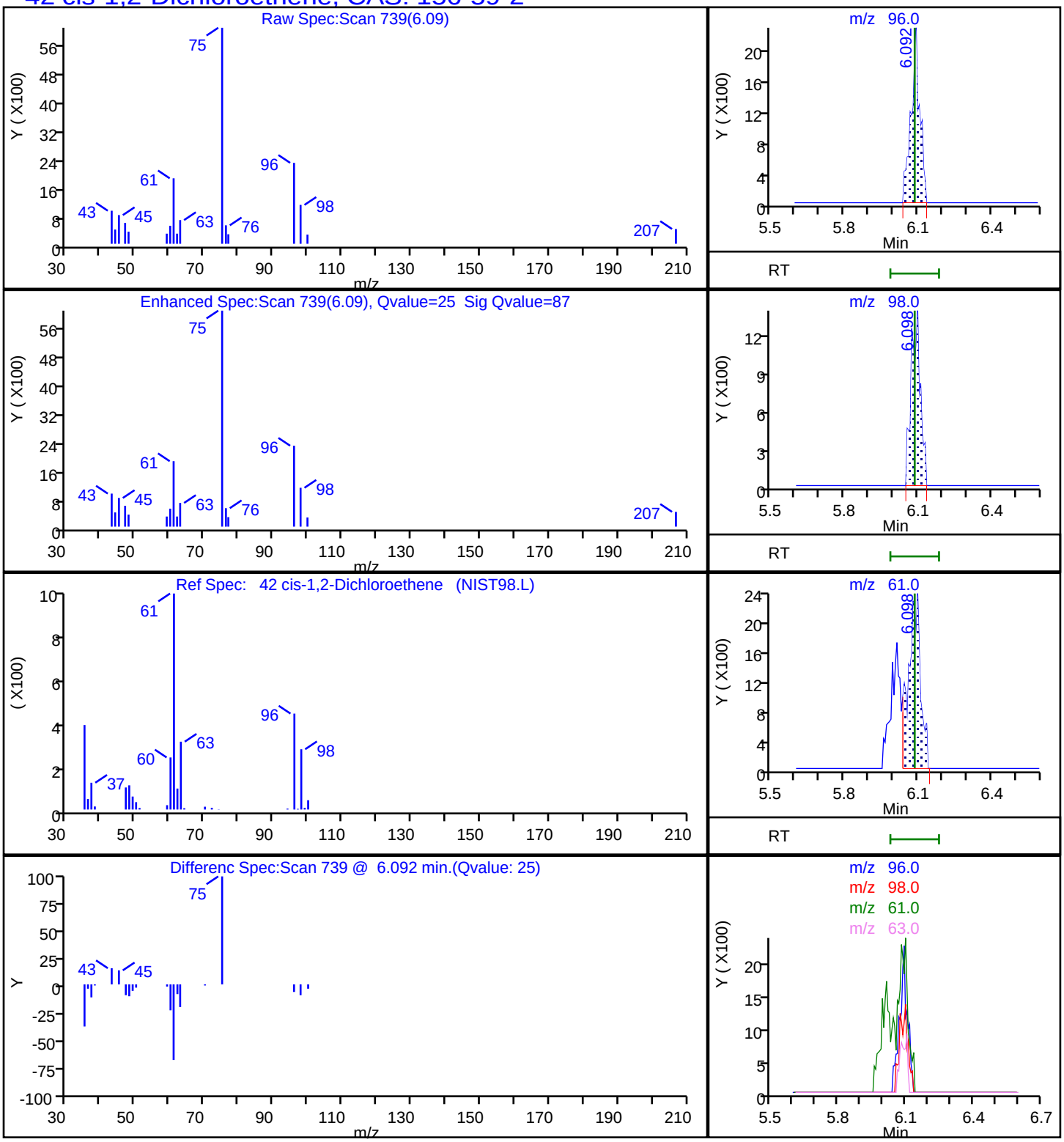
21 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X23.D
Injection Date: 01-Oct-2021 16:16:30 Instrument ID: 16334
Lims ID: 410-56784-A-3 Lab Sample ID: 410-56784-3
Client ID: HD-COD-SW-13-0/1-0
Operator ID: SRK36897 ALS Bottle#: 23 Worklist Smp#: 26
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

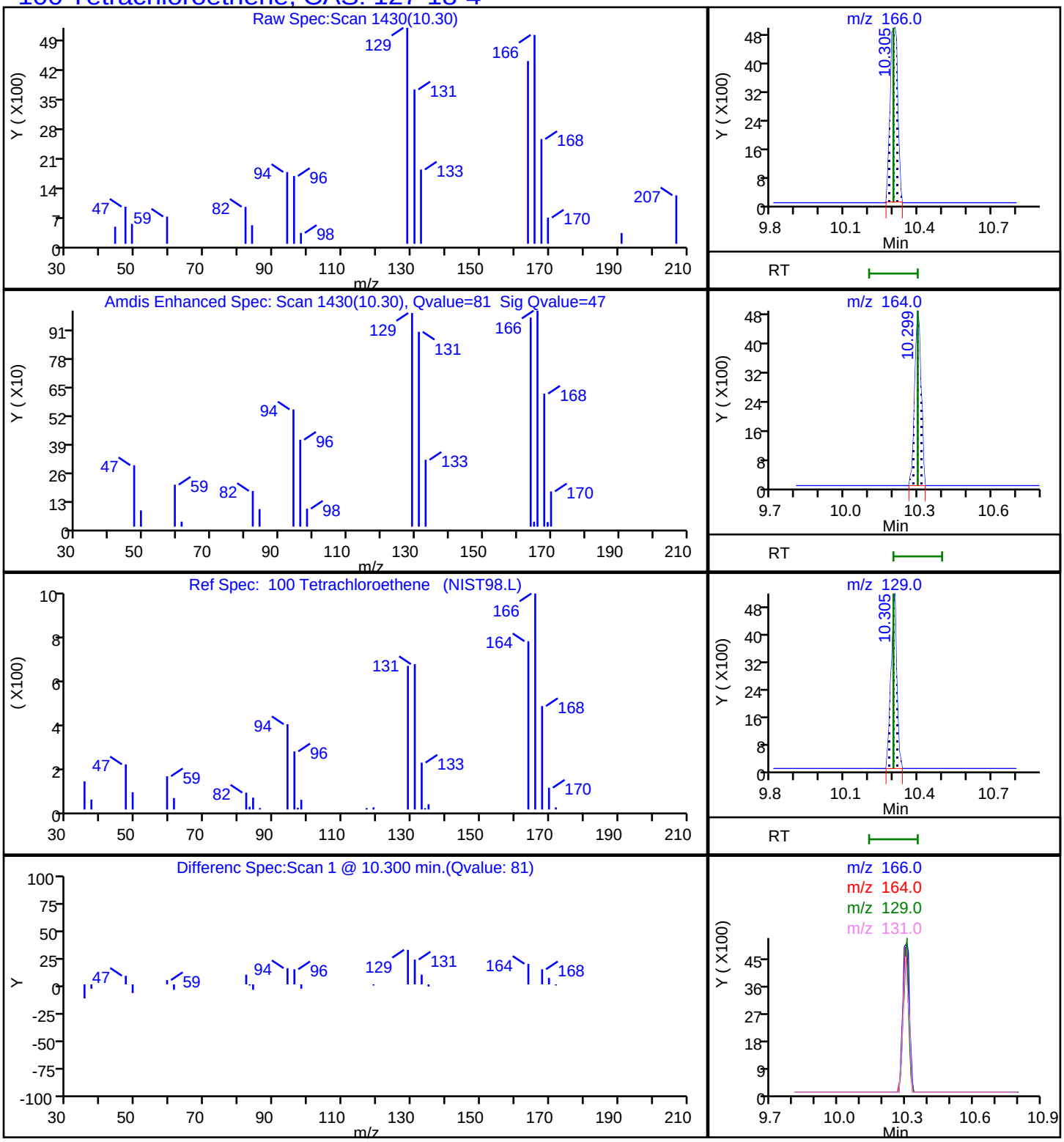
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X23.D				
Injection Date:	01-Oct-2021 16:16:30	Instrument ID:	16334		
Lims ID:	410-56784-A-3	Lab Sample ID:	410-56784-3		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	23	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

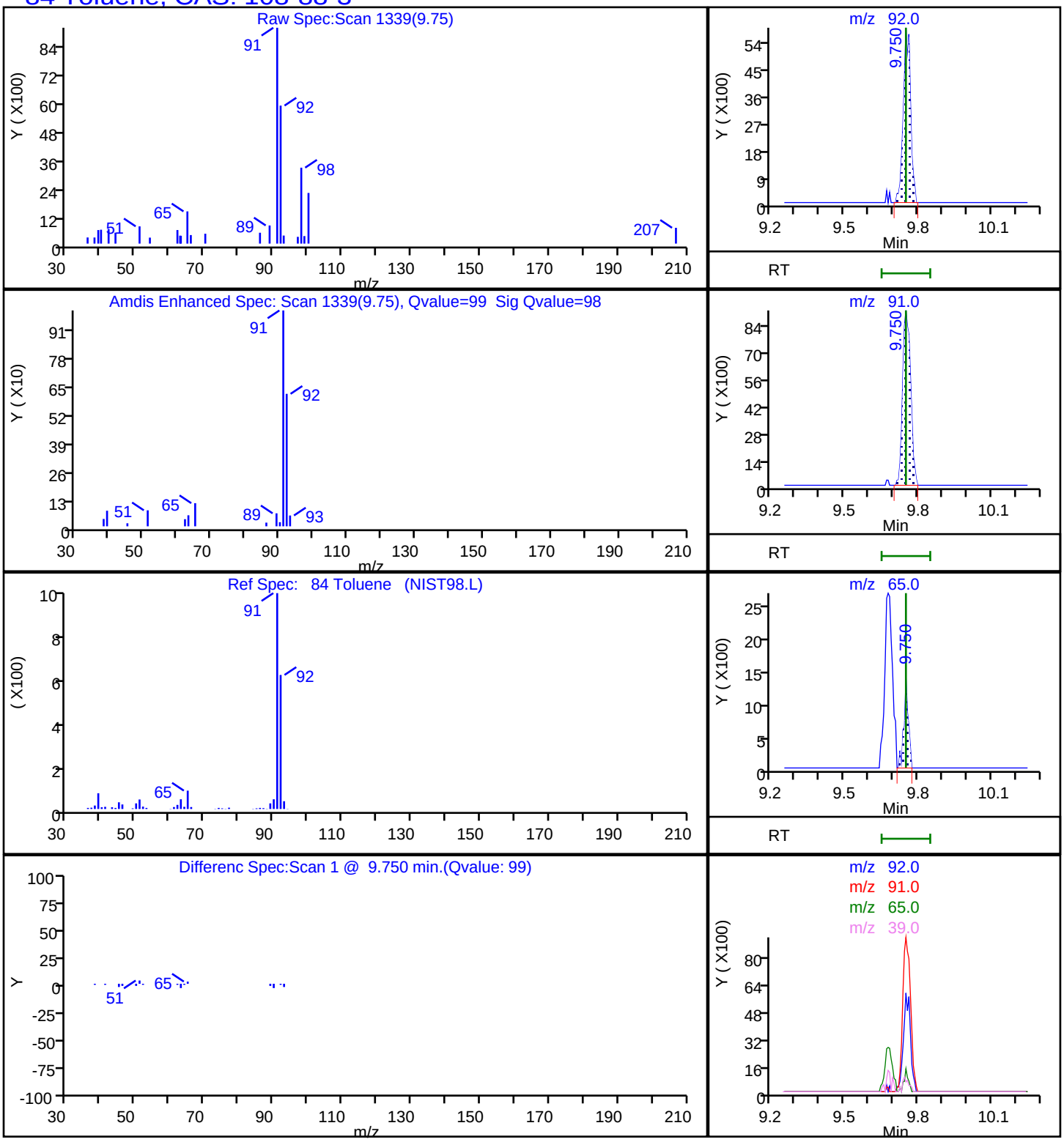
100 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X23.D				
Injection Date:	01-Oct-2021 16:16:30	Instrument ID:	16334		
Lims ID:	410-56784-A-3	Lab Sample ID:	410-56784-3		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	23	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

84 Toluene, CAS: 108-88-3



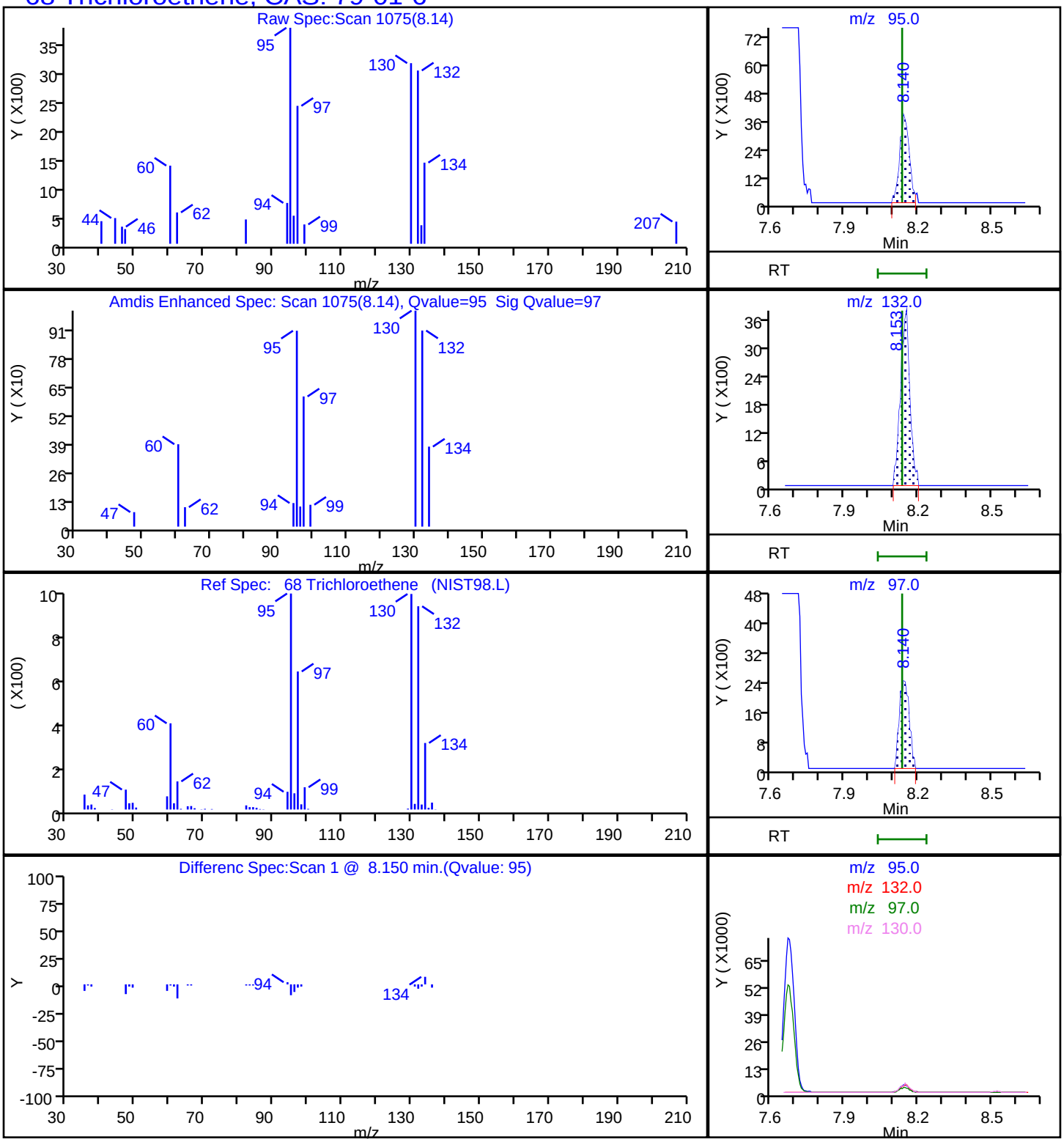
Report Date: 01-Oct-2021 19:10:26 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X23.D

Injection Date:	01-Oct-2021 16:16:30	Instrument ID:	16334		
Lims ID:	410-56784-A-3	Lab Sample ID:	410-56784-3		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	23	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

68 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

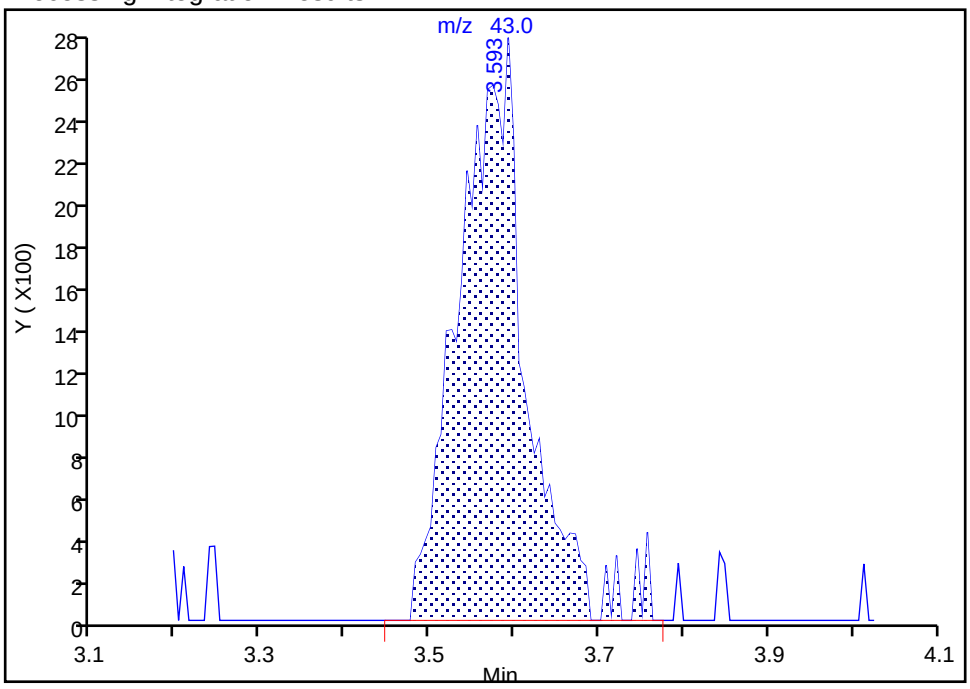
Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X23.D				
Injection Date:	01-Oct-2021 16:16:30	Instrument ID:	16334		
Lims ID:	410-56784-A-3	Lab Sample ID:	410-56784-3		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	23	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

21 Acetone, CAS: 67-64-1

Signal: 1

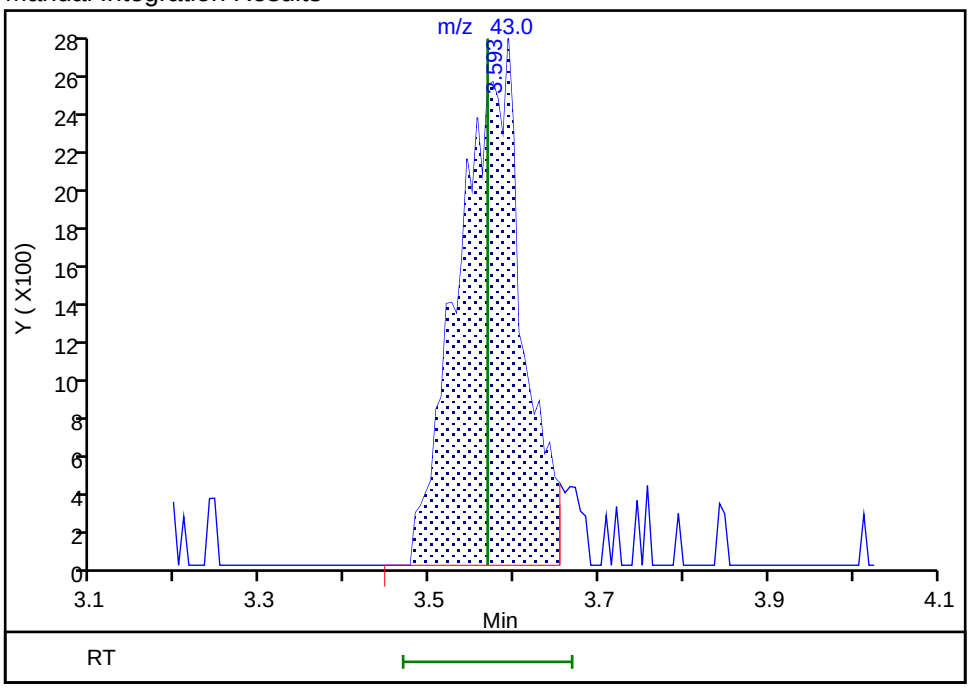
Processing Integration Results

RT: 3.59
Area: 15191
Amount: 1.501723
Amount Units: ug/l



Manual Integration Results

RT: 3.59
Area: 14084
Amount: 1.392289
Amount Units: ug/l



Reviewer: beckerk, 01-Oct-2021 19:02:52
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

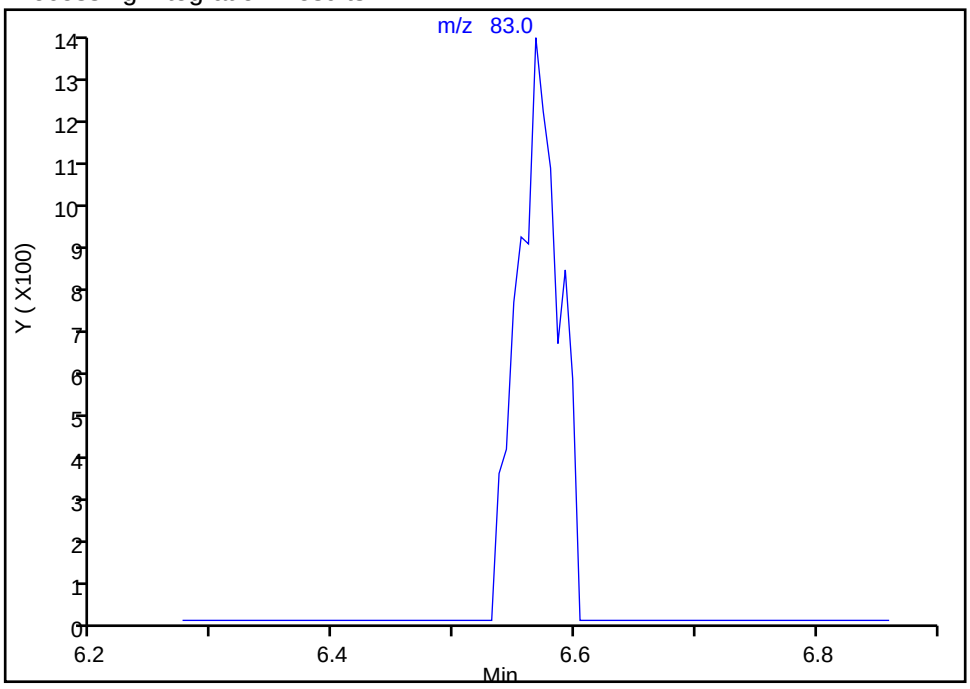
Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X23.D				
Injection Date:	01-Oct-2021 16:16:30	Instrument ID:	16334		
Lims ID:	410-56784-A-3	Lab Sample ID:	410-56784-3		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	23	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

51 Chloroform, CAS: 67-66-3

Signal: 1

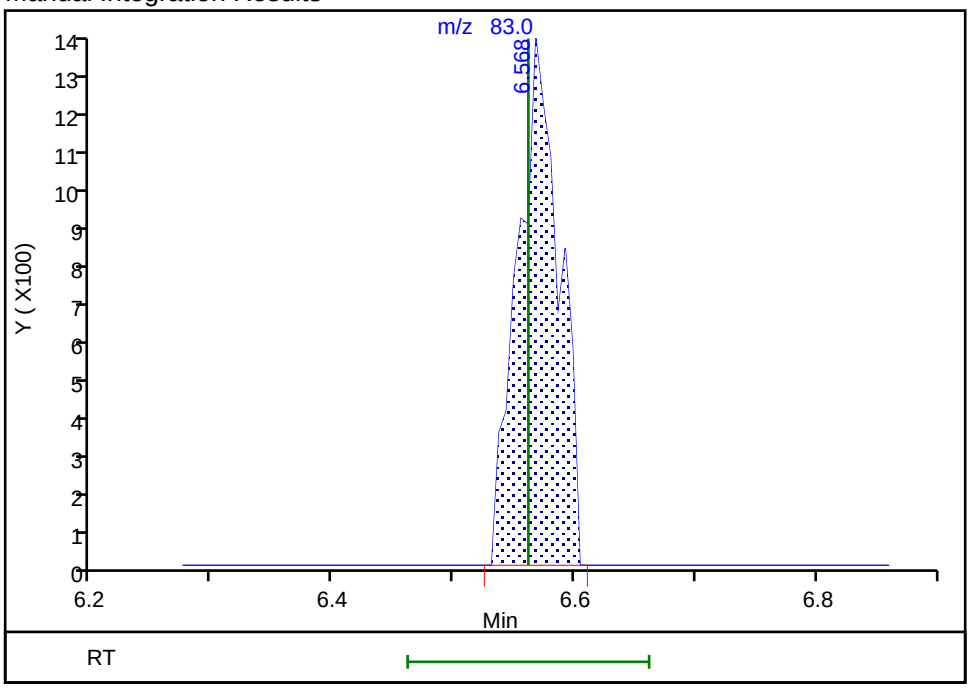
Not Detected
Expected RT: 6.56

Processing Integration Results



Manual Integration Results

RT: 6.57
Area: 3216
Amount: 0.032994
Amount Units: ug/l



Reviewer: beckerk, 01-Oct-2021 19:03:02
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

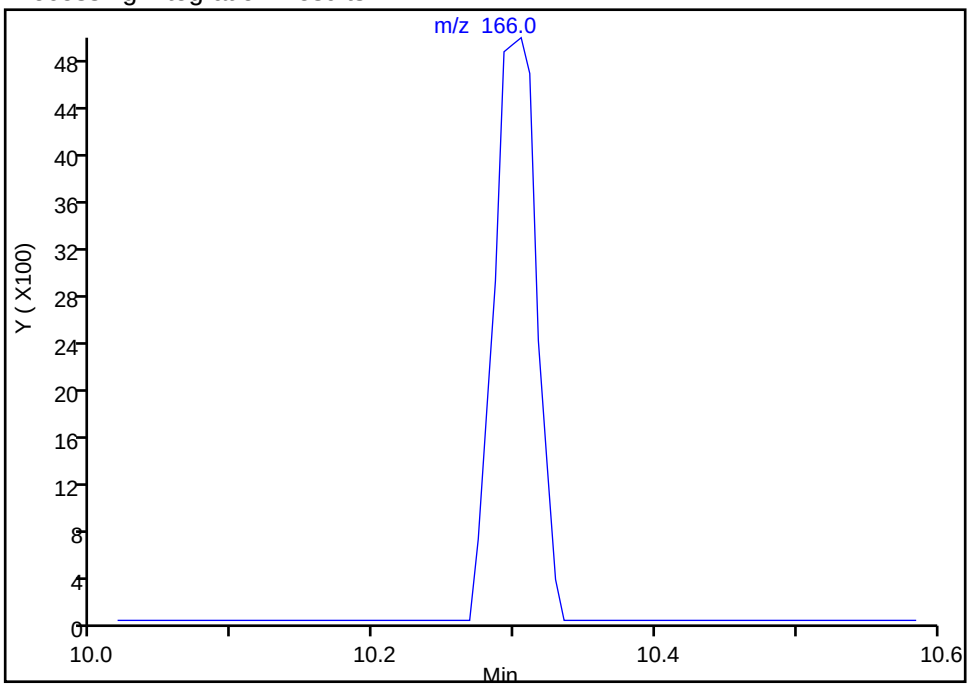
Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X23.D				
Injection Date:	01-Oct-2021 16:16:30	Instrument ID:	16334		
Lims ID:	410-56784-A-3	Lab Sample ID:	410-56784-3		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	23	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

100 Tetrachloroethene, CAS: 127-18-4

Signal: 1

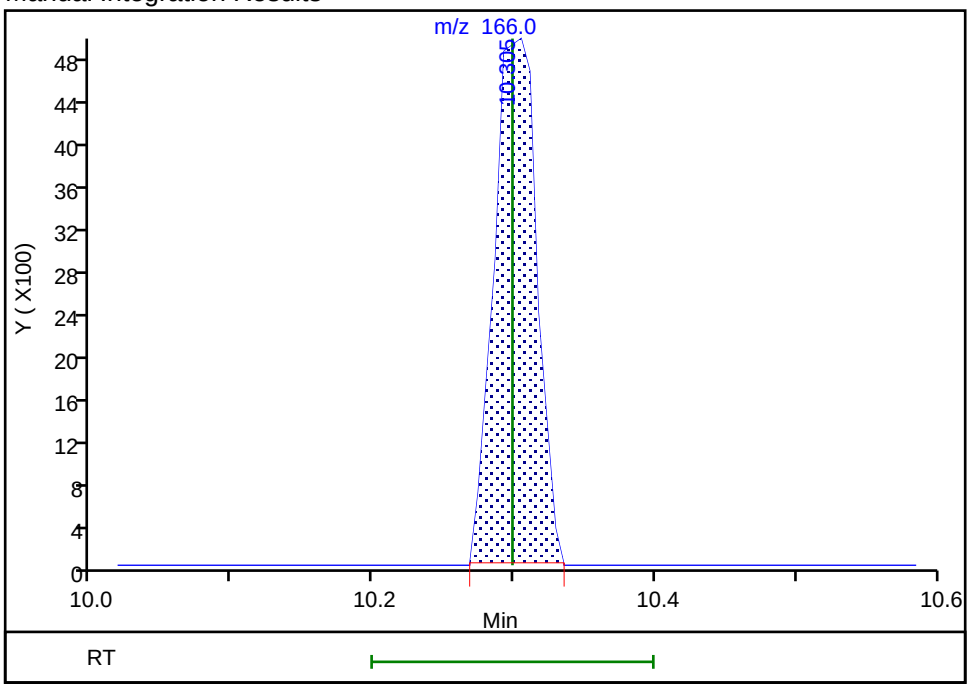
Not Detected
Expected RT: 10.30

Processing Integration Results



Manual Integration Results

RT: 10.30
Area: 10450
Amount: 0.149924
Amount Units: ug/l



Reviewer: beckerk, 01-Oct-2021 19:03:29
Audit Action: Manually Integrated Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 410-56784-4

Matrix: Water Lab File ID: GO01X24.D

Analysis Method: 8260D Date Collected: 09/24/2021 09:30

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 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.: 177560 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	1.4	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		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	0.078	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	0.15	J	0.50	0.060
108-88-3	Toluene	0.10	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	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 410-56784-4

Matrix: Water Lab File ID: GO01X24.D

Analysis Method: 8260D Date Collected: 09/24/2021 09:30

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 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.: 177560 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)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	95		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X24.D
Lims ID: 410-56784-A-4
Client ID: HD-COD-SW-16-0/1-0
Sample Type: Client
Inject. Date: 01-Oct-2021 16:38:30 ALS Bottle#: 24 Worklist Smp#: 27
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040424-027
Misc. Info.: 410-56784-A-4
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Oct-2021 19:10:12 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1602

First Level Reviewer: beckerk Date: 01-Oct-2021 19:06:18

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
	5 Chloromethane	50		2.135				ND	7
	8 Vinyl chloride	62		2.257				ND	
	9 Bromomethane	94		2.587				ND	7
	10 Chloroethane	64		2.666				ND	
	19 1,1-Dichloroethene	96		3.507				ND	
	21 Acetone	43	3.586	3.568	0.018	99	13479	1.38	M
	25 Carbon disulfide	76		3.800				ND	7
	29 Methylene Chloride	84		4.172				ND	
*	30 t-Butyl alcohol-d10 (IS)	65	4.251	4.257	-0.006	95	188075	50.0	
	33 Methyl tert-butyl ether	73		4.574				ND	
	34 trans-1,2-Dichloroethene	96		4.580				ND	
	37 1,1-Dichloroethane	63		5.245				ND	
	41 2-Butanone (MEK)	43		6.055				ND	
	42 cis-1,2-Dichloroethene	96	6.080	6.086	-0.006	66	4834	0.0778	
	49 Chlorobromomethane	128		6.409				ND	
	51 Chloroform	83	6.568	6.561	0.007	1	3074	0.0315	a
$	52 Dibromofluoromethane (Surr)	113	6.781	6.775	0.006	93	567634	9.53	
	53 1,1,1-Trichloroethane	97		6.787				ND	
	56 Carbon tetrachloride	117		6.994				ND	
$	59 1,2-Dichloroethane-d4 (Surr)	102	7.226	7.232	-0.006	38	130827	9.88	
	60 Benzene	78		7.256				ND	7
	61 1,2-Dichloroethane	62		7.323				ND	
*	64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2389241	10.0	
	68 Trichloroethene	95		8.134				ND	
	70 1,2-Dichloropropane	63		8.470				ND	
	76 Dichlorobromomethane	83		8.817				ND	
	81 cis-1,3-Dichloropropene	75		9.366				ND	
	82 4-Methyl-2-pentanone (MIBK)	43		9.549				ND	7
$	83 Toluene-d8 (Surr)	98	9.677	9.671	0.006	93	2309571	9.66	
	84 Toluene	92	9.750	9.750	0.000	99	14892	0.1014	
	96 trans-1,3-Dichloropropene	75		10.012				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
99 1,1,2-Trichloroethane	97		10.213				ND	
100 Tetrachloroethene	166	10.305	10.298	0.007	95	10301	0.1474	
102 2-Hexanone	43		10.433				ND	7
104 Chlorodibromomethane	129		10.591				ND	
105 Ethylene Dibromide	107		10.695				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	84	1835240	10.0	
108 Chlorobenzene	112		11.158				ND	
110 1,1,1,2-Tetrachloroethane	131		11.237				ND	
111 Ethylbenzene	91		11.243				ND	7
S 109 Xylenes, Total	106				0		0.1254	
112 m-Xylene & p-Xylene	106	11.353	11.353	0.000	94	9942	0.0902	
113 o-Xylene	106	11.689	11.682	0.007	94	3844	0.0353	
114 Styrene	104		11.701				ND	7
115 Bromoform	173		11.853				ND	
$ 119 4-Bromofluorobenzene (Surr)	95	12.128	12.121	0.007	92	854754	9.78	
120 1,1,2,2-Tetrachloroethane	83		12.231				ND	
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	998786	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_29_826ISS_00023 Amount Added: 1.00 Units: uL Run Reagent

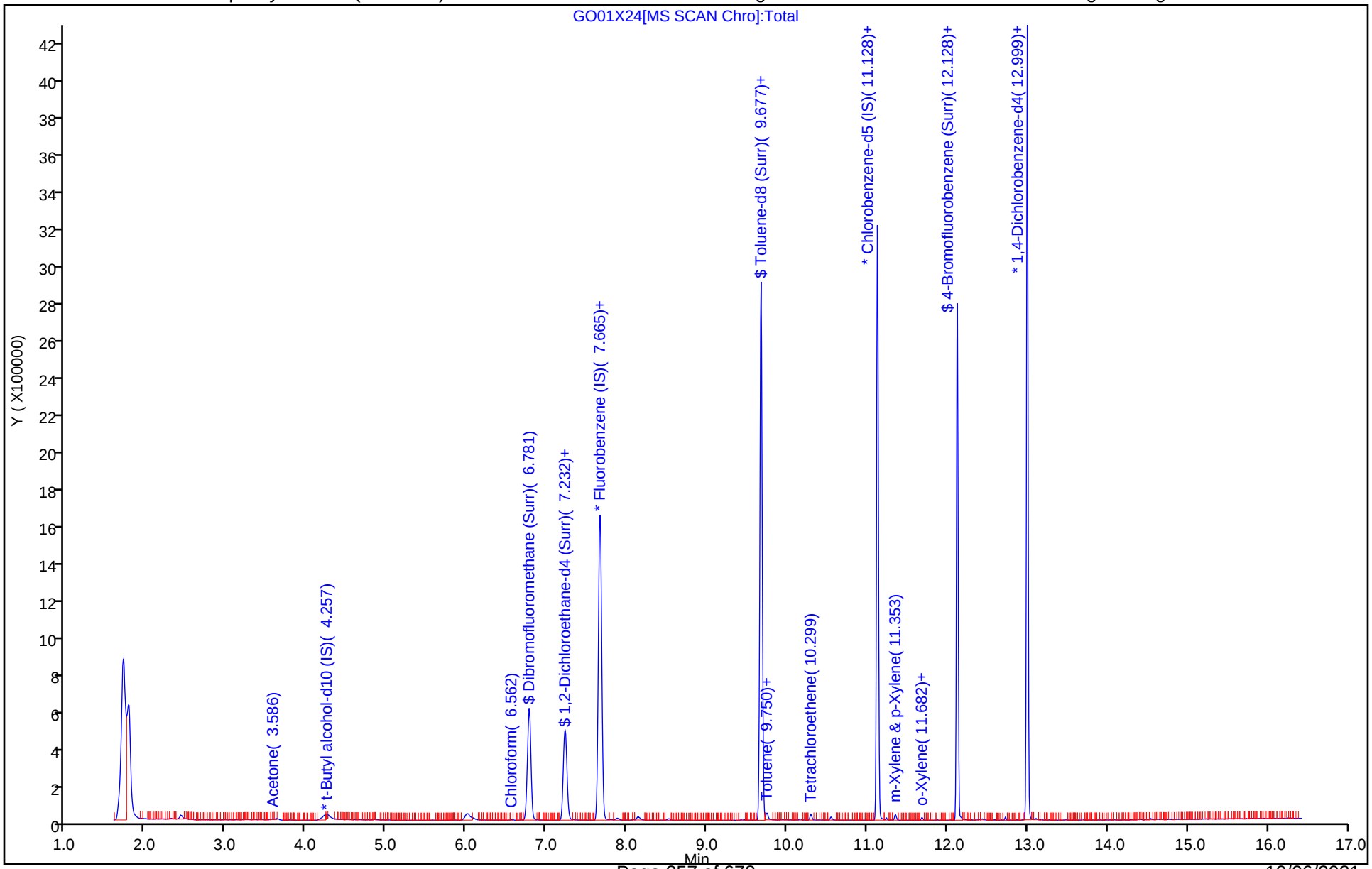
Report Date: 01-Oct-2021 19:10:27 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X24.D

Injection Date:	01-Oct-2021 16:38:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	410-56784-A-4	Lab Sample ID:	410-56784-4	Worklist Smp#:	27
Client ID:	HD-COD-SW-16-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X24.D				
Lims ID:	410-56784-A-4				
Client ID:	HD-COD-SW-16-0/1-0				
Sample Type:	Client				
Inject. Date:	01-Oct-2021 16:38:30	ALS Bottle#:	24	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0040424-027				
Misc. Info.:	410-56784-A-4				
Operator ID:	SRK36897	Instrument ID:	16334		
Method:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	01-Oct-2021 19:10:12	Calib Date:	27-Jul-2021 21:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1602				

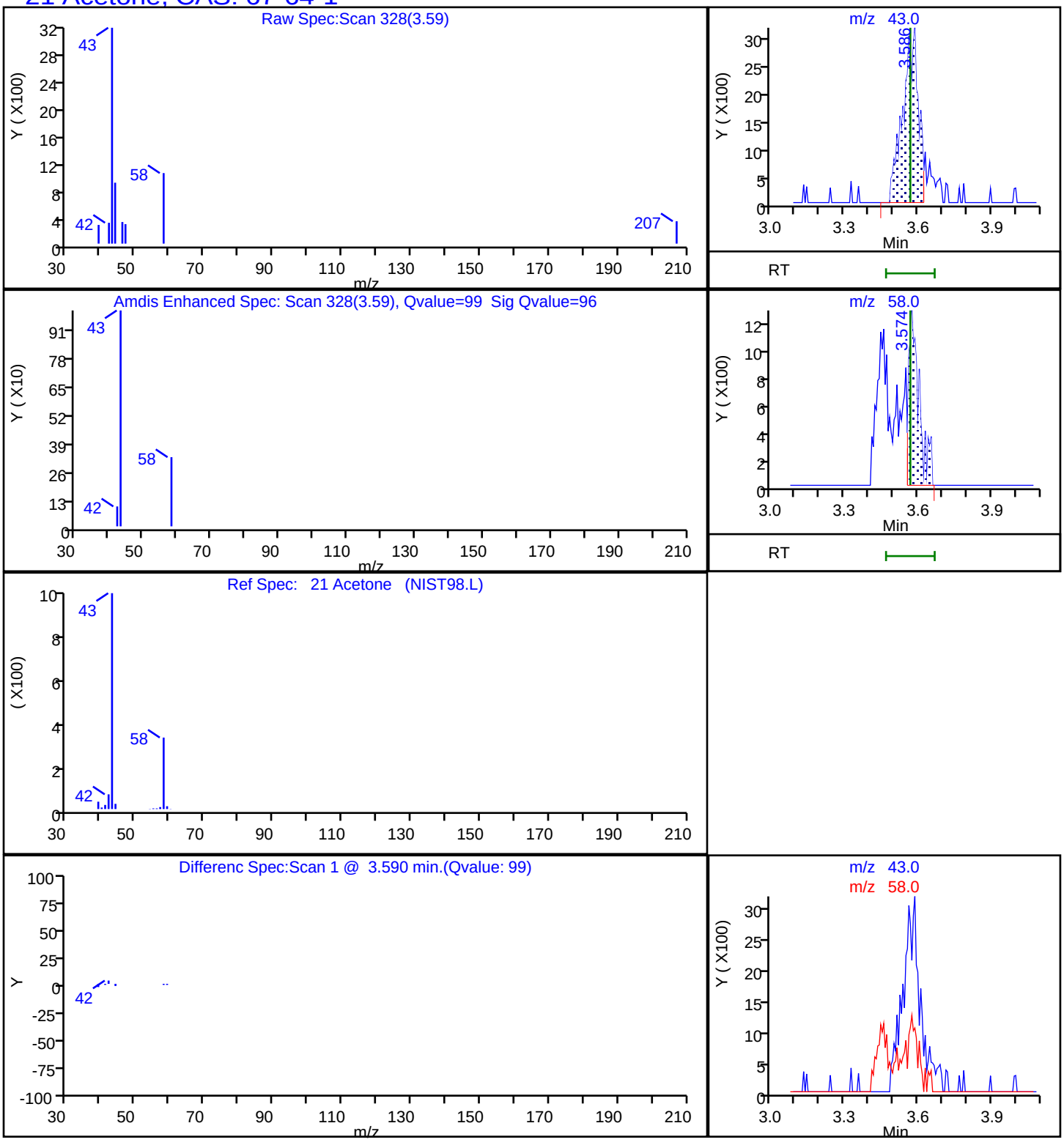
First Level Reviewer: beckerk Date: 01-Oct-2021 19:06:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	10.0	9.53	95.35
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.88	98.81
$ 83 Toluene-d8 (Surr)	10.0	9.66	96.64
$ 119 4-Bromofluorobenzene (Surr)	10.0	9.78	97.83

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X24.D				
Injection Date:	01-Oct-2021 16:38:30	Instrument ID:	16334		
Lims ID:	410-56784-A-4	Lab Sample ID:	410-56784-4		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	24	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

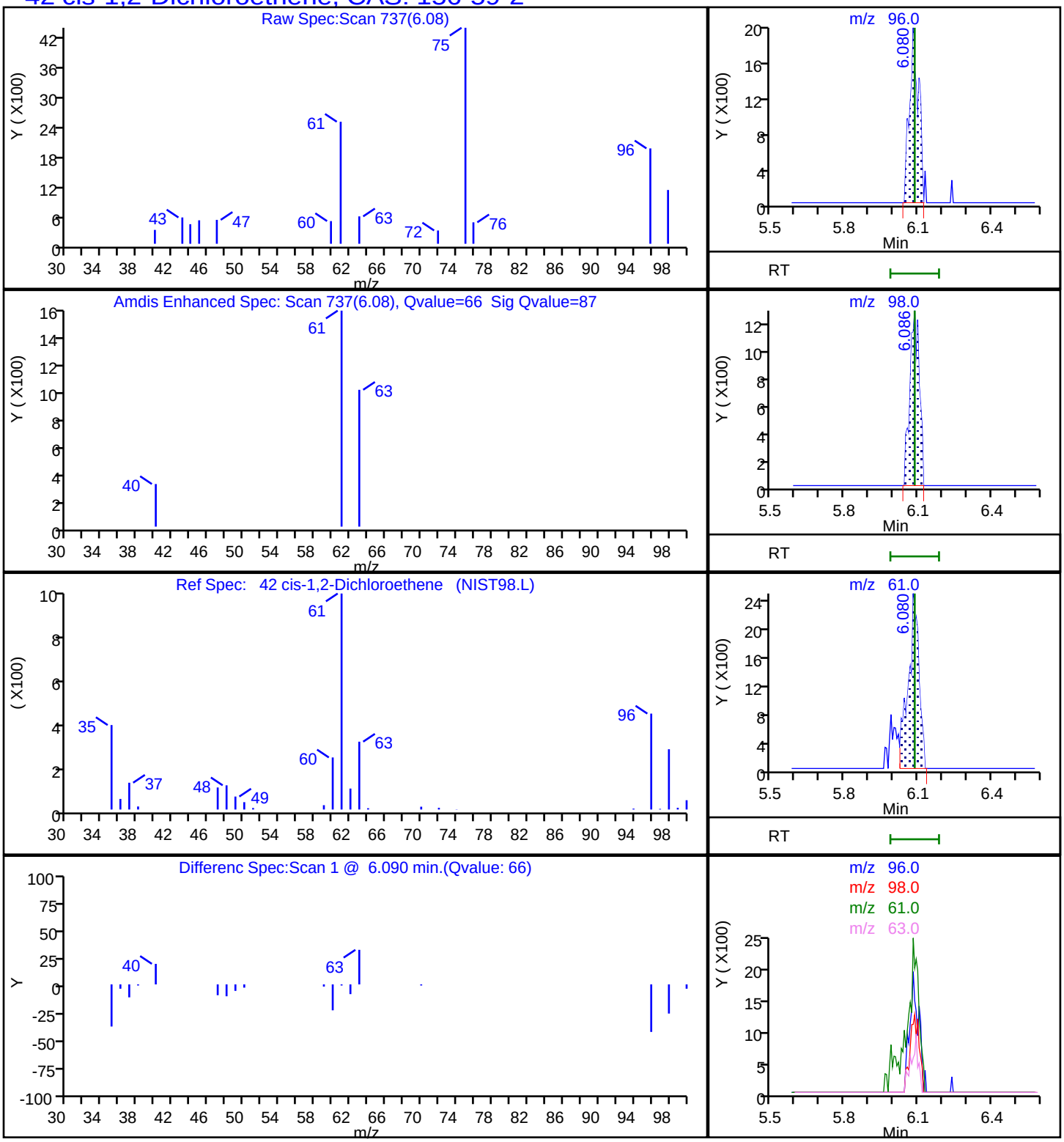
21 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X24.D				
Injection Date:	01-Oct-2021 16:38:30	Instrument ID:	16334		
Lims ID:	410-56784-A-4	Lab Sample ID:	410-56784-4		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	24	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

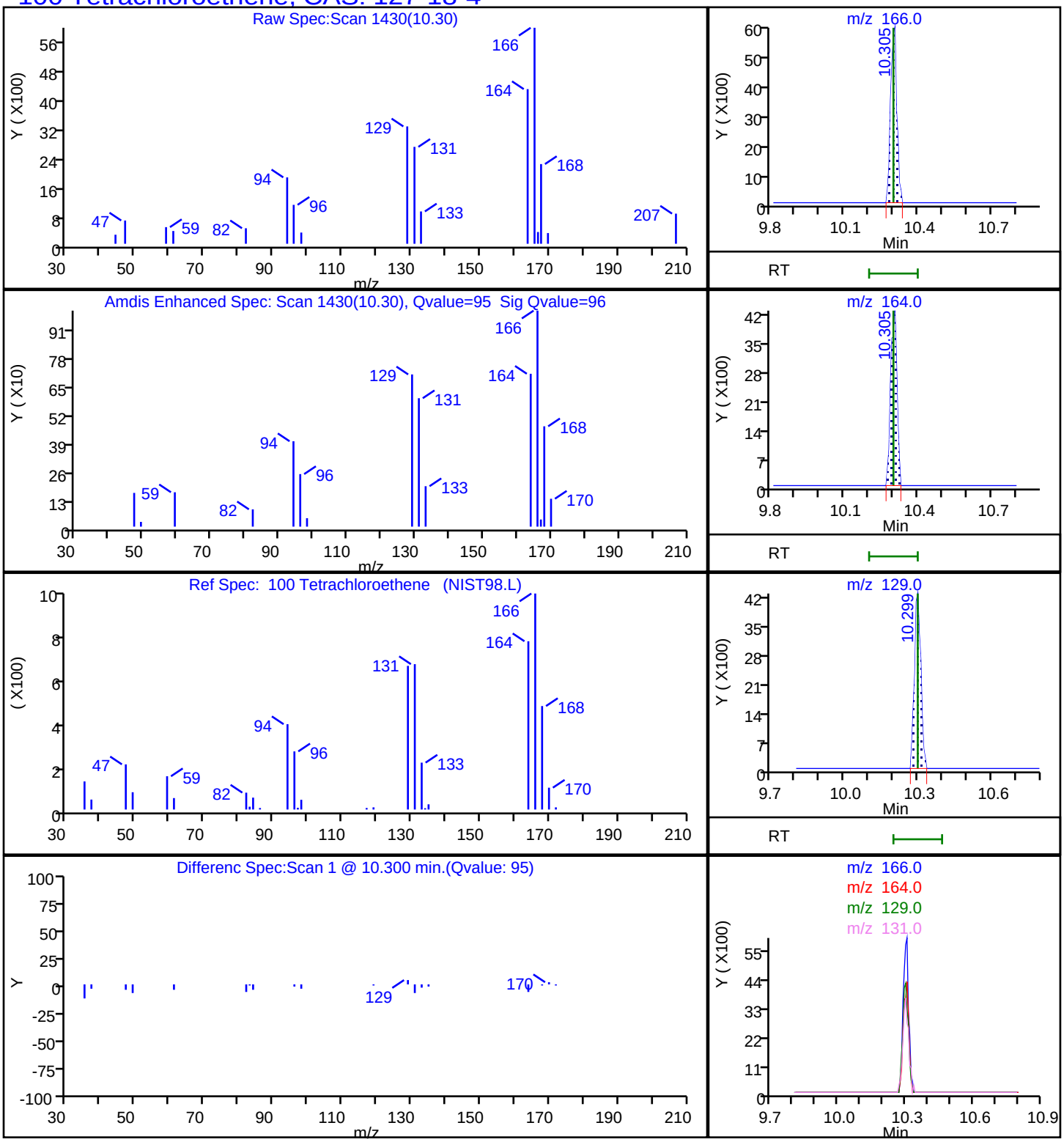
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X24.D				
Injection Date:	01-Oct-2021 16:38:30	Instrument ID:	16334		
Lims ID:	410-56784-A-4	Lab Sample ID:	410-56784-4		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	24	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

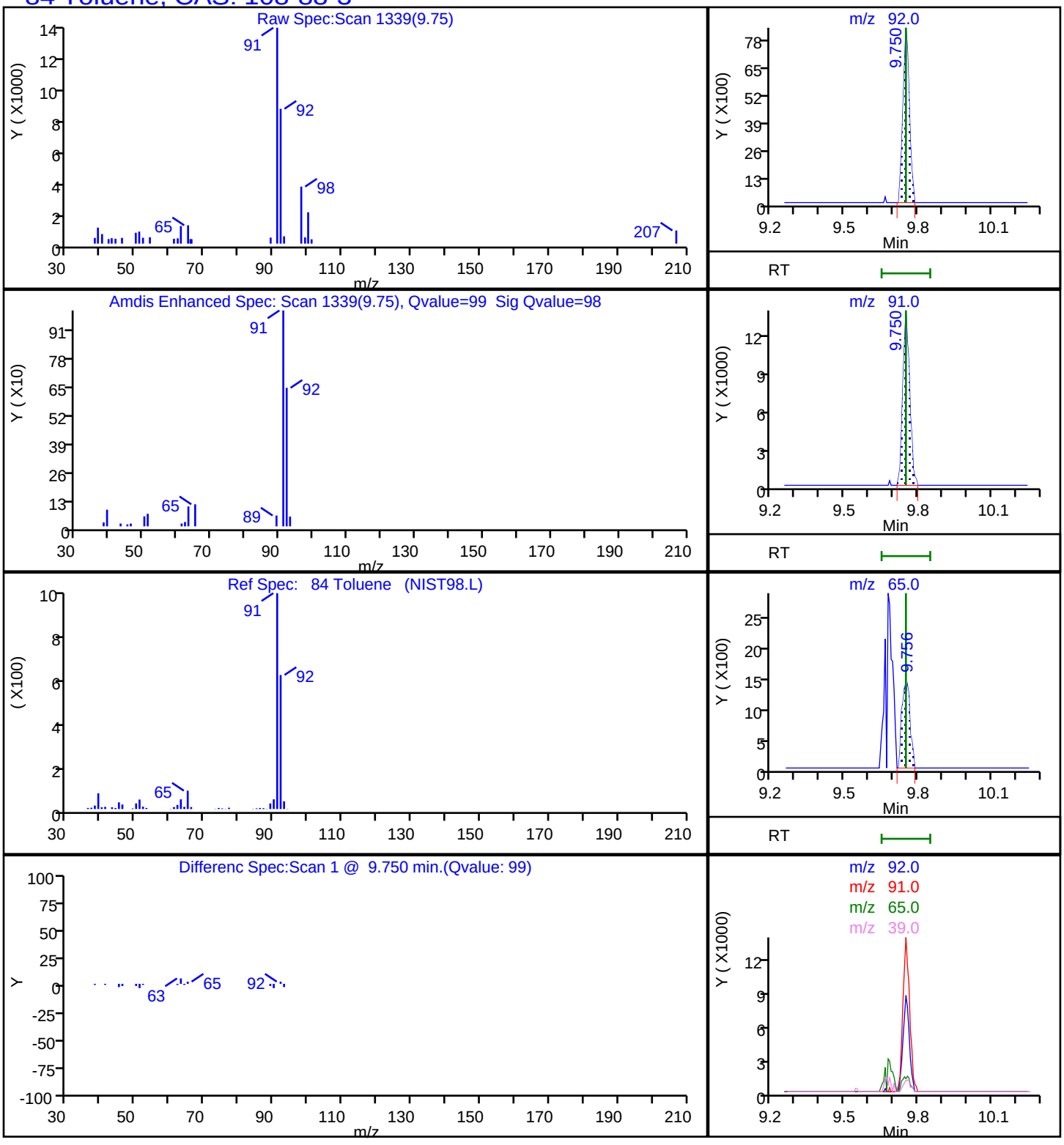
100 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X24.D				
Injection Date:	01-Oct-2021 16:38:30	Instrument ID:	16334		
Lims ID:	410-56784-A-4	Lab Sample ID:	410-56784-4		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	24	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

84 Toluene, CAS: 108-88-3



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

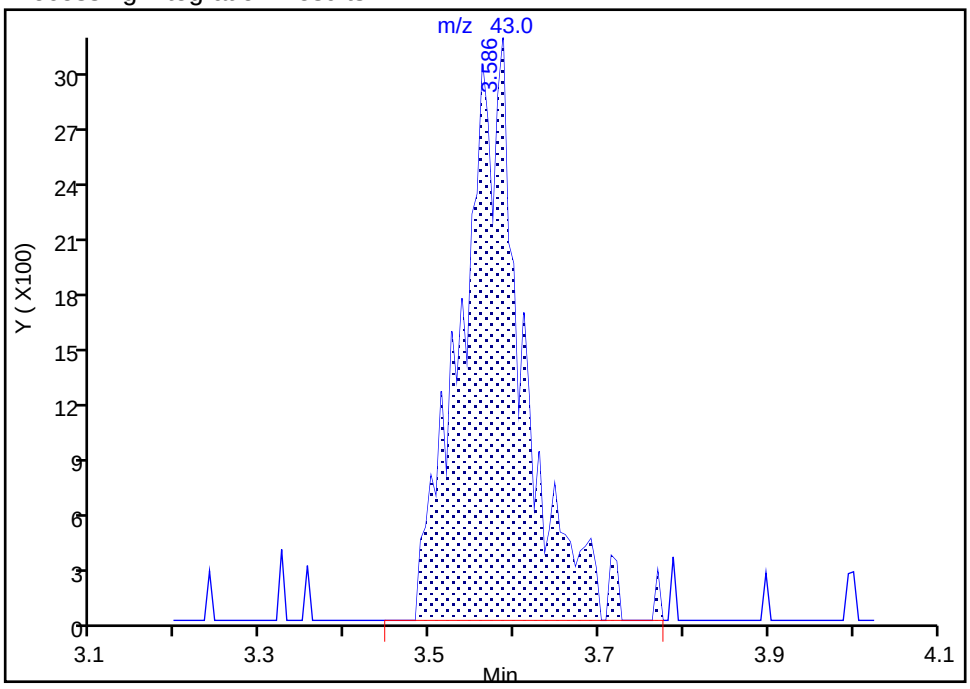
Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X24.D				
Injection Date:	01-Oct-2021 16:38:30	Instrument ID:	16334		
Lims ID:	410-56784-A-4	Lab Sample ID:	410-56784-4		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	24	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

21 Acetone, CAS: 67-64-1

Signal: 1

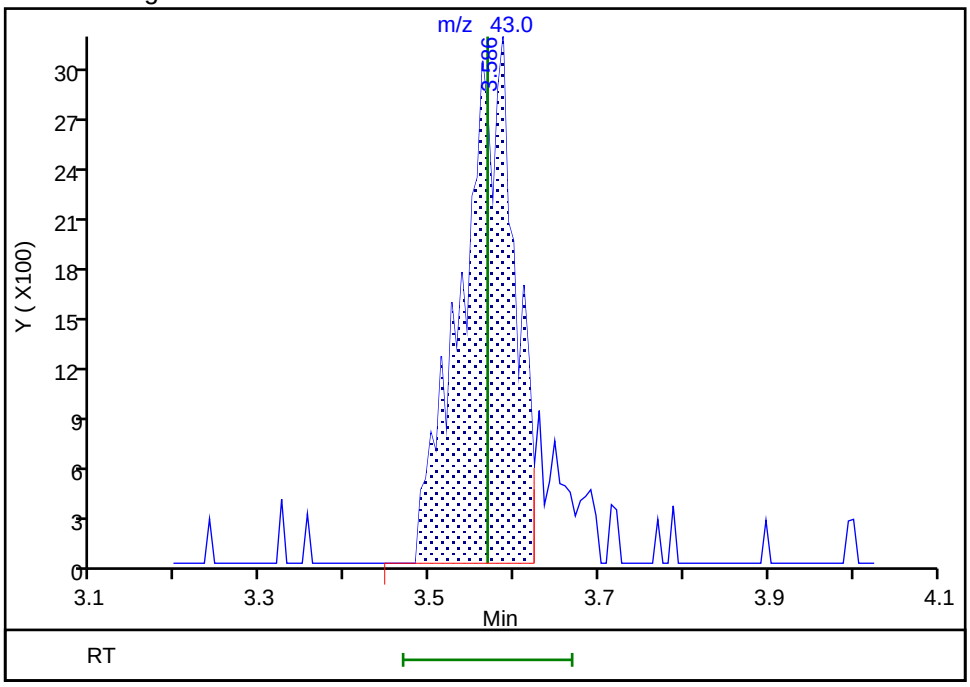
Processing Integration Results

RT: 3.59
Area: 15865
Amount: 1.628467
Amount Units: ug/l



Manual Integration Results

RT: 3.59
Area: 13479
Amount: 1.383556
Amount Units: ug/l



Reviewer: beckerk, 01-Oct-2021 19:05:49

Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

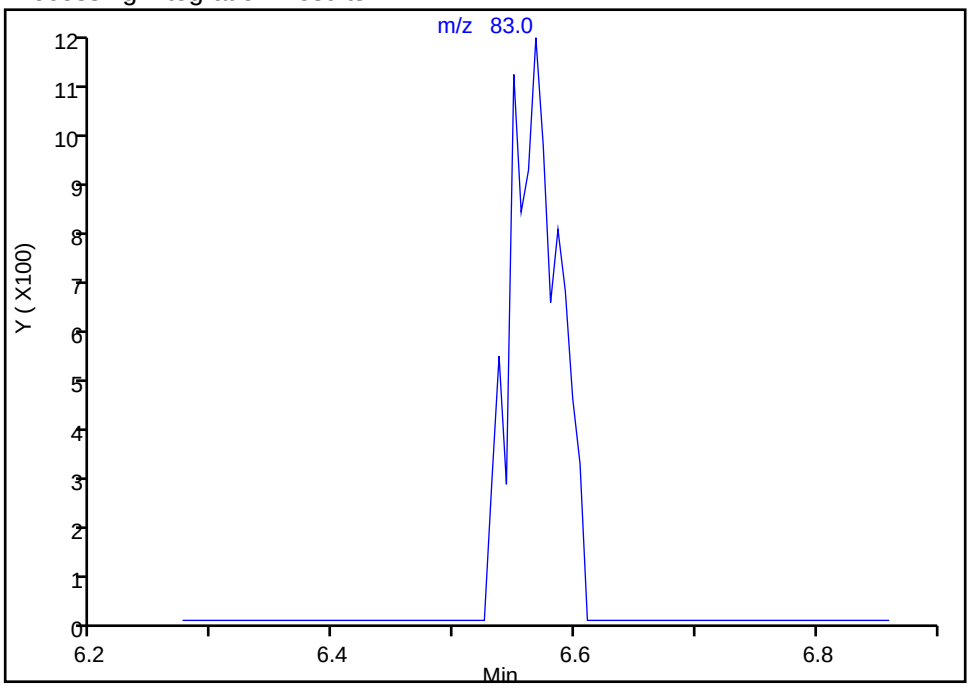
Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X24.D				
Injection Date:	01-Oct-2021 16:38:30	Instrument ID:	16334		
Lims ID:	410-56784-A-4	Lab Sample ID:	410-56784-4		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	24	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

51 Chloroform, CAS: 67-66-3

Signal: 1

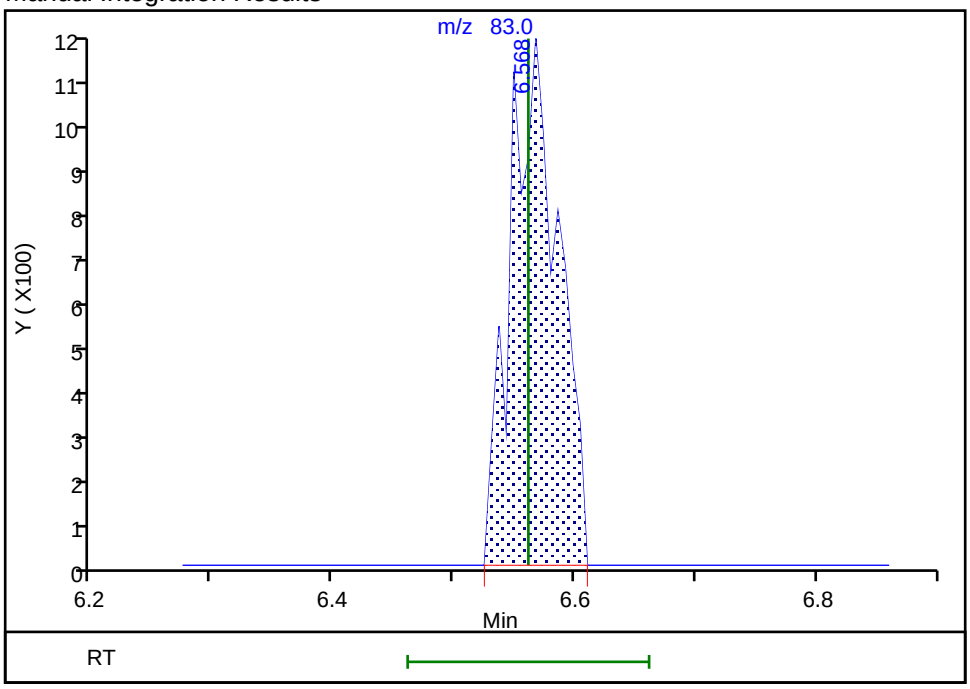
Not Detected
Expected RT: 6.56

Processing Integration Results



Manual Integration Results

RT: 6.57
Area: 3074
Amount: 0.031496
Amount Units: ug/l



Reviewer: beckerk, 01-Oct-2021 19:06:00
Audit Action: Assigned Compound ID Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 410-56784-5

Matrix: Water Lab File ID: GO01X25.D

Analysis Method: 8260D Date Collected: 09/24/2021 09:45

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 17:00

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.: 177560 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	0.64		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	0.085	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	0.94	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	0.092	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.97		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	9.0		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	2.5		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 410-56784-5

Matrix: Water Lab File ID: GO01X25.D

Analysis Method: 8260D Date Collected: 09/24/2021 09:45

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 17:00

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.: 177560 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)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	97		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X25.D
Lims ID: 410-56784-A-5
Client ID: HD-COD-SW-17-0/1-0
Sample Type: Client
Inject. Date: 01-Oct-2021 17:00:30 ALS Bottle#: 25 Worklist Smp#: 28
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040424-028
Misc. Info.: 410-56784-A-5
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Oct-2021 19:10:12 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1602

First Level Reviewer: beckerk Date: 01-Oct-2021 19:07:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.135				ND	
8 Vinyl chloride	62		2.257				ND	7
9 Bromomethane	94		2.587				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96	3.507	3.507	0.000	93	4215	0.0855	
21 Acetone	43	3.580	3.568	0.012	20	9418	0.9444	M
25 Carbon disulfide	76		3.800				ND	7
29 Methylene Chloride	84		4.172				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.227	4.257	-0.030	94	192519	50.0	
33 Methyl tert-butyl ether	73		4.574				ND	7
34 trans-1,2-Dichloroethene	96		4.580				ND	
37 1,1-Dichloroethane	63	5.251	5.245	0.006	39	12258	0.1265	
41 2-Butanone (MEK)	43		6.055				ND	
42 cis-1,2-Dichloroethene	96	6.086	6.086	0.000	78	59357	0.9664	
49 Chlorobromomethane	128		6.409				ND	
51 Chloroform	83	6.568	6.561	0.007	89	8840	0.0916	a
$ 52 Dibromofluoromethane (Surr)	113	6.781	6.775	0.006	94	570195	9.69	
53 1,1,1-Trichloroethane	97	6.787	6.787	0.000	39	52886	0.6360	
56 Carbon tetrachloride	117		6.994				ND	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.226	7.232	-0.006	38	127881	9.77	
60 Benzene	78		7.256				ND	7
61 1,2-Dichloroethane	62		7.323				ND	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2362589	10.0	
68 Trichloroethene	95	8.140	8.134	0.006	98	149040	2.46	
70 1,2-Dichloropropane	63		8.470				ND	
76 Dichlorobromomethane	83		8.817				ND	
81 cis-1,3-Dichloropropene	75		9.366				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.549				ND	7
$ 83 Toluene-d8 (Surr)	98	9.677	9.671	0.006	93	2285776	9.57	
84 Toluene	92	9.756	9.750	0.006	99	9679	0.0660	
96 trans-1,3-Dichloropropene	75		10.012				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
99 1,1,2-Trichloroethane	97		10.213				ND	U
100 Tetrachloroethene	166	10.299	10.298	0.001	97	628438	9.00	
102 2-Hexanone	43		10.433				ND	7
104 Chlorodibromomethane	129		10.591				ND	
105 Ethylene Dibromide	107		10.695				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	85	1833708	10.0	
108 Chlorobenzene	112		11.158				ND	
110 1,1,1,2-Tetrachloroethane	131		11.237				ND	
111 Ethylbenzene	91		11.243				ND	7
S 109 Xylenes, Total	106		11.245				ND	7
112 m-Xylene & p-Xylene	106	11.359	11.353	0.006	98	5739	0.0521	
113 o-Xylene	106		11.682				ND	7
114 Styrene	104		11.701				ND	
115 Bromoform	173		11.853				ND	
$ 119 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	91	851245	9.75	
120 1,1,2,2-Tetrachloroethane	83		12.231				ND	
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	997064	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_29_826ISS_00023 Amount Added: 1.00 Units: uL Run Reagent

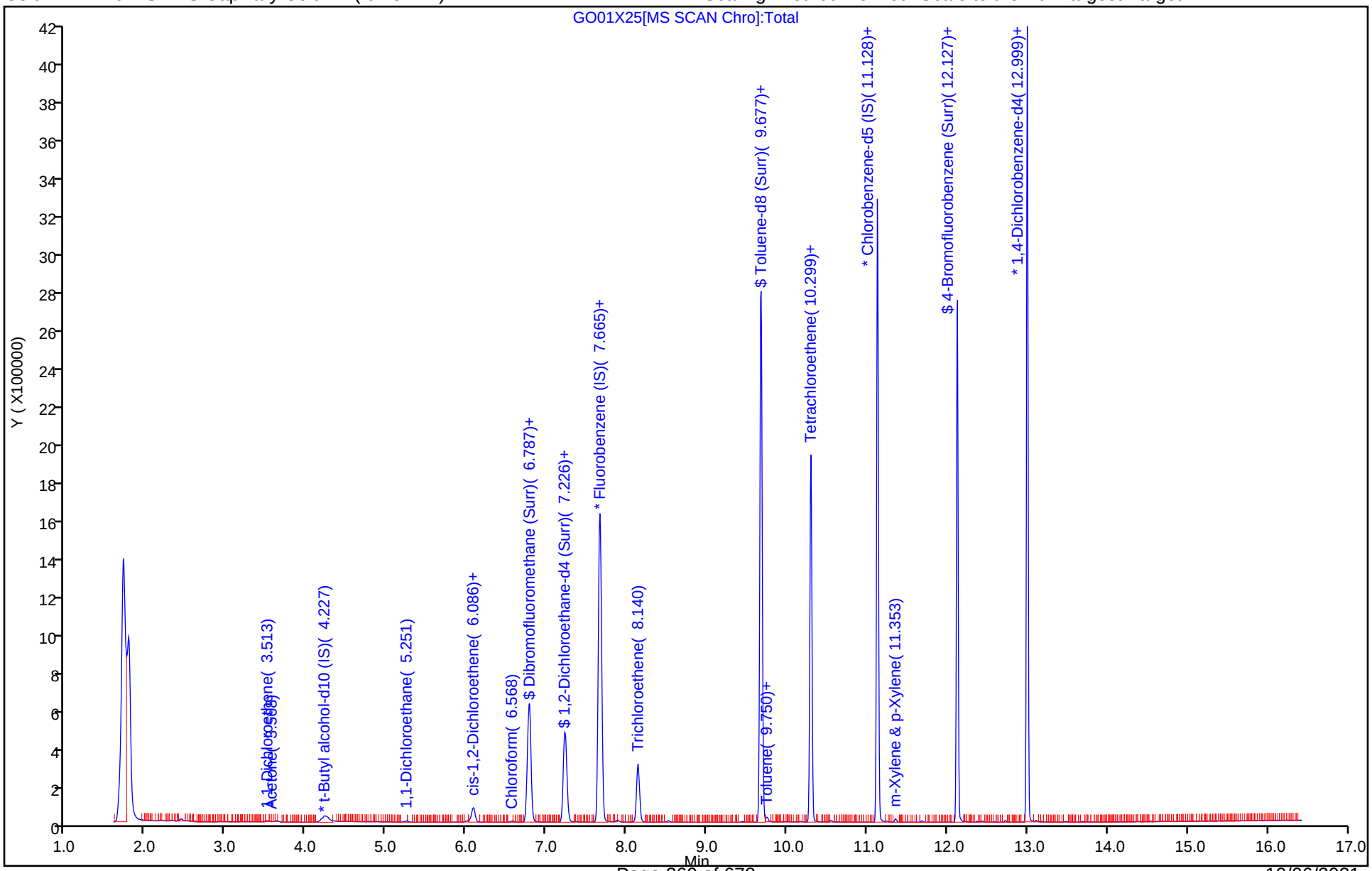
Report Date: 01-Oct-2021 19:10:29 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X25.D

Injection Date:	01-Oct-2021 17:00:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	410-56784-A-5	Lab Sample ID:	410-56784-5	Worklist Smp#:	28
Client ID:	HD-COD-SW-17-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X25.D				
Lims ID:	410-56784-A-5				
Client ID:	HD-COD-SW-17-0/1-0				
Sample Type:	Client				
Inject. Date:	01-Oct-2021 17:00:30	ALS Bottle#:	25	Worklist Smp#:	28
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0040424-028				
Misc. Info.:	410-56784-A-5				
Operator ID:	SRK36897	Instrument ID:	16334		
Method:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	01-Oct-2021 19:10:12	Calib Date:	27-Jul-2021 21:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1602				

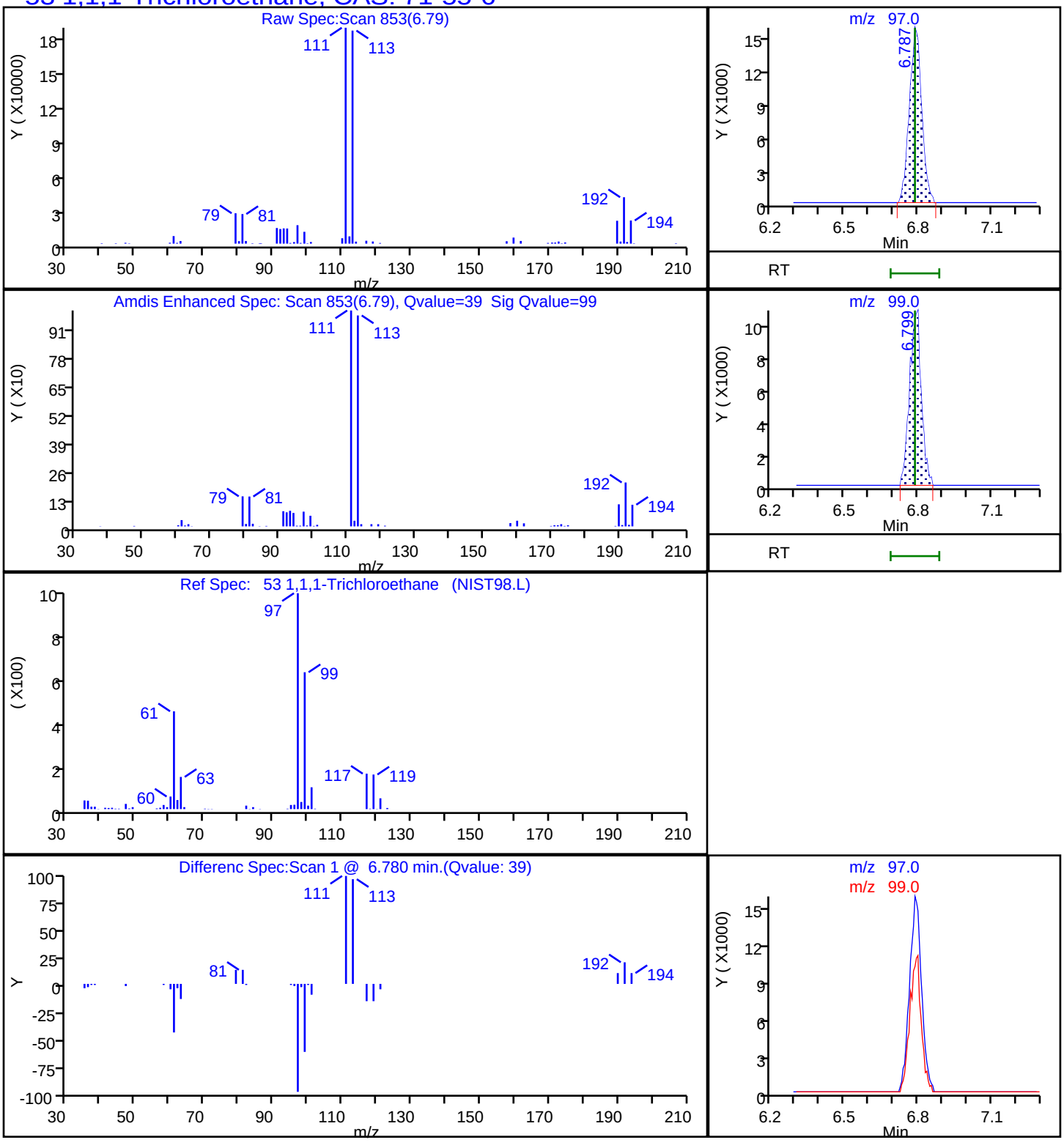
First Level Reviewer: beckerk Date: 01-Oct-2021 19:07:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	10.0	9.69	96.86
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.77	97.68
$ 83 Toluene-d8 (Surr)	10.0	9.57	95.72
$ 119 4-Bromofluorobenzene (Surr)	10.0	9.75	97.51

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X25.D				
Injection Date:	01-Oct-2021 17:00:30	Instrument ID:	16334		
Lims ID:	410-56784-A-5	Lab Sample ID:	410-56784-5		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	25	Worklist Smp#:	28
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

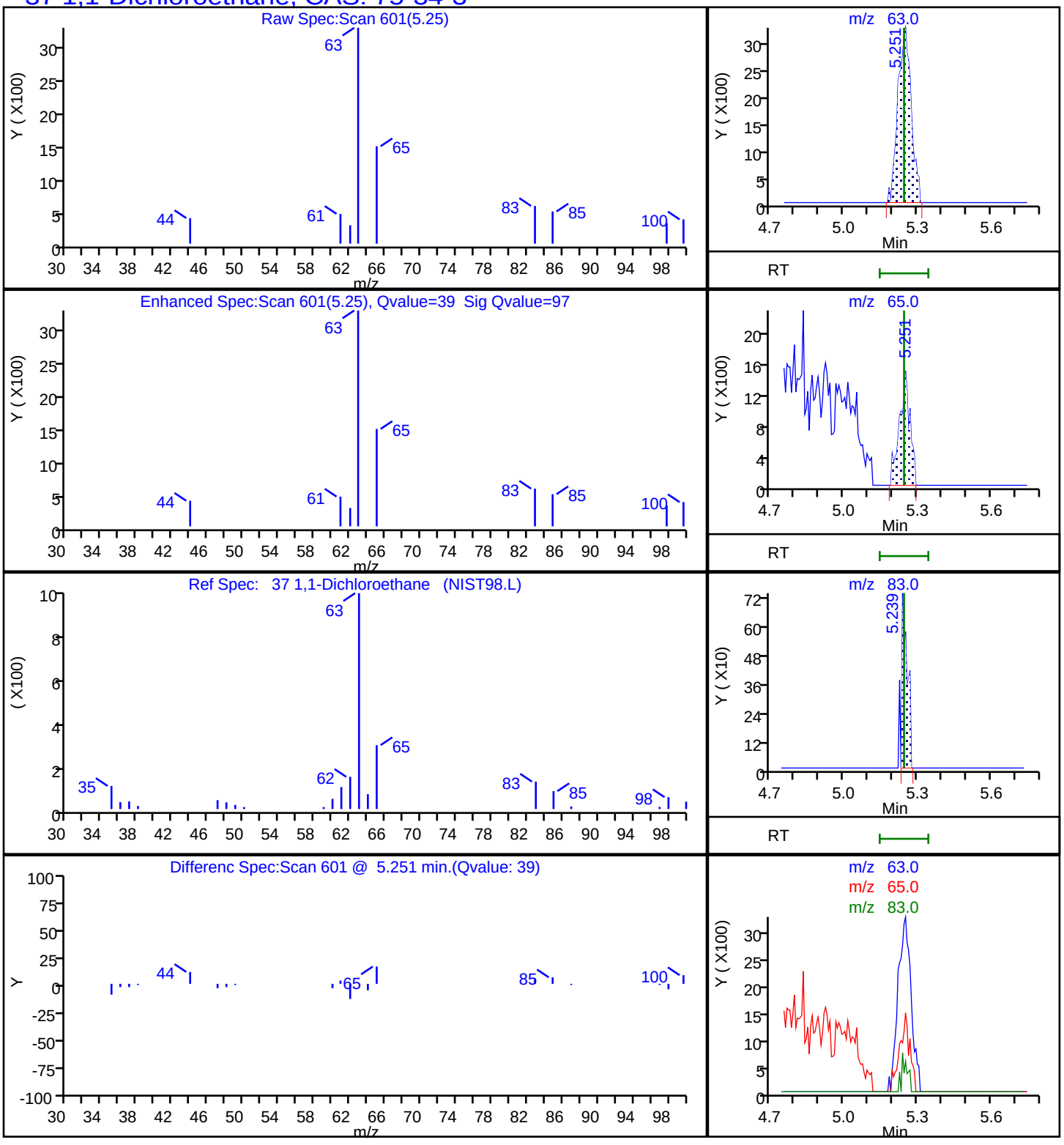
53 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X25.D				
Injection Date:	01-Oct-2021 17:00:30	Instrument ID:	16334		
Lims ID:	410-56784-A-5	Lab Sample ID:	410-56784-5		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	25	Worklist Smp#:	28
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

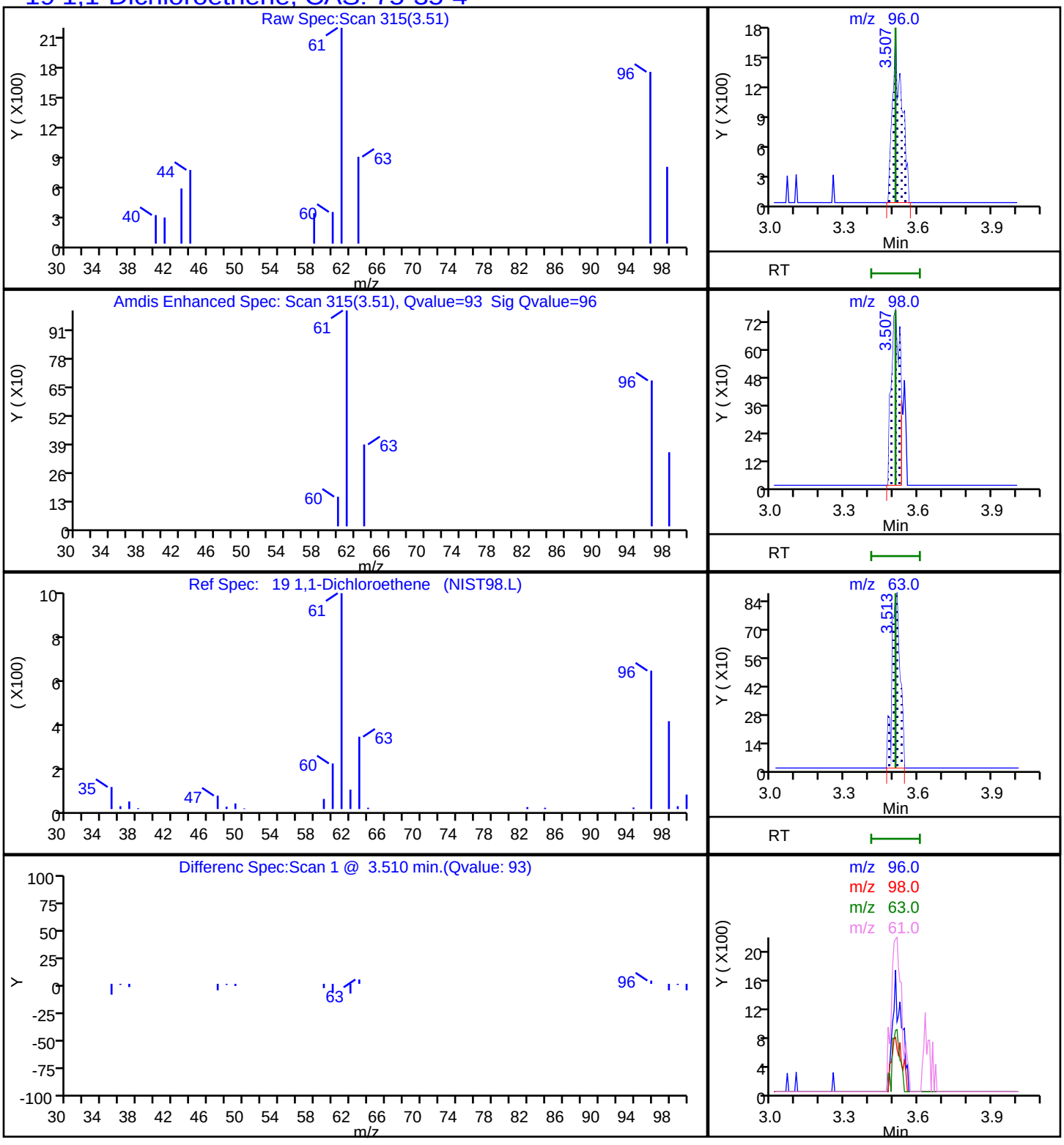
37 1,1-Dichloroethane, CAS: 75-34-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X25.D				
Injection Date:	01-Oct-2021 17:00:30	Instrument ID:	16334		
Lims ID:	410-56784-A-5	Lab Sample ID:	410-56784-5		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	25	Worklist Smp#:	28
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

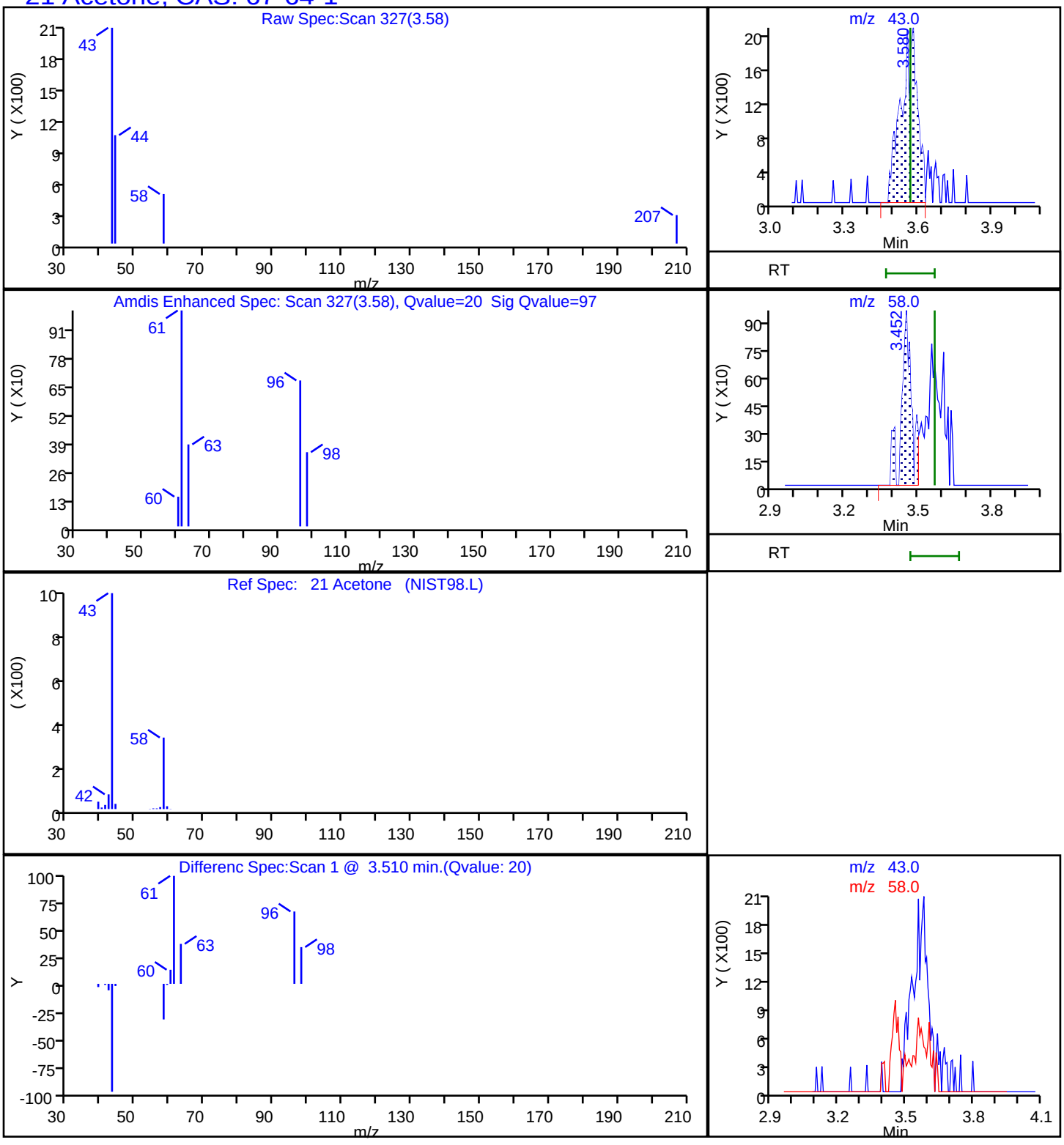
19 1,1-Dichloroethene, CAS: 75-35-4



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X25.D				
Injection Date:	01-Oct-2021 17:00:30	Instrument ID:	16334		
Lims ID:	410-56784-A-5	Lab Sample ID:	410-56784-5		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	25	Worklist Smp#:	28
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

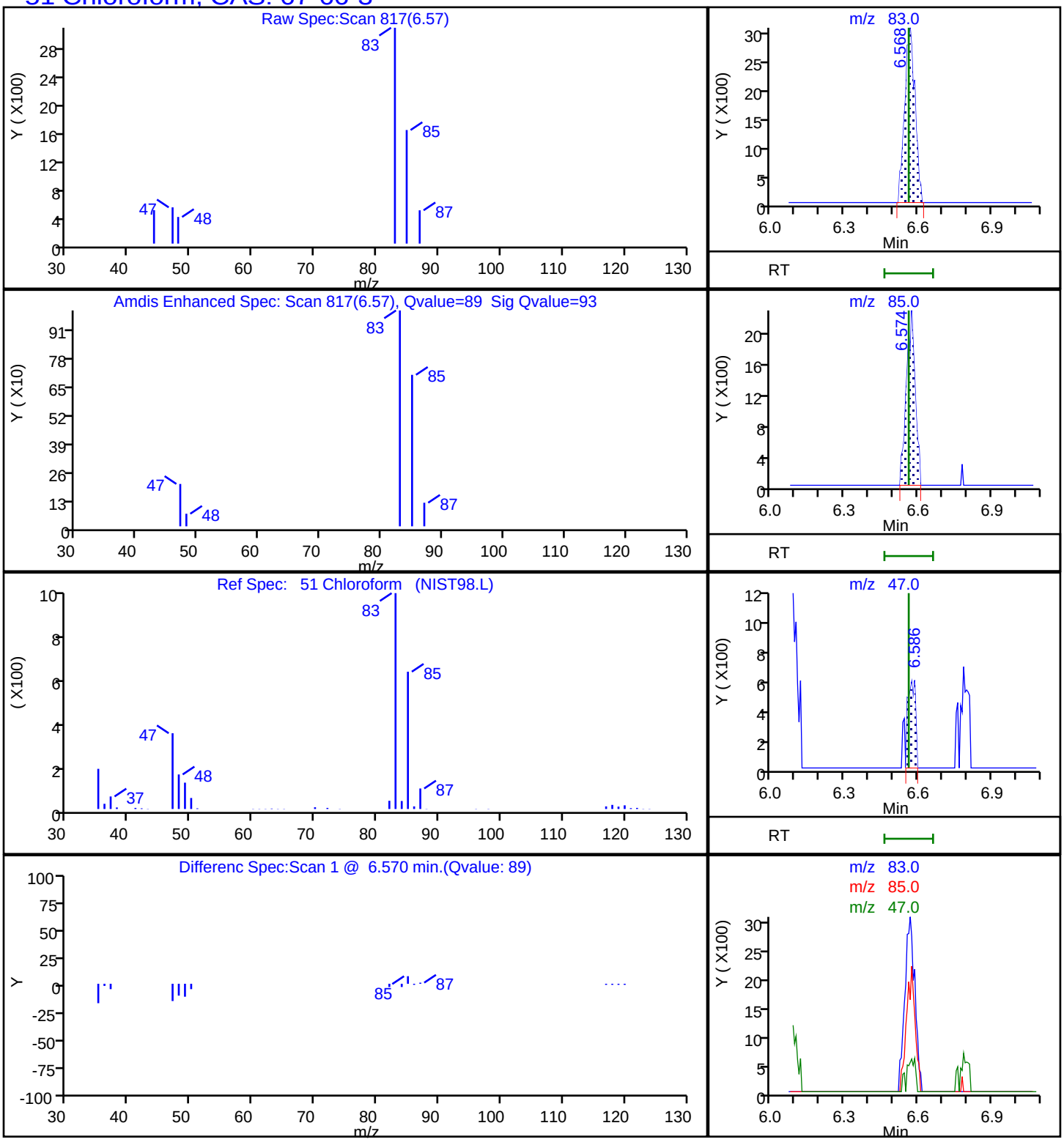
21 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X25.D				
Injection Date:	01-Oct-2021 17:00:30	Instrument ID:	16334		
Lims ID:	410-56784-A-5	Lab Sample ID:	410-56784-5		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	25	Worklist Smp#:	28
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

51 Chloroform, CAS: 67-66-3

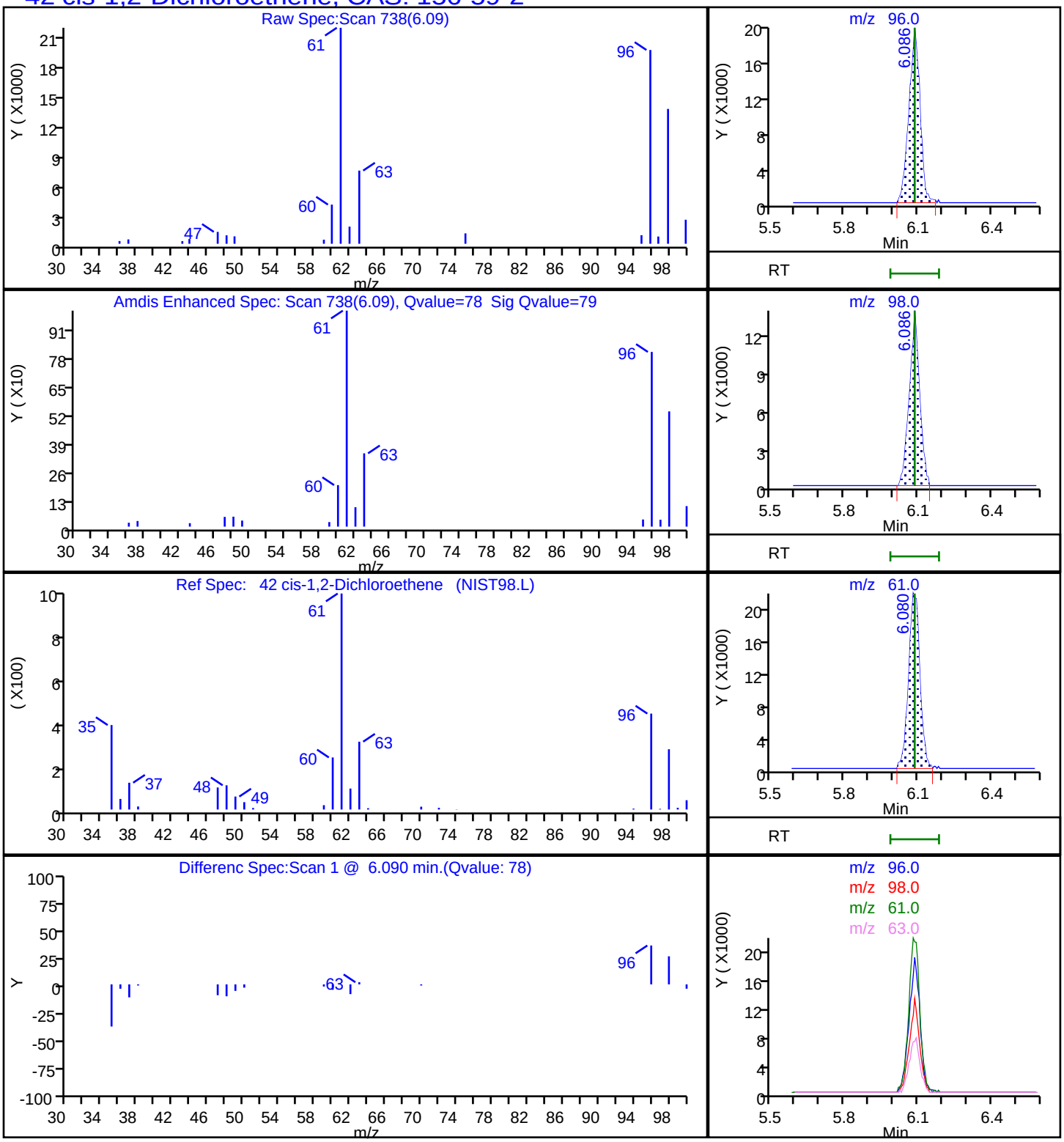


Report Date: 01-Oct-2021 19:10:29 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X25.D				
Injection Date:	01-Oct-2021 17:00:30	Instrument ID:	16334		
Lims ID:	410-56784-A-5	Lab Sample ID:	410-56784-5		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	25	Worklist Smp#:	28
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

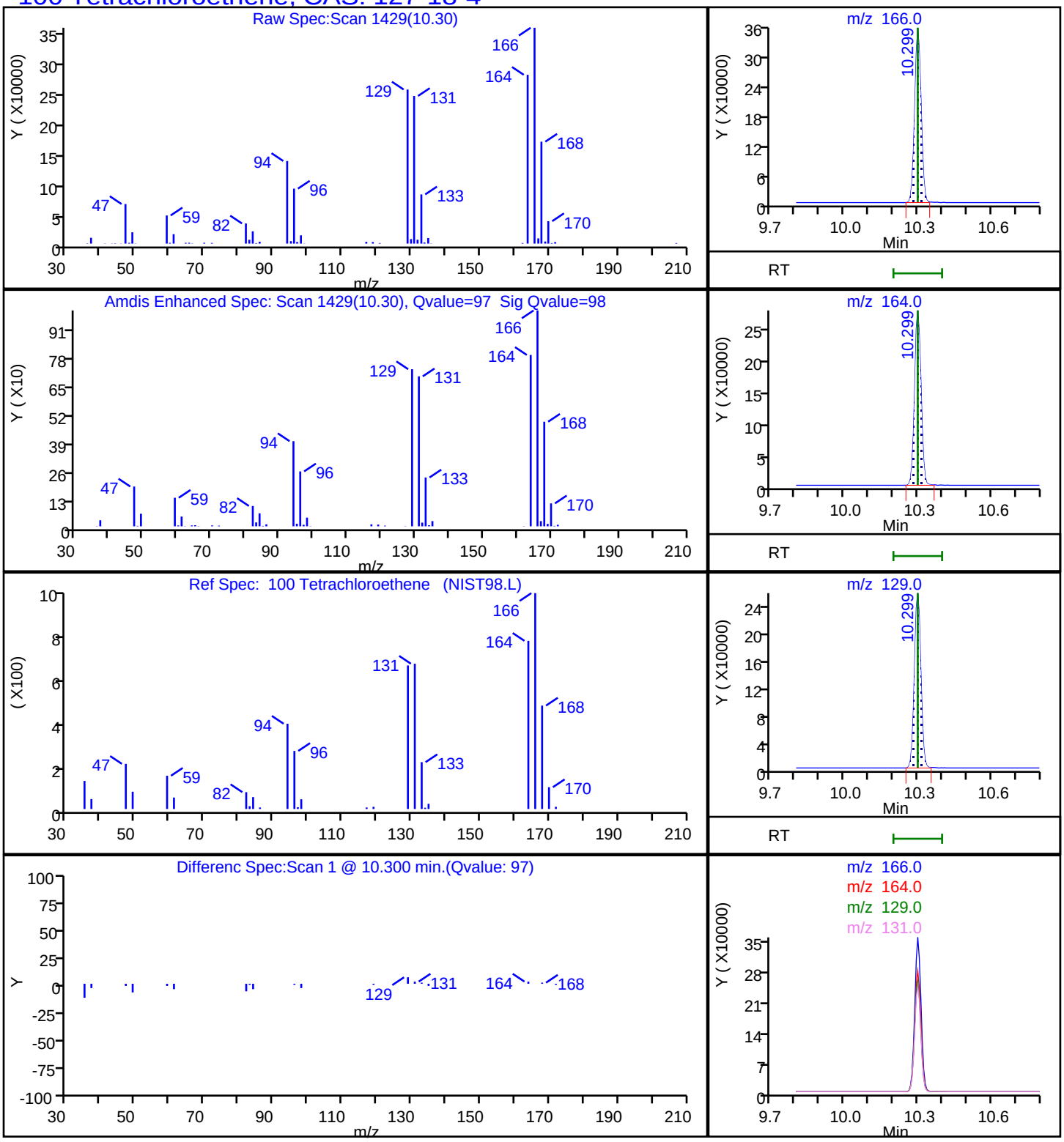
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X25.D				
Injection Date:	01-Oct-2021 17:00:30	Instrument ID:	16334		
Lims ID:	410-56784-A-5	Lab Sample ID:	410-56784-5		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	25	Worklist Smp#:	28
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

100 Tetrachloroethene, CAS: 127-18-4



Report Date: 01-Oct-2021 19:10:29 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X25.D

Injection Date: 01-Oct-2021 17:00:30 Instrument ID: 16334

Lims ID: 410-56784-A-5 Lab Sample ID: 410-56784-5

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

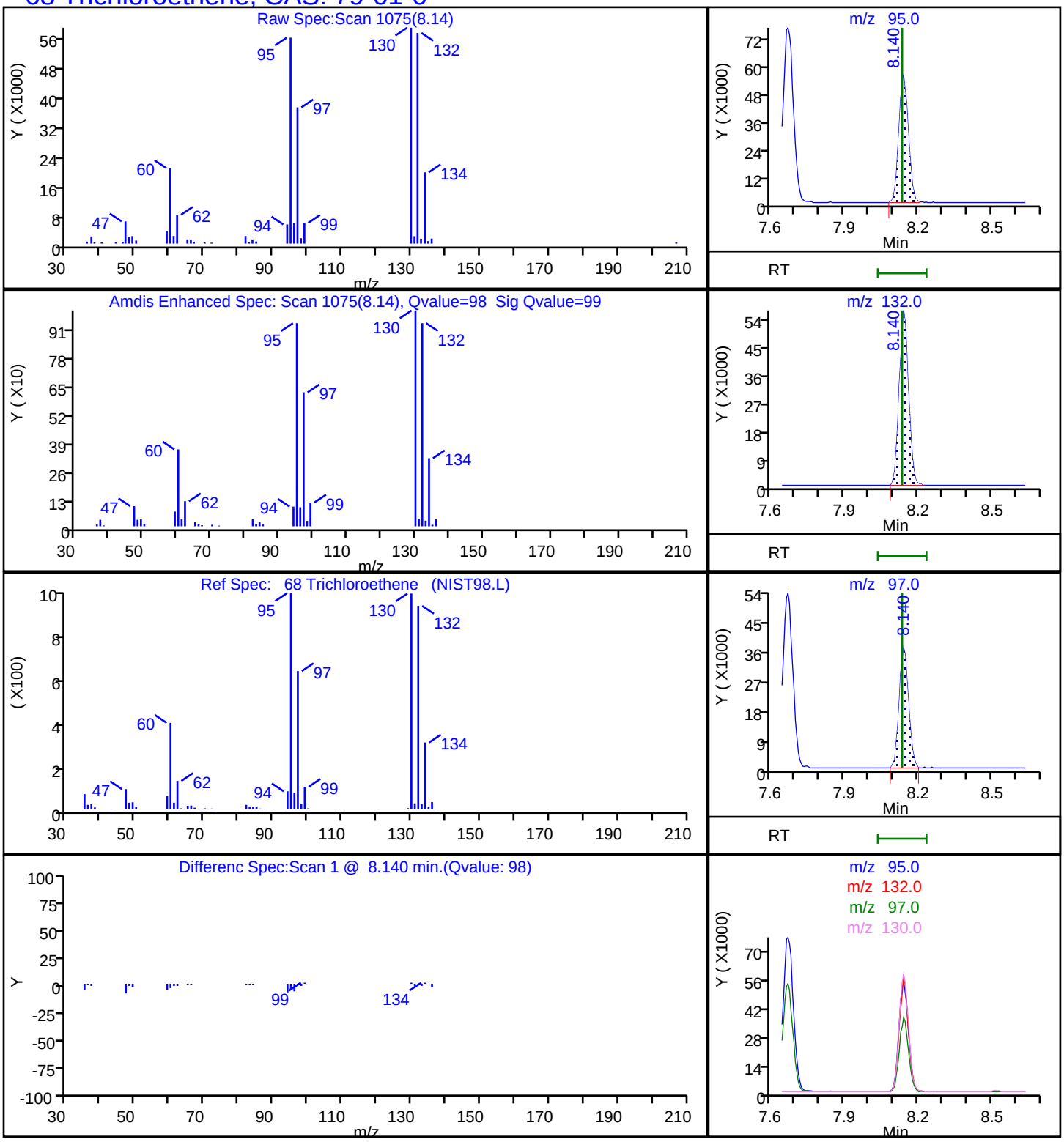
Operator ID: SRK36897 ALS Bottle#: 25 Worklist Smp#: 28

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_16334_25mL Limit Group: MSV - 8260C_D

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

68 Trichloroethene, CAS: 79-01-6



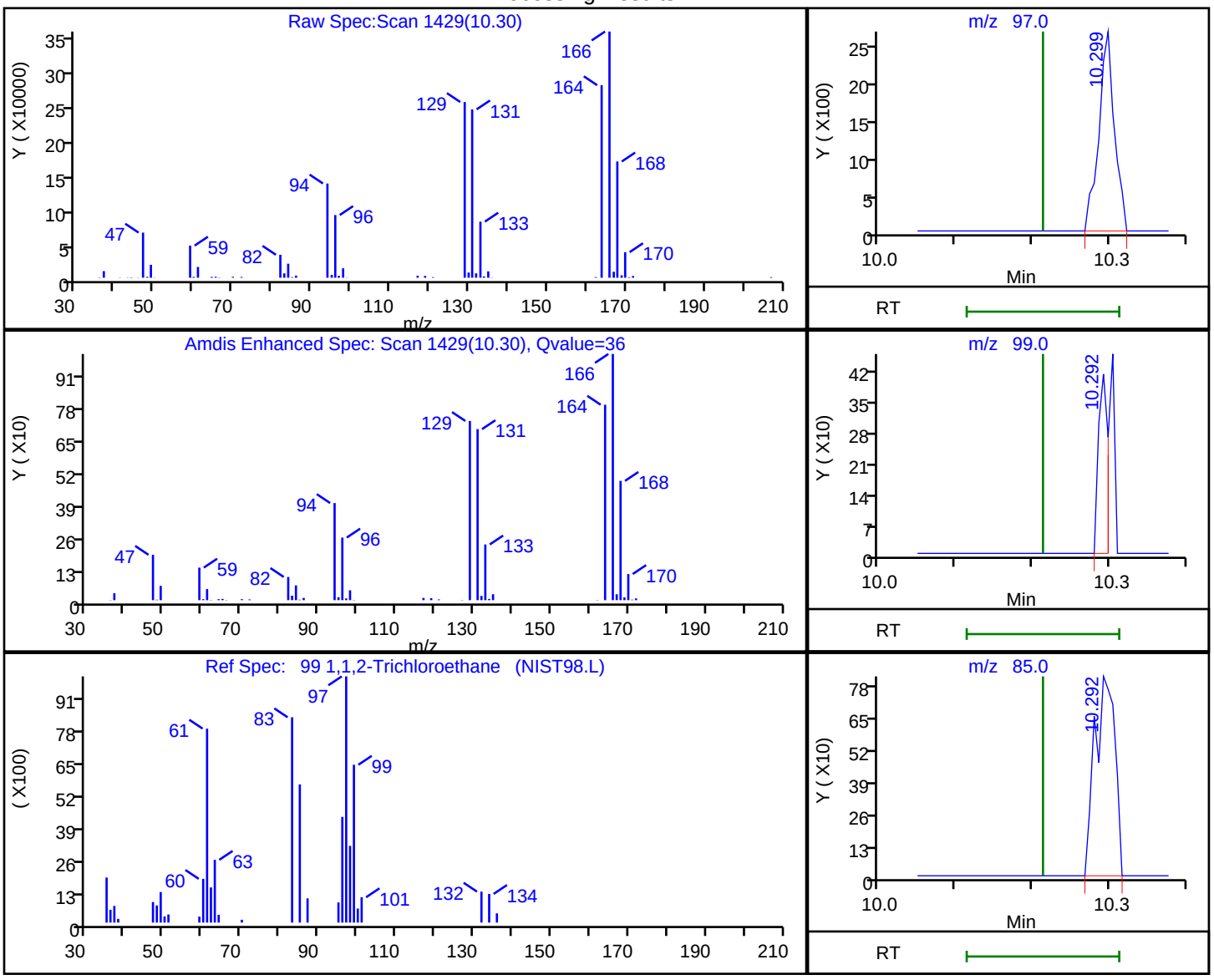
User Disabled Compound Report

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X25.D				
Injection Date:	01-Oct-2021 17:00:30	Instrument ID:	16334		
Lims ID:	410-56784-A-5	Lab Sample ID:	410-56784-5		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	25	Worklist Smp#:	28
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

99 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
10.30	97.00	3759	0.084108
10.29	99.00	355	
10.29	85.00	1487	
10.30	83.00	11781	

Reviewer: beckerk, 01-Oct-2021 19:07:02

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

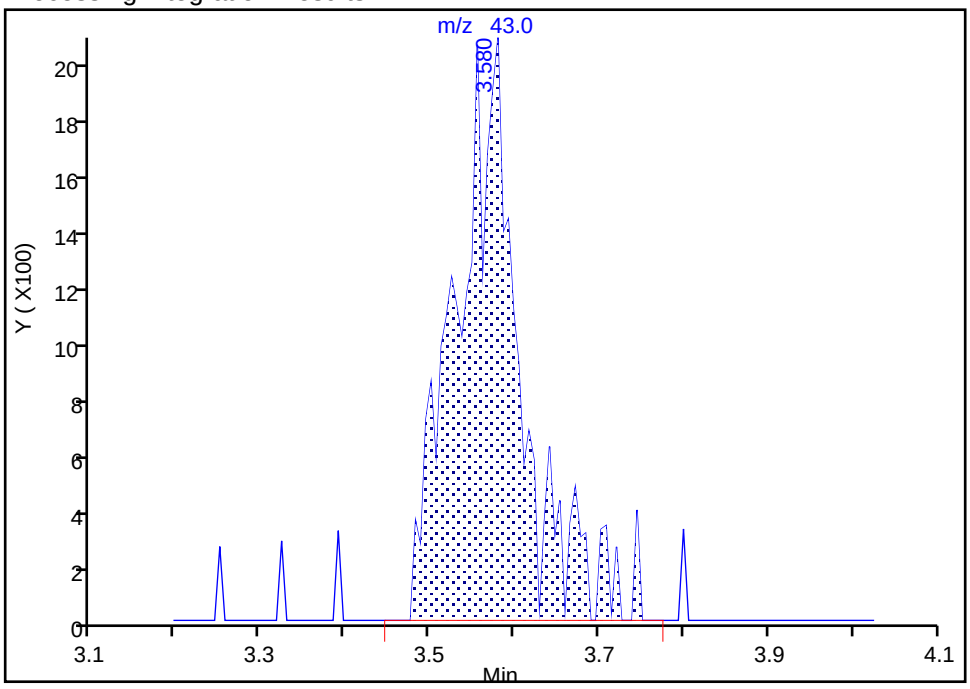
Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X25.D				
Injection Date:	01-Oct-2021 17:00:30	Instrument ID:	16334		
Lims ID:	410-56784-A-5	Lab Sample ID:	410-56784-5		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	25	Worklist Smp#:	28
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

21 Acetone, CAS: 67-64-1

Signal: 1

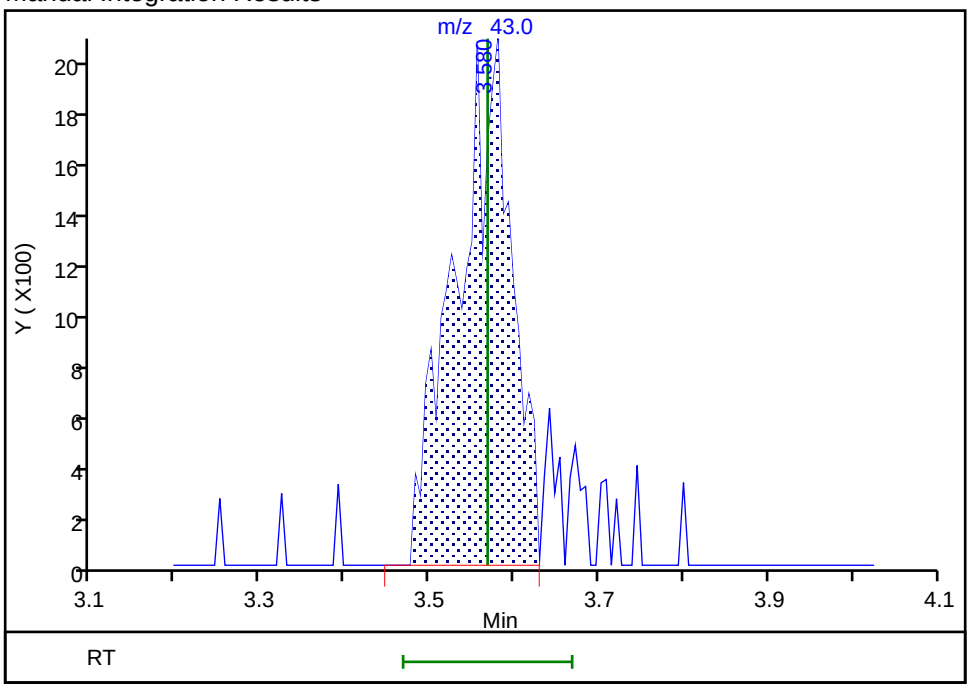
Processing Integration Results

RT: 3.58
Area: 11018
Amount: 1.104840
Amount Units: ug/l



Manual Integration Results

RT: 3.58
Area: 9418
Amount: 0.944398
Amount Units: ug/l



Reviewer: beckerk, 01-Oct-2021 19:06:37
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

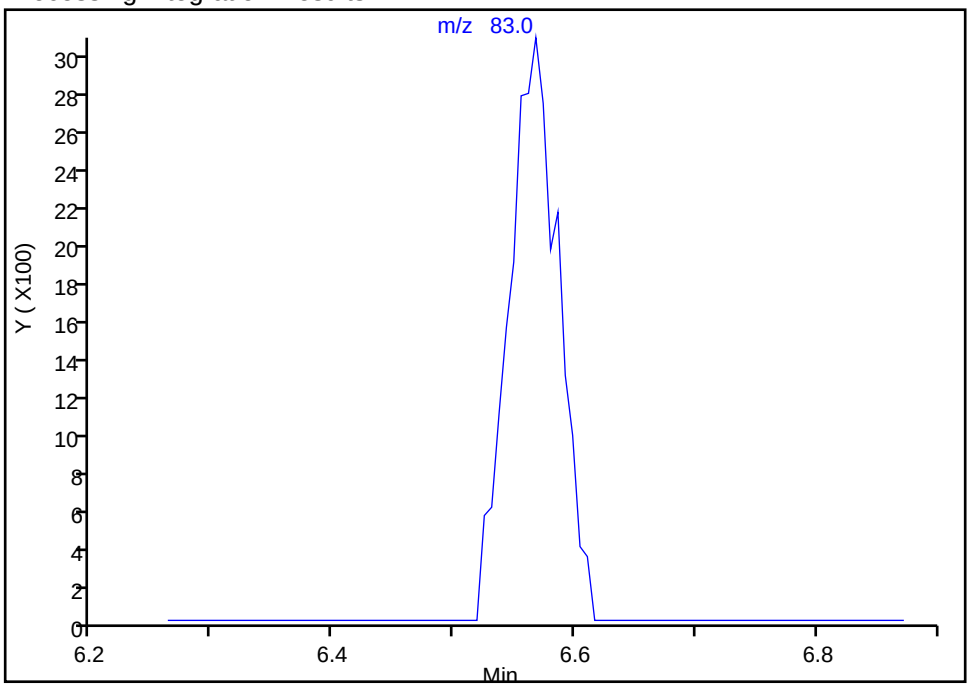
Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X25.D				
Injection Date:	01-Oct-2021 17:00:30	Instrument ID:	16334		
Lims ID:	410-56784-A-5	Lab Sample ID:	410-56784-5		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	25	Worklist Smp#:	28
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

51 Chloroform, CAS: 67-66-3

Signal: 1

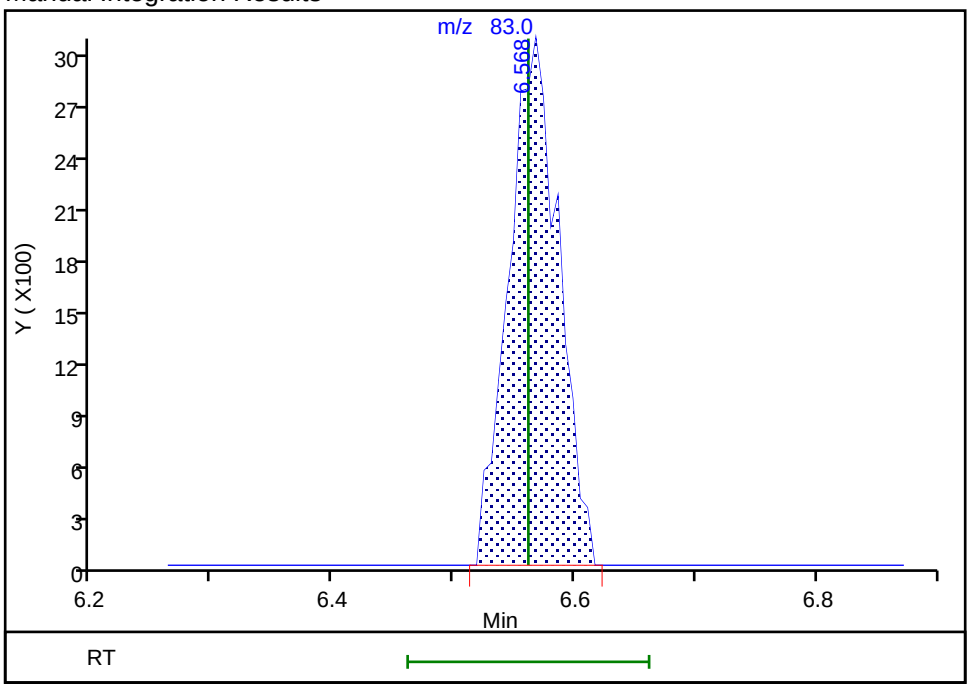
Not Detected
Expected RT: 6.56

Processing Integration Results



Manual Integration Results

RT: 6.57
Area: 8840
Amount: 0.091595
Amount Units: ug/l



Reviewer: beckerk, 01-Oct-2021 19:06:50
Audit Action: Assigned Compound ID Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 410-56784-6

Matrix: Water Lab File ID: GO01X26.D

Analysis Method: 8260D Date Collected: 09/24/2021 10:15

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 17:22

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.: 177560 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	1.1	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		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	0.088	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	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 410-56784-6

Matrix: Water Lab File ID: GO01X26.D

Analysis Method: 8260D Date Collected: 09/24/2021 10:15

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 17:22

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.: 177560 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)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	96		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X26.D
Lims ID: 410-56784-A-6
Client ID: HD-COD-SW-6-0/1-0
Sample Type: Client
Inject. Date: 01-Oct-2021 17:22:30 ALS Bottle#: 26 Worklist Smp#: 29
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040424-029
Misc. Info.: 410-56784-A-6
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Oct-2021 19:10:12 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1602

First Level Reviewer: beckerk Date: 01-Oct-2021 19:09:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.135				ND	
8 Vinyl chloride	62		2.257				ND	
9 Bromomethane	94		2.587				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96		3.507				ND	
21 Acetone	43	3.580	3.568	0.012	75	10842	1.06	M
25 Carbon disulfide	76		3.800				ND	7
29 Methylene Chloride	84		4.172				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.257	4.257	0.000	96	198365	50.0	
33 Methyl tert-butyl ether	73		4.574				ND	
34 trans-1,2-Dichloroethene	96		4.580				ND	
37 1,1-Dichloroethane	63		5.245				ND	
41 2-Butanone (MEK)	43		6.055				ND	
42 cis-1,2-Dichloroethene	96	6.086	6.086	0.000	1	2741	0.0446	
49 Chlorobromomethane	128		6.409				ND	
51 Chloroform	83	6.580	6.561	0.019	83	3621	0.0375	a
$ 52 Dibromofluoromethane (Surr)	113	6.787	6.775	0.012	93	566072	9.61	
53 1,1,1-Trichloroethane	97		6.787				ND	
56 Carbon tetrachloride	117		6.994				ND	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	38	128888	9.84	
60 Benzene	78		7.256				ND	7
61 1,2-Dichloroethane	62		7.323				ND	
* 64 Fluorobenzene (IS)	96	7.671	7.665	0.006	99	2363252	10.0	
68 Trichloroethene	95		8.134				ND	
70 1,2-Dichloropropane	63		8.470				ND	
76 Dichlorobromomethane	83		8.817				ND	
81 cis-1,3-Dichloropropene	75		9.366				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.549				ND	7
$ 83 Toluene-d8 (Surr)	98	9.677	9.671	0.006	93	2269915	9.64	
84 Toluene	92	9.756	9.750	0.006	97	12727	0.0880	
96 trans-1,3-Dichloropropene	75		10.012				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
99 1,1,2-Trichloroethane	97		10.213				ND	
100 Tetrachloroethene	166	10.292	10.298	-0.006	86	1904	0.0276	
102 2-Hexanone	43		10.433				ND	7
104 Chlorodibromomethane	129		10.591				ND	
105 Ethylene Dibromide	107		10.695				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	84	1808183	10.0	
108 Chlorobenzene	112		11.158				ND	
110 1,1,1,2-Tetrachloroethane	131		11.237				ND	
111 Ethylbenzene	91		11.243				ND	7
S 109 Xylenes, Total	106				0		0.0986	
112 m-Xylene & p-Xylene	106	11.353	11.353	0.000	98	7921	0.0729	
113 o-Xylene	106	11.682	11.682	0.000	95	2753	0.0256	
114 Styrene	104		11.701				ND	
115 Bromoform	173		11.853				ND	
$ 119 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	91	854431	9.93	
120 1,1,2,2-Tetrachloroethane	83		12.231				ND	
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	991886	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_29_826ISS_00023 Amount Added: 1.00 Units: uL Run Reagent

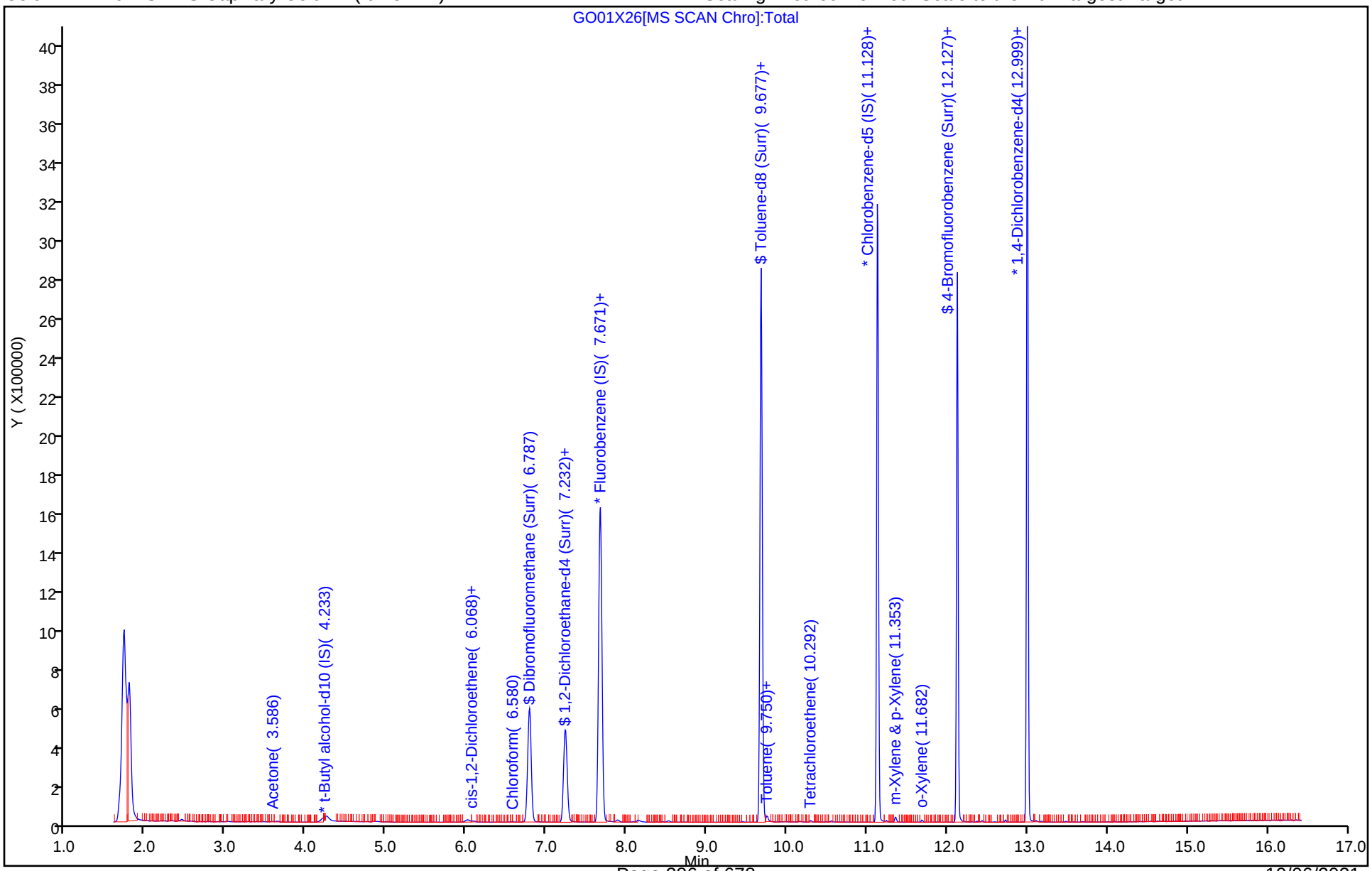
Report Date: 01-Oct-2021 19:10:31 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X26.D

Injection Date:	01-Oct-2021 17:22:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	410-56784-A-6	Lab Sample ID:	410-56784-6	Worklist Smp#:	29
Client ID:	HD-COD-SW-6-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X26.D				
Lims ID:	410-56784-A-6				
Client ID:	HD-COD-SW-6-0/1-0				
Sample Type:	Client				
Inject. Date:	01-Oct-2021 17:22:30	ALS Bottle#:	26	Worklist Smp#:	29
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0040424-029				
Misc. Info.:	410-56784-A-6				
Operator ID:	SRK36897	Instrument ID:	16334		
Method:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	01-Oct-2021 19:10:12	Calib Date:	27-Jul-2021 21:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1602				

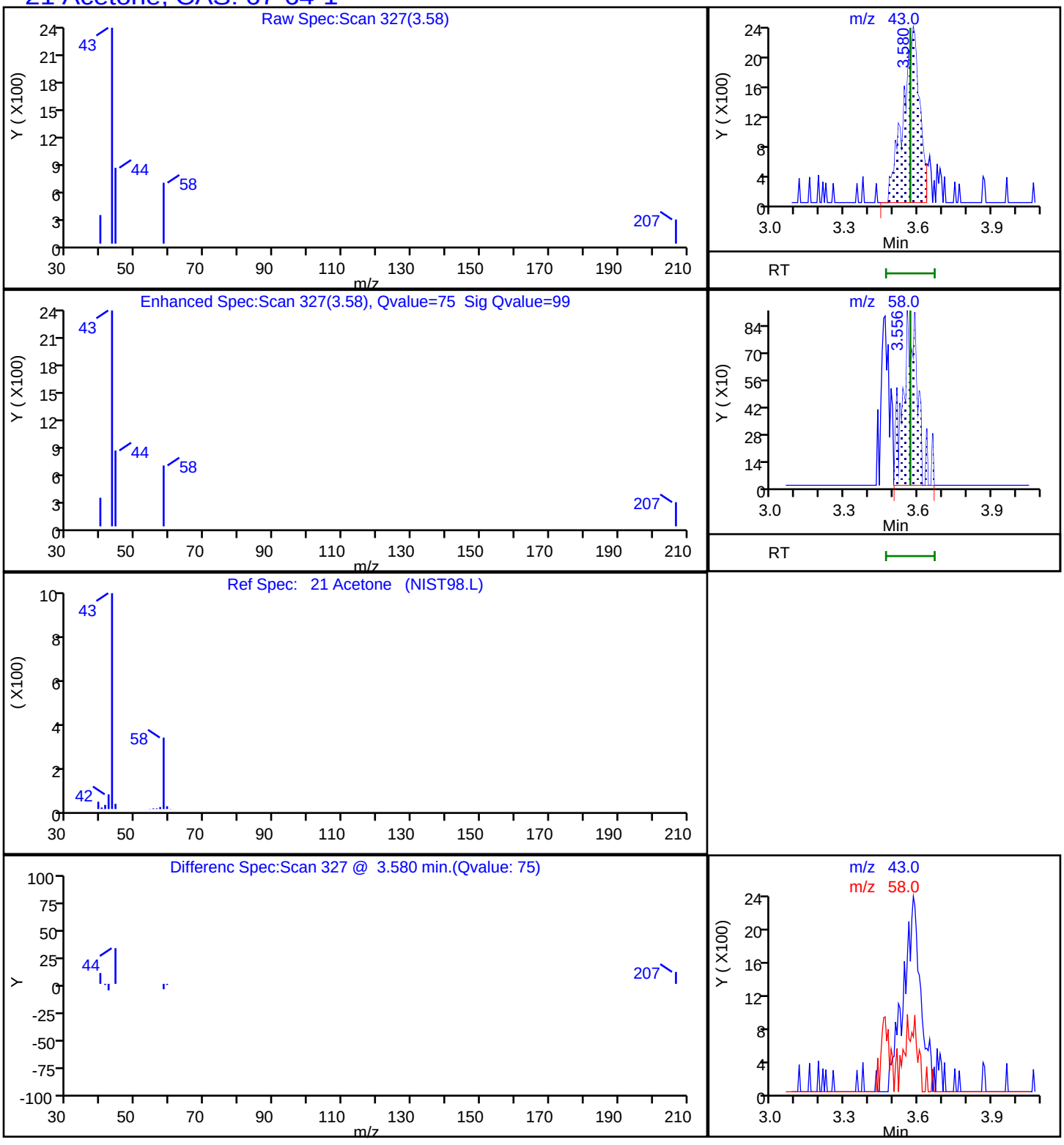
First Level Reviewer: beckerk Date: 01-Oct-2021 19:09:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	10.0	9.61	96.13
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.84	98.42
$ 83 Toluene-d8 (Surr)	10.0	9.64	96.40
$ 119 4-Bromofluorobenzene (Surr)	10.0	9.93	99.26

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X26.D				
Injection Date:	01-Oct-2021 17:22:30	Instrument ID:	16334		
Lims ID:	410-56784-A-6	Lab Sample ID:	410-56784-6		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	26	Worklist Smp#:	29
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

21 Acetone, CAS: 67-64-1



Report Date: 01-Oct-2021 19:10:31 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X26.D

Injection Date: 01-Oct-2021 17:22:30 Instrument ID: 16334

Lims ID: 410-56784-A-6 Lab Sample ID: 410-56784-6

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

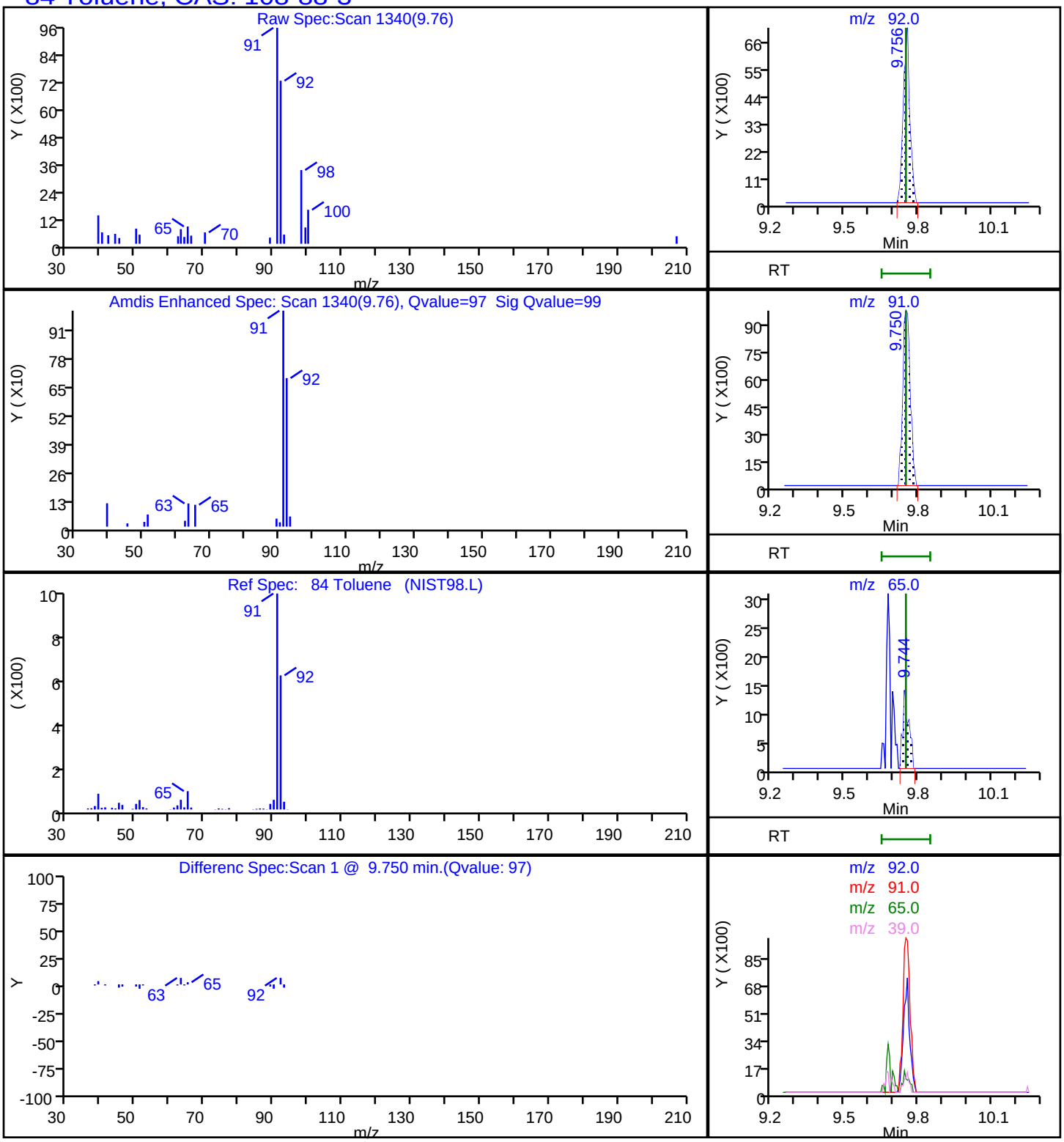
Operator ID: SRK36897 ALS Bottle#: 26 Worklist Smp#: 29

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_16334_25mL Limit Group: MSV - 8260C_D

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

84 Toluene, CAS: 108-88-3



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

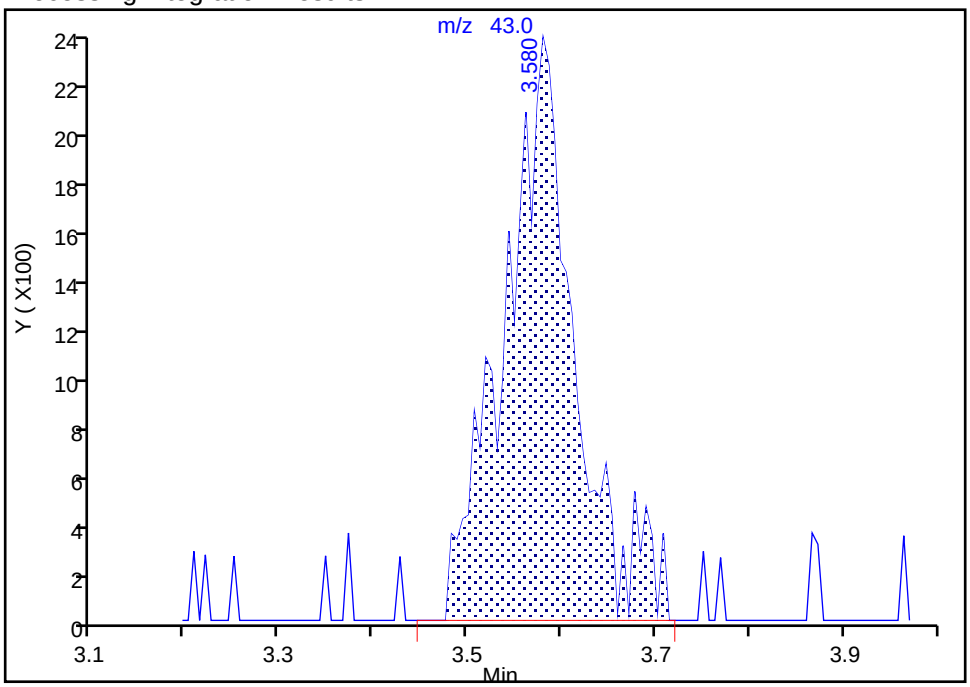
Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X26.D				
Injection Date:	01-Oct-2021 17:22:30	Instrument ID:	16334		
Lims ID:	410-56784-A-6	Lab Sample ID:	410-56784-6		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	26	Worklist Smp#:	29
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

21 Acetone, CAS: 67-64-1

Signal: 1

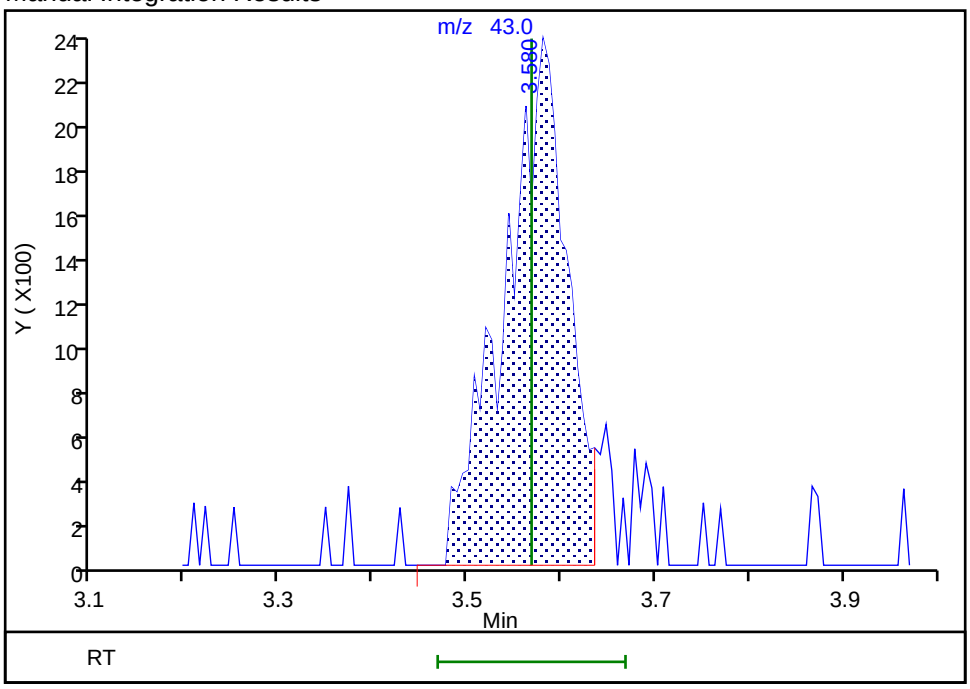
Processing Integration Results

RT: 3.58
Area: 12205
Amount: 1.187799
Amount Units: ug/l



Manual Integration Results

RT: 3.58
Area: 10842
Amount: 1.055151
Amount Units: ug/l



Reviewer: beckerk, 01-Oct-2021 19:08:48
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

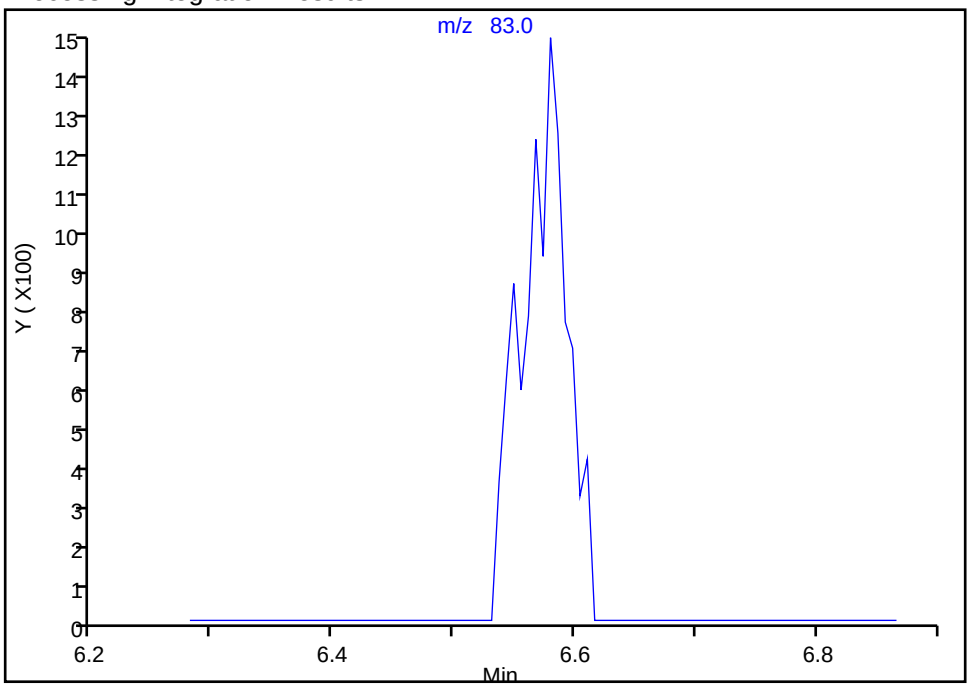
Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X26.D				
Injection Date:	01-Oct-2021 17:22:30	Instrument ID:	16334		
Lims ID:	410-56784-A-6	Lab Sample ID:	410-56784-6		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	26	Worklist Smp#:	29
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

51 Chloroform, CAS: 67-66-3

Signal: 1

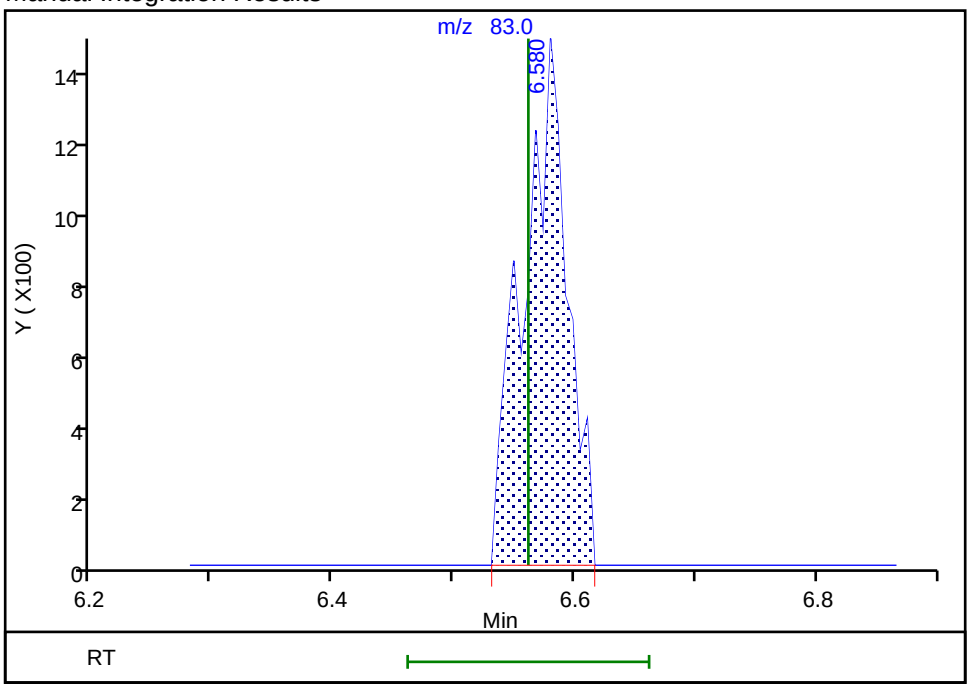
Not Detected
Expected RT: 6.56

Processing Integration Results



Manual Integration Results

RT: 6.58
Area: 3621
Amount: 0.037508
Amount Units: ug/l



Reviewer: beckerk, 01-Oct-2021 19:08:59
Audit Action: Assigned Compound ID Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 410-56784-7

Matrix: Water Lab File ID: GO01X16.D

Analysis Method: 8260D Date Collected: 09/24/2021 11:30

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 13:42

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.: 177560 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	0.16	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	0.083	J	0.50	0.070
75-35-4	1,1-Dichloroethene	0.12	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	0.29	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.85		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	2.9		0.50	0.060
108-88-3	Toluene	0.088	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	0.95		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 410-56784-7

Matrix: Water Lab File ID: GO01X16.D

Analysis Method: 8260D Date Collected: 09/24/2021 11:30

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 13:42

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.: 177560 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)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	96		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X16.D
Lims ID: 410-56784-A-7
Client ID: HD-COD-SW-15-0/1-0
Sample Type: Client
Inject. Date: 01-Oct-2021 13:42:30 ALS Bottle#: 16 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040424-019
Misc. Info.: 410-56784-A-7
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Oct-2021 19:10:12 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1602

First Level Reviewer: beckerk Date: 01-Oct-2021 18:58:48

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
	1 Chlorotrifluoroethene	116		1.910				ND	
	2 Dichlorodifluoromethane	85		1.940				ND	
	3 Chlorodifluoromethane	51		1.959				ND	7
	4 Dimethyl ether	45		2.020				ND	7
	5 Chloromethane	50		2.135				ND	
	8 Vinyl chloride	62		2.257				ND	
	7 Butadiene	39		2.257				ND	7
	6 2-Chloro-1,1,1-Trifluoroethane	118		2.330				ND	
	9 Bromomethane	94		2.587				ND	
	10 Chloroethane	64		2.666				ND	
T	11 Vinyl bromide TIC	106		2.885				ND	
	12 Dichlorofluoromethane	67		2.904				ND	7
	13 Trichlorofluoromethane	101		2.965				ND	
	14 Ethanol	45	3.282	3.190	0.092	1	186	NC	
T	16 Ethanol TIC	45		3.190				ND	7
	15 Ethyl ether	59		3.208				ND	
	17 1,2-Dichloro-1,1,2-trifluoroetha	67		3.300				ND	
	18 Acrolein	56		3.385				ND	7
	19 1,1-Dichloroethene	96	3.501	3.507	-0.006	96	5920	0.1195	
	20 112TCTFE	101		3.556				ND	
	21 Acetone	43	3.574	3.568	0.006	67	4058	0.4442	7M
	23 Iodomethane	142		3.702				ND	
	24 Ethyl bromide	108		3.733				ND	
	22 Isopropyl alcohol	45		3.800				ND	
	25 Carbon disulfide	76		3.800				ND	7
	26 Acetonitrile	41		3.964				ND	
	27 Methyl acetate	43		3.964				ND	
	28 3-Chloro-1-propene	41		3.983				ND	
	29 Methylene Chloride	84		4.172				ND	
*	30 t-Butyl alcohol-d10 (IS)	65	4.245	4.257	-0.012	94	176363	50.0	
	31 2-Methyl-2-propanol	59		4.379				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
32 Acrylonitrile	53		4.531				ND	
33 Methyl tert-butyl ether	73	4.550	4.574	-0.024	1	5764	0.0402	
34 trans-1,2-Dichloroethene	96		4.580				ND	
35 Hexane	57		5.007				ND	
36 Vinyl acetate	43		5.214				ND	
37 1,1-Dichloroethane	63	5.263	5.245	0.018	91	8083	0.0830	
38 Isopropyl ether	45		5.312				ND	
39 2-Chloro-1,3-butadiene	53		5.360				ND	
40 Tert-butyl ethyl ether	59		5.842				ND	7
41 2-Butanone (MEK)	43		6.055				ND	
42 cis-1,2-Dichloroethene	96	6.086	6.086	0.000	78	52249	0.8467	
43 2,2-Dichloropropane	77		6.098				ND	
44 Ethyl acetate	43		6.104				ND	7
47 Methyl acrylate	55		6.141				ND	
S 46 1,2-Dichloroethene, Total	100				0		0.8467	
45 Propionitrile	54		6.165				ND	
48 Methacrylonitrile	67		6.354				ND	
49 Chlorobromomethane	128		6.409				ND	
50 Tetrahydrofuran	71		6.421				ND	
51 Chloroform	83	6.574	6.561	0.013	92	28278	0.2916	
$ 52 Dibromofluoromethane (Surr)	113	6.781	6.775	0.006	94	570559	9.65	
53 1,1,1-Trichloroethane	97	6.799	6.787	0.012	49	13276	0.1589	
54 Cyclohexane	56		6.878				ND	
55 1-Chlorobutane	56		6.940				ND	
56 Carbon tetrachloride	117		6.994				ND	7
57 1,1-Dichloropropene	75		6.994				ND	
58 Isobutyl alcohol	41		7.195				ND	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.226	7.232	-0.006	38	127596	9.70	
60 Benzene	78		7.256				ND	7
61 1,2-Dichloroethane	62		7.323				ND	7
62 Isopropyl acetate	43		7.342				ND	
63 Tert-amyl methyl ether	73		7.451				ND	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2373600	10.0	
65 n-Heptane	43		7.671				ND	7
66 t-Amyl alcohol	73		7.842				ND	
67 n-Butanol	56		8.079				ND	
68 Trichloroethene	95	8.134	8.134	0.000	98	57645	0.9472	
69 Methylcyclohexane	83		8.445				ND	
70 1,2-Dichloropropane	63		8.470				ND	
71 2-ethoxy-2-methyl butane	87		8.488				ND	
72 Methyl methacrylate	69		8.561				ND	
74 Dibromomethane	93		8.579				ND	
73 1,4-Dioxane	88		8.622				ND	
75 n-Propyl acetate	61		8.640				ND	
76 Dichlorobromomethane	83		8.817				ND	
77 2-Nitropropane	41		9.104				ND	
79 2-Chloroethyl vinyl ether	63		9.183				ND	
78 Chloroacetonitrile	75		9.189				ND	
80 1-Bromo-2-chloroethane	63		9.207				ND	
81 cis-1,3-Dichloropropene	75		9.366				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.549				ND	
$ 83 Toluene-d8 (Surr)	98	9.677	9.671	0.006	93	2290927	9.56	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
84 Toluene	92	9.750	9.750	0.000	99	12957	0.0880	
T 90 Ethylene oxide TIC	44		9.976				ND	U
T 87 Epibromohydrin TIC	57		10.000				ND	U
T 86 2-Chloroethanol TIC	44		10.000				ND	U
T 89 2,3-Dibromo-1-propanol TIC	57		10.000				ND	U
T 88 Chloroacetaldehyde TIC	50		10.000				ND	U
T 91 3-Chloro-1,2-propanediol TIC	44		10.000				ND	U
T 92 2-Bromo-3-chloropropene TIC	75		10.000				ND	U
96 trans-1,3-Dichloropropene	75		10.012				ND	
T 85 Monochloroacetic acid TIC	50		10.018				ND	U
S 97 1,3-Dichloropropene, Total	100		10.060				ND	7
98 Ethyl methacrylate	69		10.073				ND	
T 93 Epichlorohydrin TIC	57		10.085				ND	U
T 95 2-Bromoethanol TIC	45		10.085				ND	U
T 94 2,3-Dibromopropene TIC	119		10.177				ND	U
99 1,1,2-Trichloroethane	97		10.213				ND	7
100 Tetrachloroethene	166	10.299	10.298	0.001	97	200924	2.87	
101 1,3-Dichloropropane	76		10.378				ND	
102 2-Hexanone	43		10.433				ND	7
103 n-Butyl acetate	43	10.561	10.561	0.000	23	572	0.007972	
104 Chlorodibromomethane	129		10.591				ND	
105 Ethylene Dibromide	107		10.695				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	84	1839880	10.0	
107 1-Chlorohexane	91		11.140				ND	7
108 Chlorobenzene	112		11.158				ND	
110 1,1,1,2-Tetrachloroethane	131		11.237				ND	
111 Ethylbenzene	91		11.243				ND	7
S 109 Xylenes, Total	106				0		0.1165	
112 m-Xylene & p-Xylene	106	11.353	11.353	0.000	97	9226	0.0835	
113 o-Xylene	106	11.683	11.682	0.001	96	3609	0.0330	
114 Styrene	104		11.701				ND	7
115 Bromoform	173		11.853				ND	
116 Isopropylbenzene	105		11.981				ND	
117 cis-1,4-Dichloro-2-butene	88		12.054				ND	U
118 Cyclohexanone	55		12.091				ND	U
$ 119 4-Bromofluorobenzene (Surr)	95	12.128	12.121	0.007	92	849075	9.69	
120 1,1,2,2-Tetrachloroethane	83		12.231				ND	
121 Bromobenzene	156		12.243				ND	
122 trans-1,4-Dichloro-2-butene	53		12.255				ND	
123 1,2,3-Trichloropropane	110		12.274				ND	
124 N-Propylbenzene	91		12.310				ND	7
125 2-Chlorotoluene	126		12.383				ND	
126 1,3,5-Trimethylbenzene	105		12.444				ND	7
127 4-Chlorotoluene	126		12.475				ND	
128 tert-Butylbenzene	134		12.682				ND	
129 Pentachloroethane	167		12.719				ND	
130 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	96	8229	0.0351	
131 sec-Butylbenzene	105		12.847				ND	
132 1,3-Dichlorobenzene	146		12.944				ND	7
133 4-Isopropyltoluene	119		12.950				ND	7
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	1001508	10.0	
135 1,4-Dichlorobenzene	146		13.017				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
136 1,2,3-Trimethylbenzene	120		13.030				ND	7
137 Benzyl chloride	126		13.097				ND	
138 p-Diethylbenzene	119		13.152				ND	
139 n-Butylbenzene	92		13.243				ND	
140 1,2-Dichlorobenzene	146		13.273				ND	
T 193 Hexachloroethane TIC	201		13.499				ND	U
141 Hexachloroethane	201		13.499				ND	
142 1,2-Dibromo-3-Chloropropane	155		13.816				ND	
143 1,3,5-Trichlorobenzene	180		13.938				ND	
144 1,2,4-Trichlorobenzene	180		14.359				ND	
145 Hexachlorobutadiene	225		14.438				ND	
146 Naphthalene	128		14.535				ND	7
147 1,2,3-Trichlorobenzene	180		14.676				ND	
148 2-Methylnaphthalene	142		15.285				ND	
149 1,1-Dichloro-1-fluoroethane	1		0.000				ND	
192 Vinyl acetate (TIC)	1		0.000				ND	
190 Acetonitrile TIC	1		0.000				ND	
162 Pentachloroethane TIC	1		0.000				ND	
161 1,1-Dichloroacetone	1		0.000				ND	
159 Propargyl alcohol TIC	1		0.000				ND	
158 1,3-Dichloro-2-propanol TIC	1		0.000				ND	
191 Isopropyl alcohol TIC	1		0.000				ND	
157 tert-Butyl Formate	1		0.000				ND	
155 Methylal	1		0.000				ND	
154 n-Decane	57		0.000				ND	
153 Propene oxide	1		0.000				ND	
152 1-Bromo-3-Chloropropane	1		0.000				ND	
151 1-Chloropropane	1		0.000				ND	
150 2-Bromo-1-chloropropane	1		0.000				ND	
156 Dodecane	57		0.000				ND	
160 Pentane	43	2.989	2.995	-0.006	1	384	NR	

QC Flag Legend

Processing Flags
- NR - Missing Quant Standard
- NC - Not Calibrated
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated
- U - Marked Undetected

Reagents:

MSV_29_826ISS_00023 Amount Added: 1.00 Units: uL Run Reagent

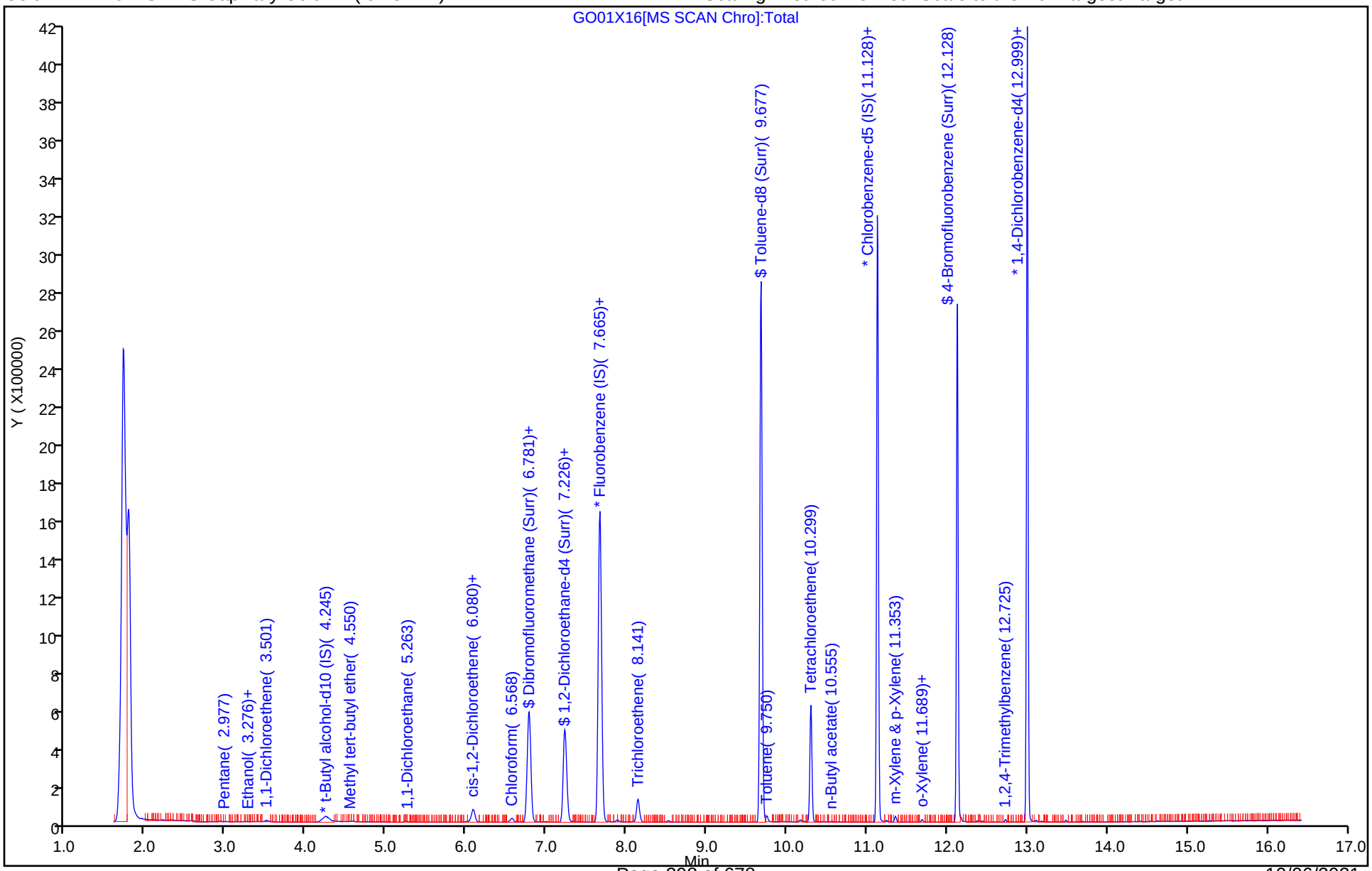
Report Date: 01-Oct-2021 19:10:35 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X16.D

Injection Date:	01-Oct-2021 13:42:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	410-56784-A-7	Lab Sample ID:	410-56784-7	Worklist Smp#:	19
Client ID:	HD-COD-SW-15-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X16.D				
Lims ID:	410-56784-A-7				
Client ID:	HD-COD-SW-15-0/1-0				
Sample Type:	Client				
Inject. Date:	01-Oct-2021 13:42:30	ALS Bottle#:	16	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0040424-019				
Misc. Info.:	410-56784-A-7				
Operator ID:	SRK36897	Instrument ID:	16334		
Method:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	01-Oct-2021 19:10:12	Calib Date:	27-Jul-2021 21:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1602				

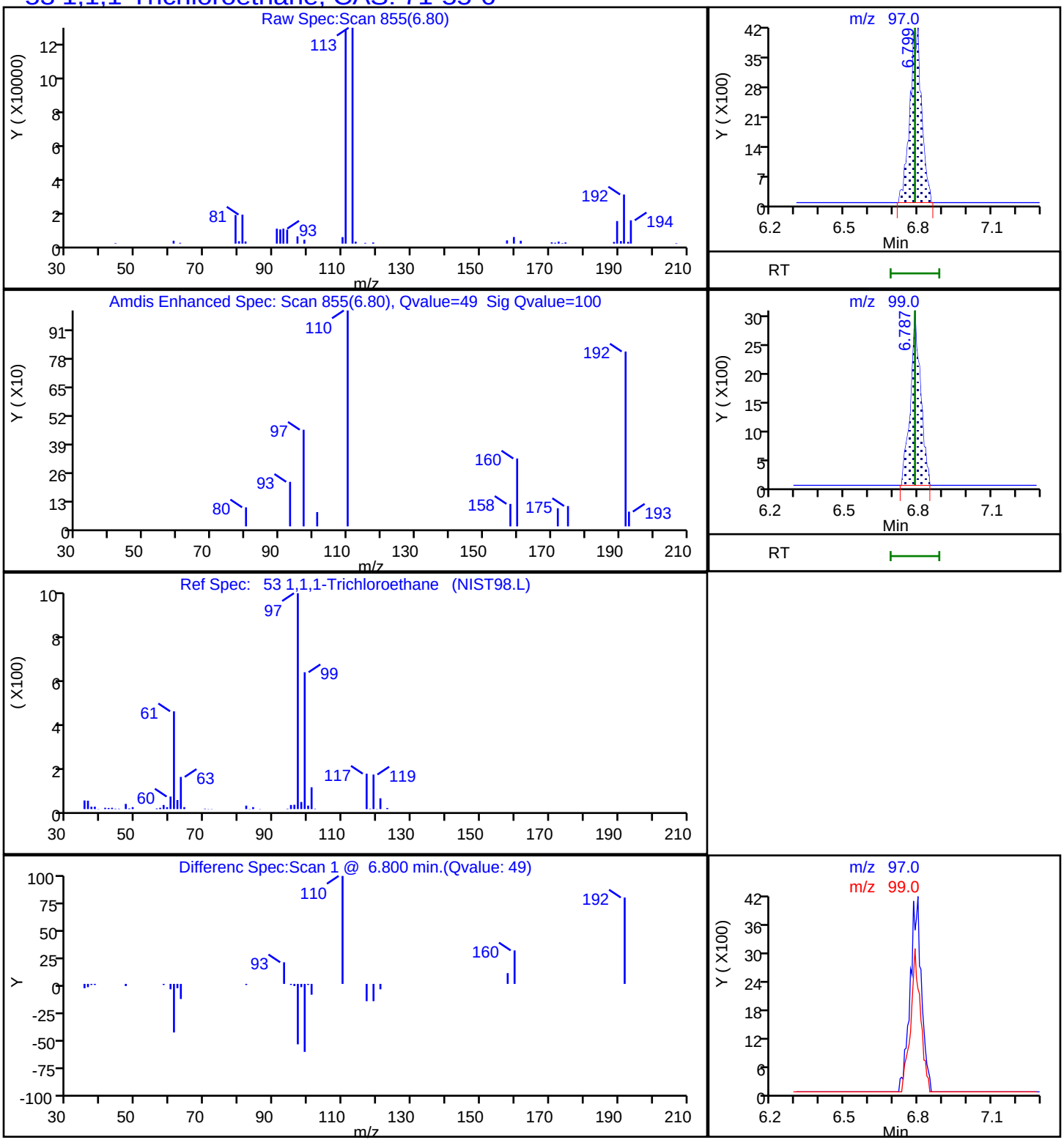
First Level Reviewer: beckerk Date: 01-Oct-2021 18:58:48

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	10.0	9.65	96.47
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.70	97.01
$ 83 Toluene-d8 (Surr)	10.0	9.56	95.62
$ 119 4-Bromofluorobenzene (Surr)	10.0	9.69	96.94

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X16.D				
Injection Date:	01-Oct-2021 13:42:30	Instrument ID:	16334		
Lims ID:	410-56784-A-7	Lab Sample ID:	410-56784-7		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	16	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

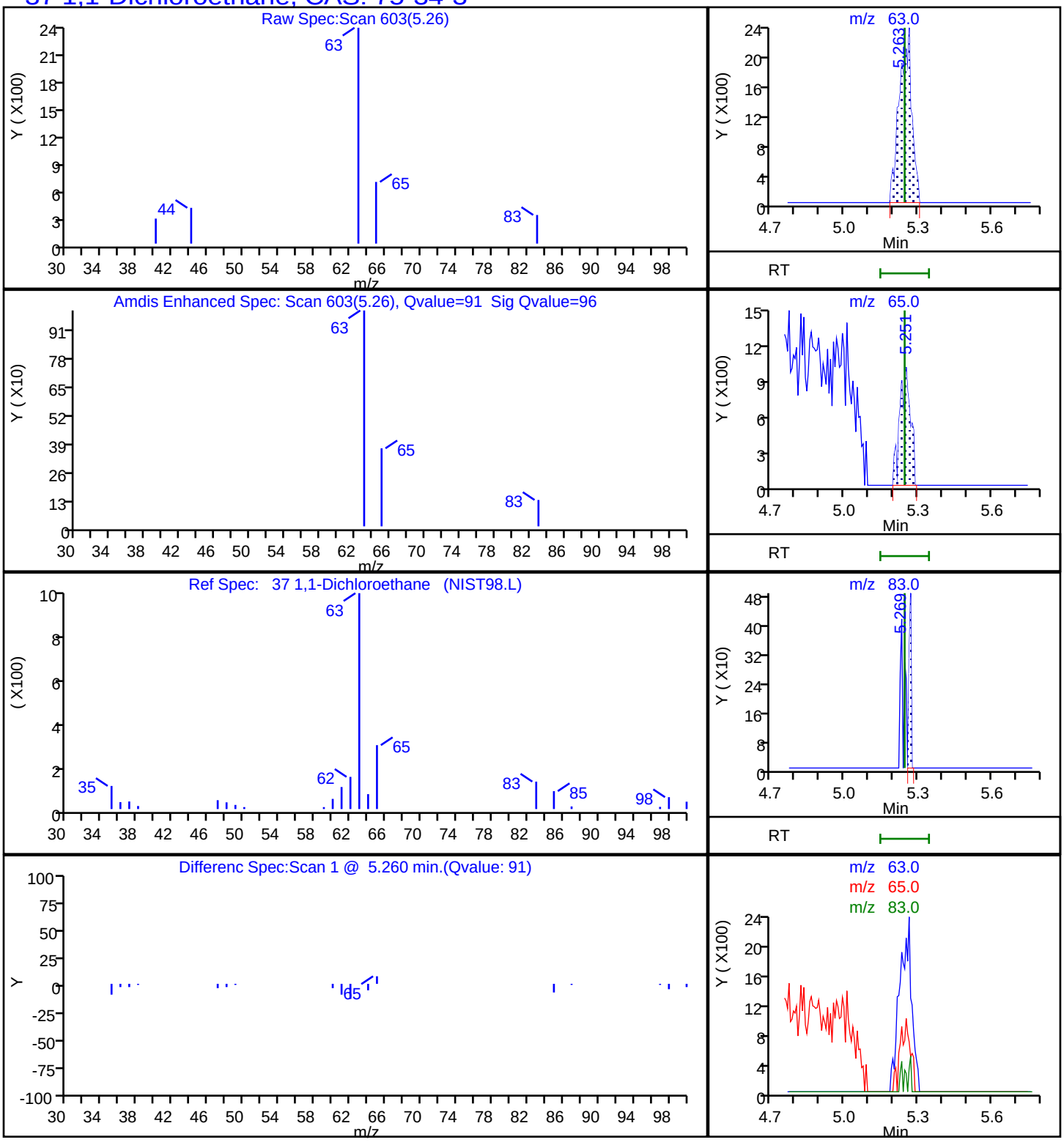
53 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X16.D				
Injection Date:	01-Oct-2021 13:42:30	Instrument ID:	16334		
Lims ID:	410-56784-A-7	Lab Sample ID:	410-56784-7		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	16	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

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

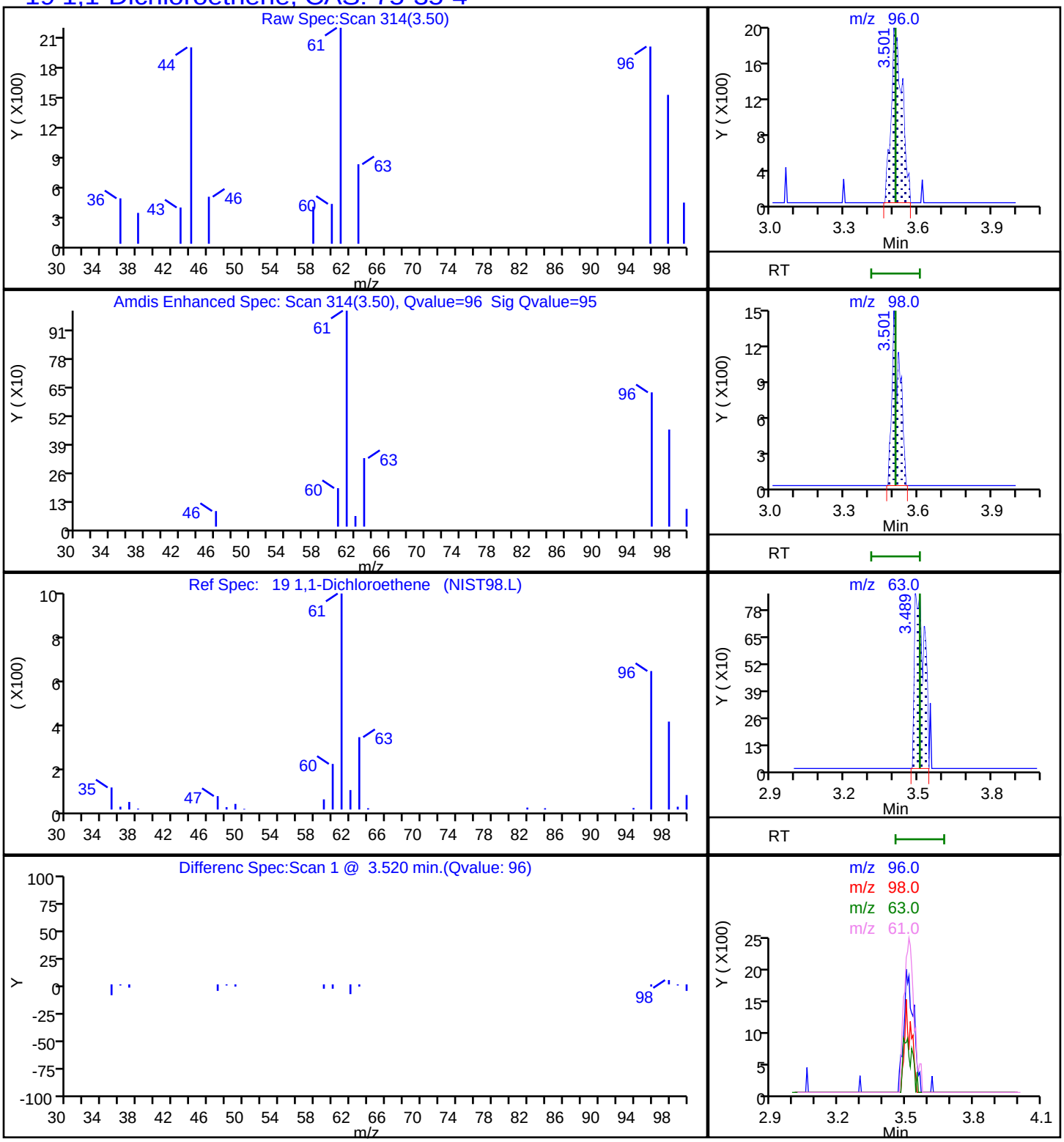


Report Date: 01-Oct-2021 19:10:36 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X16.D				
Injection Date:	01-Oct-2021 13:42:30	Instrument ID:	16334		
Lims ID:	410-56784-A-7	Lab Sample ID:	410-56784-7		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	16	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

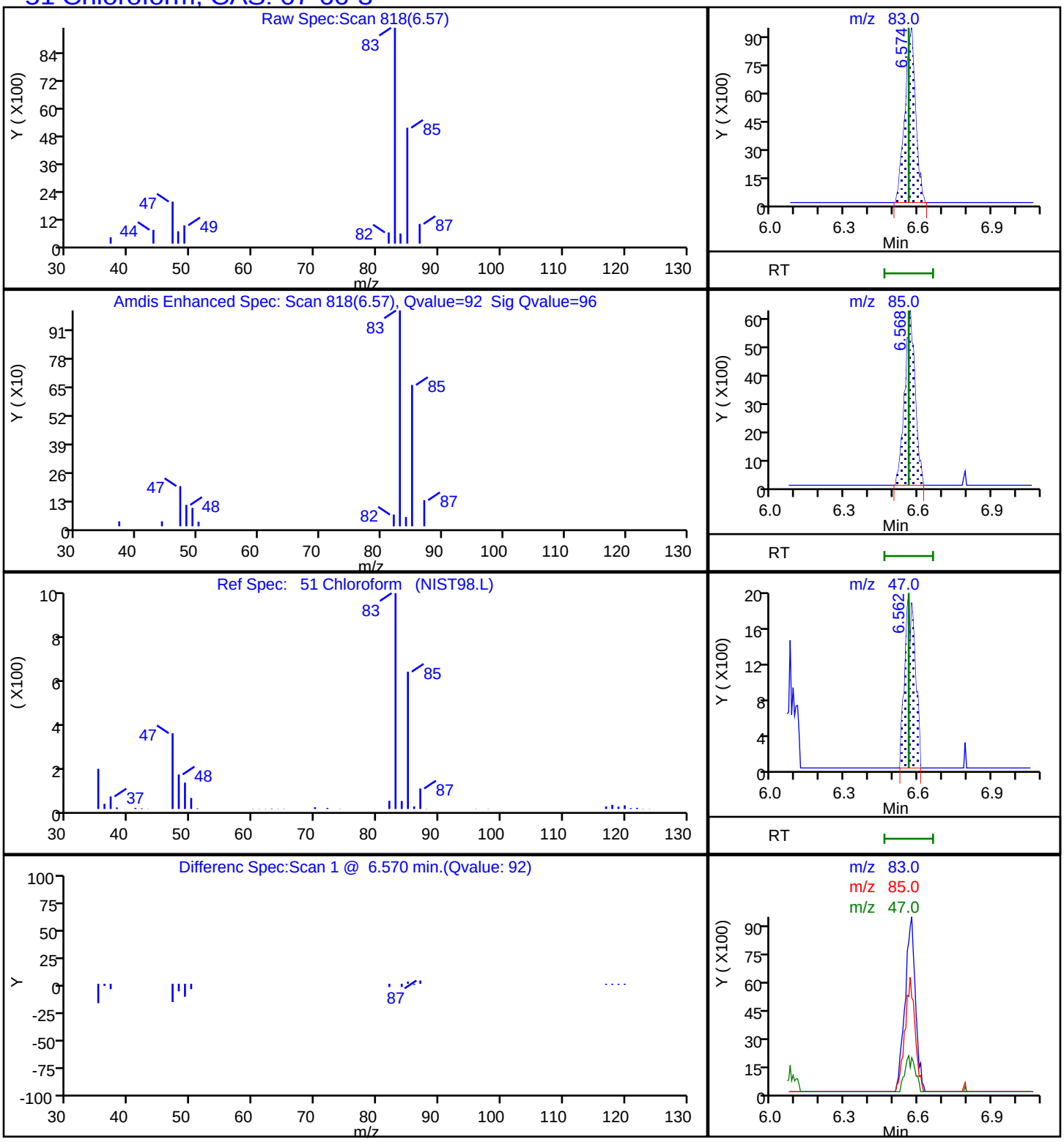
19 1,1-Dichloroethene, CAS: 75-35-4



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X16.D				
Injection Date:	01-Oct-2021 13:42:30	Instrument ID:	16334		
Lims ID:	410-56784-A-7	Lab Sample ID:	410-56784-7		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	16	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

51 Chloroform, CAS: 67-66-3



Report Date: 01-Oct-2021 19:10:36 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X16.D

Injection Date: 01-Oct-2021 13:42:30 Instrument ID: 16334

Lims ID: 410-56784-A-7 Lab Sample ID: 410-56784-7

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

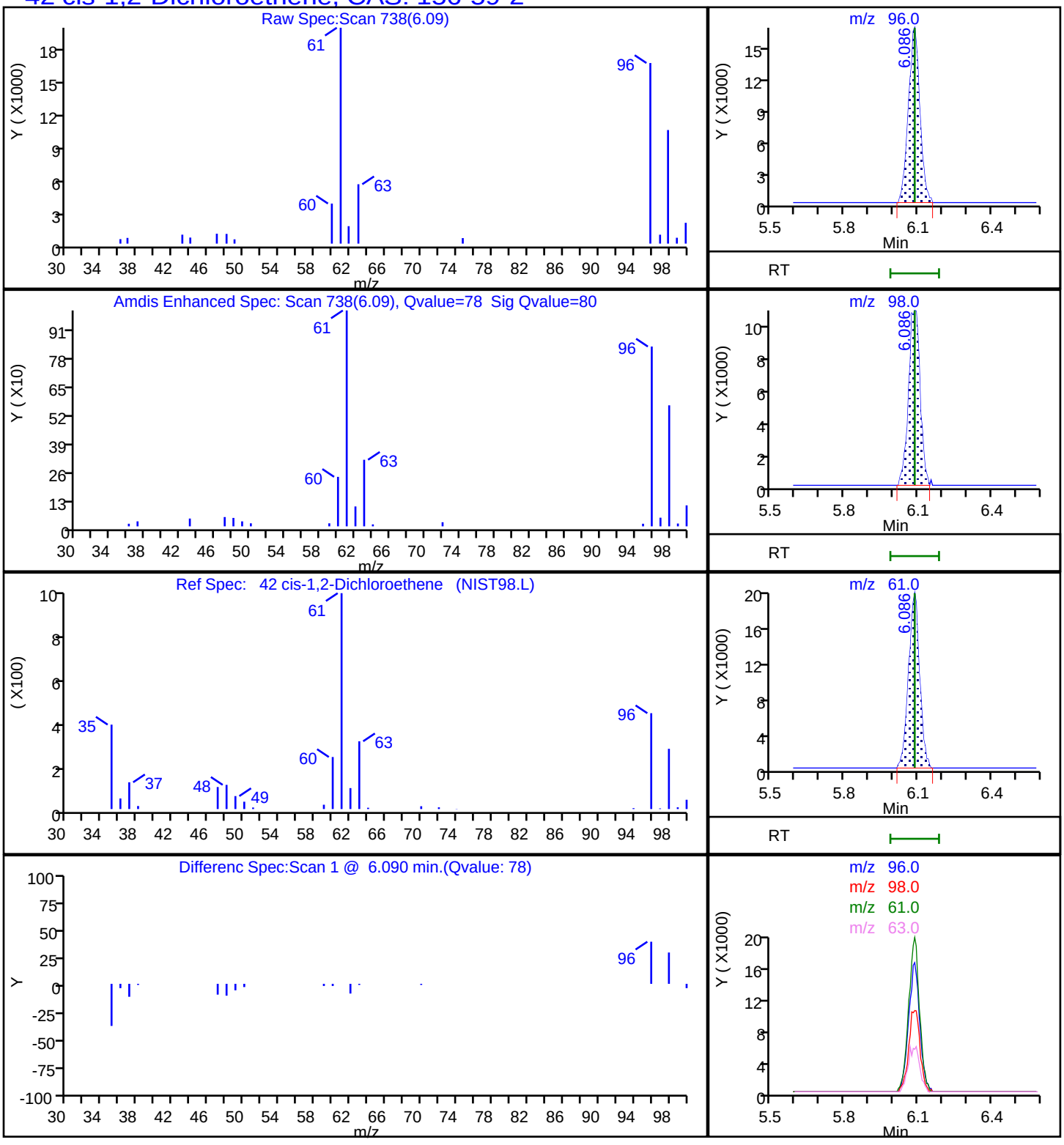
Operator ID: SRK36897 ALS Bottle#: 16 Worklist Smp#: 19

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_16334_25mL Limit Group: MSV - 8260C_D

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

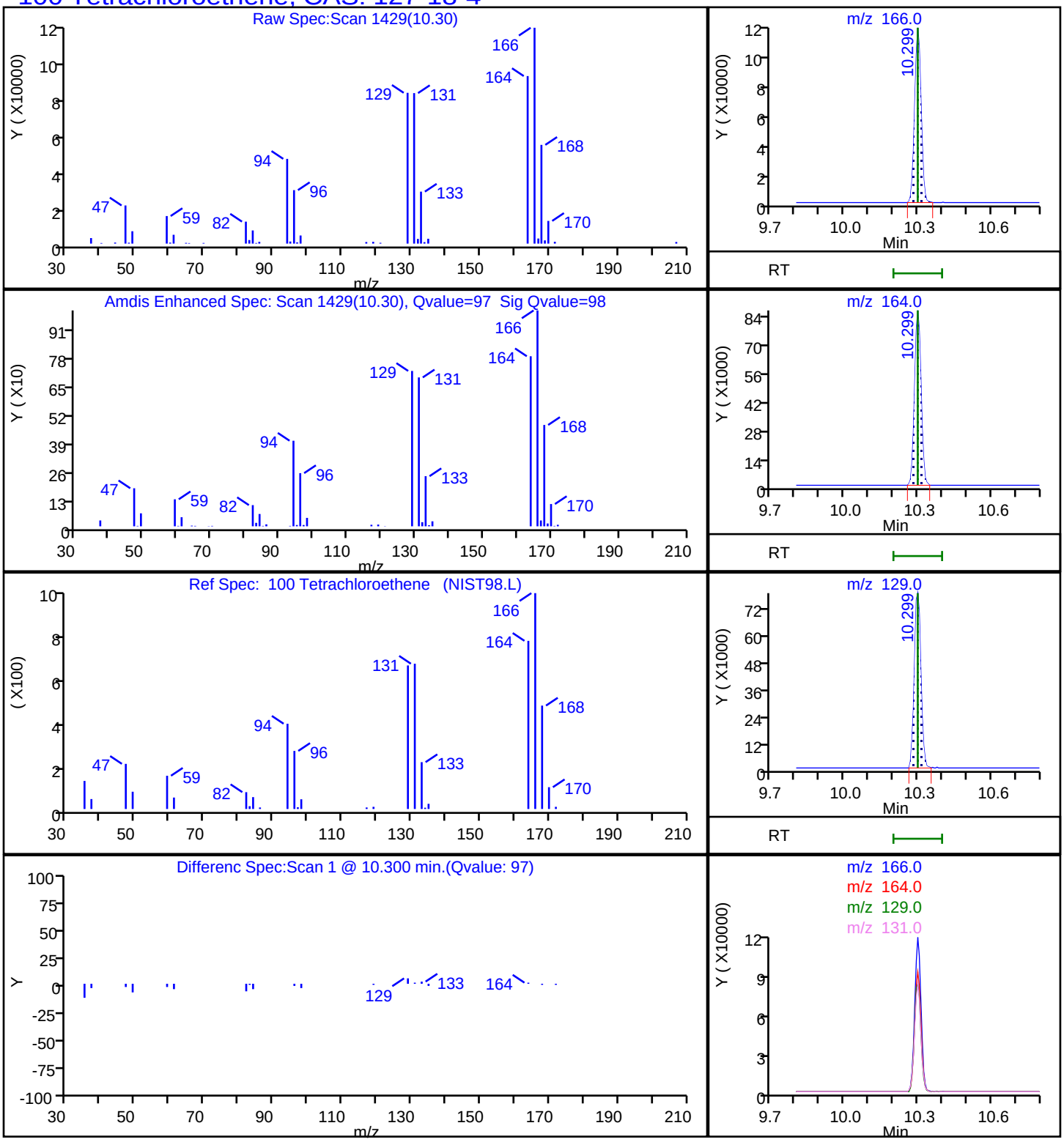
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X16.D				
Injection Date:	01-Oct-2021 13:42:30	Instrument ID:	16334		
Lims ID:	410-56784-A-7	Lab Sample ID:	410-56784-7		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	16	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

100 Tetrachloroethene, CAS: 127-18-4



Report Date: 01-Oct-2021 19:10:36 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X16.D

Injection Date: 01-Oct-2021 13:42:30 Instrument ID: 16334

Lims ID: 410-56784-A-7 Lab Sample ID: 410-56784-7

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

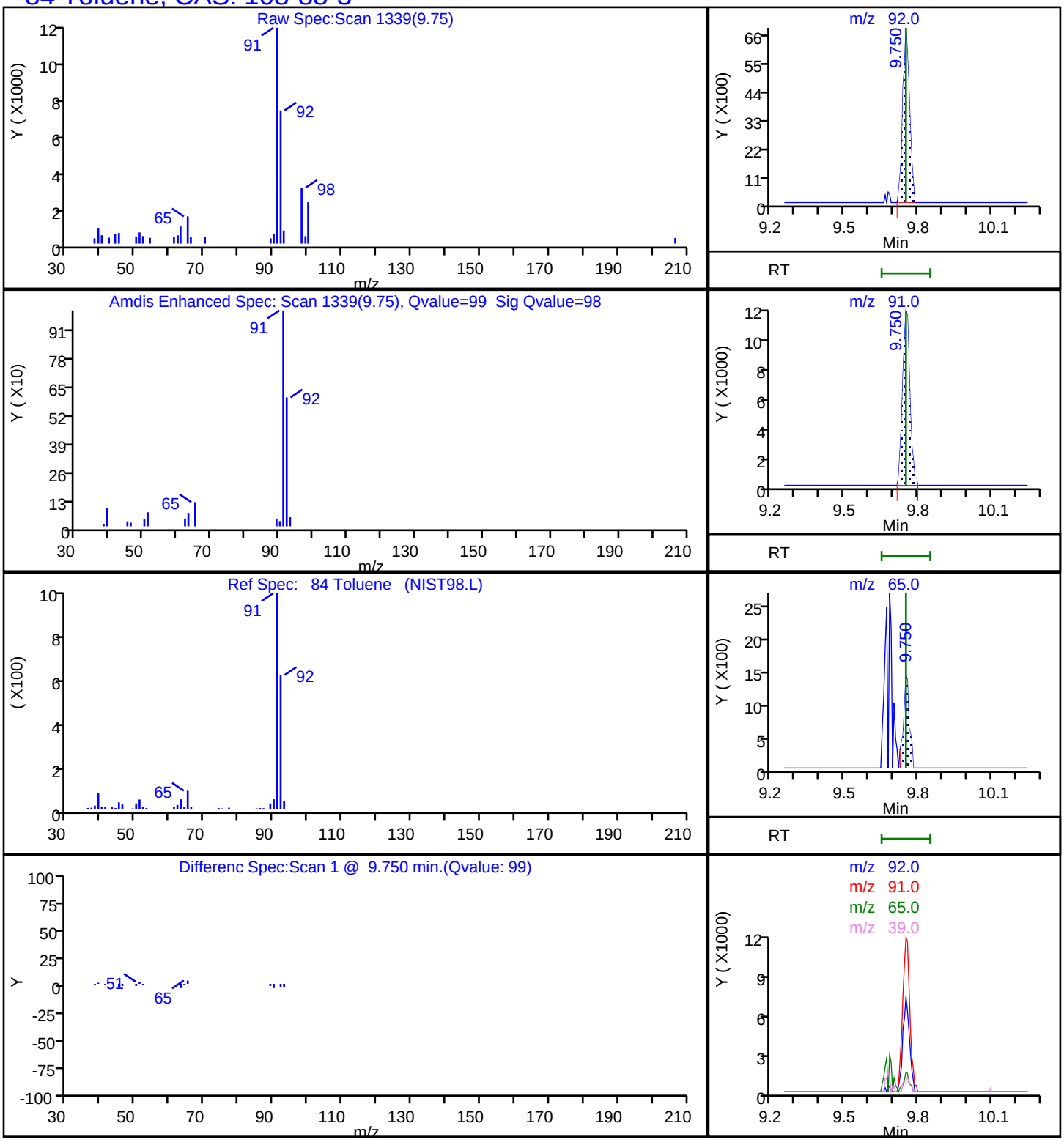
Operator ID: SRK36897 ALS Bottle#: 16 Worklist Smp#: 19

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_16334_25mL Limit Group: MSV - 8260C_D

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

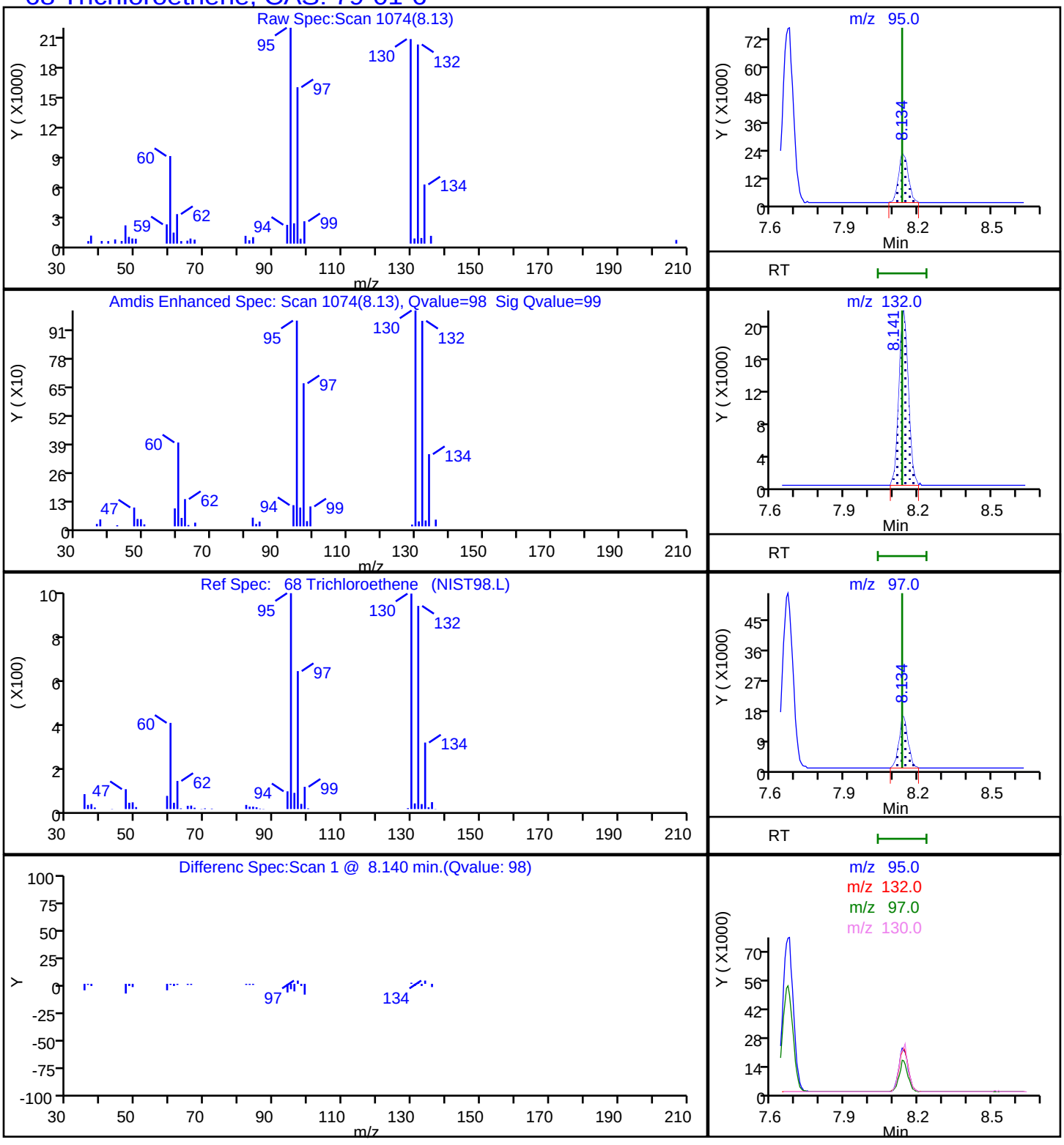
84 Toluene, CAS: 108-88-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X16.D				
Injection Date:	01-Oct-2021 13:42:30	Instrument ID:	16334		
Lims ID:	410-56784-A-7	Lab Sample ID:	410-56784-7		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	16	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

68 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

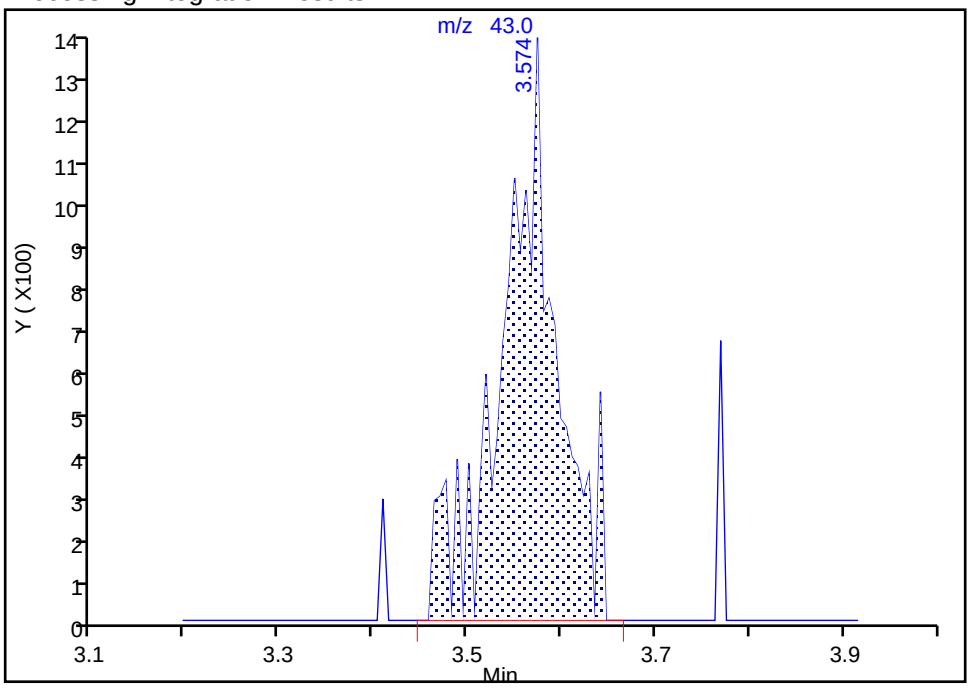
Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X16.D				
Injection Date:	01-Oct-2021 13:42:30	Instrument ID:	16334		
Lims ID:	410-56784-A-7	Lab Sample ID:	410-56784-7		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	16	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

21 Acetone, CAS: 67-64-1

Signal: 1

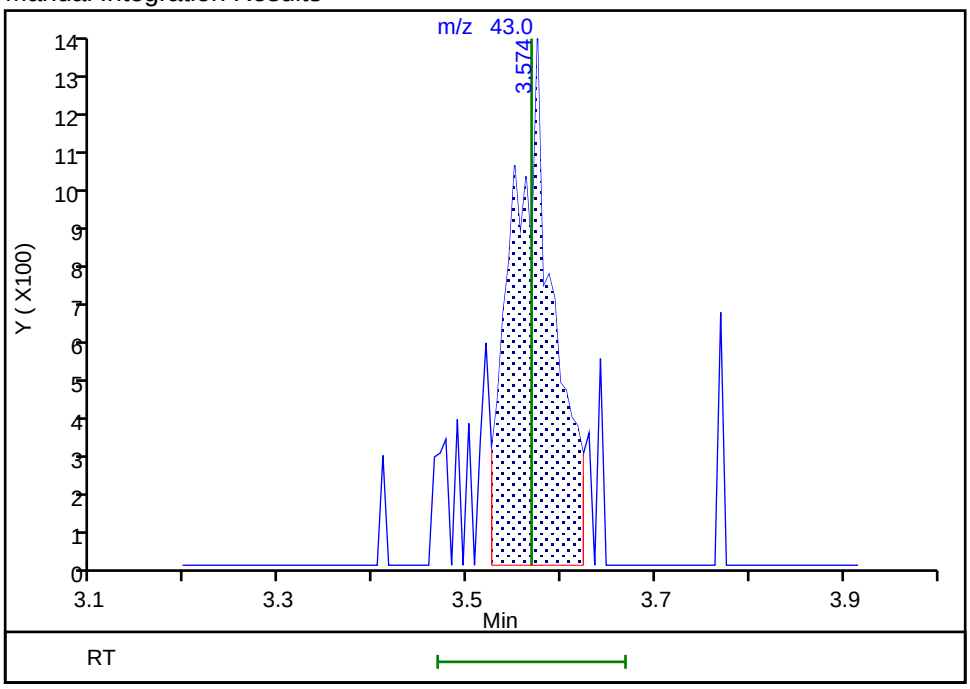
Processing Integration Results

RT: 3.57
Area: 5280
Amount: 0.577958
Amount Units: ug/l



Manual Integration Results

RT: 3.57
Area: 4058
Amount: 0.444196
Amount Units: ug/l



Reviewer: beckerk, 01-Oct-2021 18:57:41
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 410-56784-8

Matrix: Water Lab File ID: GO01X27.D

Analysis Method: 8260D Date Collected: 09/24/2021 11:20

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 17:44

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.: 177560 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	1.4	J	5.0	0.90
71-43-2	Benzene	ND		0.50	0.050
74-97-5	Bromochloromethane	ND		0.50	0.050
75-27-4	Bromodichloromethane	ND		0.50	0.050
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		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	0.089	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	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 410-56784-8

Matrix: Water Lab File ID: GO01X27.D

Analysis Method: 8260D Date Collected: 09/24/2021 11:20

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 17:44

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.: 177560 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)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X27.D
Lims ID: 410-56784-A-8
Client ID: HD-COD-SW-27-0/1-0
Sample Type: Client
Inject. Date: 01-Oct-2021 17:44:30 ALS Bottle#: 27 Worklist Smp#: 30
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040424-030
Misc. Info.: 410-56784-A-8
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Oct-2021 19:10:12 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1602

First Level Reviewer: beckerk Date: 01-Oct-2021 19:10:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.135				ND	
8 Vinyl chloride	62		2.257				ND	
9 Bromomethane	94		2.587				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96		3.507				ND	
21 Acetone	43	3.574	3.568	0.006	96	14063	1.41	M
25 Carbon disulfide	76		3.800				ND	7
29 Methylene Chloride	84		4.172				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.251	4.257	-0.006	95	192850	50.0	
33 Methyl tert-butyl ether	73		4.574				ND	
34 trans-1,2-Dichloroethene	96		4.580				ND	
37 1,1-Dichloroethane	63		5.245				ND	
41 2-Butanone (MEK)	43		6.055				ND	
42 cis-1,2-Dichloroethene	96	6.080	6.086	-0.006	1	4273	0.0699	a
49 Chlorobromomethane	128		6.409				ND	
51 Chloroform	83	6.574	6.561	0.013	85	3787	0.0394	
$ 52 Dibromofluoromethane (Surr)	113	6.781	6.775	0.006	93	574011	9.79	
53 1,1,1-Trichloroethane	97		6.787				ND	
56 Carbon tetrachloride	117		6.994				ND	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	60	128558	9.86	
60 Benzene	78		7.256				ND	7
61 1,2-Dichloroethane	62		7.323				ND	
* 64 Fluorobenzene (IS)	96	7.671	7.665	0.006	99	2352027	10.0	
68 Trichloroethene	95		8.134				ND	
70 1,2-Dichloropropane	63		8.470				ND	
76 Dichlorobromomethane	83		8.817				ND	
81 cis-1,3-Dichloropropene	75		9.366				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.549				ND	7
$ 83 Toluene-d8 (Surr)	98	9.677	9.671	0.006	93	2273016	9.64	
84 Toluene	92	9.750	9.750	0.000	98	12952	0.0894	
96 trans-1,3-Dichloropropene	75		10.012				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
99 1,1,2-Trichloroethane	97		10.213				ND	
100 Tetrachloroethene	166	10.305	10.298	0.007	92	3782	0.0548	
102 2-Hexanone	43		10.433				ND	7
104 Chlorodibromomethane	129		10.591				ND	
105 Ethylene Dibromide	107		10.695				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	84	1810855	10.0	
108 Chlorobenzene	112		11.158				ND	
110 1,1,1,2-Tetrachloroethane	131		11.237				ND	
111 Ethylbenzene	91		11.243				ND	7
S 109 Xylenes, Total	106				0		0.1095	
112 m-Xylene & p-Xylene	106	11.353	11.353	0.000	97	8175	0.0751	
113 o-Xylene	106	11.688	11.682	0.006	94	3694	0.0343	
114 Styrene	104		11.701				ND	7
115 Bromoform	173		11.853				ND	
$ 119 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	92	839667	9.74	
120 1,1,2,2-Tetrachloroethane	83		12.231				ND	
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	1001668	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_29_826ISS_00023 Amount Added: 1.00 Units: uL Run Reagent

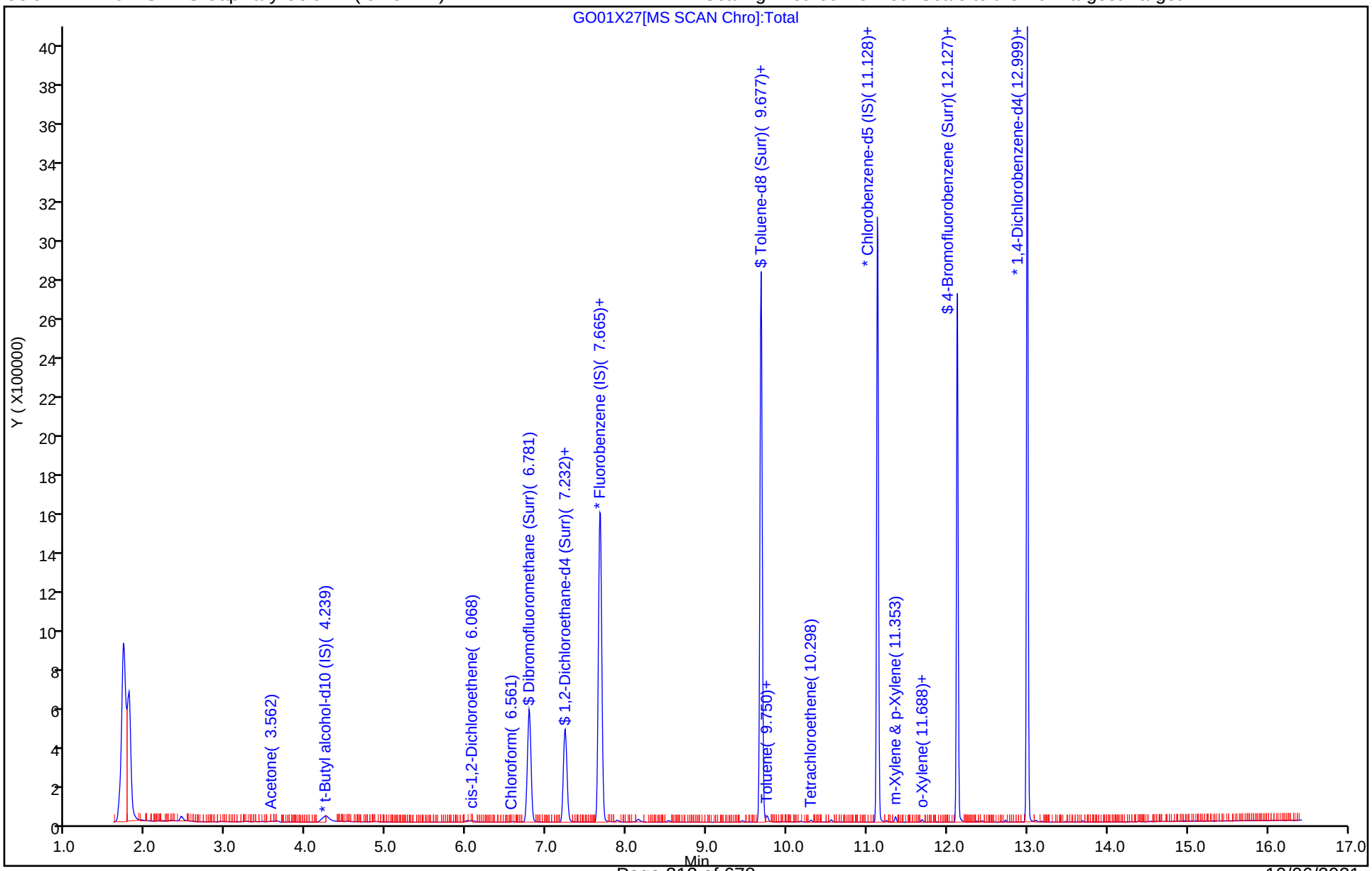
Report Date: 01-Oct-2021 19:10:32 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X27.D

Injection Date:	01-Oct-2021 17:44:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	410-56784-A-8	Lab Sample ID:	410-56784-8	Worklist Smp#:	30
Client ID:	HD-COD-SW-27-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X27.D				
Lims ID:	410-56784-A-8				
Client ID:	HD-COD-SW-27-0/1-0				
Sample Type:	Client				
Inject. Date:	01-Oct-2021 17:44:30	ALS Bottle#:	27	Worklist Smp#:	30
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0040424-030				
Misc. Info.:	410-56784-A-8				
Operator ID:	SRK36897	Instrument ID:	16334		
Method:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	01-Oct-2021 19:10:12	Calib Date:	27-Jul-2021 21:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1602				

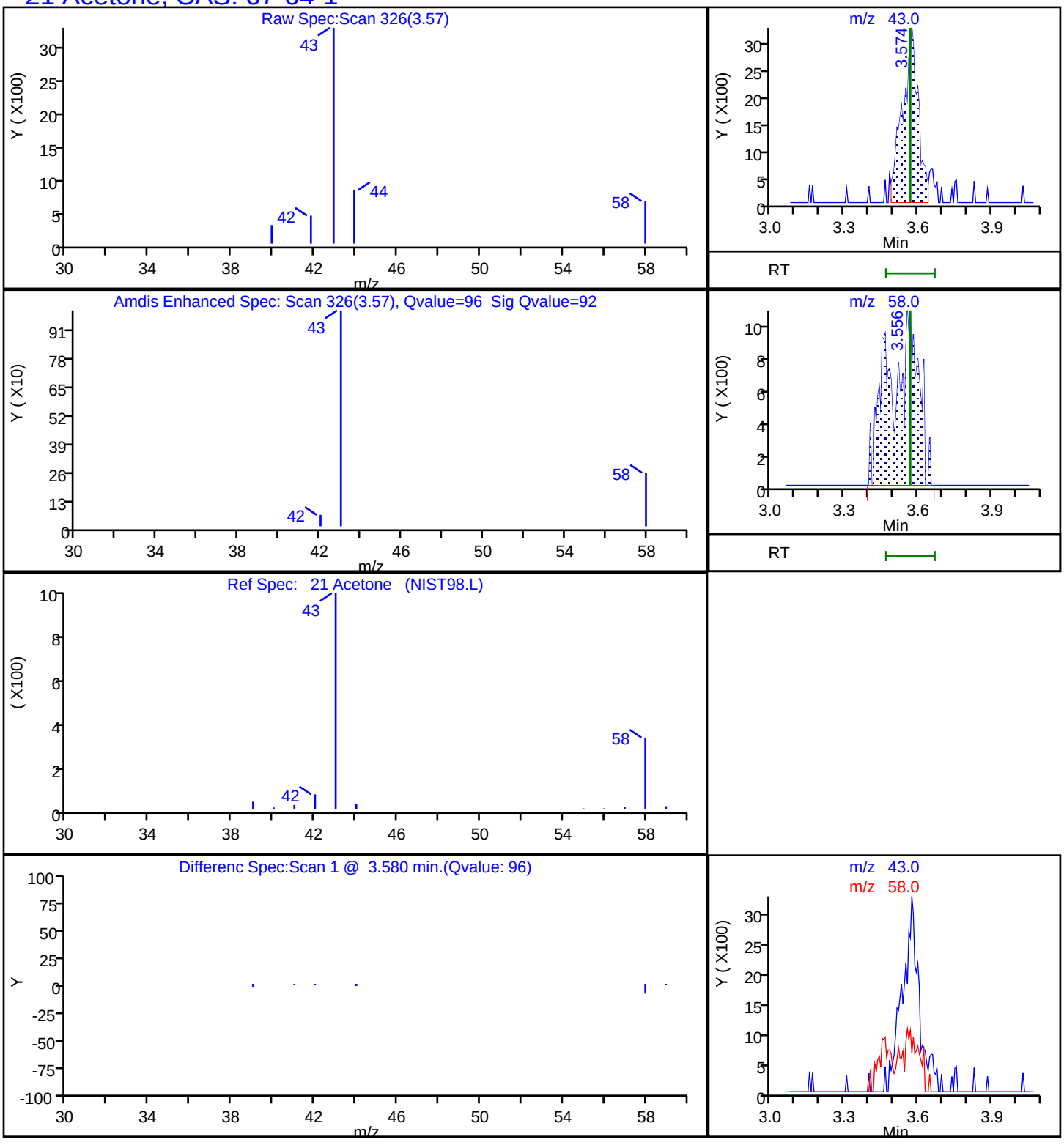
First Level Reviewer: beckerk Date: 01-Oct-2021 19:10:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	10.0	9.79	97.94
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.86	98.64
$ 83 Toluene-d8 (Surr)	10.0	9.64	96.39
$ 119 4-Bromofluorobenzene (Surr)	10.0	9.74	97.40

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X27.D				
Injection Date:	01-Oct-2021 17:44:30	Instrument ID:	16334		
Lims ID:	410-56784-A-8	Lab Sample ID:	410-56784-8		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	27	Worklist Smp#:	30
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

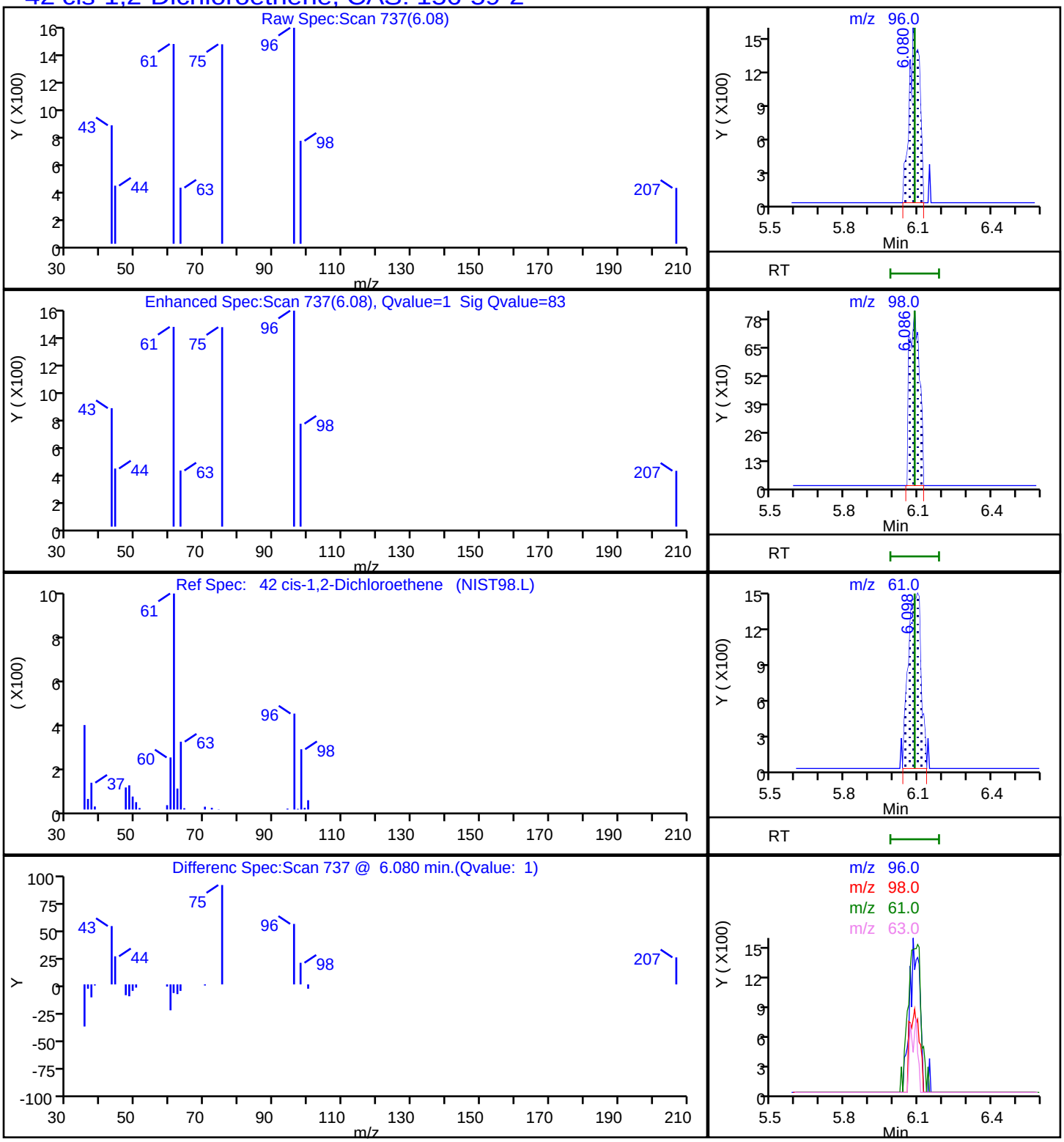
21 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X27.D				
Injection Date:	01-Oct-2021 17:44:30	Instrument ID:	16334		
Lims ID:	410-56784-A-8	Lab Sample ID:	410-56784-8		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	27	Worklist Smp#:	30
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

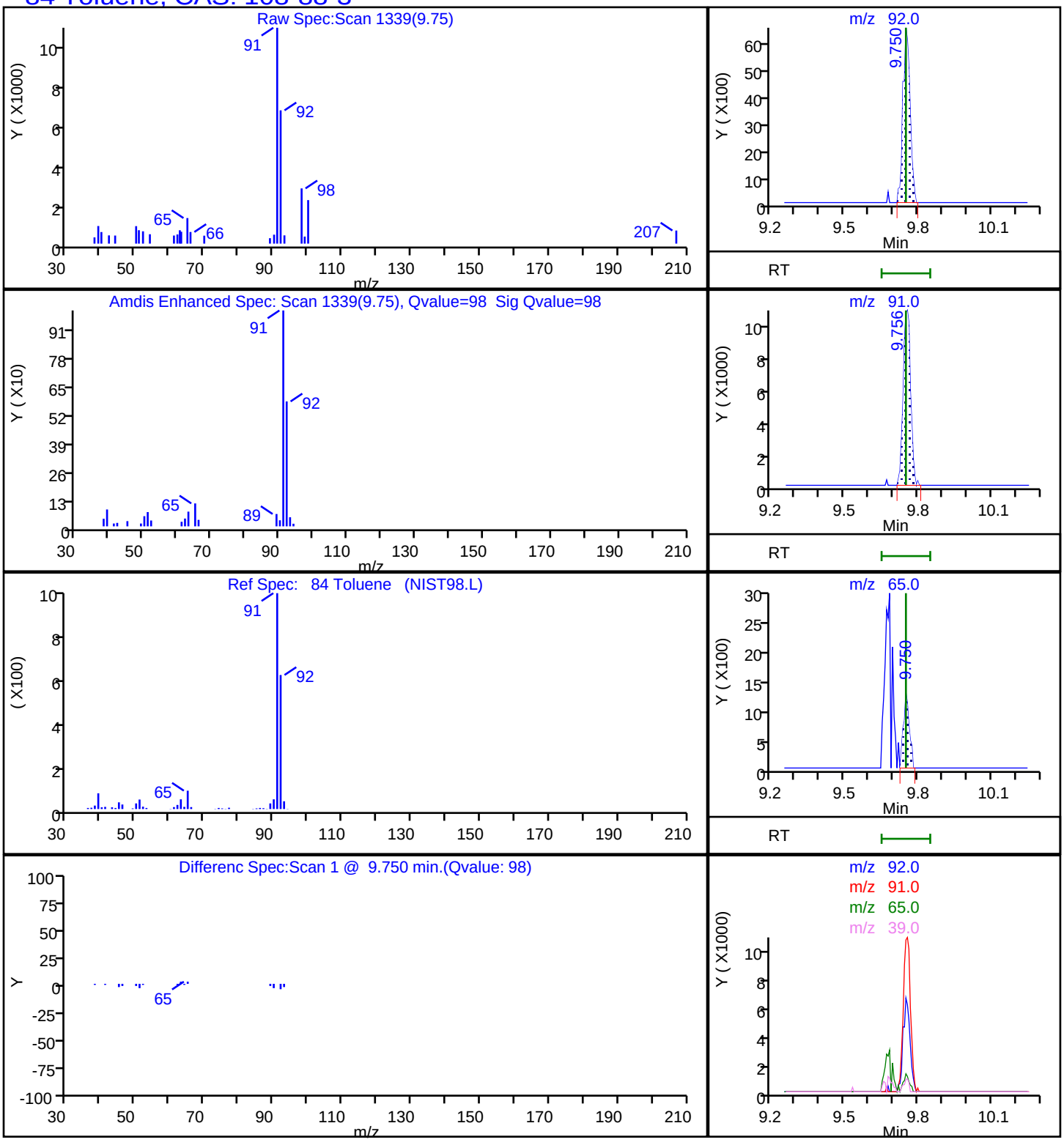
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X27.D				
Injection Date:	01-Oct-2021 17:44:30	Instrument ID:	16334		
Lims ID:	410-56784-A-8	Lab Sample ID:	410-56784-8		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	27	Worklist Smp#:	30
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

84 Toluene, CAS: 108-88-3



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

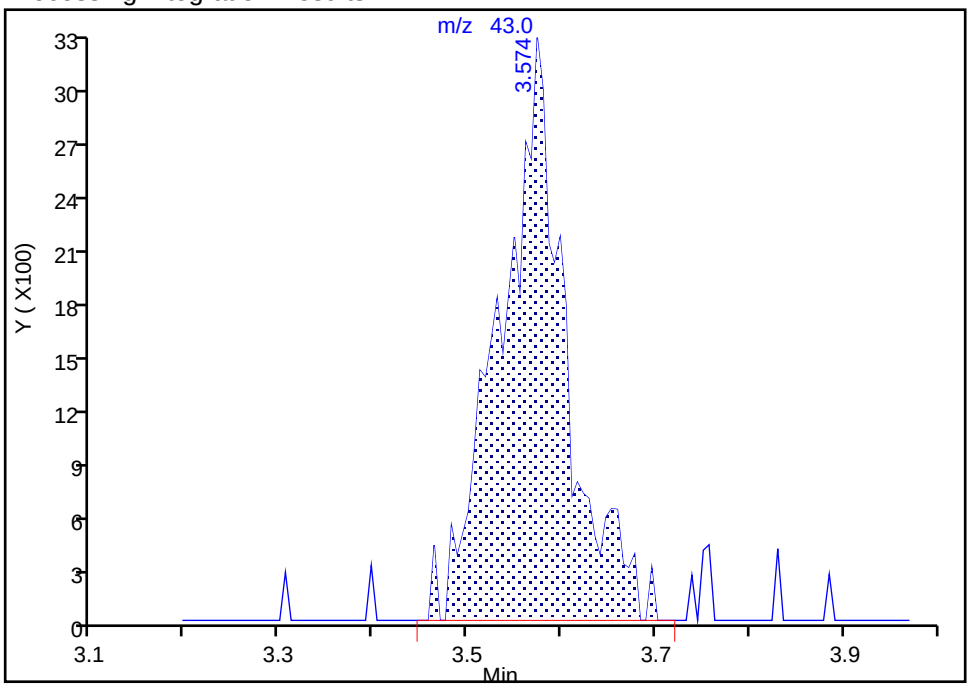
Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X27.D				
Injection Date:	01-Oct-2021 17:44:30	Instrument ID:	16334		
Lims ID:	410-56784-A-8	Lab Sample ID:	410-56784-8		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	27	Worklist Smp#:	30
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

21 Acetone, CAS: 67-64-1

Signal: 1

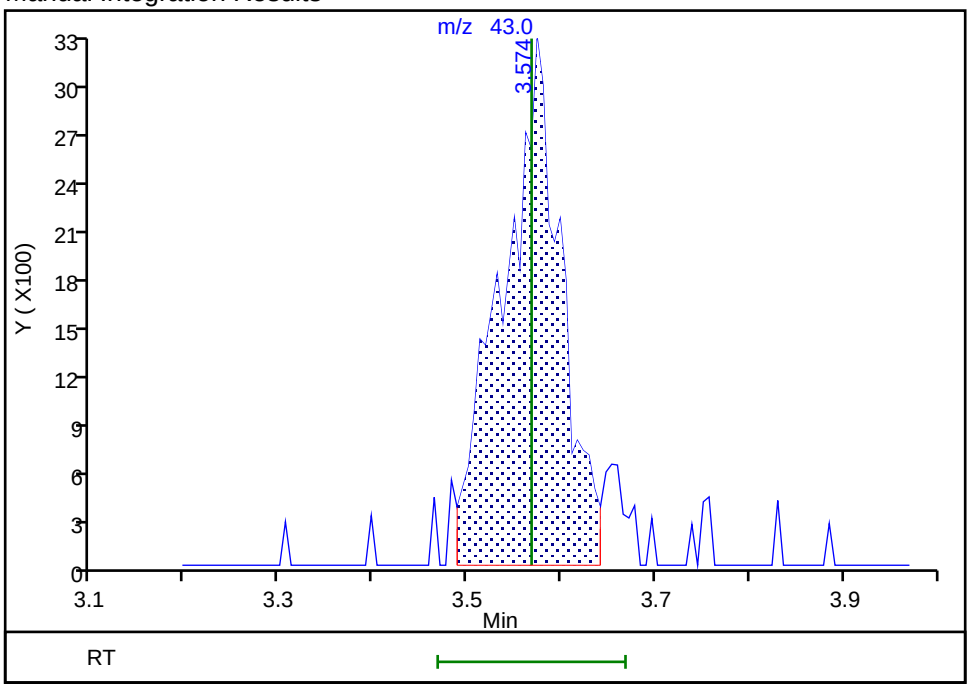
Processing Integration Results

RT: 3.57
Area: 15525
Amount: 1.554111
Amount Units: ug/l



Manual Integration Results

RT: 3.57
Area: 14063
Amount: 1.407759
Amount Units: ug/l



Reviewer: beckerk, 01-Oct-2021 19:09:43
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

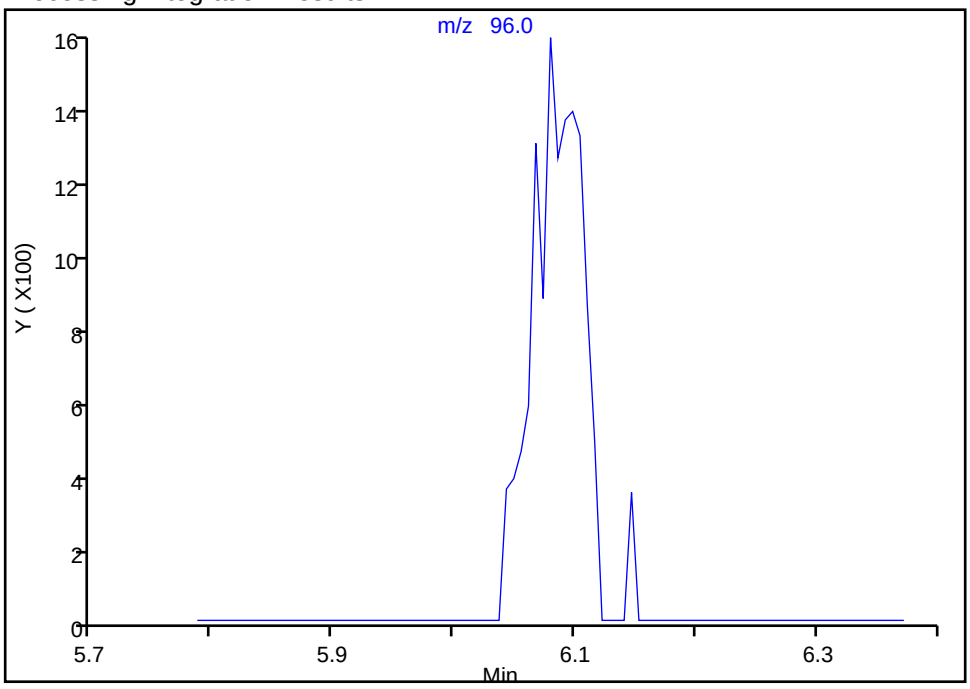
Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X27.D				
Injection Date:	01-Oct-2021 17:44:30	Instrument ID:	16334		
Lims ID:	410-56784-A-8	Lab Sample ID:	410-56784-8		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	27	Worklist Smp#:	30
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

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

Signal: 1

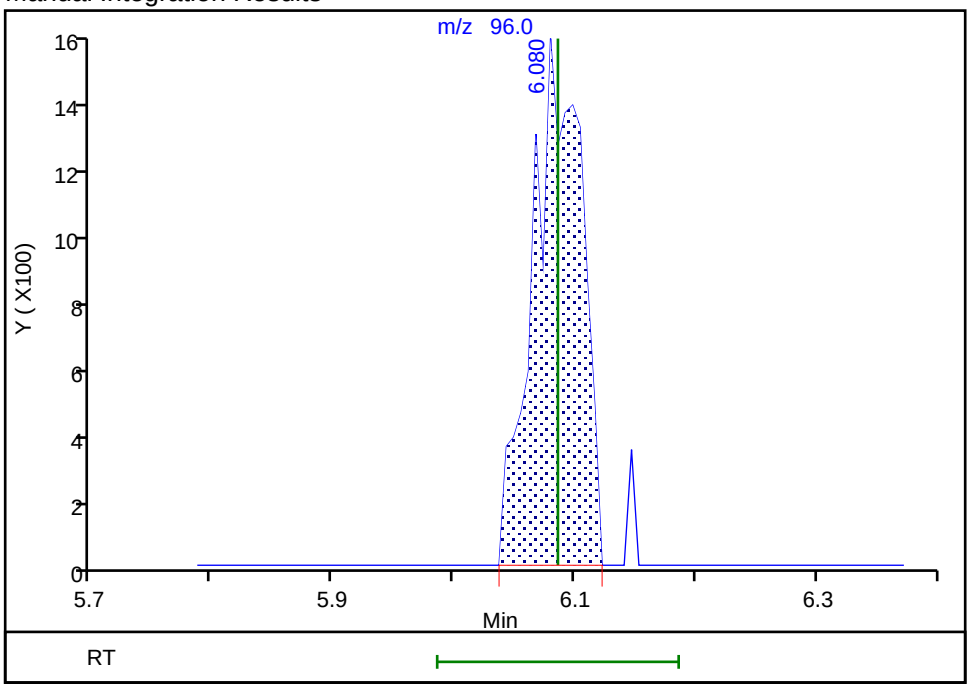
Not Detected
Expected RT: 6.09

Processing Integration Results



Manual Integration Results

RT: 6.08
Area: 4273
Amount: 0.069883
Amount Units: ug/l



Reviewer: beckerk, 01-Oct-2021 19:09:57
Audit Action: Assigned Compound ID Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 410-56784-9

Matrix: Water Lab File ID: GO05X14.D

Analysis Method: 8260D Date Collected: 09/24/2021 12:45

Sample wt/vol: 25(mL) Date Analyzed: 10/05/2021 14:01

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.: 178764 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	^c	5.0	0.60
591-78-6	2-Hexanone	ND	^c	5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	0.70
67-64-1	Acetone	3.3	J ^c	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	0.15	J	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	0.090	J	0.50	0.060
108-88-3	Toluene	0.18	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	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 410-56784-9

Matrix: Water Lab File ID: GO05X14.D

Analysis Method: 8260D Date Collected: 09/24/2021 12:45

Sample wt/vol: 25(mL) Date Analyzed: 10/05/2021 14:01

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.: 178764 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)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	97		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X14.D
Lims ID: 410-56784-A-9
Client ID: HD-COD-SW-28-0/1-0
Sample Type: Client
Inject. Date: 05-Oct-2021 14:01:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040685-015
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Oct-2021 17:57:16 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1642

First Level Reviewer: beckerk Date: 05-Oct-2021 17:50:00

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	2.148	2.142	0.006	1	1764	0.0246	7a
8 Vinyl chloride	62		2.257				ND	
9 Bromomethane	94		2.593				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96		3.513				ND	
21 Acetone	43	3.586	3.568	0.018	99	30361	3.34	M
25 Carbon disulfide	76		3.812				ND	7
29 Methylene Chloride	84	4.178	4.172	0.006	13	2176	0.0395	M
* 30 t-Butyl alcohol-d10 (IS)	65	4.251	4.251	0.000	95	175743	50.0	
33 Methyl tert-butyl ether	73		4.574				ND	
34 trans-1,2-Dichloroethene	96		4.580				ND	
37 1,1-Dichloroethane	63		5.251				ND	
41 2-Butanone (MEK)	43		6.062				ND	
42 cis-1,2-Dichloroethene	96	6.080	6.086	-0.006	1	2843	0.0475	
49 Chlorobromomethane	128		6.409				ND	
51 Chloroform	83	6.574	6.568	0.006	92	14014	0.1491	
$ 52 Dibromofluoromethane (Surr)	113	6.787	6.781	0.006	93	555723	9.69	
53 1,1,1-Trichloroethane	97		6.787				ND	
56 Carbon tetrachloride	117		6.994				ND	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.226	7.226	0.000	38	123075	9.65	
60 Benzene	78		7.263				ND	7
61 1,2-Dichloroethane	62		7.330				ND	
* 64 Fluorobenzene (IS)	96	7.671	7.665	0.006	99	2301526	10.0	
68 Trichloroethene	95		8.134				ND	
70 1,2-Dichloropropane	63		8.470				ND	
76 Dichlorobromomethane	83		8.817				ND	7
81 cis-1,3-Dichloropropene	75		9.366				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.549				ND	7
$ 83 Toluene-d8 (Surr)	98	9.677	9.677	0.000	93	2217465	9.55	
84 Toluene	92	9.750	9.750	0.000	98	24986	0.1751	
96 trans-1,3-Dichloropropene	75		10.012				ND	
99 1,1,2-Trichloroethane	97		10.213				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
100 Tetrachloroethene	166	10.304	10.299	0.005	95	6096	0.0897	
102 2-Hexanone	43		10.433				ND	7
104 Chlorodibromomethane	129		10.591				ND	
105 Ethylene Dibromide	107		10.695				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.134	11.128	0.006	84	1783425	10.0	
108 Chlorobenzene	112		11.152				ND	
110 1,1,1,2-Tetrachloroethane	131		11.237				ND	
111 Ethylbenzene	91		11.243				ND	7
S 109 Xylenes, Total	106				0		0.1442	
112 m-Xylene & p-Xylene	106	11.353	11.353	0.000	97	10841	0.1012	
113 o-Xylene	106	11.682	11.682	0.000	94	4559	0.0430	
114 Styrene	104		11.701				ND	
115 Bromoform	173		11.853				ND	
$ 119 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	90	836670	9.85	
120 1,1,2,2-Tetrachloroethane	83		12.231				ND	
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	974072	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_29_826ISS_00023 Amount Added: 1.00 Units: uL Run Reagent

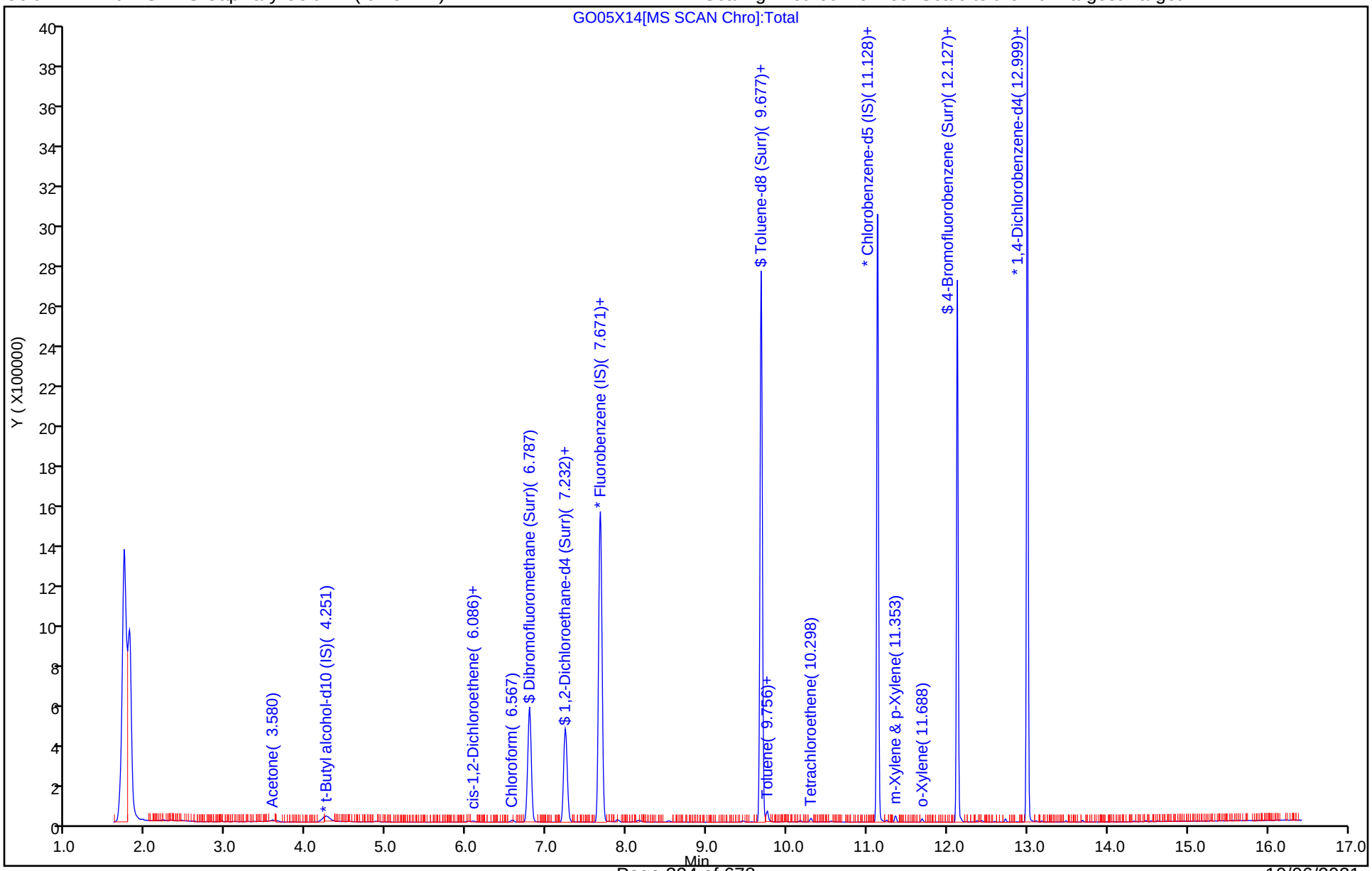
Report Date: 05-Oct-2021 17:57:27 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X14.D

Injection Date:	05-Oct-2021 14:01:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	410-56784-A-9	Lab Sample ID:	410-56784-9	Worklist Smp#:	15
Client ID:	HD-COD-SW-28-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X14.D
Lims ID: 410-56784-A-9
Client ID: HD-COD-SW-28-0/1-0
Sample Type: Client
Inject. Date: 05-Oct-2021 14:01:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040685-015
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Oct-2021 17:57:16 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1642

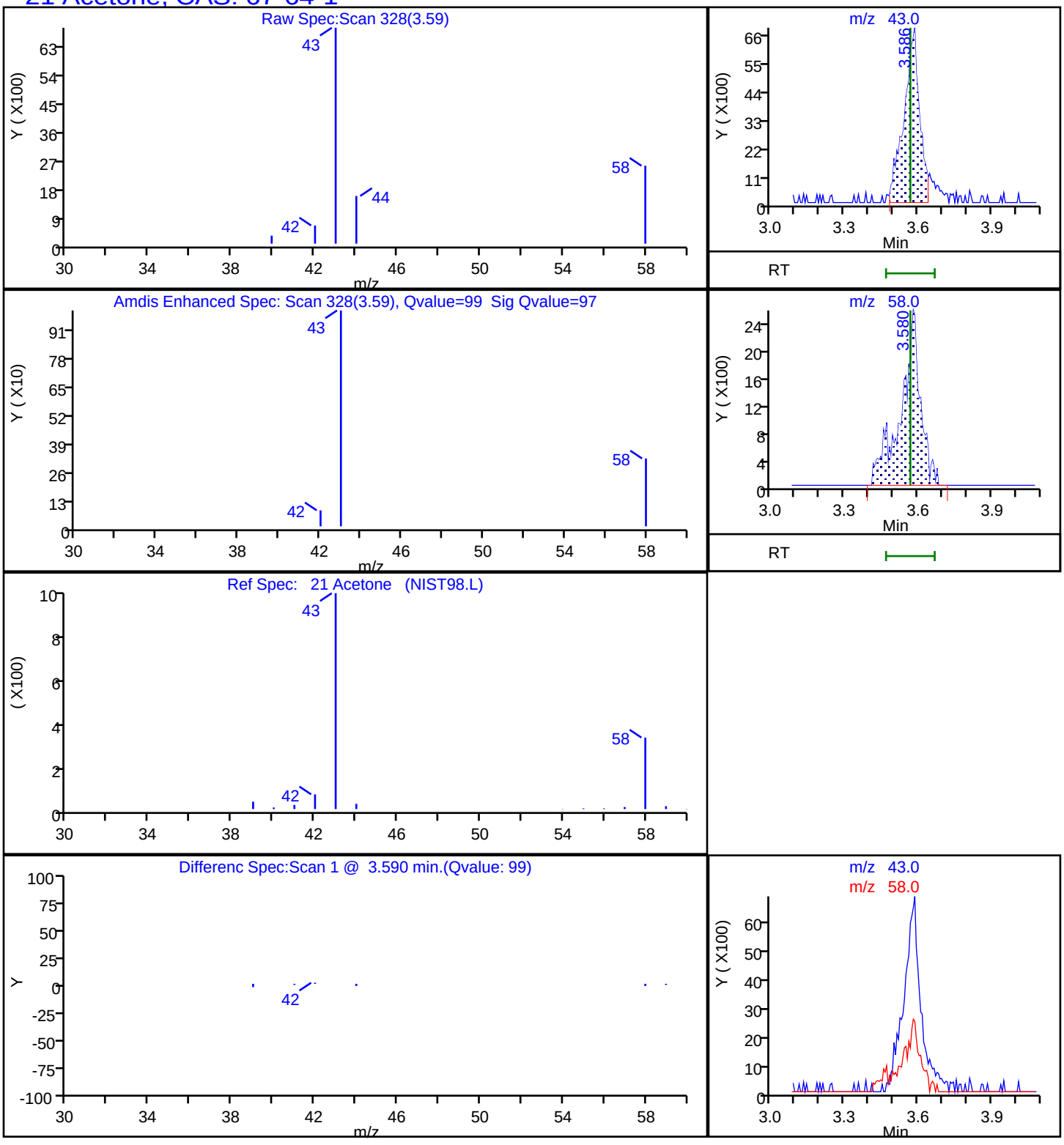
First Level Reviewer: beckerk Date: 05-Oct-2021 17:50:00

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	10.0	9.69	96.91
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.65	96.50
$ 83 Toluene-d8 (Surr)	10.0	9.55	95.48
$ 119 4-Bromofluorobenzene (Surr)	10.0	9.85	98.55

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X14.D				
Injection Date:	05-Oct-2021 14:01:30	Instrument ID:	16334		
Lims ID:	410-56784-A-9	Lab Sample ID:	410-56784-9		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

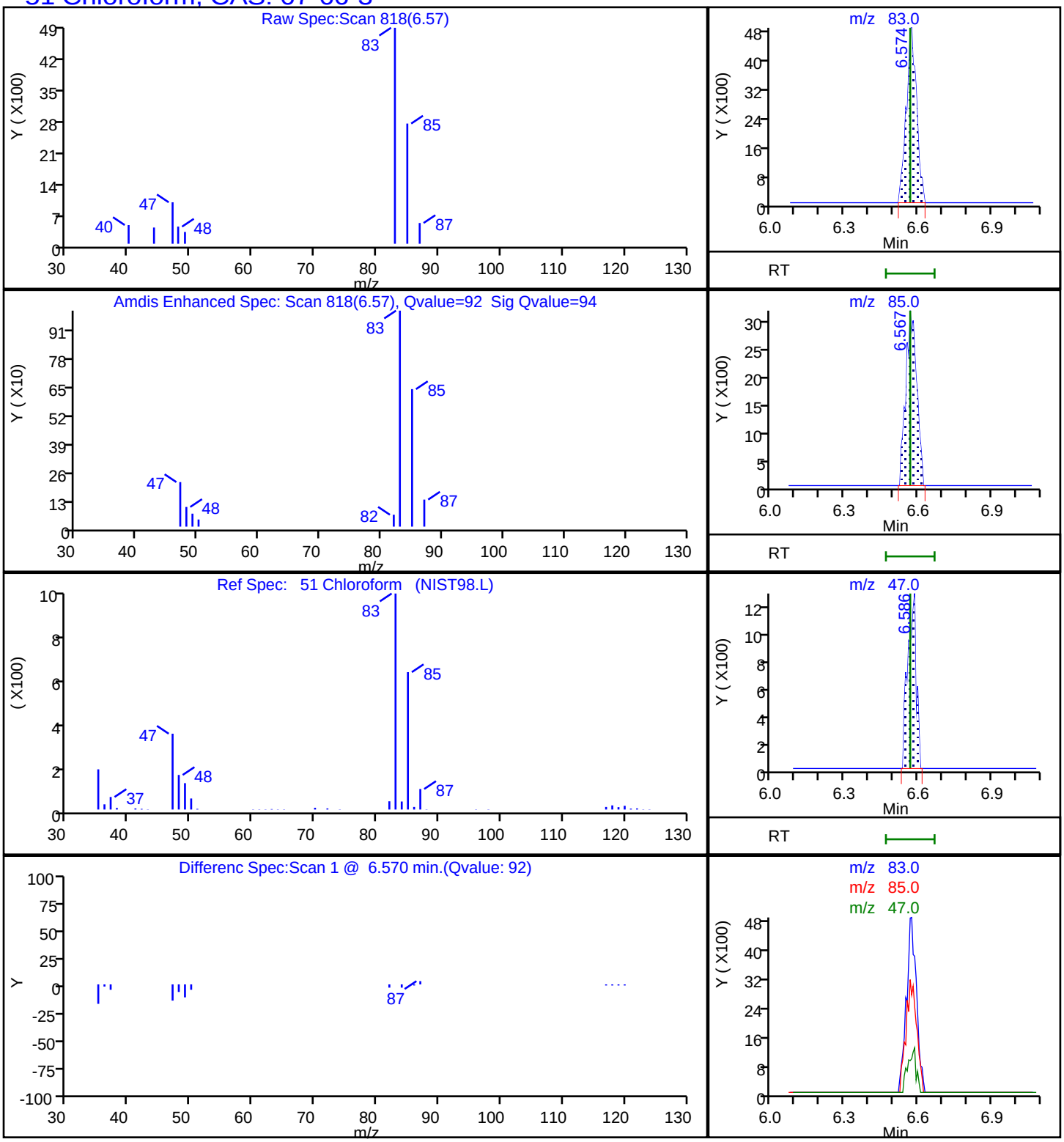
21 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X14.D				
Injection Date:	05-Oct-2021 14:01:30	Instrument ID:	16334		
Lims ID:	410-56784-A-9	Lab Sample ID:	410-56784-9		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

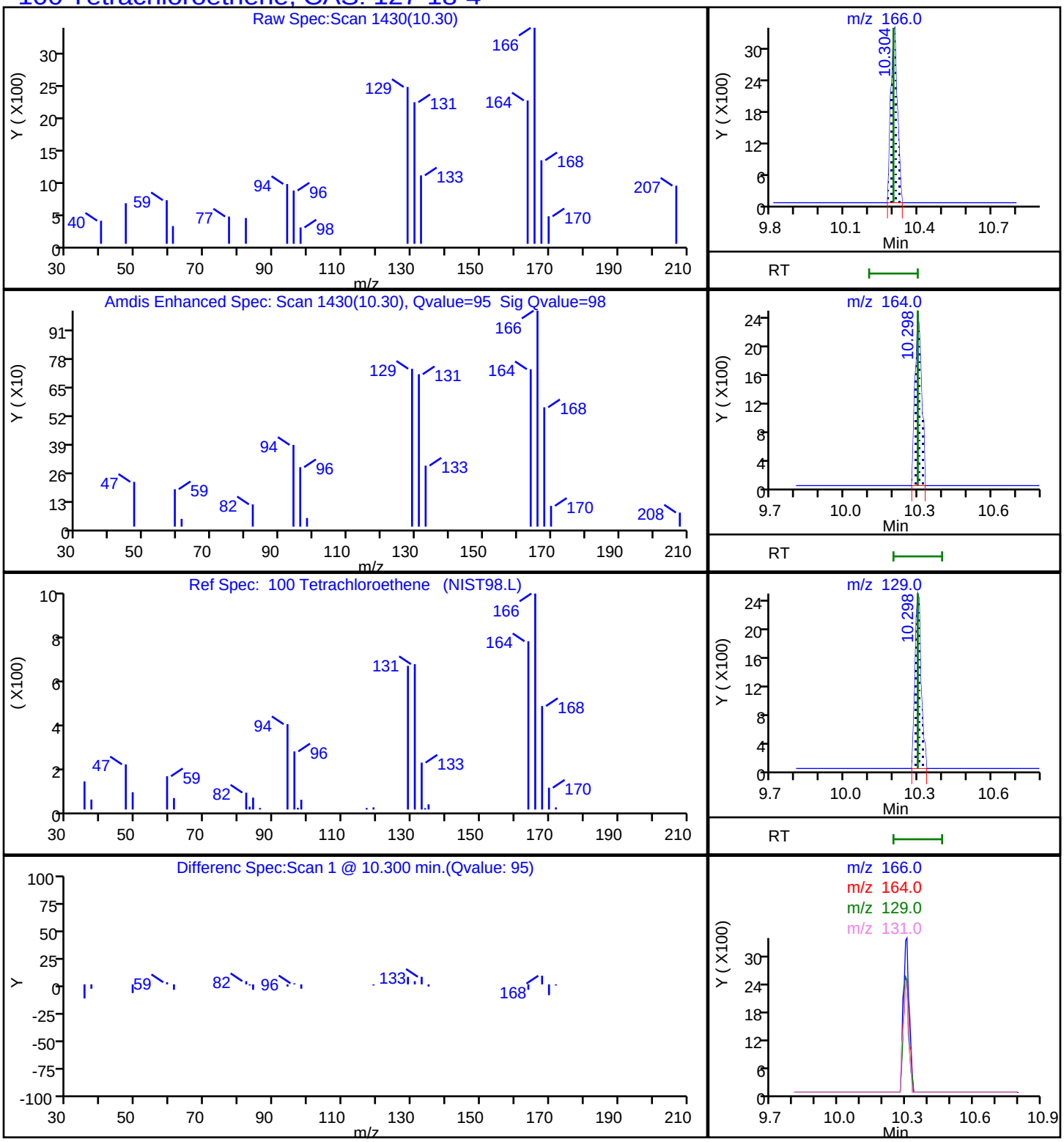
51 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X14.D				
Injection Date:	05-Oct-2021 14:01:30	Instrument ID:	16334		
Lims ID:	410-56784-A-9	Lab Sample ID:	410-56784-9		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

100 Tetrachloroethene, CAS: 127-18-4



Report Date: 05-Oct-2021 17:57:28 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X14.D

Injection Date: 05-Oct-2021 14:01:30 Instrument ID: 16334

Lims ID: 410-56784-A-9 Lab Sample ID: 410-56784-9

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

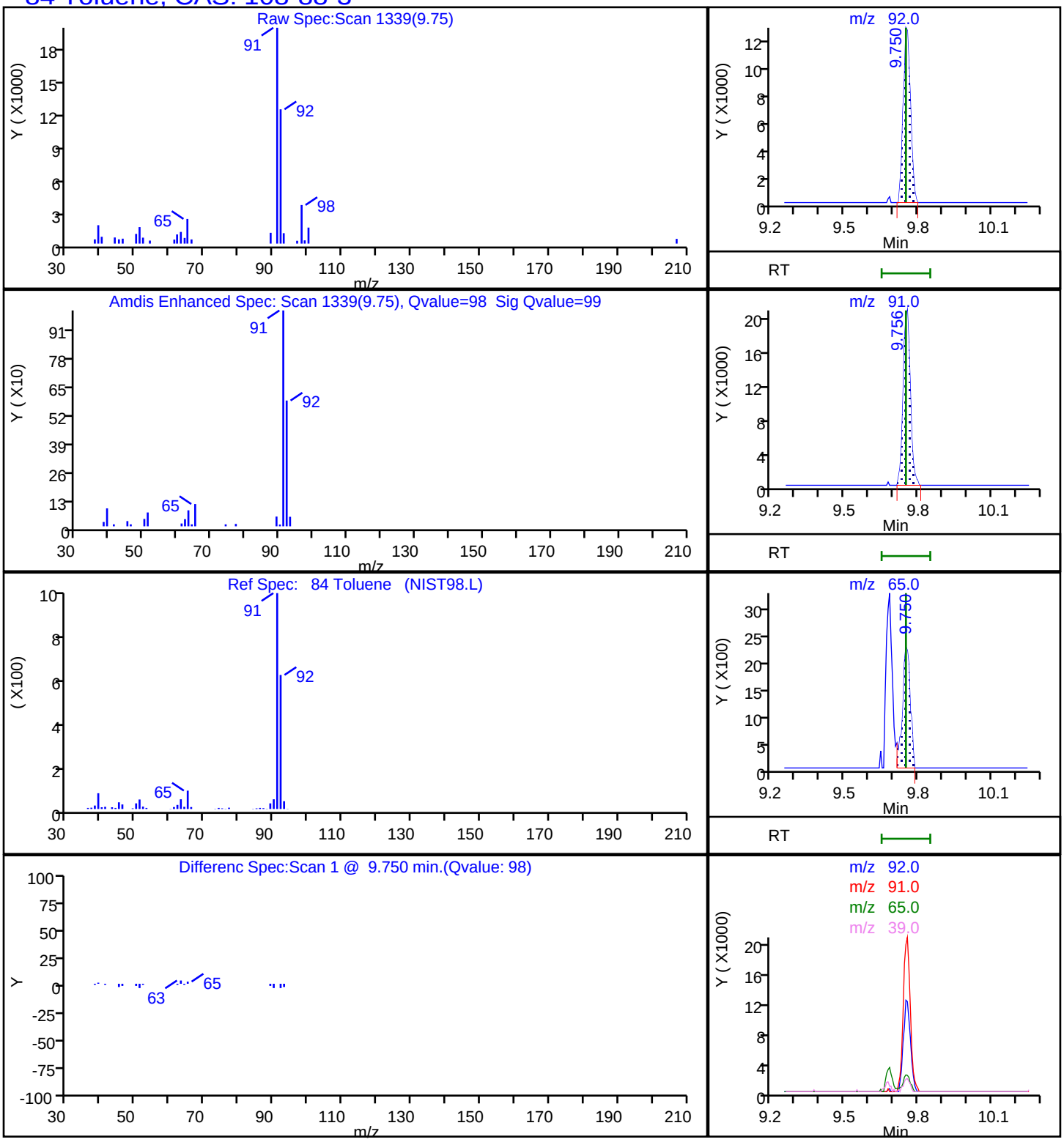
Operator ID: SRK36897 ALS Bottle#: 14 Worklist Smp#: 15

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_16334_25mL Limit Group: MSV - 8260C_D

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

84 Toluene, CAS: 108-88-3



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

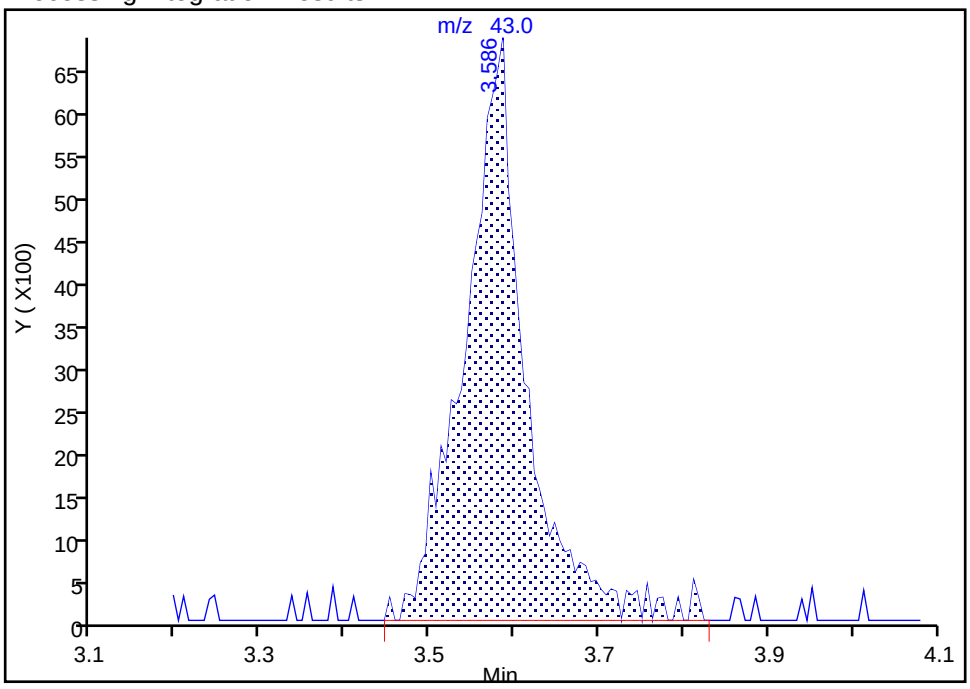
Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X14.D				
Injection Date:	05-Oct-2021 14:01:30	Instrument ID:	16334		
Lims ID:	410-56784-A-9	Lab Sample ID:	410-56784-9		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

21 Acetone, CAS: 67-64-1

Signal: 1

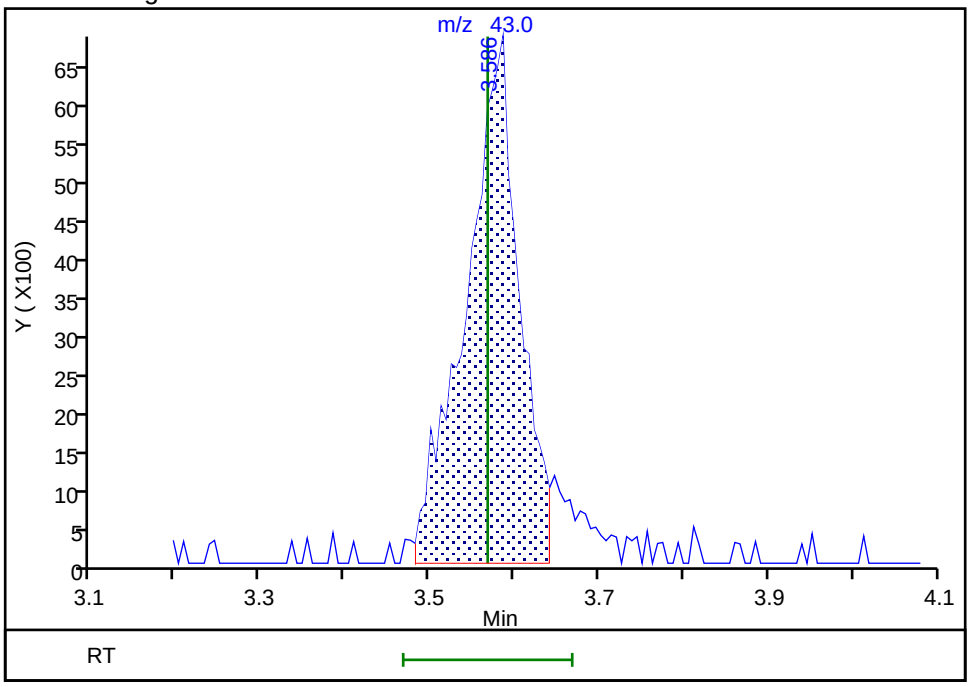
Processing Integration Results

RT: 3.59
Area: 34650
Amount: 3.806232
Amount Units: ug/l



Manual Integration Results

RT: 3.59
Area: 30361
Amount: 3.335094
Amount Units: ug/l



Reviewer: beckerk, 05-Oct-2021 17:49:36
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

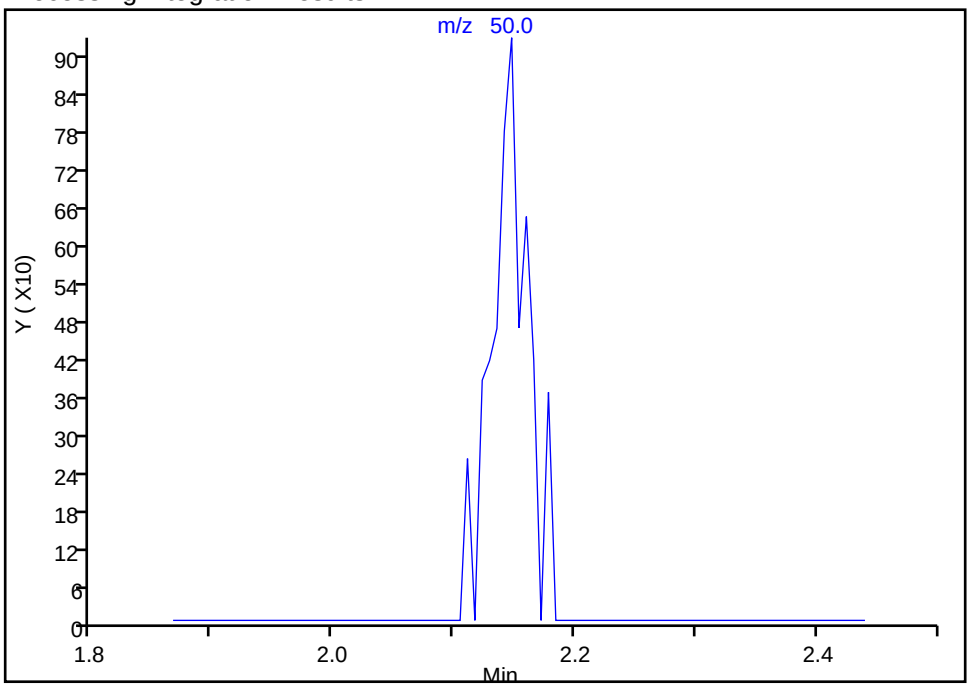
Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X14.D				
Injection Date:	05-Oct-2021 14:01:30	Instrument ID:	16334		
Lims ID:	410-56784-A-9	Lab Sample ID:	410-56784-9		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

5 Chloromethane, CAS: 74-87-3

Signal: 1

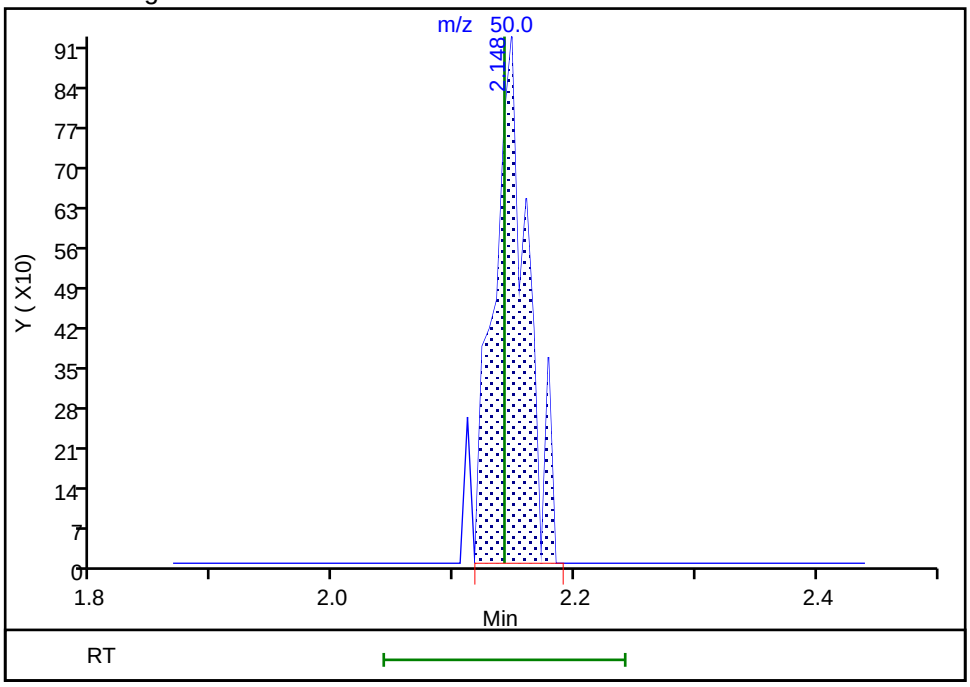
Not Detected
Expected RT: 2.14

Processing Integration Results



Manual Integration Results

RT: 2.15
Area: 1764
Amount: 0.024589
Amount Units: ug/l



Reviewer: beckerk, 05-Oct-2021 17:49:20
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

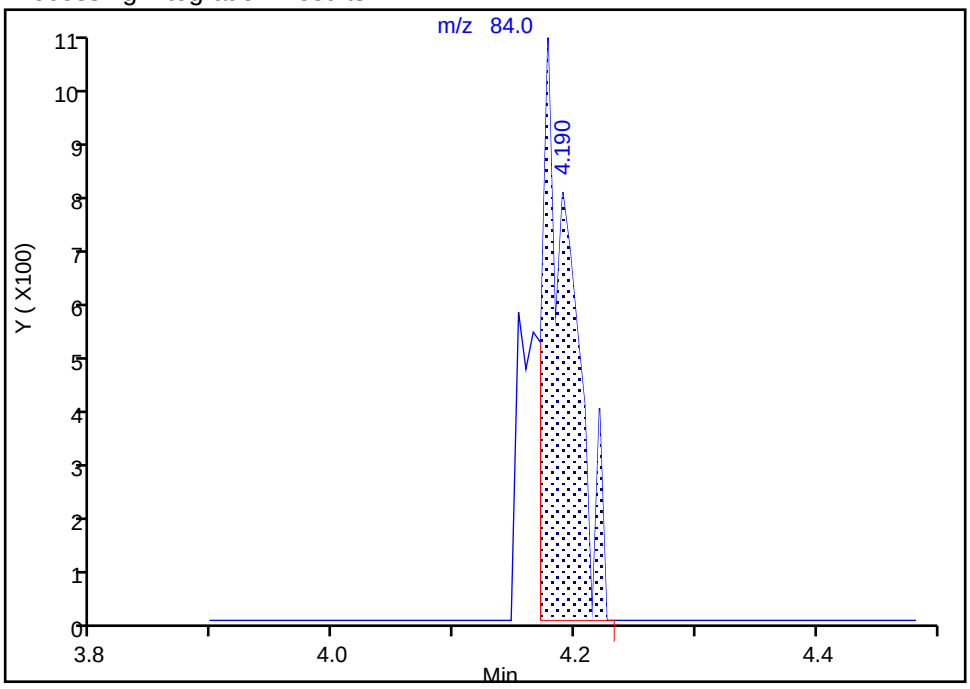
Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X14.D				
Injection Date:	05-Oct-2021 14:01:30	Instrument ID:	16334		
Lims ID:	410-56784-A-9	Lab Sample ID:	410-56784-9		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

29 Methylene Chloride, CAS: 75-09-2

Signal: 1

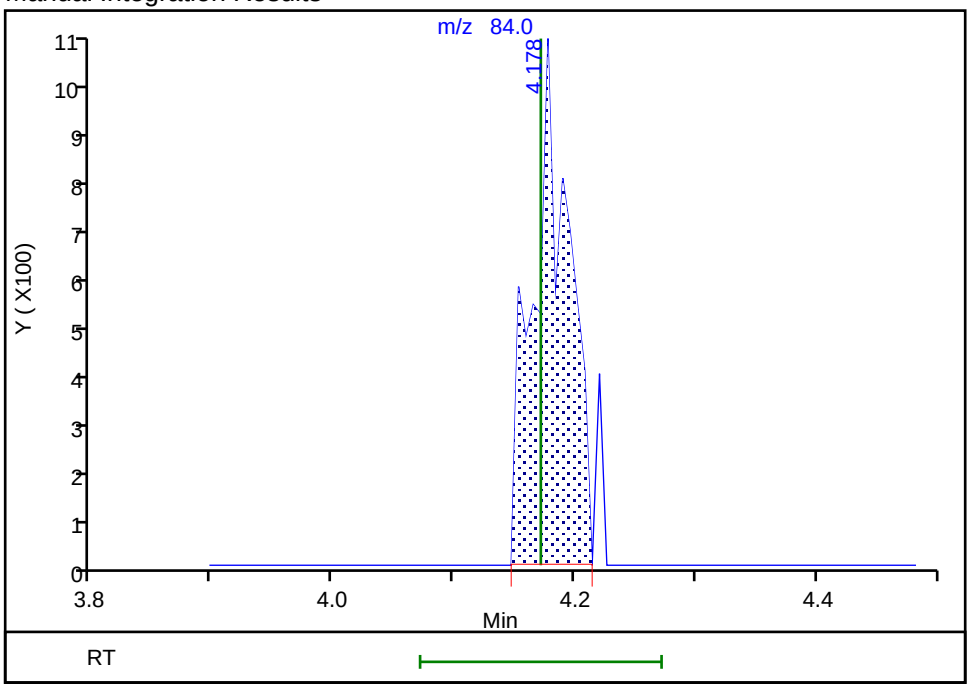
Processing Integration Results

RT: 4.19
Area: 1764
Amount: 0.032033
Amount Units: ug/l



Manual Integration Results

RT: 4.18
Area: 2176
Amount: 0.039515
Amount Units: ug/l



Reviewer: beckerk, 05-Oct-2021 17:49:45
Audit Action: Manually Integrated Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 410-56784-10

Matrix: Water Lab File ID: GO05X15.D

Analysis Method: 8260D Date Collected: 09/24/2021 11:05

Sample wt/vol: 25(mL) Date Analyzed: 10/05/2021 14:23

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.: 178764 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	^c	5.0	0.60
591-78-6	2-Hexanone	ND	^c	5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	0.70
67-64-1	Acetone	1.6	J ^c	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	0.071	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	0.084	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.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 410-56784-10

Matrix: Water Lab File ID: GO05X15.D

Analysis Method: 8260D Date Collected: 09/24/2021 11:05

Sample wt/vol: 25(mL) Date Analyzed: 10/05/2021 14:23

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.: 178764 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)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	97		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X15.D
Lims ID: 410-56784-A-10
Client ID: HD-COD-SW-7-0/1-0
Sample Type: Client
Inject. Date: 05-Oct-2021 14:23:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040685-016
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Oct-2021 17:57:16 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1642

First Level Reviewer: beckerk Date: 05-Oct-2021 17:50:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.142				ND	U
8 Vinyl chloride	62		2.257				ND	
9 Bromomethane	94		2.593				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96		3.513				ND	
21 Acetone	43	3.580	3.568	0.012	81	14620	1.55	M
25 Carbon disulfide	76		3.812				ND	7
29 Methylene Chloride	84		4.172				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.227	4.251	-0.024	94	181509	50.0	
33 Methyl tert-butyl ether	73		4.574				ND	
34 trans-1,2-Dichloroethene	96		4.580				ND	
37 1,1-Dichloroethane	63		5.251				ND	
41 2-Butanone (MEK)	43		6.062				ND	
42 cis-1,2-Dichloroethene	96	6.092	6.086	0.006	12	4246	0.0706	a
49 Chlorobromomethane	128		6.409				ND	
51 Chloroform	83	6.580	6.568	0.012	89	5171	0.0547	
$ 52 Dibromofluoromethane (Surr)	113	6.787	6.781	0.006	94	557269	9.66	
53 1,1,1-Trichloroethane	97		6.787				ND	
56 Carbon tetrachloride	117		6.994				ND	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.226	0.006	38	127150	9.92	
60 Benzene	78		7.263				ND	7
61 1,2-Dichloroethane	62		7.330				ND	7
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2314140	10.0	
68 Trichloroethene	95	8.147	8.134	0.013	94	7512	0.1266	
70 1,2-Dichloropropane	63		8.470				ND	
76 Dichlorobromomethane	83		8.817				ND	7
81 cis-1,3-Dichloropropene	75		9.366				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.549				ND	7
$ 83 Toluene-d8 (Surr)	98	9.677	9.677	0.000	93	2226708	9.53	
84 Toluene	92	9.750	9.750	0.000	99	12002	0.0837	
96 trans-1,3-Dichloropropene	75		10.012				ND	
99 1,1,2-Trichloroethane	97		10.213				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
100 Tetrachloroethene	166	10.293	10.299	-0.006	59	2604	0.0381	
102 2-Hexanone	43		10.433				ND	7
104 Chlorodibromomethane	129		10.591				ND	
105 Ethylene Dibromide	107		10.695				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.134	11.128	0.006	84	1793336	10.0	
108 Chlorobenzene	112		11.152				ND	
110 1,1,1,2-Tetrachloroethane	131		11.237				ND	
111 Ethylbenzene	91		11.243				ND	7
S 109 Xylenes, Total	106				0		0.0697	
112 m-Xylene & p-Xylene	106	11.359	11.353	0.006	96	7507	0.0697	
113 o-Xylene	106		11.682				ND	7
114 Styrene	104		11.701				ND	7
115 Bromoform	173		11.853				ND	
$ 119 4-Bromofluorobenzene (Surr)	95	12.128	12.121	0.007	90	831587	9.74	
120 1,1,2,2-Tetrachloroethane	83		12.231				ND	
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	979121	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_29_826ISS_00023 Amount Added: 1.00 Units: uL Run Reagent

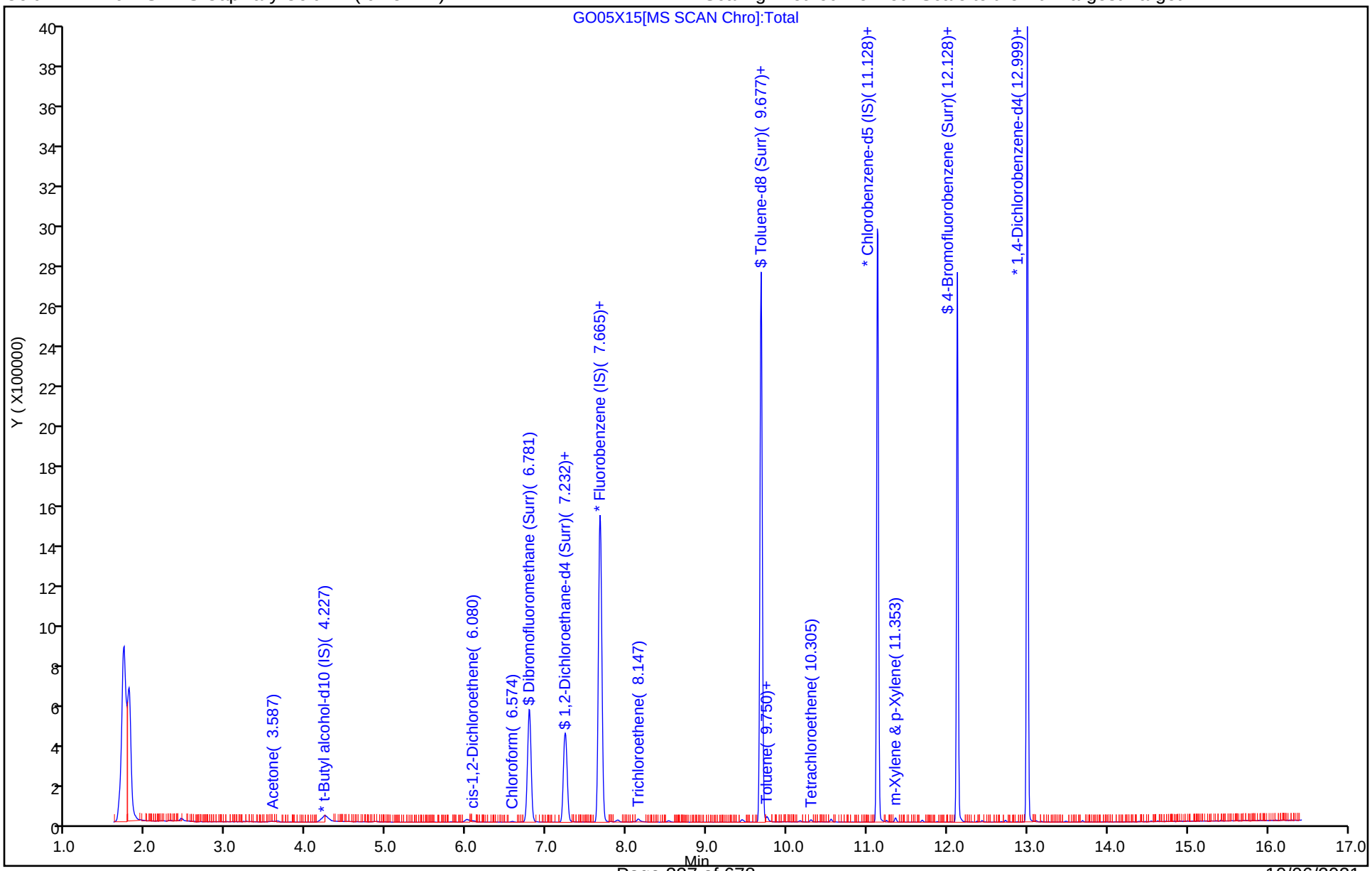
Report Date: 05-Oct-2021 17:57:29 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X15.D

Injection Date:	05-Oct-2021 14:23:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	410-56784-A-10	Lab Sample ID:	410-56784-10	Worklist Smp#:	16
Client ID:	HD-COD-SW-7-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X15.D				
Lims ID:	410-56784-A-10				
Client ID:	HD-COD-SW-7-0/1-0				
Sample Type:	Client				
Inject. Date:	05-Oct-2021 14:23:30	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0040685-016				
Operator ID:	SRK36897	Instrument ID:	16334		
Method:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\MSV_16334_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	05-Oct-2021 17:57:16	Calib Date:	27-Jul-2021 21:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1642				

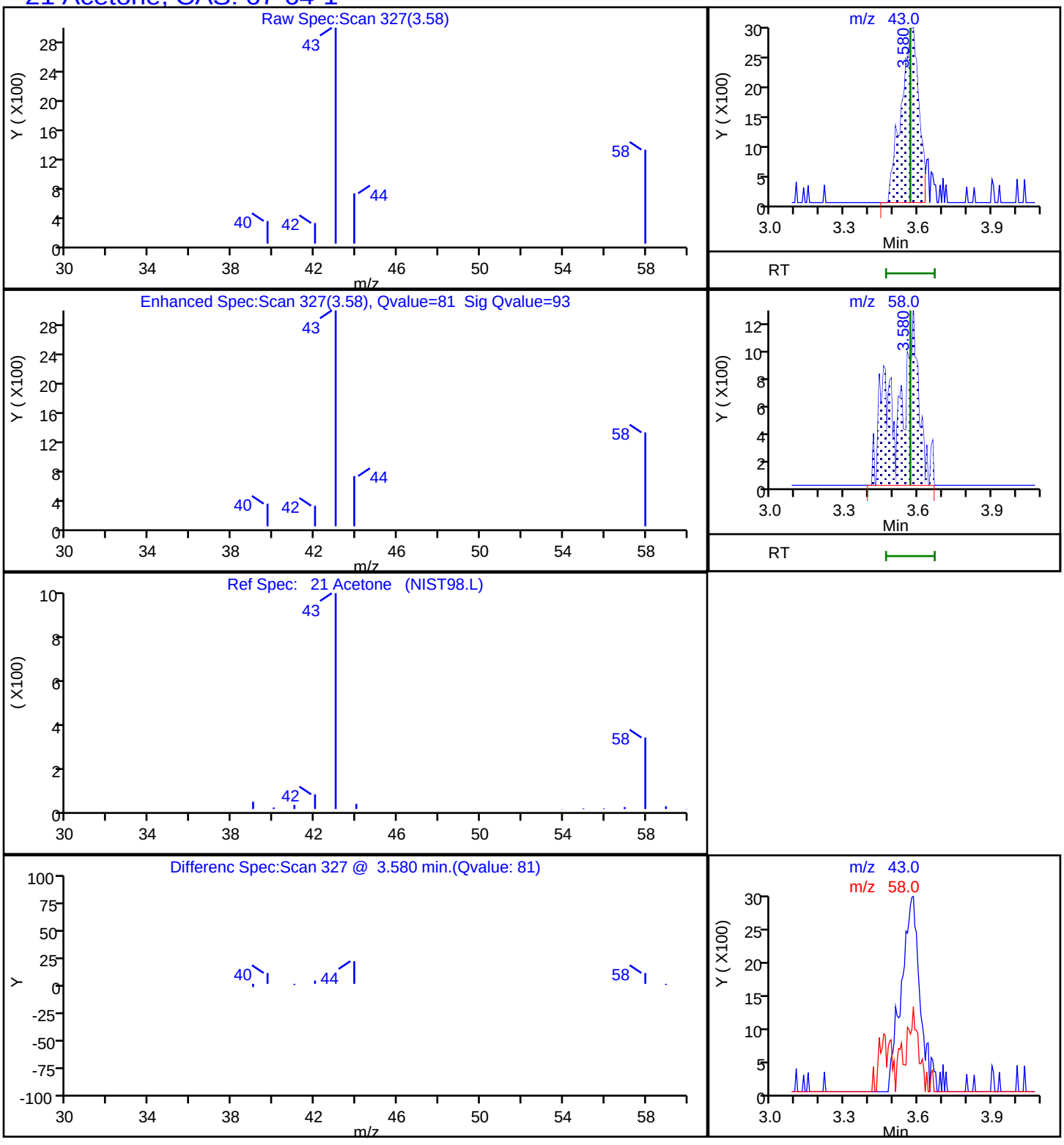
First Level Reviewer: beckerk Date: 05-Oct-2021 17:50:51

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	10.0	9.66	96.64
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.92	99.15
$ 83 Toluene-d8 (Surr)	10.0	9.53	95.35
$ 119 4-Bromofluorobenzene (Surr)	10.0	9.74	97.41

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X15.D				
Injection Date:	05-Oct-2021 14:23:30	Instrument ID:	16334		
Lims ID:	410-56784-A-10	Lab Sample ID:	410-56784-10		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

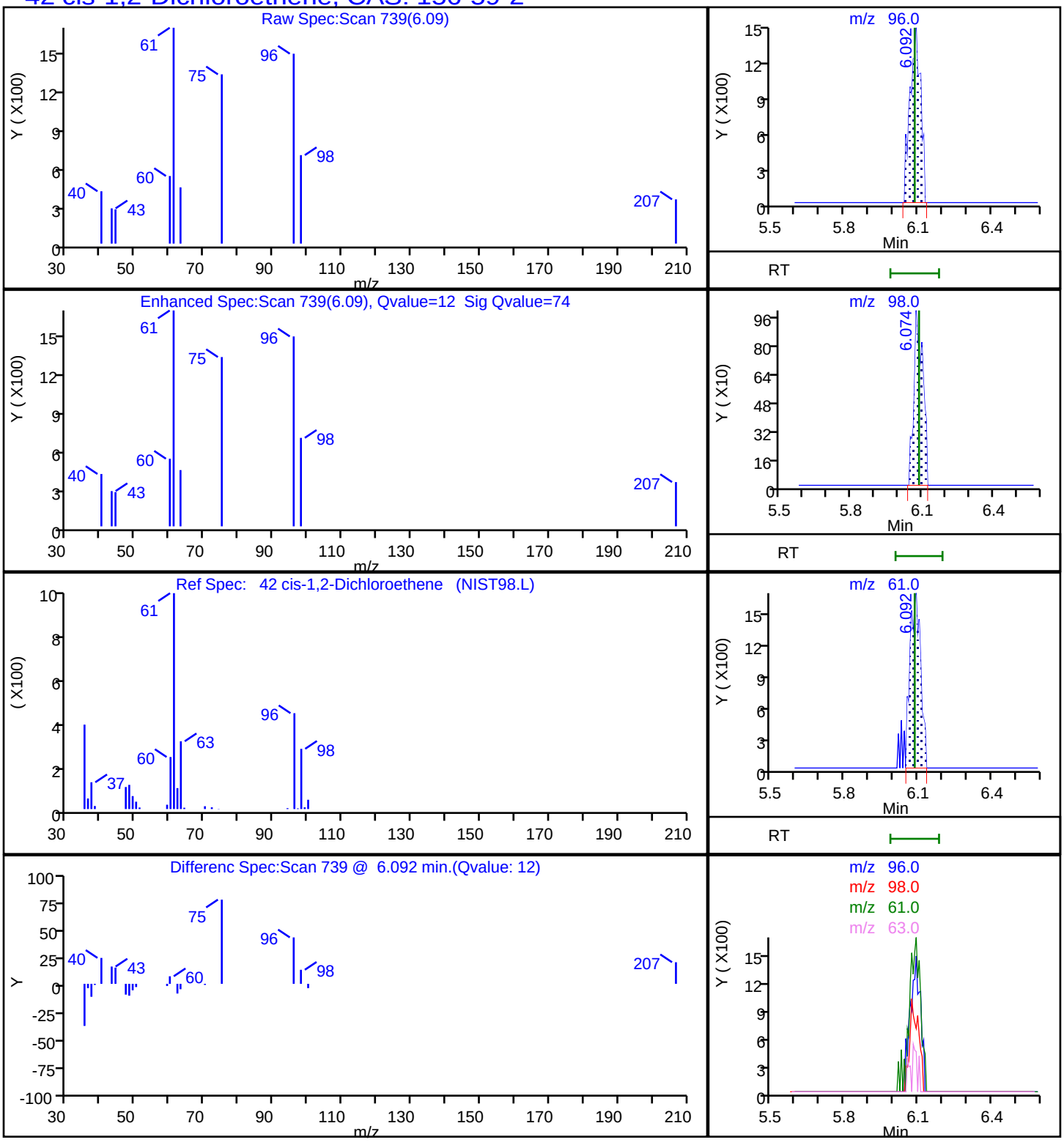
21 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X15.D
Injection Date: 05-Oct-2021 14:23:30 Instrument ID: 16334
Lims ID: 410-56784-A-10 Lab Sample ID: 410-56784-10
Client ID: HD-COD-SW-7-0/1-0
Operator ID: SRK36897 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

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

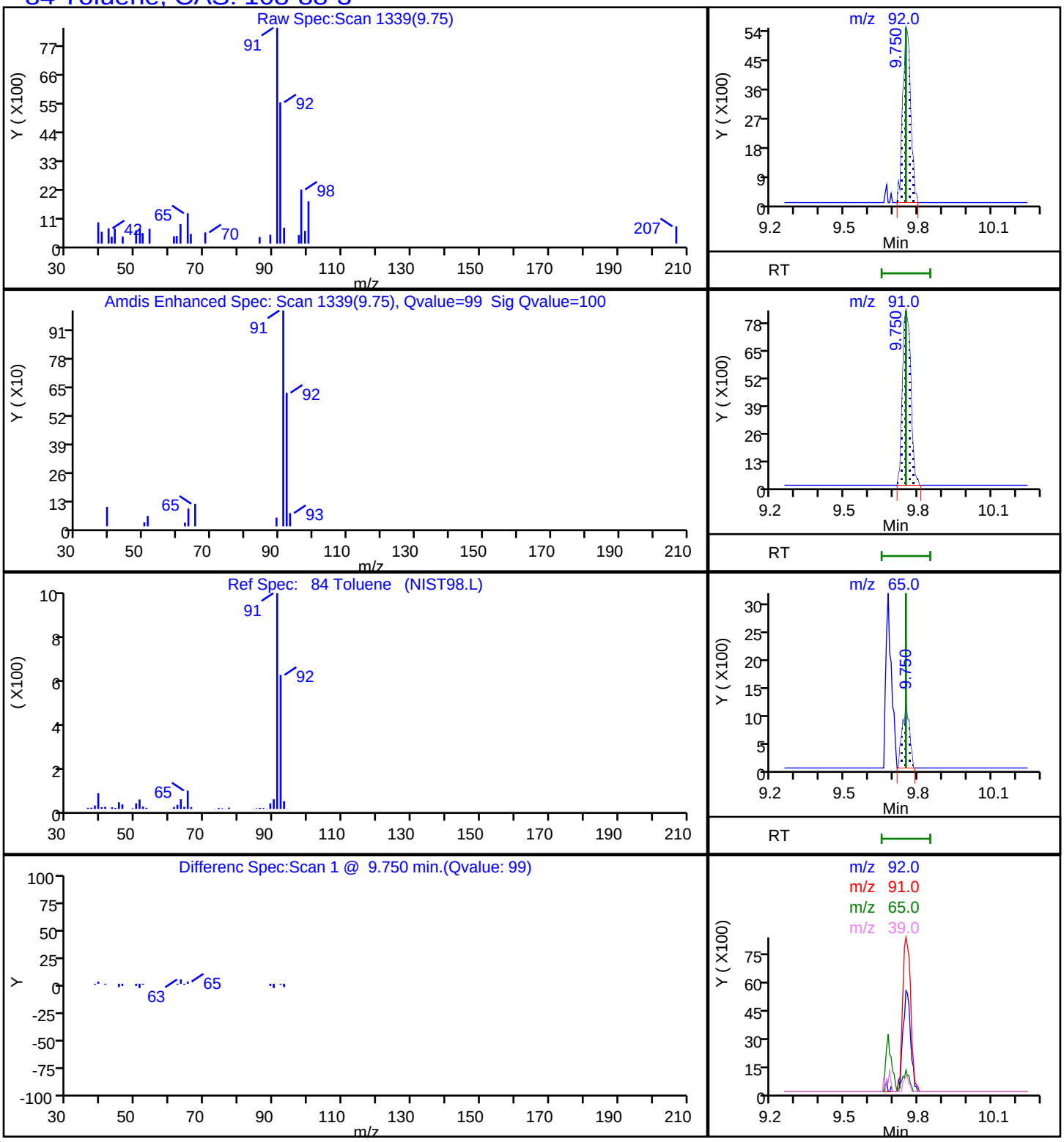


Report Date: 05-Oct-2021 17:57:29 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X15.D				
Injection Date:	05-Oct-2021 14:23:30	Instrument ID:	16334		
Lims ID:	410-56784-A-10	Lab Sample ID:	410-56784-10		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

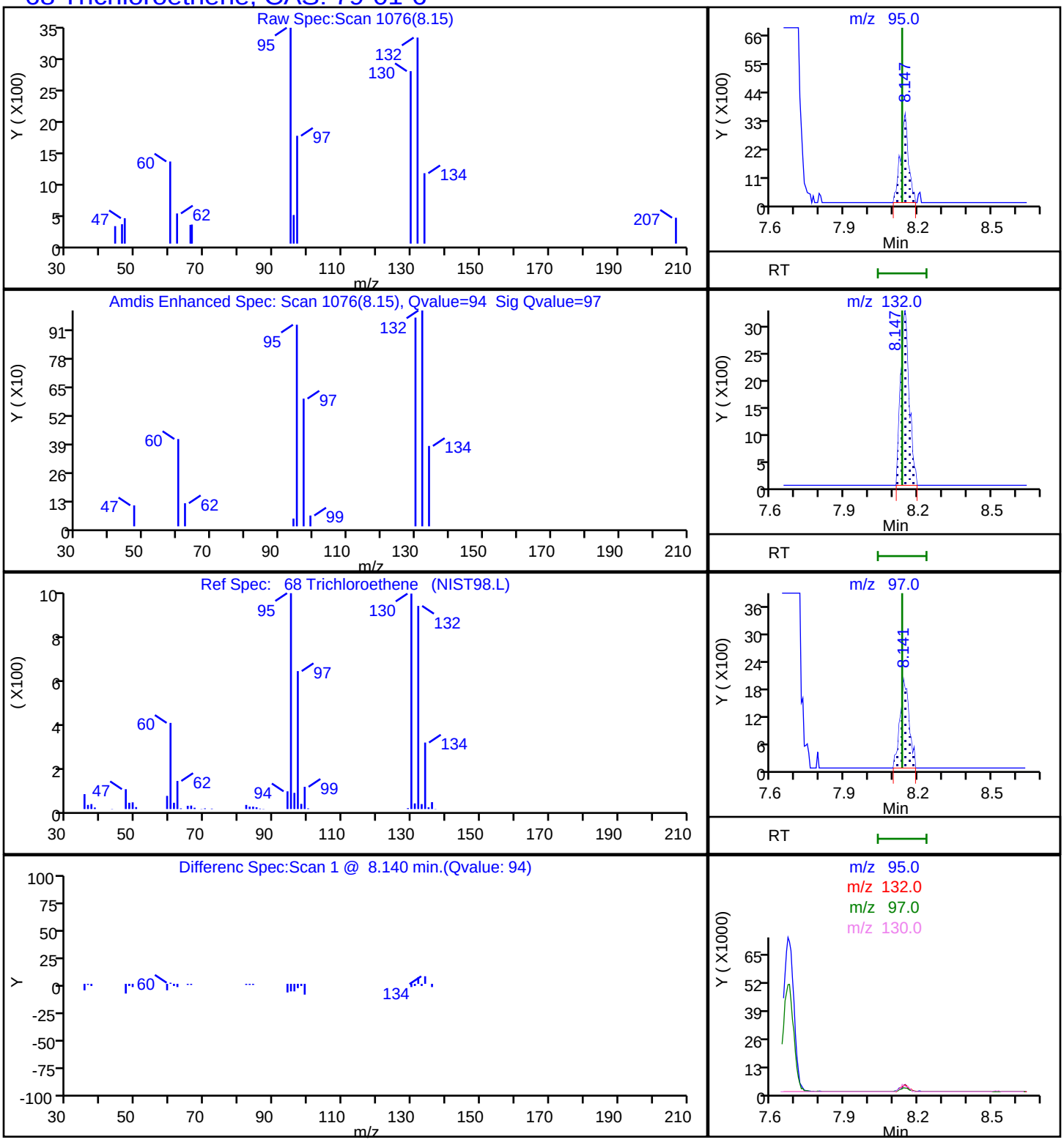
84 Toluene, CAS: 108-88-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X15.D				
Injection Date:	05-Oct-2021 14:23:30	Instrument ID:	16334		
Lims ID:	410-56784-A-10	Lab Sample ID:	410-56784-10		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

68 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

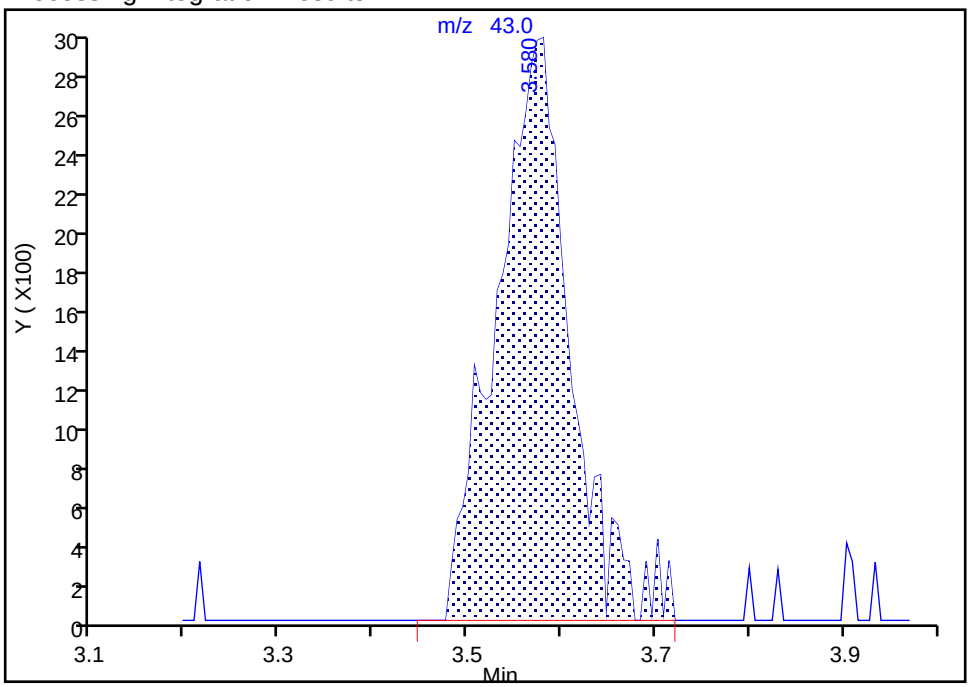
Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X15.D				
Injection Date:	05-Oct-2021 14:23:30	Instrument ID:	16334		
Lims ID:	410-56784-A-10	Lab Sample ID:	410-56784-10		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

21 Acetone, CAS: 67-64-1

Signal: 1

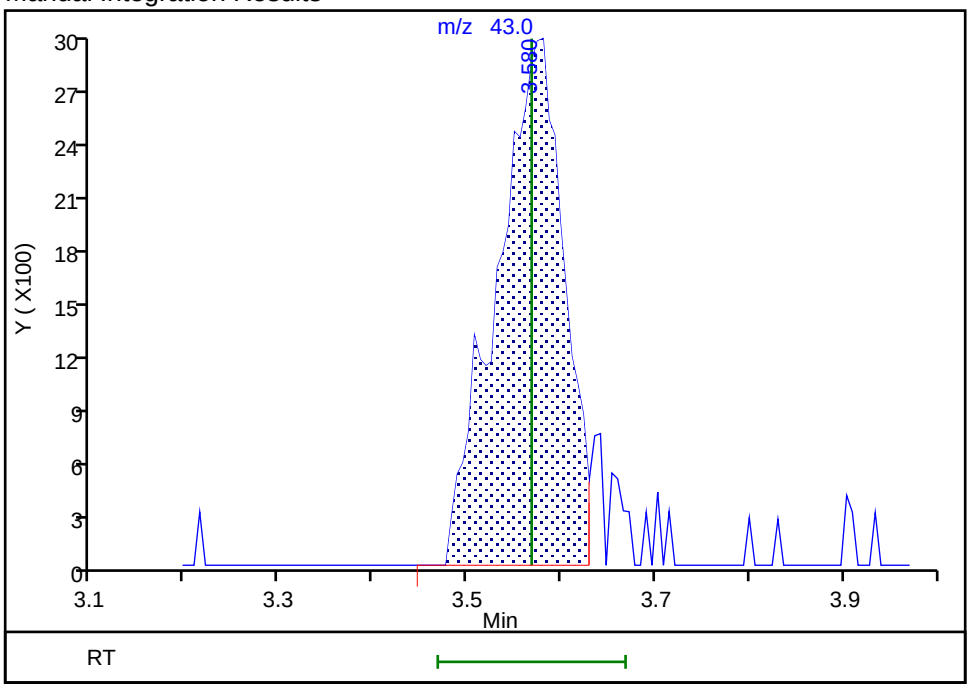
Processing Integration Results

RT: 3.58
Area: 16108
Amount: 1.713222
Amount Units: ug/l



Manual Integration Results

RT: 3.58
Area: 14620
Amount: 1.554960
Amount Units: ug/l



Reviewer: beckerk, 05-Oct-2021 17:50:32
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

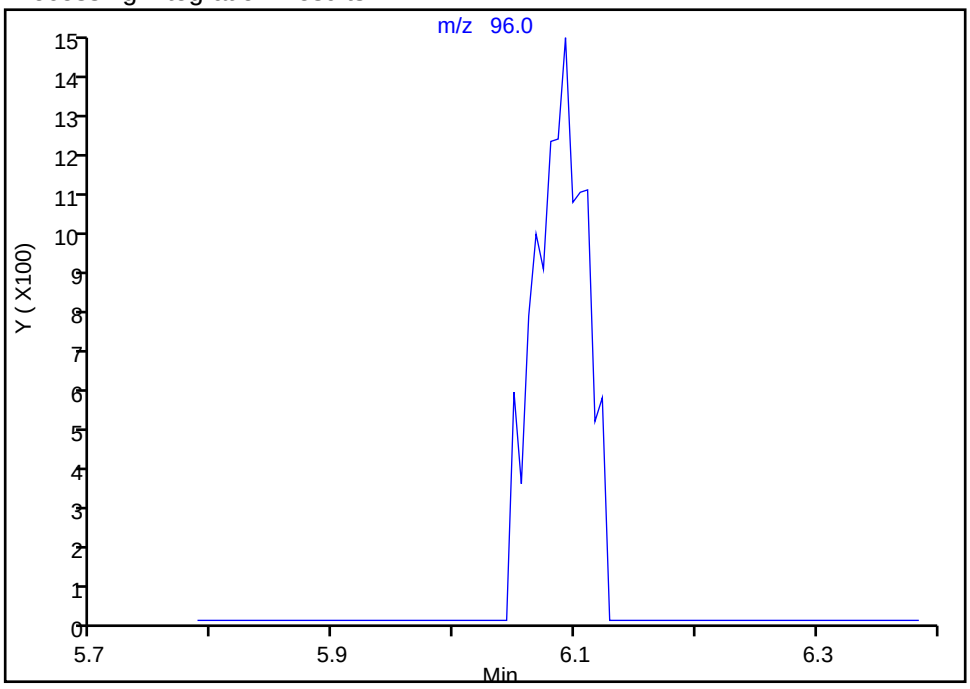
Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X15.D				
Injection Date:	05-Oct-2021 14:23:30	Instrument ID:	16334		
Lims ID:	410-56784-A-10	Lab Sample ID:	410-56784-10		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

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

Signal: 1

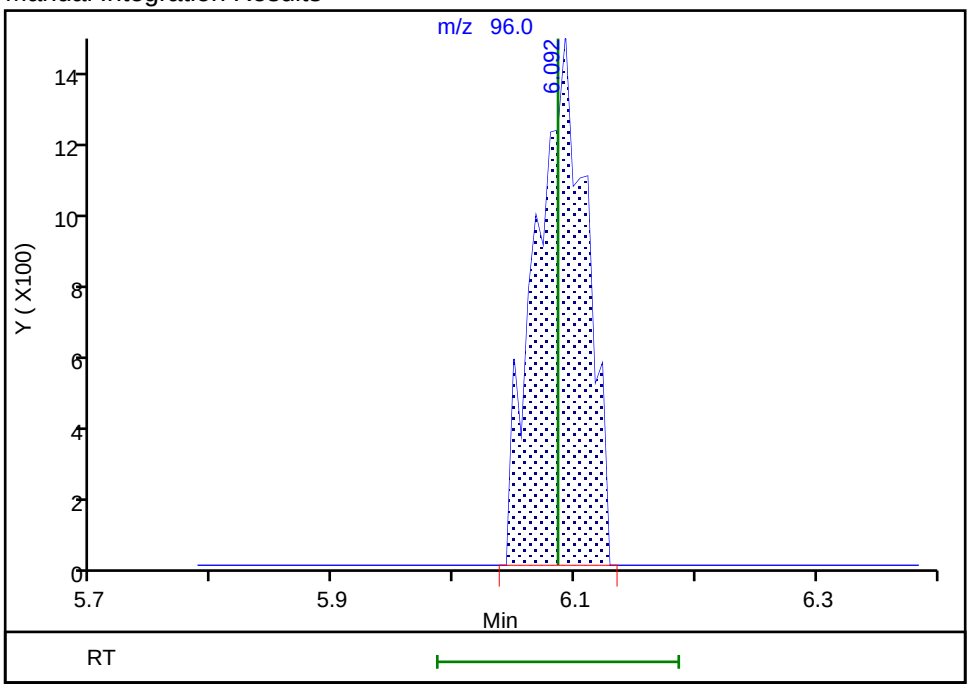
Not Detected
Expected RT: 6.09

Processing Integration Results



Manual Integration Results

RT: 6.09
Area: 4246
Amount: 0.070578
Amount Units: ug/l



Reviewer: beckerk, 05-Oct-2021 17:50:38
Audit Action: Assigned Compound ID Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 410-56784-11

Matrix: Water Lab File ID: GO05X16.D

Analysis Method: 8260D Date Collected: 09/24/2021 12:30

Sample wt/vol: 25(mL) Date Analyzed: 10/05/2021 14:45

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.: 178764 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	^c	5.0	0.60
591-78-6	2-Hexanone	ND	^c	5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	0.70
67-64-1	Acetone	3.2	J ^c	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	0.12	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.080	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	0.090	J	0.50	0.060
108-88-3	Toluene	0.29	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	0.11	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 410-56784-11

Matrix: Water Lab File ID: GO05X16.D

Analysis Method: 8260D Date Collected: 09/24/2021 12:30

Sample wt/vol: 25(mL) Date Analyzed: 10/05/2021 14:45

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.: 178764 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)	100		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	95		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X16.D
Lims ID: 410-56784-A-11
Client ID: HD-COD-SW-9-0/1-0
Sample Type: Client
Inject. Date: 05-Oct-2021 14:45:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040685-017
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Oct-2021 17:57:16 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1642

First Level Reviewer: beckerk Date: 05-Oct-2021 17:52:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.142				ND	U
8 Vinyl chloride	62		2.257				ND	
9 Bromomethane	94		2.593				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96		3.513				ND	
21 Acetone	43	3.587	3.568	0.019	96	30803	3.16	M
25 Carbon disulfide	76		3.812				ND	7
29 Methylene Chloride	84	4.178	4.172	0.006	79	2382	0.0427	
* 30 t-Butyl alcohol-d10 (IS)	65	4.245	4.251	-0.006	96	188282	50.0	
33 Methyl tert-butyl ether	73		4.574				ND	
34 trans-1,2-Dichloroethene	96		4.580				ND	
37 1,1-Dichloroethane	63		5.251				ND	
41 2-Butanone (MEK)	43		6.062				ND	
42 cis-1,2-Dichloroethene	96	6.080	6.086	-0.006	10	4846	0.0800	a
49 Chlorobromomethane	128		6.409				ND	
51 Chloroform	83	6.568	6.568	0.000	91	11182	0.1174	
$ 52 Dibromofluoromethane (Surr)	113	6.787	6.781	0.006	93	554737	9.55	
53 1,1,1-Trichloroethane	97		6.787				ND	
56 Carbon tetrachloride	117		6.994				ND	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.226	0.006	38	128602	9.95	
60 Benzene	78		7.263				ND	7
61 1,2-Dichloroethane	62		7.330				ND	
* 64 Fluorobenzene (IS)	96	7.671	7.665	0.006	99	2331424	10.0	
68 Trichloroethene	95	8.153	8.134	0.019	96	6509	0.1089	
70 1,2-Dichloropropane	63		8.470				ND	
76 Dichlorobromomethane	83		8.817				ND	7
81 cis-1,3-Dichloropropene	75		9.366				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.549				ND	7
$ 83 Toluene-d8 (Surr)	98	9.677	9.677	0.000	93	2236499	9.61	
84 Toluene	92	9.756	9.750	0.006	97	41524	0.2905	
96 trans-1,3-Dichloropropene	75		10.012				ND	
99 1,1,2-Trichloroethane	97		10.213				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
100 Tetrachloroethene	166	10.299	10.299	0.000	95	6097	0.0896	
102 2-Hexanone	43		10.433				ND	7
104 Chlorodibromomethane	129		10.591				ND	
105 Ethylene Dibromide	107		10.695				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.134	11.128	0.006	84	1786601	10.0	
108 Chlorobenzene	112		11.152				ND	
110 1,1,1,2-Tetrachloroethane	131		11.237				ND	
111 Ethylbenzene	91		11.243				ND	7
S 109 Xylenes, Total	106				0		0.1416	
112 m-Xylene & p-Xylene	106	11.353	11.353	0.000	98	10981	0.1023	
113 o-Xylene	106	11.683	11.682	0.001	96	4174	0.0393	
114 Styrene	104		11.701				ND	7
115 Bromoform	173		11.853				ND	
$ 119 4-Bromofluorobenzene (Surr)	95	12.128	12.121	0.007	91	832123	9.78	
120 1,1,2,2-Tetrachloroethane	83		12.231				ND	
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	975345	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_29_826ISS_00023 Amount Added: 1.00 Units: uL Run Reagent

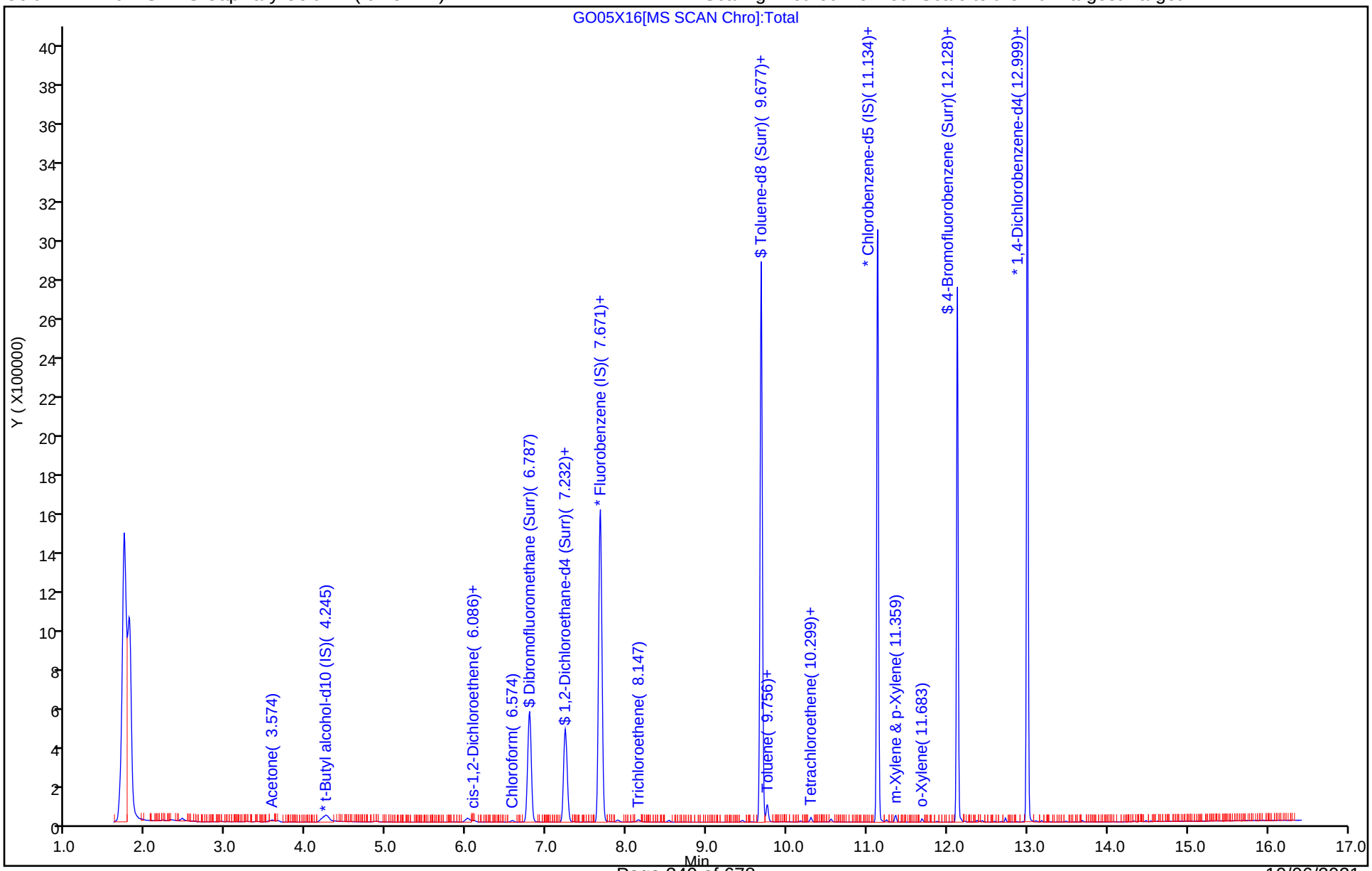
Report Date: 05-Oct-2021 17:57:30 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X16.D

Injection Date:	05-Oct-2021 14:45:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	410-56784-A-11	Lab Sample ID:	410-56784-11	Worklist Smp#:	17
Client ID:	HD-COD-SW-9-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X16.D				
Lims ID:	410-56784-A-11				
Client ID:	HD-COD-SW-9-0/1-0				
Sample Type:	Client				
Inject. Date:	05-Oct-2021 14:45:30	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0040685-017				
Operator ID:	SRK36897	Instrument ID:	16334		
Method:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\MSV_16334_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	05-Oct-2021 17:57:16	Calib Date:	27-Jul-2021 21:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1642				

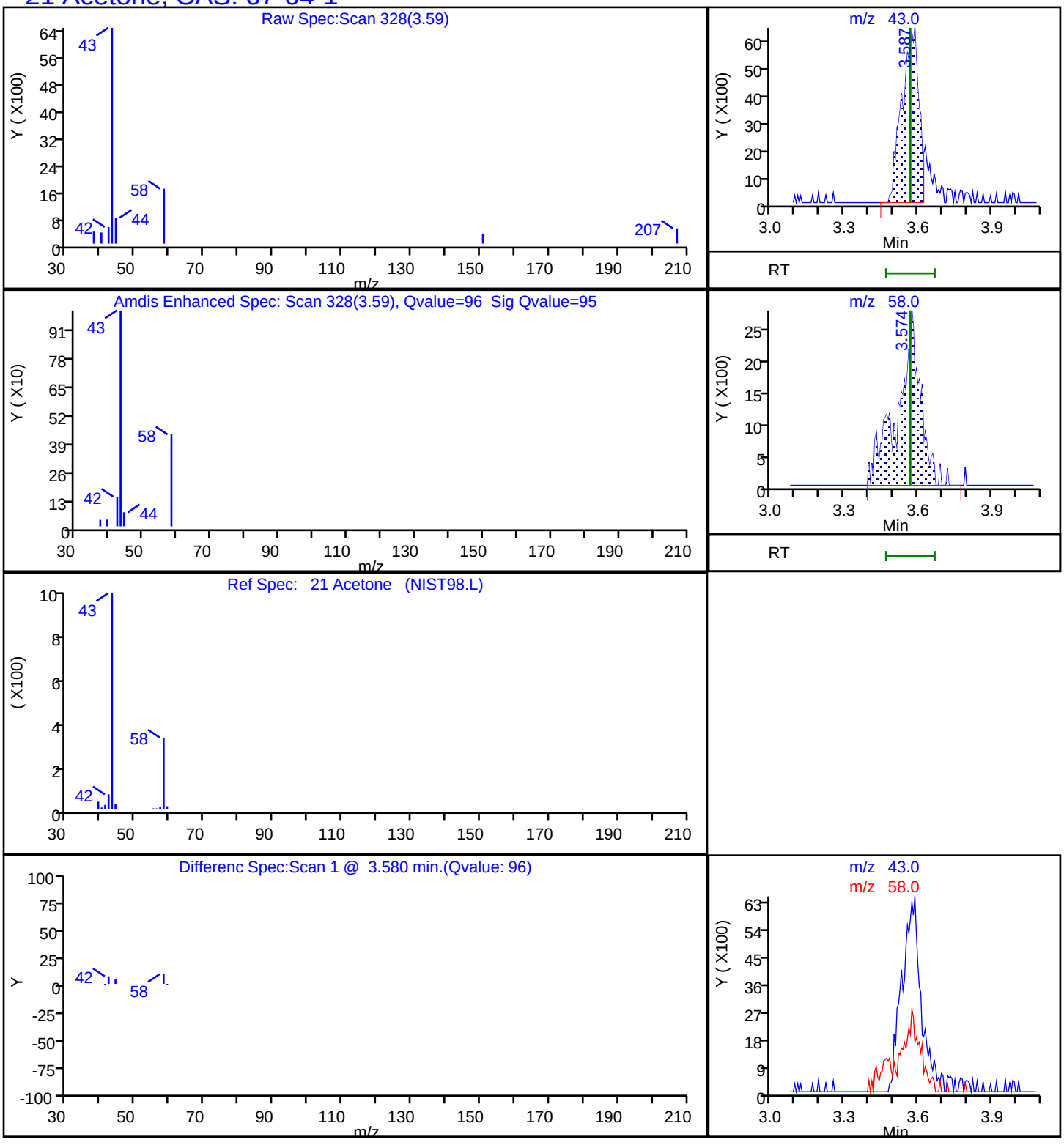
First Level Reviewer: beckerk Date: 05-Oct-2021 17:52:19

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	10.0	9.55	95.49
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.95	99.54
$ 83 Toluene-d8 (Surr)	10.0	9.61	96.13
$ 119 4-Bromofluorobenzene (Surr)	10.0	9.78	97.84

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X16.D				
Injection Date:	05-Oct-2021 14:45:30	Instrument ID:	16334		
Lims ID:	410-56784-A-11	Lab Sample ID:	410-56784-11		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

21 Acetone, CAS: 67-64-1

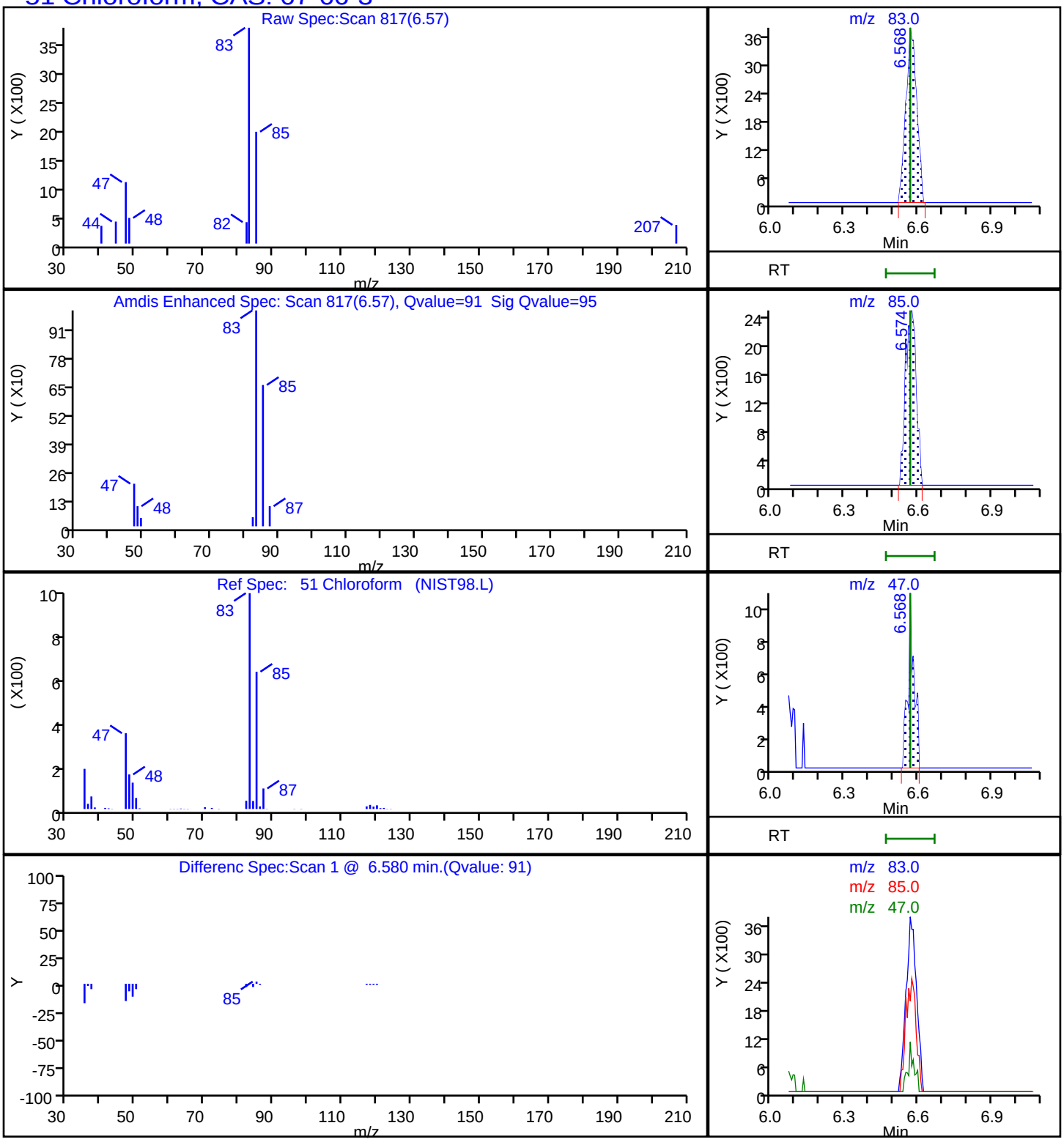


Report Date: 05-Oct-2021 17:57:31 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X16.D				
Injection Date:	05-Oct-2021 14:45:30	Instrument ID:	16334		
Lims ID:	410-56784-A-11	Lab Sample ID:	410-56784-11		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

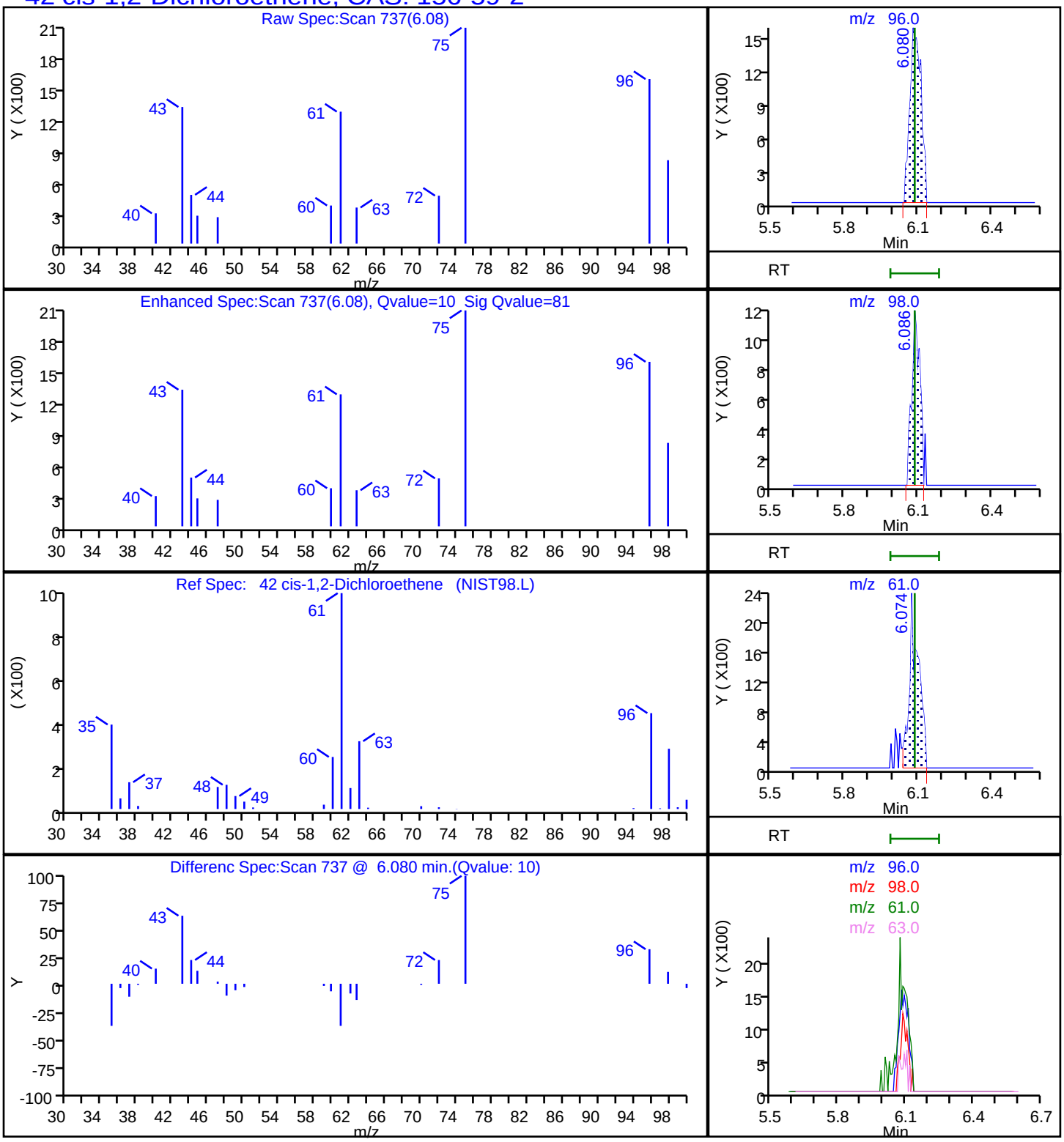
51 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X16.D				
Injection Date:	05-Oct-2021 14:45:30	Instrument ID:	16334		
Lims ID:	410-56784-A-11	Lab Sample ID:	410-56784-11		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

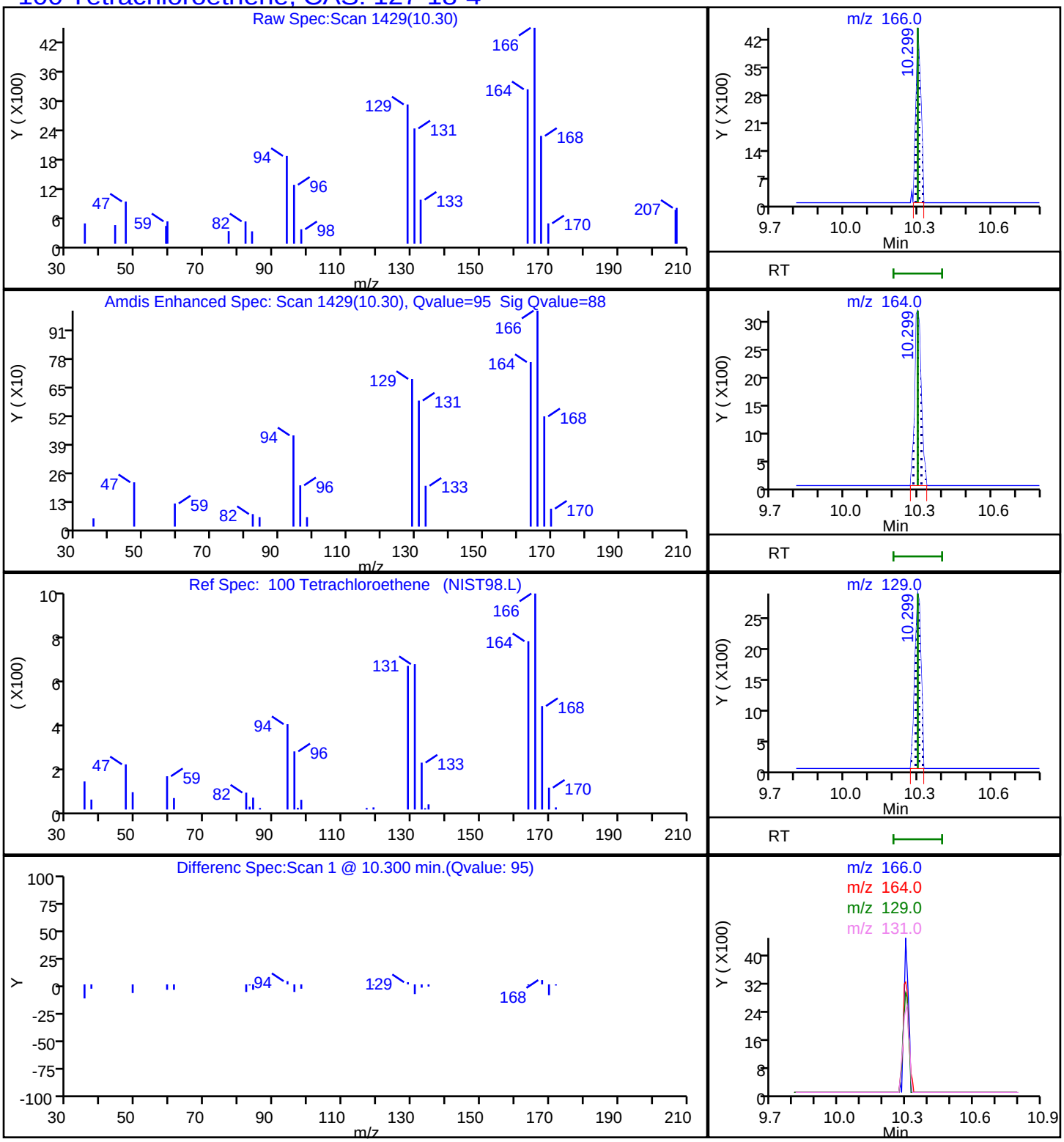
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X16.D				
Injection Date:	05-Oct-2021 14:45:30	Instrument ID:	16334		
Lims ID:	410-56784-A-11	Lab Sample ID:	410-56784-11		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

100 Tetrachloroethene, CAS: 127-18-4



Report Date: 05-Oct-2021 17:57:31 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X16.D

Injection Date: 05-Oct-2021 14:45:30 Instrument ID: 16334

Lims ID: 410-56784-A-11 Lab Sample ID: 410-56784-11

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

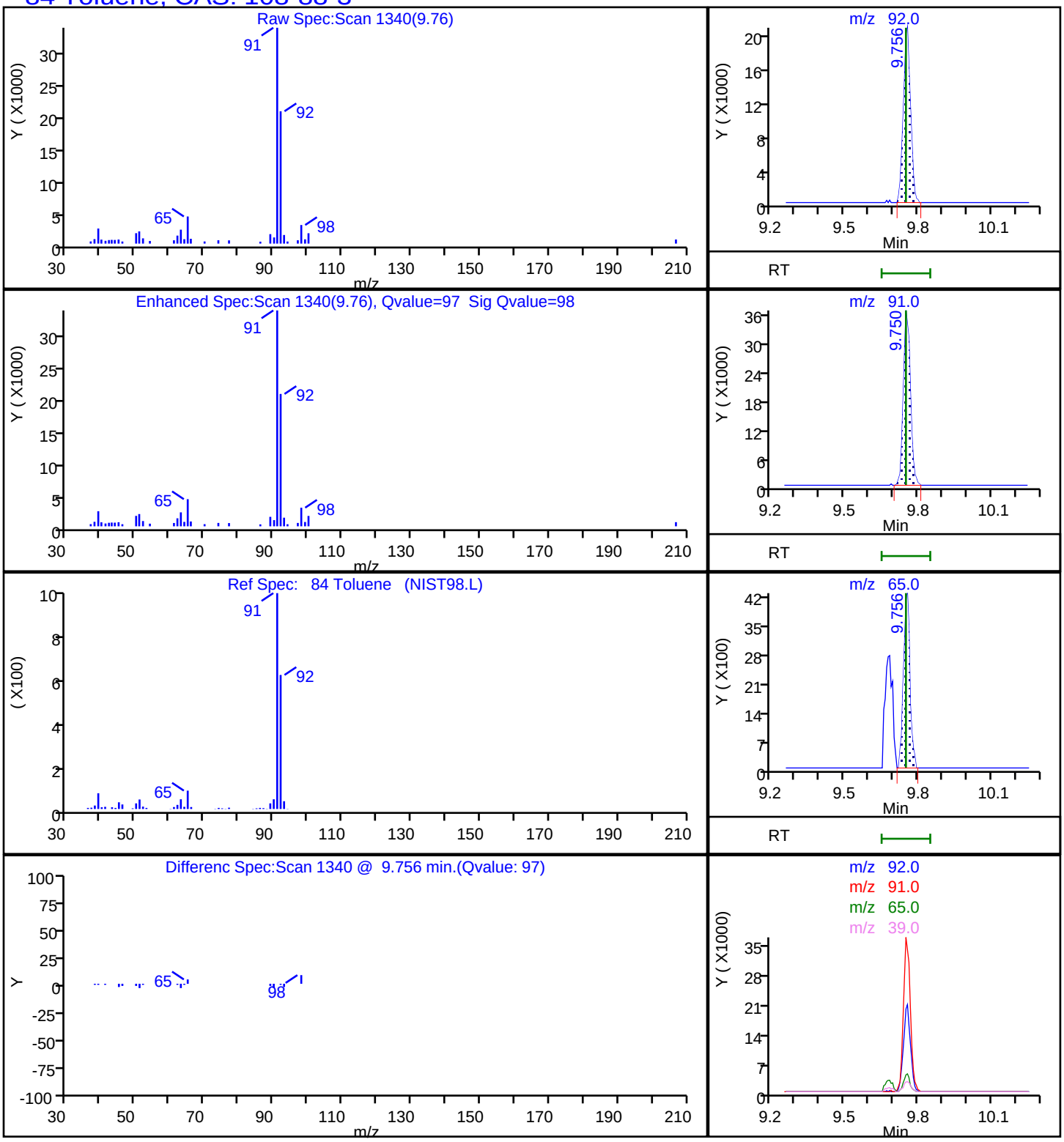
Operator ID: SRK36897 ALS Bottle#: 16 Worklist Smp#: 17

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_16334_25mL Limit Group: MSV - 8260C_D

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

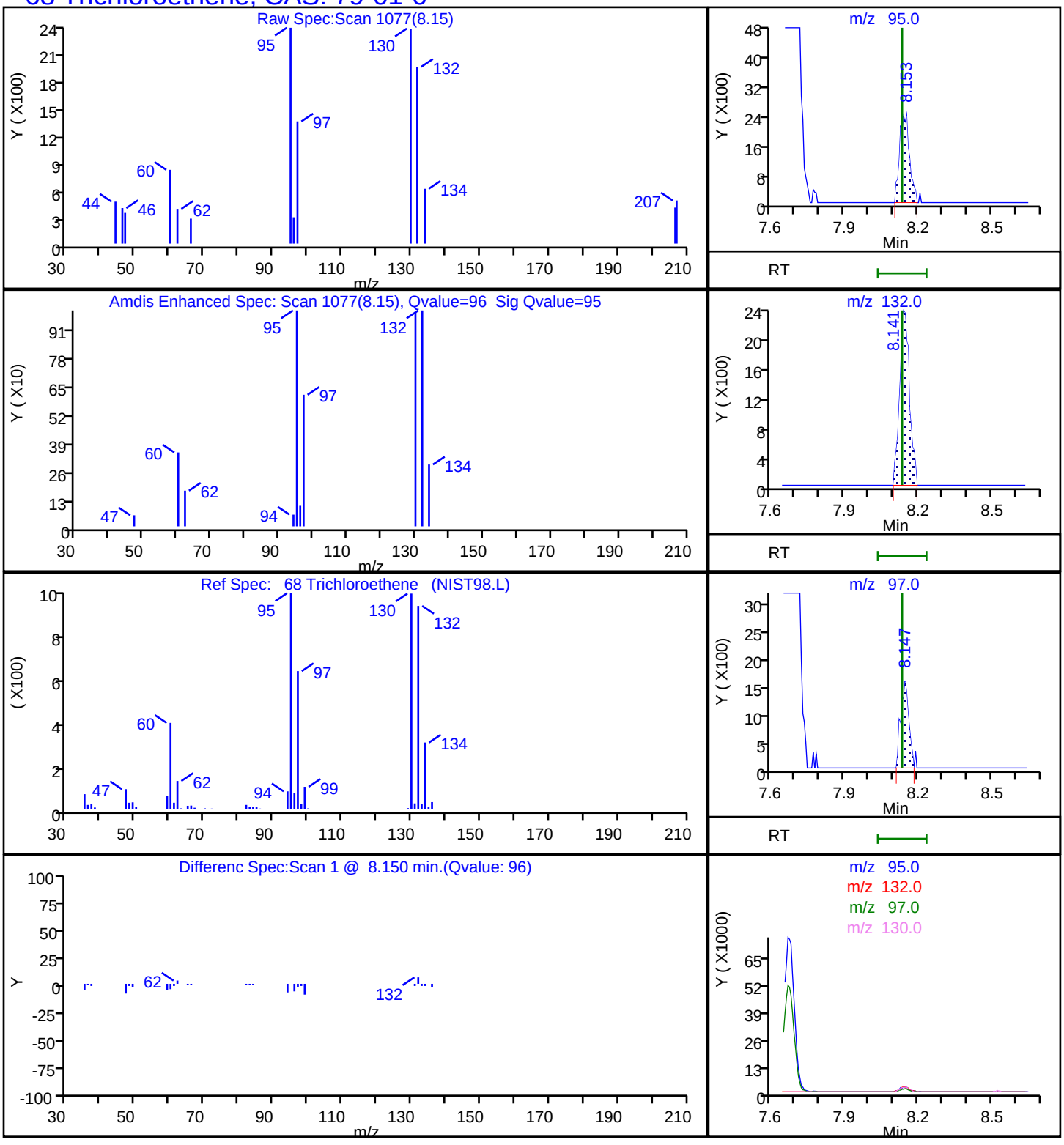
84 Toluene, CAS: 108-88-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X16.D				
Injection Date:	05-Oct-2021 14:45:30	Instrument ID:	16334		
Lims ID:	410-56784-A-11	Lab Sample ID:	410-56784-11		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

68 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

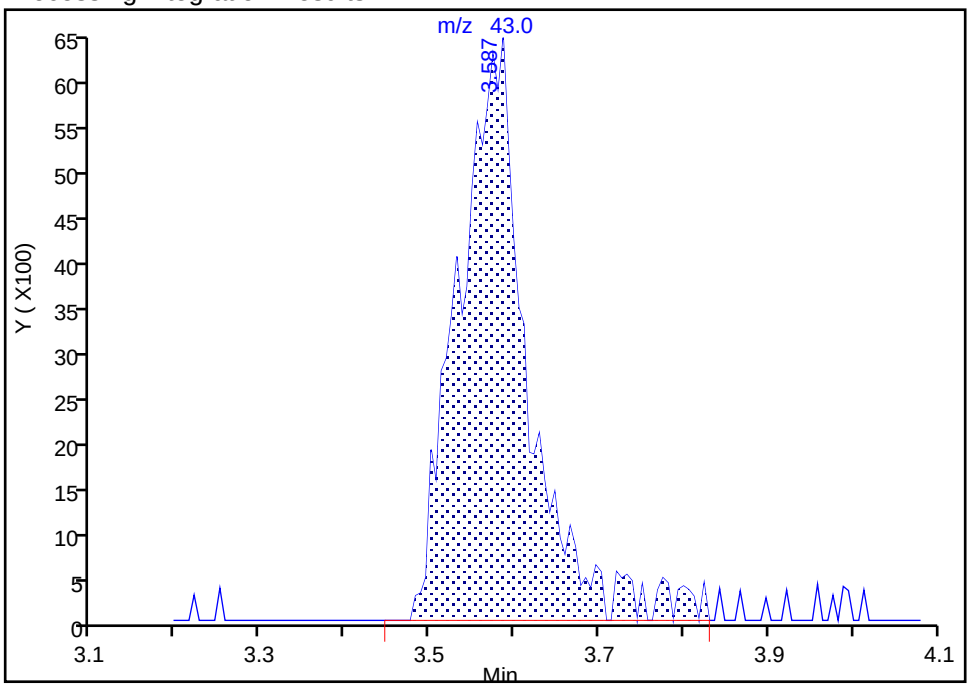
Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X16.D				
Injection Date:	05-Oct-2021 14:45:30	Instrument ID:	16334		
Lims ID:	410-56784-A-11	Lab Sample ID:	410-56784-11		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

21 Acetone, CAS: 67-64-1

Signal: 1

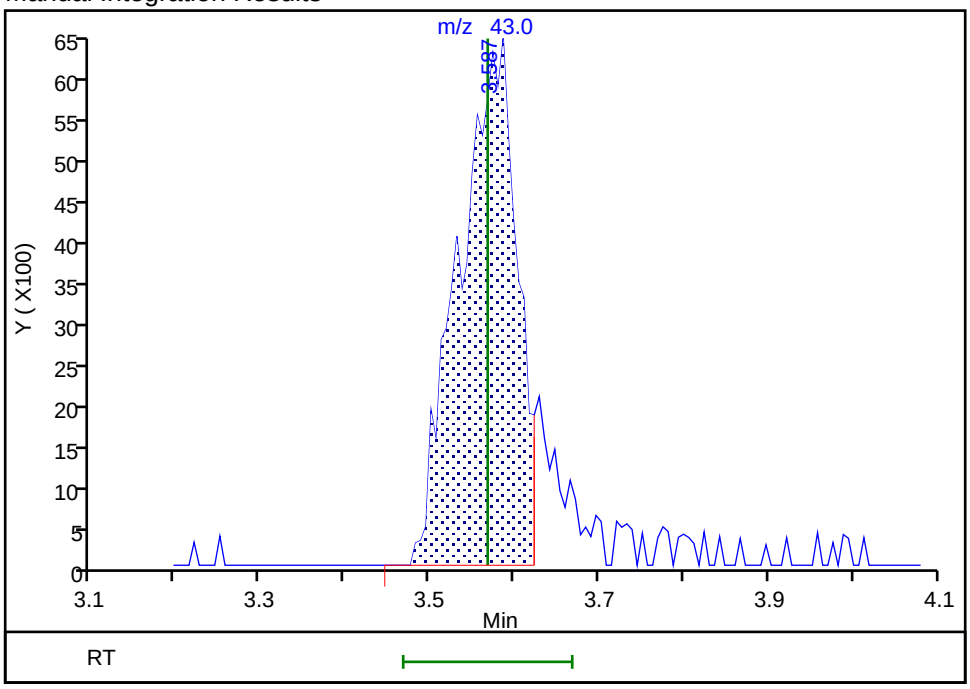
Processing Integration Results

RT: 3.59
Area: 37140
Amount: 3.808055
Amount Units: ug/l



Manual Integration Results

RT: 3.59
Area: 30803
Amount: 3.158307
Amount Units: ug/l



Reviewer: beckerk, 05-Oct-2021 17:51:08
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

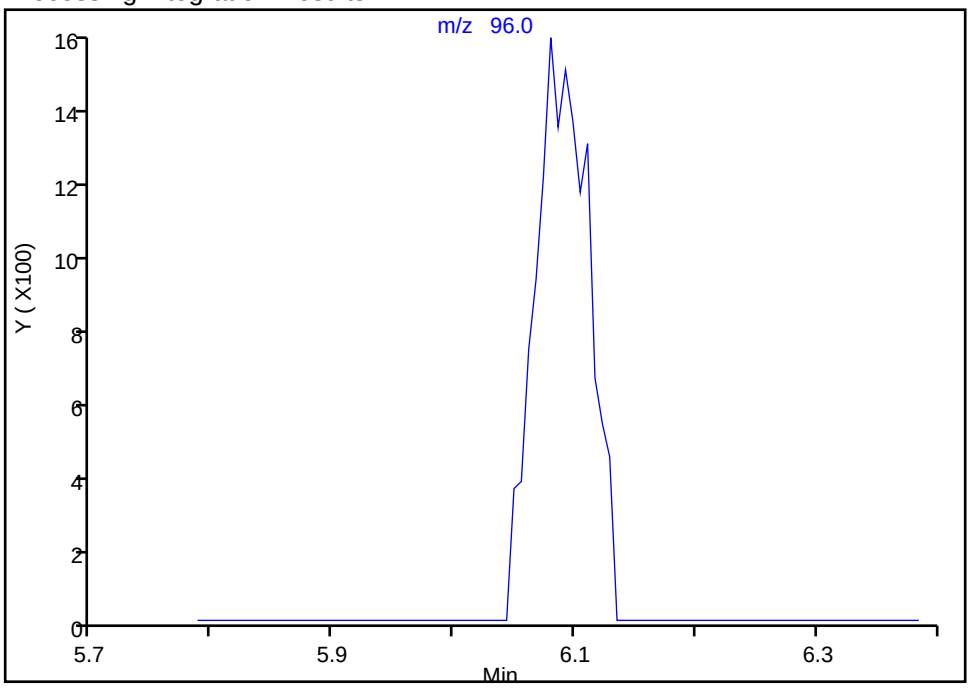
Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X16.D				
Injection Date:	05-Oct-2021 14:45:30	Instrument ID:	16334		
Lims ID:	410-56784-A-11	Lab Sample ID:	410-56784-11		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

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

Signal: 1

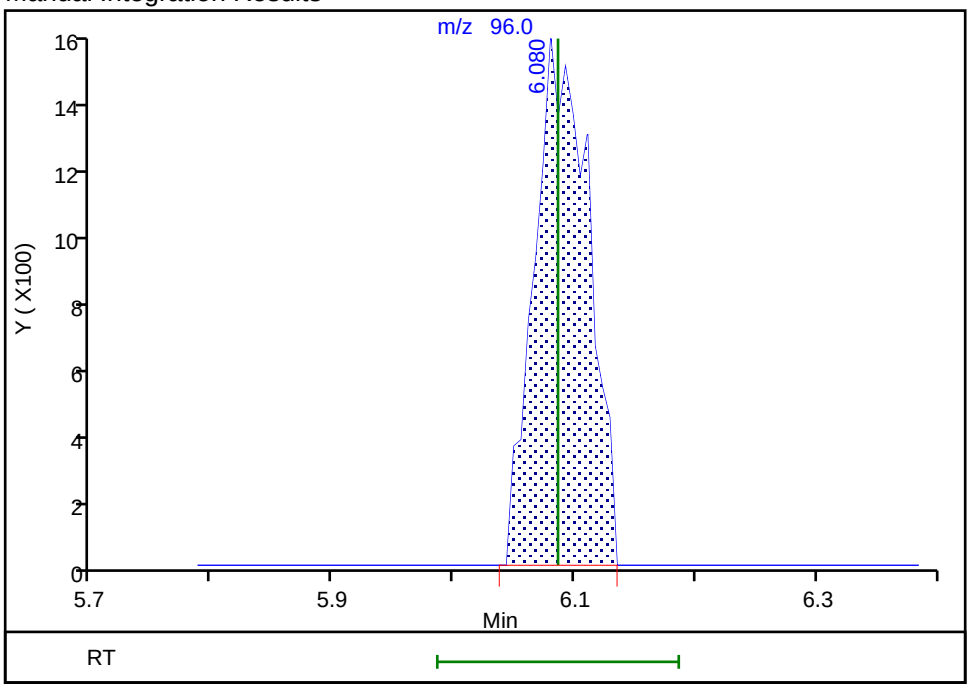
Not Detected
Expected RT: 6.09

Processing Integration Results



Manual Integration Results

RT: 6.08
Area: 4846
Amount: 0.079955
Amount Units: ug/l



Reviewer: beckerk, 05-Oct-2021 17:51:19
Audit Action: Assigned Compound ID Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 410-56784-12

Matrix: Water Lab File ID: GO05X17.D

Analysis Method: 8260D Date Collected: 09/24/2021 08:00

Sample wt/vol: 25(mL) Date Analyzed: 10/05/2021 15:07

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.: 178764 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	0.68		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	0.14	J	0.50	0.070
75-35-4	1,1-Dichloroethene	0.088	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	^c	5.0	0.60
591-78-6	2-Hexanone	ND	^c	5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	0.70
67-64-1	Acetone	0.91	J ^c	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	0.099	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	1.1		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	9.7		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	2.6		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 410-56784-12

Matrix: Water Lab File ID: GO05X17.D

Analysis Method: 8260D Date Collected: 09/24/2021 08:00

Sample wt/vol: 25(mL) Date Analyzed: 10/05/2021 15:07

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.: 178764 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)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X17.D
Lims ID: 410-56784-A-12
Client ID: HD-QC1-0/1-1
Sample Type: Client
Inject. Date: 05-Oct-2021 15:07:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040685-018
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Oct-2021 17:57:16 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1642

First Level Reviewer: beckerk Date: 05-Oct-2021 17:52:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.142				ND	7
8 Vinyl chloride	62		2.257				ND	7
9 Bromomethane	94		2.593				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96	3.519	3.513	0.006	93	4254	0.0884	
21 Acetone	43	3.586	3.568	0.018	68	8647	0.9077	M
25 Carbon disulfide	76		3.812				ND	7
29 Methylene Chloride	84		4.172				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.245	4.251	-0.006	96	183902	50.0	
33 Methyl tert-butyl ether	73		4.574				ND	7
34 trans-1,2-Dichloroethene	96		4.580				ND	
37 1,1-Dichloroethane	63	5.269	5.251	0.018	93	12818	0.1355	
41 2-Butanone (MEK)	43		6.062				ND	
42 cis-1,2-Dichloroethene	96	6.092	6.086	0.006	76	64060	1.07	
49 Chlorobromomethane	128		6.409				ND	
51 Chloroform	83	6.580	6.568	0.012	91	9308	0.0988	
$ 52 Dibromofluoromethane (Surr)	113	6.787	6.781	0.006	94	563483	9.81	
53 1,1,1-Trichloroethane	97	6.787	6.787	0.000	90	55415	0.6828	
56 Carbon tetrachloride	117		6.994				ND	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.226	0.006	38	126129	9.87	
60 Benzene	78		7.263				ND	7
61 1,2-Dichloroethane	62		7.330				ND	
* 64 Fluorobenzene (IS)	96	7.671	7.665	0.006	99	2305790	10.0	
68 Trichloroethene	95	8.140	8.134	0.006	98	154206	2.61	
70 1,2-Dichloropropane	63		8.470				ND	
76 Dichlorobromomethane	83		8.817				ND	
81 cis-1,3-Dichloropropene	75		9.366				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.549				ND	7
$ 83 Toluene-d8 (Surr)	98	9.677	9.677	0.000	93	2235705	9.57	
84 Toluene	92	9.756	9.750	0.006	97	9464	0.0660	
96 trans-1,3-Dichloropropene	75		10.012				ND	
99 1,1,2-Trichloroethane	97		10.213				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
100 Tetrachloroethene	166	10.298	10.299	-0.001	98	663916	9.72	
102 2-Hexanone	43		10.433				ND	7
104 Chlorodibromomethane	129		10.591				ND	
105 Ethylene Dibromide	107		10.695				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.134	11.128	0.006	84	1793648	10.0	
108 Chlorobenzene	112		11.152				ND	
110 1,1,1,2-Tetrachloroethane	131		11.237				ND	
111 Ethylbenzene	91		11.243				ND	7
S 109 Xylenes, Total	106		11.245				ND	7
112 m-Xylene & p-Xylene	106	11.353	11.353	0.000	97	5877	0.0545	
113 o-Xylene	106		11.682				ND	7
114 Styrene	104		11.701				ND	
115 Bromoform	173		11.853				ND	
$ 119 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	91	828800	9.71	
120 1,1,2,2-Tetrachloroethane	83		12.231				ND	
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	977295	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

MSV_29_826ISS_00023 Amount Added: 1.00 Units: uL Run Reagent

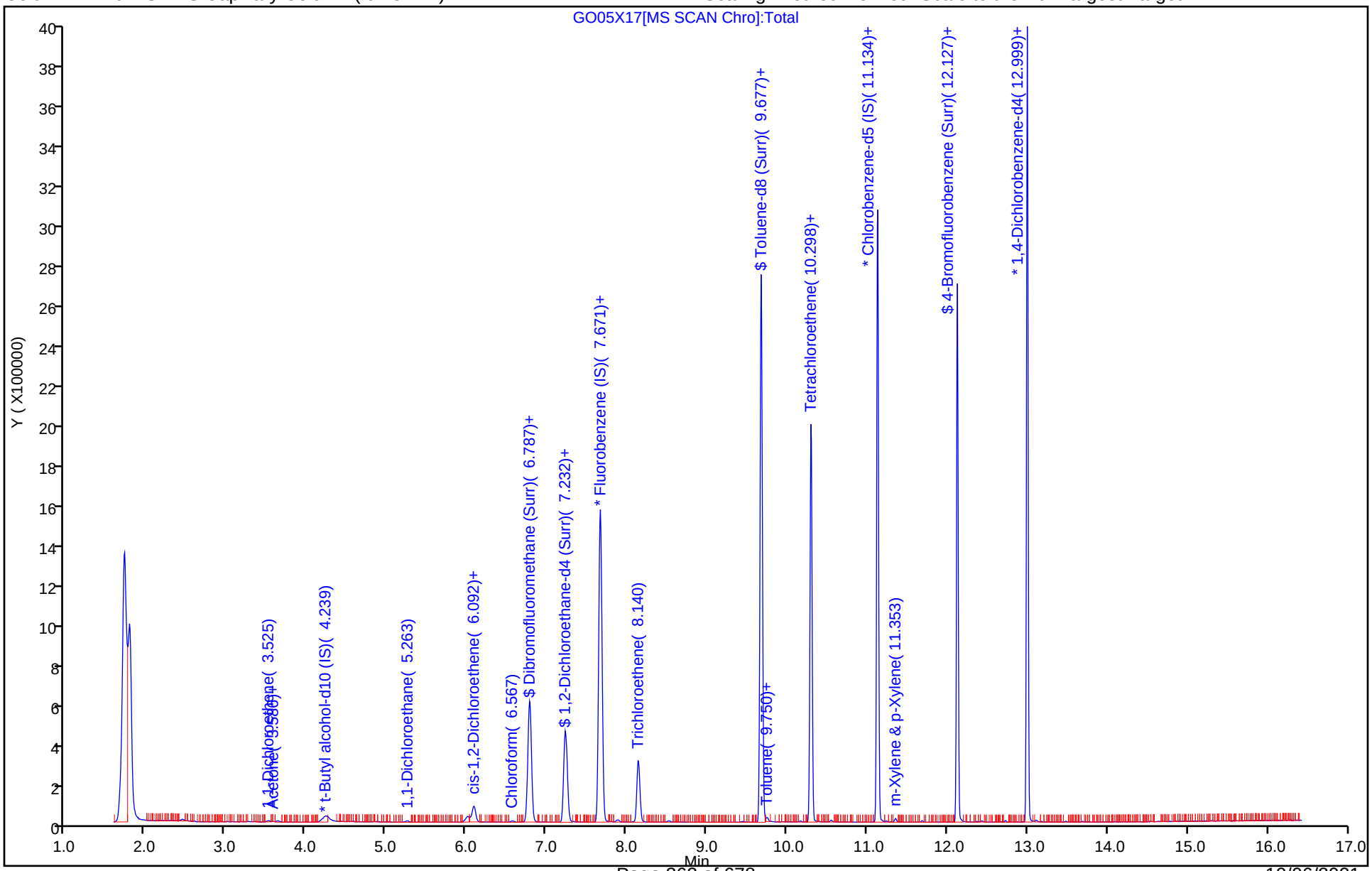
Report Date: 05-Oct-2021 17:57:32 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X17.D

Injection Date:	05-Oct-2021 15:07:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	410-56784-A-12	Lab Sample ID:	410-56784-12	Worklist Smp#:	18
Client ID:	HD-QC1-0/1-1				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X17.D				
Lims ID:	410-56784-A-12				
Client ID:	HD-QC1-0/1-1				
Sample Type:	Client				
Inject. Date:	05-Oct-2021 15:07:30	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0040685-018				
Operator ID:	SRK36897	Instrument ID:	16334		
Method:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\MSV_16334_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	05-Oct-2021 17:57:16	Calib Date:	27-Jul-2021 21:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1642				

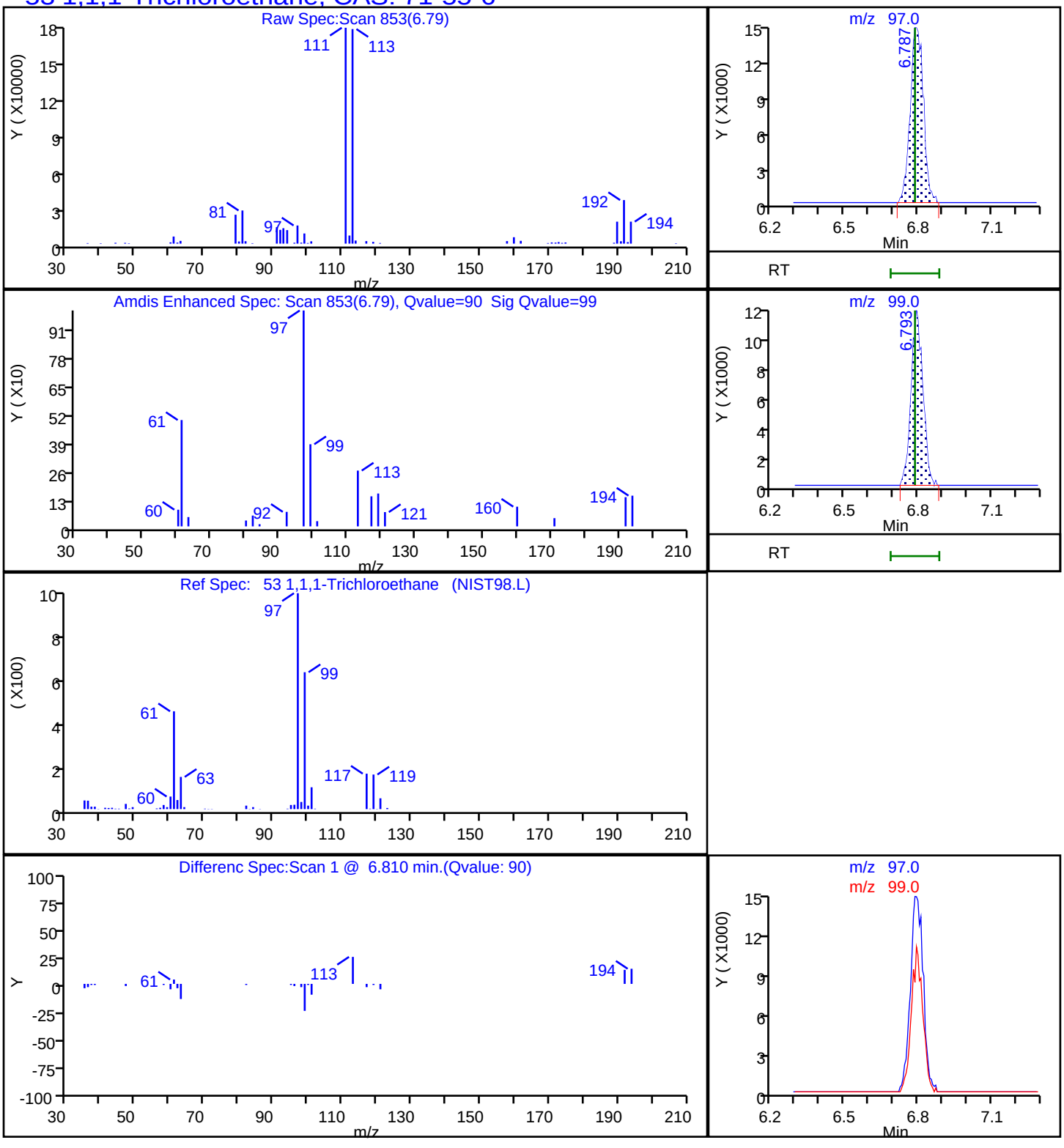
First Level Reviewer: beckerk Date: 05-Oct-2021 17:52:50

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	10.0	9.81	98.08
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.87	98.71
$ 83 Toluene-d8 (Surr)	10.0	9.57	95.72
$ 119 4-Bromofluorobenzene (Surr)	10.0	9.71	97.06

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X17.D				
Injection Date:	05-Oct-2021 15:07:30	Instrument ID:	16334		
Lims ID:	410-56784-A-12	Lab Sample ID:	410-56784-12		
Client ID:	HD-QC1-0/1-1				
Operator ID:	SRK36897	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

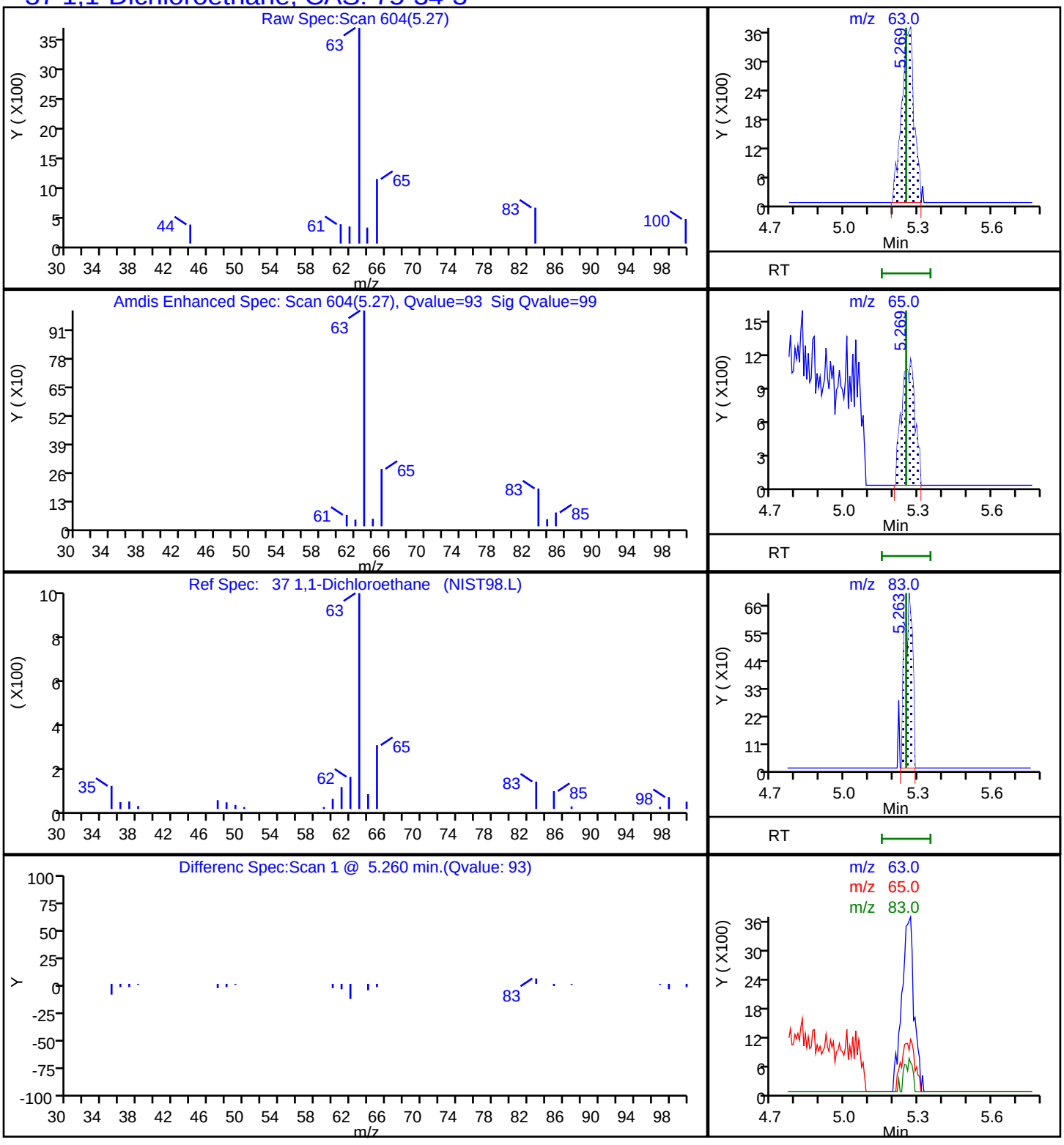
53 1,1,1-Trichloroethane, CAS: 71-55-6



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X17.D				
Injection Date:	05-Oct-2021 15:07:30	Instrument ID:	16334		
Lims ID:	410-56784-A-12	Lab Sample ID:	410-56784-12		
Client ID:	HD-QC1-0/1-1				
Operator ID:	SRK36897	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

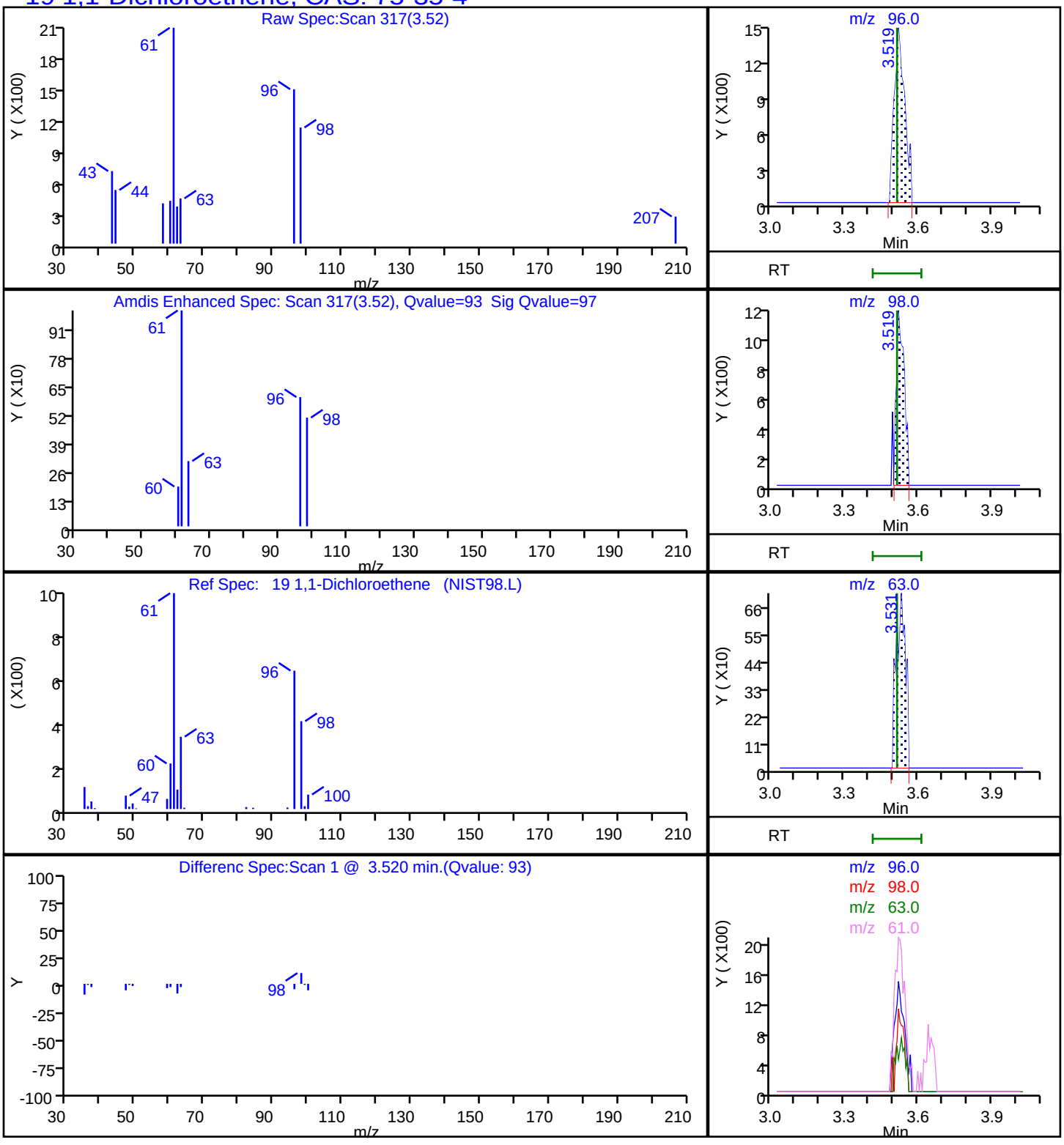
37 1,1-Dichloroethane, CAS: 75-34-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X17.D				
Injection Date:	05-Oct-2021 15:07:30	Instrument ID:	16334		
Lims ID:	410-56784-A-12	Lab Sample ID:	410-56784-12		
Client ID:	HD-QC1-0/1-1				
Operator ID:	SRK36897	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

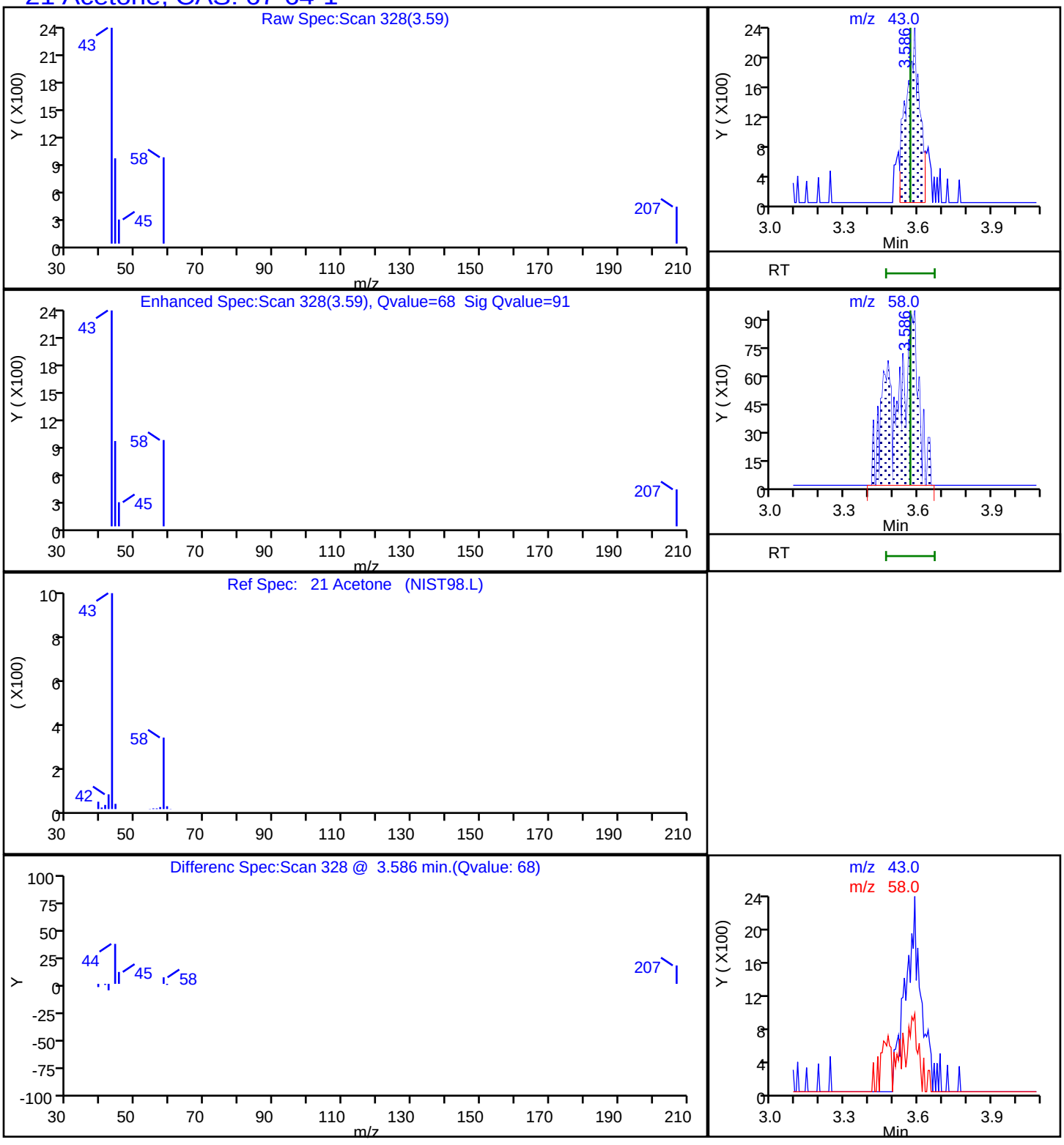
19 1,1-Dichloroethene, CAS: 75-35-4



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X17.D				
Injection Date:	05-Oct-2021 15:07:30	Instrument ID:	16334		
Lims ID:	410-56784-A-12	Lab Sample ID:	410-56784-12		
Client ID:	HD-QC1-0/1-1				
Operator ID:	SRK36897	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

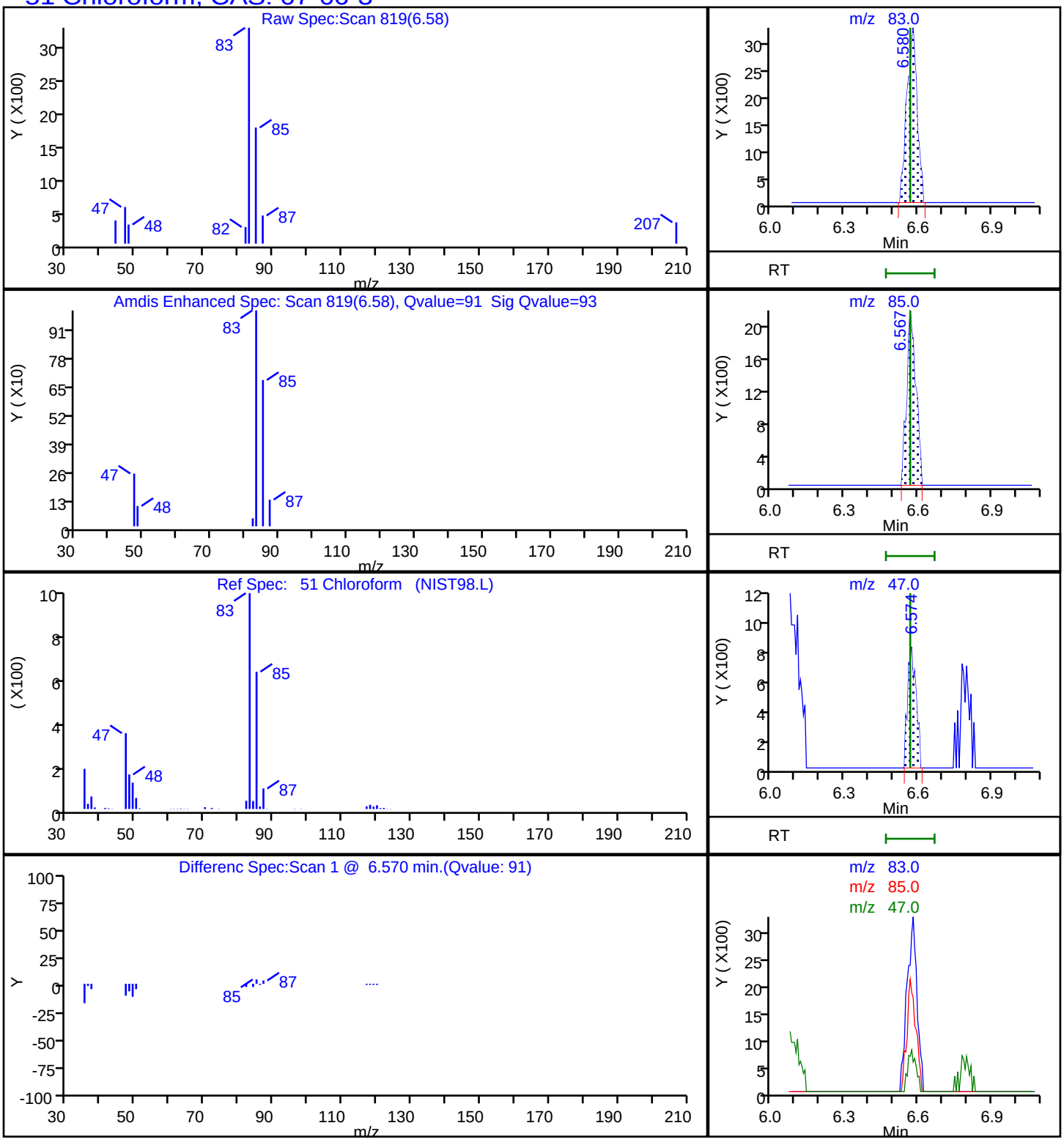
21 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X17.D				
Injection Date:	05-Oct-2021 15:07:30	Instrument ID:	16334		
Lims ID:	410-56784-A-12	Lab Sample ID:	410-56784-12		
Client ID:	HD-QC1-0/1-1				
Operator ID:	SRK36897	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

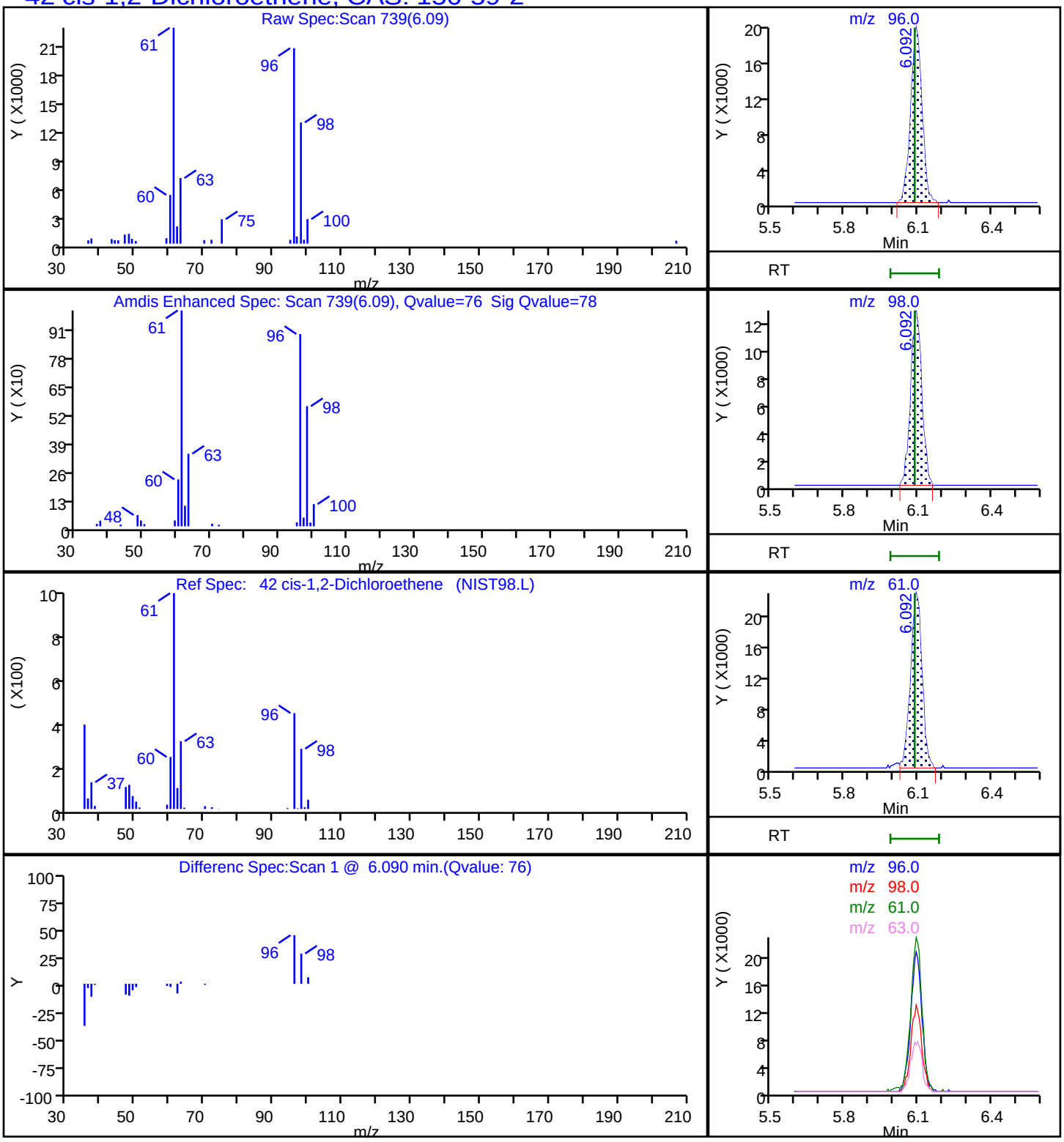
51 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X17.D				
Injection Date:	05-Oct-2021 15:07:30	Instrument ID:	16334		
Lims ID:	410-56784-A-12	Lab Sample ID:	410-56784-12		
Client ID:	HD-QC1-0/1-1				
Operator ID:	SRK36897	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

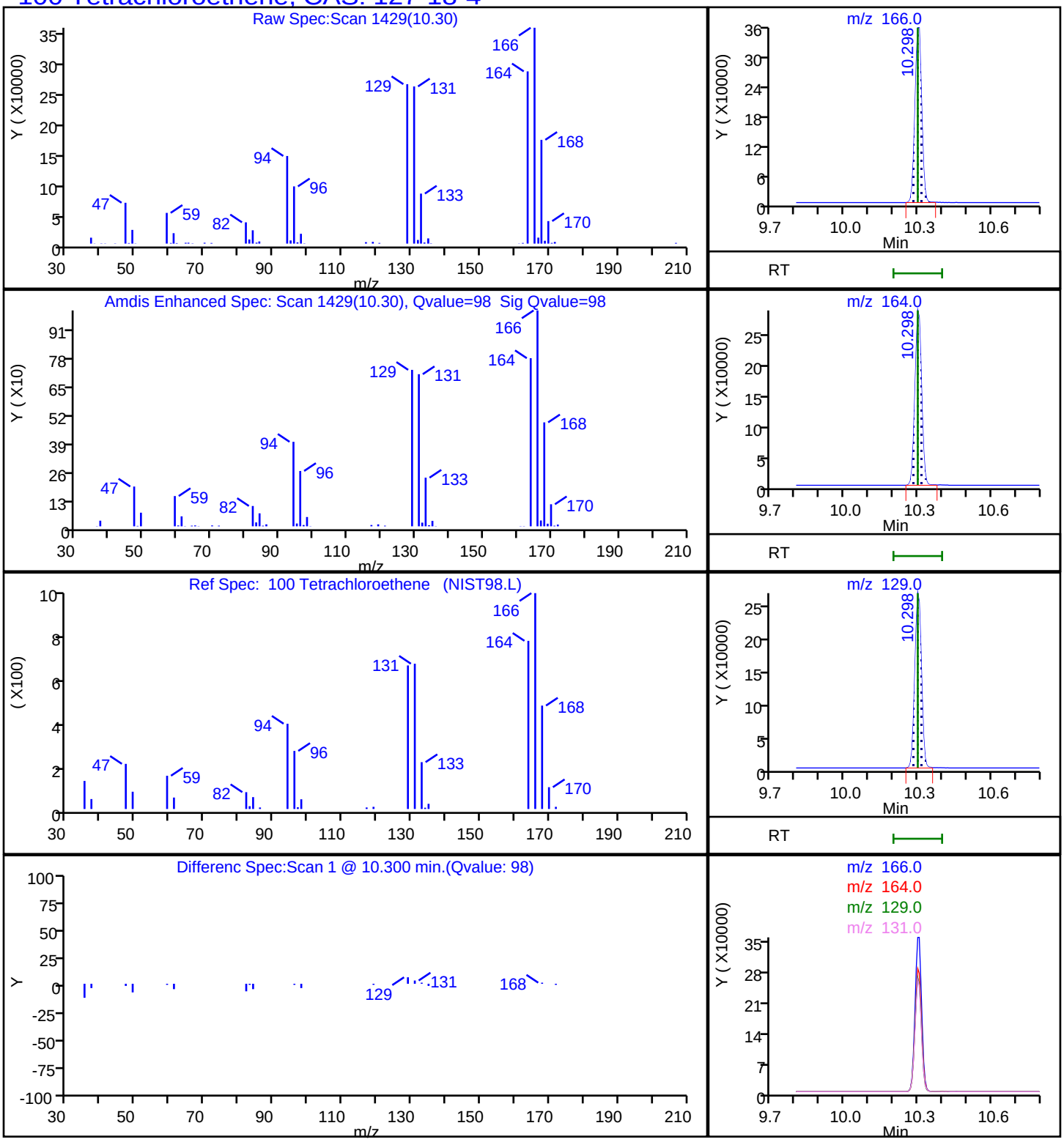
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X17.D				
Injection Date:	05-Oct-2021 15:07:30	Instrument ID:	16334		
Lims ID:	410-56784-A-12	Lab Sample ID:	410-56784-12		
Client ID:	HD-QC1-0/1-1				
Operator ID:	SRK36897	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

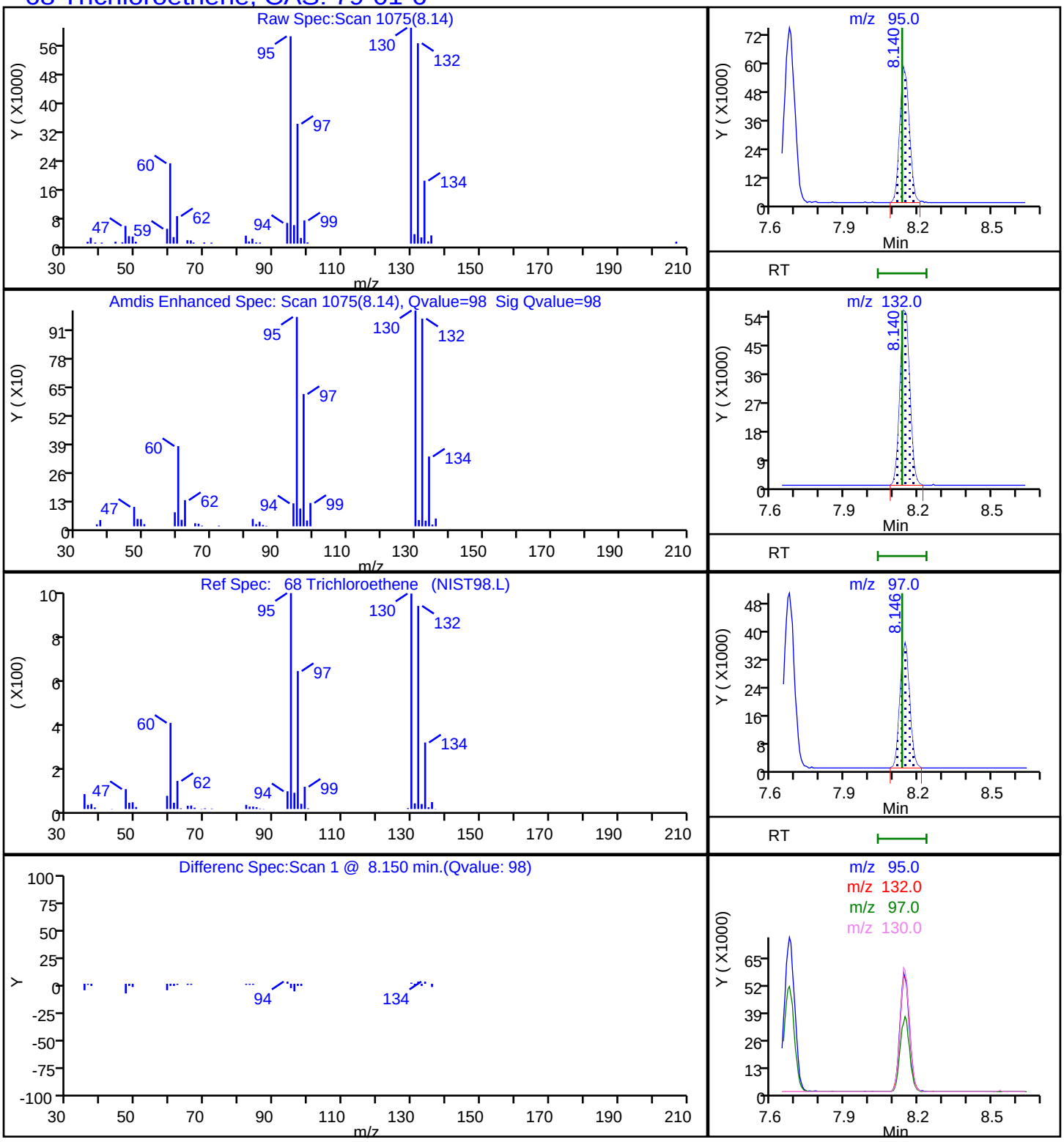
100 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X17.D				
Injection Date:	05-Oct-2021 15:07:30	Instrument ID:	16334		
Lims ID:	410-56784-A-12	Lab Sample ID:	410-56784-12		
Client ID:	HD-QC1-0/1-1				
Operator ID:	SRK36897	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

68 Trichloroethene, CAS: 79-01-6



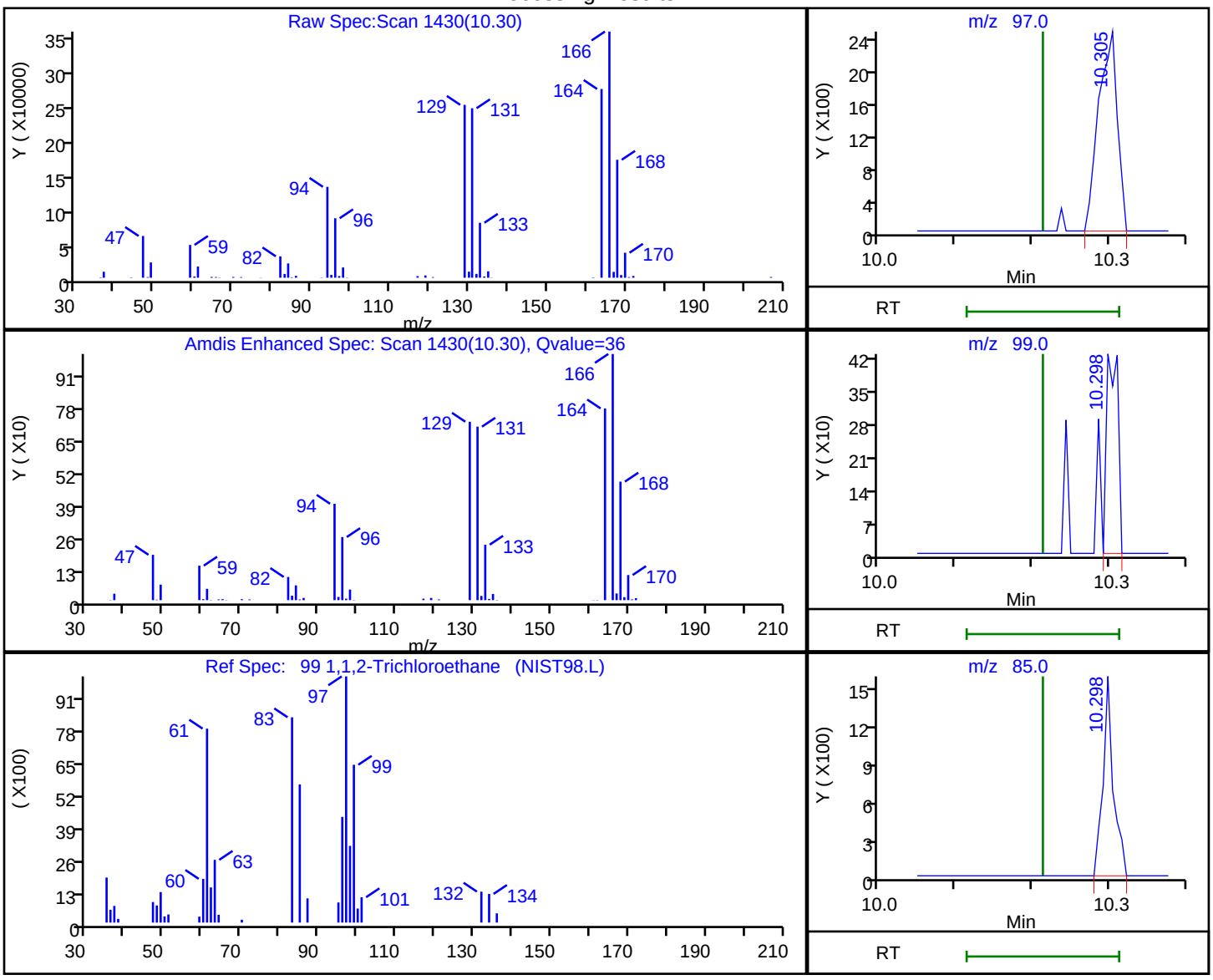
User Disabled Compound Report

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X17.D				
Injection Date:	05-Oct-2021 15:07:30	Instrument ID:	16334		
Lims ID:	410-56784-A-12	Lab Sample ID:	410-56784-12		
Client ID:	HD-QC1-0/1-1				
Operator ID:	SRK36897	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

99 1,1,2-Trichloroethane, CAS: 79-00-5

Processing Results



RT	Mass	Response	Amount
10.30	97.00	4111	0.094039
10.30	99.00	438	
10.30	85.00	1489	
10.30	83.00	11929	

Reviewer: beckerk, 05-Oct-2021 17:52:43

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

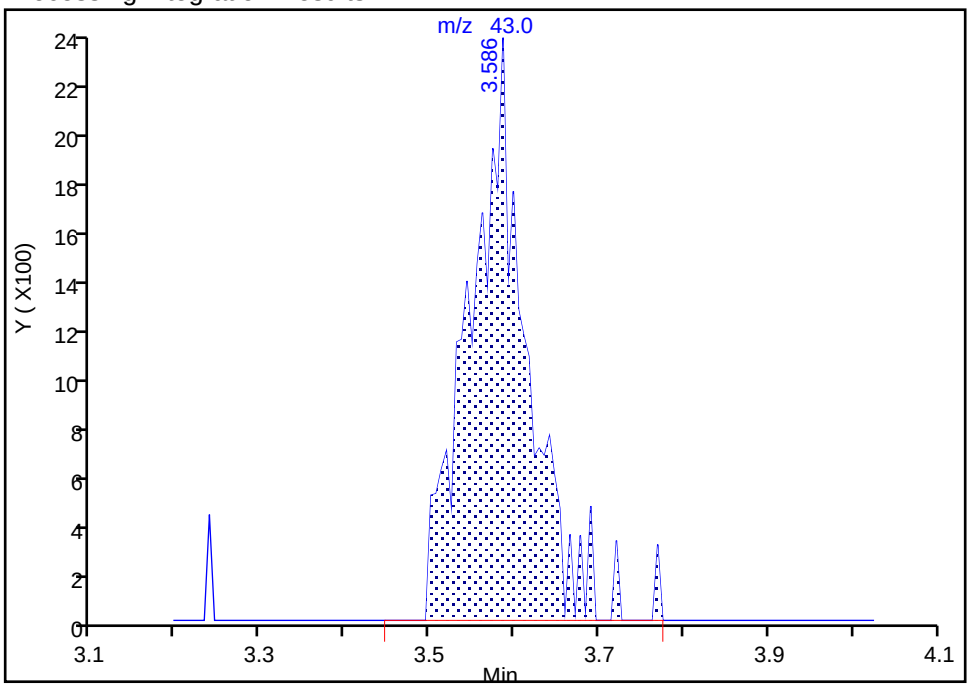
Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X17.D				
Injection Date:	05-Oct-2021 15:07:30	Instrument ID:	16334		
Lims ID:	410-56784-A-12	Lab Sample ID:	410-56784-12		
Client ID:	HD-QC1-0/1-1				
Operator ID:	SRK36897	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

21 Acetone, CAS: 67-64-1

Signal: 1

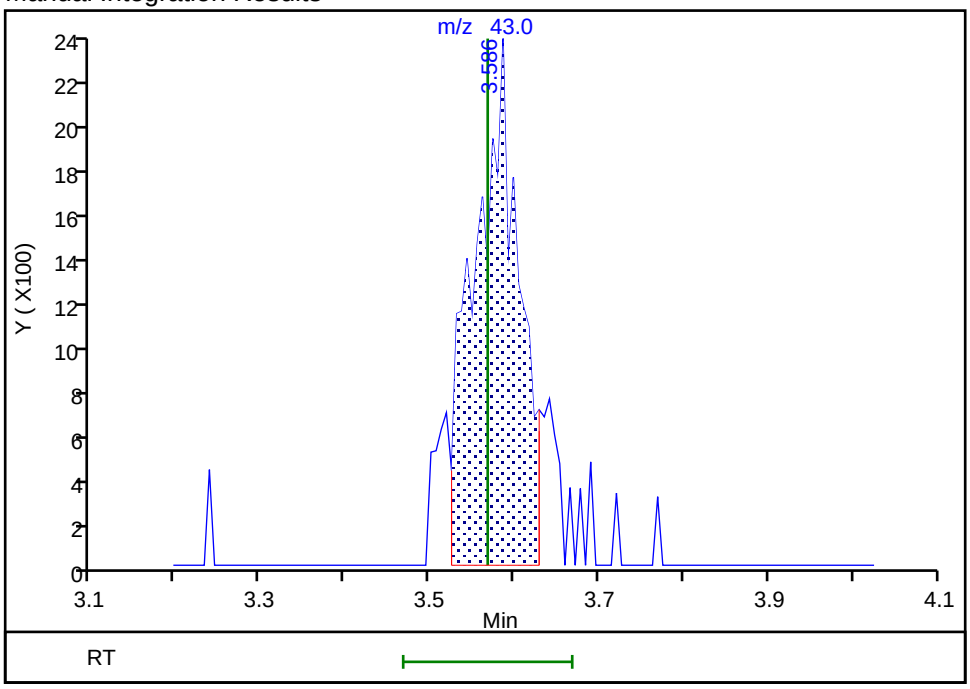
Processing Integration Results

RT: 3.59
Area: 11057
Amount: 1.160703
Amount Units: ug/l



Manual Integration Results

RT: 3.59
Area: 8647
Amount: 0.907714
Amount Units: ug/l



Reviewer: beckerk, 05-Oct-2021 17:52:32
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 410-56784-13

Matrix: Water Lab File ID: GO05X18.D

Analysis Method: 8260D Date Collected: 09/24/2021 10:35

Sample wt/vol: 25(mL) Date Analyzed: 10/05/2021 15:29

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.: 178764 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	^c	5.0	0.60
591-78-6	2-Hexanone	ND	^c	5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	0.70
67-64-1	Acetone	1.0	J ^c	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	0.18	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.065	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	0.74		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.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 410-56784-13

Matrix: Water Lab File ID: GO05X18.D

Analysis Method: 8260D Date Collected: 09/24/2021 10:35

Sample wt/vol: 25(mL) Date Analyzed: 10/05/2021 15:29

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.: 178764 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)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	97		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X18.D
Lims ID: 410-56784-A-13
Client ID: HD-COD-SW-26-0/1-0
Sample Type: Client
Inject. Date: 05-Oct-2021 15:29:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040685-019
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Oct-2021 17:57:16 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1642

First Level Reviewer: beckerk Date: 05-Oct-2021 17:53:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.142				ND	
8 Vinyl chloride	62		2.257				ND	
9 Bromomethane	94		2.593				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96	3.513	3.513	0.000	31	2190	0.0451	
21 Acetone	43	3.568	3.568	0.000	69	9484	1.02	M
25 Carbon disulfide	76		3.812				ND	7
29 Methylene Chloride	84		4.172				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.245	4.251	-0.006	96	179641	50.0	
33 Methyl tert-butyl ether	73		4.574				ND	
34 trans-1,2-Dichloroethene	96		4.580				ND	
37 1,1-Dichloroethane	63		5.251				ND	
41 2-Butanone (MEK)	43		6.062				ND	
42 cis-1,2-Dichloroethene	96	6.086	6.086	0.000	38	3952	0.0654	
49 Chlorobromomethane	128		6.409				ND	
51 Chloroform	83	6.567	6.568	-0.001	90	16764	0.1764	
$ 52 Dibromofluoromethane (Surr)	113	6.787	6.781	0.006	93	564776	9.75	
53 1,1,1-Trichloroethane	97		6.787				ND	
56 Carbon tetrachloride	117		6.994				ND	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.238	7.226	0.012	38	127342	9.88	
60 Benzene	78		7.263				ND	
61 1,2-Dichloroethane	62		7.330				ND	
* 64 Fluorobenzene (IS)	96	7.671	7.665	0.006	99	2325800	10.0	
68 Trichloroethene	95	8.152	8.134	0.018	96	7004	0.1175	
70 1,2-Dichloropropane	63		8.470				ND	
76 Dichlorobromomethane	83		8.817				ND	7
81 cis-1,3-Dichloropropene	75		9.366				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.549				ND	7
$ 83 Toluene-d8 (Surr)	98	9.677	9.677	0.000	93	2230290	9.55	
84 Toluene	92	9.750	9.750	0.000	94	9877	0.0689	
96 trans-1,3-Dichloropropene	75		10.012				ND	
99 1,1,2-Trichloroethane	97		10.213				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
100 Tetrachloroethene	166	10.298	10.299	-0.001	97	50355	0.7374	
102 2-Hexanone	43		10.433				ND	7
104 Chlorodibromomethane	129		10.591				ND	
105 Ethylene Dibromide	107		10.695				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.134	11.128	0.006	84	1792827	10.0	
108 Chlorobenzene	112		11.152				ND	
110 1,1,1,2-Tetrachloroethane	131		11.237				ND	
111 Ethylbenzene	91		11.243				ND	7
S 109 Xylenes, Total	106		11.245				ND	7
112 m-Xylene & p-Xylene	106		11.353				ND	7
113 o-Xylene	106	11.682	11.682	0.000	95	2734	0.0257	
114 Styrene	104		11.701				ND	7
115 Bromoform	173		11.853				ND	
$ 119 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	91	834013	9.77	
120 1,1,2,2-Tetrachloroethane	83		12.231				ND	
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	982093	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSV_29_826ISS_00023 Amount Added: 1.00 Units: uL Run Reagent

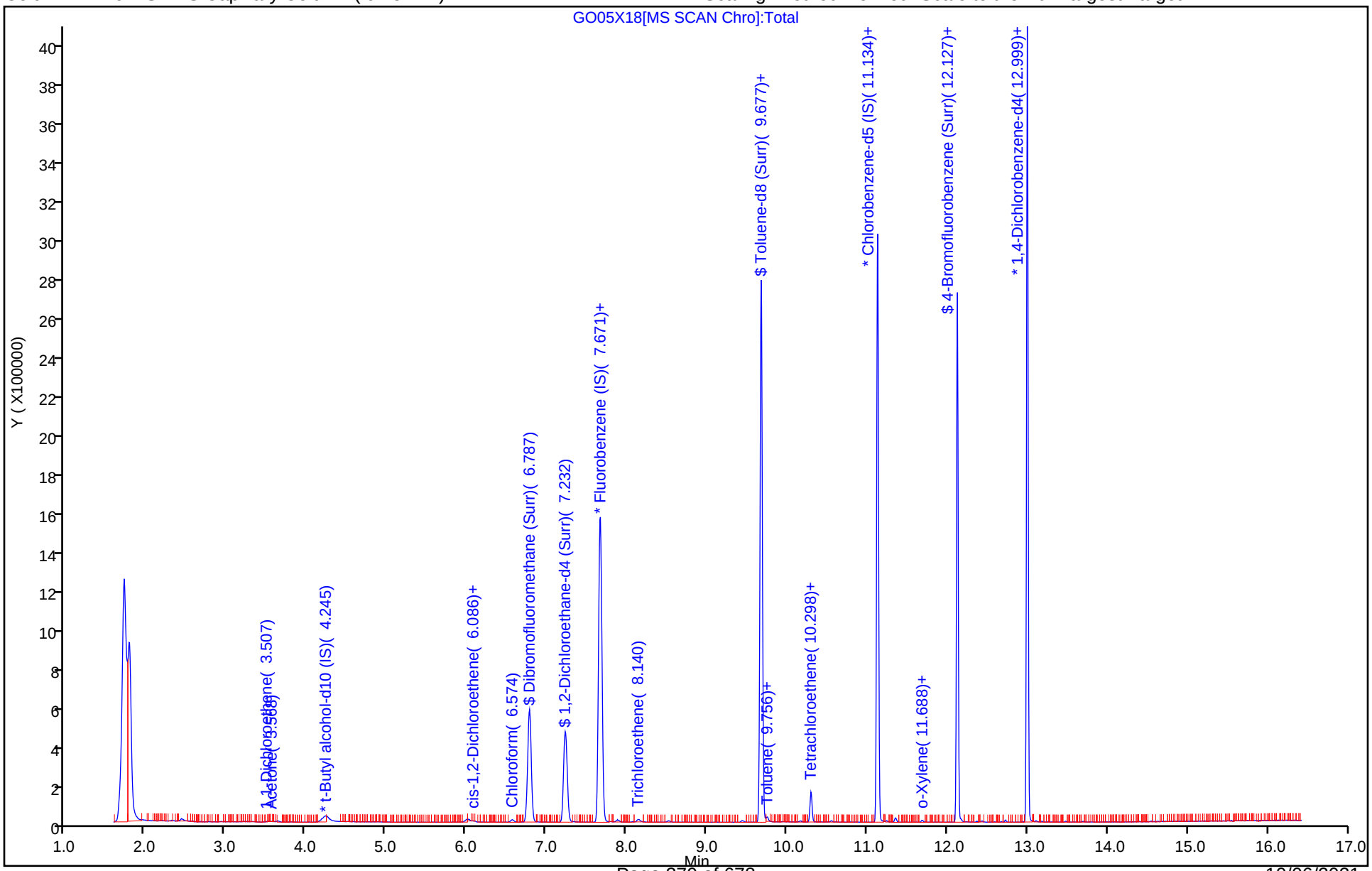
Report Date: 05-Oct-2021 17:57:34 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X18.D

Injection Date:	05-Oct-2021 15:29:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	410-56784-A-13	Lab Sample ID:	410-56784-13	Worklist Smp#:	19
Client ID:	HD-COD-SW-26-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X18.D				
Lims ID:	410-56784-A-13				
Client ID:	HD-COD-SW-26-0/1-0				
Sample Type:	Client				
Inject. Date:	05-Oct-2021 15:29:30	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0040685-019				
Operator ID:	SRK36897	Instrument ID:	16334		
Method:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\MSV_16334_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	05-Oct-2021 17:57:16	Calib Date:	27-Jul-2021 21:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1642				

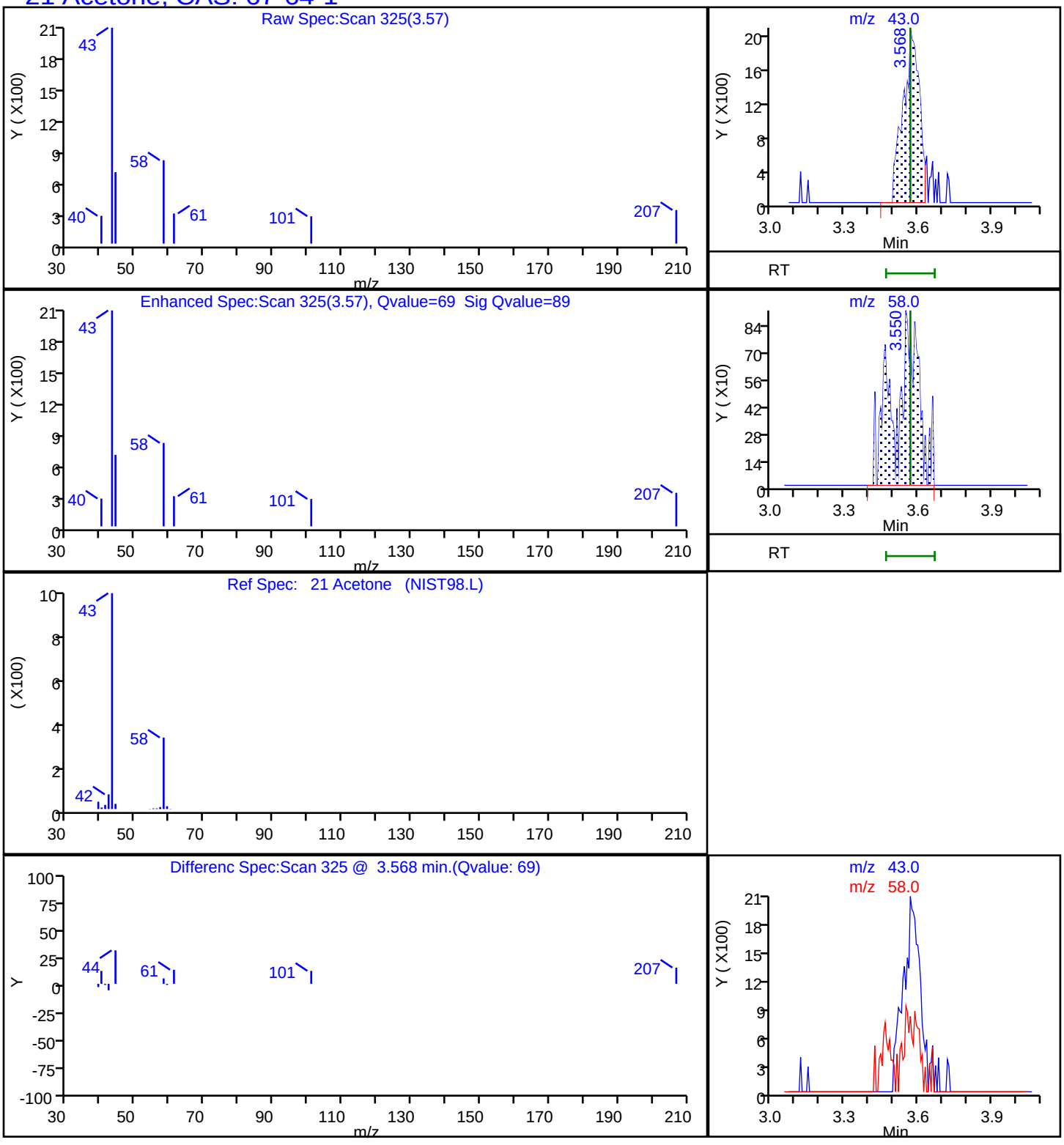
First Level Reviewer: beckerk Date: 05-Oct-2021 17:53:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	10.0	9.75	97.46
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.88	98.81
$ 83 Toluene-d8 (Surr)	10.0	9.55	95.53
$ 119 4-Bromofluorobenzene (Surr)	10.0	9.77	97.72

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X18.D				
Injection Date:	05-Oct-2021 15:29:30	Instrument ID:	16334		
Lims ID:	410-56784-A-13	Lab Sample ID:	410-56784-13		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

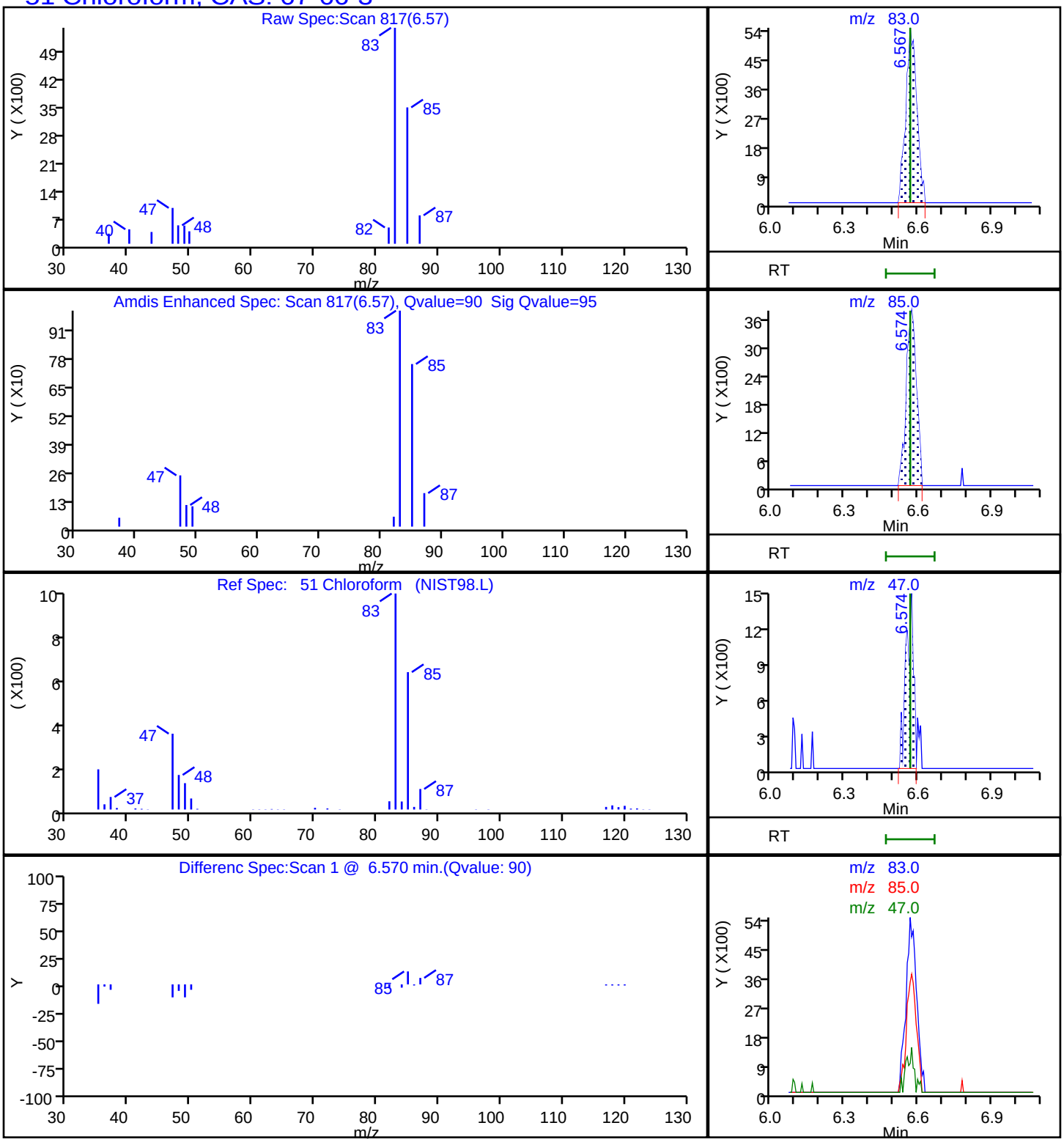
21 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X18.D				
Injection Date:	05-Oct-2021 15:29:30	Instrument ID:	16334		
Lims ID:	410-56784-A-13	Lab Sample ID:	410-56784-13		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

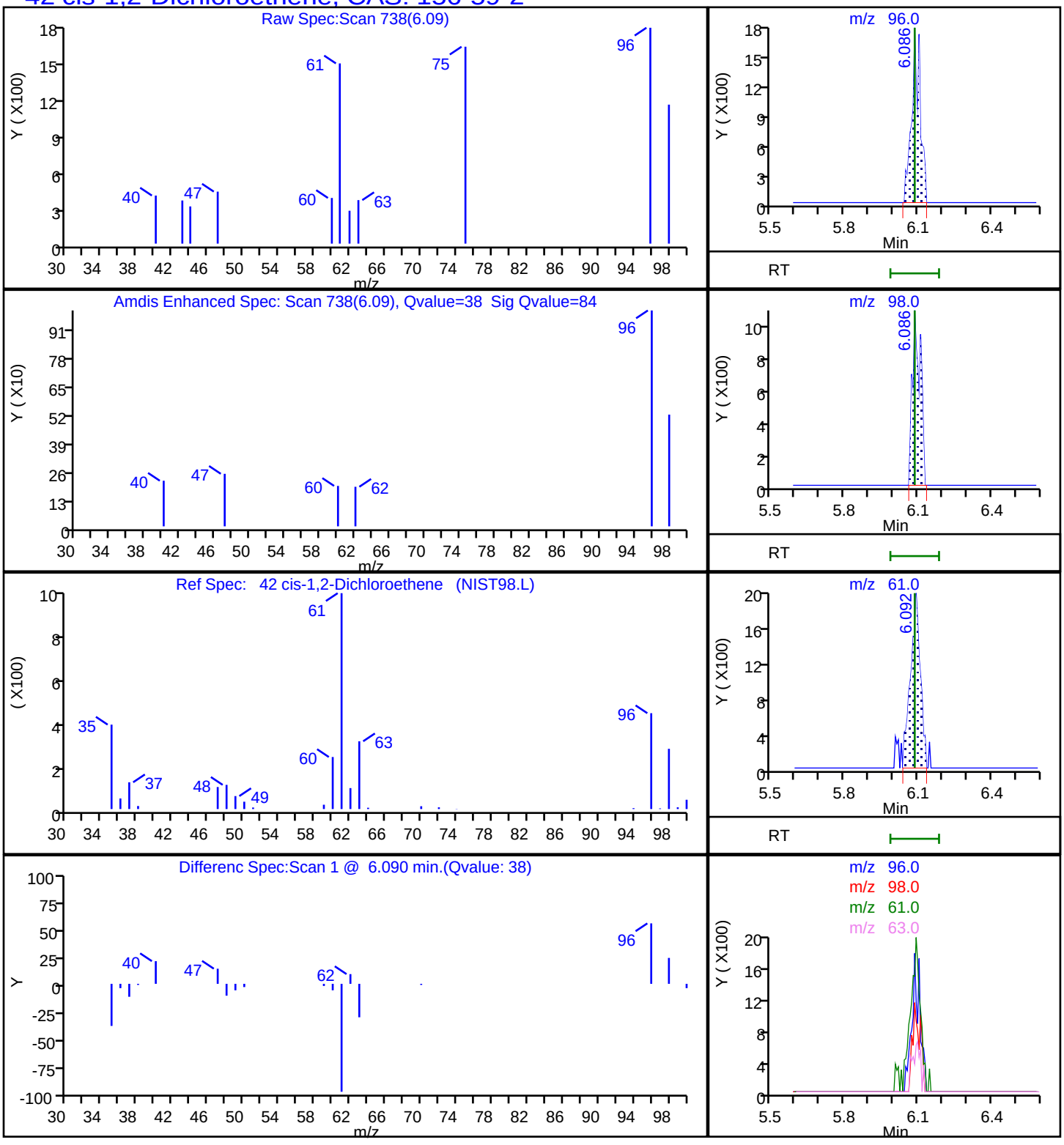
51 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X18.D				
Injection Date:	05-Oct-2021 15:29:30	Instrument ID:	16334		
Lims ID:	410-56784-A-13	Lab Sample ID:	410-56784-13		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

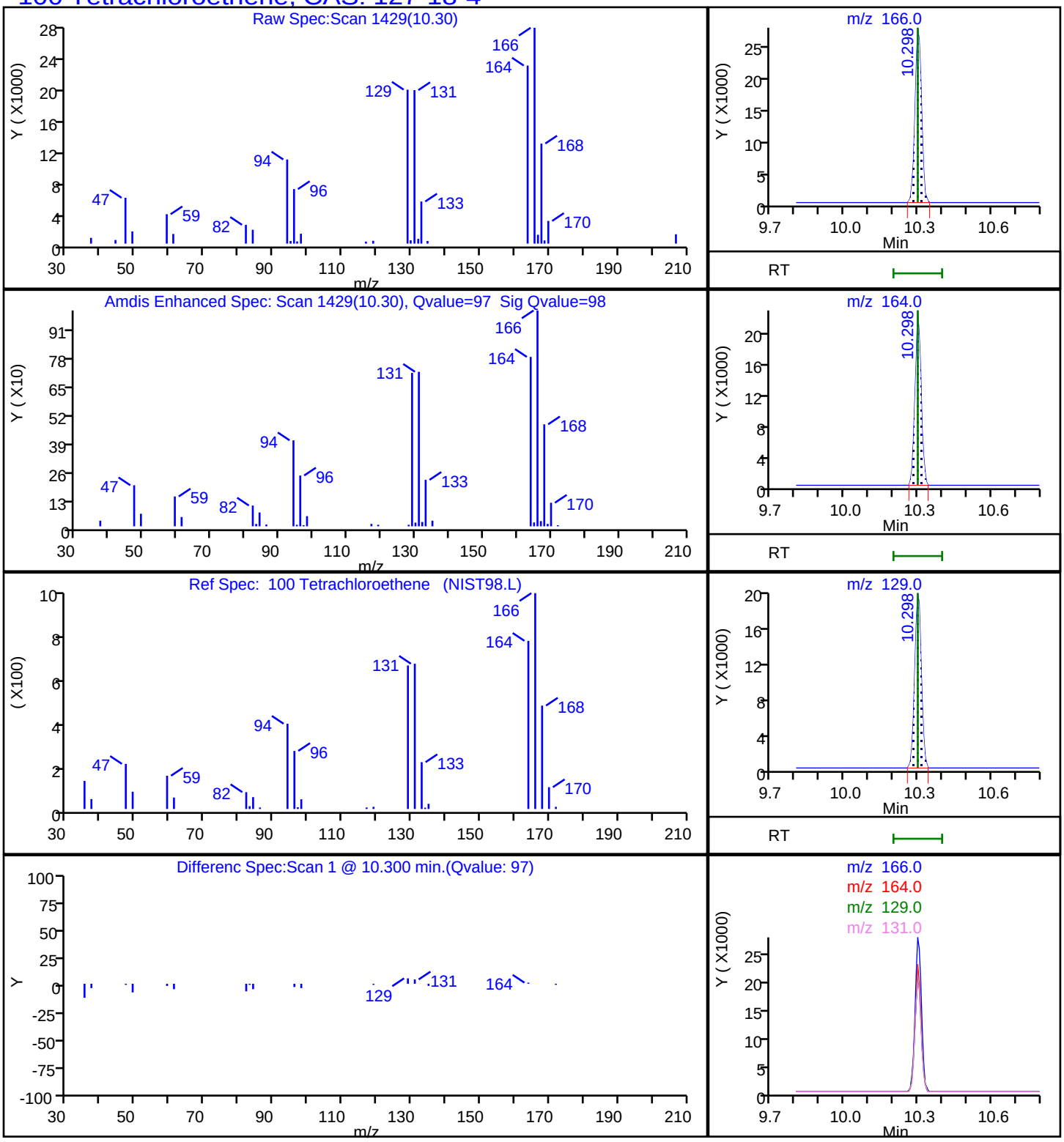
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X18.D				
Injection Date:	05-Oct-2021 15:29:30	Instrument ID:	16334		
Lims ID:	410-56784-A-13	Lab Sample ID:	410-56784-13		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

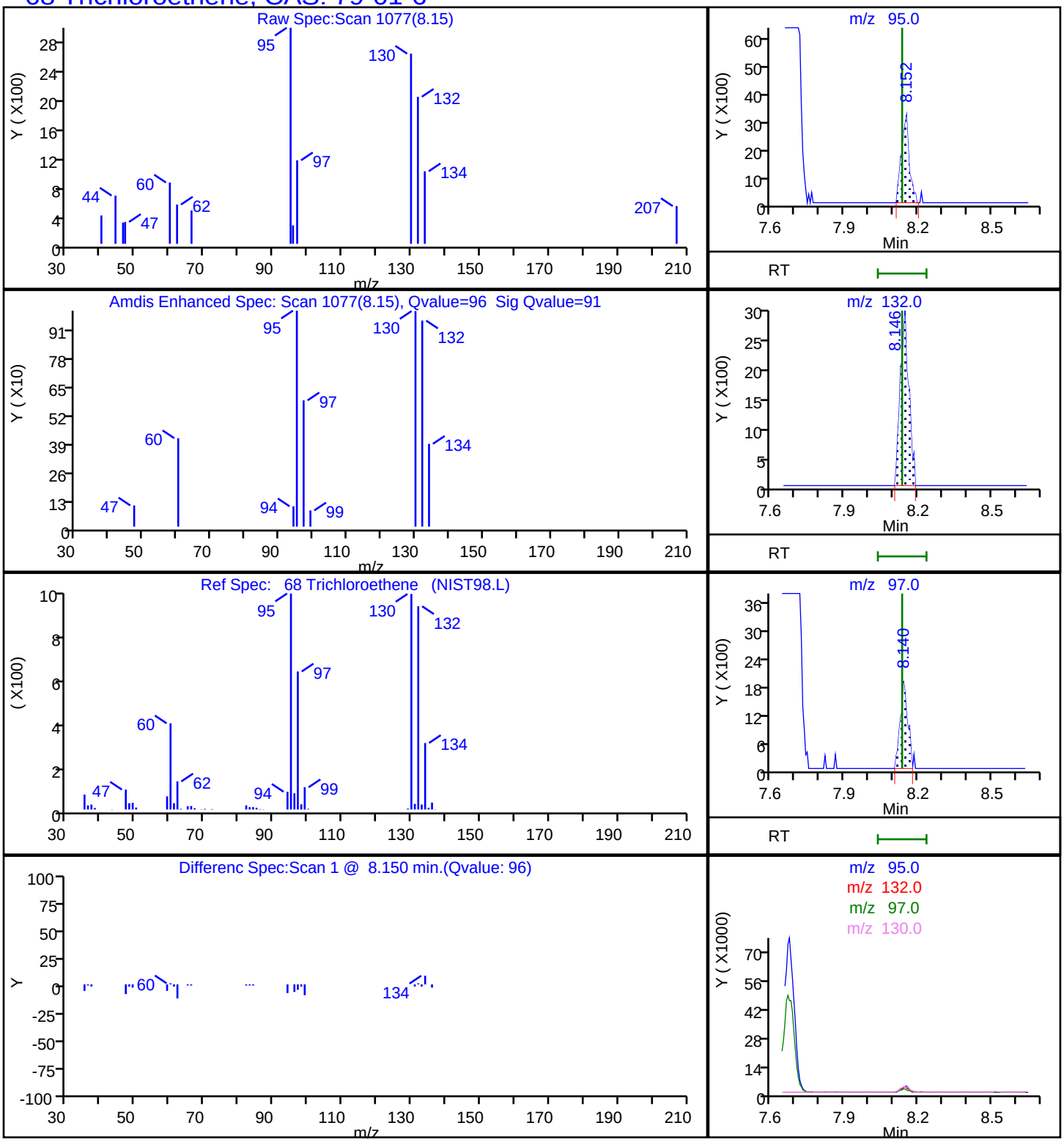
100 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X18.D				
Injection Date:	05-Oct-2021 15:29:30	Instrument ID:	16334		
Lims ID:	410-56784-A-13	Lab Sample ID:	410-56784-13		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

68 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

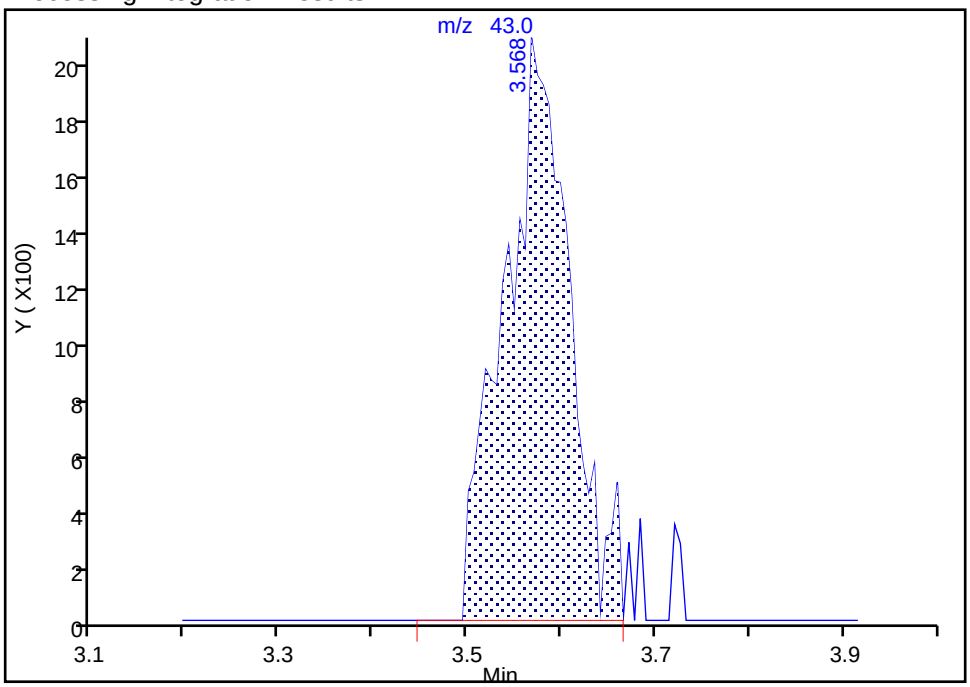
Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X18.D				
Injection Date:	05-Oct-2021 15:29:30	Instrument ID:	16334		
Lims ID:	410-56784-A-13	Lab Sample ID:	410-56784-13		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	SRK36897	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

21 Acetone, CAS: 67-64-1

Signal: 1

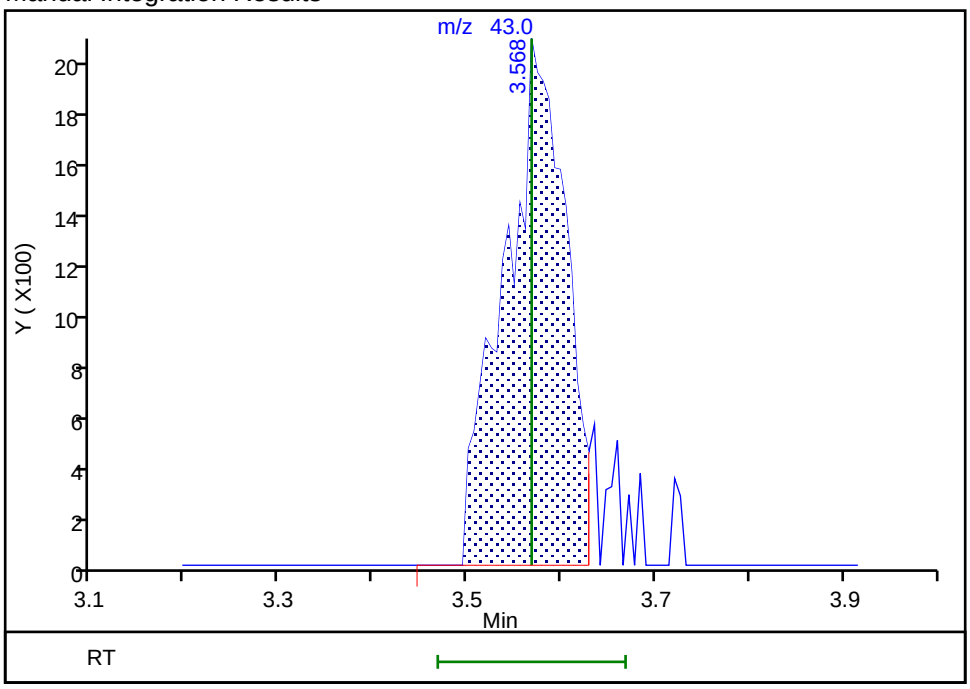
Processing Integration Results

RT: 3.57
Area: 10092
Amount: 1.084531
Amount Units: ug/l



Manual Integration Results

RT: 3.57
Area: 9484
Amount: 1.019192
Amount Units: ug/l



Reviewer: beckerk, 05-Oct-2021 17:53:05
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 410-56784-14

Matrix: Water Lab File ID: GO05X12.D

Analysis Method: 8260D Date Collected: 09/24/2021 00:00

Sample wt/vol: 25(mL) Date Analyzed: 10/05/2021 13:16

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.: 178764 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	^c	5.0	0.60
591-78-6	2-Hexanone	ND	^c	5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	^c	5.0	0.70
67-64-1	Acetone	ND	^c	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.: 410-56784-1

SDG No.:

Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 410-56784-14

Matrix: Water Lab File ID: GO05X12.D

Analysis Method: 8260D Date Collected: 09/24/2021 00:00

Sample wt/vol: 25(mL) Date Analyzed: 10/05/2021 13:16

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.: 178764 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)	101		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	96		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X12.D
Lims ID: 410-56784-A-14
Client ID: HD-QC1-0/1-2
Sample Type: Client
Inject. Date: 05-Oct-2021 13:16:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040685-013
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Oct-2021 17:57:16 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1642

First Level Reviewer: beckerk Date: 05-Oct-2021 17:48:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		2.142				ND	
8 Vinyl chloride	62		2.257				ND	
9 Bromomethane	94		2.593				ND	
10 Chloroethane	64		2.666				ND	
19 1,1-Dichloroethene	96		3.513				ND	
21 Acetone	43	3.562	3.568	-0.006	70	5836	0.6025	M
25 Carbon disulfide	76		3.812				ND	7
29 Methylene Chloride	84		4.172				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.239	4.251	-0.012	96	186999	50.0	
33 Methyl tert-butyl ether	73		4.574				ND	
34 trans-1,2-Dichloroethene	96		4.580				ND	
37 1,1-Dichloroethane	63		5.251				ND	
41 2-Butanone (MEK)	43		6.062				ND	
42 cis-1,2-Dichloroethene	96		6.086				ND	
49 Chlorobromomethane	128		6.409				ND	
51 Chloroform	83		6.568				ND	
$ 52 Dibromofluoromethane (Surr)	113	6.781	6.781	0.000	93	560155	9.63	
53 1,1,1-Trichloroethane	97		6.787				ND	
56 Carbon tetrachloride	117		6.994				ND	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.226	0.006	38	129982	10.1	
60 Benzene	78		7.263				ND	
61 1,2-Dichloroethane	62		7.330				ND	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2333688	10.0	
68 Trichloroethene	95		8.134				ND	
70 1,2-Dichloropropane	63		8.470				ND	
76 Dichlorobromomethane	83		8.817				ND	
81 cis-1,3-Dichloropropene	75		9.366				ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.549				ND	
$ 83 Toluene-d8 (Surr)	98	9.677	9.677	0.000	93	2259294	9.62	
84 Toluene	92		9.750				ND	7
96 trans-1,3-Dichloropropene	75		10.012				ND	
99 1,1,2-Trichloroethane	97		10.213				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
100 Tetrachloroethene	166		10.299				ND	
102 2-Hexanone	43		10.433				ND	
104 Chlorodibromomethane	129		10.591				ND	
105 Ethylene Dibromide	107		10.695				ND	
* 106 Chlorobenzene-d5 (IS)	117	11.134	11.128	0.006	84	1803412	10.0	
108 Chlorobenzene	112		11.152				ND	
110 1,1,1,2-Tetrachloroethane	131		11.237				ND	
111 Ethylbenzene	91		11.243				ND	
S 109 Xylenes, Total	106		11.245				ND	7
112 m-Xylene & p-Xylene	106		11.353				ND	
113 o-Xylene	106		11.682				ND	
114 Styrene	104		11.701				ND	
115 Bromoform	173		11.853				ND	
$ 119 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	90	839763	9.78	
120 1,1,2,2-Tetrachloroethane	83		12.231				ND	
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	988561	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

MSV_29_826ISS_00023 Amount Added: 1.00 Units: uL Run Reagent

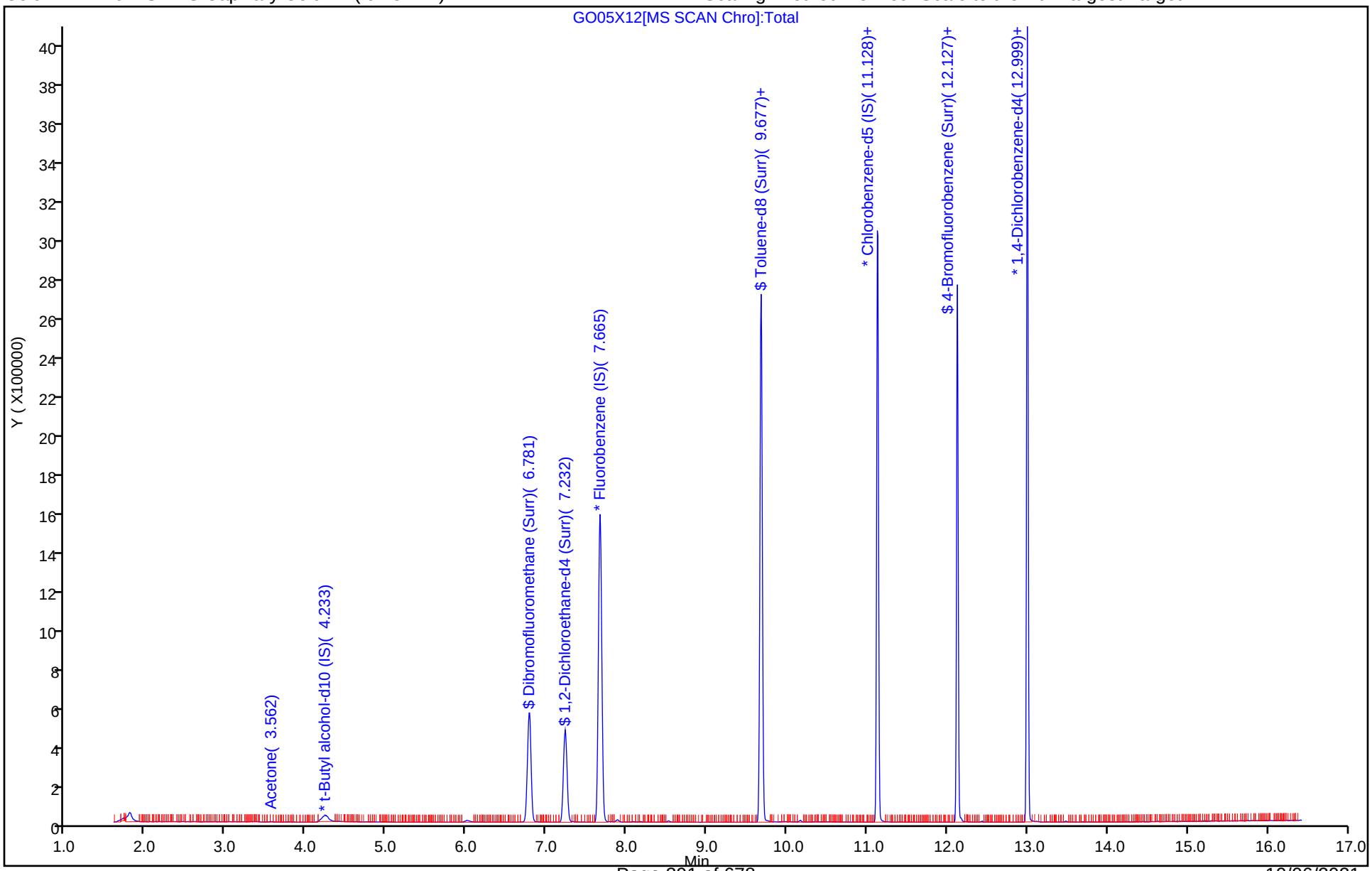
Report Date: 05-Oct-2021 17:57:25 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X12.D

Injection Date:	05-Oct-2021 13:16:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	410-56784-A-14	Lab Sample ID:	410-56784-14	Worklist Smp#:	13
Client ID:	HD-QC1-0/1-2				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X12.D				
Lims ID:	410-56784-A-14				
Client ID:	HD-QC1-0/1-2				
Sample Type:	Client				
Inject. Date:	05-Oct-2021 13:16:30	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0040685-013				
Operator ID:	SRK36897	Instrument ID:	16334		
Method:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\MSV_16334_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	05-Oct-2021 17:57:16	Calib Date:	27-Jul-2021 21:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1642				

First Level Reviewer: beckerk Date: 05-Oct-2021 17:48:43

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	10.0	9.63	96.33
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.51
$ 83 Toluene-d8 (Surr)	10.0	9.62	96.20
$ 119 4-Bromofluorobenzene (Surr)	10.0	9.78	97.81

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

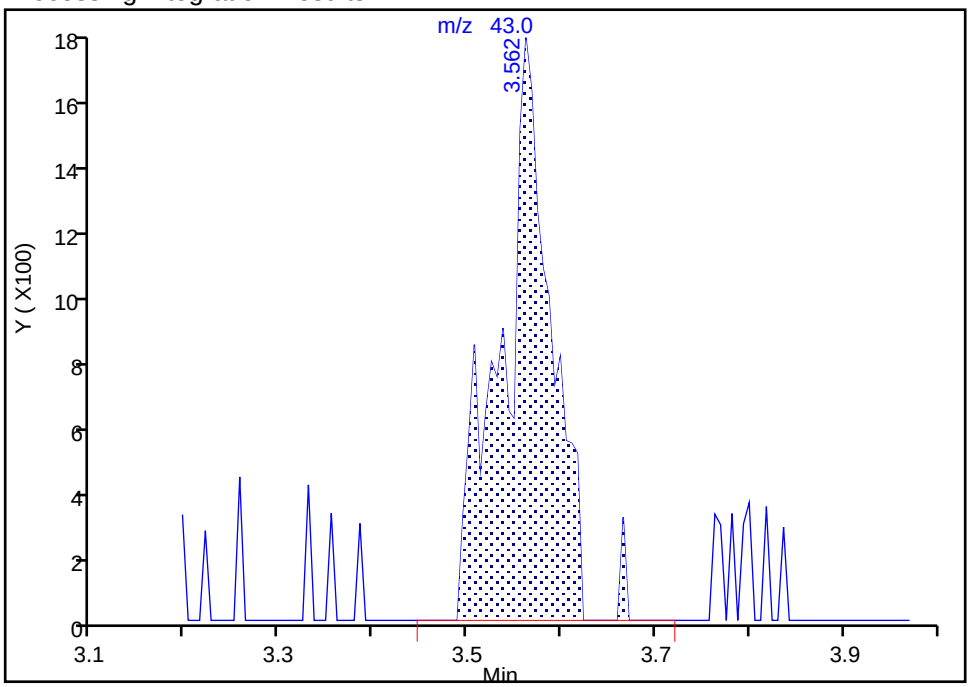
Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X12.D				
Injection Date:	05-Oct-2021 13:16:30	Instrument ID:	16334		
Lims ID:	410-56784-A-14	Lab Sample ID:	410-56784-14		
Client ID:	HD-QC1-0/1-2				
Operator ID:	SRK36897	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

21 Acetone, CAS: 67-64-1

Signal: 1

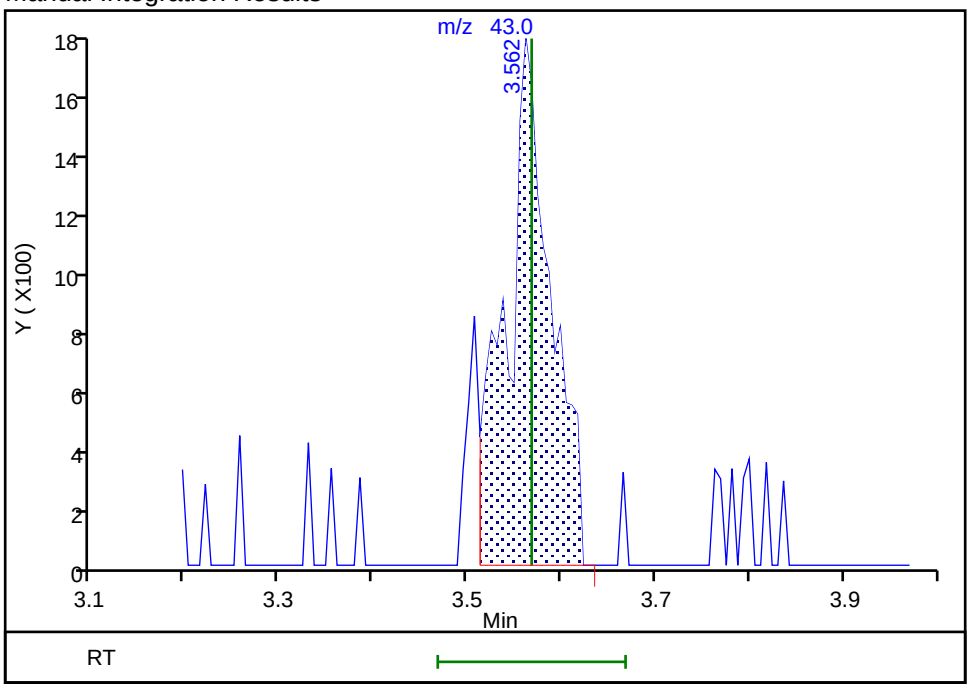
Processing Integration Results

RT: 3.56
Area: 6572
Amount: 0.678466
Amount Units: ug/l



Manual Integration Results

RT: 3.56
Area: 5836
Amount: 0.602485
Amount Units: ug/l



Reviewer: beckerk, 05-Oct-2021 17:48:29
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1 Analy Batch No.: 153227

SDG No.:

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2021 19:35 Calibration End Date: 07/27/2021 21:47 Calibration ID: 29447

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-153227/18	GL27X18.D
Level 2	IC 410-153227/17	GL27X17.D
Level 3	IC 410-153227/16	GL27X16.D
Level 4	IC 410-153227/15	GL27X15.D
Level 5	IC 410-153227/14	GL27X14.D
Level 6	ICIS 410-153227/13	GL27X13.D
Level 7	IC 410-153227/12	GL27X12.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	0.2093 0.2641	0.2317 0.2569	0.2551	0.2760	0.2551	Ave		0.2497			0.1000	8.9		20.0			
Chloromethane	0.3453 0.2990	0.3123 0.2921	0.3167	0.3140	0.3026	Ave		0.3117			0.1000	5.5		20.0			
1,3-Butadiene	0.3888 0.3099	0.3166 0.3040	0.3162	0.3640	0.3225	Ave		0.3317				9.6		20.0			
Vinyl chloride	0.2981 0.3028	0.2852 0.3017	0.2991	0.3237	0.3086	Ave		0.3028			0.1000	3.9		20.0			
Bromomethane	0.2268 0.2155	0.2091 0.2105	0.2121	0.2253	0.2149	Ave		0.2163			0.1000	3.3		20.0			
Chloroethane	0.1791 0.1812	0.1742 0.1784	0.1786	0.1912	0.1814	Ave		0.1806			0.1000	2.9		20.0			
Dichlorofluoromethane	0.4214 0.4167	0.4063 0.4111	0.4250	0.4401	0.4178	Ave		0.4198			0.1000	2.6		20.0			
Trichlorofluoromethane	0.3688 0.3955	0.3622 0.3887	0.3897	0.4174	0.3957	Ave		0.3883			0.1000	4.7		20.0			
Ethyl ether	0.1914 0.2011	0.1920 0.1974	0.1905	0.2039	0.2009	Ave		0.1968				2.8		20.0			
Freon 123a	0.2805 0.2870	0.2790 0.2836	0.2922	0.3093	0.2871	Ave		0.2884				3.5		20.0			
Acrolein	1.8818 2.1673	1.8090 2.1212	2.1228	2.5971	2.1441	Ave		2.1204				11.9		20.0			
1,1-Dichloroethene	0.1946 0.2175	0.1882 0.2100	0.2131	0.2231	0.2141	Ave		0.2087			0.1000	6.0		20.0			
Freon 113	0.2011 0.2402	0.1912 0.2342	0.2364	0.2451	0.2357	Ave		0.2263			0.1000	9.3		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.: 410-56784-1 Analy Batch No.: 153227

SDG No.:

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2021 19:35 Calibration End Date: 07/27/2021 21:47 Calibration ID: 29447

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								
Acetone	3.3450 2.5567	2.3836 2.4640	2.3308	2.7738	2.2761	Ave		2.5900			0.1000	14.4		20.0			
Methyl iodide	0.3860 0.4064	0.3513 0.3968	0.4063	0.4155	0.4027	Ave		0.3950				5.4		20.0			
Carbon disulfide	0.6888 0.7518	0.6178 0.7486	0.7483	0.7619	0.7391	Ave		0.7223			0.1000	7.2		20.0			
Methyl acetate	7.3928 8.1062	6.8257 8.2816	7.6297	9.2542	7.8658	Ave		7.9080			0.1000	9.7		20.0			
Allyl chloride	0.3585 0.3662	0.3146 0.3607	0.3727	0.3619	0.3605	Ave		0.3564				5.3		20.0			
Methylene Chloride	0.2281 0.2434	0.2255 0.2368	0.2476	0.2499	0.2435	Ave		0.2393			0.1000	4.0		20.0			
t-Butyl alcohol	0.7866 0.8631	0.7353 1.0826	0.7751	0.9197	0.8392	Ave		0.8574				13.6		20.0			
Acrylonitrile	2.5024 3.8604	3.0168 3.8018	3.6654	4.4415	3.9348	Ave		3.6033				17.8		20.0			
Methyl tert-butyl ether	0.5693 0.6349	0.5429 0.6136	0.6117	0.6255	0.6302	Ave		0.6040			0.1000	5.7		20.0			
trans-1,2-Dichloroethene	0.2252 0.2452	0.1957 0.2404	0.2394	0.2482	0.2398	Ave		0.2334			0.1000	7.8		20.0			
n-Hexane	0.2813 0.3655	0.2696 0.3689	0.3446	0.3700	0.3607	Ave		0.3372				12.8		20.0			
1,1-Dichloroethane	0.3972 0.4221	0.3646 0.4175	0.4248	0.4288	0.4170	Ave		0.4103			0.2000	5.5		20.0			
di-Isopropyl ether	0.7027 0.7927	0.6761 0.7789	0.7727	0.7958	0.7825	Ave		0.7574				6.3		20.0			
2-Chloro-1,3-butadiene	0.3064 0.3609	0.2770 0.3581	0.3403	0.3575	0.3559	Ave		0.3366				9.7		20.0			
Ethyl t-butyl ether	0.6502 0.7275	0.5982 0.7097	0.6991	0.7310	0.7174	Ave		0.6904				7.1		20.0			
2-Butanone (MEK)	4.2566 5.1745	4.1167 5.1032	5.1105	5.9256	5.0696	Ave		4.9653			0.1000	12.3		20.0			
cis-1,2-Dichloroethene	0.2498 0.2666	0.2321 0.2659	0.2665	0.2730	0.2658	Ave		0.2600			0.1000	5.5		20.0			
2,2-Dichloropropane	0.2760 0.3243	0.2596 0.3209	0.3115	0.3188	0.3169	Ave		0.3040				8.4		20.0			

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

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1 Analy Batch No.: 153227

SDG No.:

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2021 19:35 Calibration End Date: 07/27/2021 21:47 Calibration ID: 29447

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	1.0612 1.3857	1.0347 1.2797	1.3458	1.5092	1.3373	Ave		1.2791				13.5		20.0			
Methacrylonitrile	3.8252 5.0370	3.9227 5.1242	4.7387	5.9212	4.9339	Ave		4.7861				15.2		20.0			
Bromochloromethane	0.1120 0.1264	0.1055 0.1241	0.1217	0.1289	0.1237	Ave		0.1203				7.0		20.0			
Tetrahydrofuran	1.0816 1.5386	1.1370 1.5265	1.4018	1.6836	1.5202	Ave		1.4128				15.8		20.0			
Chloroform	0.3872 0.4245	0.3662 0.4207	0.4168	0.4247	0.4194	Ave		0.4085			0.2000	5.6		20.0			
1,1,1-Trichloroethane	0.3241 0.3678	0.3106 0.3701	0.3586	0.3690	0.3636	Ave		0.3520			0.1000	6.9		20.0			
Cyclohexane	0.3356 0.4466	0.3413 0.4472	0.4227	0.4402	0.4375	Ave		0.4101			0.1000	12.1		20.0			
Carbon tetrachloride	0.2773 0.3284	0.2675 0.3298	0.3176	0.3271	0.3216	Ave		0.3099			0.1000	8.4		20.0			
1,1-Dichloropropene	0.2853 0.3380	0.2704 0.3392	0.3310	0.3431	0.3310	Ave		0.3197				9.2		20.0			
Isobutyl alcohol	0.0049 0.0052	0.0039 0.0051	0.0049	0.0038	0.0046	Ave		0.0046				12.3		20.0			
Benzene	0.9540 0.9970	0.8642 0.9931	1.0029	1.0202	0.9923	Ave		0.9748			0.5000	5.4		20.0			
1,2-Dichloroethane	0.2885 0.2700	0.2611 0.2718	0.2812	0.2775	0.2663	Ave		0.2738			0.1000	3.4		20.0			
t-Amyl methyl ether	0.6017 0.6841	0.5728 0.6708	0.6574	0.6826	0.6784	Ave		0.6497				6.8		20.0			
n-Heptane	0.3378 0.3861	0.3111 0.3954	0.3853	0.3937	0.3860	Ave		0.3708				8.8		20.0			
n-Butanol	0.2494 0.3045	0.2321 0.2910	0.2738	0.2576	0.2665	Ave		0.2678				9.2		20.0			
Trichloroethene	0.2522 0.2640	0.2271 0.2651	0.2596	0.2653	0.2614	Ave		0.2564			0.2000	5.3		20.0			
Methylcyclohexane	0.3660 0.4813	0.3502 0.4834	0.4478	0.4749	0.4701	Ave		0.4391			0.1000	12.9		20.0			
1,2-Dichloropropane	0.2296 0.2628	0.2265 0.2637	0.2535	0.2598	0.2599	Ave		0.2508			0.1000	6.3		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.: 410-56784-1 Analy Batch No.: 153227

SDG No.:

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2021 19:35 Calibration End Date: 07/27/2021 21:47 Calibration ID: 29447

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	6.5935 9.9048	7.1320 10.217	8.8803	11.135	9.8565	Ave		9.1027				18.4		20.0			
Dibromomethane	0.1149 0.1297	0.1141 0.1305	0.1305	0.1299	0.1303	Ave		0.1257				6.1		20.0			
1,4-Dioxane	+++++ 0.0517	+++++ 0.0489	0.0457	0.0457	0.0467	Ave		0.0478			0.0050	5.4		20.0			
Bromodichloromethane	0.2779 0.3133	0.2673 0.3189	0.3007	0.3114	0.3078	Ave		0.2996			0.2000	6.5		20.0			
2-Nitropropane	2.0928 2.7621	2.0329 2.8371	2.4804	3.0656	2.7329	Ave		2.5720				15.1		20.0			
cis-1,3-Dichloropropene	0.3020 0.4027	0.3241 0.4125	0.3740	0.3928	0.3965	Ave		0.3721			0.2000	11.4		20.0			
4-Methyl-2-pentanone (MIBK)	9.1416 13.047	9.9829 13.113	12.009	14.967	13.048	Ave		12.187			0.1000	16.5		20.0			
Toluene	0.7623 0.8209	0.7247 0.8179	0.8132	0.8368	0.8239	Ave		0.7999			0.4000	5.1		20.0			
trans-1,3-Dichloropropene	0.3398 0.4342	0.3415 0.4402	0.3949	0.4209	0.4238	Ave		0.3993			0.1000	10.7		20.0			
Ethyl methacrylate	0.2791 0.3827	0.2866 0.3838	0.3422	0.3657	0.3737	Ave		0.3448				12.9		20.0			
1,1,2-Trichloroethane	0.2296 0.2509	0.2108 0.2497	0.2518	0.2584	0.2550	Ave		0.2437			0.1000	7.1		20.0			
Tetrachloroethene	0.3492 0.3970	0.3322 0.4003	0.3915	0.4024	0.3935	Ave		0.3809			0.2000	7.4		20.0			
1,3-Dichloropropane	0.3930 0.4271	0.3680 0.4190	0.4233	0.4296	0.4230	Ave		0.4119				5.6		20.0			
2-Hexanone	6.5637 9.4690	7.0264 9.6426	8.6655	10.998	9.5915	Ave		8.8510			0.1000	17.7		20.0			
Dibromochloromethane	0.2541 0.3152	0.2587 0.3167	0.2992	0.3061	0.3073	Ave		0.2939				9.0		20.0			
1,2-Dibromoethane (EDB)	0.2159 0.2501	0.2083 0.2473	0.2402	0.2471	0.2483	Ave		0.2367			0.1000	7.3		20.0			
1-Chlorohexane	0.4896 0.4677	0.4122 0.4731	0.4648	0.4631	0.4635	Ave		0.4620				5.2		20.0			
Chlorobenzene	0.8976 0.9520	0.8155 0.9374	0.9520	0.9713	0.9449	Ave		0.9244			0.5000	5.7		20.0			

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

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1 Analy Batch No.: 153227

SDG No.:

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2021 19:35 Calibration End Date: 07/27/2021 21:47 Calibration ID: 29447

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	0.2971 0.3369	0.2702 0.3396	0.3236	0.3310	0.3306	Ave		0.3184				8.0		20.0			
Ethylbenzene	1.4877 1.6054	1.3487 1.6082	1.5649	1.6182	1.5915	Ave		1.5464			0.1000	6.3		20.0			
m&p-Xylene	0.5432 0.6350	0.5126 0.6355	0.6191	0.6337	0.6260	Ave		0.6007			0.1000	8.5		20.0			
o-Xylene	0.5256 0.6315	0.5240 0.6352	0.6034	0.6175	0.6209	Ave		0.5940			0.3000	8.1		20.0			
Styrene	0.8694 1.0827	0.8347 1.0854	1.0118	1.0573	1.0689	Ave		1.0015			0.3000	10.5		20.0			
Bromoform	0.1669 0.2079	0.1555 0.2104	0.1839	0.1970	0.2023	Ave		0.1891			0.1000	11.2		20.0			
Isopropylbenzene	1.3259 1.6326	1.2816 1.6177	1.5291	1.6181	1.6064	Ave		1.5159			0.1000	9.8		20.0			
1,1,2,2-Tetrachloroethane	0.5088 0.5760	0.4981 0.5691	0.5437	0.5642	0.5588	Ave		0.5455			0.3000	5.6		20.0			
Bromobenzene	0.6807 0.7109	0.6245 0.7117	0.6934	0.7226	0.7073	Ave		0.6930				4.8		20.0			
trans-1,4-Dichloro-2-butene	+++++ 4.7502	3.0588 5.0007	3.9649	5.1589	4.6559	Ave		4.4316				17.8		20.0			
1,2,3-Trichloropropane	0.1288 0.1550	0.1337 0.1525	0.1562	0.1581	0.1563	Ave		0.1487				8.1		20.0			
N-Propylbenzene	2.9074 3.3218	2.7263 3.2730	3.2049	3.3600	3.3006	Ave		3.1563				7.7		20.0			
2-Chlorotoluene	0.5880 0.6753	0.5660 0.6687	0.6580	0.6781	0.6677	Ave		0.6431				7.2		20.0			
1,3,5-Trimethylbenzene	2.0473 2.4062	1.9529 2.3926	2.2499	2.3857	2.3971	Ave		2.2617				8.3		20.0			
4-Chlorotoluene	0.6336 0.6984	0.5837 0.6944	0.6886	0.7125	0.6974	Ave		0.6727				6.9		20.0			
tert-Butylbenzene	0.4204 0.5288	0.4173 0.5311	0.4908	0.5224	0.5184	Ave		0.4899				10.3		20.0			
Pentachloroethane	0.3828 0.4637	0.3878 0.4713	0.4135	0.4565	0.4592	Ave		0.4335				8.7		20.0			
1,2,4-Trimethylbenzene	2.0302 2.5171	1.9831 2.4940	2.4025	2.4923	2.4772	Ave		2.3423				9.9		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.: 410-56784-1 Analy Batch No.: 153227

SDG No.:

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2021 19:35 Calibration End Date: 07/27/2021 21:47 Calibration ID: 29447

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	2.5820 3.1121	2.4066 3.0750	2.9110	3.0641	3.0506	Ave		2.8859				9.7		20.0			
1,3-Dichlorobenzene	1.2816 1.4543	1.2742 1.4710	1.4356	1.4647	1.4527	Ave		1.4049			0.6000	6.2		20.0			
p-Isopropyltoluene	2.1607 2.7411	2.0752 2.7486	2.5257	2.7027	2.6907	Ave		2.5207				11.3		20.0			
1,4-Dichlorobenzene	1.4296 1.4848	1.2978 1.4727	1.4728	1.5062	1.4676	Ave		1.4474			0.5000	4.8		20.0			
1,2,3-Trimethylbenzene	1.0023 1.1245	0.9699 1.1351	1.0747	1.1380	1.1133	Ave		1.0797				6.3		20.0			
Benzyl chloride	0.1612 0.2425	0.1686 0.2492	0.2021	0.2201	0.2297	Ave		0.2105				16.5		20.0			
n-Butylbenzene	1.1862 1.4171	1.1404 1.4086	1.3319	1.4070	1.3957	Ave		1.3267				8.7		20.0			
1,2-Dichlorobenzene	1.2721 1.3773	1.2251 1.3738	1.3451	1.3936	1.3685	Ave		1.3365			0.4000	4.7		20.0			
1,2-Dibromo-3-Chloropropane	0.0772 0.0966	0.0733 0.0955	0.0860	0.0924	0.0931	Ave		0.0877			0.0500	10.5		20.0			
1,3,5-Trichlorobenzene	1.1300 1.2246	1.0326 1.2151	1.1806	1.2052	1.2004	Ave		1.1698				5.8		20.0			
1,2,4-Trichlorobenzene	1.0107 1.1326	0.9402 1.1124	1.0743	1.1096	1.0874	Ave		1.0667			0.2000	6.4		20.0			
Hexachlorobutadiene	0.4957 0.5636	0.4671 0.5545	0.5292	0.5461	0.5445	Ave		0.5287				6.6		20.0			
Naphthalene	1.6332 2.0708	1.5899 2.0222	1.8644	1.9523	2.0156	Ave		1.8783				10.3		20.0			
1,2,3-Trichlorobenzene	0.9082 1.0080	0.8356 0.9825	0.9684	0.9784	0.9828	Ave		0.9520				6.3		20.0			
Dibromofluoromethane (Surr)	0.2507 0.2494	0.2492 0.2489	0.2489	0.2483	0.2489	Ave		0.2492				0.3		20.0			
1,2-Dichloroethane-d4 (Surr)	0.0562 0.0552	0.0562 0.0554	0.0552	0.0552	0.0545	Ave		0.0554				1.1		20.0			
Toluene-d8 (Surr)	1.3033 1.3023	1.3047 1.2820	1.3114	1.3051	1.3067	Ave		1.3022				0.7		20.0			
4-Bromofluorobenzene (Surr)	0.4719 0.4772	0.4751 0.4746	0.4827	0.4754	0.4755	Ave		0.4761				0.7		20.0			

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

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1 Analy Batch No.: 153227

SDG No.:

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2021 19:35 Calibration End Date: 07/27/2021 21:47 Calibration ID: 29447

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-153227/18	GL27X18.D
Level 2	IC 410-153227/17	GL27X17.D
Level 3	IC 410-153227/16	GL27X16.D
Level 4	IC 410-153227/15	GL27X15.D
Level 5	IC 410-153227/14	GL27X14.D
Level 6	ICIS 410-153227/13	GL27X13.D
Level 7	IC 410-153227/12	GL27X12.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	7861 516723	21724 1253546	48285	105695	249774	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloromethane	FB	Ave	12968 585078	29283 1425192	59955	120238	296377	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Butadiene	FB	Ave	14603 606472	29692 1483329	59859	139390	315859	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Vinyl chloride	FB	Ave	11198 592530	26745 1472364	56627	123951	302193	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromomethane	FB	Ave	8518 421592	19605 1027363	40150	86285	210438	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloroethane	FB	Ave	6729 354649	16333 870537	33819	73196	177677	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dichlorofluoromethane	FB	Ave	15827 815276	38104 2006252	80455	168533	409195	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Trichlorofluoromethane	FB	Ave	13852 773951	33969 1896898	73768	159826	387502	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl ether	FB	Ave	7191 393590	18010 963484	36058	78080	196735	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Freon 123a	FB	Ave	10536 561590	26167 1384134	55311	118430	281133	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acrolein	TBAd 10	Ave	59676 3112860	132577 7310070	305188	620999	1506352	10.00 500	25.0 1250	50.0	100.0	250
1,1-Dichloroethene	FB	Ave	7309 425643	17652 1024792	40340	85424	209672	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Freon 113	FB	Ave	7554 469934	17931 1142818	44751	93862	230841	0.200 10.0	0.500 25.0	1.00	2.00	5.00

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1 Analy Batch No.: 153227

SDG No.:

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2021 19:35 Calibration End Date: 07/27/2021 21:47 Calibration ID: 29447

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Acetone	TBAd10	Ave	21216 734480	34939 1698335	67020	132655	319840	2.00 100	5.00 250	10.0	20.0	50.0
Methyl iodide	FB	Ave	14499 795281	32943 1936349	76913	159111	394336	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon disulfide	FB	Ave	25874 1470951	57933 3652913	141663	291736	723844	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl acetate	TBAd10	Ave	4689 232867	10005 570825	21939	44258	110528	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Allyl chloride	FB	Ave	13465 716532	29502 1760283	70545	138586	353062	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylene Chloride	FB	Ave	8567 476324	21145 1155642	46875	95699	238472	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Butyl alcohol	TBAd10	Ave	9978 495911	21557 1492417	44573	87970	235836	4.00 200	10.0 500	20.0	40.0	100
Acrylonitrile	TBAd10	Ave	3968 277249	11055 655106	26349	53103	138229	0.500 25.0	1.25 62.5	2.50	5.00	12.5
Methyl tert-butyl ether	FB	Ave	21385 1242395	50908 2994194	115806	239506	617188	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,2-Dichloroethene	FB	Ave	8457 479749	18357 1173294	45312	95047	234832	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Hexane	FB	Ave	10567 715082	25282 1800233	65230	141660	353278	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloroethane	FB	Ave	14921 825927	34195 2037094	80419	164184	408393	0.200 10.0	0.500 25.0	1.00	2.00	5.00
di-Isopropyl ether	FB	Ave	26395 1551125	63401 3801082	146277	304739	766313	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chloro-1,3-butadiene	FB	Ave	11510 706249	25981 1747556	64426	136910	348522	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl t-butyl ether	FB	Ave	24423 1423423	56098 3463336	132335	279921	702523	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Butanone (MEK)	TBAd10	Ave	26998	60342	146949	283392	712377	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.: 410-56784-1 Analy Batch No.: 153227

SDG No.:

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2021 19:35 Calibration End Date: 07/27/2021 21:47 Calibration ID: 29447

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
			1486502	3517461				100	250			
cis-1,2-Dichloroethene	FB	Ave	9383 521666	21768 1297682	50459	104526	260285	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2,2-Dichloropropane	FB	Ave	10367 634495	24342 1566148	58977	122071	310357	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Propionitrile	TBAd 10	Ave	13462 796171	30332 1764071	77396	144352	375827	4.00 200	10.0 500	20.0	40.0	100
Methacrylonitrile	TBAd 10	Ave	24262 1447001	57499 3531950	136258	283178	693298	2.00 100	5.00 250	10.0	20.0	50.0
Bromochloromethane	FB	Ave	4205 247355	9896 605697	23043	49371	121185	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrahydrofuran	TBAd 10	Ave	3430 221001	8333 526089	20154	40258	106807	1.00 50.0	2.50 125	5.00	10.0	25.0
Chloroform	FB	Ave	14545 830529	34342 2052889	78896	162636	410725	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1-Trichloroethane	FB	Ave	12174 719579	29131 1806207	67893	141297	356100	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Cyclohexane	FB	Ave	12606 873813	32004 2182074	80010	168554	428403	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon tetrachloride	FB	Ave	10415 642568	25082 1609545	60121	125270	314977	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloropropene	FB	Ave	10716 661411	25354 1655371	62661	131391	324144	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isobutyl alcohol	FB	Ave	9165 510385	18495 1236400	46747	71811	225001	10.0 500	25.0 1250	50.0	100	250
Benzene	FB	Ave	35835 1950769	81040 4846041	189845	390651	971741	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloroethane	FB	Ave	10837 528398	24482 1326300	53223	106240	260781	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Amyl methyl ether	FB	Ave	22599 1338549	53714 3273561	124444	261376	664335	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Heptane	FB	Ave	12688 755469	29178 1929385	72933	150763	378028	0.200 10.0	0.500 25.0	1.00	2.00	5.00

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1 Analy Batch No.: 153227

SDG No.:

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2021 19:35 Calibration End Date: 07/27/2021 21:47 Calibration ID: 29447

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
n-Butanol	TBAd 10	Ave	13839 765480	29774 1754885	68888	107788	327688	17.5 875	43.8 2188	87.5	175	438
Trichloroethene	FB	Ave	9474 516547	21298 1293471	49147	101568	256014	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylcyclohexane	FB	Ave	13746 941824	32844 2359075	84779	181841	460371	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloropropane	FB	Ave	8624 514255	21244 1287040	47996	99474	254477	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl methacrylate	TBAd 10	Ave	4182 284538	10454 704239	25535	53252	138502	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dibromomethane	FB	Ave	4317 253858	10701 637054	24708	49729	127594	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,4-Dioxane	TBAd 10	Ave	+++++ 74329	+++++ 168647	6572	10923	32843	+++++ 500	+++++ 1250	50.0	100	250
Bromodichloromethane	FB	Ave	10440 613045	25067 1556304	56926	119231	301385	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Nitropropane	TBAd 10	Ave	6637 396735	14899 977744	35662	73305	192010	1.00 50.0	2.50 125	5.00	10.0	25.0
cis-1,3-Dichloropropene	FB	Ave	11343 787924	30391 2012913	70807	150413	388304	0.200 10.0	0.500 25.0	1.00	2.00	5.00
4-Methyl-2-pentanone (MIBK)	TBAd 10	Ave	57982 3748028	146329 9038373	345315	715808	1833544	2.00 100	5.00 250	10.0	20.0	50.0
Toluene	CBZd 5	Ave	22427 1263648	53299 3182569	120357	251158	632066	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,3-Dichloropropene	CBZd 5	Ave	9997 668411	25116 1712803	58447	126337	325124	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl methacrylate	CBZd 5	Ave	8211 589066	21078 1493298	50655	109774	286710	0.200 10.0	0.500 25.0	1.00	2.00	5.00

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1 Analy Batch No.: 153227

SDG No.:

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2021 19:35 Calibration End Date: 07/27/2021 21:47 Calibration ID: 29447

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,1,2-Trichloroethane	CBZd 5	Ave	6754 386158	15502 971609	37268	77558	195631	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrachloroethene	CBZd 5	Ave	10275 611154	24431 1557790	57945	120772	301876	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichloropropane	CBZd 5	Ave	11562 657511	27066 1630413	62656	128951	324544	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Hexanone	TBAd 10	Ave	41631 2720182	102992 6646341	249173	525996	1347779	2.00 100	5.00 250	10.0	20.0	50.0
Dibromochloromethane	CBZd 5	Ave	7476 485191	19025 1232439	44279	91864	235743	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromoethane (EDB)	CBZd 5	Ave	6351 384909	15317 962305	35554	74158	190467	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1-Chlorohexane	CBZd 5	Ave	14405 719936	30317 1840716	68788	138994	355580	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chlorobenzene	CBZd 5	Ave	26408 1465495	59976 3647731	140899	291512	724968	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1,2-Tetrachloroethane	CBZd 5	Ave	8742 518542	19872 1321338	47898	99332	253604	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethylbenzene	CBZd 5	Ave	43770 2471291	99191 6257658	231619	485679	1220994	0.200 10.0	0.500 25.0	1.00	2.00	5.00
m&p-Xylene	CBZd 5	Ave	31964 1954841	75404 4945575	183271	380409	960534	0.400 20.0	1.00 50.0	2.00	4.00	10.0
o-Xylene	CBZd 5	Ave	15463 972087	38542 2471775	89302	185335	476343	0.200 10.0	0.500 25.0	1.00	2.00	5.00

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1 Analy Batch No.: 153227

SDG No.:

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2021 19:35 Calibration End Date: 07/27/2021 21:47 Calibration ID: 29447

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Styrene	CBZd 5	Ave	25579 1666639	61389 4223576	149757	317345	820059	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromoform	CBZd 5	Ave	4912 320058	11437 818655	27224	59134	155220	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isopropylbenzene	CBZd 5	Ave	39012 2513151	94259 6294550	226325	485658	1232476	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	8736 519410	21368 1301500	47628	99213	250651	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromobenzene	DCBd 4	Ave	11689 640968	26789 1627659	60740	127057	317303	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,4-Dichloro-2-butene	TBAd 10	Ave	+++++ 1364596	44835 3446796	114008	246723	654243	+++++ 100	5.00 250	10.0	20.0	50.0
1,2,3-Trichloropropane	DCBd 4	Ave	2212 139728	5734 348849	13685	27797	70129	0.200 10.0	0.500 25.0	1.00	2.00	5.00
N-Propylbenzene	DCBd 4	Ave	49923 2995210	116945 7485306	280736	590833	1480592	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chlorotoluene	DCBd 4	Ave	10097 608930	24277 1529310	57641	119243	299514	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3,5-Trimethylbenzene	DCBd 4	Ave	35155 2169631	83768 5471729	197085	419509	1075297	0.200 10.0	0.500 25.0	1.00	2.00	5.00
4-Chlorotoluene	DCBd 4	Ave	10880 629769	25036 1588139	60319	125295	312849	0.200 10.0	0.500 25.0	1.00	2.00	5.00
tert-Butylbenzene	DCBd 4	Ave	7219 476799	17899 1214603	42989	91865	232532	0.200 10.0	0.500 25.0	1.00	2.00	5.00

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1 Analy Batch No.: 153227

SDG No.:

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2021 19:35 Calibration End Date: 07/27/2021 21:47 Calibration ID: 29447

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Pentachloroethane	DCBd 4	Ave	6573 418106	16636 1077865	36222	80272	205994	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,4-Trimethylbenzene	DCBd 4	Ave	34861 2269629	85067 5703646	210451	438254	1111219	0.200 10.0	0.500 25.0	1.00	2.00	5.00
sec-Butylbenzene	DCBd 4	Ave	44335 2806118	103229 7032509	254997	538798	1368479	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichlorobenzene	DCBd 4	Ave	22007 1311314	54656 3364224	125754	257560	651676	0.200 10.0	0.500 25.0	1.00	2.00	5.00
p-Isopropyltoluene	DCBd 4	Ave	37102 2471640	89017 6285970	221243	475245	1207000	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,4-Dichlorobenzene	DCBd 4	Ave	24548 1338790	55669 3368113	129014	264857	658335	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,3-Trimethylbenzene	DCBd 4	Ave	17211 1013920	41606 2596038	94138	200100	499402	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Benzyl chloride	DCBd 4	Ave	2768 218698	7232 569915	17706	38696	103032	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Butylbenzene	DCBd 4	Ave	20369 1277757	48919 3221534	116669	247402	626076	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichlorobenzene	DCBd 4	Ave	21843 1241894	52551 3141899	117822	245051	613898	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1325 87076	3145 218520	7530	16249	41743	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3,5-Trichlorobenzene	DCBd 4	Ave	19403 1104240	44292 2778810	103419	211923	538482	0.200 10.0	0.500 25.0	1.00	2.00	5.00

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1 Analy Batch No.: 153227

SDG No.:

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2021 19:35 Calibration End Date: 07/27/2021 21:47 Calibration ID: 29447

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,2,4-Trichlorobenzene	DCBd 4	Ave	17354 1021250	40328 2544095	94107	195116	487803	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Hexachlorobutadiene	DCBd 4	Ave	8511 508190	20037 1268156	46353	96028	244269	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Naphthalene	DCBd 4	Ave	28044 1867226	68200 4624623	163319	343293	904150	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,3-Trichlorobenzene	DCBd 4	Ave	15594 908913	35843 2246935	84829	172041	440850	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dibromofluoromethane (Surr)	FB	Ave	470752 487955	467435 485776	471097	475325	487572	10.0 10.0	10.0 10.0	10.0	10.0	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	105513 108066	105375 108065	104518	105744	106740	10.0 10.0	10.0 10.0	10.0	10.0	10.0
Toluene-d8 (Surr)	CBZd 5	Ave	1917346 2004602	1919172 1995381	1940951	1958504	2005076	10.0 10.0	10.0 10.0	10.0	10.0	10.0
4-Bromofluorobenzene (Surr)	CBZd 5	Ave	694165 734538	698786 738716	714443	713497	729675	10.0 10.0	10.0 10.0	10.0	10.0	10.0

Curve Type Legend
Ave = Average ISTD

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1 Analy Batch No.: 153227

SDG No.:

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2021 19:35 Calibration End Date: 07/27/2021 21:47 Calibration ID: 29447

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-153227/18	GL27X18.D
Level 2	IC 410-153227/17	GL27X17.D
Level 3	IC 410-153227/16	GL27X16.D
Level 4	IC 410-153227/15	GL27X15.D
Level 5	IC 410-153227/14	GL27X14.D
Level 6	ICIS 410-153227/13	GL27X13.D
Level 7	IC 410-153227/12	GL27X12.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	-16.2 2.9	-7.2	2.1	10.5	2.1	5.7	50 30	30	30	30	30	30
Chloromethane	10.8 -6.3	0.2	1.6	0.7	-2.9	-4.1	50 30	30	30	30	30	30
1,3-Butadiene	17.2 -8.4	-4.6	-4.7	9.7	-2.8	-6.6	50 30	30	30	30	30	30
Vinyl chloride	-1.5 -0.3	-5.8	-1.2	6.9	1.9	0.0	50 30	30	30	30	30	30
Bromomethane	4.8 -2.7	-3.4	-1.9	4.2	-0.7	-0.4	50 30	30	30	30	30	30
Chloroethane	-0.8 -1.2	-3.6	-1.1	5.8	0.5	0.4	50 30	30	30	30	30	30
Dichlorofluoromethane	0.4 -2.1	-3.2	1.2	4.8	-0.5	-0.7	50 30	30	30	30	30	30
Trichlorofluoromethane	-5.0 0.1	-6.7	0.4	7.5	1.9	1.9	50 30	30	30	30	30	30
Ethyl ether	-2.7 0.3	-2.4	-3.2	3.6	2.1	2.2	50 30	30	30	30	30	30
Freon 123a	-2.7 -1.6	-3.2	1.3	7.2	-0.5	-0.5	50 30	30	30	30	30	30
Acrolein	-11.3 0.0	-14.7	0.1	22.5	1.1	2.2	50 30	30	30	30	30	30
1,1-Dichloroethene	-6.7 0.6	-9.8	2.1	6.9	2.6	4.2	50 30	30	30	30	30	30
Freon 113	-11.1 3.5	-15.5	4.5	8.3	4.2	6.1	50 30	30	30	30	30	30
Acetone	29.1 -4.9	-8.0	-10.0	7.1	-12.1	-1.3	50 30	30	30	30	30	30

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1 Analy Batch No.: 153227

SDG No.:

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2021 19:35 Calibration End Date: 07/27/2021 21:47 Calibration ID: 29447

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	-2.3 0.5	-11.1	2.9	5.2	1.9	2.9	50 30	30	30	30	30	30
Carbon disulfide	-4.6 3.6	-14.5	3.6	5.5	2.3	4.1	50 30	30	30	30	30	30
Methyl acetate	-6.5 4.7	-13.7	-3.5	17.0	-0.5	2.5	50 30	30	30	30	30	30
Allyl chloride	0.6 1.2	-11.7	4.5	1.5	1.1	2.7	50 30	30	30	30	30	30
Methylene Chloride	-4.7 -1.0	-5.8	3.5	4.5	1.8	1.7	50 30	30	30	30	30	30
t-Butyl alcohol	-8.3 26.3	-14.2	-9.6	7.3	-2.1	0.7	50 30	30	30	30	30	30
Acrylonitrile	-30.6 5.5	-16.3	1.7	23.3	9.2	7.1	50 30	30	30	30	30	30
Methyl tert-butyl ether	-5.7 1.6	-10.1	1.3	3.6	4.3	5.1	50 30	30	30	30	30	30
trans-1,2-Dichloroethene	-3.5 3.0	-16.1	2.5	6.3	2.7	5.0	50 30	30	30	30	30	30
n-Hexane	-16.6 9.4	-20.1	2.2	9.7	7.0	8.4	50 30	30	30	30	30	30
1,1-Dichloroethane	-3.2 1.7	-11.1	3.5	4.5	1.6	2.9	50 30	30	30	30	30	30
di-Isopropyl ether	-7.2 2.8	-10.7	2.0	5.1	3.3	4.7	50 30	30	30	30	30	30
2-Chloro-1,3-butadiene	-9.0 6.4	-17.7	1.1	6.2	5.7	7.2	50 30	30	30	30	30	30
Ethyl t-butyl ether	-5.8 2.8	-13.4	1.2	5.9	3.9	5.4	50 30	30	30	30	30	30
2-Butanone (MEK)	-14.3 2.8	-17.1	2.9	19.3	2.1	4.2	50 30	30	30	30	30	30
cis-1,2-Dichloroethene	-3.9 2.3	-10.7	2.5	5.0	2.2	2.6	50 30	30	30	30	30	30
2,2-Dichloropropane	-9.2 5.6	-14.6	2.5	4.9	4.2	6.7	50 30	30	30	30	30	30
Propionitrile	-17.0 0.0	-19.1	5.2	18.0	4.6	8.3	50 30	30	30	30	30	30
Methacrylonitrile	-20.1 7.1	-18.0	-1.0	23.7	3.1	5.2	50 30	30	30	30	30	30

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1 Analy Batch No.: 153227

SDG No.:

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2021 19:35 Calibration End Date: 07/27/2021 21:47 Calibration ID: 29447

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	-7.0 3.1	-12.3	1.1	7.1	2.8	5.0	50 30	30	30	30	30	30
Tetrahydrofuran	-23.4 8.1	-19.5	-0.8	19.2	7.6	8.9	50 30	30	30	30	30	30
Chloroform	-5.2 3.0	-10.4	2.0	4.0	2.7	3.9	50 30	30	30	30	30	30
1,1,1-Trichloroethane	-7.9 5.2	-11.7	1.9	4.8	3.3	4.5	50 30	30	30	30	30	30
Cyclohexane	-18.2 9.0	-16.8	3.1	7.3	6.7	8.9	50 30	30	30	30	30	30
Carbon tetrachloride	-10.5 6.4	-13.7	2.5	5.6	3.8	6.0	50 30	30	30	30	30	30
1,1-Dichloropropene	-10.8 6.1	-15.4	3.5	7.3	3.5	5.7	50 30	30	30	30	30	30
Isobutyl alcohol	5.5 9.5	-14.8	6.7	-18.9	-0.7	12.7	50 30	30	30	30	30	30
Benzene	-2.1 1.9	-11.3	2.9	4.7	1.8	2.3	50 30	30	30	30	30	30
1,2-Dichloroethane	5.4 -0.7	-4.6	2.7	1.3	-2.7	-1.4	50 30	30	30	30	30	30
t-Amyl methyl ether	-7.4 3.3	-11.8	1.2	5.1	4.4	5.3	50 30	30	30	30	30	30
n-Heptane	-8.9 6.6	-16.1	3.9	6.2	4.1	4.1	50 30	30	30	30	30	30
n-Butanol	-6.9 8.6	-13.3	2.2	-3.8	-0.5	13.7	50 30	30	30	30	30	30
Trichloroethene	-1.6 3.4	-11.4	1.3	3.5	2.0	3.0	50 30	30	30	30	30	30
Methylcyclohexane	-16.7 10.1	-20.2	2.0	8.1	7.1	9.6	50 30	30	30	30	30	30
1,2-Dichloropropane	-8.5 5.1	-9.7	1.1	3.6	3.6	4.8	50 30	30	30	30	30	30
Methyl methacrylate	-27.6 12.2	-21.7	-2.4	22.3	8.3	8.8	50 30	30	30	30	30	30
Dibromomethane	-8.6 3.8	-9.2	3.8	3.3	3.6	3.2	50 30	30	30	30	30	30
1,4-Dioxane	+++++ 2.5	+++++	-4.3	-4.4	-2.1	8.3	 30		50	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.: 410-56784-1 Analy Batch No.: 153227

SDG No.:

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2021 19:35 Calibration End Date: 07/27/2021 21:47 Calibration ID: 29447

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	-7.2 6.4	-10.8	0.4	3.9	2.7	4.6	50 30	30	30	30	30	30
2-Nitropropane	-18.6 10.3	-21.0	-3.6	19.2	6.3	7.4	50 30	30	30	30	30	30
cis-1,3-Dichloropropene	-18.8 10.9	-12.9	0.5	5.6	6.6	8.2	50 30	30	30	30	30	30
4-Methyl-2-pentanone (MIBK)	-25.0 7.6	-18.1	-1.5	22.8	7.1	7.1	50 30	30	30	30	30	30
Toluene	-4.7 2.2	-9.4	1.7	4.6	3.0	2.6	50 30	30	30	30	30	30
trans-1,3-Dichloropropene	-14.9 10.2	-14.5	-1.1	5.4	6.1	8.7	50 30	30	30	30	30	30
Ethyl methacrylate	-19.1 11.3	-16.9	-0.8	6.1	8.4	11.0	50 30	30	30	30	30	30
1,1,2-Trichloroethane	-5.8 2.4	-13.5	3.3	6.0	4.6	2.9	50 30	30	30	30	30	30
Tetrachloroethene	-8.3 5.1	-12.8	2.8	5.6	3.3	4.2	50 30	30	30	30	30	30
1,3-Dichloropropane	-4.6 1.7	-10.6	2.8	4.3	2.7	3.7	50 30	30	30	30	30	30
2-Hexanone	-25.8 8.9	-20.6	-2.1	24.3	8.4	7.0	50 30	30	30	30	30	30
Dibromochloromethane	-13.5 7.8	-12.0	1.8	4.1	4.6	7.3	50 30	30	30	30	30	30
1,2-Dibromoethane (EDB)	-8.8 4.5	-12.0	1.5	4.4	4.9	5.6	50 30	30	30	30	30	30
1-Chlorohexane	6.0 2.4	-10.8	0.6	0.2	0.3	1.2	50 30	30	30	30	30	30
Chlorobenzene	-2.9 1.4	-11.8	3.0	5.1	2.2	3.0	50 30	30	30	30	30	30
1,1,1,2-Tetrachloroethane	-6.7 6.6	-15.1	1.6	3.9	3.8	5.8	50 30	30	30	30	30	30
Ethylbenzene	-3.8 4.0	-12.8	1.2	4.6	2.9	3.8	50 30	30	30	30	30	30
m&p-Xylene	-9.6 5.8	-14.7	3.1	5.5	4.2	5.7	50 30	30	30	30	30	30
o-Xylene	-11.5 6.9	-11.8	1.6	4.0	4.5	6.3	50 30	30	30	30	30	30

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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-56784-1 Analy Batch No.: 153227

SDG No.:

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2021 19:35 Calibration End Date: 07/27/2021 21:47 Calibration ID: 29447

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	-13.2 8.4	-16.7	1.0	5.6	6.7	8.1	50 30	30	30	30	30	30
Bromoform	-11.7 11.2	-17.8	-2.8	4.2	7.0	9.9	50 30	30	30	30	30	30
Isopropylbenzene	-12.5 6.7	-15.5	0.9	6.7	6.0	7.7	50 30	30	30	30	30	30
1,1,2,2-Tetrachloroethane	-6.7 4.3	-8.7	-0.3	3.4	2.4	5.6	50 30	30	30	30	30	30
Bromobenzene	-1.8 2.7	-9.9	0.1	4.3	2.1	2.6	50 30	30	30	30	30	30
trans-1,4-Dichloro-2-butene	+++++ 12.8	-31.0	-10.5	16.4	5.1	7.2	 30	50	30	30	30	30
1,2,3-Trichloropropane	-13.3 2.6	-10.1	5.1	6.3	5.2	4.2	50 30	30	30	30	30	30
N-Propylbenzene	-7.9 3.7	-13.6	1.5	6.5	4.6	5.2	50 30	30	30	30	30	30
2-Chlorotoluene	-8.6 4.0	-12.0	2.3	5.4	3.8	5.0	50 30	30	30	30	30	30
1,3,5-Trimethylbenzene	-9.5 5.8	-13.7	-0.5	5.5	6.0	6.4	50 30	30	30	30	30	30
4-Chlorotoluene	-5.8 3.2	-13.2	2.4	5.9	3.7	3.8	50 30	30	30	30	30	30
tert-Butylbenzene	-14.2 8.4	-14.8	0.2	6.6	5.8	7.9	50 30	30	30	30	30	30
Pentachloroethane	-11.7 8.7	-10.5	-4.6	5.3	5.9	7.0	50 30	30	30	30	30	30
1,2,4-Trimethylbenzene	-13.3 6.5	-15.3	2.6	6.4	5.8	7.5	50 30	30	30	30	30	30
sec-Butylbenzene	-10.5 6.6	-16.6	0.9	6.2	5.7	7.8	50 30	30	30	30	30	30
1,3-Dichlorobenzene	-8.8 4.7	-9.3	2.2	4.3	3.4	3.5	50 30	30	30	30	30	30
p-Isopropyltoluene	-14.3 9.0	-17.7	0.2	7.2	6.7	8.7	50 30	30	30	30	30	30
1,4-Dichlorobenzene	-1.2 1.8	-10.3	1.8	4.1	1.4	2.6	50 30	30	30	30	30	30
1,2,3-Trimethylbenzene	-7.2 5.1	-10.2	-0.5	5.4	3.1	4.1	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.: 410-56784-1 Analy Batch No.: 153227

SDG No.:

Instrument ID: 16334 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/27/2021 19:35 Calibration End Date: 07/27/2021 21:47 Calibration ID: 29447

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Benzyl chloride	-23.4 18.4	-19.9	-4.0	4.5	9.1	15.2	50 30	30	30	30	30	30
n-Butylbenzene	-10.6 6.2	-14.0	0.4	6.0	5.2	6.8	50 30	30	30	30	30	30
1,2-Dichlorobenzene	-4.8 2.8	-8.3	0.6	4.3	2.4	3.1	50 30	30	30	30	30	30
1,2-Dibromo-3-Chloropropane	-12.0 8.9	-16.4	-2.0	5.3	6.1	10.1	50 30	30	30	30	30	30
1,3,5-Trichlorobenzene	-3.4 3.9	-11.7	0.9	3.0	2.6	4.7	50 30	30	30	30	30	30
1,2,4-Trichlorobenzene	-5.3 4.3	-11.9	0.7	4.0	1.9	6.2	50 30	30	30	30	30	30
Hexachlorobutadiene	-6.2 4.9	-11.6	0.1	3.3	3.0	6.6	50 30	30	30	30	30	30
Naphthalene	-13.1 7.7	-15.4	-0.7	3.9	7.3	10.2	50 30	30	30	30	30	30
1,2,3-Trichlorobenzene	-4.6 3.2	-12.2	1.7	2.8	3.2	5.9	50 30	30	30	30	30	30
Dibromofluoromethane (Surr)	0.6 -0.1	0.0	-0.1	-0.4	-0.1	0.1	50 30	30	30	30	30	30
1,2-Dichloroethane-d4 (Surr)	1.4 -0.1	1.4	-0.4	-0.3	-1.7	-0.3	50 30	30	30	30	30	30
Toluene-d8 (Surr)	0.1 -1.6	0.2	0.7	0.2	0.3	0.0	50 30	30	30	30	30	30
4-Bromofluorobenzene (Surr)	-0.9 -0.3	-0.2	1.4	-0.1	-0.1	0.2	50 30	30	30	30	30	30

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X12.D
Lims ID: IC std7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 27-Jul-2021 19:35:30 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0035331-012
Misc. Info.: IC STD7
Operator ID: kas02648 Instrument ID: 16334
Sublist: chrom-MSV_16334_25mL*sub4

Method: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 16:12:22 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1675

First Level Reviewer: campbellme Date: 28-Jul-2021 00:05:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.953	1.934	0.019	99	1253546	25.0	25.7	
5 Chloromethane	50	2.148	2.136	0.012	99	1425192	25.0	23.4	
7 Butadiene	39	2.257	2.245	0.012	92	1483329	25.0	22.9	
8 Vinyl chloride	62	2.264	2.251	0.013	98	1472364	25.0	24.9	
9 Bromomethane	94	2.581	2.568	0.013	90	1027363	25.0	24.3	
10 Chloroethane	64	2.660	2.648	0.012	100	870537	25.0	24.7	
12 Dichlorofluoromethane	67	2.904	2.892	0.012	97	2006252	25.0	24.5	
13 Trichlorofluoromethane	101	2.971	2.959	0.012	98	1896898	25.0	25.0	
15 Ethyl ether	59	3.196	3.190	0.006	92	963484	25.0	25.1	
17 1,2-Dichloro-1,1,2-trifluoroetha	67	3.300	3.288	0.012	92	1384134	25.0	24.6	
18 Acrolein	56	3.379	3.367	0.012	100	7310070	1250.0	1250.4	
19 1,1-Dichloroethene	96	3.519	3.501	0.018	98	1024792	25.0	25.2	
20 112TCTFE	101	3.538	3.532	0.006	91	1142818	25.0	25.9	
21 Acetone	43	3.568	3.550	0.018	100	1698335	250.0	237.8	
23 Iodomethane	142	3.708	3.696	0.012	98	1936349	25.0	25.1	
24 Ethyl bromide	108	3.727	3.715	0.012	98	915021	25.0	25.3	
22 Isopropyl alcohol	45	3.830	3.800	0.030	94	636474	500.0	554.3	
25 Carbon disulfide	76	3.830	3.806	0.024	99	3652913	25.0	25.9	
27 Methyl acetate	43	3.958	3.934	0.024	97	570825	25.0	26.2	M
28 3-Chloro-1-propene	41	3.971	3.965	0.006	93	1760283	25.0	25.3	
29 Methylene Chloride	84	4.166	4.154	0.012	92	1155642	25.0	24.7	
* 30 t-Butyl alcohol-d10 (IS)	65	4.275	4.257	0.018	98	137853	50.0	50.0	
31 2-Methyl-2-propanol	59	4.397	4.367	0.030	99	1492417	500.0	631.4	
32 Acrylonitrile	53	4.519	4.501	0.018	98	655106	62.5	65.9	
33 Methyl tert-butyl ether	73	4.568	4.550	0.018	90	2994194	25.0	25.4	
34 trans-1,2-Dichloroethene	96	4.568	4.556	0.012	100	1173294	25.0	25.8	
35 Hexane	57	4.989	4.983	0.006	92	1800233	25.0	27.3	
37 1,1-Dichloroethane	63	5.232	5.226	0.006	96	2037094	25.0	25.4	
38 Isopropyl ether	45	5.293	5.287	0.006	94	3801082	25.0	25.7	
39 2-Chloro-1,3-butadiene	53	5.342	5.336	0.006	90	1747556	25.0	26.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.836	5.824	0.012	98	3463336	25.0	25.7	
41 2-Butanone (MEK)	43	6.062	6.043	0.019	100	3517461	250.0	256.9	
42 cis-1,2-Dichloroethene	96	6.068	6.062	0.006	81	1297682	25.0	25.6	
43 2,2-Dichloropropane	77	6.086	6.080	0.006	89	1566148	25.0	26.4	
45 Propionitrile	54	6.165	6.153	0.012	99	1764071	500.0	500.2	
S 46 1,2-Dichloroethene, Total	100				0			51.3	
48 Methacrylonitrile	67	6.360	6.348	0.012	92	3531950	250.0	267.7	
49 Chlorobromomethane	128	6.403	6.391	0.012	94	605697	25.0	25.8	
50 Tetrahydrofuran	71	6.421	6.409	0.012	86	526089	125.0	135.1	
51 Chloroform	83	6.555	6.549	0.006	93	2052889	25.0	25.7	
$ 52 Dibromofluoromethane (Surr)	113	6.769	6.763	0.006	95	485776	10.0	9.99	
53 1,1,1-Trichloroethane	97	6.775	6.769	0.006	98	1806207	25.0	26.3	
54 Cyclohexane	56	6.872	6.866	0.006	90	2182074	25.0	27.3	
56 Carbon tetrachloride	117	6.982	6.976	0.006	96	1609545	25.0	26.6	
57 1,1-Dichloropropene	75	6.994	6.982	0.012	98	1655371	25.0	26.5	
58 Isobutyl alcohol	41	7.202	7.196	0.006	94	1236400	1250.0	1368.8	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.226	7.214	0.012	93	108065	10.0	10.0	
60 Benzene	78	7.256	7.250	0.006	96	4846041	25.0	25.5	
61 1,2-Dichloroethane	62	7.330	7.318	0.012	97	1326300	25.0	24.8	
63 Tert-amyl methyl ether	73	7.445	7.446	-0.001	99	3273561	25.0	25.8	
* 64 Fluorobenzene (IS)	96	7.665	7.659	0.006	99	1951930	10.0	10.0	
65 n-Heptane	43	7.671	7.665	0.006	93	1929385	25.0	26.7	
67 n-Butanol	56	8.080	8.086	-0.007	88	1754885	2187.5	2376.4	
68 Trichloroethene	95	8.140	8.134	0.006	97	1293471	25.0	25.8	
69 Methylcyclohexane	83	8.445	8.439	0.006	92	2359075	25.0	27.5	
70 1,2-Dichloropropane	63	8.476	8.470	0.006	89	1287040	25.0	26.3	
71 2-ethoxy-2-methyl butane	87	8.482	8.476	0.006	93	1886522	25.0	26.7	
72 Methyl methacrylate	69	8.561	8.555	0.006	92	704239	25.0	28.1	
74 Dibromomethane	93	8.585	8.579	0.006	94	637054	25.0	26.0	
73 1,4-Dioxane	88	8.634	8.653	-0.019	89	168647	1250.0	1280.7	M
76 Dichlorobromomethane	83	8.823	8.817	0.006	100	1556304	25.0	26.6	
77 2-Nitropropane	41	9.104	9.104	0.000	97	977744	125.0	137.9	
80 1-Bromo-2-chloroethane	63	9.213	9.207	0.006	98	1367771	25.0	25.7	
81 cis-1,3-Dichloropropene	75	9.372	9.366	0.006	97	2012913	25.0	27.7	
82 4-Methyl-2-pentanone (MIBK)	43	9.555	9.549	0.006	96	9038373	250.0	269.0	
$ 83 Toluene-d8 (Surr)	98	9.683	9.677	0.006	93	1995381	10.0	9.84	
84 Toluene	92	9.756	9.756	0.000	98	3182569	25.0	25.6	
96 trans-1,3-Dichloropropene	75	10.018	10.018	0.000	92	1712803	25.0	27.6	
S 97 1,3-Dichloropropene, Total	100				0			55.3	
98 Ethyl methacrylate	69	10.085	10.079	0.006	89	1493298	25.0	27.8	
99 1,1,2-Trichloroethane	97	10.225	10.219	0.006	90	971609	25.0	25.6	
100 Tetrachloroethene	166	10.311	10.305	0.006	98	1557790	25.0	26.3	
101 1,3-Dichloropropane	76	10.390	10.384	0.006	89	1630413	25.0	25.4	
102 2-Hexanone	43	10.445	10.445	0.000	96	6646341	250.0	272.4	
104 Chlorodibromomethane	129	10.603	10.597	0.006	90	1232439	25.0	26.9	
105 Ethylene Dibromide	107	10.713	10.707	0.006	98	962305	25.0	26.1	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.140	0.006	84	1556461	10.0	10.0	
107 1-Chlorohexane	91	11.152	11.152	0.000	98	1840716	25.0	25.6	
108 Chlorobenzene	112	11.170	11.170	0.000	98	3647731	25.0	25.4	
S 109 Xylenes, Total	106				0			79.6	
110 1,1,1,2-Tetrachloroethane	131	11.256	11.250	0.006	97	1321338	25.0	26.7	
111 Ethylbenzene	91	11.256	11.256	0.000	98	6257658	25.0	26.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 m-Xylene & p-Xylene	106	11.372	11.372	0.000	99	4945575	50.0	52.9	
113 o-Xylene	106	11.701	11.701	0.000	96	2471775	25.0	26.7	
114 Styrene	104	11.719	11.719	0.000	95	4223576	25.0	27.1	
115 Bromoform	173	11.871	11.872	-0.001	98	818655	25.0	27.8	
116 Isopropylbenzene	105	12.006	12.000	0.006	95	6294550	25.0	26.7	
$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	94	738716	10.0	9.97	
120 1,1,2,2-Tetrachloroethane	83	12.249	12.250	-0.001	92	1301500	25.0	26.1	
121 Bromobenzene	156	12.262	12.262	0.000	95	1627659	25.0	25.7	
122 trans-1,4-Dichloro-2-butene	53	12.280	12.274	0.006	92	3446796	250.0	282.1	
123 1,2,3-Trichloropropane	110	12.298	12.292	0.006	81	348849	25.0	25.7	
124 N-Propylbenzene	91	12.335	12.329	0.006	99	7485306	25.0	25.9	
125 2-Chlorotoluene	126	12.408	12.408	0.000	97	1529310	25.0	26.0	
126 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	5471729	25.0	26.4	
127 4-Chlorotoluene	126	12.499	12.499	0.000	97	1588139	25.0	25.8	
128 tert-Butylbenzene	134	12.713	12.707	0.006	93	1214603	25.0	27.1	
129 Pentachloroethane	167	12.743	12.743	0.000	94	1077865	25.0	27.2	
130 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	5703646	25.0	26.6	
131 sec-Butylbenzene	105	12.871	12.871	0.000	94	7032509	25.0	26.6	
132 1,3-Dichlorobenzene	146	12.975	12.969	0.006	99	3364224	25.0	26.2	
133 4-Isopropyltoluene	119	12.981	12.981	0.000	97	6285970	25.0	27.3	
* 134 1,4-Dichlorobenzene-d4	152	13.030	13.023	0.007	93	914789	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.048	13.042	0.006	96	3368113	25.0	25.4	
136 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	2596038	25.0	26.3	
137 Benzyl chloride	126	13.121	13.121	0.000	98	569915	25.0	29.6	
138 p-Diethylbenzene	119	13.182	13.182	0.000	92	3841873	25.0	27.0	
139 n-Butylbenzene	92	13.274	13.274	0.000	97	3221534	25.0	26.5	
140 1,2-Dichlorobenzene	146	13.304	13.304	0.000	99	3141899	25.0	25.7	
142 1,2-Dibromo-3-Chloropropane	155	13.847	13.847	0.000	90	218520	25.0	27.2	
143 1,3,5-Trichlorobenzene	180	13.969	13.969	0.000	98	2778810	25.0	26.0	
144 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	2544095	25.0	26.1	
145 Hexachlorobutadiene	225	14.475	14.475	0.000	96	1268156	25.0	26.2	
146 Naphthalene	128	14.572	14.578	-0.006	97	4624623	25.0	26.9	
147 1,2,3-Trichlorobenzene	180	14.718	14.719	-0.001	96	2246935	25.0	25.8	
148 2-Methylnaphthalene	142	15.334	15.340	-0.006	92	3050199	25.0	28.4	
160 Pentane	43	2.989	2.983	0.006	98	1931343	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00011	Amount Added: 25.00	Units: uL	
MSV_LL_GAS826_00018	Amount Added: 25.00	Units: uL	
MSV_LL_#2_826_00011	Amount Added: 25.00	Units: uL	
MSV_29_826ISS_00020	Amount Added: 1.00	Units: uL	Run Reagent

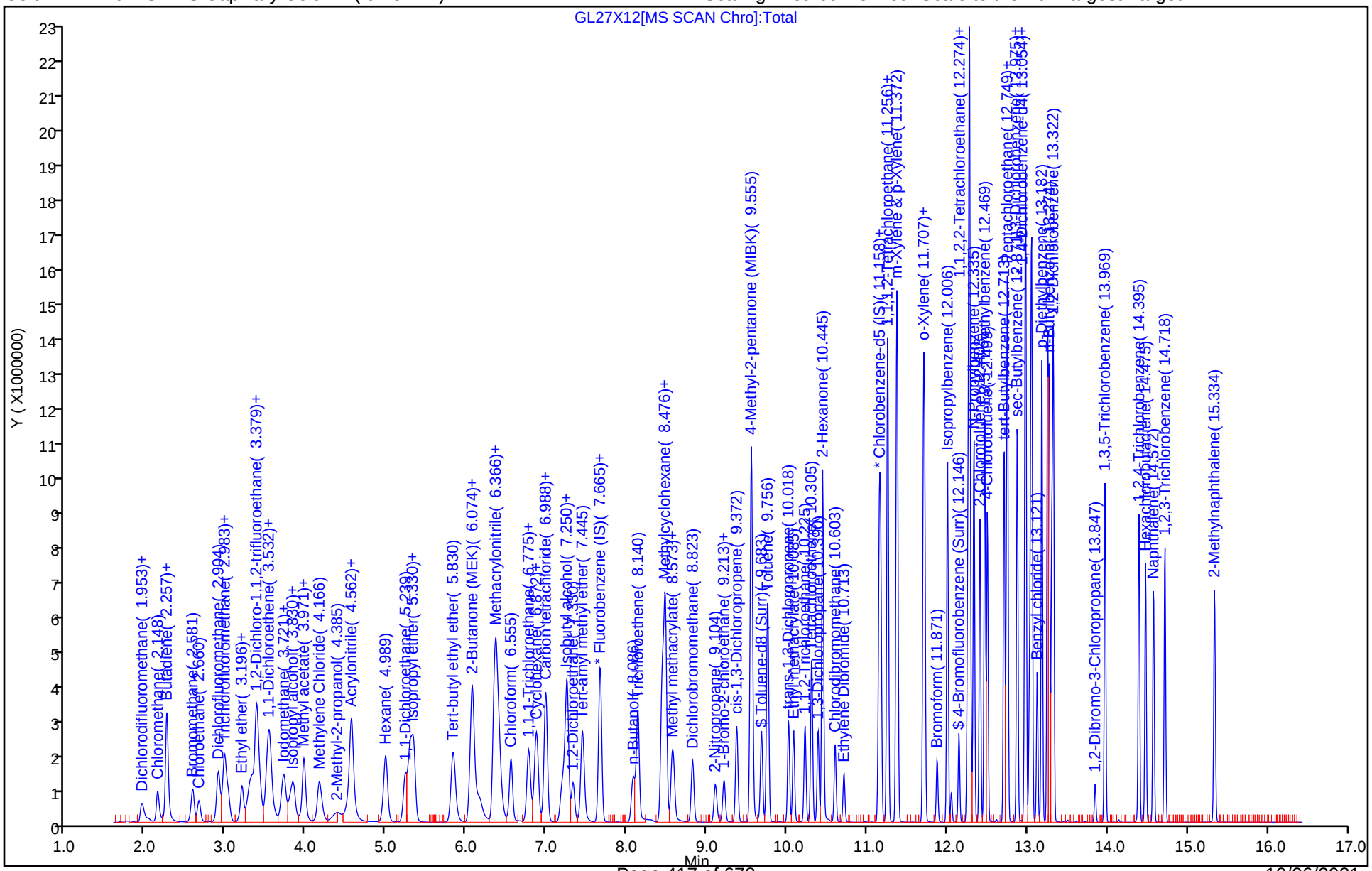
Report Date: 05-Aug-2021 16:12:23 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X12.D

Injection Date:	27-Jul-2021 19:35:30	Instrument ID:	16334	Operator ID:	kas02648
Lims ID:	IC std7			Worklist Smp#:	12
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

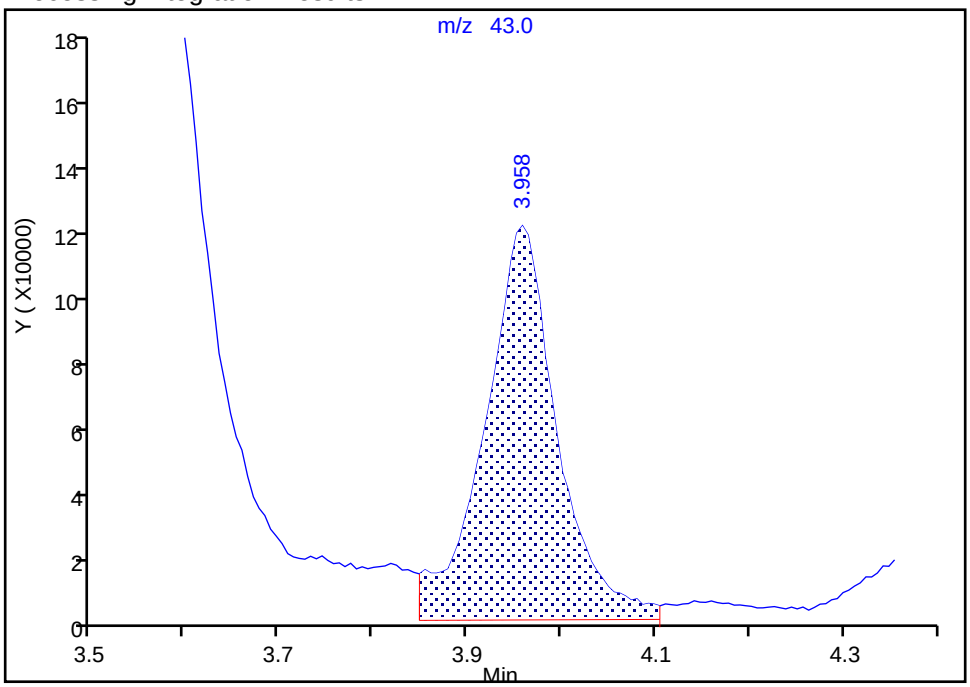
Data File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X12.D				
Injection Date:	27-Jul-2021 19:35:30	Instrument ID:	16334		
Lims ID:	IC std7				
Client ID:					
Operator ID:	kas02648	ALS Bottle#:	12	Worklist Smp#:	12
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

27 Methyl acetate, CAS: 79-20-9

Signal: 1

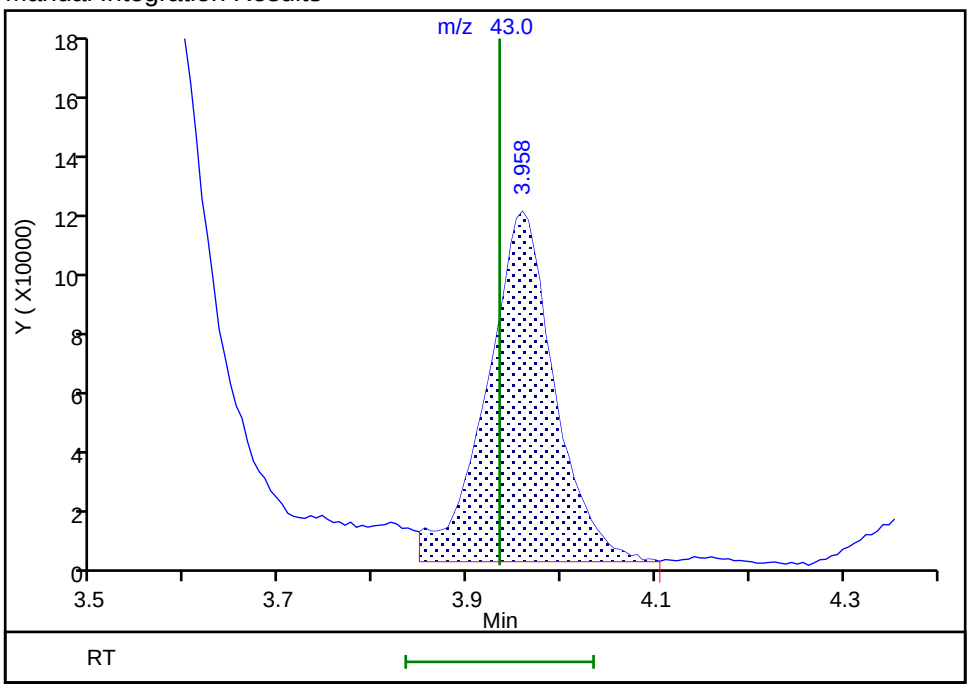
Processing Integration Results

RT: 3.96
Area: 634578
Amount: 27.703697
Amount Units: ug/l



Manual Integration Results

RT: 3.96
Area: 570825
Amount: 26.181246
Amount Units: ug/l



Reviewer: spositok, 28-Jul-2021 11:51:39
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

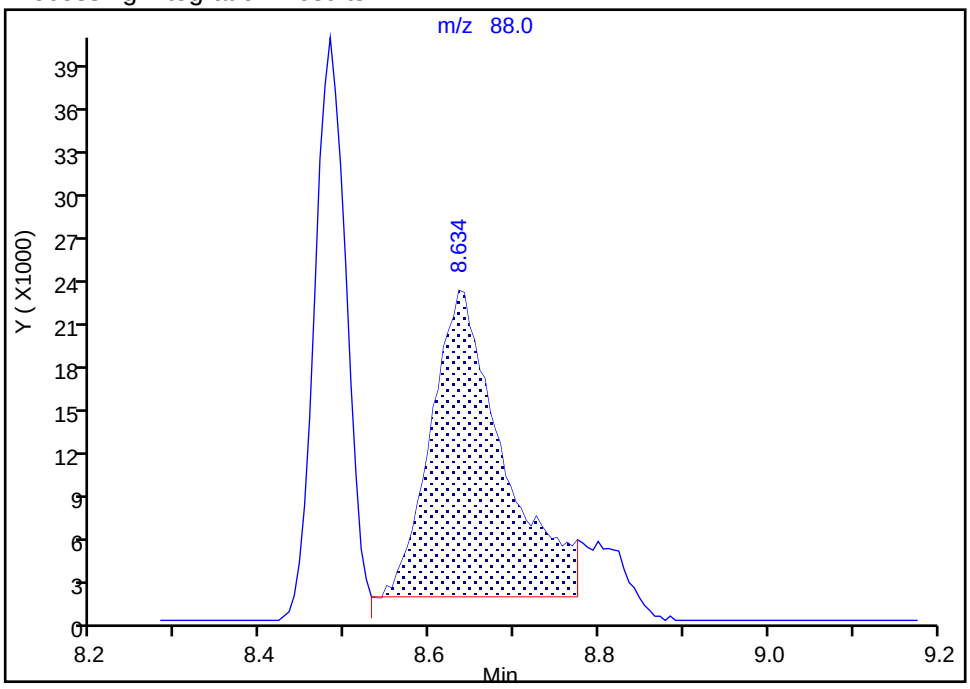
Data File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X12.D
Injection Date: 27-Jul-2021 19:35:30 Instrument ID: 16334
Lims ID: IC std7
Client ID:
Operator ID: kas02648 ALS Bottle#: 12 Worklist Smp#: 12
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

73 1,4-Dioxane, CAS: 123-91-1

Signal: 1

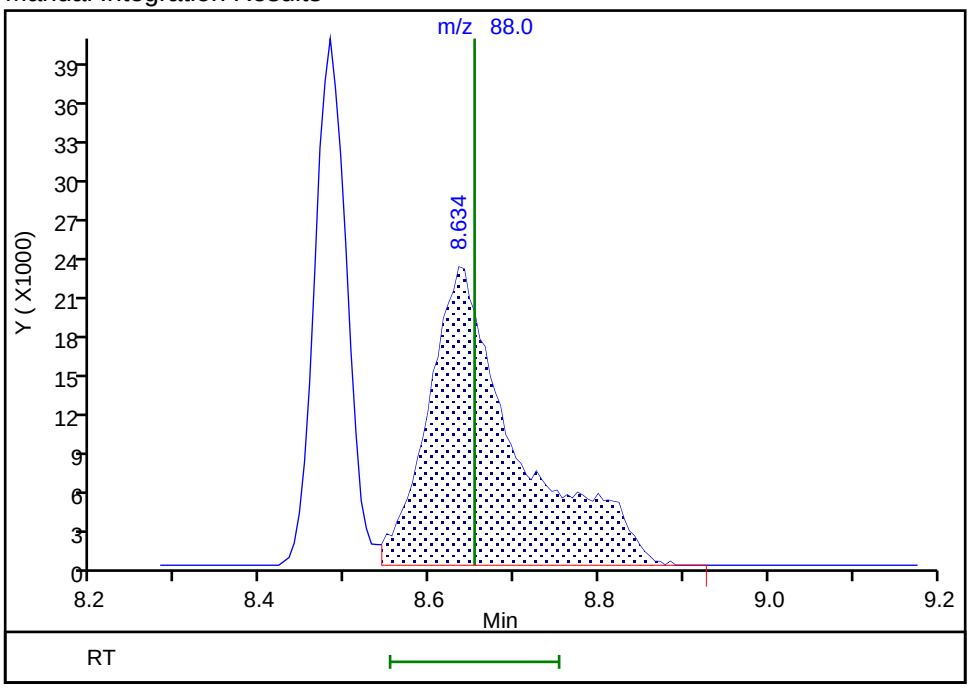
Processing Integration Results

RT: 8.63
Area: 125805
Amount: 1263.6556
Amount Units: ug/l



Manual Integration Results

RT: 8.63
Area: 168647
Amount: 1280.6576
Amount Units: ug/l



Reviewer: spositok, 28-Jul-2021 11:57:03
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X13.D
Lims ID: ICIS std6
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 27-Jul-2021 19:57:30 ALS Bottle#: 13 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0035331-013
Misc. Info.: ICIS STD6
Operator ID: kas02648 Instrument ID: 16334
Sublist: chrom-MSV_16334_25mL*sub4

Method: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 16:12:29 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1675

First Level Reviewer: spositok Date: 28-Jul-2021 08:05:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.940	1.940	0.000	99	516723	10.0	10.6	
5 Chloromethane	50	2.136	2.136	0.000	99	585078	10.0	9.59	
7 Butadiene	39	2.251	2.251	0.000	91	606472	10.0	9.34	
8 Vinyl chloride	62	2.257	2.257	0.000	98	592530	10.0	10.0	
9 Bromomethane	94	2.574	2.574	0.000	90	421592	10.0	9.96	
10 Chloroethane	64	2.654	2.654	0.000	100	354649	10.0	10.0	
12 Dichlorofluoromethane	67	2.898	2.898	0.000	97	815276	10.0	9.93	
13 Trichlorofluoromethane	101	2.959	2.959	0.000	98	773951	10.0	10.2	
15 Ethyl ether	59	3.190	3.190	0.000	91	393590	10.0	10.2	
17 1,2-Dichloro-1,1,2-trifluoroetha	67	3.294	3.294	0.000	91	561590	10.0	9.95	
18 Acrolein	56	3.373	3.373	0.000	99	3112860	500.0	511.0	
19 1,1-Dichloroethene	96	3.507	3.507	0.000	98	425643	10.0	10.4	
20 112TCTFE	101	3.532	3.532	0.000	91	469934	10.0	10.6	
21 Acetone	43	3.556	3.556	0.000	100	734480	100.0	98.7	
23 Iodomethane	142	3.696	3.696	0.000	98	795281	10.0	10.3	
24 Ethyl bromide	108	3.721	3.721	0.000	98	373018	10.0	10.3	
22 Isopropyl alcohol	45	3.812	3.812	0.000	94	245533	200.0	213.3	
25 Carbon disulfide	76	3.824	3.824	0.000	99	1470951	10.0	10.4	
27 Methyl acetate	43	3.946	3.946	0.000	98	232867	10.0	10.3	M
28 3-Chloro-1-propene	41	3.964	3.964	0.000	93	716532	10.0	10.3	
29 Methylene Chloride	84	4.153	4.153	0.000	91	476324	10.0	10.2	
* 30 t-Butyl alcohol-d10 (IS)	65	4.251	4.251	0.000	98	143636	50.0	50.0	
31 2-Methyl-2-propanol	59	4.367	4.367	0.000	98	495911	200.0	201.3	
32 Acrylonitrile	53	4.513	4.513	0.000	98	277249	25.0	26.8	
33 Methyl tert-butyl ether	73	4.556	4.556	0.000	91	1242395	10.0	10.5	
34 trans-1,2-Dichloroethene	96	4.562	4.562	0.000	100	479749	10.0	10.5	
35 Hexane	57	4.983	4.983	0.000	92	715082	10.0	10.8	
37 1,1-Dichloroethane	63	5.226	5.226	0.000	96	825927	10.0	10.3	
38 Isopropyl ether	45	5.293	5.293	0.000	94	1551125	10.0	10.5	
39 2-Chloro-1,3-butadiene	53	5.336	5.336	0.000	90	706249	10.0	10.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.830	5.830	0.000	98	1423423	10.0	10.5	
41 2-Butanone (MEK)	43	6.043	6.043	0.000	100	1486502	100.0	104.2	
42 cis-1,2-Dichloroethene	96	6.068	6.068	0.000	82	521666	10.0	10.3	
43 2,2-Dichloropropane	77	6.080	6.080	0.000	86	634495	10.0	10.7	
45 Propionitrile	54	6.153	6.153	0.000	99	796171	200.0	216.7	
48 Methacrylonitrile	67	6.342	6.342	0.000	92	1447001	100.0	105.2	
49 Chlorobromomethane	128	6.391	6.391	0.000	94	247355	10.0	10.5	
50 Tetrahydrofuran	71	6.415	6.415	0.000	85	221001	50.0	54.5	
51 Chloroform	83	6.549	6.549	0.000	93	830529	10.0	10.4	
$ 52 Dibromofluoromethane (Surr)	113	6.763	6.763	0.000	94	487955	10.0	10.0	
53 1,1,1-Trichloroethane	97	6.775	6.775	0.000	98	719579	10.0	10.4	
54 Cyclohexane	56	6.866	6.866	0.000	90	873813	10.0	10.9	
56 Carbon tetrachloride	117	6.982	6.982	0.000	97	642568	10.0	10.6	
57 1,1-Dichloropropene	75	6.988	6.988	0.000	97	661411	10.0	10.6	
58 Isobutyl alcohol	41	7.189	7.189	0.000	93	510385	500.0	563.7	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.220	7.220	0.000	91	108066	10.0	9.97	
60 Benzene	78	7.250	7.250	0.000	97	1950769	10.0	10.2	
61 1,2-Dichloroethane	62	7.324	7.324	0.000	97	528398	10.0	9.86	
63 Tert-amyl methyl ether	73	7.445	7.445	0.000	99	1338549	10.0	10.5	
* 64 Fluorobenzene (IS)	96	7.659	7.659	0.000	99	1956692	10.0	10.0	
65 n-Heptane	43	7.665	7.665	0.000	94	755469	10.0	10.4	
67 n-Butanol	56	8.079	8.079	0.000	88	765480	875.0	994.9	
68 Trichloroethene	95	8.134	8.134	0.000	97	516547	10.0	10.3	
69 Methylcyclohexane	83	8.439	8.439	0.000	91	941824	10.0	11.0	
70 1,2-Dichloropropane	63	8.470	8.470	0.000	87	514255	10.0	10.5	
71 2-ethoxy-2-methyl butane	87	8.482	8.482	0.000	94	755969	10.0	10.7	
72 Methyl methacrylate	69	8.555	8.555	0.000	92	284538	10.0	10.9	
74 Dibromomethane	93	8.579	8.579	0.000	93	253858	10.0	10.3	
73 1,4-Dioxane	88	8.646	8.646	0.000	92	74329	500.0	541.7	M
76 Dichlorobromomethane	83	8.817	8.817	0.000	100	613045	10.0	10.5	
77 2-Nitropropane	41	9.104	9.104	0.000	97	396735	50.0	53.7	
80 1-Bromo-2-chloroethane	63	9.207	9.207	0.000	98	541039	10.0	10.1	
81 cis-1,3-Dichloropropene	75	9.366	9.366	0.000	97	787924	10.0	10.8	
82 4-Methyl-2-pentanone (MIBK)	43	9.549	9.549	0.000	96	3748028	100.0	107.1	
$ 83 Toluene-d8 (Surr)	98	9.677	9.677	0.000	93	2004602	10.0	10.0	
84 Toluene	92	9.756	9.756	0.000	98	1263648	10.0	10.3	
96 trans-1,3-Dichloropropene	75	10.018	10.018	0.000	92	668411	10.0	10.9	
98 Ethyl methacrylate	69	10.079	10.079	0.000	90	589066	10.0	11.1	
99 1,1,2-Trichloroethane	97	10.225	10.225	0.000	90	386158	10.0	10.3	
100 Tetrachloroethene	166	10.305	10.305	0.000	97	611154	10.0	10.4	
101 1,3-Dichloropropane	76	10.384	10.384	0.000	89	657511	10.0	10.4	
102 2-Hexanone	43	10.445	10.445	0.000	96	2720182	100.0	107.0	
104 Chlorodibromomethane	129	10.597	10.597	0.000	90	485191	10.0	10.7	
105 Ethylene Dibromide	107	10.707	10.707	0.000	98	384909	10.0	10.6	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.146	0.000	85	1539325	10.0	10.0	
107 1-Chlorohexane	91	11.152	11.152	0.000	98	719936	10.0	10.1	
108 Chlorobenzene	112	11.170	11.170	0.000	96	1465495	10.0	10.3	
110 1,1,1,2-Tetrachloroethane	131	11.250	11.250	0.000	96	518542	10.0	10.6	
111 Ethylbenzene	91	11.256	11.256	0.000	98	2471291	10.0	10.4	
112 m-Xylene & p-Xylene	106	11.372	11.372	0.000	100	1954841	20.0	21.1	
113 o-Xylene	106	11.701	11.701	0.000	97	972087	10.0	10.6	
114 Styrene	104	11.719	11.719	0.000	95	1666639	10.0	10.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
115 Bromoform	173	11.871	11.871	0.000	98	320058	10.0	11.0	
116 Isopropylbenzene	105	12.006	12.006	0.000	95	2513151	10.0	10.8	
$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	94	734538	10.0	10.0	
120 1,1,2,2-Tetrachloroethane	83	12.249	12.249	0.000	92	519410	10.0	10.6	
121 Bromobenzene	156	12.262	12.262	0.000	95	640968	10.0	10.3	
122 trans-1,4-Dichloro-2-butene	53	12.274	12.274	0.000	91	1364596	100.0	107.2	
123 1,2,3-Trichloropropane	110	12.298	12.298	0.000	82	139728	10.0	10.4	
124 N-Propylbenzene	91	12.329	12.329	0.000	99	2995210	10.0	10.5	
125 2-Chlorotoluene	126	12.408	12.408	0.000	97	608930	10.0	10.5	
126 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	2169631	10.0	10.6	
127 4-Chlorotoluene	126	12.499	12.499	0.000	97	629769	10.0	10.4	
128 tert-Butylbenzene	134	12.713	12.713	0.000	93	476799	10.0	10.8	
129 Pentachloroethane	167	12.743	12.743	0.000	95	418106	10.0	10.7	
130 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	2269629	10.0	10.7	
131 sec-Butylbenzene	105	12.871	12.871	0.000	94	2806118	10.0	10.8	
132 1,3-Dichlorobenzene	146	12.969	12.969	0.000	99	1311314	10.0	10.4	
133 4-Isopropyltoluene	119	12.981	12.981	0.000	97	2471640	10.0	10.9	
* 134 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	97	901681	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.042	13.042	0.000	96	1338790	10.0	10.3	
136 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	1013920	10.0	10.4	
137 Benzyl chloride	126	13.121	13.121	0.000	98	218698	10.0	11.5	
138 p-Diethylbenzene	119	13.182	13.182	0.000	92	1515713	10.0	10.8	
139 n-Butylbenzene	92	13.274	13.274	0.000	98	1277757	10.0	10.7	
140 1,2-Dichlorobenzene	146	13.304	13.304	0.000	99	1241894	10.0	10.3	
142 1,2-Dibromo-3-Chloropropane	155	13.847	13.847	0.000	90	87076	10.0	11.0	
143 1,3,5-Trichlorobenzene	180	13.969	13.969	0.000	98	1104240	10.0	10.5	
144 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	1021250	10.0	10.6	
145 Hexachlorobutadiene	225	14.475	14.475	0.000	96	508190	10.0	10.7	
146 Naphthalene	128	14.572	14.572	0.000	97	1867226	10.0	11.0	
147 1,2,3-Trichlorobenzene	180	14.718	14.718	0.000	96	908913	10.0	10.6	
148 2-Methylnaphthalene	142	15.334	15.334	0.000	92	1250227	10.0	11.8	
160 Pentane	43	2.983	2.983	0.000	96	789015	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00011	Amount Added: 10.00	Units: uL	
MSV_LL_GAS826_00018	Amount Added: 10.00	Units: uL	
MSV_LL_#2_826_00011	Amount Added: 10.00	Units: uL	
MSV_29_826ISS_00020	Amount Added: 1.00	Units: uL	Run Reagent

Report Date: 05-Aug-2021 16:12:30 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X13.D

Injection Date: 27-Jul-2021 19:57:30 Instrument ID: 16334 Operator ID: kas02648

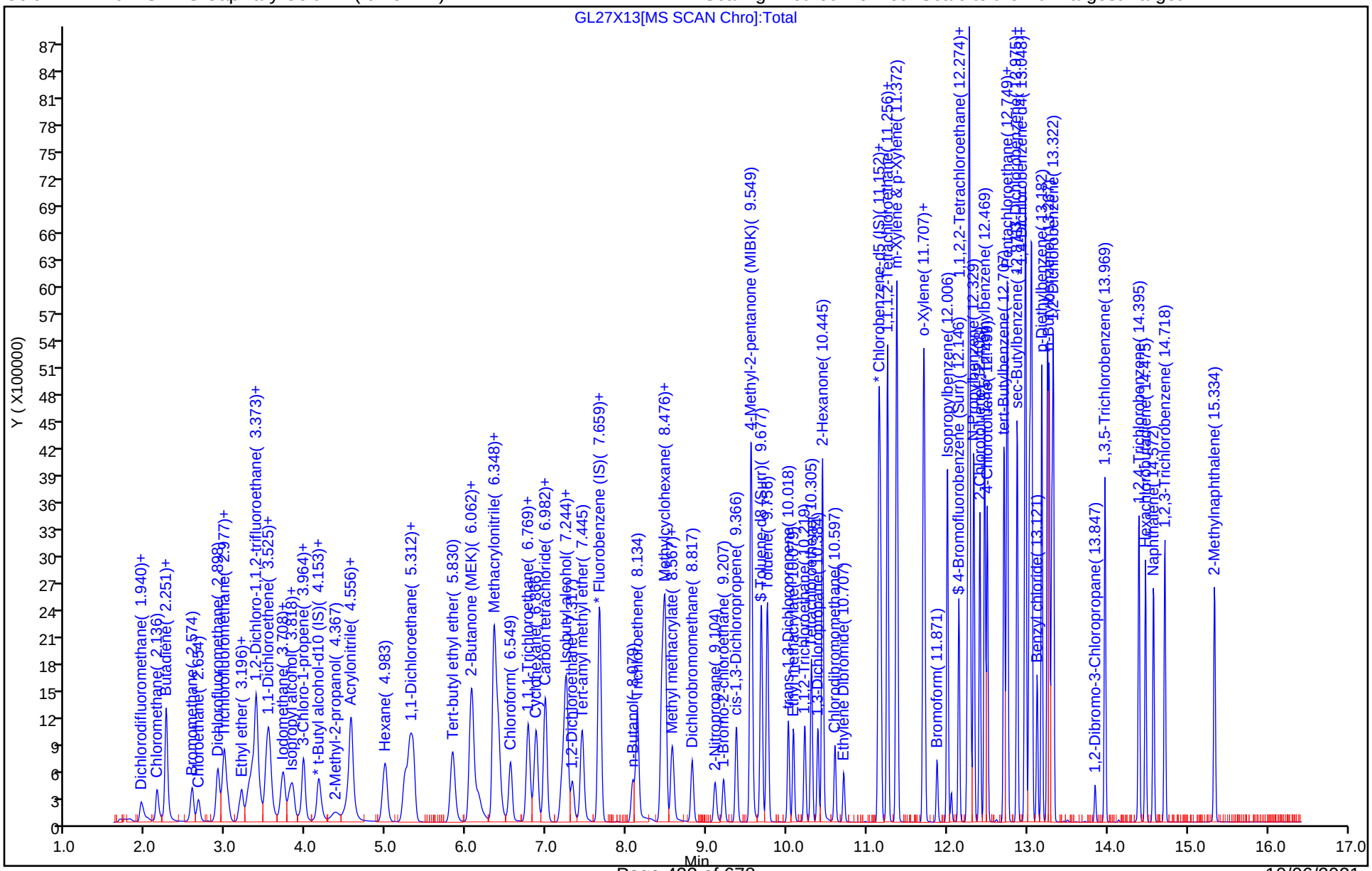
Lims ID: ICIS std6 Worklist Smp#: 13

Client ID:

Purge Vol: 25.000 mL Dil. Factor: 1.0000 ALS Bottle#: 13

Method: MSV_16334_25mL Limit Group: MSV - 8260C_D

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

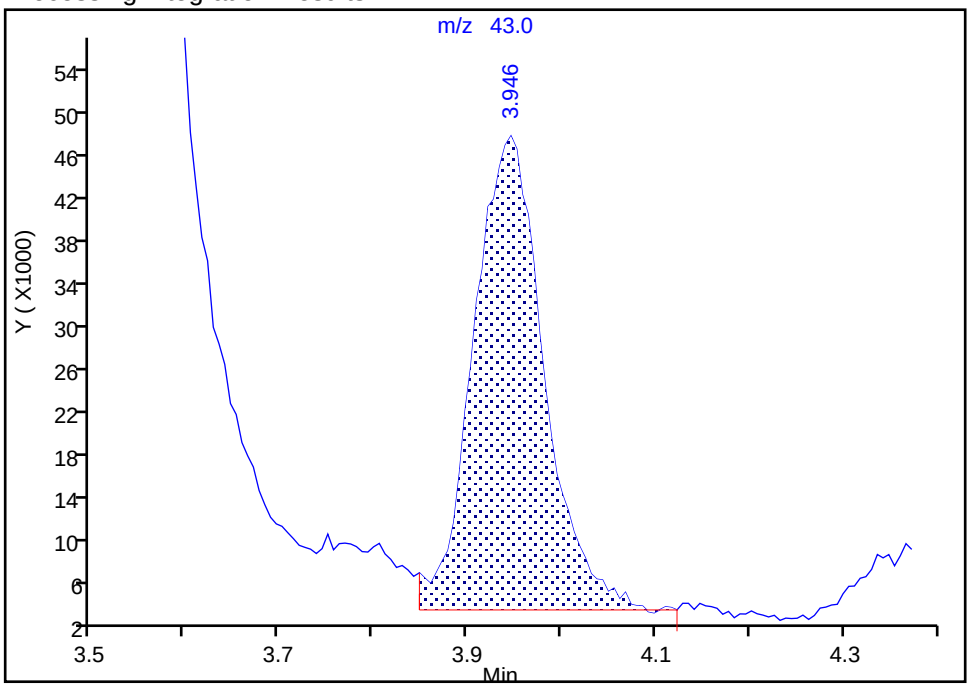
Data File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X13.D				
Injection Date:	27-Jul-2021 19:57:30	Instrument ID:	16334		
Lims ID:	ICIS std6				
Client ID:					
Operator ID:	kas02648	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

27 Methyl acetate, CAS: 79-20-9

Signal: 1

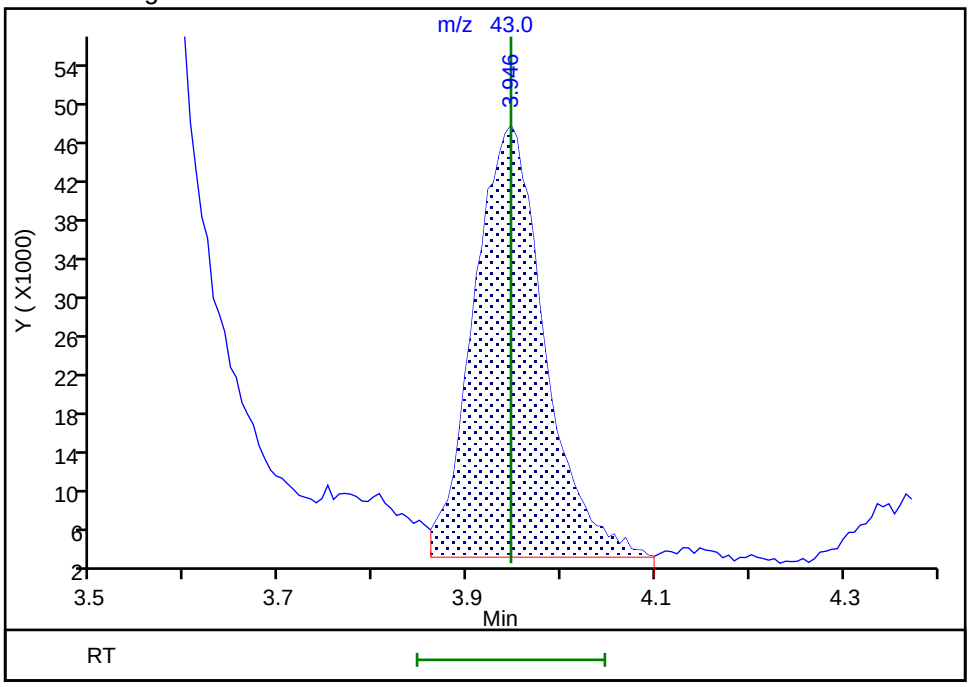
Processing Integration Results

RT: 3.95
Area: 230357
Amount: 9.807758
Amount Units: ug/l



Manual Integration Results

RT: 3.95
Area: 232867
Amount: 10.250574
Amount Units: ug/l



Reviewer: spositok, 28-Jul-2021 11:53:03

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

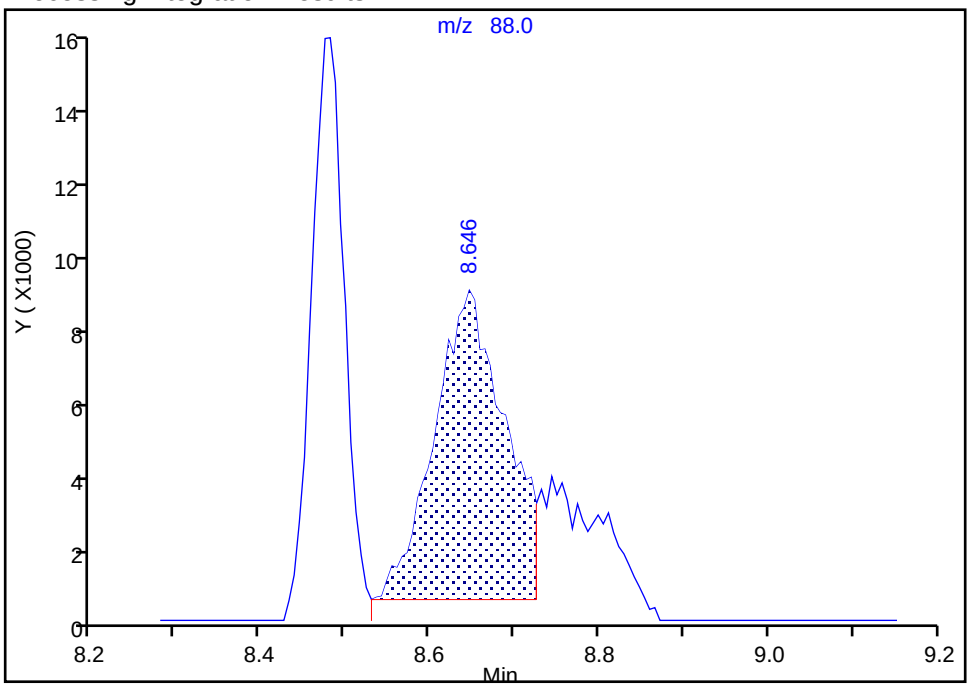
Data File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X13.D				
Injection Date:	27-Jul-2021 19:57:30	Instrument ID:	16334		
Lims ID:	ICIS std6				
Client ID:					
Operator ID:	kas02648	ALS Bottle#:	13	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

73 1,4-Dioxane, CAS: 123-91-1

Signal: 1

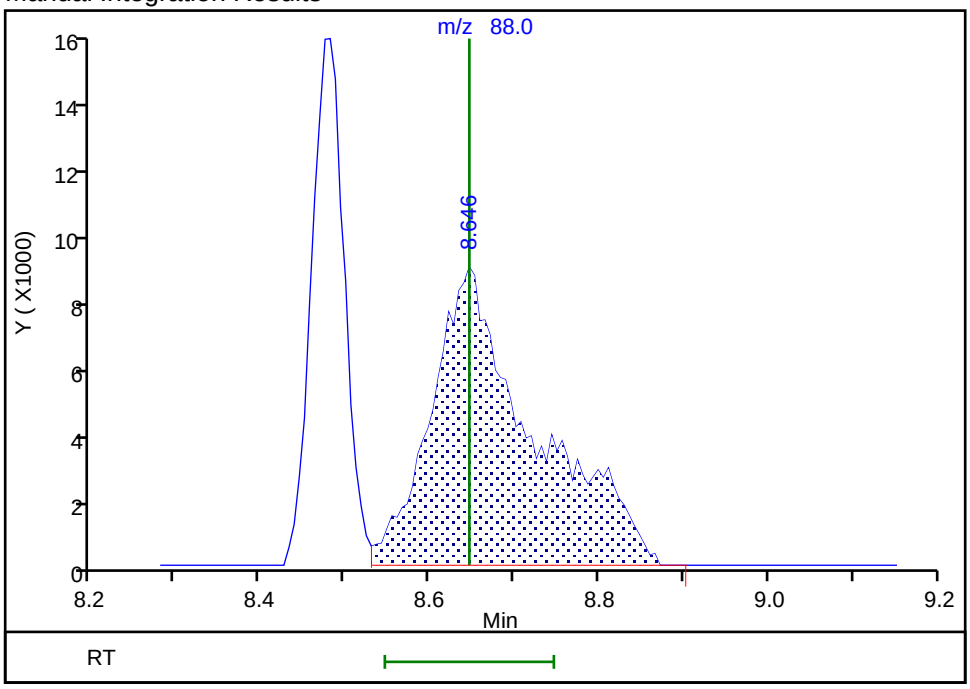
Processing Integration Results

RT: 8.65
Area: 48143
Amount: 506.7462
Amount Units: ug/l



Manual Integration Results

RT: 8.65
Area: 74329
Amount: 541.7085
Amount Units: ug/l



Reviewer: spositok, 28-Jul-2021 11:56:16

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X14.D
Lims ID: IC std5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 27-Jul-2021 20:19:30 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0035331-014
Misc. Info.: IC STD5
Operator ID: kas02648 Instrument ID: 16334
Sublist: chrom-MSV_16334_25mL*sub4

Method: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 16:12:36 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1675

First Level Reviewer: spositok Date: 28-Jul-2021 11:55:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.940	1.940	0.000	99	249774	5.00	5.11	
5 Chloromethane	50	2.135	2.136	-0.001	99	296377	5.00	4.85	
7 Butadiene	39	2.245	2.251	-0.006	92	315859	5.00	4.86	
8 Vinyl chloride	62	2.251	2.257	-0.006	98	302193	5.00	5.10	
9 Bromomethane	94	2.568	2.574	-0.006	90	210438	5.00	4.97	
10 Chloroethane	64	2.648	2.654	-0.006	99	177677	5.00	5.02	
12 Dichlorofluoromethane	67	2.891	2.898	-0.007	97	409195	5.00	4.98	
13 Trichlorofluoromethane	101	2.958	2.959	-0.001	98	387502	5.00	5.10	
15 Ethyl ether	59	3.190	3.190	0.000	91	196735	5.00	5.11	
17 1,2-Dichloro-1,1,2-trifluoroetha	67	3.288	3.294	-0.006	92	281133	5.00	4.98	
18 Acrolein	56	3.373	3.373	0.000	100	1506352	250.0	252.8	
19 1,1-Dichloroethene	96	3.495	3.507	-0.012	97	209672	5.00	5.13	
20 112TCTFE	101	3.538	3.532	0.006	92	230841	5.00	5.21	
21 Acetone	43	3.562	3.556	0.006	100	319840	50.0	43.9	
23 Iodomethane	142	3.690	3.696	-0.006	98	394336	5.00	5.10	
24 Ethyl bromide	108	3.714	3.721	-0.007	98	186316	5.00	5.13	
22 Isopropyl alcohol	45	3.806	3.812	-0.006	94	109259	100.0	94.8	
25 Carbon disulfide	76	3.818	3.824	-0.006	99	723844	5.00	5.12	
27 Methyl acetate	43	3.958	3.946	0.012	37	110528	5.00	4.97	
28 3-Chloro-1-propene	41	3.964	3.964	0.000	94	353062	5.00	5.06	
29 Methylene Chloride	84	4.159	4.153	0.006	92	238472	5.00	5.09	
* 30 t-Butyl alcohol-d10 (IS)	65	4.245	4.251	-0.006	96	140518	50.0	50.0	
31 2-Methyl-2-propanol	59	4.373	4.367	0.006	99	235836	100.0	97.9	
32 Acrylonitrile	53	4.507	4.513	-0.006	100	138229	12.5	13.7	
33 Methyl tert-butyl ether	73	4.556	4.556	0.000	95	617188	5.00	5.22	
34 trans-1,2-Dichloroethene	96	4.556	4.562	-0.006	99	234832	5.00	5.14	
35 Hexane	57	4.989	4.983	0.007	92	353278	5.00	5.35	
37 1,1-Dichloroethane	63	5.226	5.226	0.000	96	408393	5.00	5.08	
38 Isopropyl ether	45	5.287	5.293	-0.006	94	766313	5.00	5.17	
39 2-Chloro-1,3-butadiene	53	5.336	5.336	0.000	90	348522	5.00	5.29	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.824	5.830	-0.006	98	702523	5.00	5.20	
41 2-Butanone (MEK)	43	6.049	6.043	0.006	100	712377	50.0	51.1	
42 cis-1,2-Dichloroethene	96	6.068	6.068	0.000	81	260285	5.00	5.11	
43 2,2-Dichloropropane	77	6.080	6.080	0.000	87	310357	5.00	5.21	
45 Propionitrile	54	6.153	6.153	0.000	99	375827	100.0	104.6	
S 46 1,2-Dichloroethene, Total	100				0			10.2	
48 Methacrylonitrile	67	6.348	6.342	0.006	92	693298	50.0	51.5	
49 Chlorobromomethane	128	6.397	6.391	0.006	95	121185	5.00	5.14	
50 Tetrahydrofuran	71	6.409	6.415	-0.006	87	106807	25.0	26.9	
51 Chloroform	83	6.549	6.549	0.000	93	410725	5.00	5.13	
$ 52 Dibromofluoromethane (Surr)	113	6.769	6.763	0.006	94	487572	10.0	10.0	
53 1,1,1-Trichloroethane	97	6.775	6.775	0.000	98	356100	5.00	5.17	
54 Cyclohexane	56	6.866	6.866	0.000	90	428403	5.00	5.33	
56 Carbon tetrachloride	117	6.982	6.982	0.000	96	314977	5.00	5.19	
57 1,1-Dichloropropene	75	6.988	6.988	0.000	98	324144	5.00	5.18	
58 Isobutyl alcohol	41	7.195	7.189	0.006	95	225001	250.0	248.2	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.220	7.220	0.000	88	106740	10.0	9.83	
60 Benzene	78	7.250	7.250	0.000	97	971741	5.00	5.09	
61 1,2-Dichloroethane	62	7.323	7.324	-0.001	97	260781	5.00	4.86	
63 Tert-amyl methyl ether	73	7.439	7.445	-0.006	99	664335	5.00	5.22	
* 64 Fluorobenzene (IS)	96	7.659	7.659	0.000	99	1958598	10.0	10.0	
65 n-Heptane	43	7.665	7.665	0.000	94	378028	5.00	5.21	
67 n-Butanol	56	8.079	8.079	0.000	89	327688	437.5	435.3	
68 Trichloroethene	95	8.134	8.134	0.000	98	256014	5.00	5.10	
69 Methylcyclohexane	83	8.439	8.439	0.000	90	460371	5.00	5.35	
70 1,2-Dichloropropane	63	8.470	8.470	0.000	91	254477	5.00	5.18	
71 2-ethoxy-2-methyl butane	87	8.476	8.482	-0.006	92	370435	5.00	5.22	
72 Methyl methacrylate	69	8.561	8.555	0.006	92	138502	5.00	5.41	
74 Dibromomethane	93	8.579	8.579	0.000	93	127594	5.00	5.18	
73 1,4-Dioxane	88	8.646	8.646	0.000	84	32843	250.0	244.7	M
76 Dichlorobromomethane	83	8.817	8.817	0.000	100	301385	5.00	5.14	
77 2-Nitropropane	41	9.104	9.104	0.000	98	192010	25.0	26.6	
80 1-Bromo-2-chloroethane	63	9.207	9.207	0.000	98	273867	5.00	5.12	
81 cis-1,3-Dichloropropene	75	9.372	9.366	0.006	97	388304	5.00	5.33	
82 4-Methyl-2-pentanone (MIBK)	43	9.555	9.549	0.006	96	1833544	50.0	53.5	
$ 83 Toluene-d8 (Surr)	98	9.683	9.677	0.006	94	2005076	10.0	10.0	
84 Toluene	92	9.756	9.756	0.000	98	632066	5.00	5.15	
96 trans-1,3-Dichloropropene	75	10.018	10.018	0.000	92	325124	5.00	5.31	
S 97 1,3-Dichloropropene, Total	100				0			10.6	
98 Ethyl methacrylate	69	10.079	10.079	0.000	90	286710	5.00	5.42	
99 1,1,2-Trichloroethane	97	10.225	10.225	0.000	89	195631	5.00	5.23	
100 Tetrachloroethene	166	10.305	10.305	0.000	97	301876	5.00	5.17	
101 1,3-Dichloropropane	76	10.384	10.384	0.000	90	324544	5.00	5.14	
102 2-Hexanone	43	10.445	10.445	0.000	96	1347779	50.0	54.2	
104 Chlorodibromomethane	129	10.597	10.597	0.000	90	235743	5.00	5.23	
105 Ethylene Dibromide	107	10.707	10.707	0.000	99	190467	5.00	5.24	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.146	0.000	85	1534420	10.0	10.0	
107 1-Chlorohexane	91	11.152	11.152	0.000	98	355580	5.00	5.02	
108 Chlorobenzene	112	11.170	11.170	0.000	96	724968	5.00	5.11	
S 109 Xylenes, Total	106				0			15.6	
110 1,1,1,2-Tetrachloroethane	131	11.250	11.250	0.000	96	253604	5.00	5.19	
111 Ethylbenzene	91	11.256	11.256	0.000	98	1220994	5.00	5.15	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 m-Xylene & p-Xylene	106	11.371	11.372	-0.001	100	960534	10.0	10.4	
113 o-Xylene	106	11.701	11.701	0.000	96	476343	5.00	5.23	
114 Styrene	104	11.719	11.719	0.000	95	820059	5.00	5.34	
115 Bromoform	173	11.877	11.871	0.006	99	155220	5.00	5.35	
116 Isopropylbenzene	105	11.999	12.006	-0.007	96	1232476	5.00	5.30	
$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	94	729675	10.0	9.99	
120 1,1,2,2-Tetrachloroethane	83	12.249	12.249	0.000	92	250651	5.00	5.12	
121 Bromobenzene	156	12.262	12.262	0.000	95	317303	5.00	5.10	
122 trans-1,4-Dichloro-2-butene	53	12.274	12.274	0.000	92	654243	50.0	52.5	
123 1,2,3-Trichloropropane	110	12.298	12.298	0.000	82	70129	5.00	5.26	
124 N-Propylbenzene	91	12.329	12.329	0.000	99	1480592	5.00	5.23	
125 2-Chlorotoluene	126	12.408	12.408	0.000	97	299514	5.00	5.19	
126 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	1075297	5.00	5.30	
127 4-Chlorotoluene	126	12.499	12.499	0.000	97	312849	5.00	5.18	
128 tert-Butylbenzene	134	12.713	12.713	0.000	93	232532	5.00	5.29	
129 Pentachloroethane	167	12.743	12.743	0.000	94	205994	5.00	5.30	
130 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	1111219	5.00	5.29	
131 sec-Butylbenzene	105	12.871	12.871	0.000	94	1368479	5.00	5.29	
132 1,3-Dichlorobenzene	146	12.969	12.969	0.000	99	651676	5.00	5.17	
133 4-Isopropyltoluene	119	12.981	12.981	0.000	97	1207000	5.00	5.34	
* 134 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	897174	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.042	13.042	0.000	96	658335	5.00	5.07	
136 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	499402	5.00	5.16	
137 Benzyl chloride	126	13.121	13.121	0.000	98	103032	5.00	5.46	
138 p-Diethylbenzene	119	13.182	13.182	0.000	92	743222	5.00	5.33	
139 n-Butylbenzene	92	13.274	13.274	0.000	96	626076	5.00	5.26	
140 1,2-Dichlorobenzene	146	13.304	13.304	0.000	99	613898	5.00	5.12	
142 1,2-Dibromo-3-Chloropropane	155	13.847	13.847	0.000	89	41743	5.00	5.30	
143 1,3,5-Trichlorobenzene	180	13.969	13.969	0.000	98	538482	5.00	5.13	
144 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	487803	5.00	5.10	
145 Hexachlorobutadiene	225	14.475	14.475	0.000	96	244269	5.00	5.15	
146 Naphthalene	128	14.572	14.572	0.000	97	904150	5.00	5.37	
147 1,2,3-Trichlorobenzene	180	14.718	14.718	0.000	96	440850	5.00	5.16	
148 2-Methylnaphthalene	142	15.334	15.334	0.000	92	579560	5.00	5.51	
160 Pentane	43	2.983	2.983	0.000	96	385078	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00011	Amount Added:	5.00	Units: uL	
MSV_LL_GAS826_00018	Amount Added:	5.00	Units: uL	
MSV_LL_#2_826_00011	Amount Added:	5.00	Units: uL	
MSV_29_826ISS_00020	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 05-Aug-2021 16:12:37 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X14.D

Injection Date: 27-Jul-2021 20:19:30 Instrument ID: 16334 Operator ID: kas02648

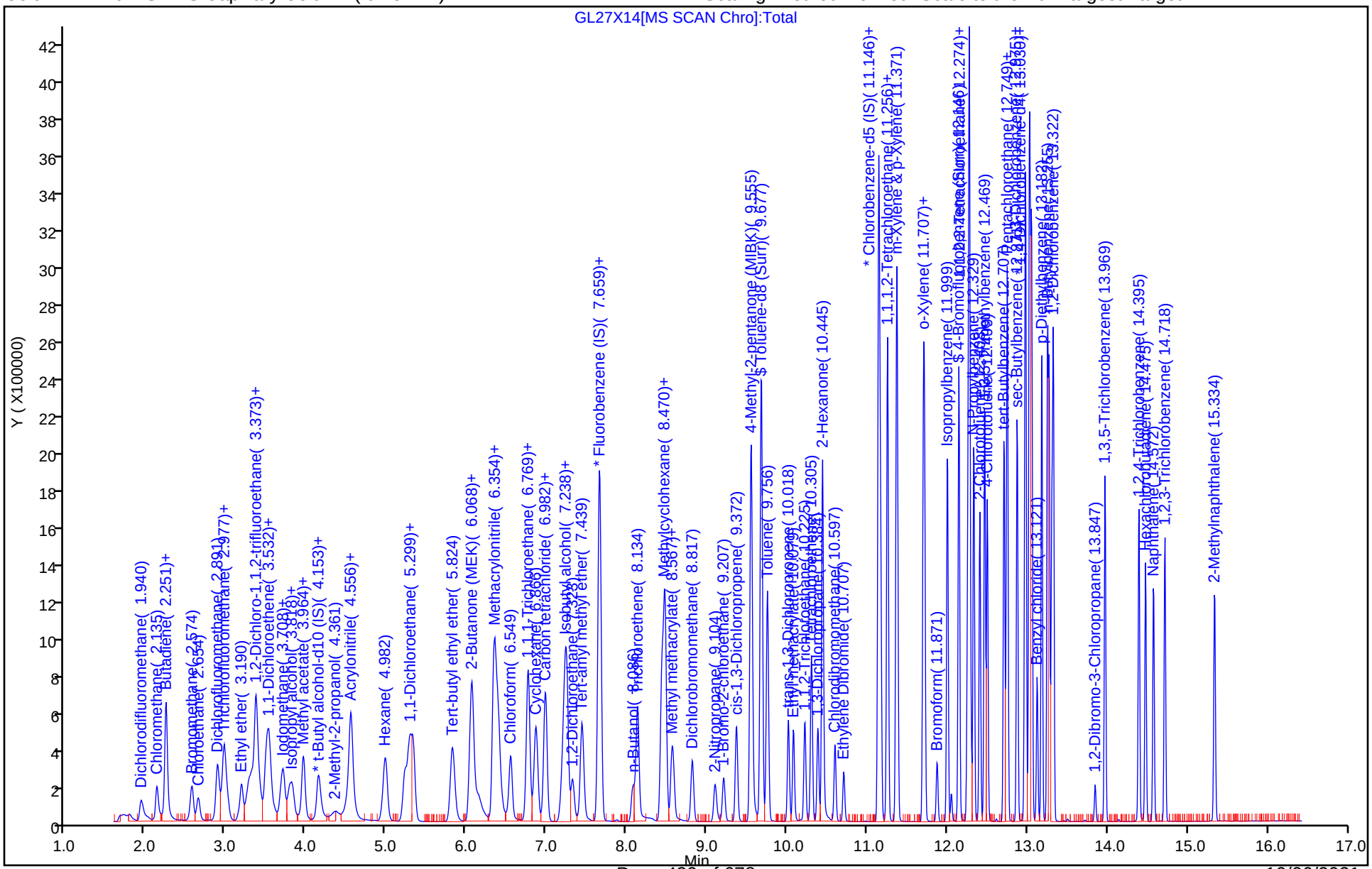
Lims ID: IC std5 Worklist Smp#: 14

Client ID:

Purge Vol: 25.000 mL Dil. Factor: 1.0000 ALS Bottle#: 14

Method: MSV_16334_25mL Limit Group: MSV - 8260C_D

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



Eurofins Lancaster Laboratories Env, LLC

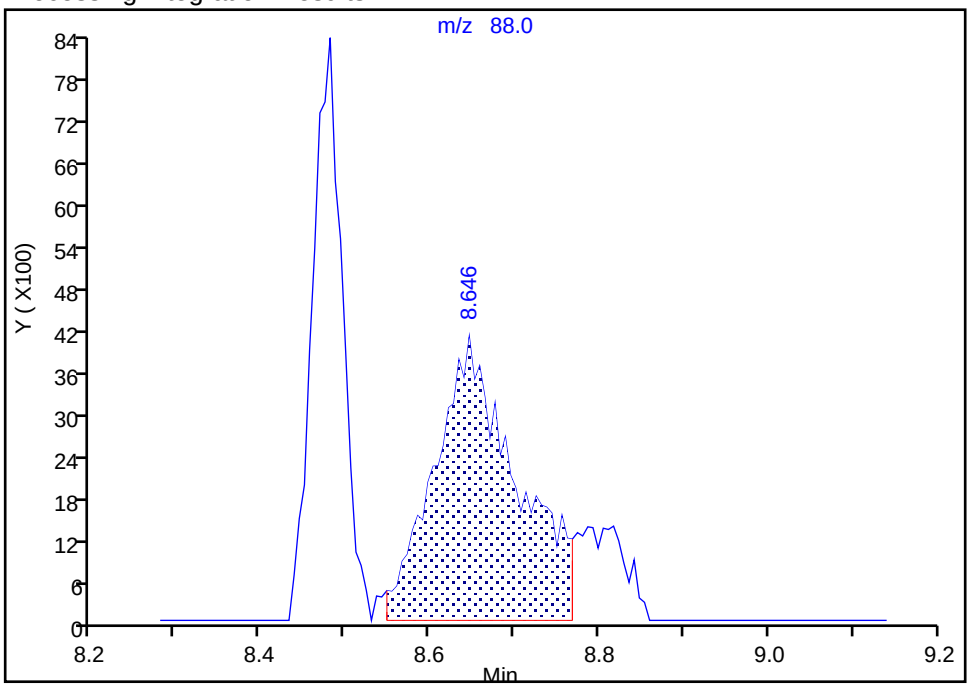
Data File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X14.D
Injection Date: 27-Jul-2021 20:19:30 Instrument ID: 16334
Lims ID: IC std5
Client ID:
Operator ID: kas02648 ALS Bottle#: 14 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

73 1,4-Dioxane, CAS: 123-91-1

Signal: 1

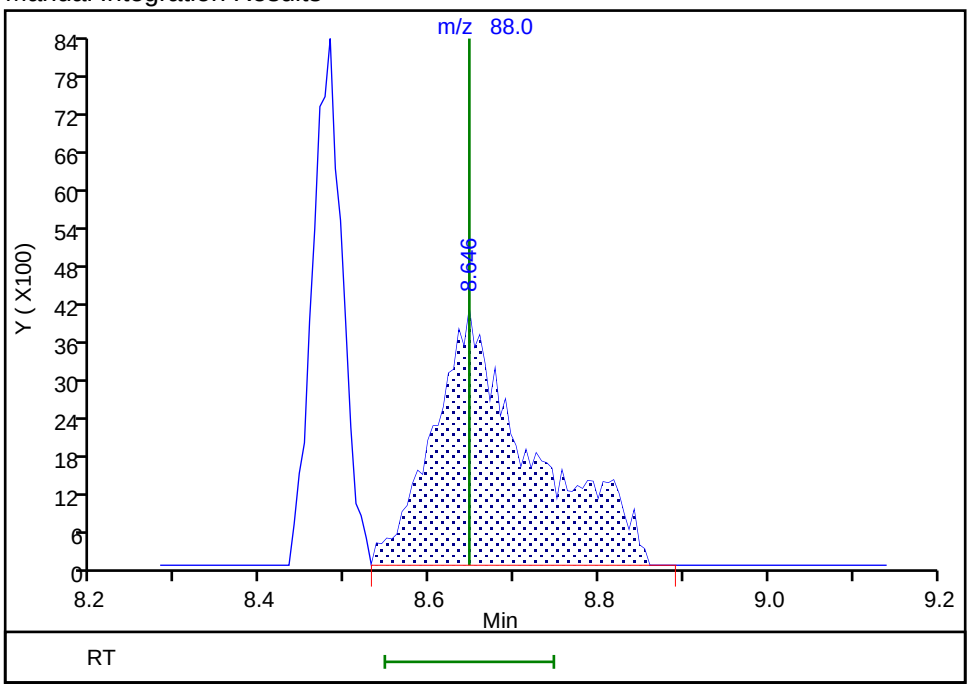
Processing Integration Results

RT: 8.65
Area: 27424
Amount: 306.9993
Amount Units: ug/l



Manual Integration Results

RT: 8.65
Area: 32843
Amount: 244.6704
Amount Units: ug/l



Reviewer: spositok, 28-Jul-2021 11:55:02
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X15.D
Lims ID: IC std4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 27-Jul-2021 20:41:30 ALS Bottle#: 15 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0035331-015
Misc. Info.: IC STD4
Operator ID: kas02648 Instrument ID: 16334
Sublist: chrom-MSV_16334_25mL*sub4

Method: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 16:12:44 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1675

First Level Reviewer: spositok Date: 28-Jul-2021 11:58:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.934	1.934	0.000	99	105695	2.00	2.21	
5 Chloromethane	50	2.136	2.136	0.000	98	120238	2.00	2.01	
7 Butadiene	39	2.245	2.245	0.000	91	139390	2.00	2.19	
8 Vinyl chloride	62	2.251	2.251	0.000	84	123951	2.00	2.14	
9 Bromomethane	94	2.568	2.568	0.000	90	86285	2.00	2.08	
10 Chloroethane	64	2.648	2.648	0.000	99	73196	2.00	2.12	
12 Dichlorofluoromethane	67	2.892	2.892	0.000	97	168533	2.00	2.10	
13 Trichlorofluoromethane	101	2.959	2.959	0.000	97	159826	2.00	2.15	
15 Ethyl ether	59	3.190	3.190	0.000	91	78080	2.00	2.07	
17 1,2-Dichloro-1,1,2-trifluoroetha	67	3.288	3.288	0.000	92	118430	2.00	2.14	
18 Acrolein	56	3.367	3.367	0.000	99	620999	100.0	122.5	
19 1,1-Dichloroethene	96	3.501	3.501	0.000	97	85424	2.00	2.14	
20 112TCTFE	101	3.532	3.532	0.000	90	93862	2.00	2.17	
21 Acetone	43	3.550	3.550	0.000	99	132655	20.0	21.4	
23 Iodomethane	142	3.696	3.696	0.000	98	159111	2.00	2.10	
24 Ethyl bromide	108	3.715	3.715	0.000	98	74675	2.00	2.10	
22 Isopropyl alcohol	45	3.800	3.800	0.000	95	36768	40.0	32.6	M
25 Carbon disulfide	76	3.806	3.806	0.000	99	291736	2.00	2.11	
27 Methyl acetate	43	3.934	3.934	0.000	97	44258	2.00	2.34	
28 3-Chloro-1-propene	41	3.965	3.965	0.000	92	138586	2.00	2.03	
29 Methylene Chloride	84	4.154	4.154	0.000	90	95699	2.00	2.09	
* 30 t-Butyl alcohol-d10 (IS)	65	4.257	4.257	0.000	97	119562	50.0	50.0	
31 2-Methyl-2-propanol	59	4.367	4.367	0.000	97	87970	40.0	42.9	
32 Acrylonitrile	53	4.501	4.501	0.000	95	53103	5.00	6.16	
33 Methyl tert-butyl ether	73	4.550	4.550	0.000	93	239506	2.00	2.07	
34 trans-1,2-Dichloroethene	96	4.556	4.556	0.000	100	95047	2.00	2.13	
35 Hexane	57	4.983	4.983	0.000	92	141660	2.00	2.19	
37 1,1-Dichloroethane	63	5.226	5.226	0.000	96	164184	2.00	2.09	
38 Isopropyl ether	45	5.287	5.287	0.000	94	304739	2.00	2.10	
39 2-Chloro-1,3-butadiene	53	5.336	5.336	0.000	90	136910	2.00	2.12	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.824	5.824	0.000	98	279921	2.00	2.12	
41 2-Butanone (MEK)	43	6.043	6.043	0.000	100	283392	20.0	23.9	
42 cis-1,2-Dichloroethene	96	6.062	6.062	0.000	81	104526	2.00	2.10	
43 2,2-Dichloropropane	77	6.080	6.080	0.000	88	122071	2.00	2.10	
45 Propionitrile	54	6.153	6.153	0.000	99	144352	40.0	47.2	
S 46 1,2-Dichloroethene, Total	100				0			4.23	
48 Methacrylonitrile	67	6.348	6.348	0.000	92	283178	20.0	24.7	
49 Chlorobromomethane	128	6.391	6.391	0.000	91	49371	2.00	2.14	
50 Tetrahydrofuran	71	6.409	6.409	0.000	87	40258	10.0	11.9	
51 Chloroform	83	6.549	6.549	0.000	93	162636	2.00	2.08	
$ 52 Dibromofluoromethane (Surr)	113	6.763	6.763	0.000	94	475325	10.0	9.96	
53 1,1,1-Trichloroethane	97	6.769	6.769	0.000	48	141297	2.00	2.10	
54 Cyclohexane	56	6.866	6.866	0.000	90	168554	2.00	2.15	
56 Carbon tetrachloride	117	6.976	6.976	0.000	85	125270	2.00	2.11	
57 1,1-Dichloropropene	75	6.982	6.982	0.000	96	131391	2.00	2.15	
58 Isobutyl alcohol	41	7.196	7.196	0.000	91	71811	100.0	81.1	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.214	7.214	0.000	86	105744	10.0	9.97	
60 Benzene	78	7.250	7.250	0.000	96	390651	2.00	2.09	
61 1,2-Dichloroethane	62	7.318	7.318	0.000	97	106240	2.00	2.03	
63 Tert-amyl methyl ether	73	7.446	7.446	0.000	98	261376	2.00	2.10	
* 64 Fluorobenzene (IS)	96	7.653	7.653	0.000	98	1914569	10.0	10.0	
65 n-Heptane	43	7.665	7.665	0.000	91	150763	2.00	2.12	
67 n-Butanol	56	8.086	8.086	0.000	90	107788	175.0	168.3	
68 Trichloroethene	95	8.134	8.134	0.000	97	101568	2.00	2.07	
69 Methylcyclohexane	83	8.439	8.439	0.000	92	181841	2.00	2.16	
70 1,2-Dichloropropane	63	8.470	8.470	0.000	96	99474	2.00	2.07	
71 2-ethoxy-2-methyl butane	87	8.476	8.476	0.000	93	145519	2.00	2.10	
72 Methyl methacrylate	69	8.555	8.555	0.000	93	53252	2.00	2.45	
74 Dibromomethane	93	8.579	8.579	0.000	93	49729	2.00	2.07	
73 1,4-Dioxane	88	8.653	8.653	0.000	28	10923	100.0	95.6	M
76 Dichlorobromomethane	83	8.817	8.817	0.000	100	119231	2.00	2.08	
77 2-Nitropropane	41	9.104	9.104	0.000	99	73305	10.0	11.9	
80 1-Bromo-2-chloroethane	63	9.207	9.207	0.000	98	110803	2.00	2.12	
81 cis-1,3-Dichloropropene	75	9.366	9.366	0.000	97	150413	2.00	2.11	
82 4-Methyl-2-pentanone (MIBK)	43	9.549	9.549	0.000	96	715808	20.0	24.6	
$ 83 Toluene-d8 (Surr)	98	9.677	9.677	0.000	93	1958504	10.0	10.0	
84 Toluene	92	9.756	9.756	0.000	98	251158	2.00	2.09	
96 trans-1,3-Dichloropropene	75	10.018	10.018	0.000	92	126337	2.00	2.11	
S 97 1,3-Dichloropropene, Total	100				0			4.22	
98 Ethyl methacrylate	69	10.079	10.079	0.000	90	109774	2.00	2.12	
99 1,1,2-Trichloroethane	97	10.219	10.219	0.000	90	77558	2.00	2.12	
100 Tetrachloroethene	166	10.305	10.305	0.000	98	120772	2.00	2.11	
101 1,3-Dichloropropane	76	10.384	10.384	0.000	90	128951	2.00	2.09	
102 2-Hexanone	43	10.445	10.445	0.000	96	525996	20.0	24.9	
104 Chlorodibromomethane	129	10.597	10.597	0.000	90	91864	2.00	2.08	
105 Ethylene Dibromide	107	10.707	10.707	0.000	99	74158	2.00	2.09	
* 106 Chlorobenzene-d5 (IS)	117	11.140	11.140	0.000	85	1500688	10.0	10.0	
107 1-Chlorohexane	91	11.152	11.152	0.000	98	138994	2.00	2.00	
108 Chlorobenzene	112	11.170	11.170	0.000	96	291512	2.00	2.10	
S 109 Xylenes, Total	106				0			6.30	
110 1,1,1,2-Tetrachloroethane	131	11.250	11.250	0.000	96	99332	2.00	2.08	
111 Ethylbenzene	91	11.256	11.256	0.000	98	485679	2.00	2.09	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 m-Xylene & p-Xylene	106	11.372	11.372	0.000	99	380409	4.00	4.22	
113 o-Xylene	106	11.701	11.701	0.000	96	185335	2.00	2.08	
114 Styrene	104	11.719	11.719	0.000	95	317345	2.00	2.11	
115 Bromoform	173	11.872	11.872	0.000	98	59134	2.00	2.08	
116 Isopropylbenzene	105	12.000	12.000	0.000	95	485658	2.00	2.13	
$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	94	713497	10.0	9.99	
120 1,1,2,2-Tetrachloroethane	83	12.250	12.250	0.000	93	99213	2.00	2.07	
121 Bromobenzene	156	12.262	12.262	0.000	94	127057	2.00	2.09	
122 trans-1,4-Dichloro-2-butene	53	12.274	12.274	0.000	92	246723	20.0	23.3	
123 1,2,3-Trichloropropane	110	12.292	12.292	0.000	79	27797	2.00	2.13	
124 N-Propylbenzene	91	12.329	12.329	0.000	99	590833	2.00	2.13	
125 2-Chlorotoluene	126	12.408	12.408	0.000	97	119243	2.00	2.11	
126 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	95	419509	2.00	2.11	
127 4-Chlorotoluene	126	12.499	12.499	0.000	97	125295	2.00	2.12	
128 tert-Butylbenzene	134	12.707	12.707	0.000	93	91865	2.00	2.13	
129 Pentachloroethane	167	12.743	12.743	0.000	93	80272	2.00	2.11	
130 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	438254	2.00	2.13	
131 sec-Butylbenzene	105	12.871	12.871	0.000	94	538798	2.00	2.12	
132 1,3-Dichlorobenzene	146	12.969	12.969	0.000	99	257560	2.00	2.09	
133 4-Isopropyltoluene	119	12.981	12.981	0.000	97	475245	2.00	2.14	
* 134 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	879209	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.042	13.042	0.000	96	264857	2.00	2.08	
136 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	200100	2.00	2.11	
137 Benzyl chloride	126	13.121	13.121	0.000	98	38696	2.00	2.09	
138 p-Diethylbenzene	119	13.182	13.182	0.000	92	288595	2.00	2.11	
139 n-Butylbenzene	92	13.274	13.274	0.000	97	247402	2.00	2.12	
140 1,2-Dichlorobenzene	146	13.304	13.304	0.000	99	245051	2.00	2.09	
142 1,2-Dibromo-3-Chloropropane	155	13.847	13.847	0.000	88	16249	2.00	2.11	
143 1,3,5-Trichlorobenzene	180	13.969	13.969	0.000	98	211923	2.00	2.06	
144 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	195116	2.00	2.08	
145 Hexachlorobutadiene	225	14.475	14.475	0.000	96	96028	2.00	2.07	
146 Naphthalene	128	14.578	14.578	0.000	97	343293	2.00	2.08	
147 1,2,3-Trichlorobenzene	180	14.719	14.719	0.000	95	172041	2.00	2.06	
148 2-Methylnaphthalene	142	15.340	15.340	0.000	91	210419	2.00	2.04	
160 Pentane	43	2.983	2.983	0.000	96	156032	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00011	Amount Added:	2.00	Units: uL	
MSV_LL_GAS826_00018	Amount Added:	2.00	Units: uL	
MSV_LL_#2_826_00011	Amount Added:	2.00	Units: uL	
MSV_29_826ISS_00020	Amount Added:	1.00	Units: uL	Run Reagent

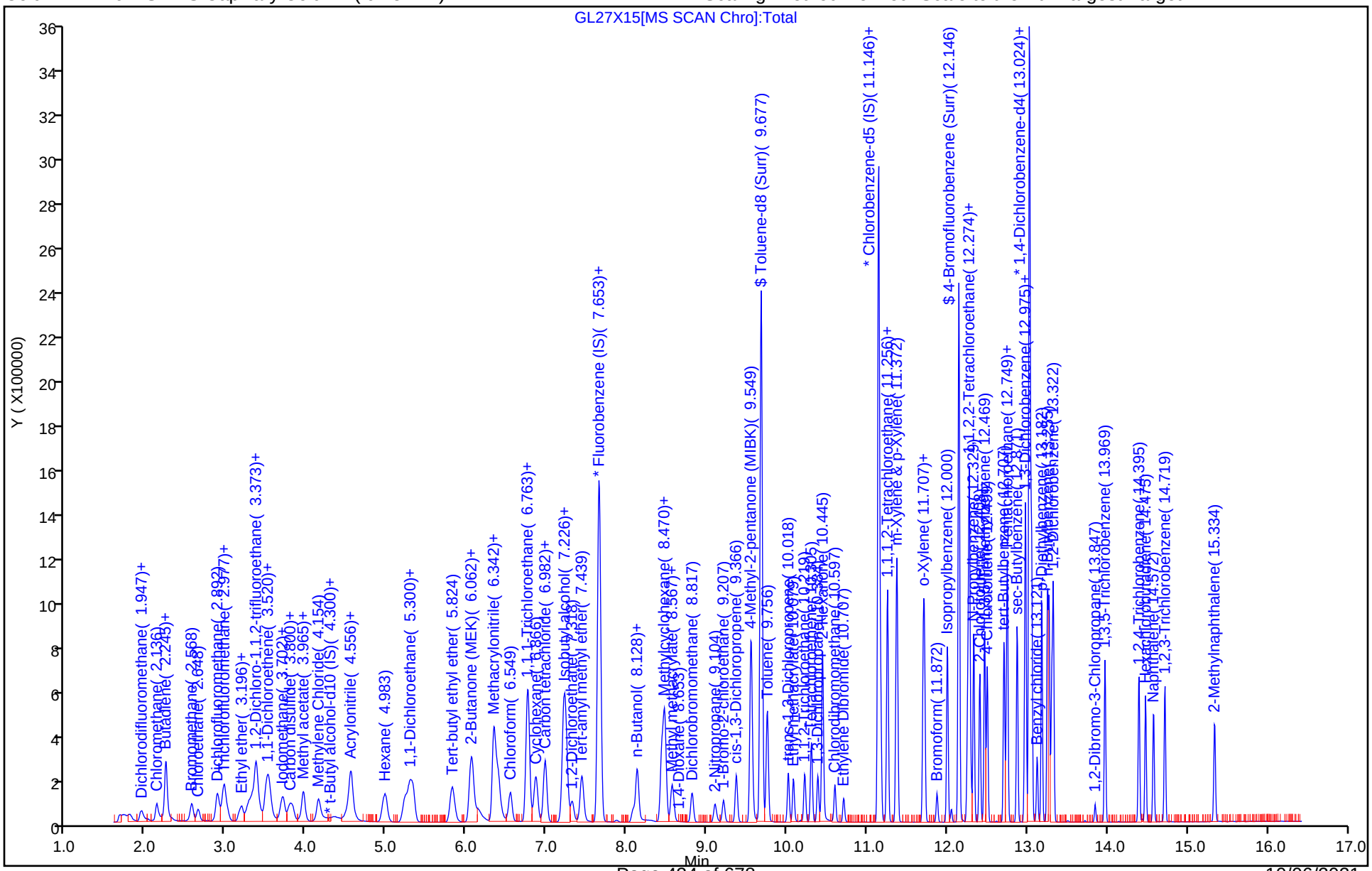
Report Date: 05-Aug-2021 16:12:45 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X15.D

Injection Date:	27-Jul-2021 20:41:30	Instrument ID:	16334	Operator ID:	kas02648
Lims ID:	IC std4			Worklist Smp#:	15
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

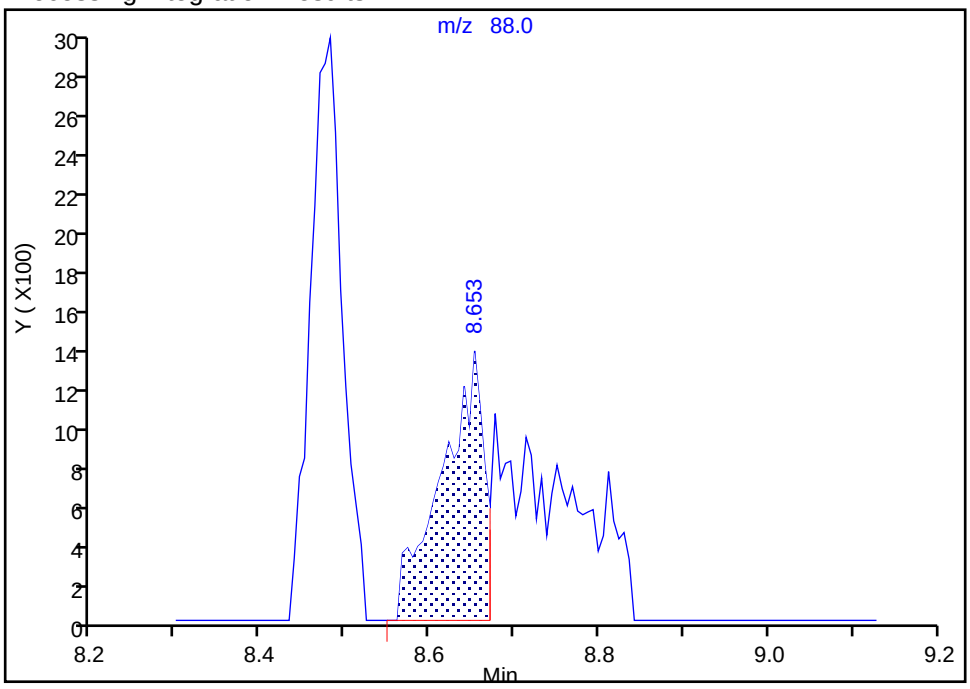
Data File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X15.D				
Injection Date:	27-Jul-2021 20:41:30	Instrument ID:	16334		
Lims ID:	IC std4				
Client ID:					
Operator ID:	kas02648	ALS Bottle#:	15	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

73 1,4-Dioxane, CAS: 123-91-1

Signal: 1

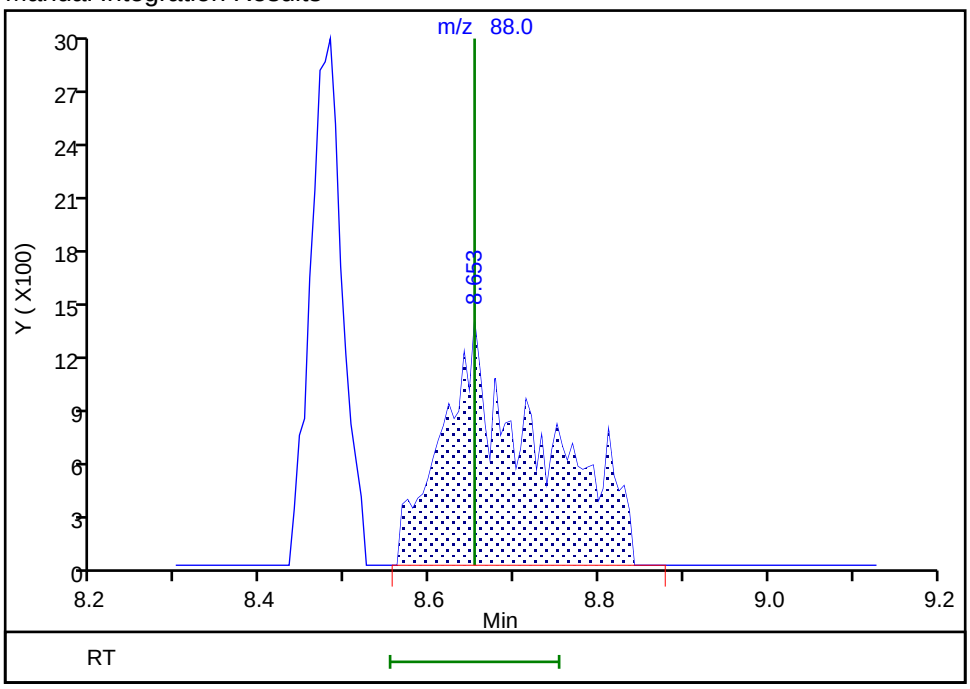
Processing Integration Results

RT: 8.65
Area: 4756
Amount: 52.091370
Amount Units: ug/l



Manual Integration Results

RT: 8.65
Area: 10923
Amount: 95.635559
Amount Units: ug/l



Reviewer: spositok, 28-Jul-2021 11:58:11

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X16.D
Lims ID: IC std3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 27-Jul-2021 21:03:30 ALS Bottle#: 16 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0035331-016
Misc. Info.: IC STD3
Operator ID: kas02648 Instrument ID: 16334
Sublist: chrom-MSV_16334_25mL*sub4

Method: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 16:12:52 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1675

First Level Reviewer: spositok Date: 28-Jul-2021 12:00:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.953	1.934	0.019	99	48285	1.00	1.02	
5 Chloromethane	50	2.148	2.136	0.012	99	59955	1.00	1.02	
7 Butadiene	39	2.257	2.245	0.012	91	59859	1.00	0.9532	
8 Vinyl chloride	62	2.264	2.251	0.013	89	56627	1.00	0.9880	
9 Bromomethane	94	2.581	2.568	0.013	89	40150	1.00	0.9805	
10 Chloroethane	64	2.666	2.648	0.018	99	33819	1.00	0.9892	
12 Dichlorofluoromethane	67	2.904	2.892	0.012	97	80455	1.00	1.01	
13 Trichlorofluoromethane	101	2.971	2.959	0.012	97	73768	1.00	1.00	
15 Ethyl ether	59	3.196	3.190	0.006	92	36058	1.00	0.9681	
17 1,2-Dichloro-1,1,2-trifluoroetha	67	3.300	3.288	0.012	92	55311	1.00	1.01	
18 Acrolein	56	3.379	3.367	0.012	100	305188	50.0	50.1	
19 1,1-Dichloroethene	96	3.513	3.501	0.012	98	40340	1.00	1.02	
20 112TCTFE	101	3.544	3.532	0.012	91	44751	1.00	1.04	
21 Acetone	43	3.562	3.550	0.012	96	67020	10.0	9.00	
23 Iodomethane	142	3.702	3.696	0.006	98	76913	1.00	1.03	
24 Ethyl bromide	108	3.733	3.715	0.018	97	34065	1.00	0.9704	
22 Isopropyl alcohol	45	3.812	3.800	0.012	28	23013	20.0	20.7	M
25 Carbon disulfide	76	3.824	3.806	0.018	99	141663	1.00	1.04	
27 Methyl acetate	43	3.946	3.934	0.012	25	21939	1.00	0.9648	M
28 3-Chloro-1-propene	41	3.977	3.965	0.012	93	70545	1.00	1.05	
29 Methylene Chloride	84	4.160	4.154	0.006	92	46875	1.00	1.03	
* 30 t-Butyl alcohol-d10 (IS)	65	4.251	4.257	-0.006	96	143773	50.0	50.0	
31 2-Methyl-2-propanol	59	4.373	4.367	0.006	99	44573	20.0	18.1	
32 Acrylonitrile	53	4.513	4.501	0.012	97	26349	2.50	2.54	
33 Methyl tert-butyl ether	73	4.562	4.550	0.012	87	115806	1.00	1.01	
34 trans-1,2-Dichloroethene	96	4.568	4.556	0.012	99	45312	1.00	1.03	
35 Hexane	57	4.995	4.983	0.012	92	65230	1.00	1.02	
37 1,1-Dichloroethane	63	5.232	5.226	0.006	95	80419	1.00	1.04	
38 Isopropyl ether	45	5.287	5.287	0.000	94	146277	1.00	1.02	
39 2-Chloro-1,3-butadiene	53	5.336	5.336	0.000	90	64426	1.00	1.01	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.830	5.824	0.006	97	132335	1.00	1.01	
41 2-Butanone (MEK)	43	6.056	6.043	0.013	100	146949	10.0	10.3	
42 cis-1,2-Dichloroethene	96	6.080	6.062	0.018	81	50459	1.00	1.03	
43 2,2-Dichloropropane	77	6.080	6.080	0.000	62	58977	1.00	1.02	
45 Propionitrile	54	6.159	6.153	0.006	99	77396	20.0	21.0	
S 46 1,2-Dichloroethene, Total	100				0			2.05	
48 Methacrylonitrile	67	6.348	6.348	0.000	92	136258	10.0	9.90	
49 Chlorobromomethane	128	6.391	6.391	0.000	91	23043	1.00	1.01	
50 Tetrahydrofuran	71	6.415	6.409	0.006	73	20154	5.00	4.96	
51 Chloroform	83	6.549	6.549	0.000	93	78896	1.00	1.02	
$ 52 Dibromofluoromethane (Surr)	113	6.763	6.763	0.000	94	471097	10.0	9.99	
53 1,1,1-Trichloroethane	97	6.781	6.769	0.012	41	67893	1.00	1.02	
54 Cyclohexane	56	6.872	6.866	0.006	91	80010	1.00	1.03	
56 Carbon tetrachloride	117	6.982	6.976	0.006	90	60121	1.00	1.02	
57 1,1-Dichloropropene	75	6.988	6.982	0.006	96	62661	1.00	1.04	
58 Isobutyl alcohol	41	7.196	7.196	0.000	89	46747	50.0	53.4	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.214	7.214	0.000	83	104518	10.0	9.96	
60 Benzene	78	7.250	7.250	0.000	92	189845	1.00	1.03	
61 1,2-Dichloroethane	62	7.317	7.318	-0.001	97	53223	1.00	1.03	
63 Tert-amyl methyl ether	73	7.439	7.446	-0.007	97	124444	1.00	1.01	
* 64 Fluorobenzene (IS)	96	7.659	7.653	0.006	99	1893045	10.0	10.0	
65 n-Heptane	43	7.665	7.665	0.000	78	72933	1.00	1.04	
67 n-Butanol	56	8.086	8.086	0.000	89	68888	87.5	89.4	
68 Trichloroethene	95	8.128	8.134	-0.006	96	49147	1.00	1.01	
69 Methylcyclohexane	83	8.439	8.439	0.000	91	84779	1.00	1.02	
70 1,2-Dichloropropane	63	8.470	8.470	0.000	95	47996	1.00	1.01	
71 2-ethoxy-2-methyl butane	87	8.482	8.476	0.006	96	69499	1.00	1.01	
72 Methyl methacrylate	69	8.555	8.555	0.000	92	25535	1.00	0.9756	
74 Dibromomethane	93	8.579	8.579	0.000	93	24708	1.00	1.04	
73 1,4-Dioxane	88	8.616	8.653	-0.037	28	6572	50.0	47.9	M
76 Dichlorobromomethane	83	8.817	8.817	0.000	99	56926	1.00	1.00	
77 2-Nitropropane	41	9.098	9.104	-0.006	99	35662	5.00	4.82	
80 1-Bromo-2-chloroethane	63	9.213	9.207	0.006	98	50499	1.00	0.9765	
81 cis-1,3-Dichloropropene	75	9.372	9.366	0.006	96	70807	1.00	1.01	
82 4-Methyl-2-pentanone (MIBK)	43	9.549	9.549	0.000	97	345315	10.0	9.85	
$ 83 Toluene-d8 (Surr)	98	9.683	9.677	0.006	93	1940951	10.0	10.1	
84 Toluene	92	9.756	9.756	0.000	98	120357	1.00	1.02	
96 trans-1,3-Dichloropropene	75	10.018	10.018	0.000	93	58447	1.00	0.9889	
S 97 1,3-Dichloropropene, Total	100				0			1.99	
98 Ethyl methacrylate	69	10.079	10.079	0.000	90	50655	1.00	0.99	
99 1,1,2-Trichloroethane	97	10.219	10.219	0.000	89	37268	1.00	1.03	
100 Tetrachloroethene	166	10.305	10.305	0.000	97	57945	1.00	1.03	
101 1,3-Dichloropropane	76	10.384	10.384	0.000	90	62656	1.00	1.03	
102 2-Hexanone	43	10.445	10.445	0.000	96	249173	10.0	9.79	
104 Chlorodibromomethane	129	10.597	10.597	0.000	89	44279	1.00	1.02	
105 Ethylene Dibromide	107	10.707	10.707	0.000	98	35554	1.00	1.01	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.140	0.006	85	1480101	10.0	10.0	
107 1-Chlorohexane	91	11.152	11.152	0.000	96	68788	1.00	1.01	
108 Chlorobenzene	112	11.170	11.170	0.000	96	140899	1.00	1.03	
S 109 Xylenes, Total	106				0			3.08	
110 1,1,1,2-Tetrachloroethane	131	11.250	11.250	0.000	95	47898	1.00	1.02	
111 Ethylbenzene	91	11.256	11.256	0.000	98	231619	1.00	1.01	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 m-Xylene & p-Xylene	106	11.372	11.372	0.000	99	183271	2.00	2.06	
113 o-Xylene	106	11.701	11.701	0.000	96	89302	1.00	1.02	
114 Styrene	104	11.719	11.719	0.000	95	149757	1.00	1.01	
115 Bromoform	173	11.871	11.872	-0.001	98	27224	1.00	0.9724	
116 Isopropylbenzene	105	11.999	12.000	-0.001	95	226325	1.00	1.01	
$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	93	714443	10.0	10.1	
120 1,1,2,2-Tetrachloroethane	83	12.249	12.250	-0.001	93	47628	1.00	1.00	
121 Bromobenzene	156	12.262	12.262	0.000	96	60740	1.00	1.00	
122 trans-1,4-Dichloro-2-butene	53	12.274	12.274	0.000	94	114008	10.0	8.95	
123 1,2,3-Trichloropropane	110	12.298	12.292	0.006	83	13685	1.00	1.05	
124 N-Propylbenzene	91	12.329	12.329	0.000	99	280736	1.00	1.02	
125 2-Chlorotoluene	126	12.408	12.408	0.000	97	57641	1.00	1.02	
126 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	197085	1.00	0.99	
127 4-Chlorotoluene	126	12.499	12.499	0.000	97	60319	1.00	1.02	
128 tert-Butylbenzene	134	12.707	12.707	0.000	93	42989	1.00	1.00	
129 Pentachloroethane	167	12.743	12.743	0.000	91	36222	1.00	0.9538	
130 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	210451	1.00	1.03	
131 sec-Butylbenzene	105	12.871	12.871	0.000	94	254997	1.00	1.01	
132 1,3-Dichlorobenzene	146	12.969	12.969	0.000	99	125754	1.00	1.02	
133 4-Isopropyltoluene	119	12.981	12.981	0.000	97	221243	1.00	1.00	
* 134 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	875966	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.042	13.042	0.000	96	129014	1.00	1.02	
136 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	94138	1.00	1.00	
137 Benzyl chloride	126	13.121	13.121	0.000	98	17706	1.00	0.9603	
138 p-Diethylbenzene	119	13.182	13.182	0.000	92	137465	1.00	1.01	
139 n-Butylbenzene	92	13.274	13.274	0.000	98	116669	1.00	1.00	
140 1,2-Dichlorobenzene	146	13.304	13.304	0.000	99	117822	1.00	1.01	
142 1,2-Dibromo-3-Chloropropane	155	13.847	13.847	0.000	84	7530	1.00	0.9800	
143 1,3,5-Trichlorobenzene	180	13.969	13.969	0.000	98	103419	1.00	1.01	
144 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	94107	1.00	1.01	
145 Hexachlorobutadiene	225	14.475	14.475	0.000	95	46353	1.00	1.00	
146 Naphthalene	128	14.578	14.578	0.000	97	163319	1.00	0.99	
147 1,2,3-Trichlorobenzene	180	14.718	14.719	-0.001	96	84829	1.00	1.02	
148 2-Methylnaphthalene	142	15.340	15.340	0.000	92	95705	1.00	0.9322	
160 Pentane	43	2.995	2.983	0.012	97	72245	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00011	Amount Added:	2.00	Units: uL	
MSV_LL_GAS826_00018	Amount Added:	2.00	Units: uL	
MSV_LL_#2_826_00011	Amount Added:	2.00	Units: uL	
MSV_29_826ISS_00020	Amount Added:	1.00	Units: uL	Run Reagent

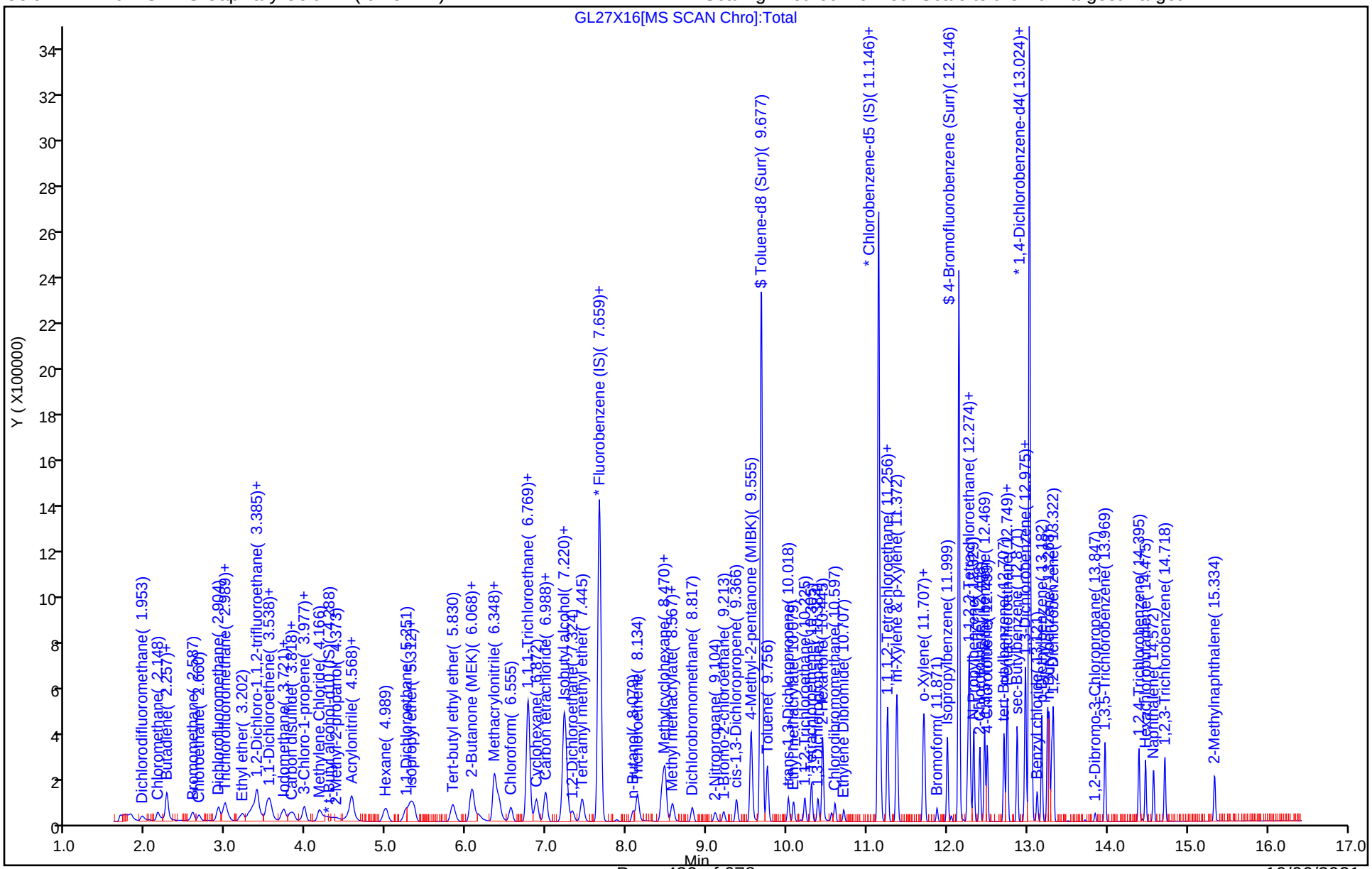
Report Date: 05-Aug-2021 16:12:53 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X16.D

Injection Date:	27-Jul-2021 21:03:30	Instrument ID:	16334	Operator ID:	kas02648
Lims ID:	IC std3			Worklist Smp#:	16
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

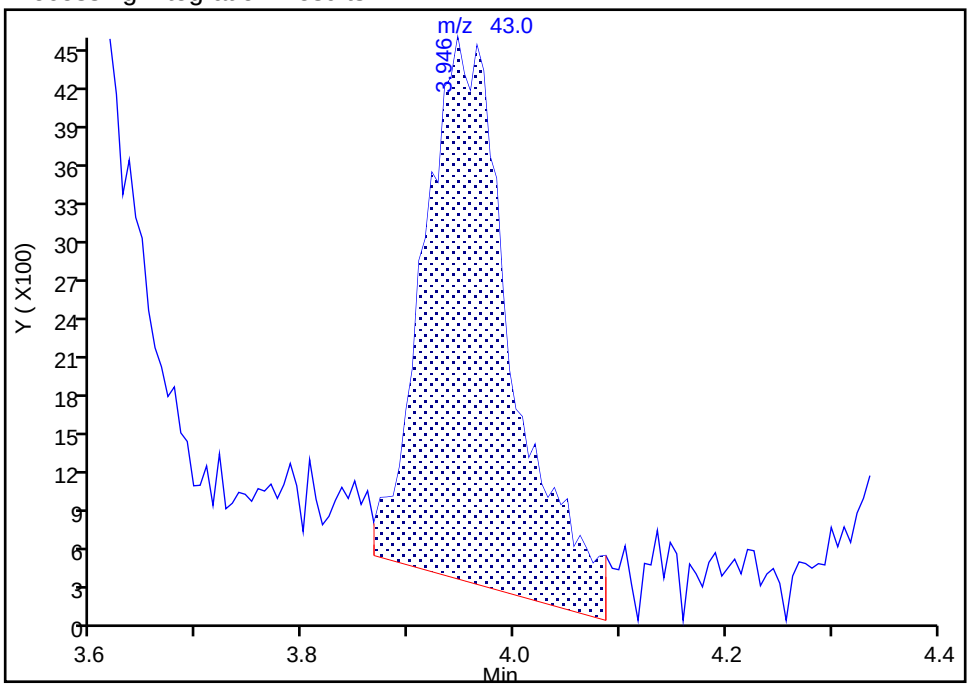
Data File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X16.D				
Injection Date:	27-Jul-2021 21:03:30	Instrument ID:	16334		
Lims ID:	IC std3				
Client ID:					
Operator ID:	kas02648	ALS Bottle#:	16	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

27 Methyl acetate, CAS: 79-20-9

Signal: 1

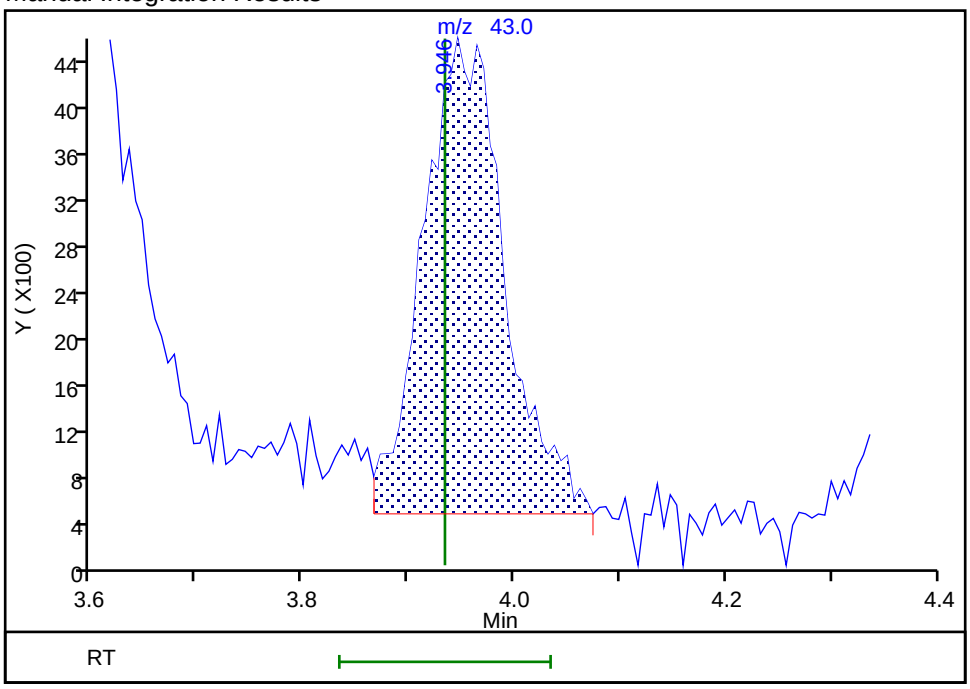
Processing Integration Results

RT: 3.95
Area: 24547
Amount: 1.042534
Amount Units: ug/l



Manual Integration Results

RT: 3.95
Area: 21939
Amount: 0.964813
Amount Units: ug/l



Reviewer: spositok, 28-Jul-2021 12:00:04
Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

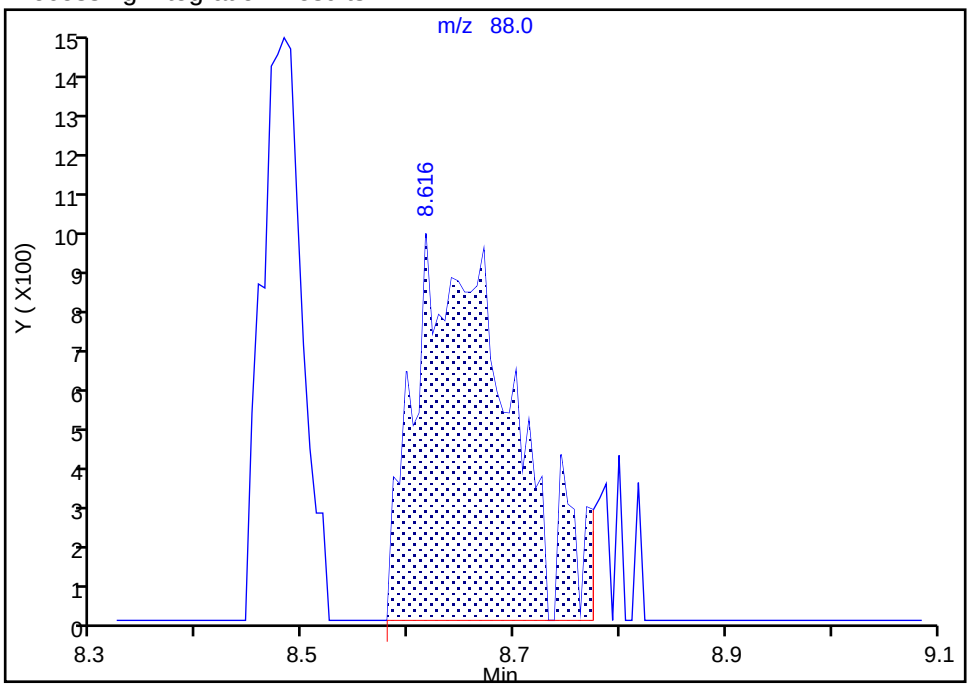
Data File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X16.D				
Injection Date:	27-Jul-2021 21:03:30	Instrument ID:	16334		
Lims ID:	IC std3				
Client ID:					
Operator ID:	kas02648	ALS Bottle#:	16	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

73 1,4-Dioxane, CAS: 123-91-1

Signal: 1

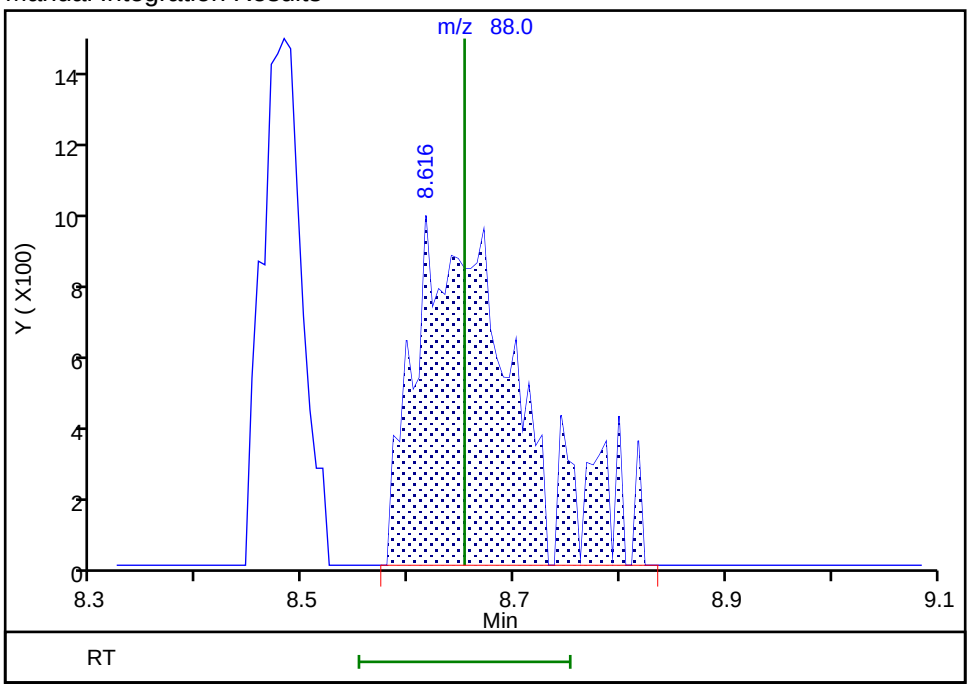
Processing Integration Results

RT: 8.62
Area: 6060
Amount: 48.944328
Amount Units: ug/l



Manual Integration Results

RT: 8.62
Area: 6572
Amount: 47.850982
Amount Units: ug/l



Reviewer: spositok, 28-Jul-2021 12:00:53

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X17.D
Lims ID: IC std2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 27-Jul-2021 21:25:30 ALS Bottle#: 17 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0035331-017
Misc. Info.: IC STD2
Operator ID: kas02648 Instrument ID: 16334
Sublist: chrom-MSV_16334_25mL*sub4

Method: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 16:12:59 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1675

First Level Reviewer: spositok Date: 28-Jul-2021 12:04:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.947	1.934	0.013	99	21724	0.5000	0.4638	
5 Chloromethane	50	2.142	2.136	0.006	99	29283	0.5000	0.5009	
7 Butadiene	39	2.257	2.245	0.012	90	29692	0.5000	0.4772	
8 Vinyl chloride	62	2.257	2.251	0.006	88	26745	0.5000	0.4710	
9 Bromomethane	94	2.581	2.568	0.013	90	19605	0.5000	0.4832	
10 Chloroethane	64	2.648	2.648	0.000	99	16333	0.5000	0.4822	
12 Dichlorofluoromethane	67	2.898	2.892	0.006	97	38104	0.5000	0.4840	
13 Trichlorofluoromethane	101	2.971	2.959	0.012	97	33969	0.5000	0.4664	
15 Ethyl ether	59	3.196	3.190	0.006	91	18010	0.5000	0.4880	M
17 1,2-Dichloro-1,1,2-trifluoroetha	67	3.294	3.288	0.006	88	26167	0.5000	0.4838	
18 Acrolein	56	3.373	3.367	0.006	99	132577	25.0	21.3	
19 1,1-Dichloroethene	96	3.513	3.501	0.012	97	17652	0.5000	0.4510	
20 112TCTFE	101	3.538	3.532	0.006	92	17931	0.5000	0.4225	
21 Acetone	43	3.562	3.550	0.012	98	34939	5.00	4.60	M
23 Iodomethane	142	3.696	3.696	0.000	98	32943	0.5000	0.4447	
24 Ethyl bromide	108	3.727	3.715	0.012	95	16384	0.4997	0.4711	
22 Isopropyl alcohol	45	3.782	3.800	-0.018	28	11253	10.0	10.2	
25 Carbon disulfide	76	3.812	3.806	0.006	99	57933	0.5000	0.4276	M
27 Methyl acetate	43	3.946	3.934	0.012	92	10005	0.5000	0.4316	M
28 3-Chloro-1-propene	41	3.971	3.965	0.006	93	29502	0.5000	0.4413	
29 Methylene Chloride	84	4.160	4.154	0.006	88	21145	0.5000	0.4712	
* 30 t-Butyl alcohol-d10 (IS)	65	4.245	4.257	-0.012	96	146579	50.0	50.0	
31 2-Methyl-2-propanol	59	4.349	4.367	-0.019	98	21557	10.0	8.58	
32 Acrylonitrile	53	4.525	4.501	0.024	97	11055	1.25	1.05	
33 Methyl tert-butyl ether	73	4.568	4.550	0.018	91	50908	0.5000	0.4494	
34 trans-1,2-Dichloroethene	96	4.562	4.556	0.006	98	18357	0.5000	0.4193	
35 Hexane	57	5.001	4.983	0.018	92	25282	0.5000	0.3997	
37 1,1-Dichloroethane	63	5.232	5.226	0.006	96	34195	0.5000	0.4444	a
38 Isopropyl ether	45	5.293	5.287	0.006	94	63401	0.5000	0.4463	
39 2-Chloro-1,3-butadiene	53	5.342	5.336	0.006	90	25981	0.5000	0.4115	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.824	5.824	0.000	97	56098	0.5000	0.4332	
41 2-Butanone (MEK)	43	6.055	6.043	0.012	100	60342	5.00	4.15	
42 cis-1,2-Dichloroethene	96	6.068	6.062	0.006	80	21768	0.5000	0.4464	
43 2,2-Dichloropropane	77	6.086	6.080	0.006	87	24342	0.5000	0.4269	
45 Propionitrile	54	6.153	6.153	0.000	99	30332	10.0	8.09	
S 46 1,2-Dichloroethene, Total	100				0			0.8658	
48 Methacrylonitrile	67	6.348	6.348	0.000	91	57499	5.00	4.10	
49 Chlorobromomethane	128	6.397	6.391	0.006	93	9896	0.5000	0.4384	
50 Tetrahydrofuran	71	6.415	6.409	0.006	74	8333	2.50	2.01	
51 Chloroform	83	6.549	6.549	0.000	93	34342	0.5000	0.4482	
$ 52 Dibromofluoromethane (Surr)	113	6.769	6.763	0.006	94	467435	10.0	10.0	
53 1,1,1-Trichloroethane	97	6.775	6.769	0.006	40	29131	0.5000	0.4413	
54 Cyclohexane	56	6.872	6.866	0.006	89	32004	0.5000	0.4161	
56 Carbon tetrachloride	117	6.982	6.976	0.006	86	25082	0.5000	0.4315	
57 1,1-Dichloropropene	75	6.976	6.982	-0.006	96	25354	0.5000	0.4228	
58 Isobutyl alcohol	41	7.183	7.196	-0.013	92	18495	25.0	21.3	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.220	7.214	0.006	83	105375	10.0	10.1	
60 Benzene	78	7.256	7.250	0.006	92	81040	0.5000	0.4433	
61 1,2-Dichloroethane	62	7.324	7.318	0.006	96	24482	0.5000	0.4768	
63 Tert-amyl methyl ether	73	7.439	7.446	-0.007	98	53714	0.5000	0.4408	
* 64 Fluorobenzene (IS)	96	7.659	7.653	0.006	99	1875578	10.0	10.0	
65 n-Heptane	43	7.665	7.665	0.000	52	29178	0.5000	0.4196	
67 n-Butanol	56	8.086	8.086	0.000	91	29774	43.8	37.9	
68 Trichloroethene	95	8.134	8.134	0.000	98	21298	0.5000	0.4429	
69 Methylcyclohexane	83	8.433	8.439	-0.006	90	32844	0.5000	0.3988	
70 1,2-Dichloropropane	63	8.470	8.470	0.000	96	21244	0.5000	0.4516	
71 2-ethoxy-2-methyl butane	87	8.476	8.476	0.000	91	29633	0.5000	0.4358	
72 Methyl methacrylate	69	8.555	8.555	0.000	90	10454	0.5000	0.3917	
74 Dibromomethane	93	8.579	8.579	0.000	93	10701	0.5000	0.4538	
73 1,4-Dioxane	88	8.622	8.653	-0.031	27	1753	25.0	12.5	M
76 Dichlorobromomethane	83	8.817	8.817	0.000	99	25067	0.5000	0.4461	
77 2-Nitropropane	41	9.104	9.104	0.000	98	14899	2.50	1.98	
80 1-Bromo-2-chloroethane	63	9.213	9.207	0.006	97	24244	0.5000	0.4732	
81 cis-1,3-Dichloropropene	75	9.372	9.366	0.006	96	30391	0.5000	0.4355	
82 4-Methyl-2-pentanone (MIBK)	43	9.549	9.549	0.000	97	146329	5.00	4.10	
$ 83 Toluene-d8 (Surr)	98	9.677	9.677	0.000	93	1919172	10.0	10.0	
84 Toluene	92	9.756	9.756	0.000	98	53299	0.5000	0.4530	
96 trans-1,3-Dichloropropene	75	10.018	10.018	0.000	92	25116	0.5000	0.4276	
S 97 1,3-Dichloropropene, Total	100				0			0.8631	
98 Ethyl methacrylate	69	10.079	10.079	0.000	90	21078	0.5000	0.4156	
99 1,1,2-Trichloroethane	97	10.219	10.219	0.000	89	15502	0.5000	0.4324	
100 Tetrachloroethene	166	10.305	10.305	0.000	97	24431	0.5000	0.4361	
101 1,3-Dichloropropane	76	10.384	10.384	0.000	89	27066	0.5000	0.4468	
102 2-Hexanone	43	10.445	10.445	0.000	96	102992	5.00	3.97	
104 Chlorodibromomethane	129	10.597	10.597	0.000	89	19025	0.5000	0.4401	
105 Ethylene Dibromide	107	10.707	10.707	0.000	98	15317	0.5000	0.4399	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.140	0.006	85	1470938	10.0	10.0	
107 1-Chlorohexane	91	11.152	11.152	0.000	97	30317	0.5000	0.4461	
108 Chlorobenzene	112	11.170	11.170	0.000	95	59976	0.5000	0.4411	
S 109 Xylenes, Total	106				0			1.29	
110 1,1,1,2-Tetrachloroethane	131	11.250	11.250	0.000	94	19872	0.5000	0.4243	
111 Ethylbenzene	91	11.256	11.256	0.000	98	99191	0.5000	0.4361	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 m-Xylene & p-Xylene	106	11.372	11.372	0.000	100	75404	1.00	0.8533	
113 o-Xylene	106	11.701	11.701	0.000	96	38542	0.5000	0.4411	
114 Styrene	104	11.719	11.719	0.000	93	61389	0.5000	0.4167	
115 Bromoform	173	11.871	11.872	-0.001	97	11437	0.5000	0.4111	
116 Isopropylbenzene	105	11.999	12.000	-0.001	95	94259	0.5000	0.4227	
$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	94	698786	10.0	9.98	
120 1,1,2,2-Tetrachloroethane	83	12.249	12.250	-0.001	92	21368	0.5000	0.4566	
121 Bromobenzene	156	12.262	12.262	0.000	92	26789	0.5000	0.4506	
122 trans-1,4-Dichloro-2-butene	53	12.280	12.274	0.006	95	44835	5.00	3.45	
123 1,2,3-Trichloropropane	110	12.298	12.292	0.006	74	5734	0.5000	0.4496	
124 N-Propylbenzene	91	12.329	12.329	0.000	99	116945	0.5000	0.4319	
125 2-Chlorotoluene	126	12.408	12.408	0.000	97	24277	0.5000	0.4400	
126 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	93	83768	0.5000	0.4317	
127 4-Chlorotoluene	126	12.499	12.499	0.000	96	25036	0.5000	0.4338	
128 tert-Butylbenzene	134	12.713	12.707	0.006	93	17899	0.5000	0.4259	
129 Pentachloroethane	167	12.743	12.743	0.000	79	16636	0.5000	0.4473	
130 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	85067	0.5000	0.4233	
131 sec-Butylbenzene	105	12.871	12.871	0.000	94	103229	0.5000	0.4169	
132 1,3-Dichlorobenzene	146	12.975	12.969	0.006	98	54656	0.5000	0.4535	
133 4-Isopropyltoluene	119	12.981	12.981	0.000	97	89017	0.5000	0.4116	
* 134 1,4-Dichlorobenzene-d4	152	13.024	13.024	0.000	94	857900	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.042	13.042	0.000	95	55669	0.5000	0.4483	
136 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	41606	0.5000	0.4492	
137 Benzyl chloride	126	13.121	13.121	0.000	98	7232	0.5000	0.4005	
138 p-Diethylbenzene	119	13.182	13.182	0.000	92	56000	0.5000	0.4196	
139 n-Butylbenzene	92	13.274	13.274	0.000	97	48919	0.5000	0.4298	
140 1,2-Dichlorobenzene	146	13.304	13.304	0.000	98	52551	0.5000	0.4583	
142 1,2-Dibromo-3-Chloropropane	155	13.847	13.847	0.000	85	3145	0.5000	0.4179	
143 1,3,5-Trichlorobenzene	180	13.969	13.969	0.000	98	44292	0.5000	0.4414	
144 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	40328	0.5000	0.4407	
145 Hexachlorobutadiene	225	14.475	14.475	0.000	95	20037	0.5000	0.4418	
146 Naphthalene	128	14.578	14.578	0.000	96	68200	0.5000	0.4232	
147 1,2,3-Trichlorobenzene	180	14.718	14.719	-0.001	94	35843	0.5000	0.4389	
148 2-Methylnaphthalene	142	15.334	15.340	-0.006	93	40068	0.5000	0.3985	
160 Pentane	43	2.989	2.983	0.006	97	29467	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_LL_#1_826_00011	Amount Added:	2.00	Units: uL	
MSV_LL_GAS826_00018	Amount Added:	2.00	Units: uL	
MSV_LL_#2_826_00011	Amount Added:	2.00	Units: uL	
MSV_29_826ISS_00020	Amount Added:	1.00	Units: uL	Run Reagent

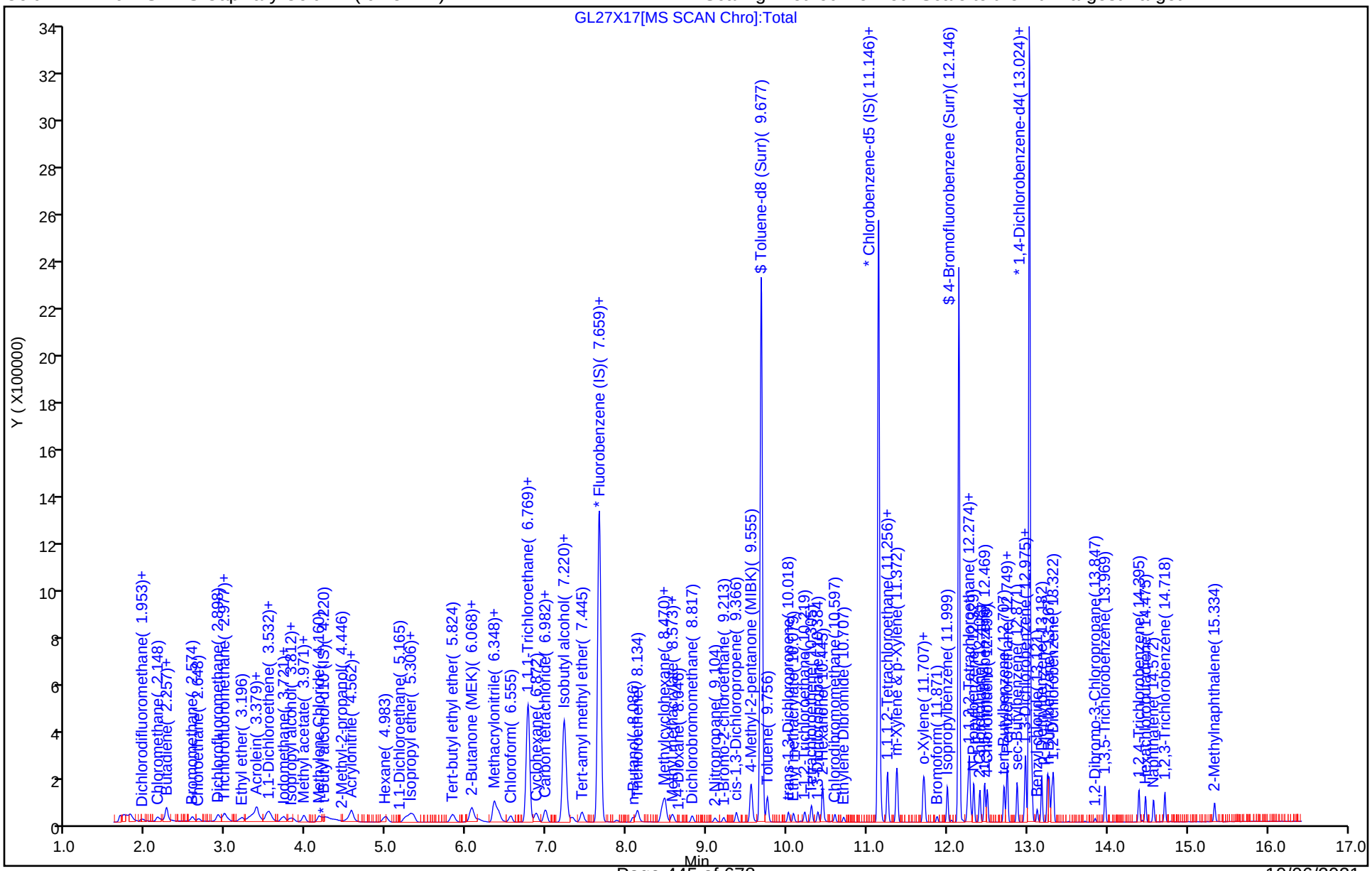
Report Date: 05-Aug-2021 16:13:01 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X17.D

Injection Date:	27-Jul-2021 21:25:30	Instrument ID:	16334	Operator ID:	kas02648
Lims ID:	IC std2			Worklist Smp#:	17
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

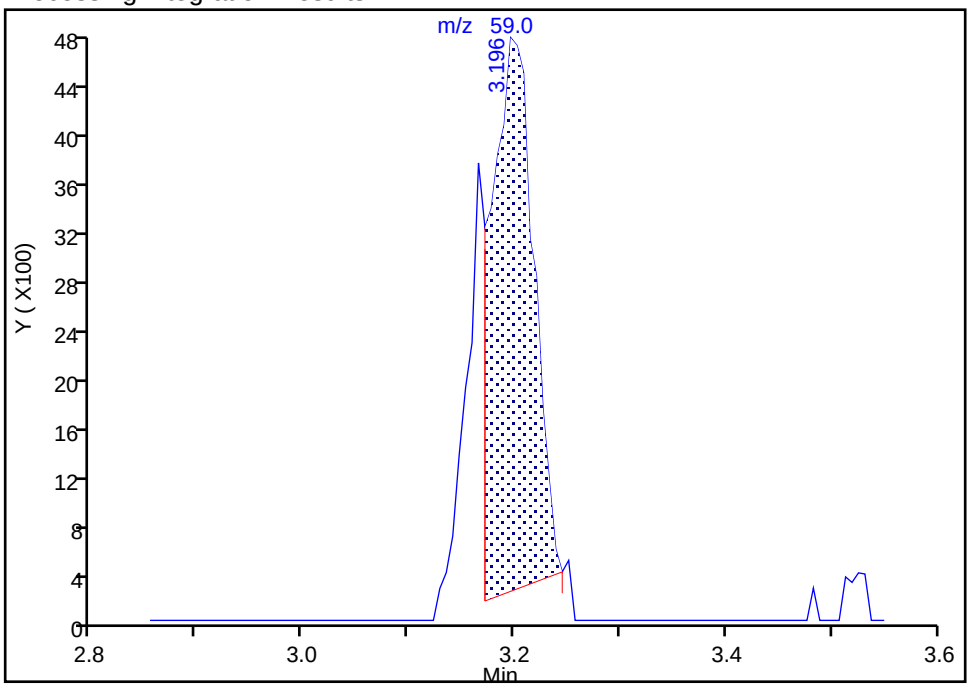
Data File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X17.D				
Injection Date:	27-Jul-2021 21:25:30	Instrument ID:	16334		
Lims ID:	IC std2				
Client ID:					
Operator ID:	kas02648	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

15 Ethyl ether, CAS: 60-29-7

Signal: 1

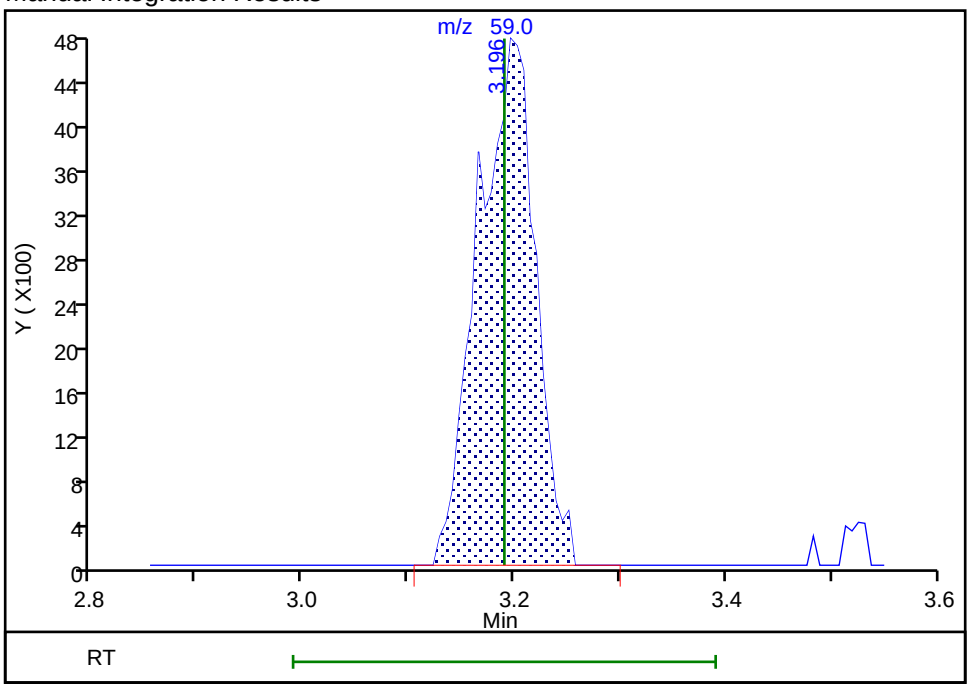
Processing Integration Results

RT: 3.20
Area: 12636
Amount: 0.357279
Amount Units: ug/l



Manual Integration Results

RT: 3.20
Area: 18010
Amount: 0.488041
Amount Units: ug/l



Reviewer: spositok, 28-Jul-2021 12:01:23
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

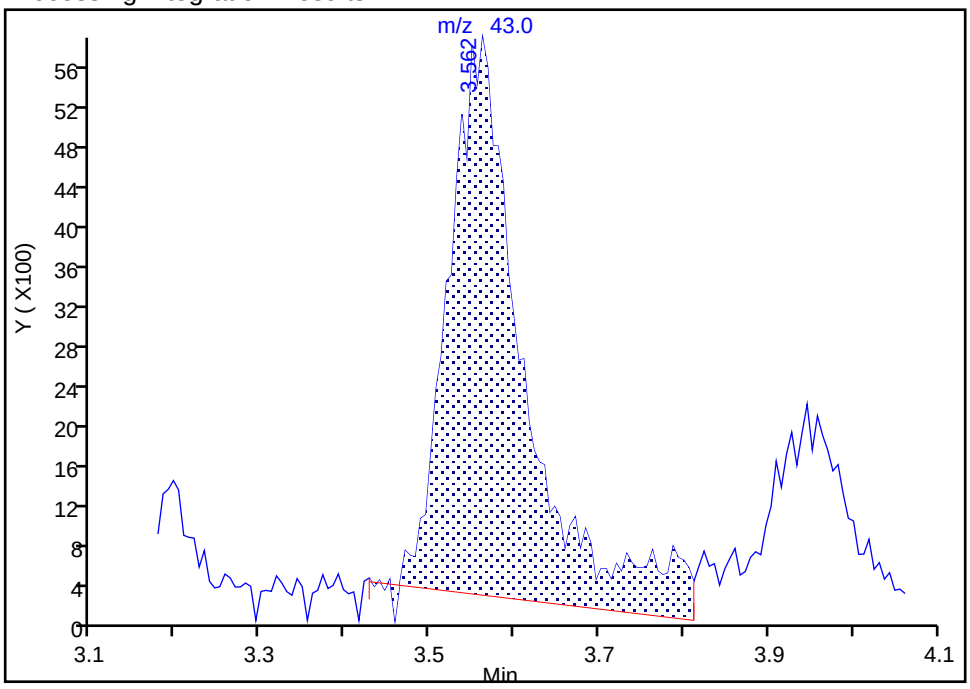
Data File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X17.D				
Injection Date:	27-Jul-2021 21:25:30	Instrument ID:	16334		
Lims ID:	IC std2				
Client ID:					
Operator ID:	kas02648	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

21 Acetone, CAS: 67-64-1

Signal: 1

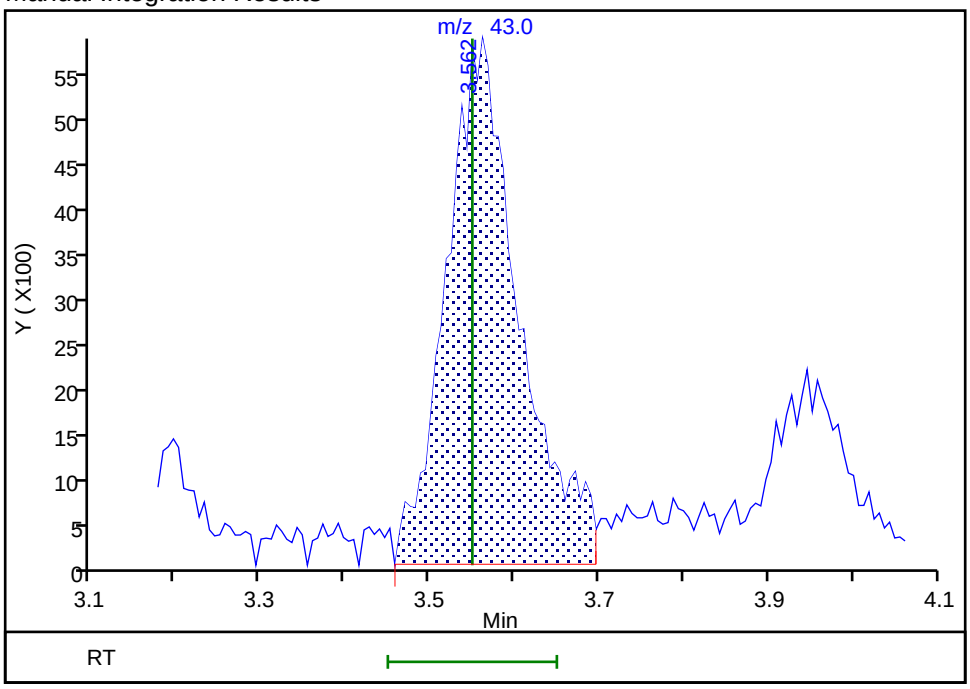
Processing Integration Results

RT: 3.56
Area: 35033
Amount: 4.612348
Amount Units: ug/l



Manual Integration Results

RT: 3.56
Area: 34939
Amount: 4.601599
Amount Units: ug/l



Reviewer: spositok, 28-Jul-2021 12:02:01
Audit Action: Assigned New Baseline Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

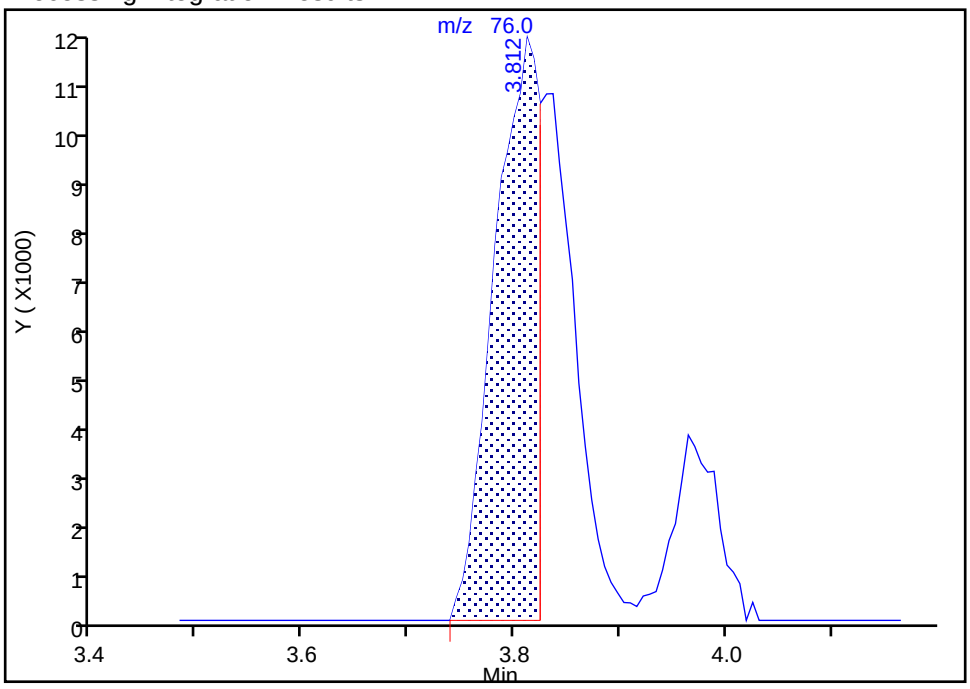
Data File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X17.D				
Injection Date:	27-Jul-2021 21:25:30	Instrument ID:	16334		
Lims ID:	IC std2				
Client ID:					
Operator ID:	kas02648	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

25 Carbon disulfide, CAS: 75-15-0

Signal: 1

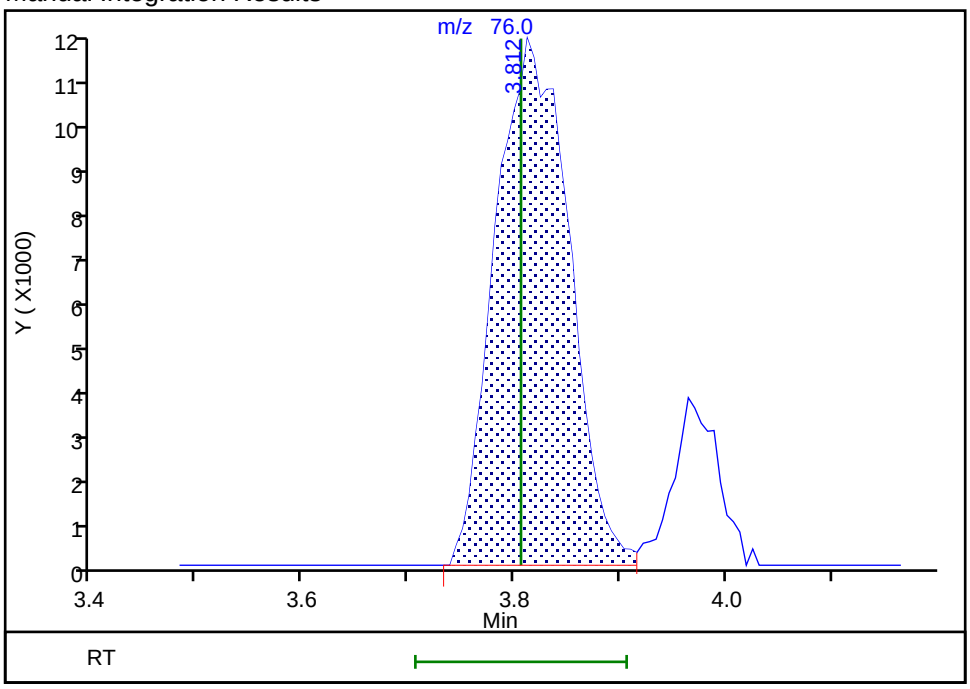
Processing Integration Results

RT: 3.81
Area: 35361
Amount: 0.274054
Amount Units: ug/l



Manual Integration Results

RT: 3.81
Area: 57933
Amount: 0.427618
Amount Units: ug/l



Reviewer: spositok, 28-Jul-2021 12:02:25

Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

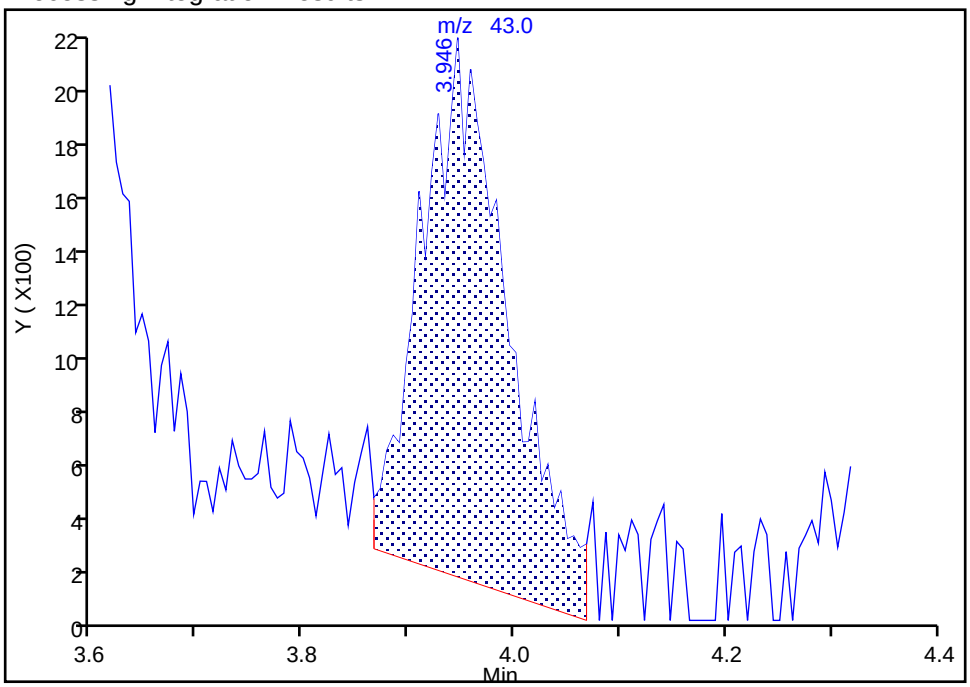
Data File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X17.D				
Injection Date:	27-Jul-2021 21:25:30	Instrument ID:	16334		
Lims ID:	IC std2				
Client ID:					
Operator ID:	kas02648	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

27 Methyl acetate, CAS: 79-20-9

Signal: 1

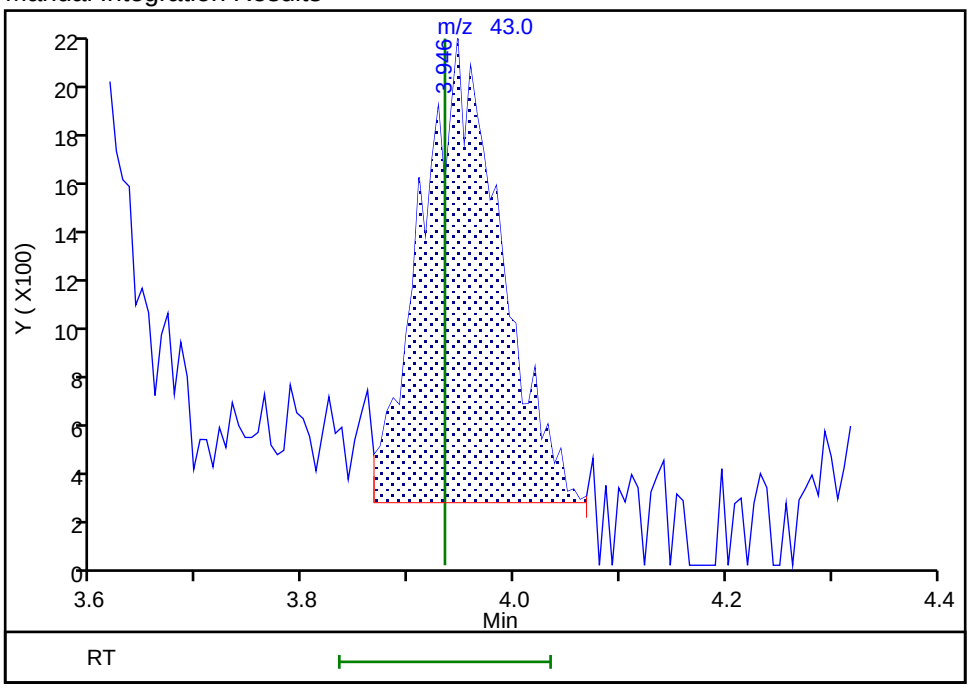
Processing Integration Results

RT: 3.95
Area: 11553
Amount: 0.489012
Amount Units: ug/l



Manual Integration Results

RT: 3.95
Area: 10005
Amount: 0.431568
Amount Units: ug/l



Reviewer: spositok, 28-Jul-2021 12:02:47
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

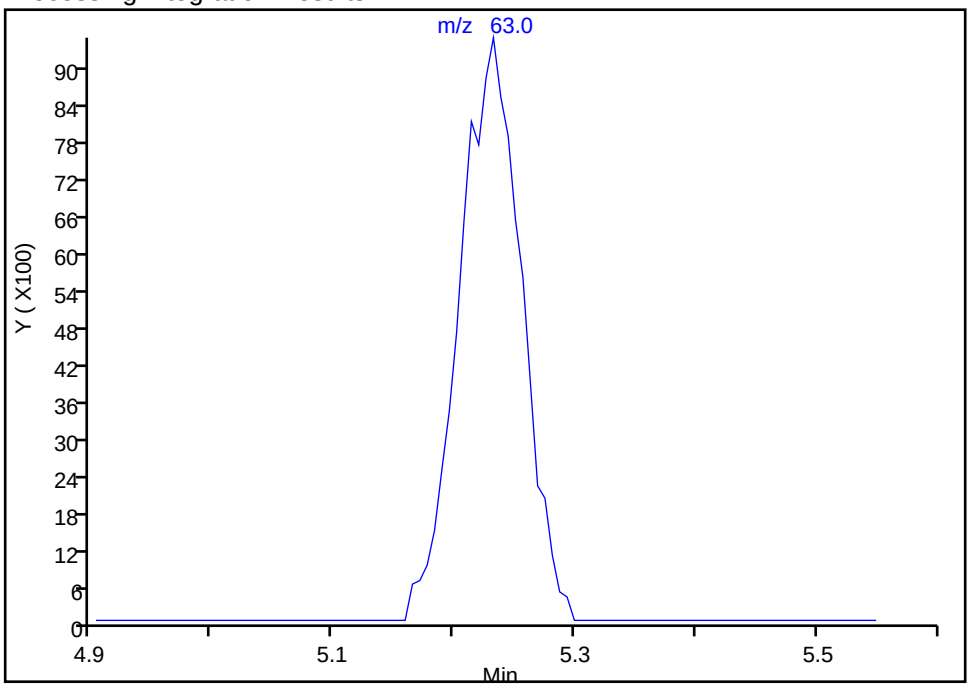
Data File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X17.D				
Injection Date:	27-Jul-2021 21:25:30	Instrument ID:	16334		
Lims ID:	IC std2				
Client ID:					
Operator ID:	kas02648	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

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

Signal: 1

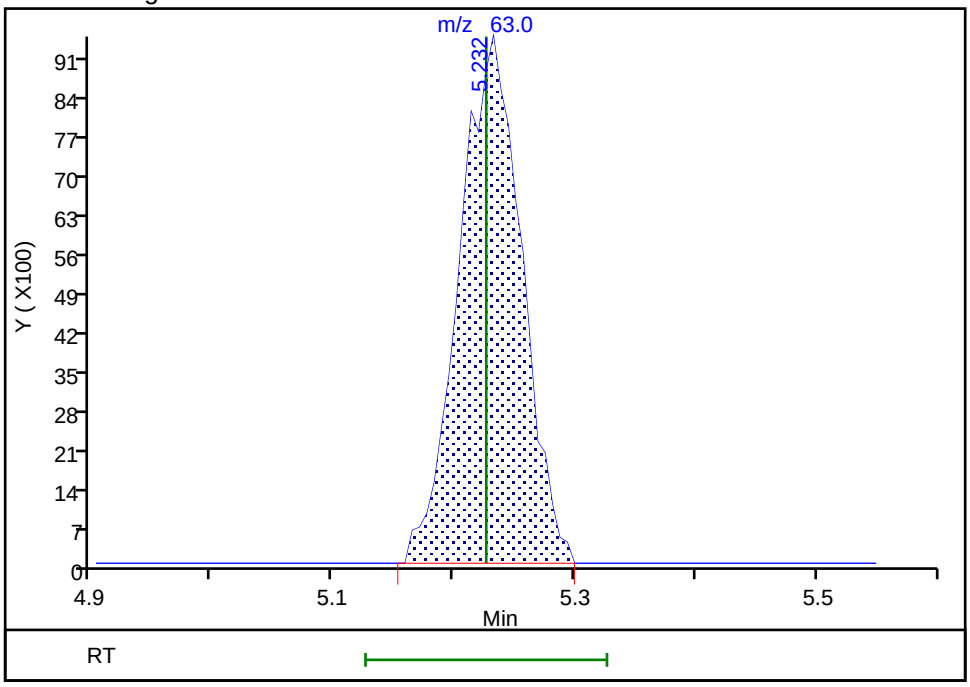
Not Detected
Expected RT: 5.23

Processing Integration Results



Manual Integration Results

RT: 5.23
Area: 34195
Amount: 0.444359
Amount Units: ug/l



Reviewer: spositok, 28-Jul-2021 12:02:59
Audit Action: Assigned Compound ID Audit Reason: Baseline

Eurofins Lancaster Laboratories Env, LLC

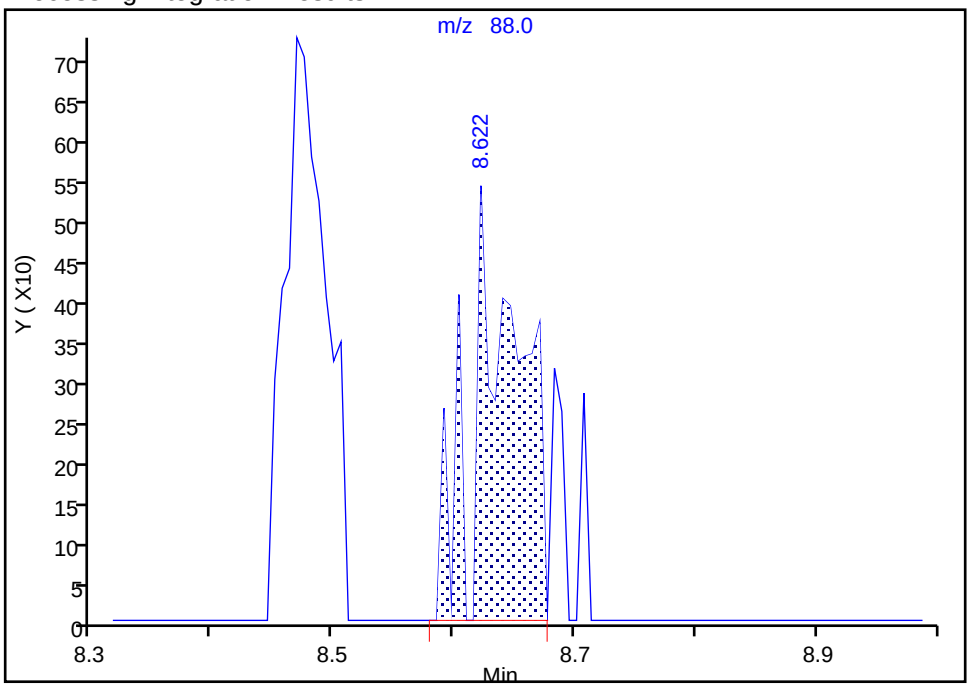
Data File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X17.D				
Injection Date:	27-Jul-2021 21:25:30	Instrument ID:	16334		
Lims ID:	IC std2				
Client ID:					
Operator ID:	kas02648	ALS Bottle#:	17	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

73 1,4-Dioxane, CAS: 123-91-1

Signal: 1

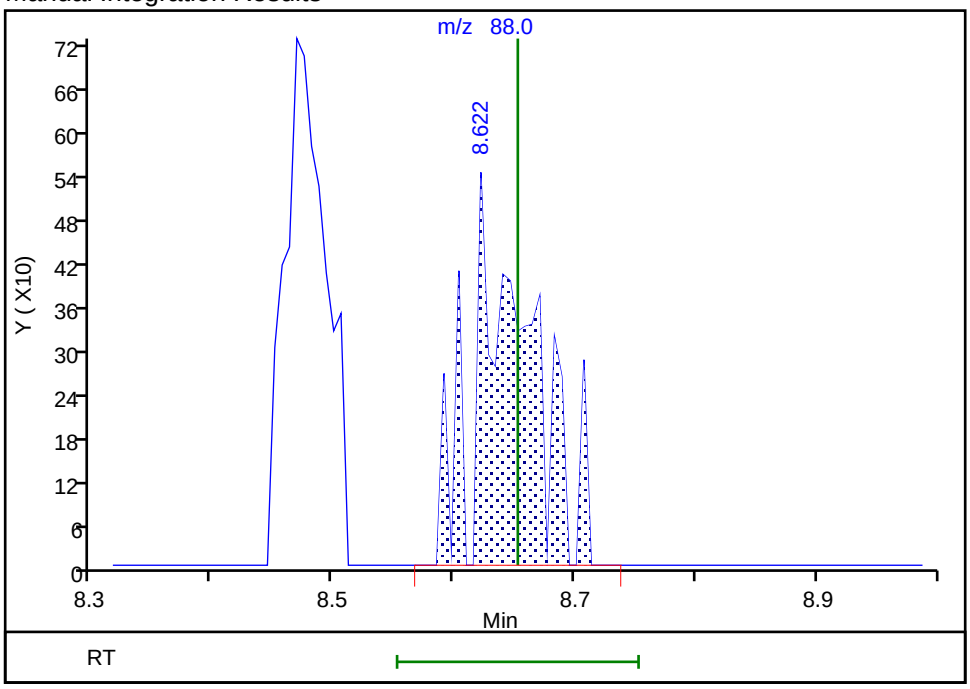
Processing Integration Results

RT: 8.62
Area: 1438
Amount: 15.368858
Amount Units: ug/l



Manual Integration Results

RT: 8.62
Area: 1753
Amount: 12.519322
Amount Units: ug/l



Reviewer: spositok, 28-Jul-2021 12:01:07
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D
Lims ID: IC std1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 27-Jul-2021 21:47:30 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0035331-018
Misc. Info.: IC STD1
Operator ID: kas02648 Instrument ID: 16334
Sublist: chrom-MSV_16334_25mL*sub4

Method: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 16:13:07 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1675

First Level Reviewer: spositok Date: 28-Jul-2021 12:05:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.953	1.934	0.019	96	7861	0.2000	0.1676	
5 Chloromethane	50	2.142	2.136	0.006	98	12968	0.2000	0.2215	
7 Butadiene	39	2.245	2.245	0.000	96	14603	0.2000	0.2344	
8 Vinyl chloride	62	2.264	2.251	0.013	85	11198	0.2000	0.1969	
9 Bromomethane	94	2.581	2.568	0.013	91	8518	0.2000	0.2097	
10 Chloroethane	64	2.660	2.648	0.012	99	6729	0.2000	0.1984	
12 Dichlorofluoromethane	67	2.910	2.892	0.018	95	15827	0.2000	0.2008	
13 Trichlorofluoromethane	101	2.971	2.959	0.012	95	13852	0.2000	0.1900	M
15 Ethyl ether	59	3.202	3.190	0.012	92	7191	0.2000	0.1946	
17 1,2-Dichloro-1,1,2-trifluoroetha	67	3.306	3.288	0.018	85	10536	0.2000	0.1945	M
18 Acrolein	56	3.379	3.367	0.012	99	59676	10.0	8.87	
19 1,1-Dichloroethene	96	3.501	3.501	0.000	96	7309	0.2000	0.1865	
20 112TCTFE	101	3.538	3.532	0.006	88	7554	0.2000	0.1778	
21 Acetone	43	3.568	3.550	0.018	91	21216	2.00	2.58	
23 Iodomethane	142	3.690	3.696	-0.006	99	14499	0.2000	0.1954	
24 Ethyl bromide	108	3.727	3.715	0.012	93	6734	0.1999	0.1934	
22 Isopropyl alcohol	45	3.794	3.800	-0.006	31	4453	4.00	4.03	
25 Carbon disulfide	76	3.818	3.806	0.012	98	25874	0.2000	0.1907	
27 Methyl acetate	43	3.952	3.934	0.018	25	4689	0.2000	0.1870	
28 3-Chloro-1-propene	41	3.971	3.965	0.006	93	13465	0.2000	0.2011	
29 Methylene Chloride	84	4.153	4.154	-0.001	91	8567	0.2000	0.1907	
* 30 t-Butyl alcohol-d10 (IS)	65	4.257	4.257	0.000	96	158566	50.0	50.0	
31 2-Methyl-2-propanol	59	4.391	4.367	0.024	95	9978	4.00	3.67	
32 Acrylonitrile	53	4.501	4.501	0.000	44	3968	0.5000	0.3472	
33 Methyl tert-butyl ether	73	4.568	4.550	0.018	88	21385	0.2000	0.1885	
34 trans-1,2-Dichloroethene	96	4.556	4.556	0.000	98	8457	0.2000	0.1929	M
35 Hexane	57	4.989	4.983	0.006	92	10567	0.2000	0.1668	
37 1,1-Dichloroethane	63	5.239	5.226	0.013	94	14921	0.2000	0.1936	
38 Isopropyl ether	45	5.300	5.287	0.013	95	26395	0.2000	0.1856	
39 2-Chloro-1,3-butadiene	53	5.342	5.336	0.006	88	11510	0.2000	0.1821	M

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.830	5.824	0.006	97	24423	0.2000	0.1883	
41 2-Butanone (MEK)	43	6.049	6.043	0.006	99	26998	2.00	1.71	
42 cis-1,2-Dichloroethene	96	6.074	6.062	0.012	81	9383	0.2000	0.1922	
43 2,2-Dichloropropane	77	6.086	6.080	0.006	88	10367	0.2000	0.1816	
45 Propionitrile	54	6.165	6.153	0.012	97	13462	4.00	3.32	
S 46 1,2-Dichloroethene, Total	100				0			0.3851	
48 Methacrylonitrile	67	6.354	6.348	0.006	91	24262	2.00	1.60	
49 Chlorobromomethane	128	6.397	6.391	0.006	80	4205	0.2000	0.1860	
50 Tetrahydrofuran	71	6.409	6.409	0.000	60	3430	1.00	0.7656	
51 Chloroform	83	6.555	6.549	0.006	92	14545	0.2000	0.1896	
$ 52 Dibromofluoromethane (Surr)	113	6.769	6.763	0.006	94	470752	10.0	10.1	
53 1,1,1-Trichloroethane	97	6.775	6.769	0.006	80	12174	0.2000	0.1842	
54 Cyclohexane	56	6.866	6.866	0.000	89	12606	0.2000	0.1637	
56 Carbon tetrachloride	117	6.976	6.976	0.000	88	10415	0.2000	0.1789	
57 1,1-Dichloropropene	75	6.982	6.982	0.000	94	10716	0.2000	0.1785	M
58 Isobutyl alcohol	41	7.196	7.196	0.000	89	9165	10.0	10.5	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.220	7.214	0.006	85	105513	10.0	10.1	
60 Benzene	78	7.250	7.250	0.000	93	35835	0.2000	0.1957	
61 1,2-Dichloroethane	62	7.324	7.318	0.006	94	10837	0.2000	0.2108	
63 Tert-amyl methyl ether	73	7.452	7.446	0.006	98	22599	0.2000	0.1852	M
* 64 Fluorobenzene (IS)	96	7.659	7.653	0.006	99	1878059	10.0	10.0	
65 n-Heptane	43	7.665	7.665	0.000	37	12688	0.2000	0.1822	
67 n-Butanol	56	8.080	8.086	-0.006	90	13839	17.5	16.3	
68 Trichloroethene	95	8.128	8.134	-0.006	97	9474	0.2000	0.1968	
69 Methylcyclohexane	83	8.439	8.439	0.000	82	13746	0.2000	0.1667	
70 1,2-Dichloropropane	63	8.470	8.470	0.000	83	8624	0.2000	0.1831	
71 2-ethoxy-2-methyl butane	87	8.476	8.476	0.000	90	12148	0.2000	0.1784	
72 Methyl methacrylate	69	8.561	8.555	0.006	93	4182	0.2000	0.1449	
74 Dibromomethane	93	8.579	8.579	0.000	96	4317	0.2000	0.1828	
73 1,4-Dioxane	88		8.653				ND	ND	U
76 Dichlorobromomethane	83	8.817	8.817	0.000	98	10440	0.2000	0.1855	
77 2-Nitropropane	41	9.098	9.104	-0.006	95	6637	1.00	0.8137	
80 1-Bromo-2-chloroethane	63	9.207	9.207	0.000	96	9810	0.2000	0.1912	
81 cis-1,3-Dichloropropene	75	9.372	9.366	0.006	95	11343	0.2000	0.1623	
82 4-Methyl-2-pentanone (MIBK)	43	9.555	9.549	0.006	96	57982	2.00	1.50	
$ 83 Toluene-d8 (Surr)	98	9.677	9.677	0.000	94	1917346	10.0	10.0	
84 Toluene	92	9.756	9.756	0.000	98	22427	0.2000	0.1906	
96 trans-1,3-Dichloropropene	75	10.018	10.018	0.000	91	9997	0.2000	0.1702	
S 97 1,3-Dichloropropene, Total	100				0			0.3325	
98 Ethyl methacrylate	69	10.079	10.079	0.000	90	8211	0.2000	0.1619	
99 1,1,2-Trichloroethane	97	10.225	10.219	0.006	89	6754	0.2000	0.1884	
100 Tetrachloroethene	166	10.305	10.305	0.000	97	10275	0.2000	0.1834	
101 1,3-Dichloropropane	76	10.384	10.384	0.000	91	11562	0.2000	0.1908	
102 2-Hexanone	43	10.445	10.445	0.000	96	41631	2.00	1.48	
104 Chlorodibromomethane	129	10.603	10.597	0.006	90	7476	0.2000	0.1729	
105 Ethylene Dibromide	107	10.713	10.707	0.006	96	6351	0.2000	0.1824	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.140	0.006	85	1471101	10.0	10.0	
107 1-Chlorohexane	91	11.152	11.152	0.000	74	14405	0.2000	0.2120	
108 Chlorobenzene	112	11.170	11.170	0.000	96	26408	0.2000	0.1942	
S 109 Xylenes, Total	106				0			0.5386	
110 1,1,1,2-Tetrachloroethane	131	11.250	11.250	0.000	43	8742	0.2000	0.1866	
111 Ethylbenzene	91	11.256	11.256	0.000	98	43770	0.2000	0.1924	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
112 m-Xylene & p-Xylene	106	11.372	11.372	0.000	99	31964	0.4000	0.3617	
113 o-Xylene	106	11.701	11.701	0.000	96	15463	0.2000	0.1770	
114 Styrene	104	11.719	11.719	0.000	95	25579	0.2000	0.1736	
115 Bromoform	173	11.872	11.872	0.000	95	4912	0.2000	0.1765	
116 Isopropylbenzene	105	12.000	12.000	0.000	96	39012	0.2000	0.1749	
$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	94	694165	10.0	9.91	
120 1,1,2,2-Tetrachloroethane	83	12.249	12.250	-0.001	93	8736	0.2000	0.1865	
121 Bromobenzene	156	12.262	12.262	0.000	91	11689	0.2000	0.1965	
122 trans-1,4-Dichloro-2-butene	53	12.274	12.274	0.000	94	18256	2.00	1.30	
123 1,2,3-Trichloropropane	110	12.292	12.292	0.000	74	2212	0.2000	0.1733	
124 N-Propylbenzene	91	12.329	12.329	0.000	99	49923	0.2000	0.1842	
125 2-Chlorotoluene	126	12.408	12.408	0.000	96	10097	0.2000	0.1829	
126 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	35155	0.2000	0.1810	
127 4-Chlorotoluene	126	12.499	12.499	0.000	96	10880	0.2000	0.1884	
128 tert-Butylbenzene	134	12.713	12.707	0.006	93	7219	0.2000	0.1716	
129 Pentachloroethane	167	12.743	12.743	0.000	78	6573	0.2000	0.1766	
130 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	34861	0.2000	0.1733	
131 sec-Butylbenzene	105	12.871	12.871	0.000	93	44335	0.2000	0.1789	
132 1,3-Dichlorobenzene	146	12.969	12.969	0.000	96	22007	0.2000	0.1825	
133 4-Isopropyltoluene	119	12.981	12.981	0.000	98	37102	0.2000	0.1714	
* 134 1,4-Dichlorobenzene-d4	152	13.030	13.024	0.006	94	858555	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.042	13.042	0.000	94	24548	0.2000	0.1975	
136 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	97	17211	0.2000	0.1857	
137 Benzyl chloride	126	13.121	13.121	0.000	98	2768	0.2000	0.1532	
138 p-Diethylbenzene	119	13.182	13.182	0.000	92	23266	0.2000	0.1742	
139 n-Butylbenzene	92	13.274	13.274	0.000	98	20369	0.2000	0.1788	
140 1,2-Dichlorobenzene	146	13.304	13.304	0.000	99	21843	0.2000	0.1904	
142 1,2-Dibromo-3-Chloropropane	155	13.847	13.847	0.000	88	1325	0.2000	0.1759	
143 1,3,5-Trichlorobenzene	180	13.969	13.969	0.000	97	19403	0.2000	0.1932	
144 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	92	17354	0.2000	0.1895	
145 Hexachlorobutadiene	225	14.475	14.475	0.000	95	8511	0.2000	0.1875	
146 Naphthalene	128	14.572	14.578	-0.006	97	28044	0.2000	0.1739	
147 1,2,3-Trichlorobenzene	180	14.719	14.719	-0.001	97	15594	0.2000	0.1908	
148 2-Methylnaphthalene	142	15.340	15.340	0.000	92	16637	0.2000	0.1653	
160 Pentane	43	2.983	2.983	0.000	91	14706	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

MSV_LL_#1_826_00011	Amount Added:	2.00	Units: uL	
MSV_LL_GAS826_00018	Amount Added:	2.00	Units: uL	
MSV_LL_#2_826_00011	Amount Added:	2.00	Units: uL	
MSV_29_826ISS_00020	Amount Added:	1.00	Units: uL	Run Reagent

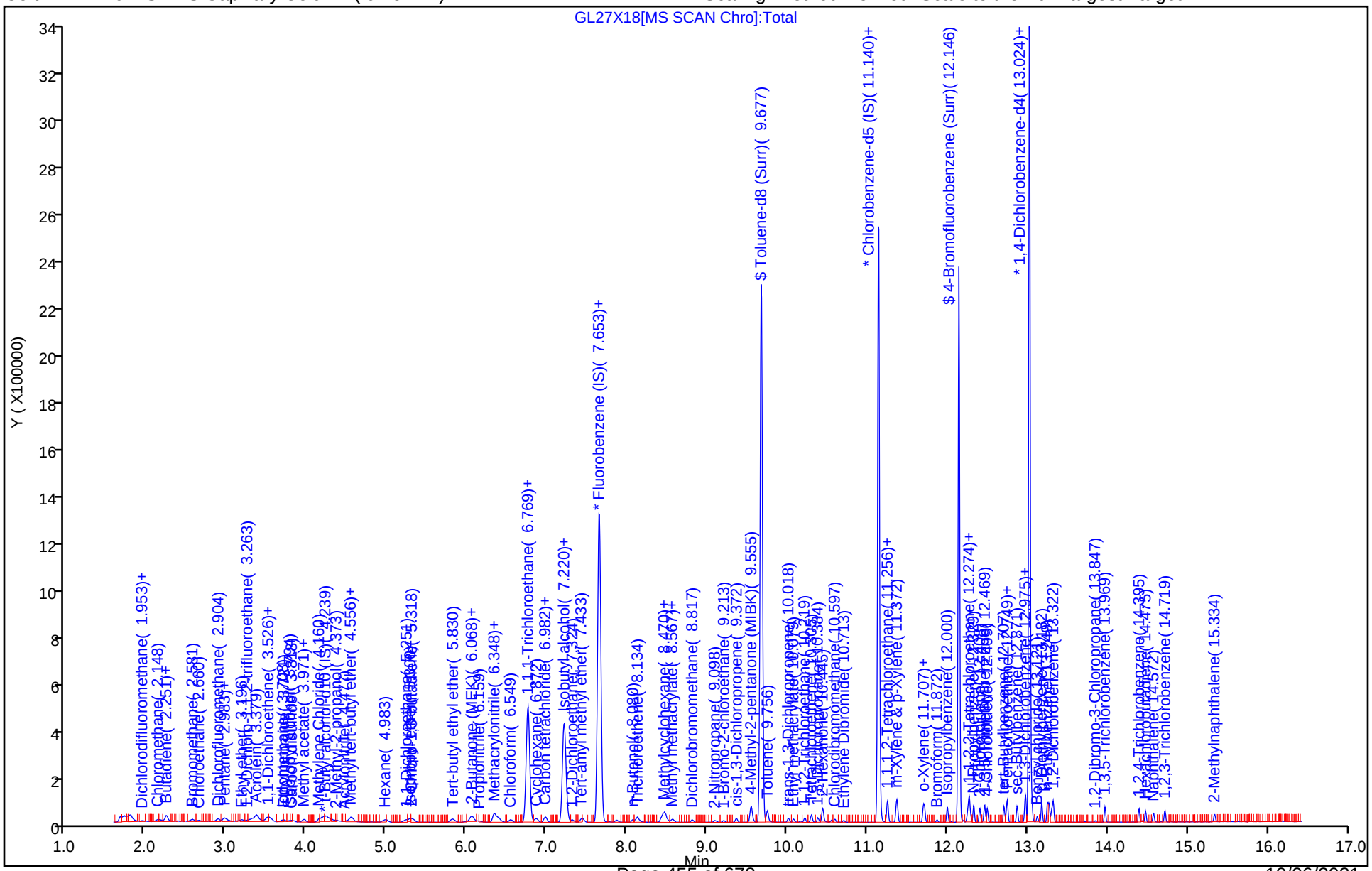
Report Date: 05-Aug-2021 16:13:08 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Injection Date:	27-Jul-2021 21:47:30	Instrument ID:	16334	Operator ID:	kas02648
Lims ID:	IC std1			Worklist Smp#:	18
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

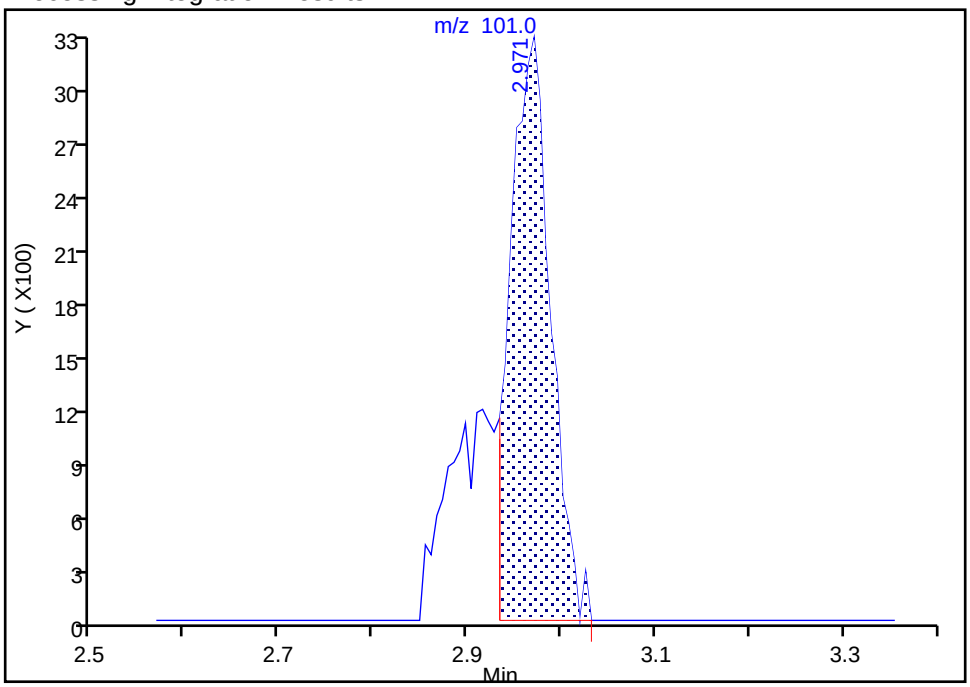
Data File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D				
Injection Date:	27-Jul-2021 21:47:30	Instrument ID:	16334		
Lims ID:	IC std1				
Client ID:					
Operator ID:	kas02648	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

13 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

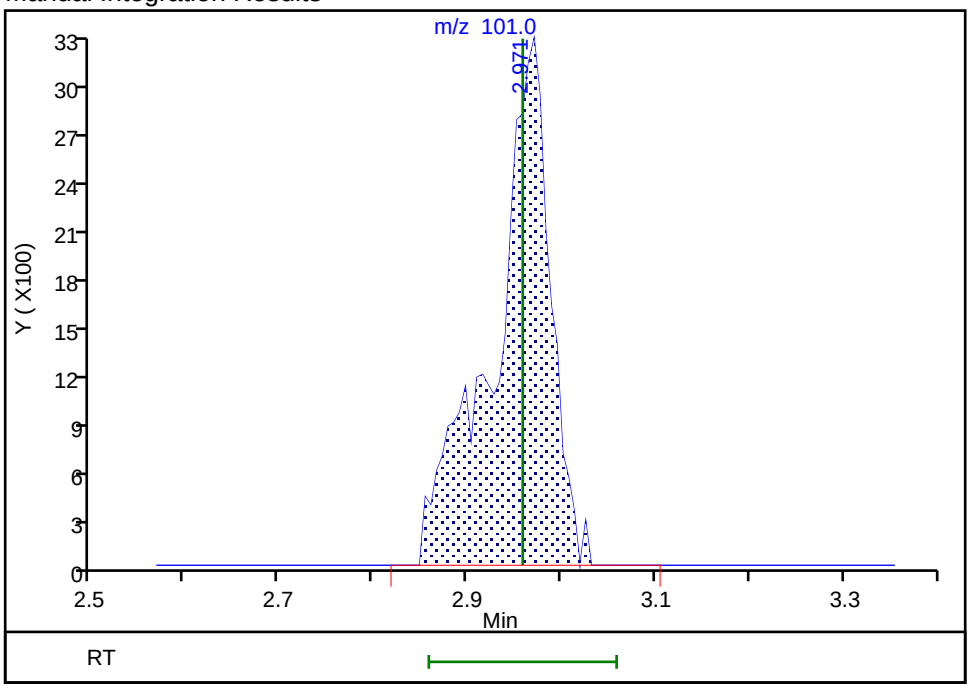
Processing Integration Results

RT: 2.97
Area: 9760
Amount: 0.139428
Amount Units: ug/l



Manual Integration Results

RT: 2.97
Area: 13852
Amount: 0.189953
Amount Units: ug/l



Reviewer: spositok, 28-Jul-2021 12:04:19

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

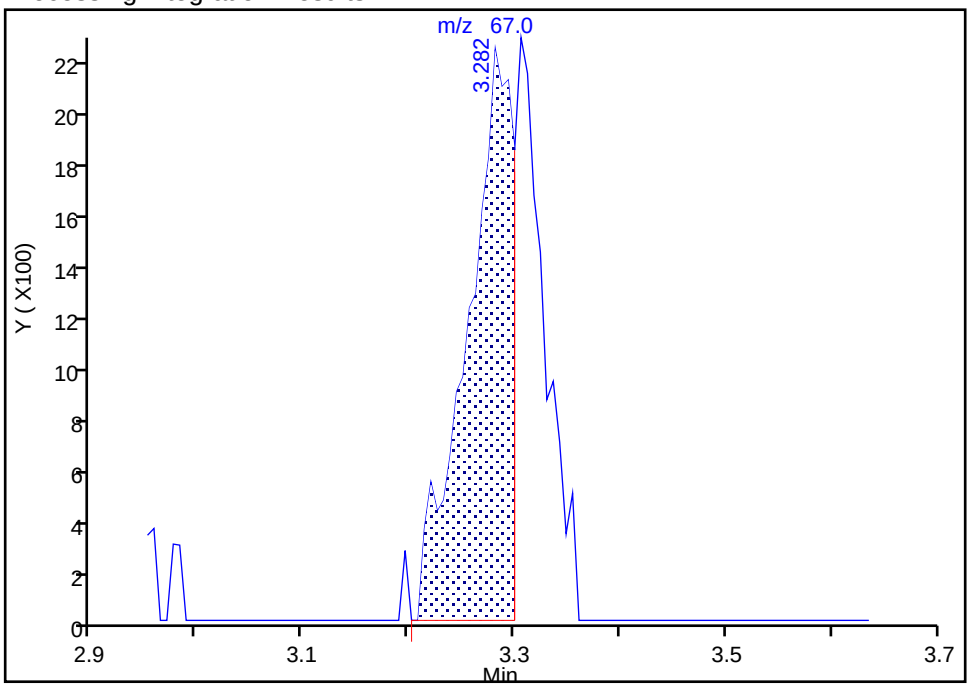
Data File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D				
Injection Date:	27-Jul-2021 21:47:30	Instrument ID:	16334		
Lims ID:	IC std1				
Client ID:					
Operator ID:	kas02648	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

17 1,2-Dichloro-1,1,2-trifluoroetha, CAS: 354-23-4

Signal: 1

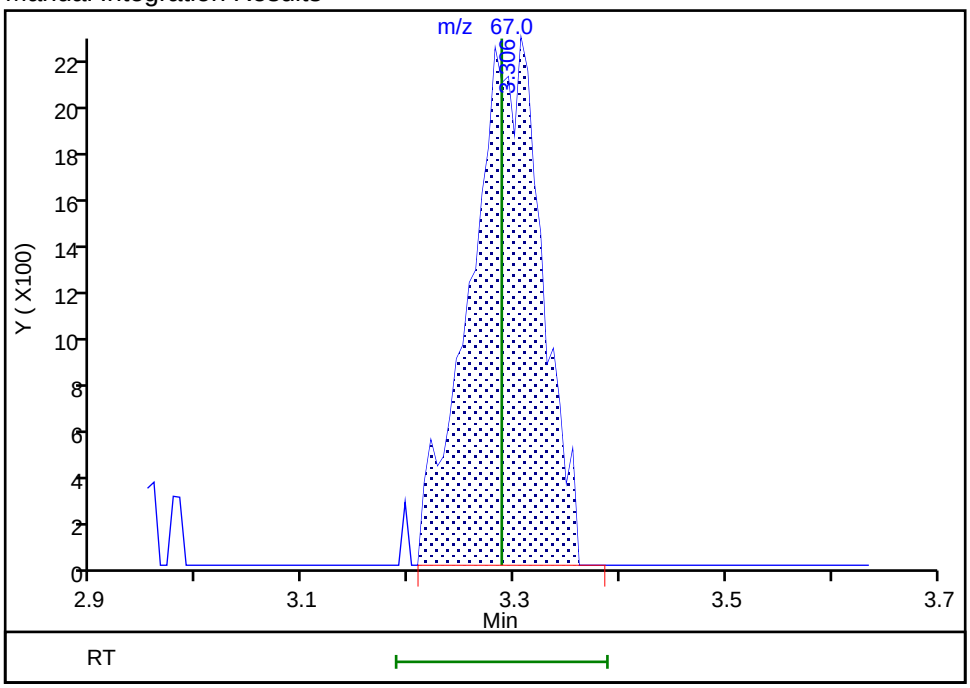
Processing Integration Results

RT: 3.28
Area: 6638
Amount: 0.129202
Amount Units: ug/l



Manual Integration Results

RT: 3.31
Area: 10536
Amount: 0.194530
Amount Units: ug/l



Reviewer: spositok, 28-Jul-2021 12:04:27
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

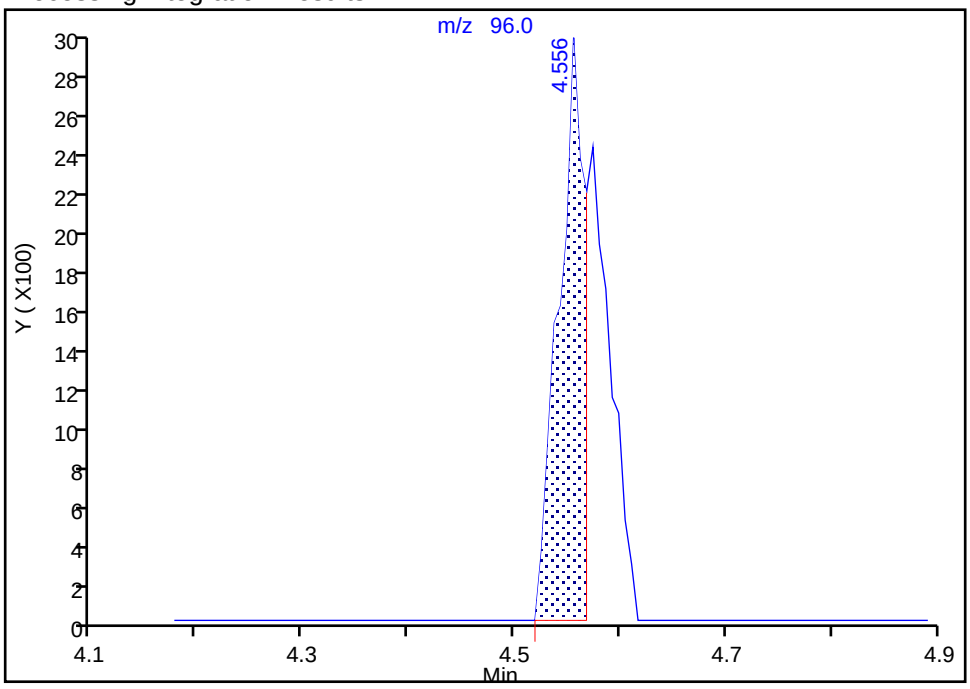
Data File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D				
Injection Date:	27-Jul-2021 21:47:30	Instrument ID:	16334		
Lims ID:	IC std1				
Client ID:					
Operator ID:	kas02648	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

34 trans-1,2-Dichloroethene, CAS: 156-60-5

Signal: 1

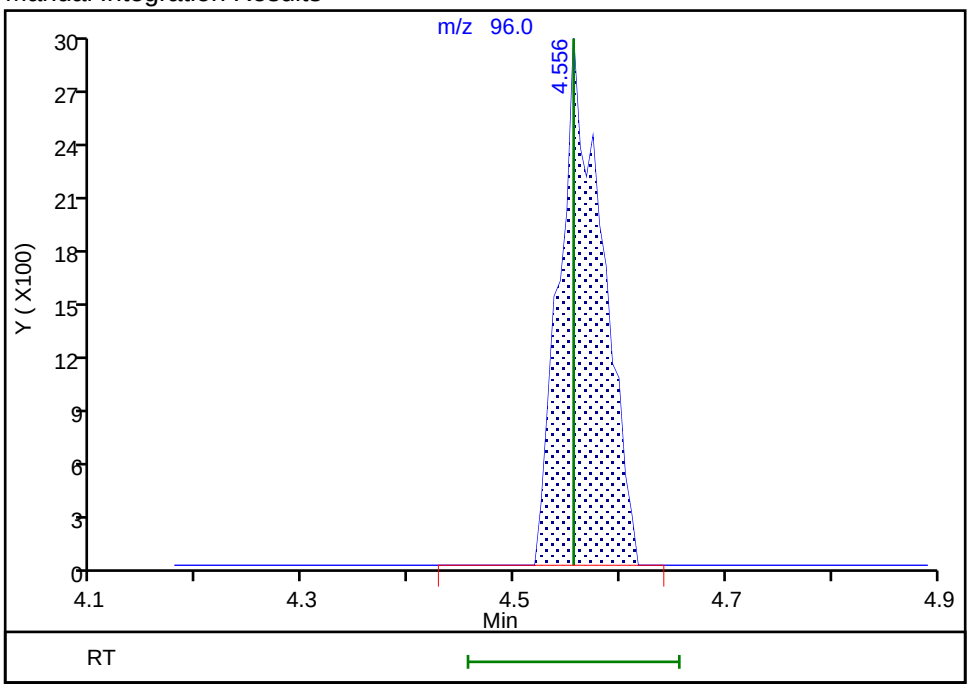
Processing Integration Results

RT: 4.56
Area: 5129
Amount: 0.123711
Amount Units: ug/l



Manual Integration Results

RT: 4.56
Area: 8457
Amount: 0.192921
Amount Units: ug/l



Reviewer: knouses, 05-Aug-2021 12:23:50
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

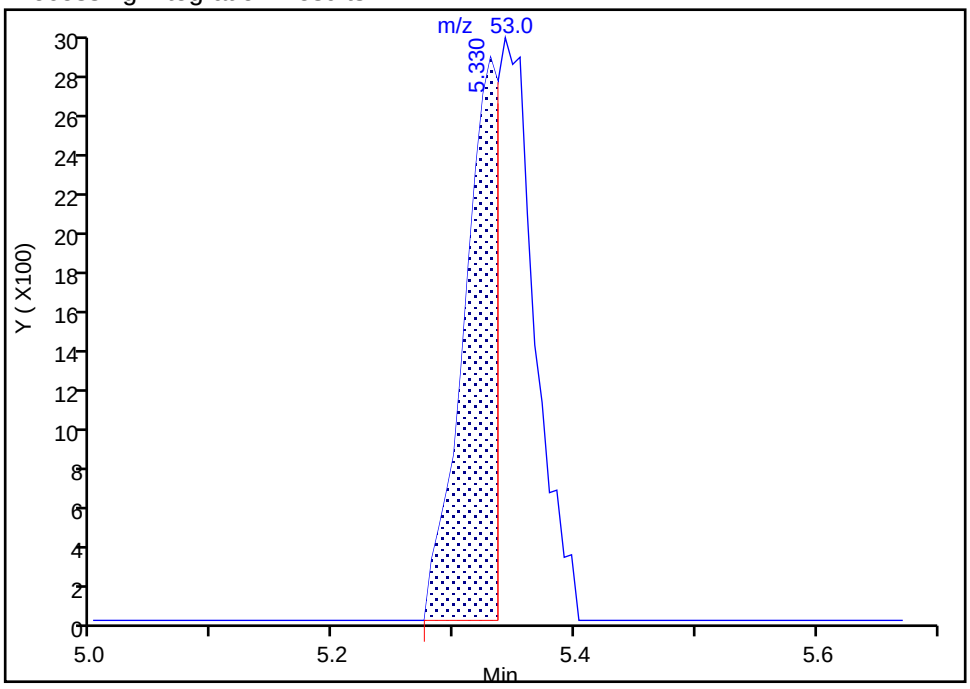
Data File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D				
Injection Date:	27-Jul-2021 21:47:30	Instrument ID:	16334		
Lims ID:	IC std1				
Client ID:					
Operator ID:	kas02648	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

39 2-Chloro-1,3-butadiene, CAS: 126-99-8

Signal: 1

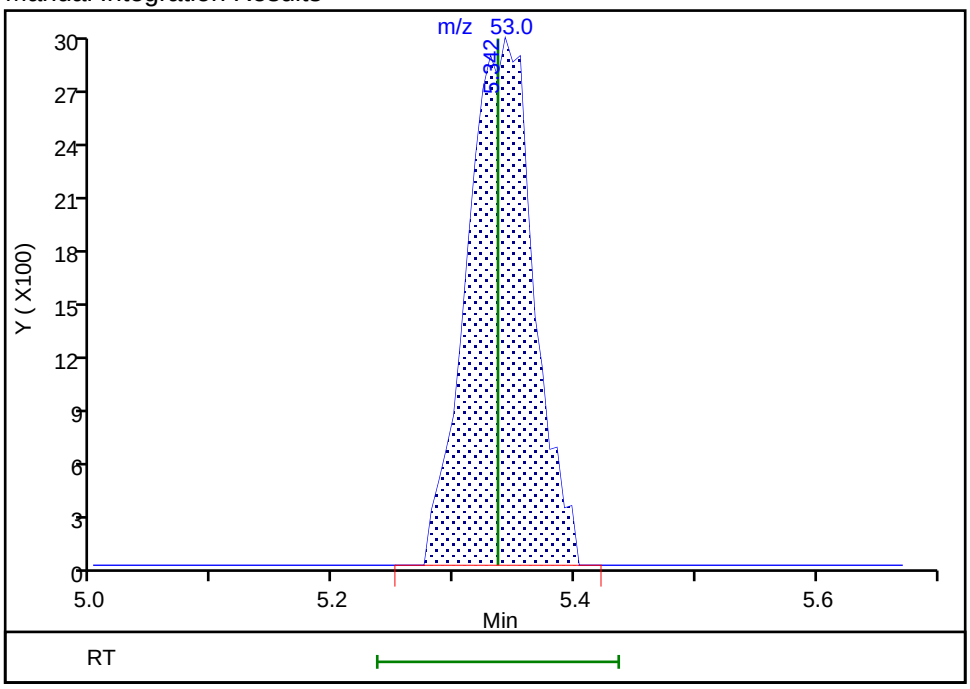
Processing Integration Results

RT: 5.33
Area: 5896
Amount: 0.145112
Amount Units: ug/l



Manual Integration Results

RT: 5.34
Area: 11510
Amount: 0.182068
Amount Units: ug/l



Reviewer: spositok, 28-Jul-2021 12:04:40

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

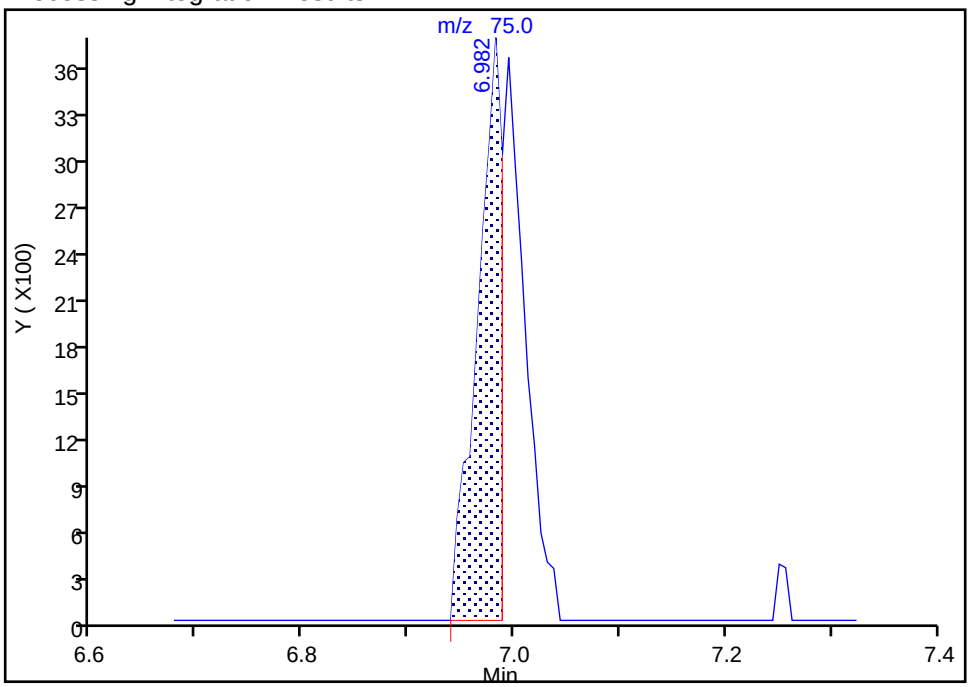
Data File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D
Injection Date: 27-Jul-2021 21:47:30 Instrument ID: 16334
Lims ID: IC std1
Client ID:
Operator ID: kas02648 ALS Bottle#: 18 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

57 1,1-Dichloropropene, CAS: 563-58-6

Signal: 1

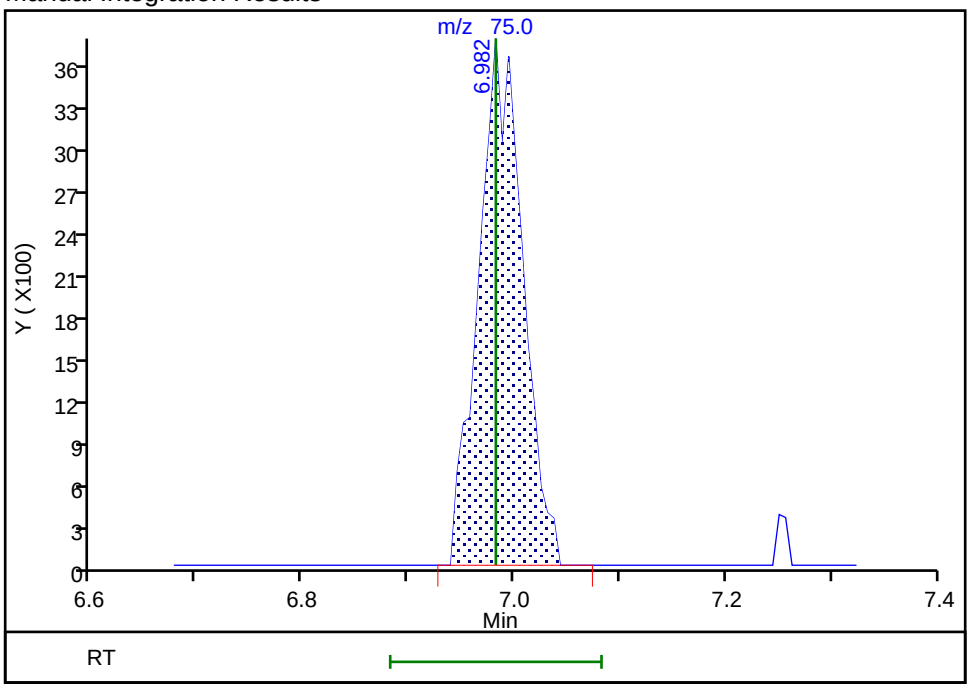
Processing Integration Results

RT: 6.98
Area: 6077
Amount: 0.163303
Amount Units: ug/l



Manual Integration Results

RT: 6.98
Area: 10716
Amount: 0.178465
Amount Units: ug/l



Reviewer: spositok, 28-Jul-2021 12:04:51
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

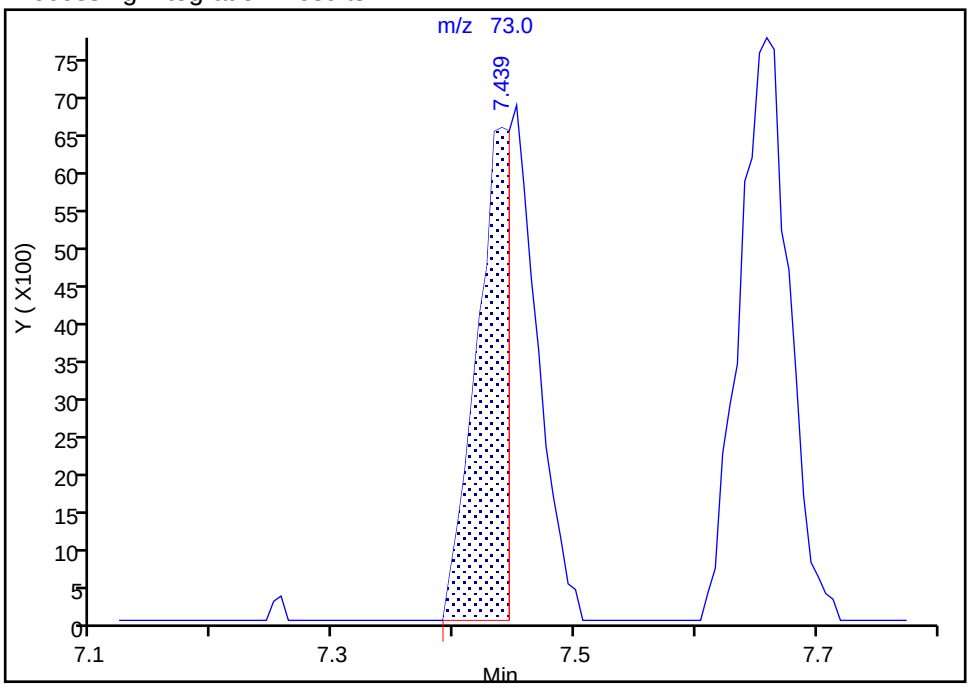
Data File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D				
Injection Date:	27-Jul-2021 21:47:30	Instrument ID:	16334		
Lims ID:	IC std1				
Client ID:					
Operator ID:	kas02648	ALS Bottle#:	18	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

63 Tert-amyl methyl ether, CAS: 994-05-8

Signal: 1

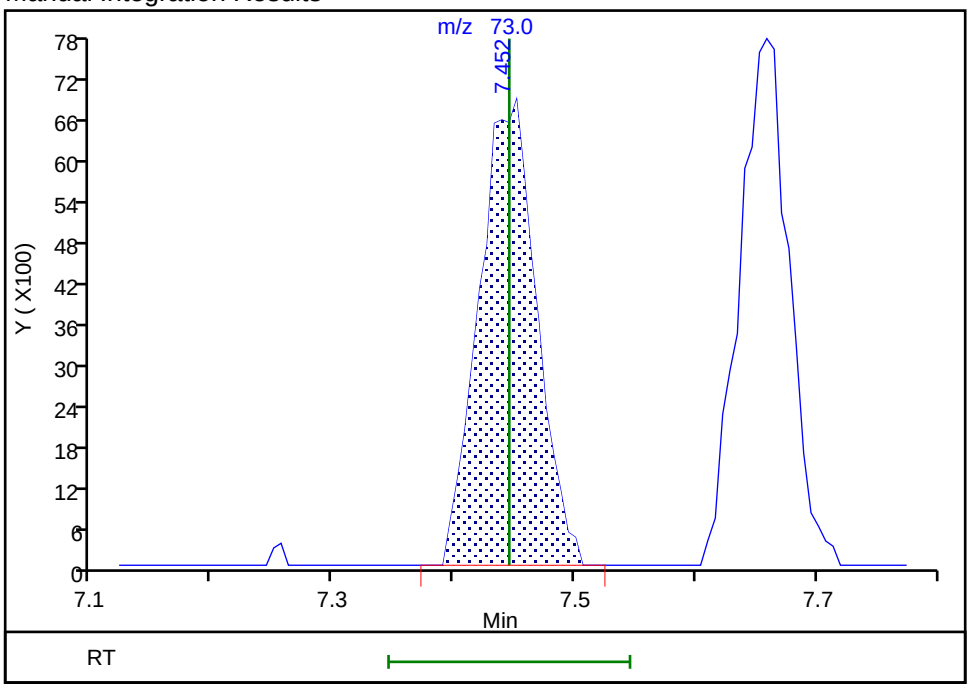
Processing Integration Results

RT: 7.44
Area: 12864
Amount: 0.108988
Amount Units: ug/l



Manual Integration Results

RT: 7.45
Area: 22599
Amount: 0.185219
Amount Units: ug/l



Reviewer: spositok, 28-Jul-2021 12:04:57

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Calibration / Dichlorodifluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

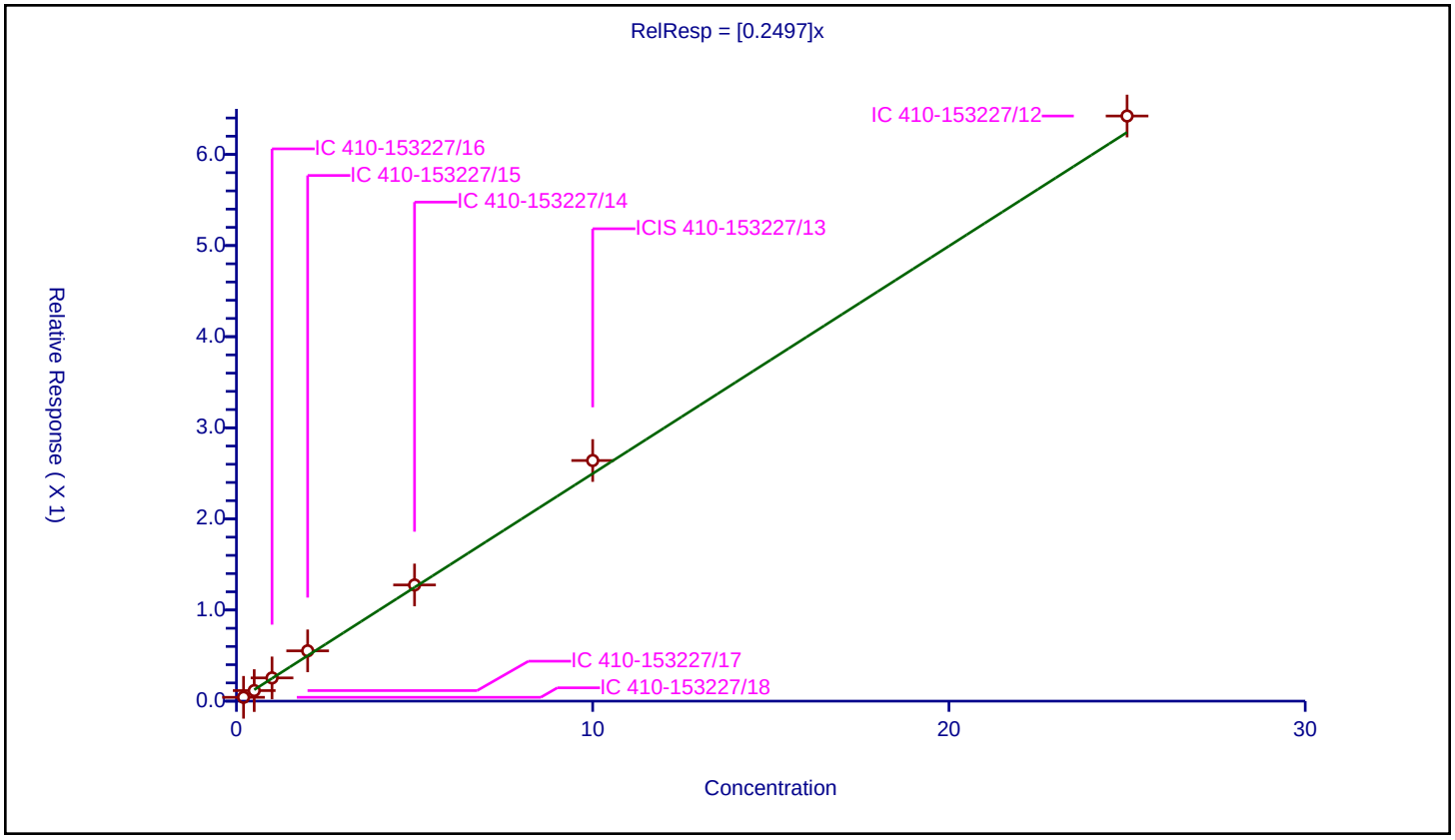
Curve Coefficients

Intercept:	0
Slope:	0.2497

Error Coefficients

Standard Error:	565000
Relative Standard Error:	8.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.041857	10.0	1878059.0	0.209285	Y
2	IC 410-153227/17	0.5	0.115826	10.0	1875578.0	0.231651	Y
3	IC 410-153227/16	1.0	0.255065	10.0	1893045.0	0.255065	Y
4	IC 410-153227/15	2.0	0.552056	10.0	1914569.0	0.276028	Y
5	IC 410-153227/14	5.0	1.275269	10.0	1958598.0	0.255054	Y
6	ICIS 410-153227/13	10.0	2.640799	10.0	1956692.0	0.26408	Y
7	IC 410-153227/12	25.0	6.422085	10.0	1951930.0	0.256883	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

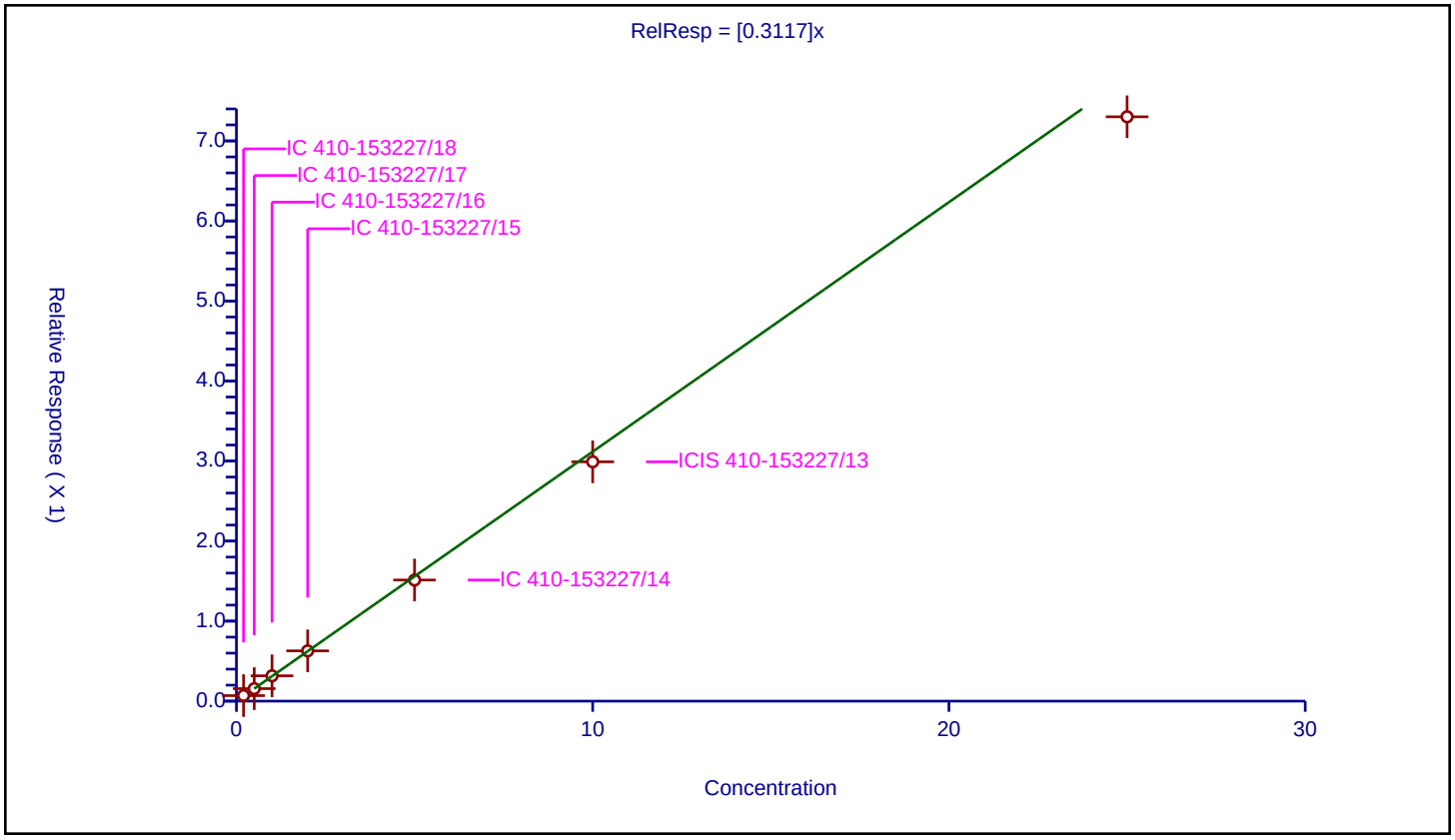
Curve Coefficients

Intercept:	0
Slope:	0.3117

Error Coefficients

Standard Error:	643000
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 410-153227/18	0.2	0.06905	10.0	1878059.0	0.34525	Y
2	IC 410-153227/17	0.5	0.156128	10.0	1875578.0	0.312256	Y
3	IC 410-153227/16	1.0	0.316712	10.0	1893045.0	0.316712	Y
4	IC 410-153227/15	2.0	0.628016	10.0	1914569.0	0.314008	Y
5	IC 410-153227/14	5.0	1.51321	10.0	1958598.0	0.302642	Y
6	ICIS 410-153227/13	10.0	2.990138	10.0	1956692.0	0.299014	Y
7	IC 410-153227/12	25.0	7.30145	10.0	1951930.0	0.292058	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

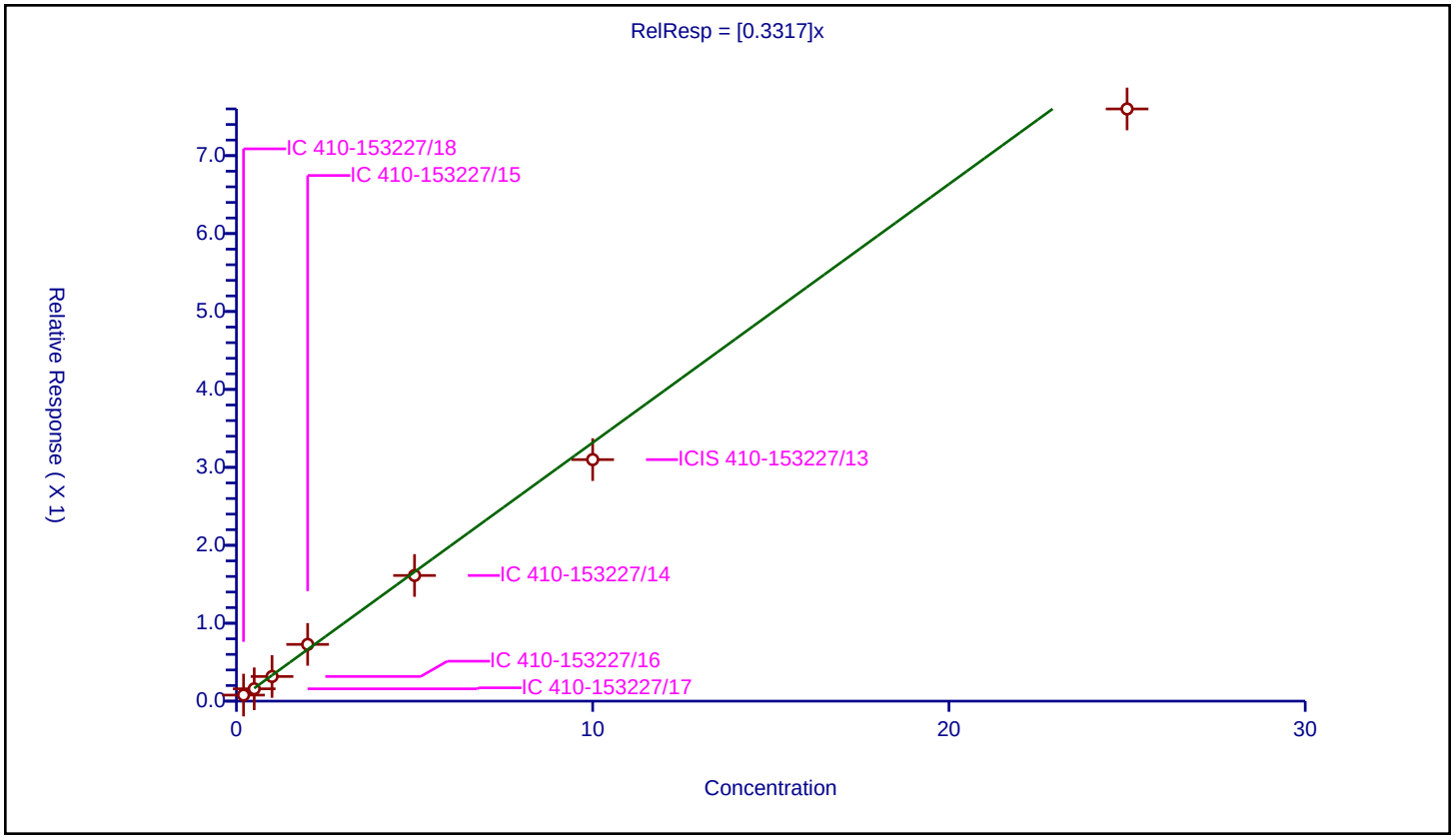
Curve Coefficients

Intercept:	0
Slope:	0.3317

Error Coefficients

Standard Error:	670000
Relative Standard Error:	9.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.077756	10.0	1878059.0	0.388779	Y
2	IC 410-153227/17	0.5	0.158309	10.0	1875578.0	0.316617	Y
3	IC 410-153227/16	1.0	0.316205	10.0	1893045.0	0.316205	Y
4	IC 410-153227/15	2.0	0.728049	10.0	1914569.0	0.364024	Y
5	IC 410-153227/14	5.0	1.612679	10.0	1958598.0	0.322536	Y
6	ICIS 410-153227/13	10.0	3.099476	10.0	1956692.0	0.309948	Y
7	IC 410-153227/12	25.0	7.599294	10.0	1951930.0	0.303972	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

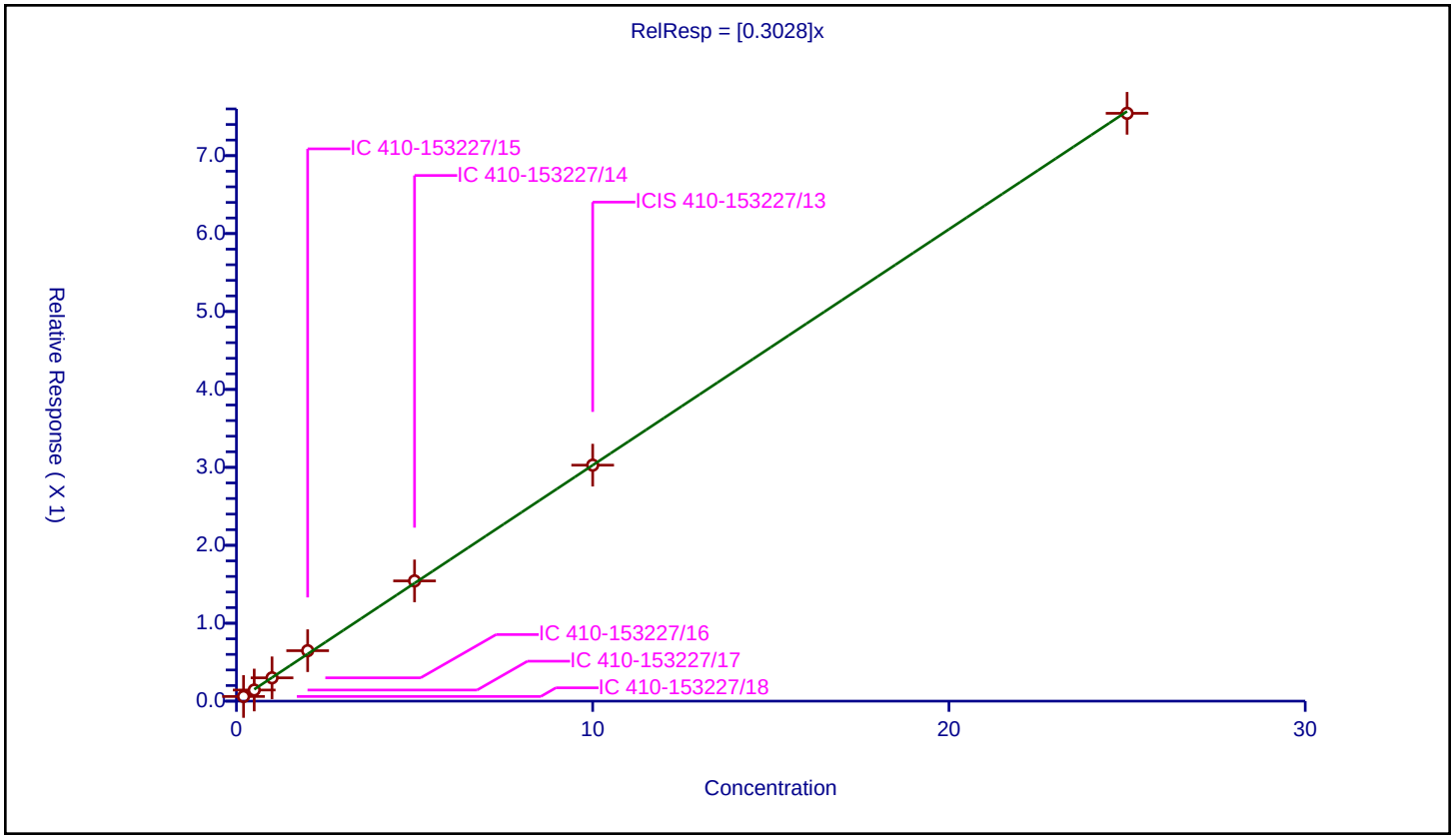
Curve Coefficients

Intercept:	0
Slope:	0.3028

Error Coefficients

Standard Error:	662000
Relative Standard Error:	3.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.059625	10.0	1878059.0	0.298127	Y
2	IC 410-153227/17	0.5	0.142596	10.0	1875578.0	0.285192	Y
3	IC 410-153227/16	1.0	0.299132	10.0	1893045.0	0.299132	Y
4	IC 410-153227/15	2.0	0.647409	10.0	1914569.0	0.323705	Y
5	IC 410-153227/14	5.0	1.542905	10.0	1958598.0	0.308581	Y
6	ICIS 410-153227/13	10.0	3.028223	10.0	1956692.0	0.302822	Y
7	IC 410-153227/12	25.0	7.543119	10.0	1951930.0	0.301725	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

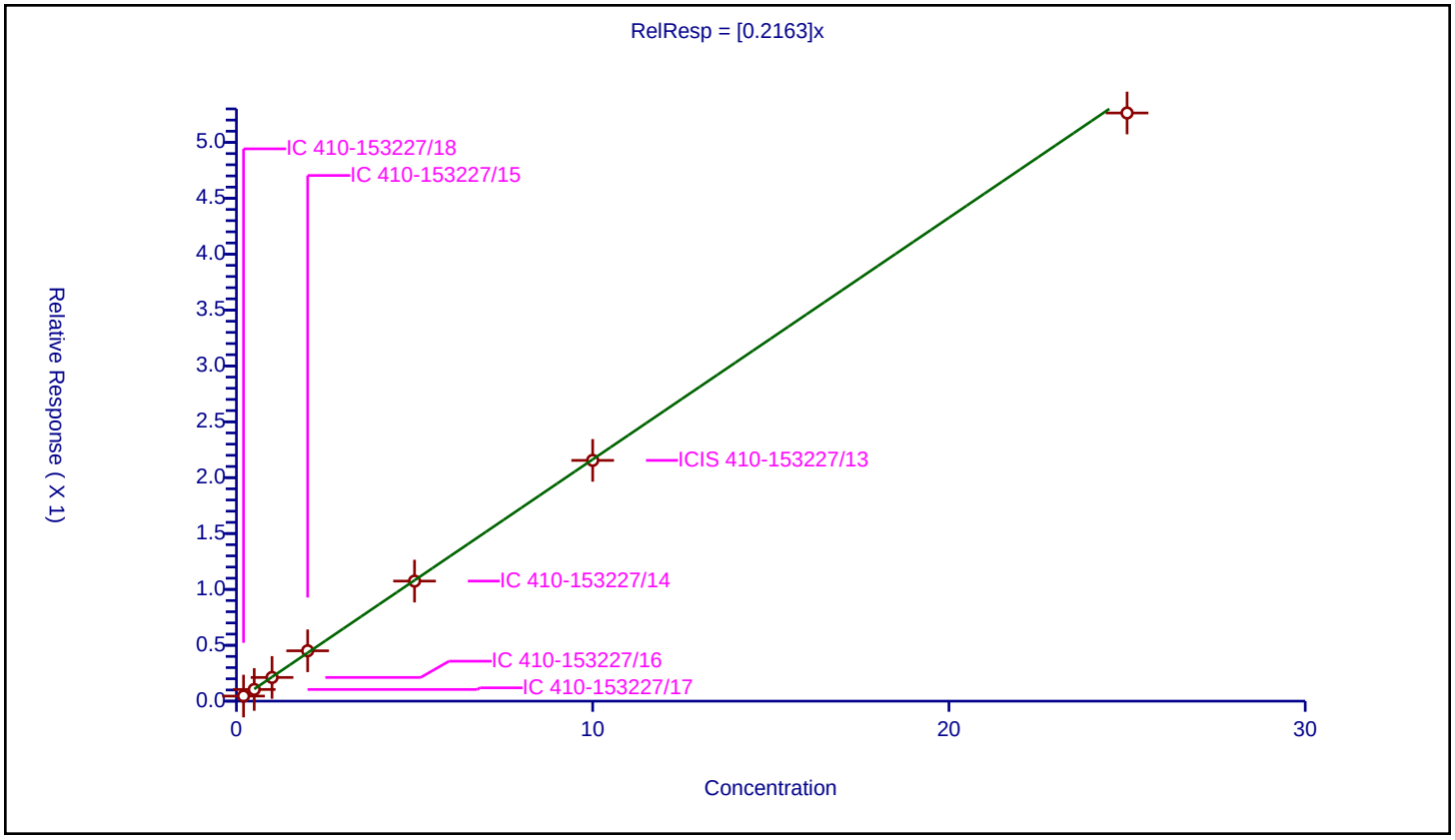
Curve Coefficients

Intercept:	0
Slope:	0.2163

Error Coefficients

Standard Error:	463000
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 410-153227/18	0.2	0.045355	10.0	1878059.0	0.226777	Y
2	IC 410-153227/17	0.5	0.104528	10.0	1875578.0	0.209056	Y
3	IC 410-153227/16	1.0	0.212092	10.0	1893045.0	0.212092	Y
4	IC 410-153227/15	2.0	0.450676	10.0	1914569.0	0.225338	Y
5	IC 410-153227/14	5.0	1.074432	10.0	1958598.0	0.214886	Y
6	ICIS 410-153227/13	10.0	2.154616	10.0	1956692.0	0.215462	Y
7	IC 410-153227/12	25.0	5.263319	10.0	1951930.0	0.210533	Y



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

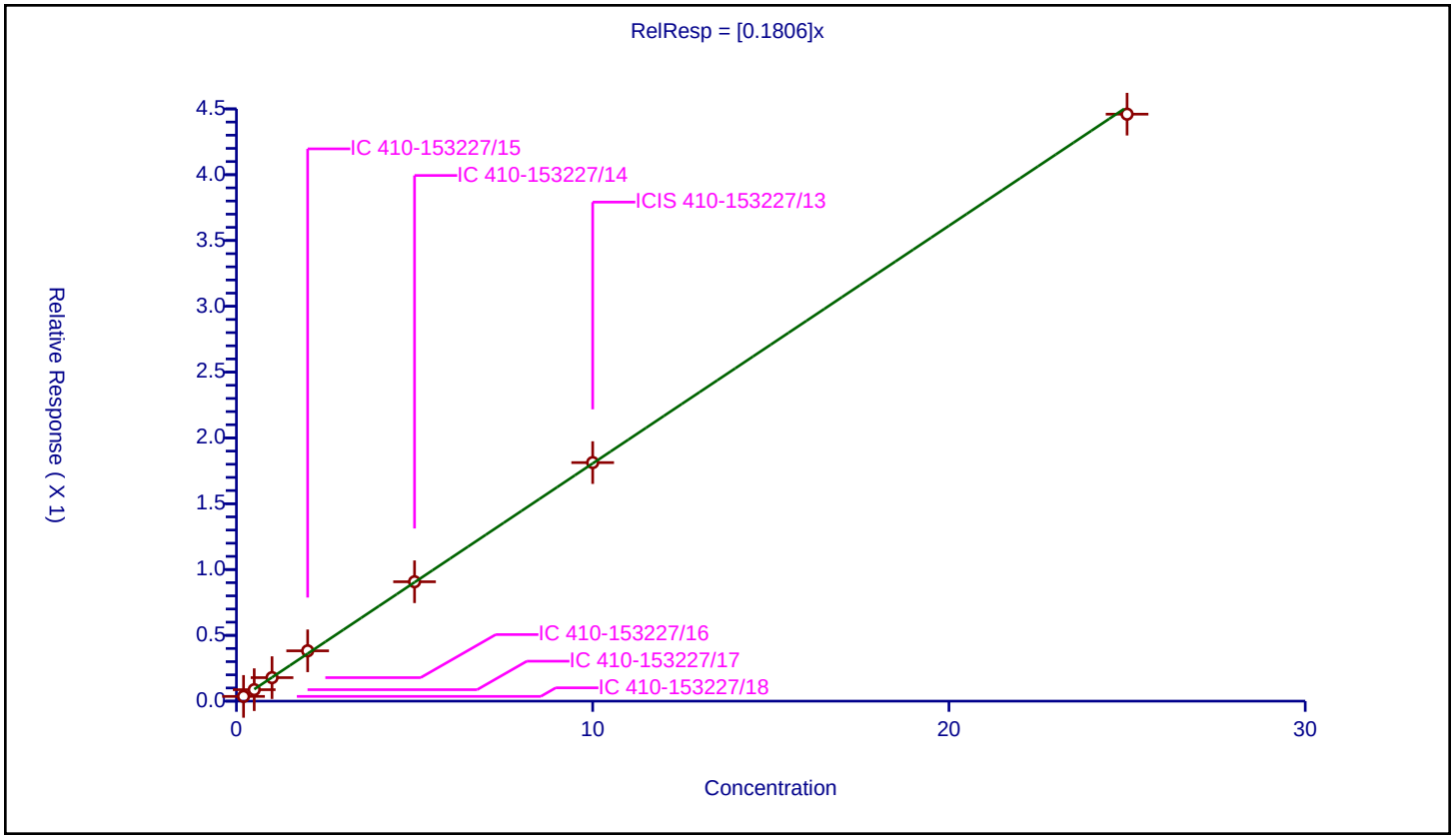
Curve Coefficients

Intercept:	0
Slope:	0.1806

Error Coefficients

Standard Error:	392000
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 410-153227/18	0.2	0.03583	10.0	1878059.0	0.179148	Y
2	IC 410-153227/17	0.5	0.087082	10.0	1875578.0	0.174165	Y
3	IC 410-153227/16	1.0	0.178649	10.0	1893045.0	0.178649	Y
4	IC 410-153227/15	2.0	0.382311	10.0	1914569.0	0.191155	Y
5	IC 410-153227/14	5.0	0.907164	10.0	1958598.0	0.181433	Y
6	ICIS 410-153227/13	10.0	1.812493	10.0	1956692.0	0.181249	Y
7	IC 410-153227/12	25.0	4.459878	10.0	1951930.0	0.178395	Y



Calibration / Dichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

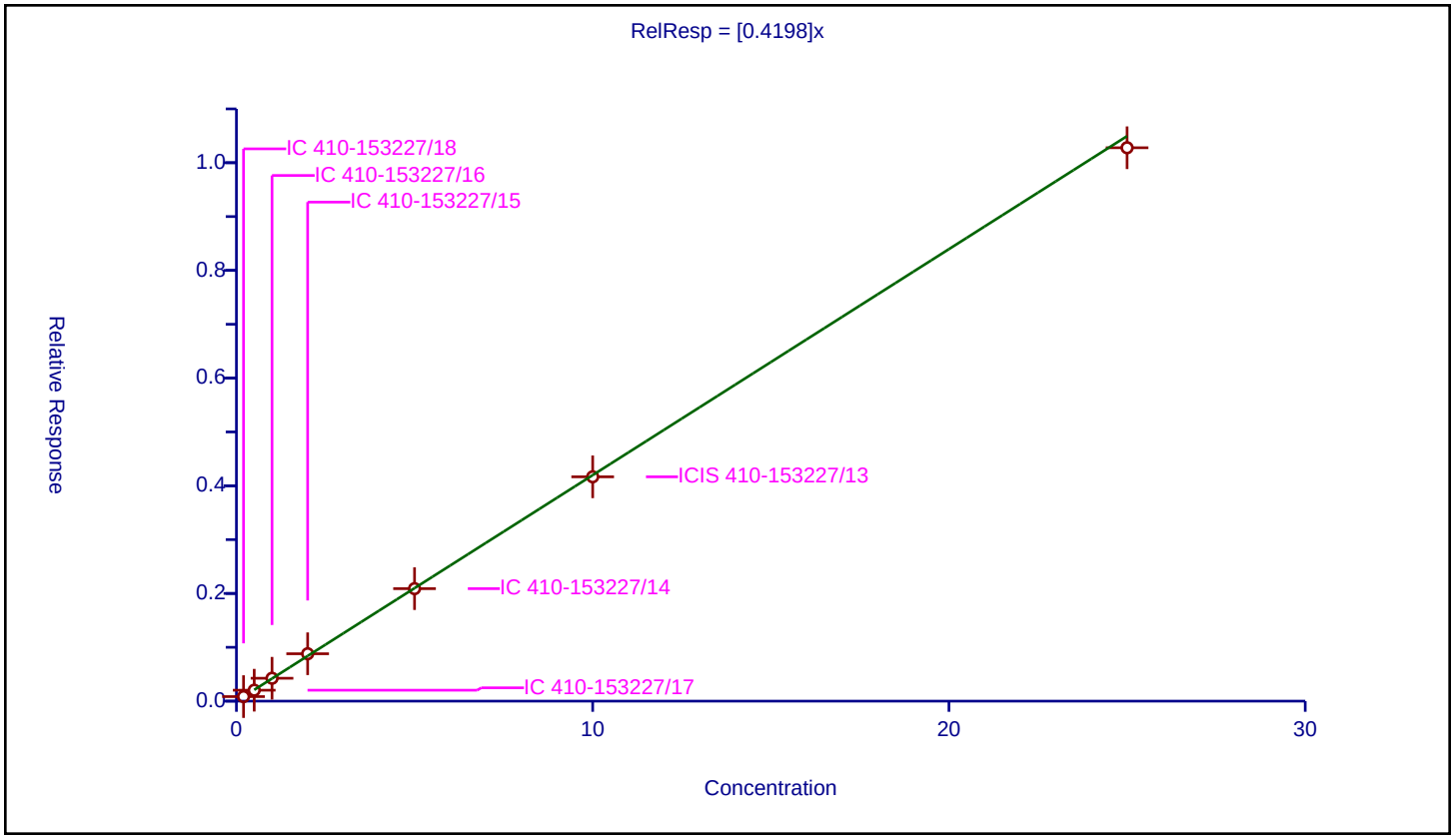
Curve Coefficients

Intercept:	0
Slope:	0.4198

Error Coefficients

Standard Error:	903000
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 410-153227/18	0.2	0.084273	10.0	1878059.0	0.421366	Y
2	IC 410-153227/17	0.5	0.203159	10.0	1875578.0	0.406317	Y
3	IC 410-153227/16	1.0	0.425003	10.0	1893045.0	0.425003	Y
4	IC 410-153227/15	2.0	0.880266	10.0	1914569.0	0.440133	Y
5	IC 410-153227/14	5.0	2.089224	10.0	1958598.0	0.417845	Y
6	ICIS 410-153227/13	10.0	4.166604	10.0	1956692.0	0.41666	Y
7	IC 410-153227/12	25.0	10.278299	10.0	1951930.0	0.411132	Y



Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

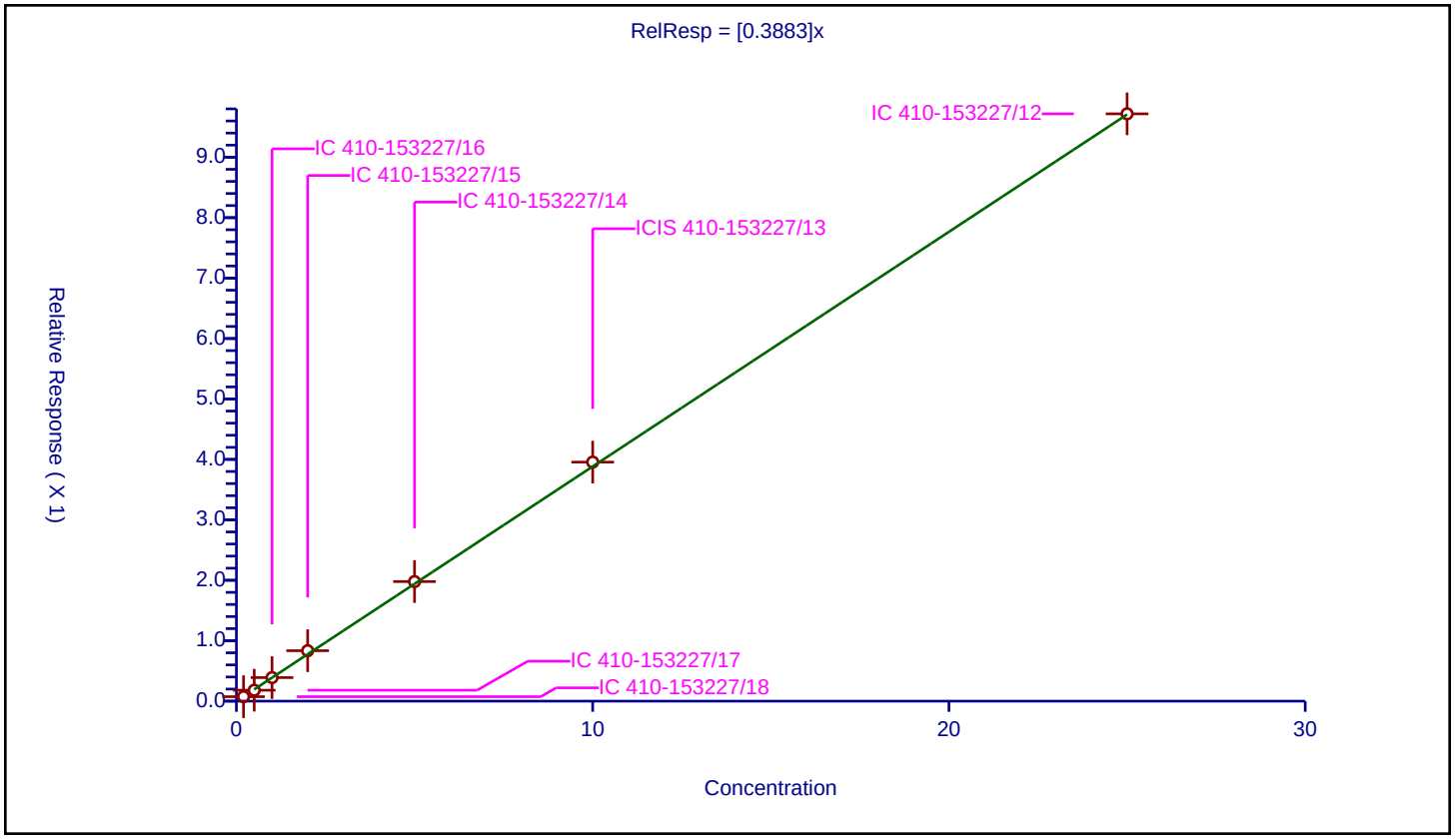
Curve Coefficients

Intercept:	0
Slope:	0.3883

Error Coefficients

Standard Error:	854000
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 410-153227/18	0.2	0.073757	10.0	1878059.0	0.368785	Y
2	IC 410-153227/17	0.5	0.181112	10.0	1875578.0	0.362224	Y
3	IC 410-153227/16	1.0	0.389679	10.0	1893045.0	0.389679	Y
4	IC 410-153227/15	2.0	0.834788	10.0	1914569.0	0.417394	Y
5	IC 410-153227/14	5.0	1.978466	10.0	1958598.0	0.395693	Y
6	ICIS 410-153227/13	10.0	3.955405	10.0	1956692.0	0.395541	Y
7	IC 410-153227/12	25.0	9.718064	10.0	1951930.0	0.388723	Y



Calibration / Ethyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

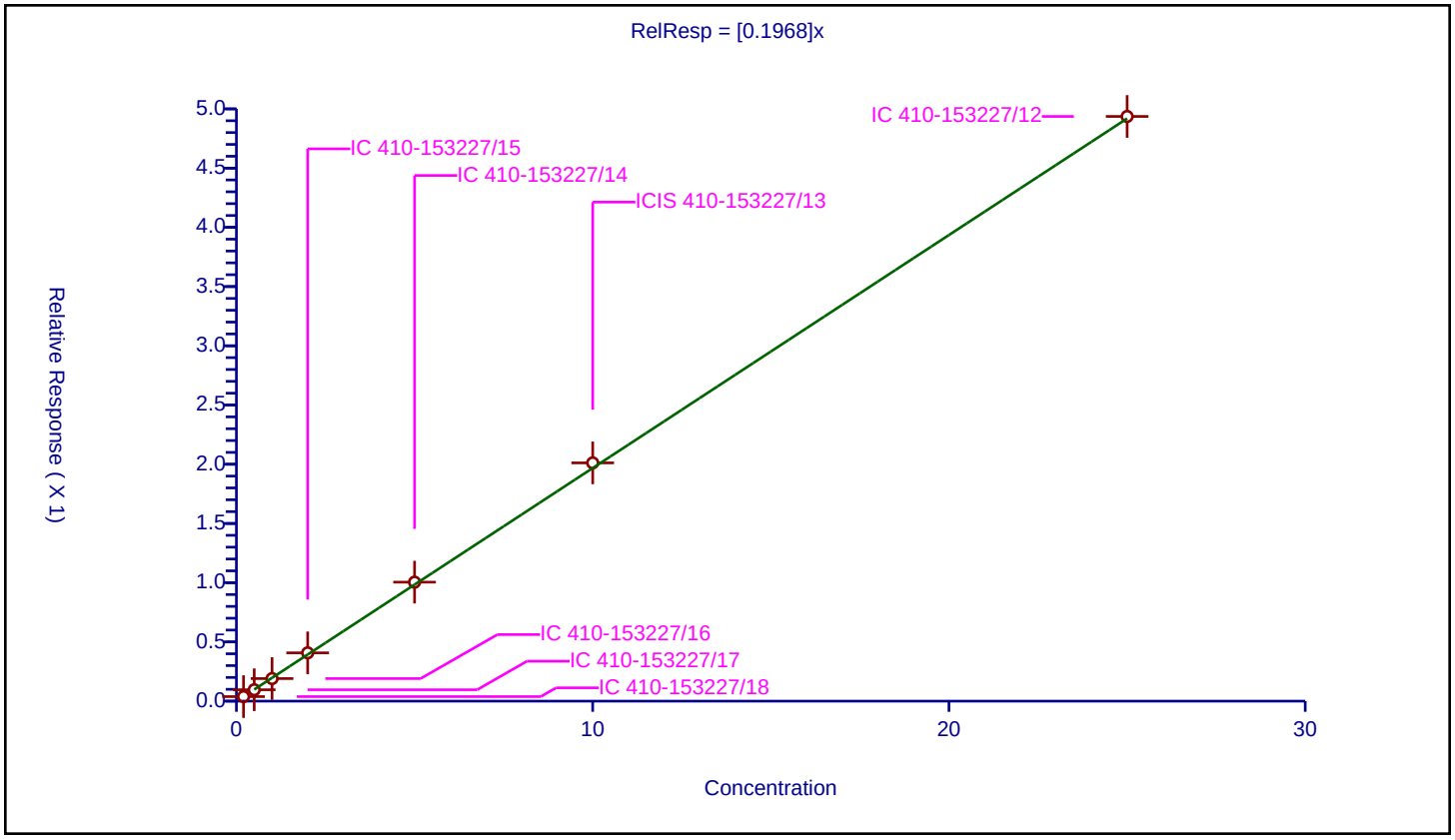
Curve Coefficients

Intercept:	0
Slope:	0.1968

Error Coefficients

Standard Error:	434000
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 410-153227/18	0.200014	0.03829	10.0	1878059.0	0.191434	Y
2	IC 410-153227/17	0.500035	0.096024	10.0	1875578.0	0.192034	Y
3	IC 410-153227/16	1.000069	0.190476	10.0	1893045.0	0.190463	Y
4	IC 410-153227/15	2.000138	0.40782	10.0	1914569.0	0.203896	Y
5	IC 410-153227/14	5.000346	1.004469	10.0	1958598.0	0.20088	Y
6	ICIS 410-153227/13	10.000692	2.011507	10.0	1956692.0	0.201137	Y
7	IC 410-153227/12	25.00173	4.936058	10.0	1951930.0	0.197429	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

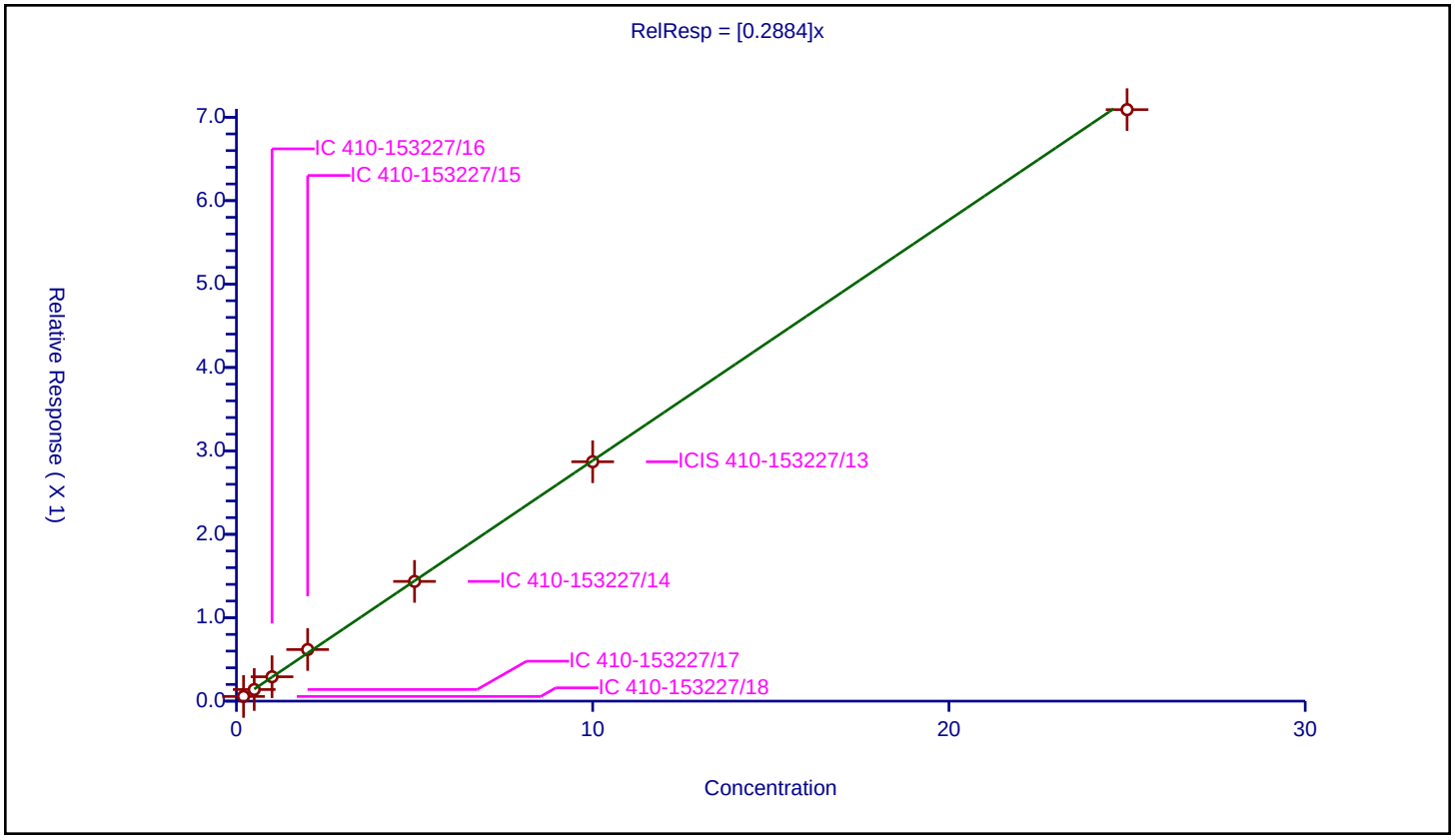
Curve Coefficients

Intercept:	0
Slope:	0.2884

Error Coefficients

Standard Error:	623000
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 410-153227/18	0.2	0.0561	10.0	1878059.0	0.280502	Y
2	IC 410-153227/17	0.5	0.139514	10.0	1875578.0	0.279029	Y
3	IC 410-153227/16	1.0	0.29218	10.0	1893045.0	0.29218	Y
4	IC 410-153227/15	2.0	0.618573	10.0	1914569.0	0.309286	Y
5	IC 410-153227/14	5.0	1.435379	10.0	1958598.0	0.287076	Y
6	ICIS 410-153227/13	10.0	2.870099	10.0	1956692.0	0.28701	Y
7	IC 410-153227/12	25.0	7.091105	10.0	1951930.0	0.283644	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

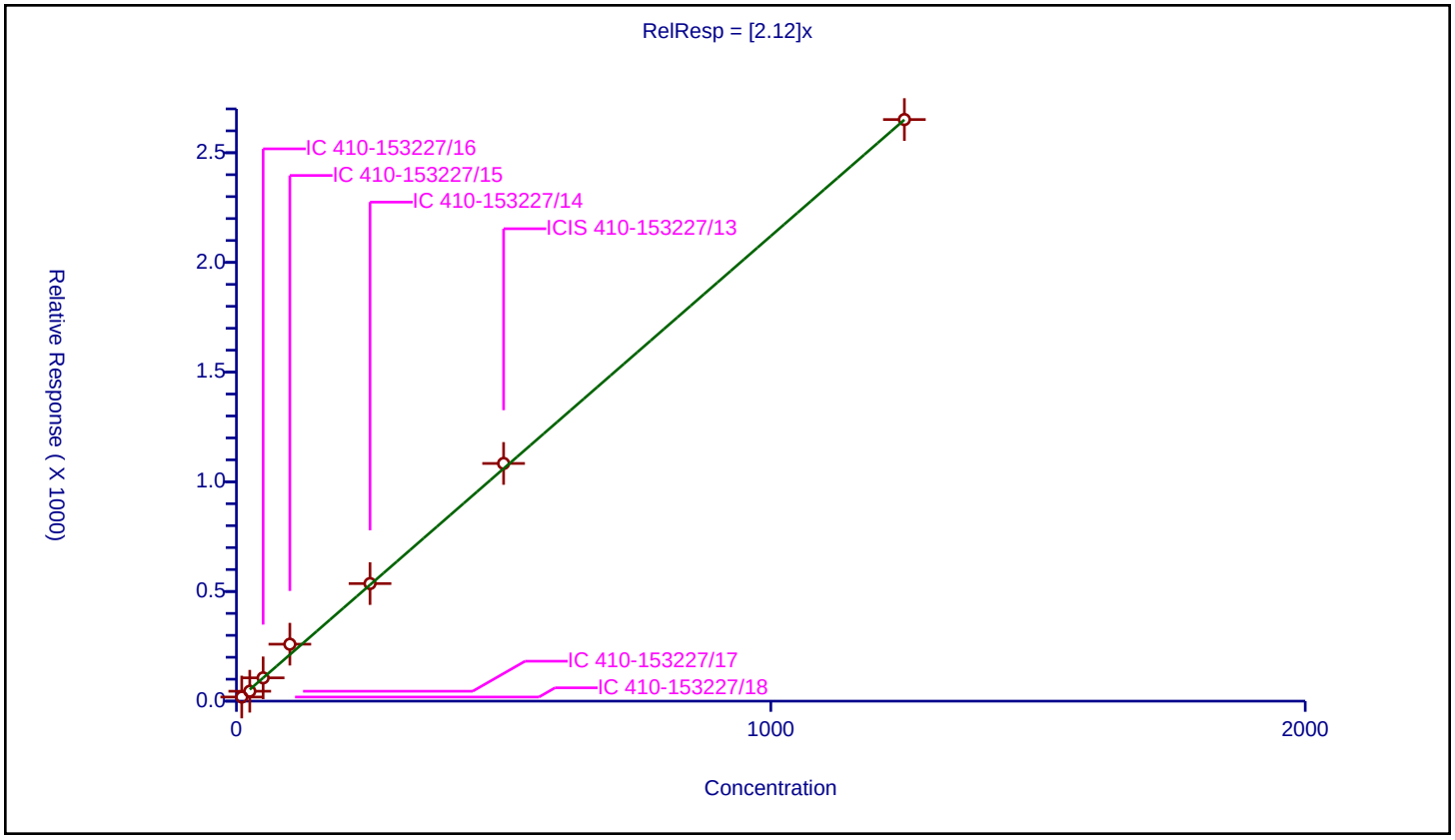
Curve Coefficients

Intercept:	0
Slope:	2.12

Error Coefficients

Standard Error:	3310000
Relative Standard Error:	11.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	9.999702	18.817401	50.0	158566.0	1.881796	Y
2	IC 410-153227/17	24.999254	45.223736	50.0	146579.0	1.809003	Y
3	IC 410-153227/16	49.998508	106.135366	50.0	143773.0	2.122771	Y
4	IC 410-153227/15	99.997016	259.697479	50.0	119562.0	2.597052	Y
5	IC 410-153227/14	249.992539	535.999658	50.0	140518.0	2.144063	Y
6	ICIS 410-153227/13	499.985078	1083.59325	50.0	143636.0	2.167251	Y
7	IC 410-153227/12	1249.962694	2651.400405	50.0	137853.0	2.121184	Y



Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

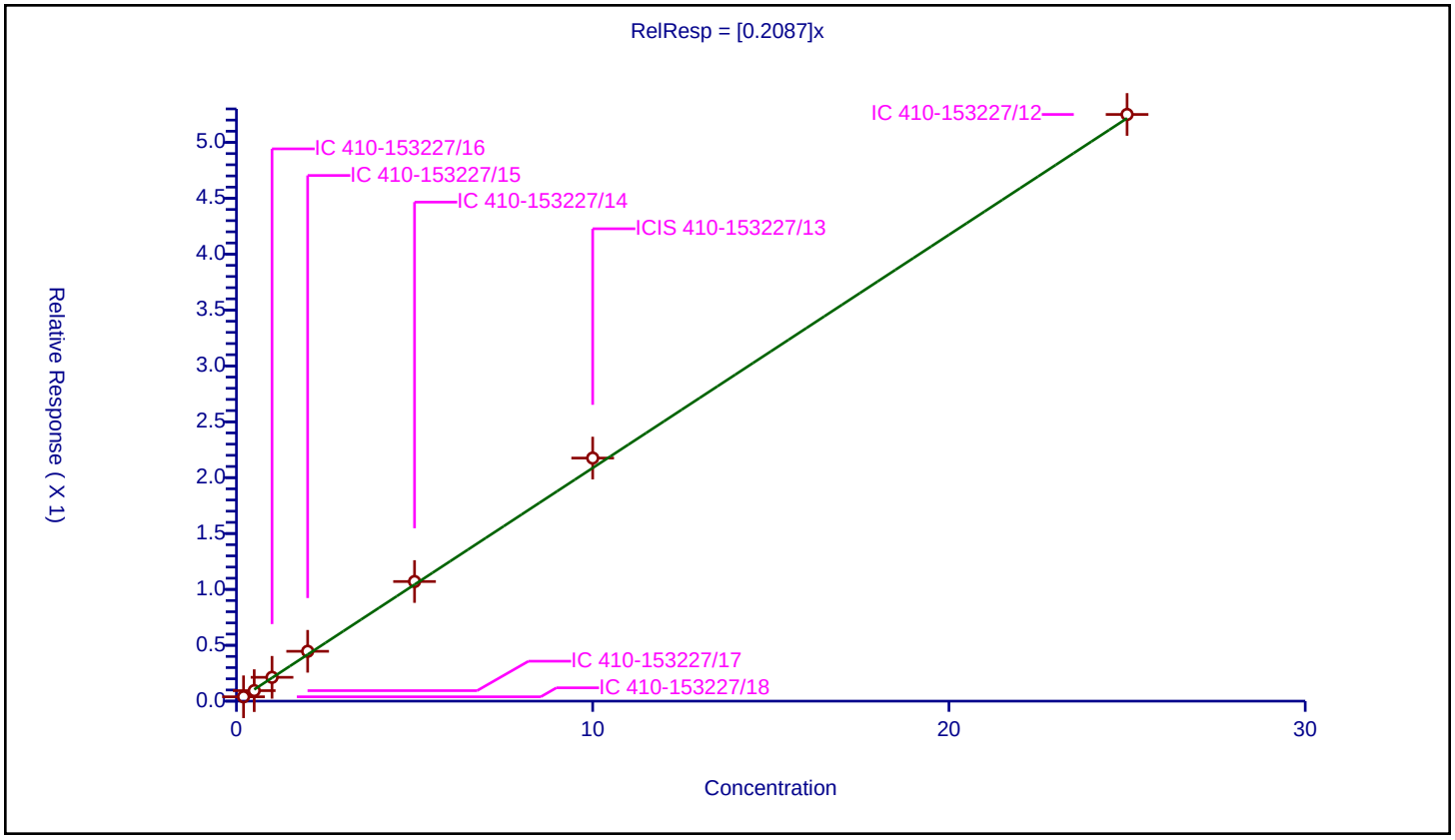
Curve Coefficients

Intercept:	0
Slope:	0.2087

Error Coefficients

Standard Error:	463000
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 410-153227/18	0.2	0.038918	10.0	1878059.0	0.194589	Y
2	IC 410-153227/17	0.5	0.094115	10.0	1875578.0	0.18823	Y
3	IC 410-153227/16	1.0	0.213096	10.0	1893045.0	0.213096	Y
4	IC 410-153227/15	2.0	0.446179	10.0	1914569.0	0.223089	Y
5	IC 410-153227/14	5.0	1.070521	10.0	1958598.0	0.214104	Y
6	ICIS 410-153227/13	10.0	2.175319	10.0	1956692.0	0.217532	Y
7	IC 410-153227/12	25.0	5.250147	10.0	1951930.0	0.210006	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

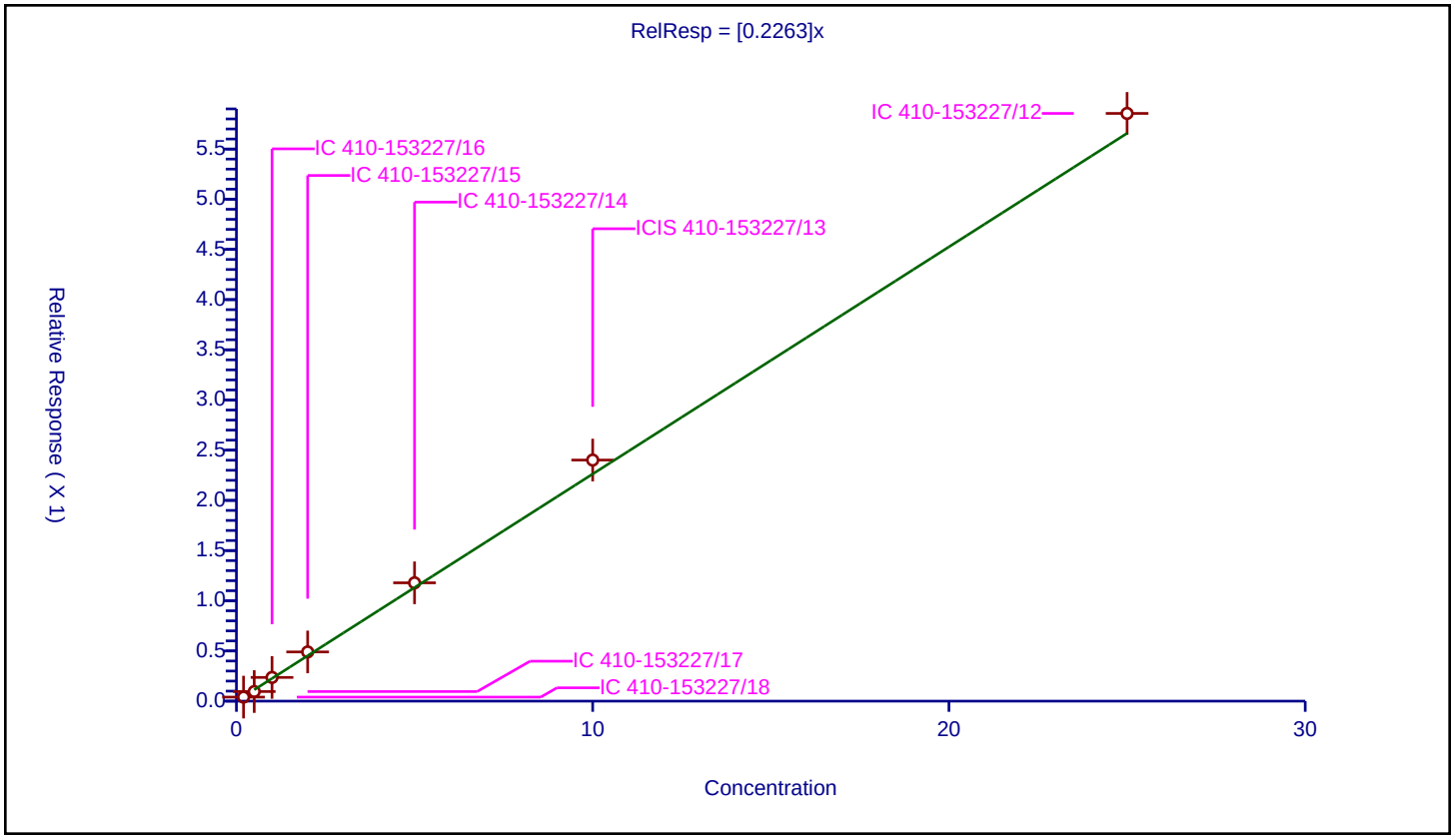
Curve Coefficients

Intercept:	0
Slope:	0.2263

Error Coefficients

Standard Error:	515000
Relative Standard Error:	9.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.040222	10.0	1878059.0	0.201112	Y
2	IC 410-153227/17	0.5	0.095603	10.0	1875578.0	0.191205	Y
3	IC 410-153227/16	1.0	0.236397	10.0	1893045.0	0.236397	Y
4	IC 410-153227/15	2.0	0.490251	10.0	1914569.0	0.245126	Y
5	IC 410-153227/14	5.0	1.178603	10.0	1958598.0	0.235721	Y
6	ICIS 410-153227/13	10.0	2.401676	10.0	1956692.0	0.240168	Y
7	IC 410-153227/12	25.0	5.85481	10.0	1951930.0	0.234192	Y



Calibration / Acetone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

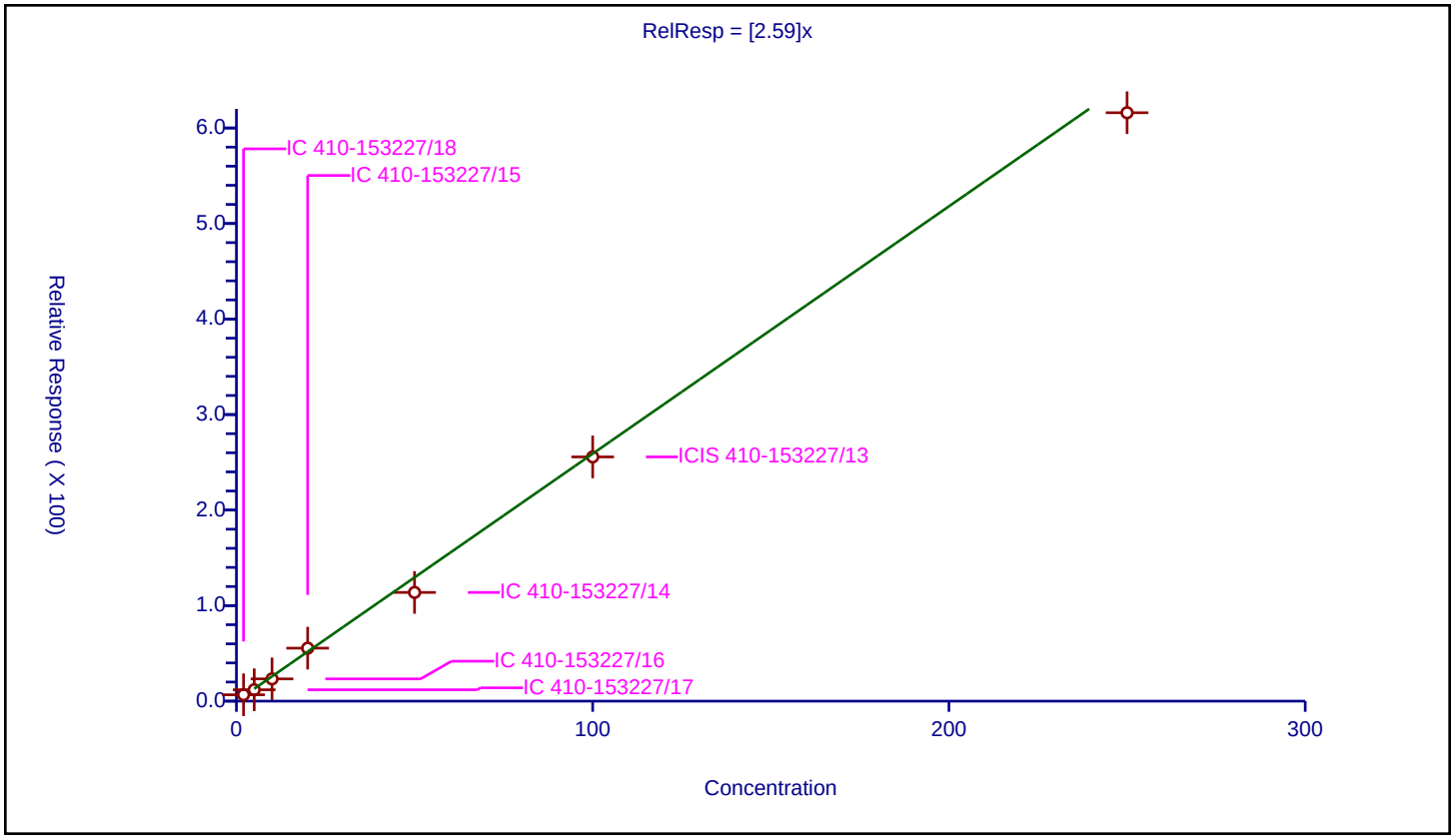
Curve Coefficients

Intercept:	0
Slope:	2.59

Error Coefficients

Standard Error:	769000
Relative Standard Error:	14.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.967

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	2.0	6.689959	50.0	158566.0	3.344979	Y
2	IC 410-153227/17	5.0	11.918147	50.0	146579.0	2.383629	Y
3	IC 410-153227/16	10.0	23.307575	50.0	143773.0	2.330758	Y
4	IC 410-153227/15	20.0	55.475402	50.0	119562.0	2.77377	Y
5	IC 410-153227/14	50.0	113.807484	50.0	140518.0	2.27615	Y
6	ICIS 410-153227/13	100.0	255.674065	50.0	143636.0	2.556741	Y
7	IC 410-153227/12	250.0	615.994937	50.0	137853.0	2.46398	Y



Calibration / Iodomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

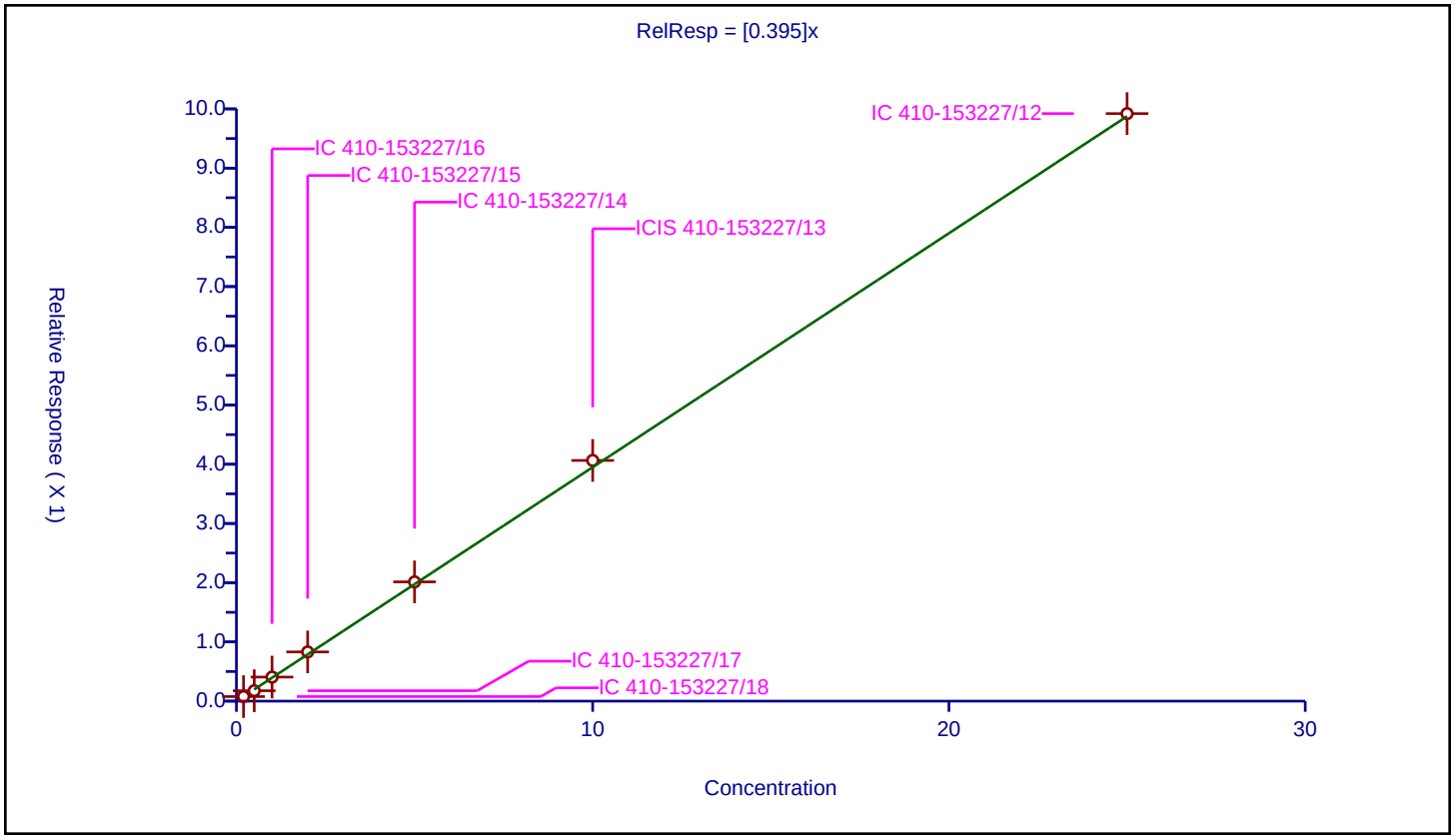
Curve Coefficients

Intercept:	0
Slope:	0.395

Error Coefficients

Standard Error:	873000
Relative Standard Error:	5.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.077202	10.0	1878059.0	0.38601	Y
2	IC 410-153227/17	0.5	0.175642	10.0	1875578.0	0.351284	Y
3	IC 410-153227/16	1.0	0.406293	10.0	1893045.0	0.406293	Y
4	IC 410-153227/15	2.0	0.831054	10.0	1914569.0	0.415527	Y
5	IC 410-153227/14	5.0	2.013359	10.0	1958598.0	0.402672	Y
6	ICIS 410-153227/13	10.0	4.064416	10.0	1956692.0	0.406442	Y
7	IC 410-153227/12	25.0	9.920176	10.0	1951930.0	0.396807	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

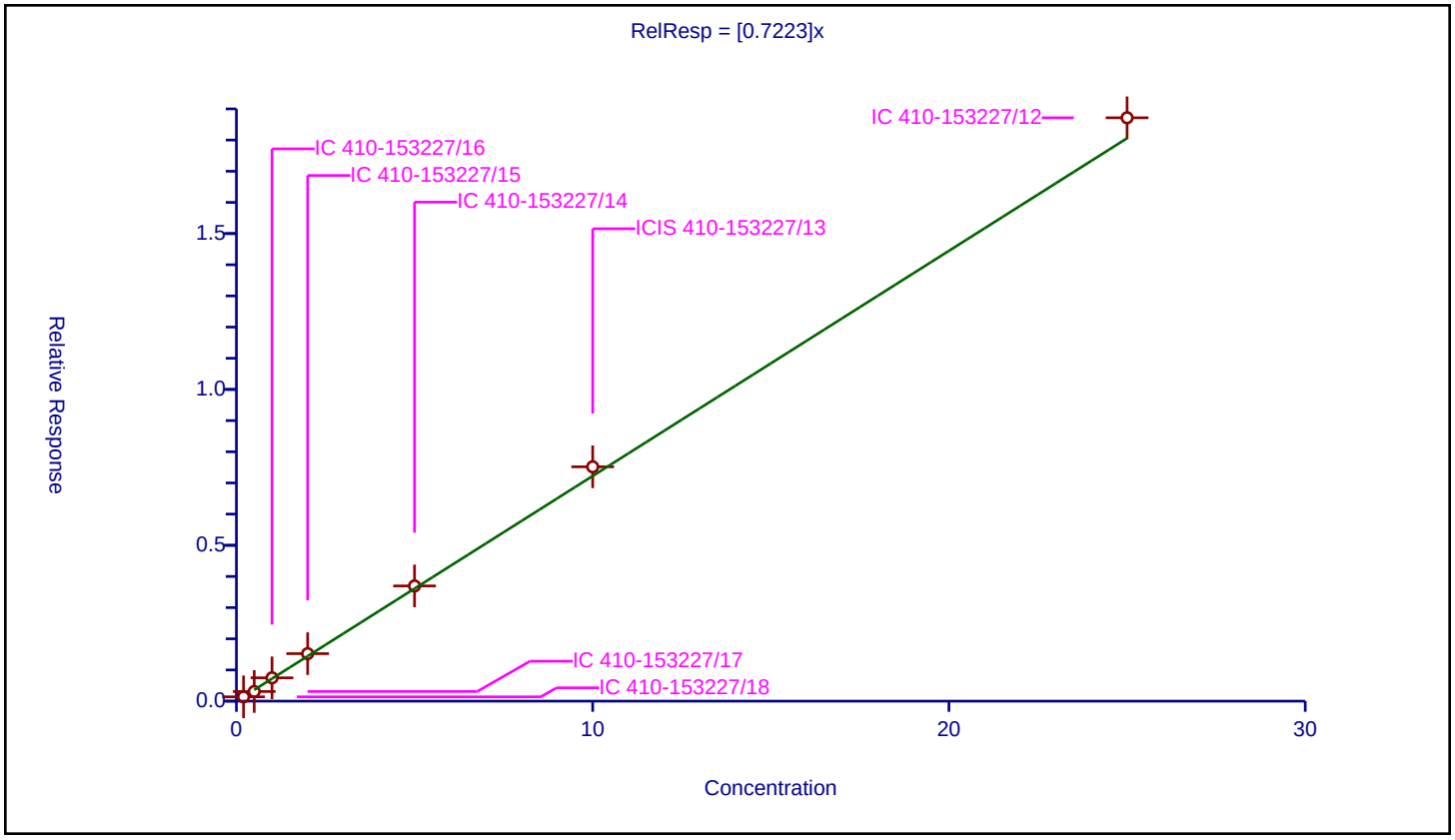
Curve Coefficients

Intercept:	0
Slope:	0.7223

Error Coefficients

Standard Error:	1640000
Relative Standard Error:	7.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.13777	10.0	1878059.0	0.688849	Y
2	IC 410-153227/17	0.5	0.308881	10.0	1875578.0	0.617762	Y
3	IC 410-153227/16	1.0	0.748334	10.0	1893045.0	0.748334	Y
4	IC 410-153227/15	2.0	1.523769	10.0	1914569.0	0.761884	Y
5	IC 410-153227/14	5.0	3.695725	10.0	1958598.0	0.739145	Y
6	ICIS 410-153227/13	10.0	7.51754	10.0	1956692.0	0.751754	Y
7	IC 410-153227/12	25.0	18.714365	10.0	1951930.0	0.748575	Y



Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

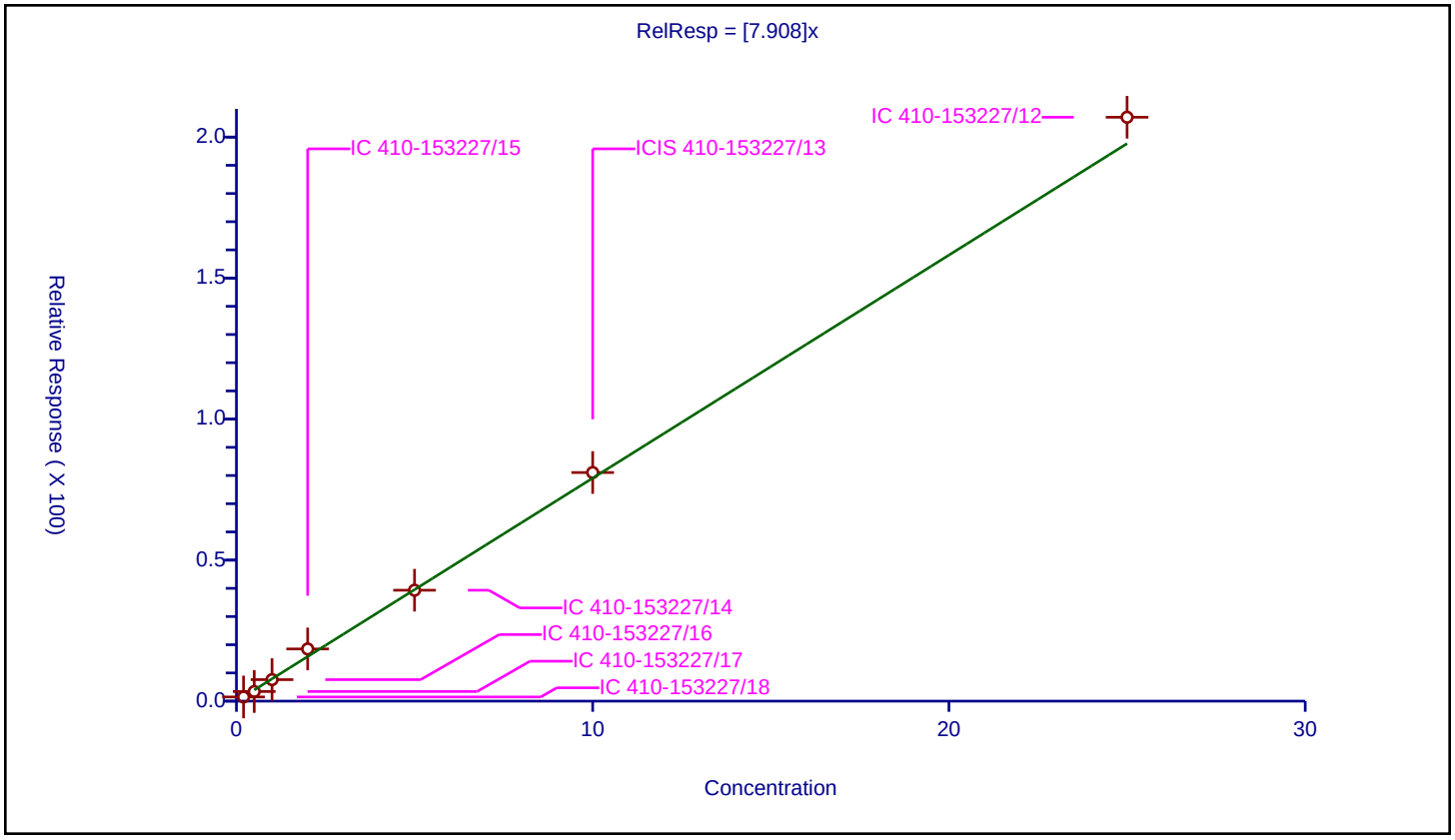
Curve Coefficients

Intercept:	0
Slope:	7.908

Error Coefficients

Standard Error:	256000
Relative Standard Error:	9.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	1.478564	50.0	158566.0	7.392821	Y
2	IC 410-153227/17	0.5	3.412835	50.0	146579.0	6.825671	Y
3	IC 410-153227/16	1.0	7.629736	50.0	143773.0	7.629736	Y
4	IC 410-153227/15	2.0	18.508389	50.0	119562.0	9.254194	Y
5	IC 410-153227/14	5.0	39.328769	50.0	140518.0	7.865754	Y
6	ICIS 410-153227/13	10.0	81.061503	50.0	143636.0	8.10615	Y
7	IC 410-153227/12	25.0	207.041196	50.0	137853.0	8.281648	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

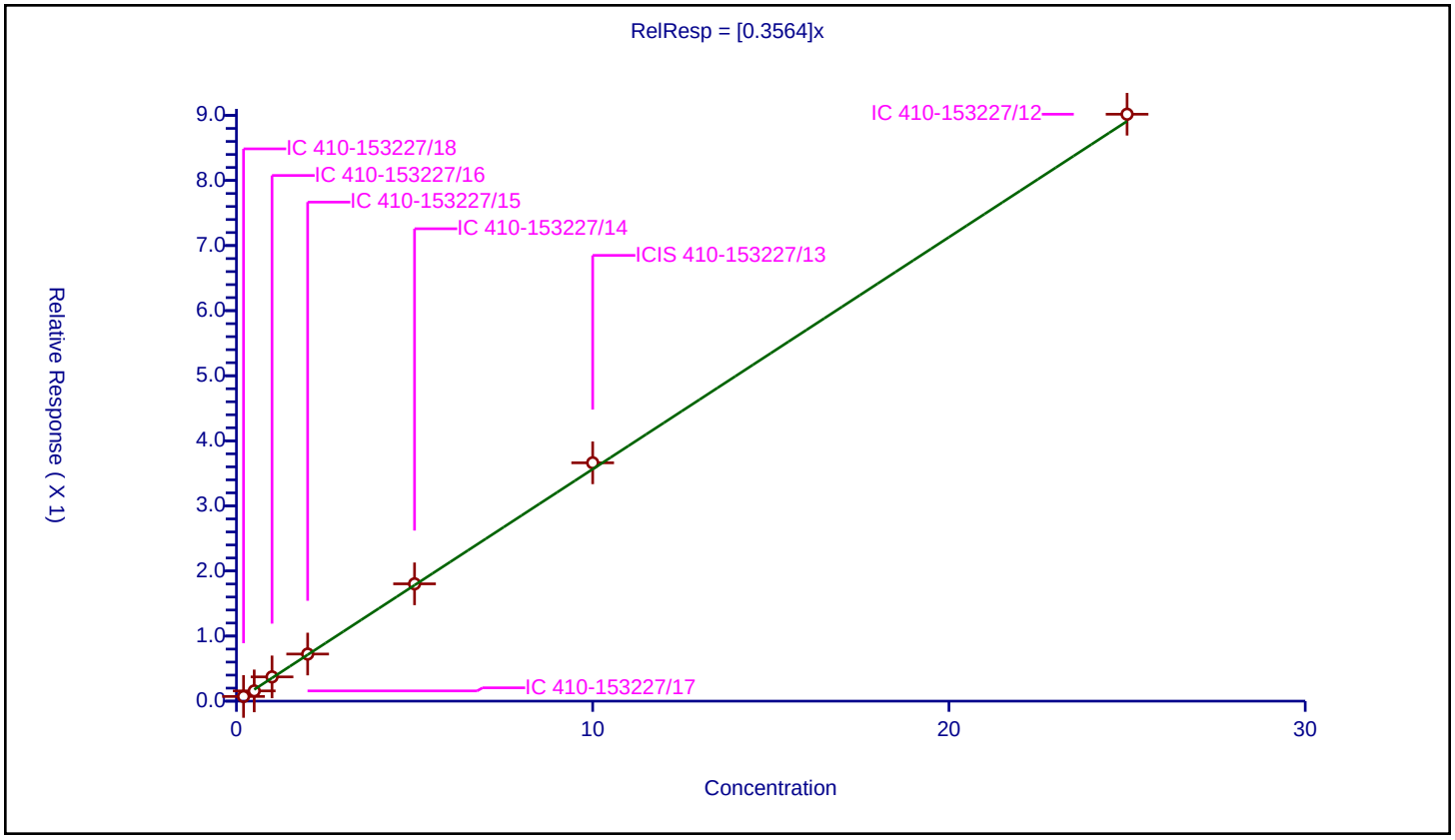
Curve Coefficients

Intercept:	0
Slope:	0.3564

Error Coefficients

Standard Error:	792000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.071696	10.0	1878059.0	0.358482	Y
2	IC 410-153227/17	0.5	0.157296	10.0	1875578.0	0.314591	Y
3	IC 410-153227/16	1.0	0.372654	10.0	1893045.0	0.372654	Y
4	IC 410-153227/15	2.0	0.72385	10.0	1914569.0	0.361925	Y
5	IC 410-153227/14	5.0	1.802626	10.0	1958598.0	0.360525	Y
6	ICIS 410-153227/13	10.0	3.661956	10.0	1956692.0	0.366196	Y
7	IC 410-153227/12	25.0	9.018167	10.0	1951930.0	0.360727	Y



Calibration / Methylene Chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

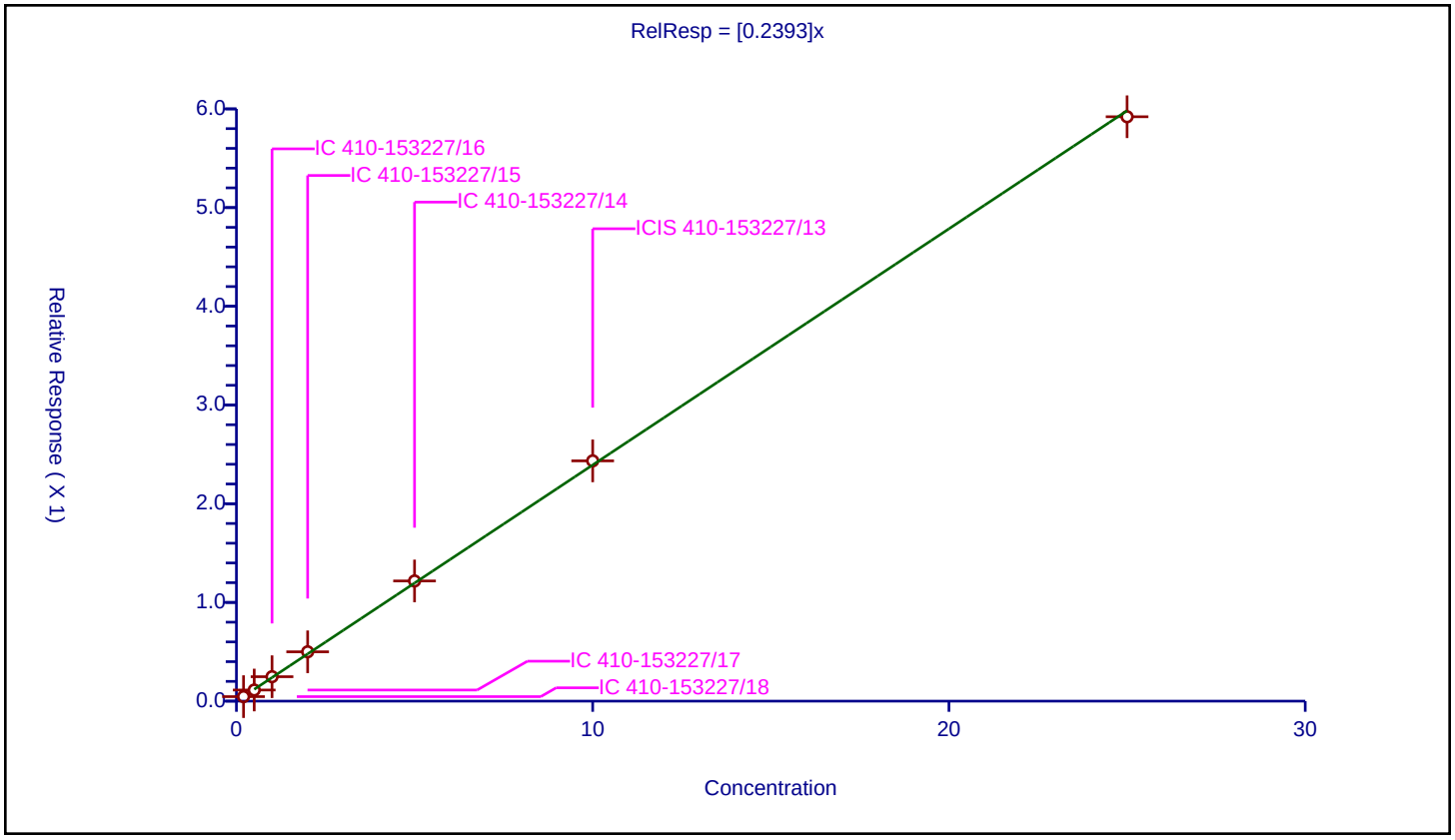
Curve Coefficients

Intercept:	0
Slope:	0.2393

Error Coefficients

Standard Error:	521000
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 410-153227/18	0.2	0.045616	10.0	1878059.0	0.228081	Y
2	IC 410-153227/17	0.5	0.112739	10.0	1875578.0	0.225477	Y
3	IC 410-153227/16	1.0	0.247617	10.0	1893045.0	0.247617	Y
4	IC 410-153227/15	2.0	0.499846	10.0	1914569.0	0.249923	Y
5	IC 410-153227/14	5.0	1.217565	10.0	1958598.0	0.243513	Y
6	ICIS 410-153227/13	10.0	2.434333	10.0	1956692.0	0.243433	Y
7	IC 410-153227/12	25.0	5.920509	10.0	1951930.0	0.23682	Y



Calibration / 2-Methyl-2-propanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

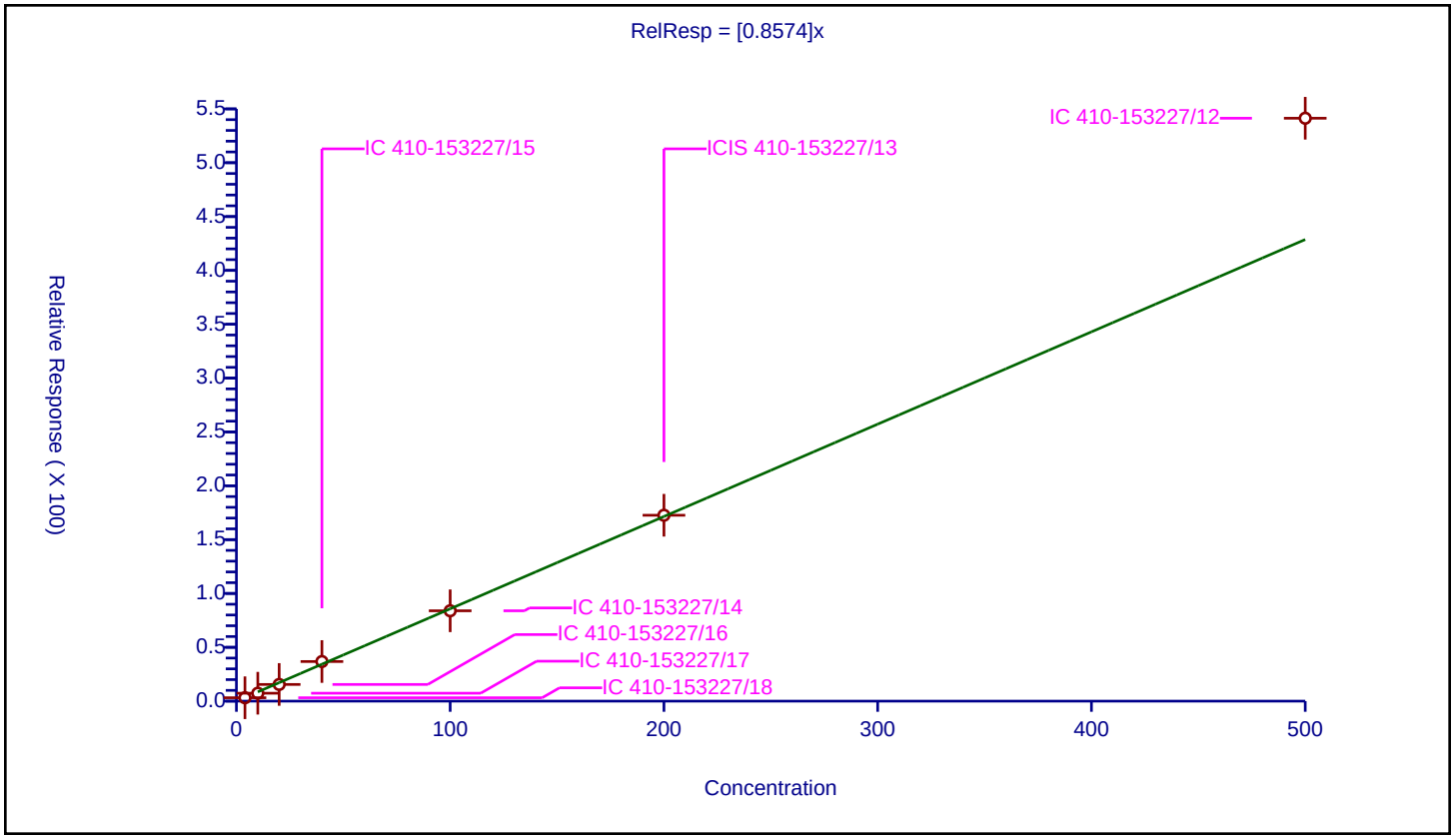
Curve Coefficients

Intercept:	0
Slope:	0.8574

Error Coefficients

Standard Error:	650000
Relative Standard Error:	13.6
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	4.0	3.146324	50.0	158566.0	0.786581	Y
2	IC 410-153227/17	10.0	7.353373	50.0	146579.0	0.735337	Y
3	IC 410-153227/16	20.0	15.501172	50.0	143773.0	0.775059	Y
4	IC 410-153227/15	40.0	36.788444	50.0	119562.0	0.919711	Y
5	IC 410-153227/14	100.0	83.916651	50.0	140518.0	0.839167	Y
6	ICIS 410-153227/13	200.0	172.627684	50.0	143636.0	0.863138	Y
7	IC 410-153227/12	500.0	541.307407	50.0	137853.0	1.082615	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

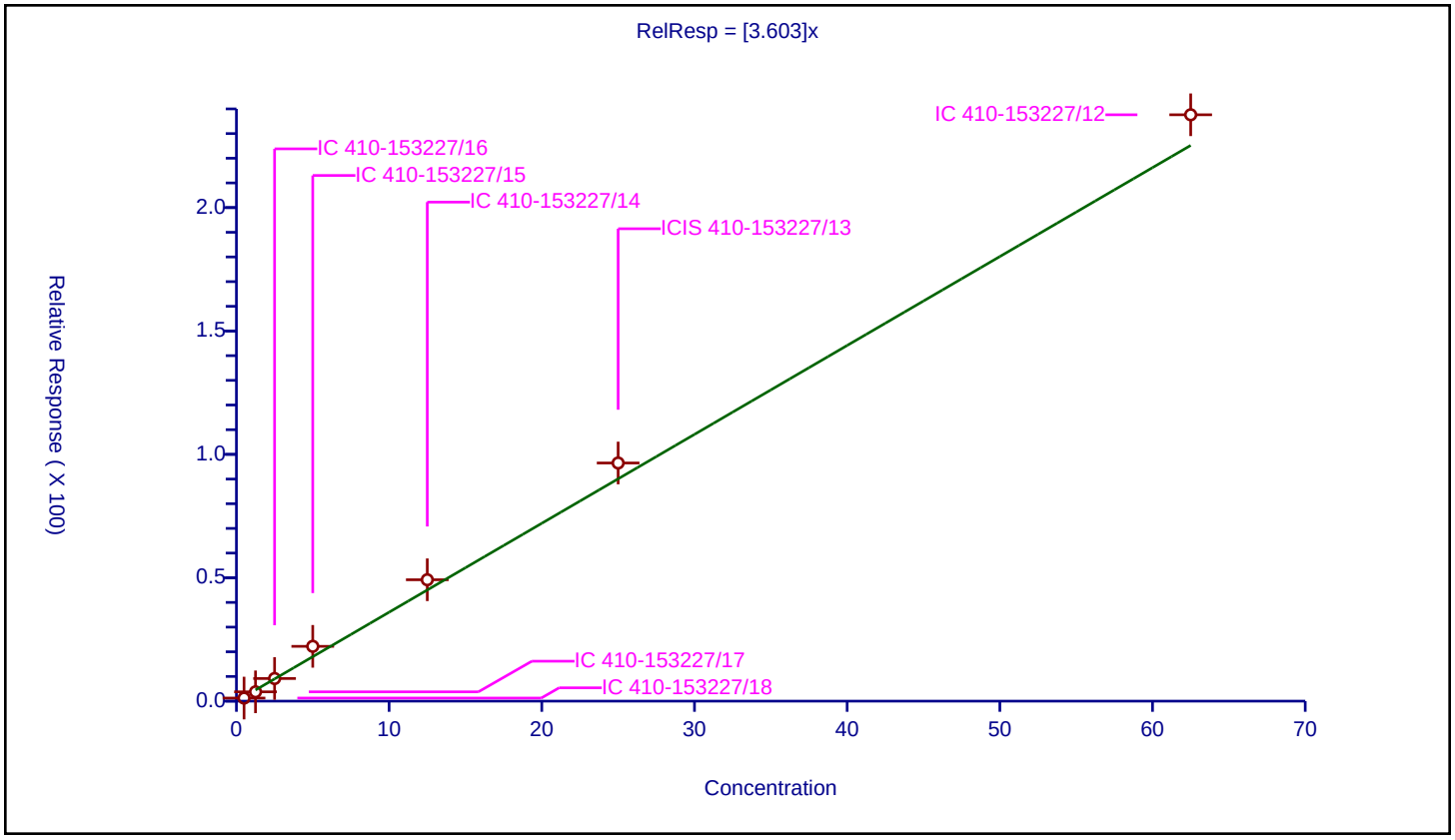
Curve Coefficients

Intercept:	0
Slope:	3.603

Error Coefficients

Standard Error:	297000
Relative Standard Error:	17.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.965

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.5	1.251214	50.0	158566.0	2.502428	Y
2	IC 410-153227/17	1.25	3.771004	50.0	146579.0	3.016803	Y
3	IC 410-153227/16	2.5	9.163403	50.0	143773.0	3.665361	Y
4	IC 410-153227/15	5.0	22.207307	50.0	119562.0	4.441461	Y
5	IC 410-153227/14	12.5	49.185514	50.0	140518.0	3.934841	Y
6	ICIS 410-153227/13	25.0	96.510972	50.0	143636.0	3.860439	Y
7	IC 410-153227/12	62.5	237.610353	50.0	137853.0	3.801766	Y



Calibration / Methyl tert-butyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

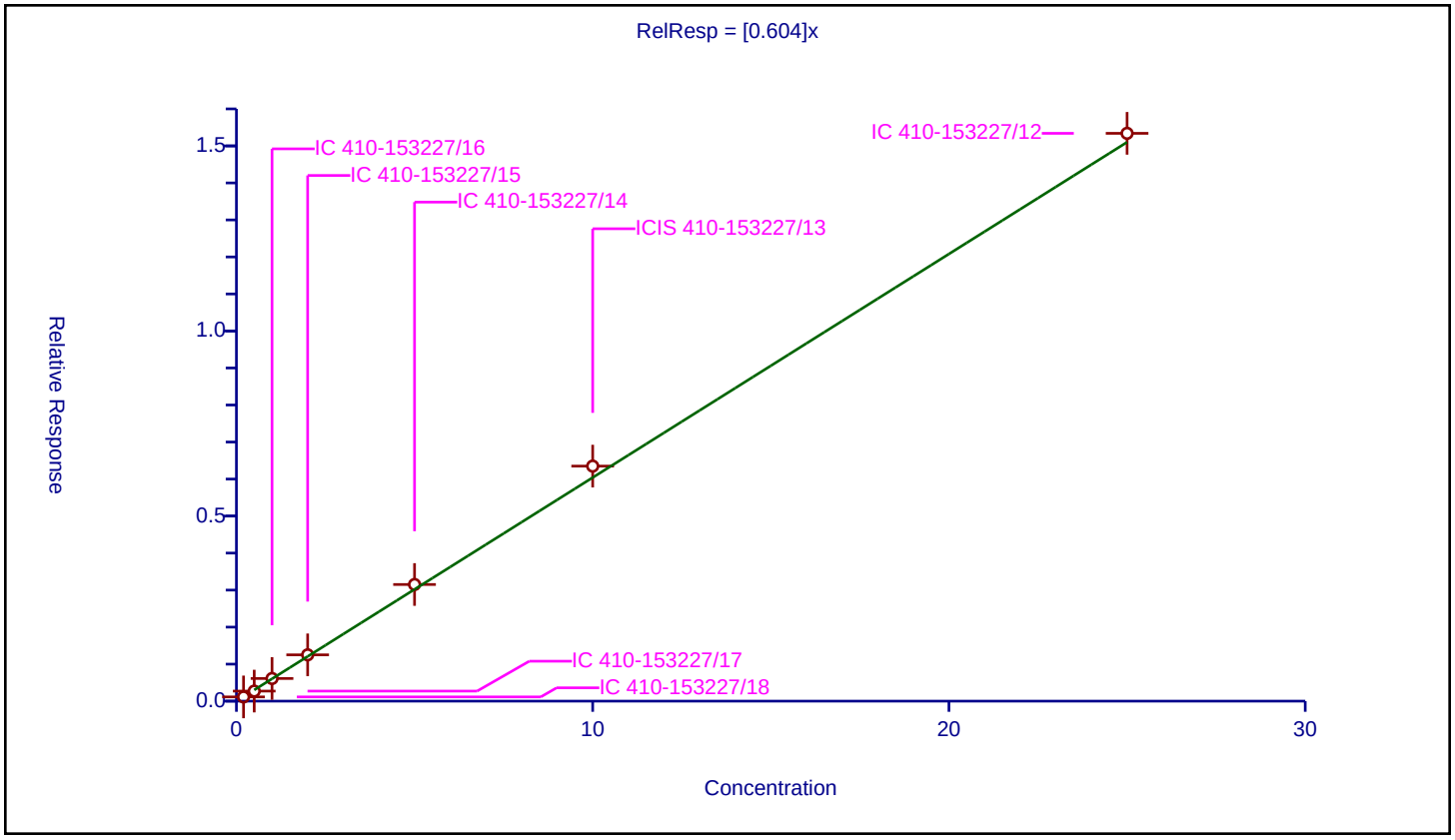
Curve Coefficients

Intercept:	0
Slope:	0.604

Error Coefficients

Standard Error:	1350000
Relative Standard Error:	5.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.113868	10.0	1878059.0	0.569338	Y
2	IC 410-153227/17	0.5	0.271426	10.0	1875578.0	0.542851	Y
3	IC 410-153227/16	1.0	0.611745	10.0	1893045.0	0.611745	Y
4	IC 410-153227/15	2.0	1.250966	10.0	1914569.0	0.625483	Y
5	IC 410-153227/14	5.0	3.151172	10.0	1958598.0	0.630234	Y
6	ICIS 410-153227/13	10.0	6.349466	10.0	1956692.0	0.634947	Y
7	IC 410-153227/12	25.0	15.339659	10.0	1951930.0	0.613586	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

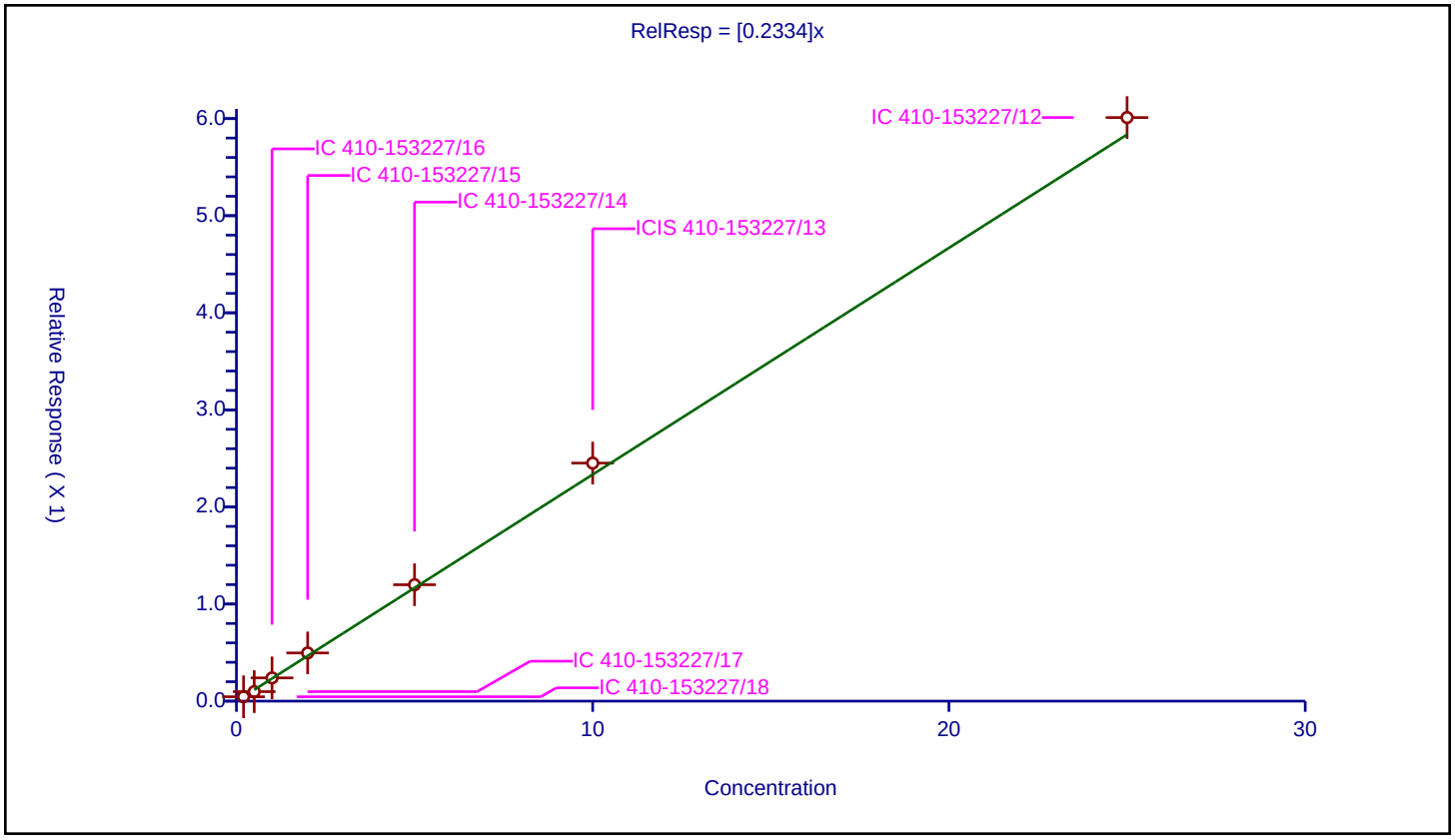
Curve Coefficients

Intercept:	0
Slope:	0.2334

Error Coefficients

Standard Error:	528000
Relative Standard Error:	7.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.045031	10.0	1878059.0	0.225153	Y
2	IC 410-153227/17	0.5	0.097874	10.0	1875578.0	0.195748	Y
3	IC 410-153227/16	1.0	0.23936	10.0	1893045.0	0.23936	Y
4	IC 410-153227/15	2.0	0.496441	10.0	1914569.0	0.24822	Y
5	IC 410-153227/14	5.0	1.19898	10.0	1958598.0	0.239796	Y
6	ICIS 410-153227/13	10.0	2.451837	10.0	1956692.0	0.245184	Y
7	IC 410-153227/12	25.0	6.010943	10.0	1951930.0	0.240438	Y



Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

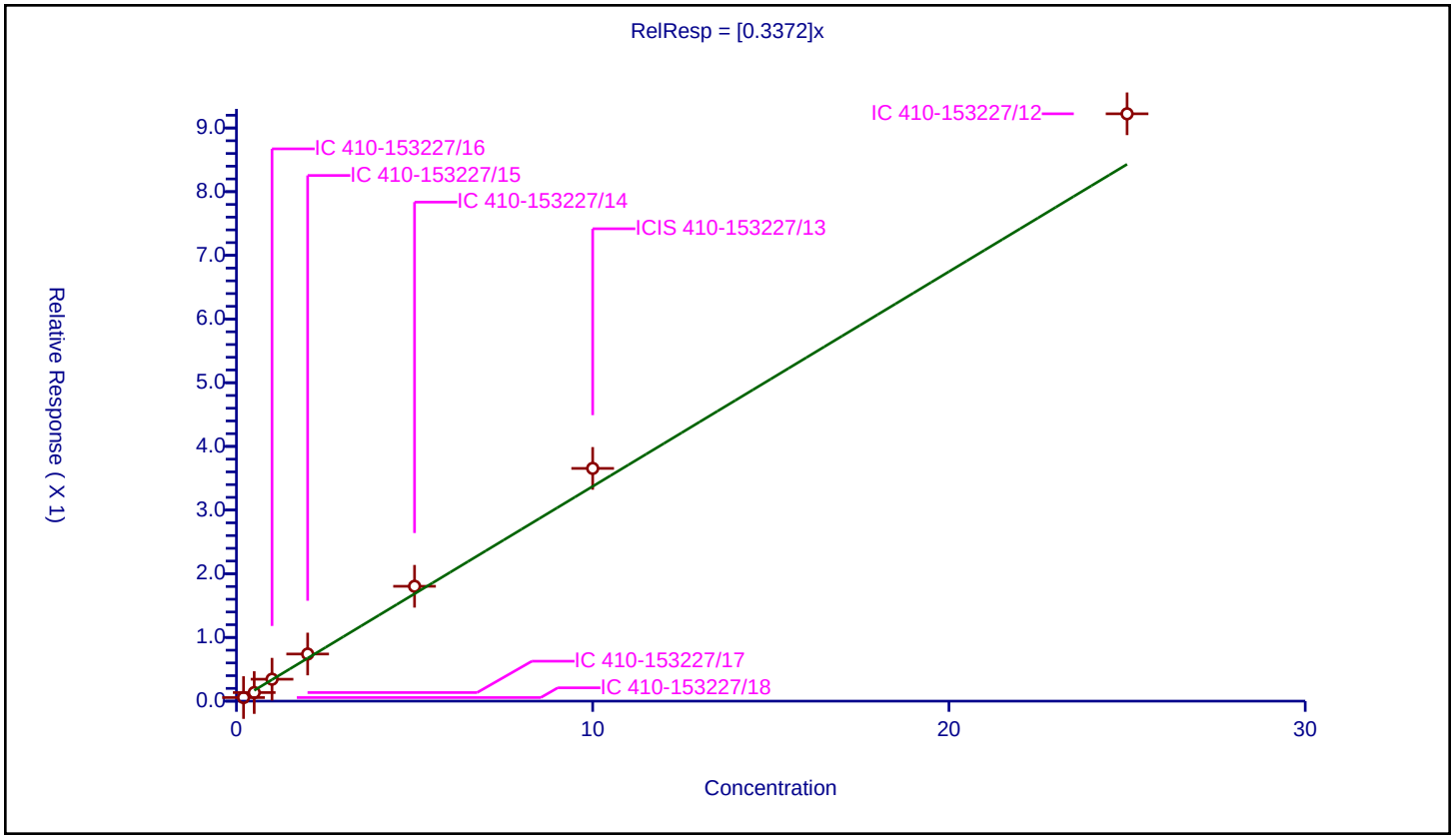
Curve Coefficients

Intercept:	0
Slope:	0.3372

Error Coefficients

Standard Error:	806000
Relative Standard Error:	12.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.056266	10.0	1878059.0	0.281328	Y
2	IC 410-153227/17	0.5	0.134796	10.0	1875578.0	0.269592	Y
3	IC 410-153227/16	1.0	0.344577	10.0	1893045.0	0.344577	Y
4	IC 410-153227/15	2.0	0.739905	10.0	1914569.0	0.369953	Y
5	IC 410-153227/14	5.0	1.803729	10.0	1958598.0	0.360746	Y
6	ICIS 410-153227/13	10.0	3.654546	10.0	1956692.0	0.365455	Y
7	IC 410-153227/12	25.0	9.222836	10.0	1951930.0	0.368913	Y



Calibration / 1,1-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

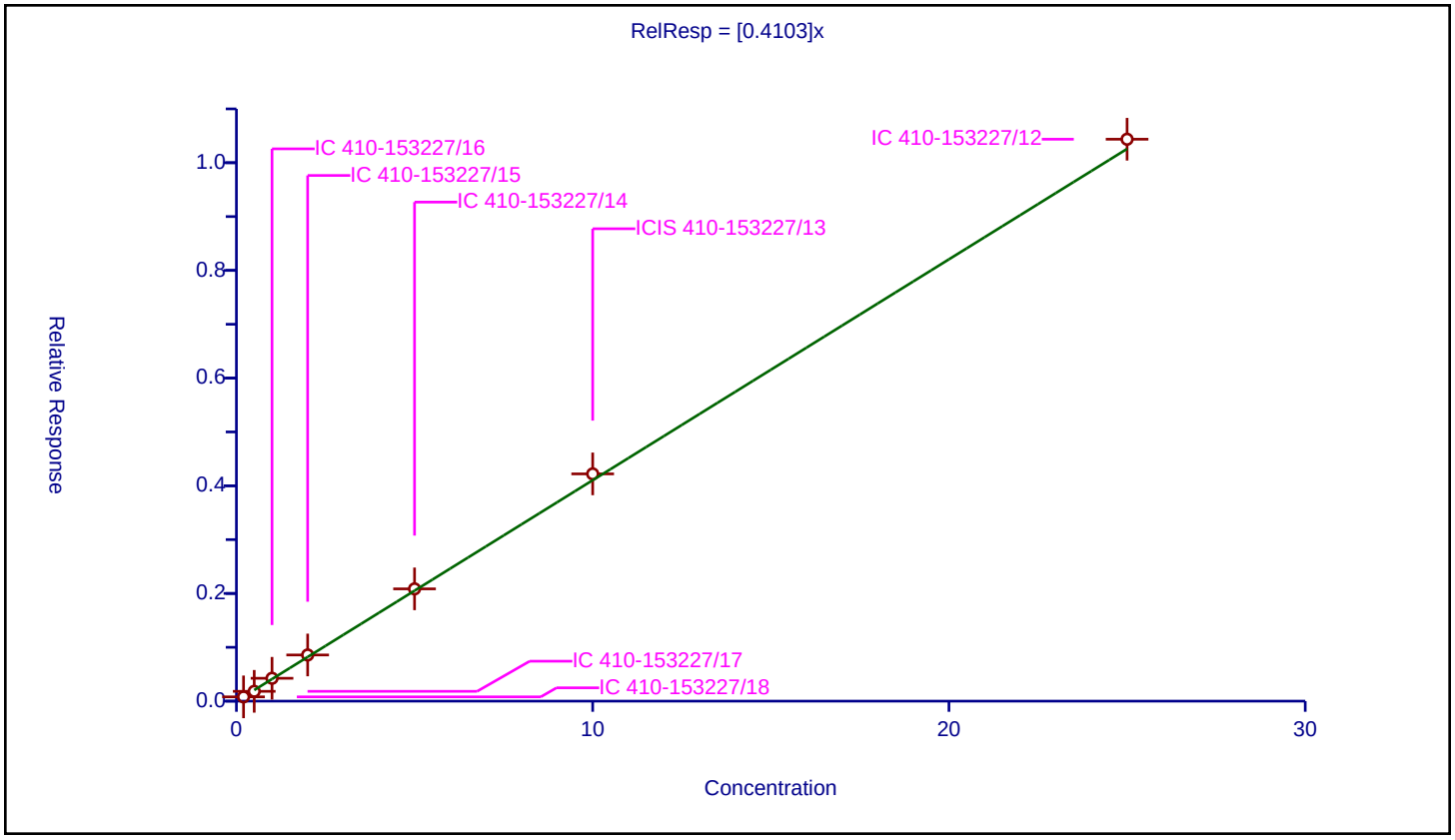
Curve Coefficients

Intercept:	0
Slope:	0.4103

Error Coefficients

Standard Error:	916000
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 410-153227/18	0.2	0.079449	10.0	1878059.0	0.397245	Y
2	IC 410-153227/17	0.5	0.182317	10.0	1875578.0	0.364634	Y
3	IC 410-153227/16	1.0	0.424813	10.0	1893045.0	0.424813	Y
4	IC 410-153227/15	2.0	0.857551	10.0	1914569.0	0.428775	Y
5	IC 410-153227/14	5.0	2.085129	10.0	1958598.0	0.417026	Y
6	ICIS 410-153227/13	10.0	4.221037	10.0	1956692.0	0.422104	Y
7	IC 410-153227/12	25.0	10.436307	10.0	1951930.0	0.417452	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

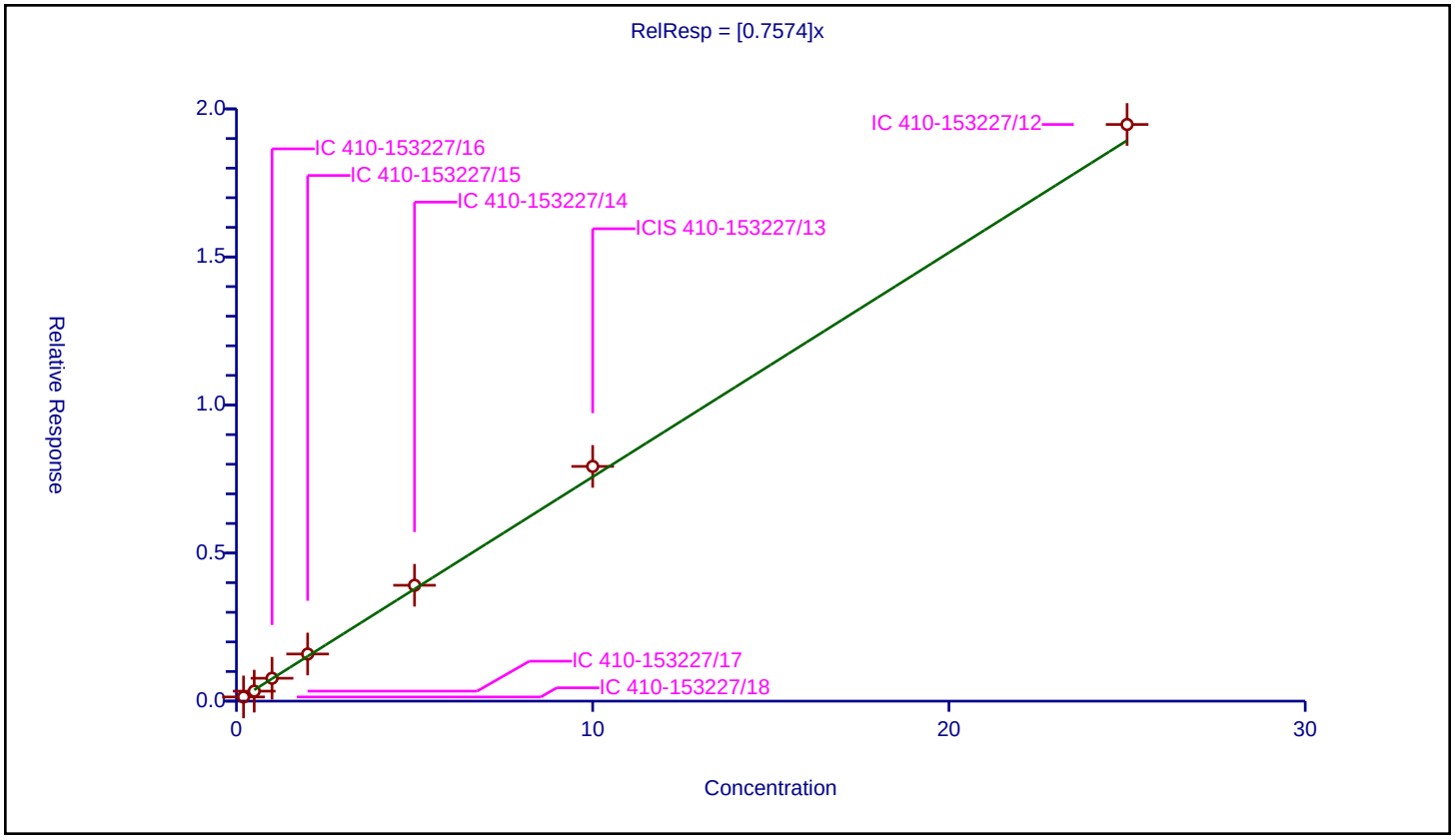
Curve Coefficients

Intercept:	0
Slope:	0.7574

Error Coefficients

Standard Error:	1710000
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 410-153227/18	0.2	0.140544	10.0	1878059.0	0.70272	Y
2	IC 410-153227/17	0.5	0.338034	10.0	1875578.0	0.676069	Y
3	IC 410-153227/16	1.0	0.772707	10.0	1893045.0	0.772707	Y
4	IC 410-153227/15	2.0	1.591685	10.0	1914569.0	0.795842	Y
5	IC 410-153227/14	5.0	3.912559	10.0	1958598.0	0.782512	Y
6	ICIS 410-153227/13	10.0	7.927282	10.0	1956692.0	0.792728	Y
7	IC 410-153227/12	25.0	19.473454	10.0	1951930.0	0.778938	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

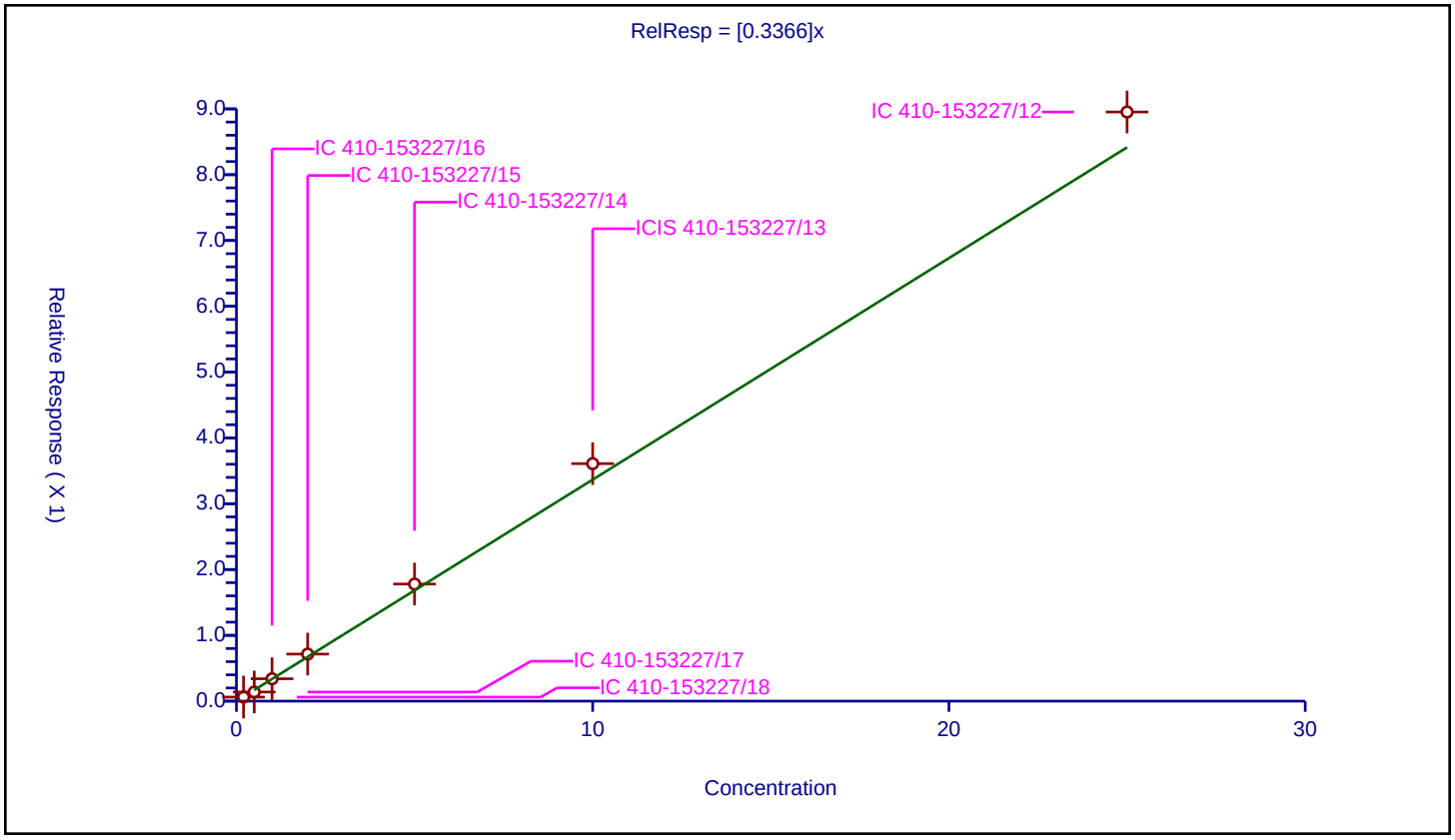
Curve Coefficients

Intercept:	0
Slope:	0.3366

Error Coefficients

Standard Error:	785000
Relative Standard Error:	9.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.061287	10.0	1878059.0	0.306433	Y
2	IC 410-153227/17	0.5	0.138523	10.0	1875578.0	0.277045	Y
3	IC 410-153227/16	1.0	0.34033	10.0	1893045.0	0.34033	Y
4	IC 410-153227/15	2.0	0.715096	10.0	1914569.0	0.357548	Y
5	IC 410-153227/14	5.0	1.779446	10.0	1958598.0	0.355889	Y
6	ICIS 410-153227/13	10.0	3.609403	10.0	1956692.0	0.36094	Y
7	IC 410-153227/12	25.0	8.952965	10.0	1951930.0	0.358119	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

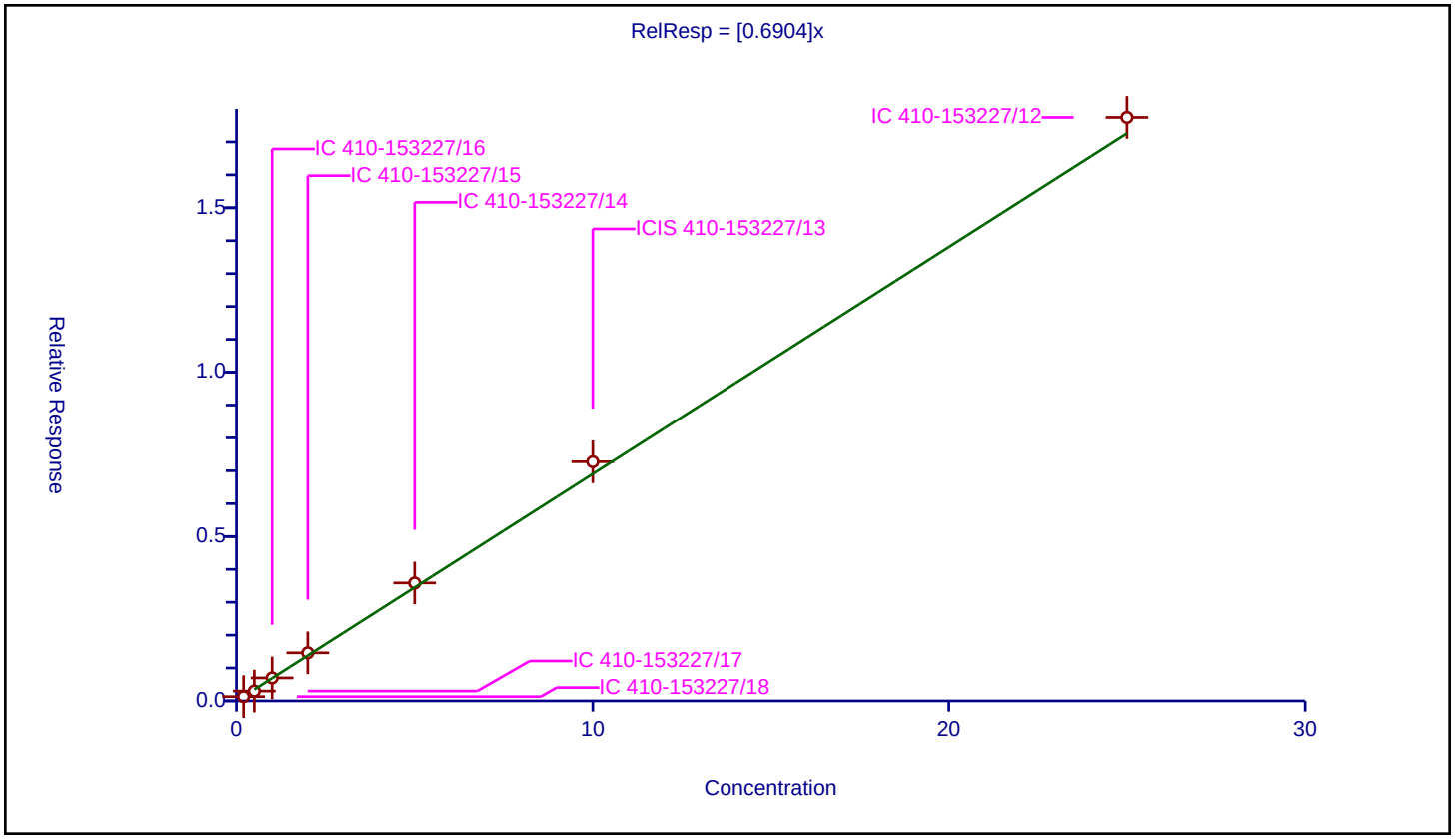
Curve Coefficients

Intercept:	0
Slope:	0.6904

Error Coefficients

Standard Error:	1560000
Relative Standard Error:	7.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.130044	10.0	1878059.0	0.650219	Y
2	IC 410-153227/17	0.5	0.299097	10.0	1875578.0	0.598194	Y
3	IC 410-153227/16	1.0	0.699059	10.0	1893045.0	0.699059	Y
4	IC 410-153227/15	2.0	1.462058	10.0	1914569.0	0.731029	Y
5	IC 410-153227/14	5.0	3.586867	10.0	1958598.0	0.717373	Y
6	ICIS 410-153227/13	10.0	7.27464	10.0	1956692.0	0.727464	Y
7	IC 410-153227/12	25.0	17.743136	10.0	1951930.0	0.709725	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

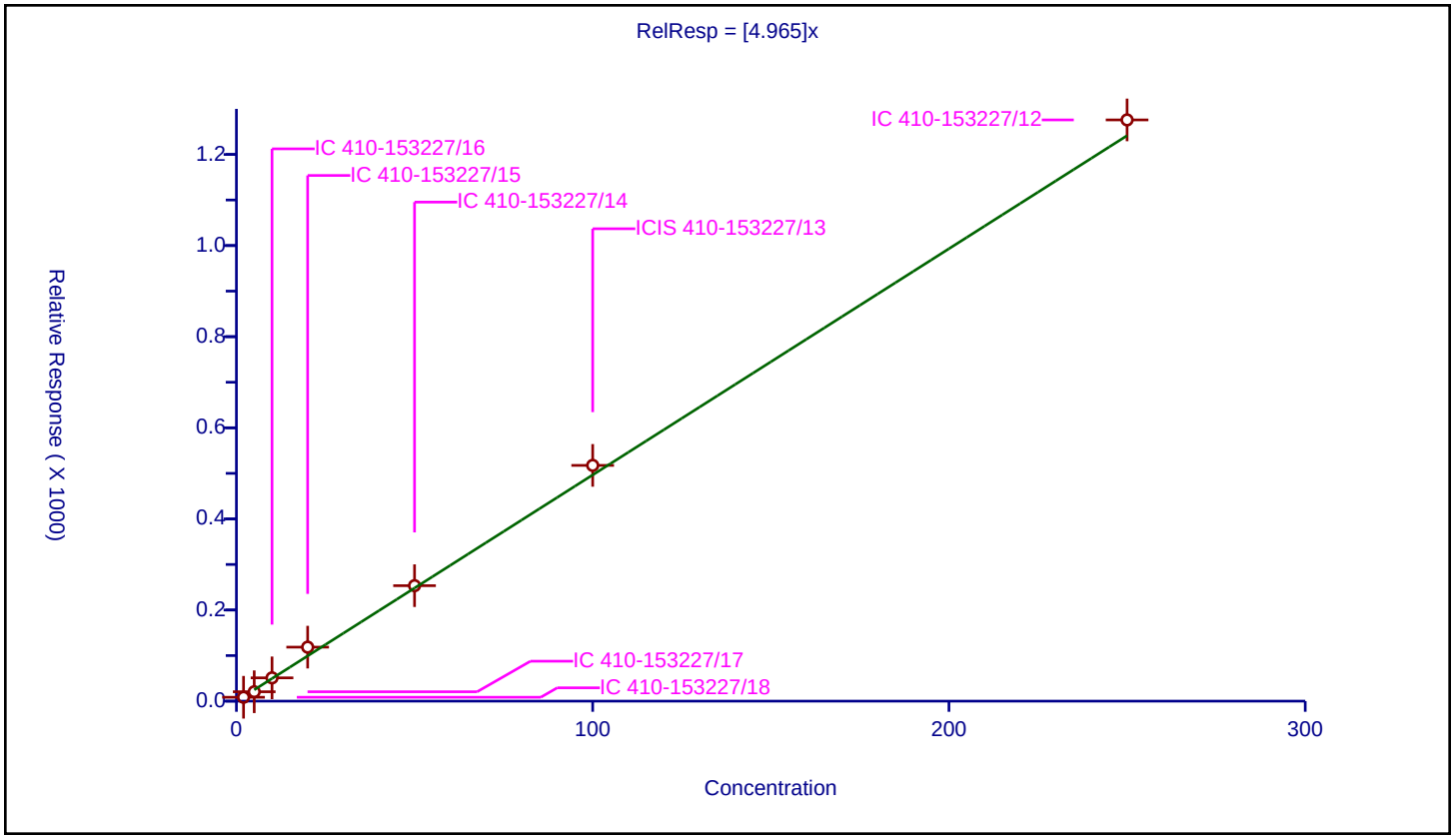
Curve Coefficients

Intercept:	0
Slope:	4.965

Error Coefficients

Standard Error:	1590000
Relative Standard Error:	12.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	2.0	8.513174	50.0	158566.0	4.256587	Y
2	IC 410-153227/17	5.0	20.58344	50.0	146579.0	4.116688	Y
3	IC 410-153227/16	10.0	51.104519	50.0	143773.0	5.110452	Y
4	IC 410-153227/15	20.0	118.512571	50.0	119562.0	5.925629	Y
5	IC 410-153227/14	50.0	253.482472	50.0	140518.0	5.069649	Y
6	ICIS 410-153227/13	100.0	517.454538	50.0	143636.0	5.174545	Y
7	IC 410-153227/12	250.0	1275.801397	50.0	137853.0	5.103206	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

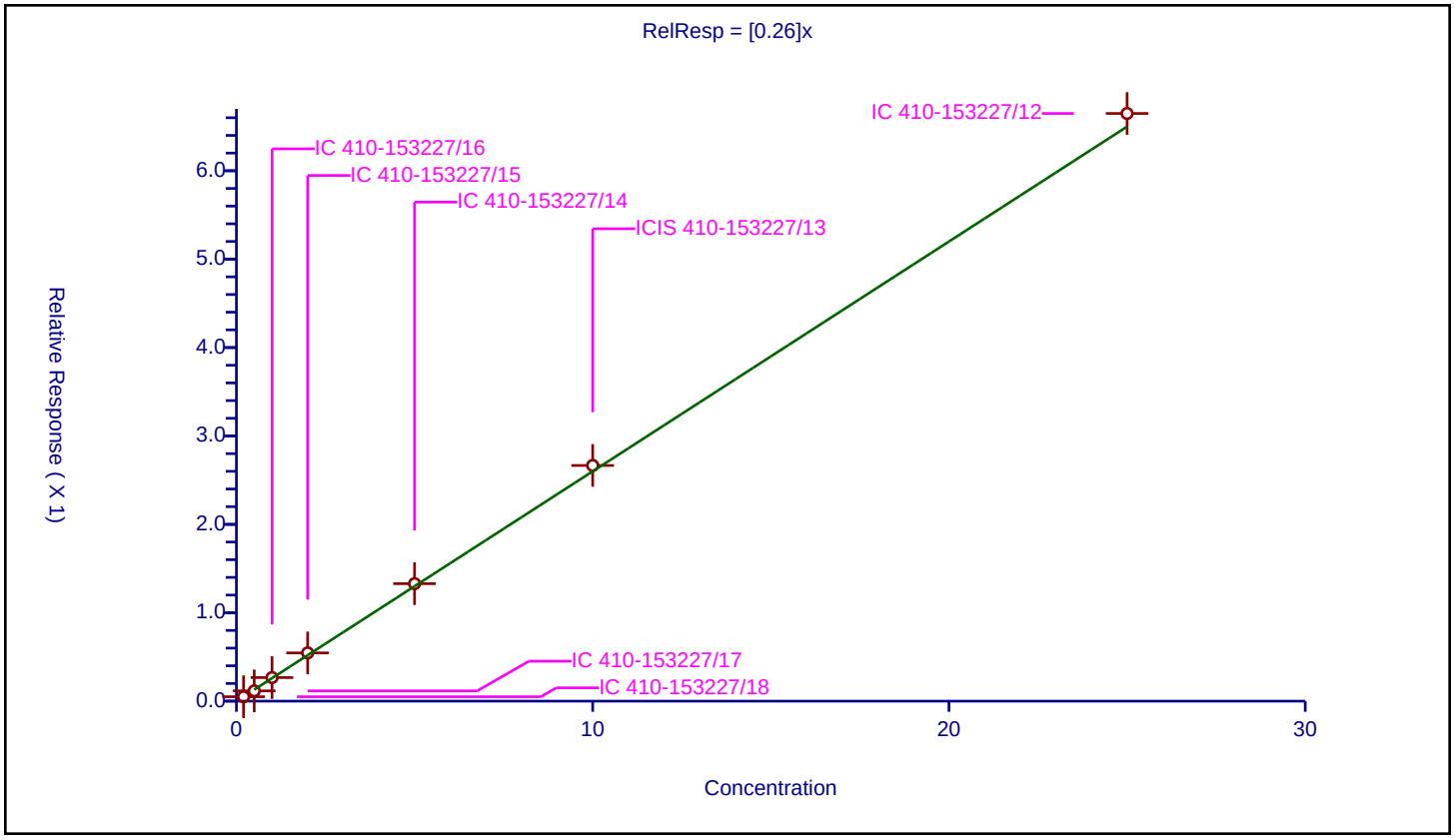
Curve Coefficients

Intercept:	0
Slope:	0.26

Error Coefficients

Standard Error:	583000
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 410-153227/18	0.2	0.049961	10.0	1878059.0	0.249806	Y
2	IC 410-153227/17	0.5	0.11606	10.0	1875578.0	0.23212	Y
3	IC 410-153227/16	1.0	0.266549	10.0	1893045.0	0.266549	Y
4	IC 410-153227/15	2.0	0.545951	10.0	1914569.0	0.272975	Y
5	IC 410-153227/14	5.0	1.328935	10.0	1958598.0	0.265787	Y
6	ICIS 410-153227/13	10.0	2.666061	10.0	1956692.0	0.266606	Y
7	IC 410-153227/12	25.0	6.648199	10.0	1951930.0	0.265928	Y



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

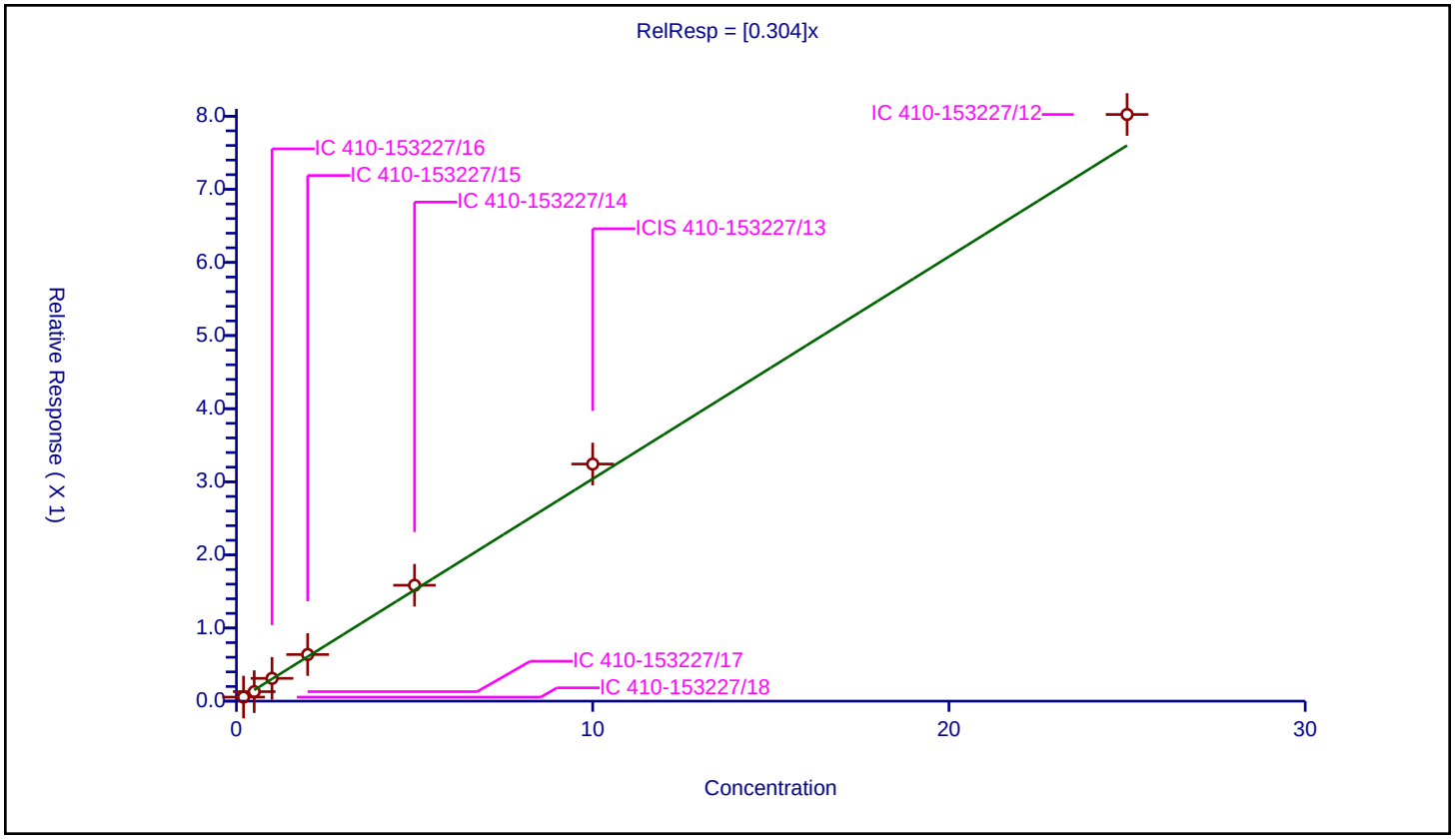
Curve Coefficients

Intercept:	0
Slope:	0.304

Error Coefficients

Standard Error:	704000
Relative Standard Error:	8.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.055201	10.0	1878059.0	0.276003	Y
2	IC 410-153227/17	0.5	0.129784	10.0	1875578.0	0.259568	Y
3	IC 410-153227/16	1.0	0.311546	10.0	1893045.0	0.311546	Y
4	IC 410-153227/15	2.0	0.63759	10.0	1914569.0	0.318795	Y
5	IC 410-153227/14	5.0	1.584588	10.0	1958598.0	0.316918	Y
6	ICIS 410-153227/13	10.0	3.242692	10.0	1956692.0	0.324269	Y
7	IC 410-153227/12	25.0	8.023587	10.0	1951930.0	0.320943	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

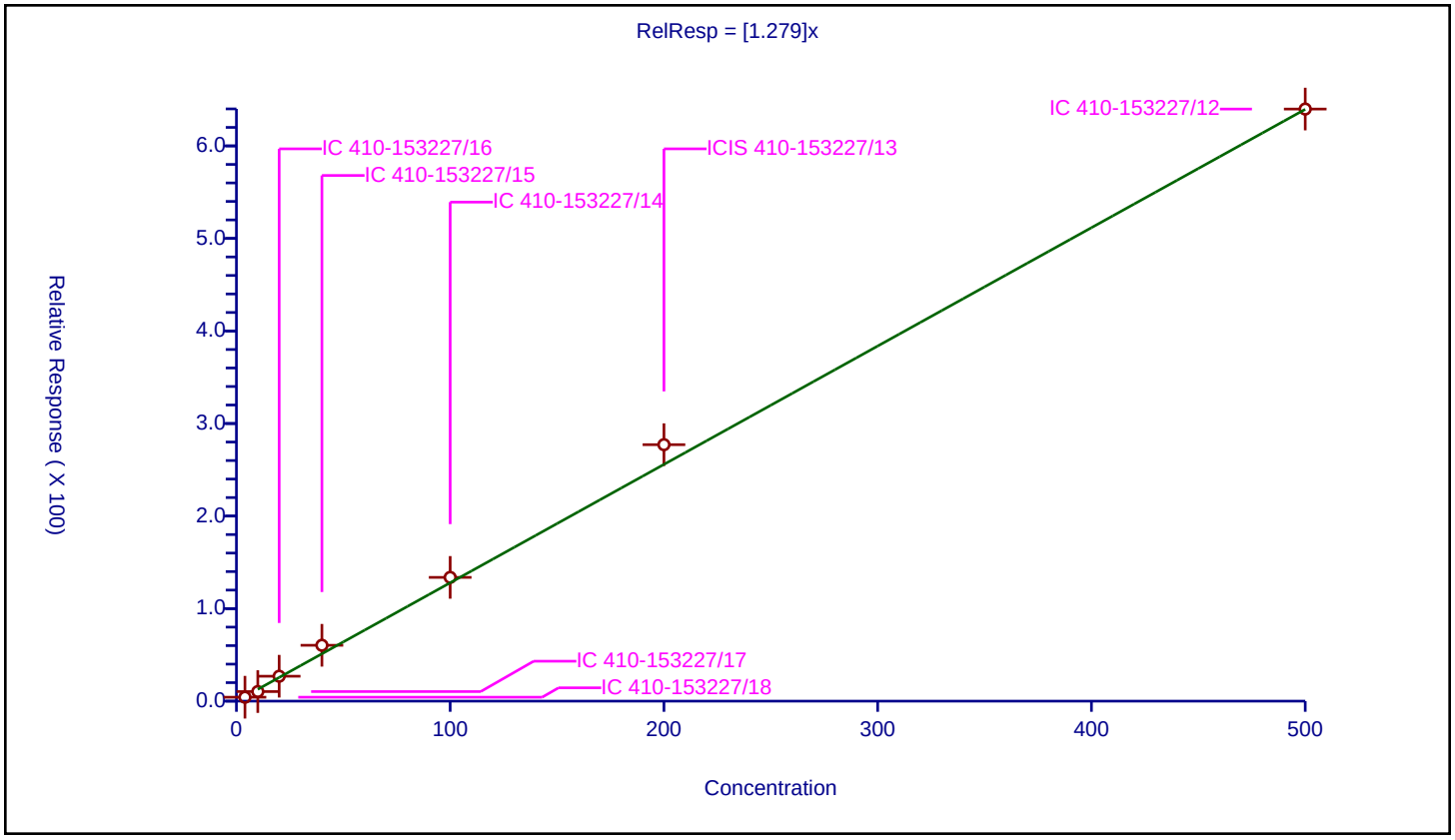
Curve Coefficients

Intercept:	0
Slope:	1.279

Error Coefficients

Standard Error:	807000
Relative Standard Error:	13.5
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.979

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	4.0	4.24492	50.0	158566.0	1.06123	Y
2	IC 410-153227/17	10.0	10.346639	50.0	146579.0	1.034664	Y
3	IC 410-153227/16	20.0	26.916041	50.0	143773.0	1.345802	Y
4	IC 410-153227/15	40.0	60.367006	50.0	119562.0	1.509175	Y
5	IC 410-153227/14	100.0	133.729131	50.0	140518.0	1.337291	Y
6	ICIS 410-153227/13	200.0	277.148835	50.0	143636.0	1.385744	Y
7	IC 410-153227/12	500.0	639.837726	50.0	137853.0	1.279675	Y



Calibration / Methacrylonitrile

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

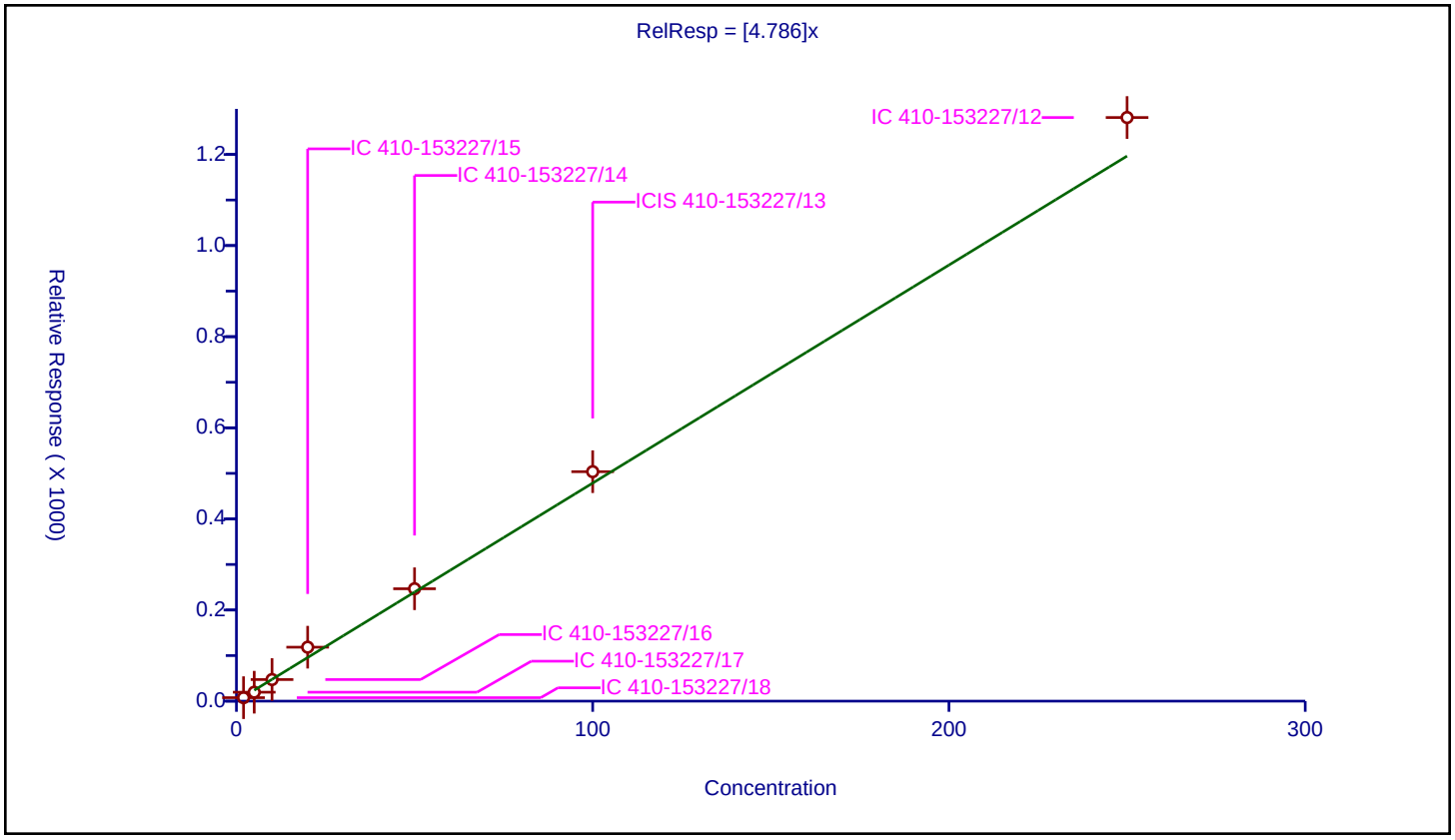
Curve Coefficients

Intercept:	0
Slope:	4.786

Error Coefficients

Standard Error:	1590000
Relative Standard Error:	15.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	2.0	7.650442	50.0	158566.0	3.825221	Y
2	IC 410-153227/17	5.0	19.613655	50.0	146579.0	3.922731	Y
3	IC 410-153227/16	10.0	47.386505	50.0	143773.0	4.738651	Y
4	IC 410-153227/15	20.0	118.423078	50.0	119562.0	5.921154	Y
5	IC 410-153227/14	50.0	246.693662	50.0	140518.0	4.933873	Y
6	ICIS 410-153227/13	100.0	503.704155	50.0	143636.0	5.037042	Y
7	IC 410-153227/12	250.0	1281.056633	50.0	137853.0	5.124227	Y



Calibration / Chlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

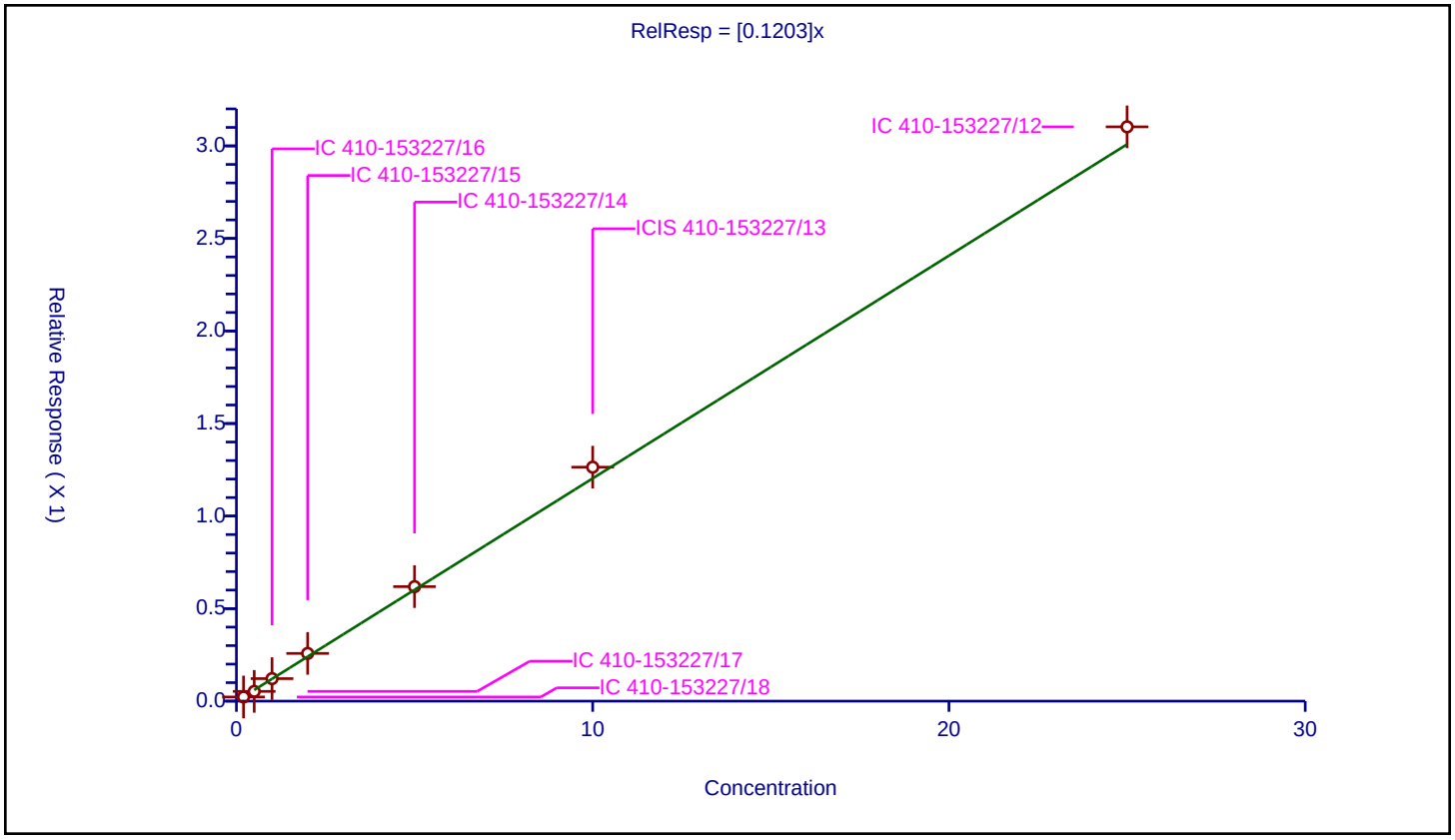
Curve Coefficients

Intercept:	0
Slope:	0.1203

Error Coefficients

Standard Error:	273000
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 410-153227/18	0.2	0.02239	10.0	1878059.0	0.111951	Y
2	IC 410-153227/17	0.5	0.052762	10.0	1875578.0	0.105525	Y
3	IC 410-153227/16	1.0	0.121725	10.0	1893045.0	0.121725	Y
4	IC 410-153227/15	2.0	0.25787	10.0	1914569.0	0.128935	Y
5	IC 410-153227/14	5.0	0.618733	10.0	1958598.0	0.123747	Y
6	ICIS 410-153227/13	10.0	1.264149	10.0	1956692.0	0.126415	Y
7	IC 410-153227/12	25.0	3.103067	10.0	1951930.0	0.124123	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

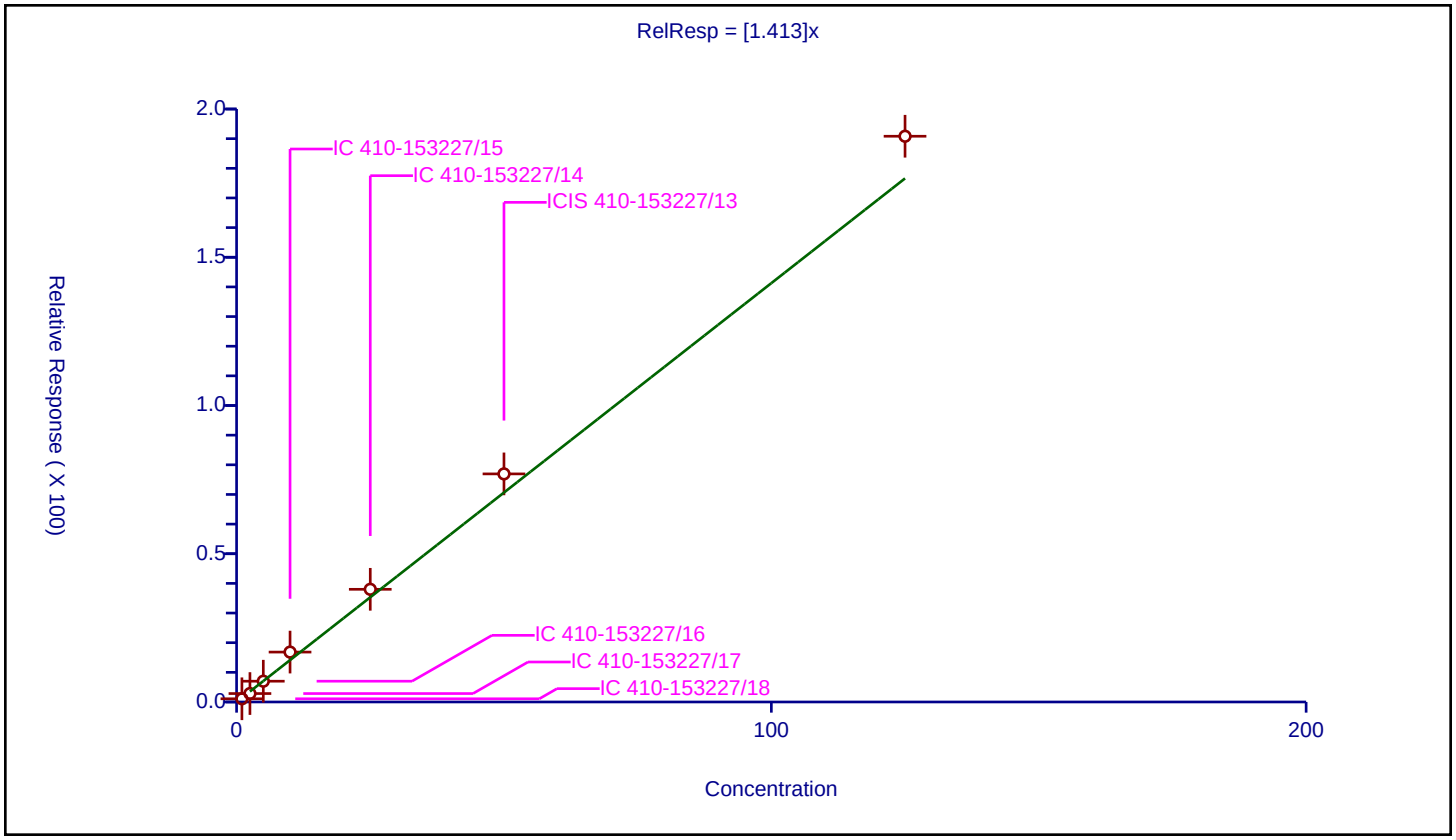
Curve Coefficients

Intercept:	0
Slope:	1.413

Error Coefficients

Standard Error:	238000
Relative Standard Error:	15.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.972

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	1.0	1.081569	50.0	158566.0	1.081569	Y
2	IC 410-153227/17	2.5	2.842494	50.0	146579.0	1.136998	Y
3	IC 410-153227/16	5.0	7.008966	50.0	143773.0	1.401793	Y
4	IC 410-153227/15	10.0	16.835617	50.0	119562.0	1.683562	Y
5	IC 410-153227/14	25.0	38.00474	50.0	140518.0	1.52019	Y
6	ICIS 410-153227/13	50.0	76.930923	50.0	143636.0	1.538618	Y
7	IC 410-153227/12	125.0	190.815216	50.0	137853.0	1.526522	Y



Calibration / Chloroform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

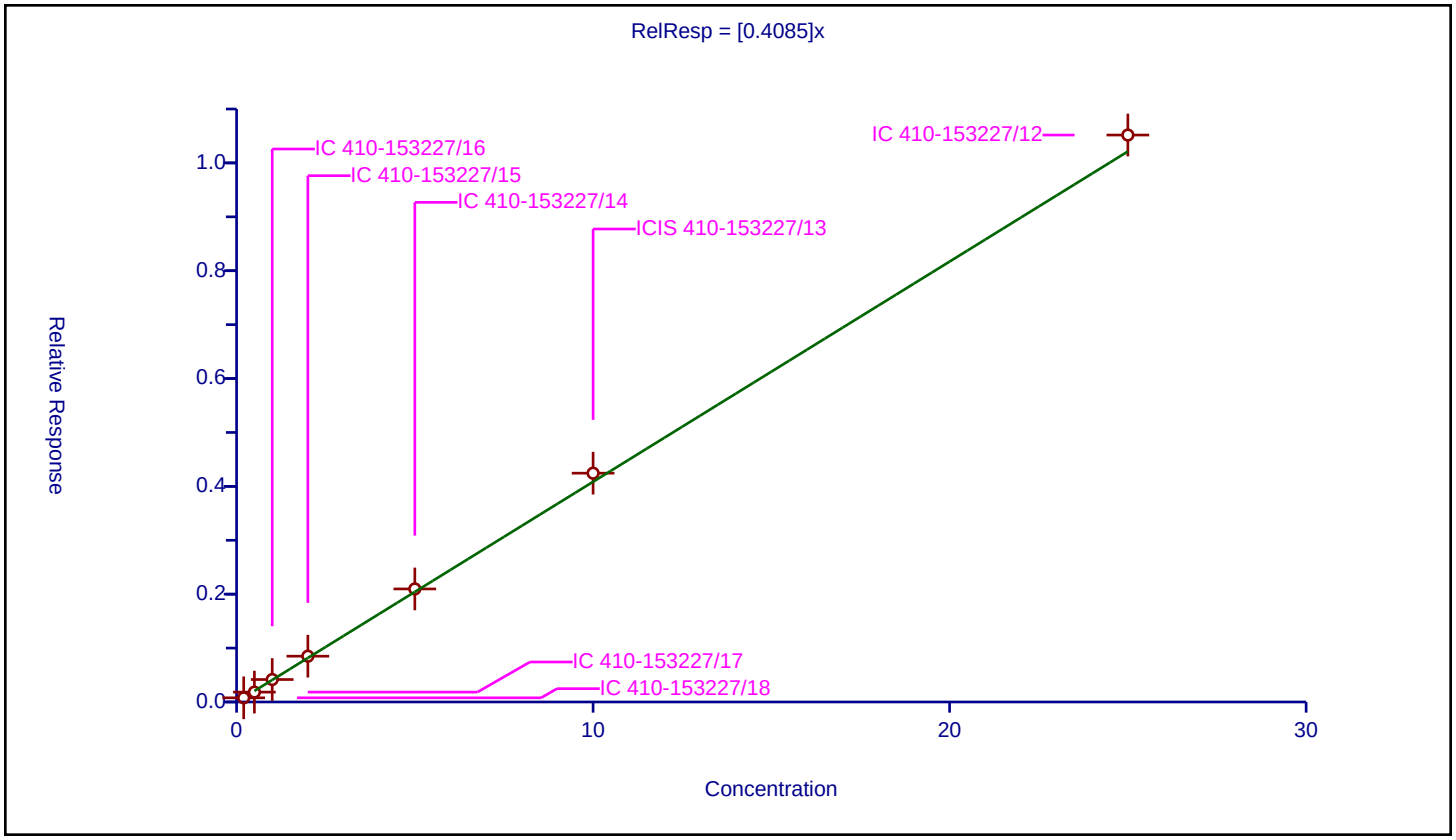
Curve Coefficients

Intercept:	0
Slope:	0.4085

Error Coefficients

Standard Error:	923000
Relative Standard Error:	5.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.077447	10.0	1878059.0	0.387235	Y
2	IC 410-153227/17	0.5	0.183101	10.0	1875578.0	0.366202	Y
3	IC 410-153227/16	1.0	0.416768	10.0	1893045.0	0.416768	Y
4	IC 410-153227/15	2.0	0.849465	10.0	1914569.0	0.424733	Y
5	IC 410-153227/14	5.0	2.097036	10.0	1958598.0	0.419407	Y
6	ICIS 410-153227/13	10.0	4.244557	10.0	1956692.0	0.424456	Y
7	IC 410-153227/12	25.0	10.517227	10.0	1951930.0	0.420689	Y



Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

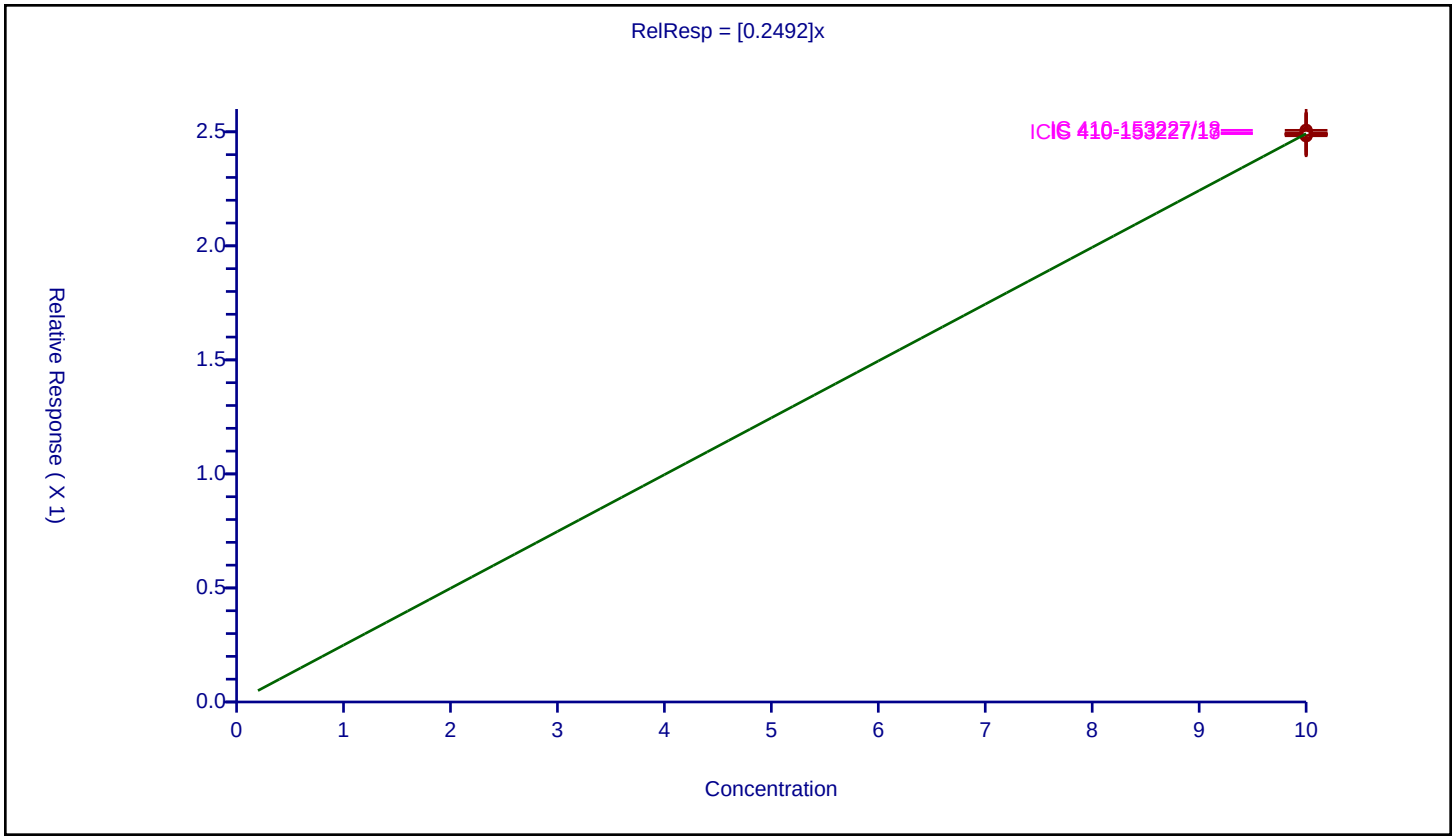
Curve Coefficients

Intercept:	0
Slope:	0.2492

Error Coefficients

Standard Error:	516000
Relative Standard Error:	0.3
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	ICIS 410-153227/13	10.0	2.493775	10.0	1956692.0	0.249378	Y
2	IC 410-153227/12	10.0	2.488696	10.0	1951930.0	0.24887	Y
3	IC 410-153227/14	10.0	2.489393	10.0	1958598.0	0.248939	Y
4	IC 410-153227/15	10.0	2.482674	10.0	1914569.0	0.248267	Y
5	IC 410-153227/16	10.0	2.488567	10.0	1893045.0	0.248857	Y
6	IC 410-153227/17	10.0	2.492218	10.0	1875578.0	0.249222	Y
7	IC 410-153227/18	10.0	2.506588	10.0	1878059.0	0.250659	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

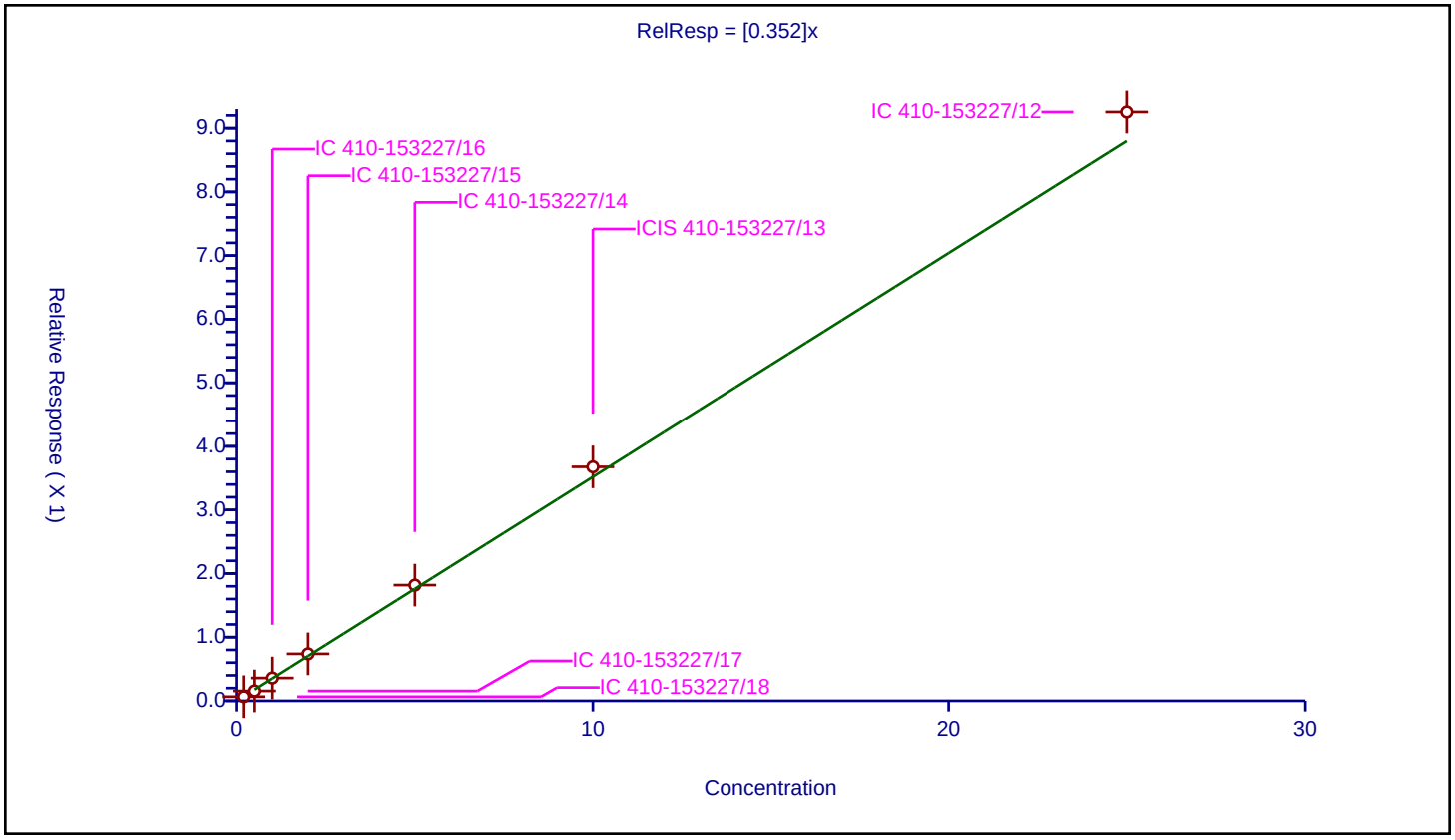
Curve Coefficients

Intercept:	0
Slope:	0.352

Error Coefficients

Standard Error:	810000
Relative Standard Error:	6.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.064822	10.0	1878059.0	0.324111	Y
2	IC 410-153227/17	0.5	0.155317	10.0	1875578.0	0.310635	Y
3	IC 410-153227/16	1.0	0.358644	10.0	1893045.0	0.358644	Y
4	IC 410-153227/15	2.0	0.738009	10.0	1914569.0	0.369005	Y
5	IC 410-153227/14	5.0	1.818137	10.0	1958598.0	0.363627	Y
6	ICIS 410-153227/13	10.0	3.677528	10.0	1956692.0	0.367753	Y
7	IC 410-153227/12	25.0	9.253441	10.0	1951930.0	0.370138	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

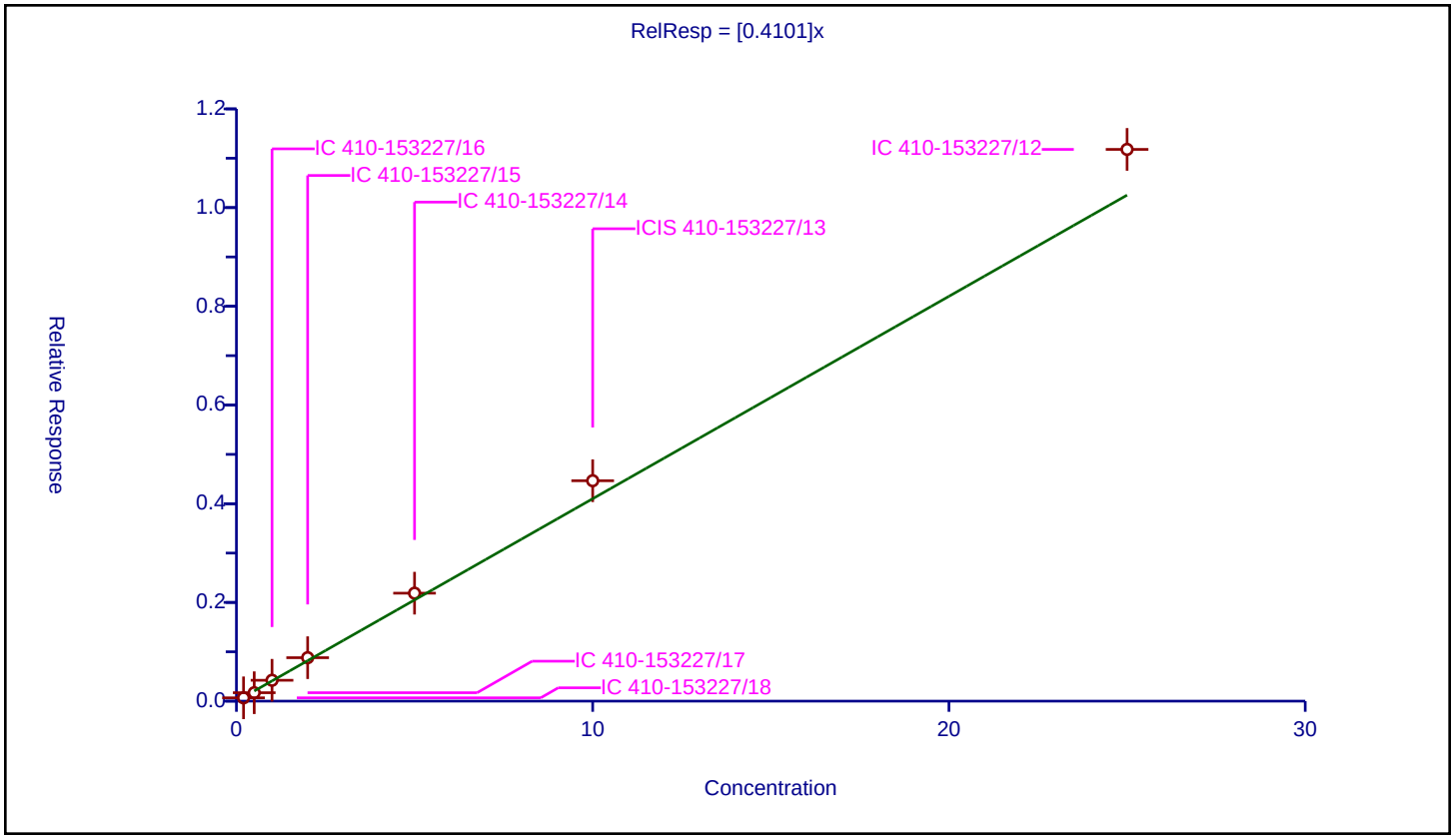
Curve Coefficients

Intercept:	0
Slope:	0.4101

Error Coefficients

Standard Error:	978000
Relative Standard Error:	12.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.067122	10.0	1878059.0	0.335612	Y
2	IC 410-153227/17	0.5	0.170635	10.0	1875578.0	0.341271	Y
3	IC 410-153227/16	1.0	0.422652	10.0	1893045.0	0.422652	Y
4	IC 410-153227/15	2.0	0.880376	10.0	1914569.0	0.440188	Y
5	IC 410-153227/14	5.0	2.187294	10.0	1958598.0	0.437459	Y
6	ICIS 410-153227/13	10.0	4.465767	10.0	1956692.0	0.446577	Y
7	IC 410-153227/12	25.0	11.179059	10.0	1951930.0	0.447162	Y



Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

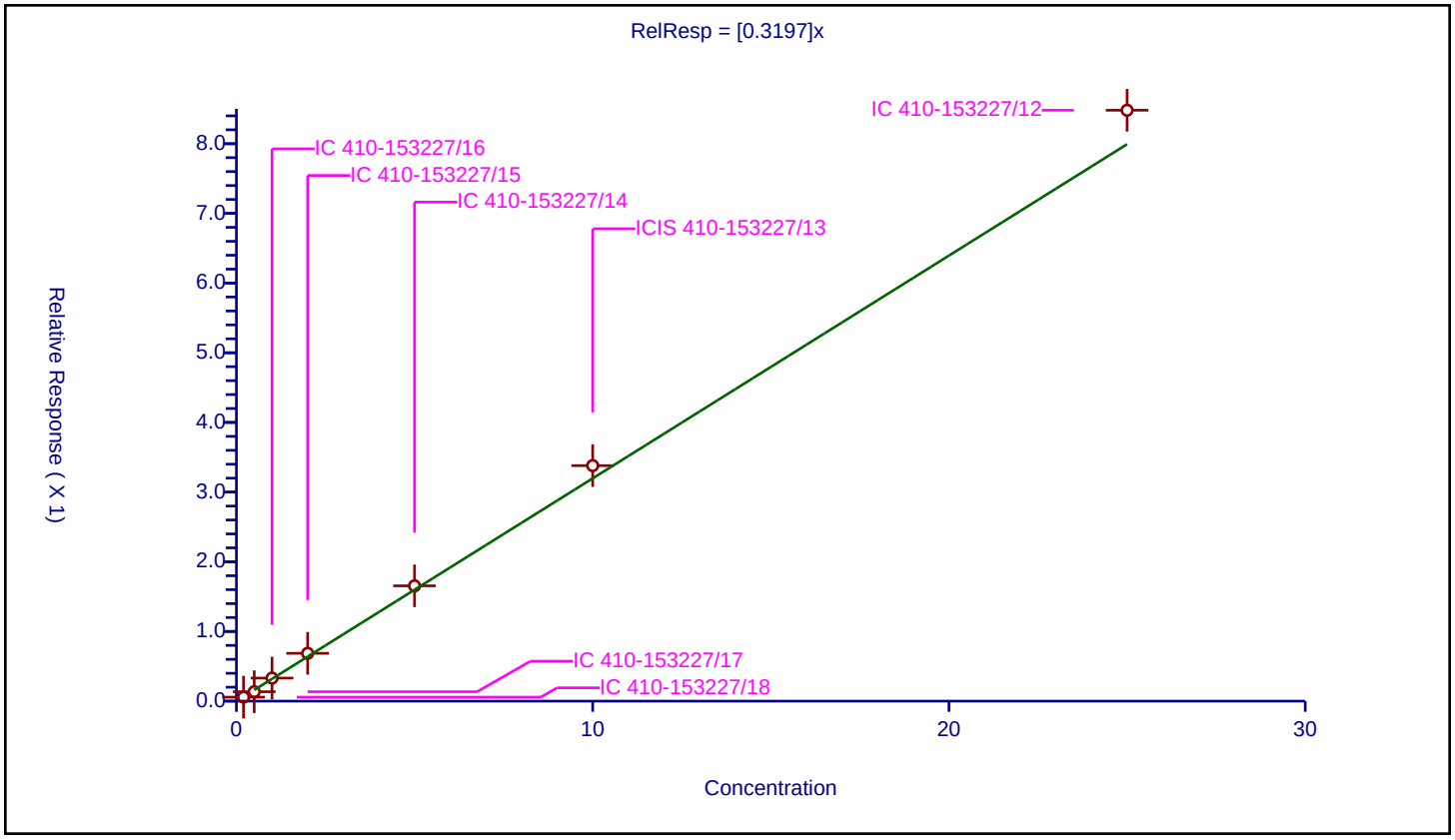
Curve Coefficients

Intercept:	0
Slope:	0.3197

Error Coefficients

Standard Error:	742000
Relative Standard Error:	9.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.057059	10.0	1878059.0	0.285295	Y
2	IC 410-153227/17	0.5	0.13518	10.0	1875578.0	0.270359	Y
3	IC 410-153227/16	1.0	0.331006	10.0	1893045.0	0.331006	Y
4	IC 410-153227/15	2.0	0.686269	10.0	1914569.0	0.343135	Y
5	IC 410-153227/14	5.0	1.65498	10.0	1958598.0	0.330996	Y
6	ICIS 410-153227/13	10.0	3.380251	10.0	1956692.0	0.338025	Y
7	IC 410-153227/12	25.0	8.480688	10.0	1951930.0	0.339228	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

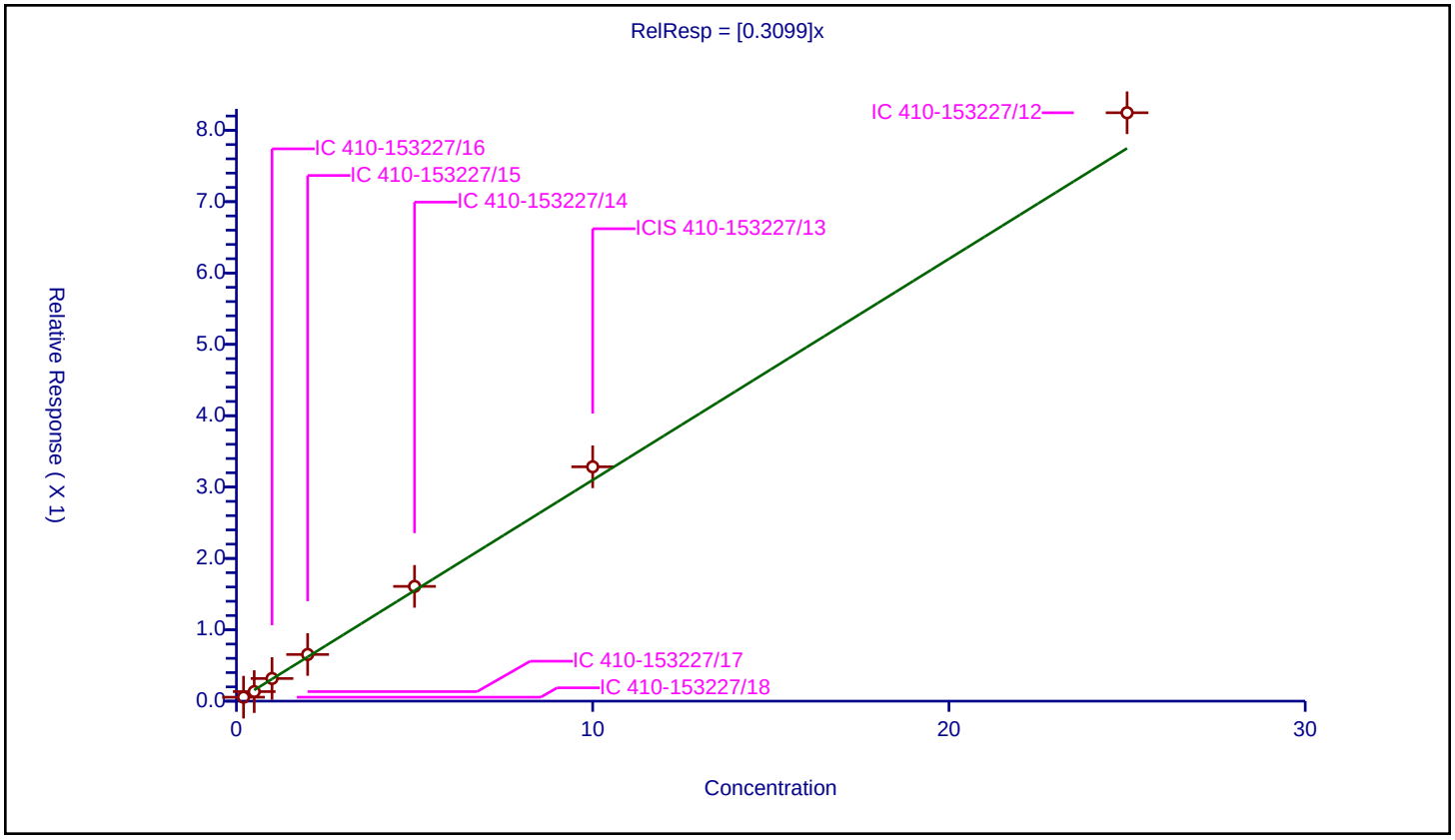
Curve Coefficients

Intercept:	0
Slope:	0.3099

Error Coefficients

Standard Error:	721000
Relative Standard Error:	8.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.055456	10.0	1878059.0	0.277281	Y
2	IC 410-153227/17	0.5	0.133729	10.0	1875578.0	0.267459	Y
3	IC 410-153227/16	1.0	0.317589	10.0	1893045.0	0.317589	Y
4	IC 410-153227/15	2.0	0.654299	10.0	1914569.0	0.327149	Y
5	IC 410-153227/14	5.0	1.608176	10.0	1958598.0	0.321635	Y
6	ICIS 410-153227/13	10.0	3.283951	10.0	1956692.0	0.328395	Y
7	IC 410-153227/12	25.0	8.245916	10.0	1951930.0	0.329837	Y



Calibration / Isobutyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

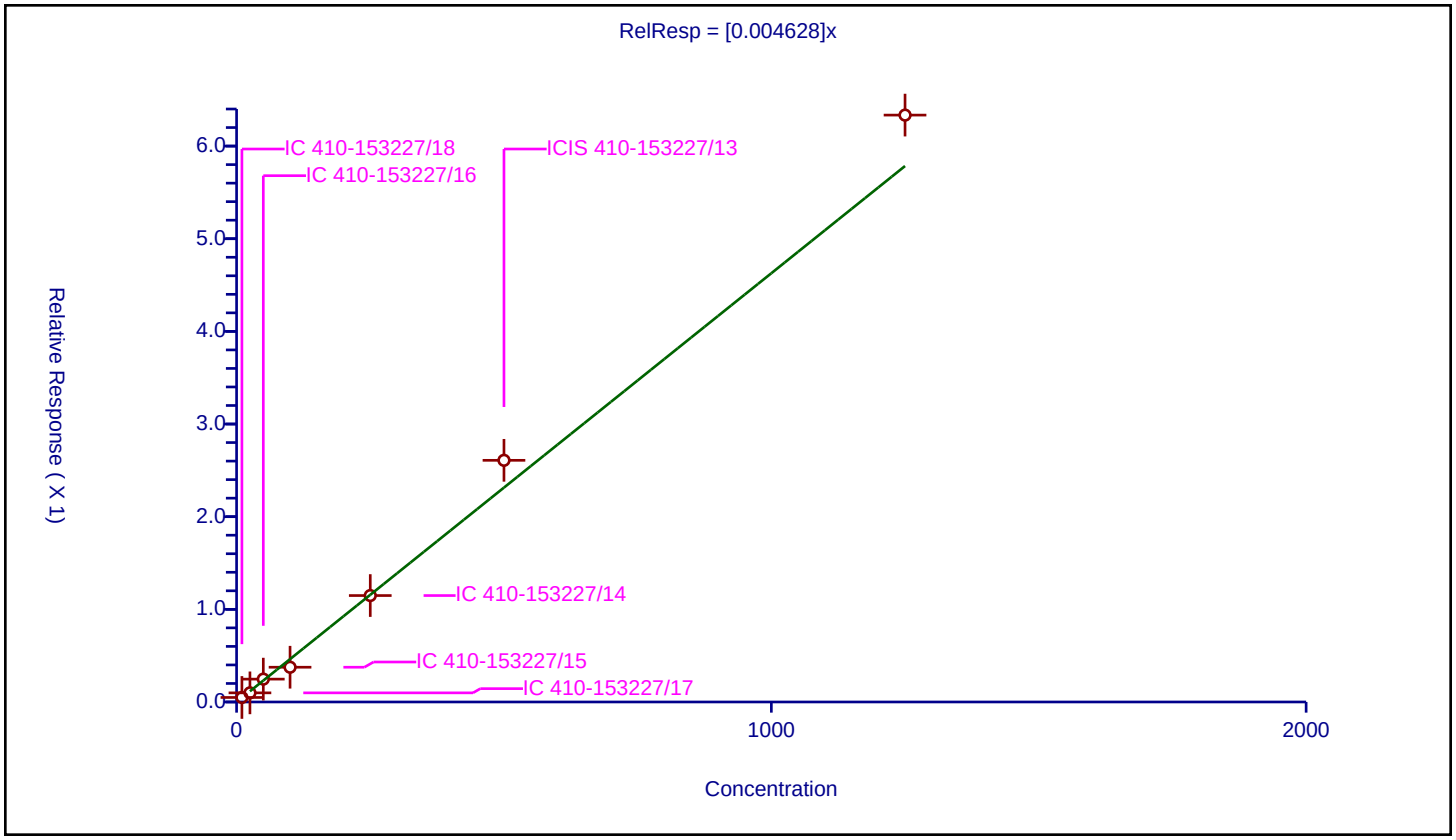
Curve Coefficients

Intercept:	0
Slope:	0.004628

Error Coefficients

Standard Error:	555000
Relative Standard Error:	12.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.980

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	10.0	0.0488	10.0	1878059.0	0.00488	Y
2	IC 410-153227/17	25.0	0.09861	10.0	1875578.0	0.003944	Y
3	IC 410-153227/16	50.0	0.246941	10.0	1893045.0	0.004939	Y
4	IC 410-153227/15	100.0	0.375077	10.0	1914569.0	0.003751	Y
5	IC 410-153227/14	250.0	1.148786	10.0	1958598.0	0.004595	Y
6	ICIS 410-153227/13	500.0	2.608407	10.0	1956692.0	0.005217	Y
7	IC 410-153227/12	1250.0	6.334244	10.0	1951930.0	0.005067	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

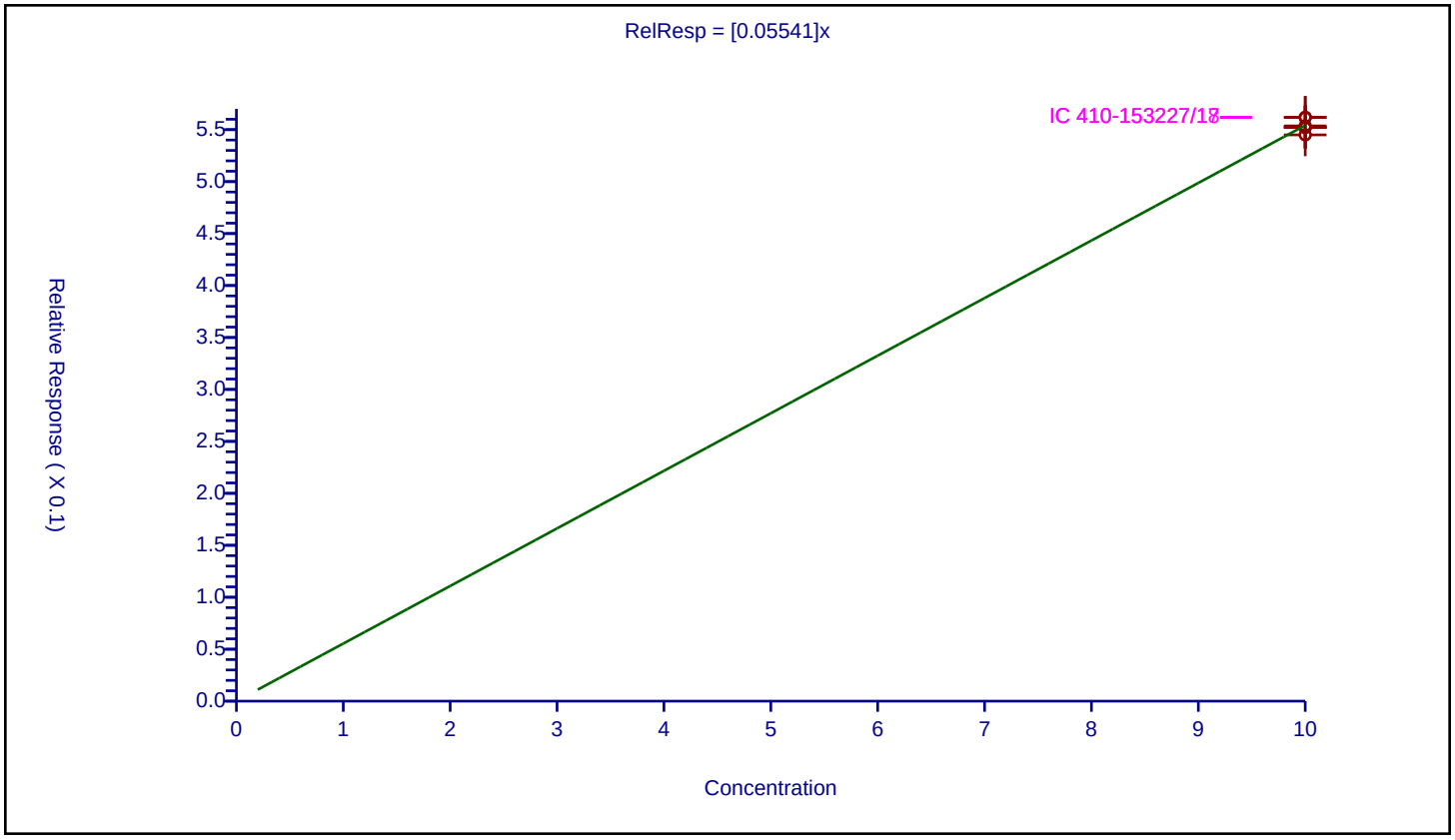
Curve Coefficients

Intercept:	0
Slope:	0.05541

Error Coefficients

Standard Error:	115000
Relative Standard Error:	1.1
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/14	10.0	0.544982	10.0	1958598.0	0.054498	Y
2	ICIS 410-153227/13	10.0	0.552289	10.0	1956692.0	0.055229	Y
3	IC 410-153227/12	10.0	0.553632	10.0	1951930.0	0.055363	Y
4	IC 410-153227/15	10.0	0.552312	10.0	1914569.0	0.055231	Y
5	IC 410-153227/16	10.0	0.552116	10.0	1893045.0	0.055212	Y
6	IC 410-153227/17	10.0	0.561827	10.0	1875578.0	0.056183	Y
7	IC 410-153227/18	10.0	0.561819	10.0	1878059.0	0.056182	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

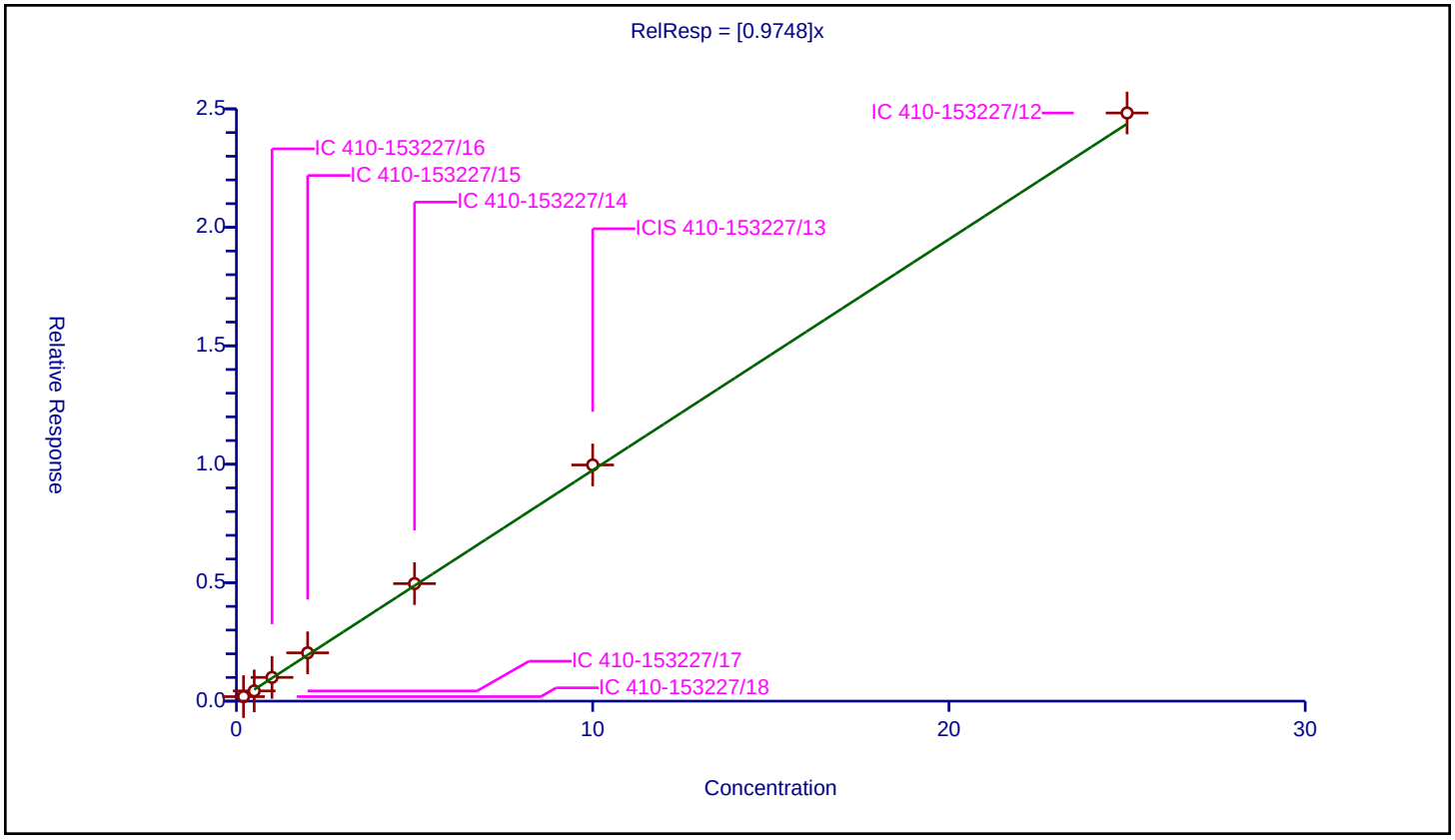
Curve Coefficients

Intercept:	0
Slope:	0.9748

Error Coefficients

Standard Error:	2180000
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 410-153227/18	0.2	0.190809	10.0	1878059.0	0.954044	Y
2	IC 410-153227/17	0.5	0.43208	10.0	1875578.0	0.86416	Y
3	IC 410-153227/16	1.0	1.002855	10.0	1893045.0	1.002855	Y
4	IC 410-153227/15	2.0	2.040412	10.0	1914569.0	1.020206	Y
5	IC 410-153227/14	5.0	4.961411	10.0	1958598.0	0.992282	Y
6	ICIS 410-153227/13	10.0	9.96973	10.0	1956692.0	0.996973	Y
7	IC 410-153227/12	25.0	24.82692	10.0	1951930.0	0.993077	Y



Calibration / 1,2-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

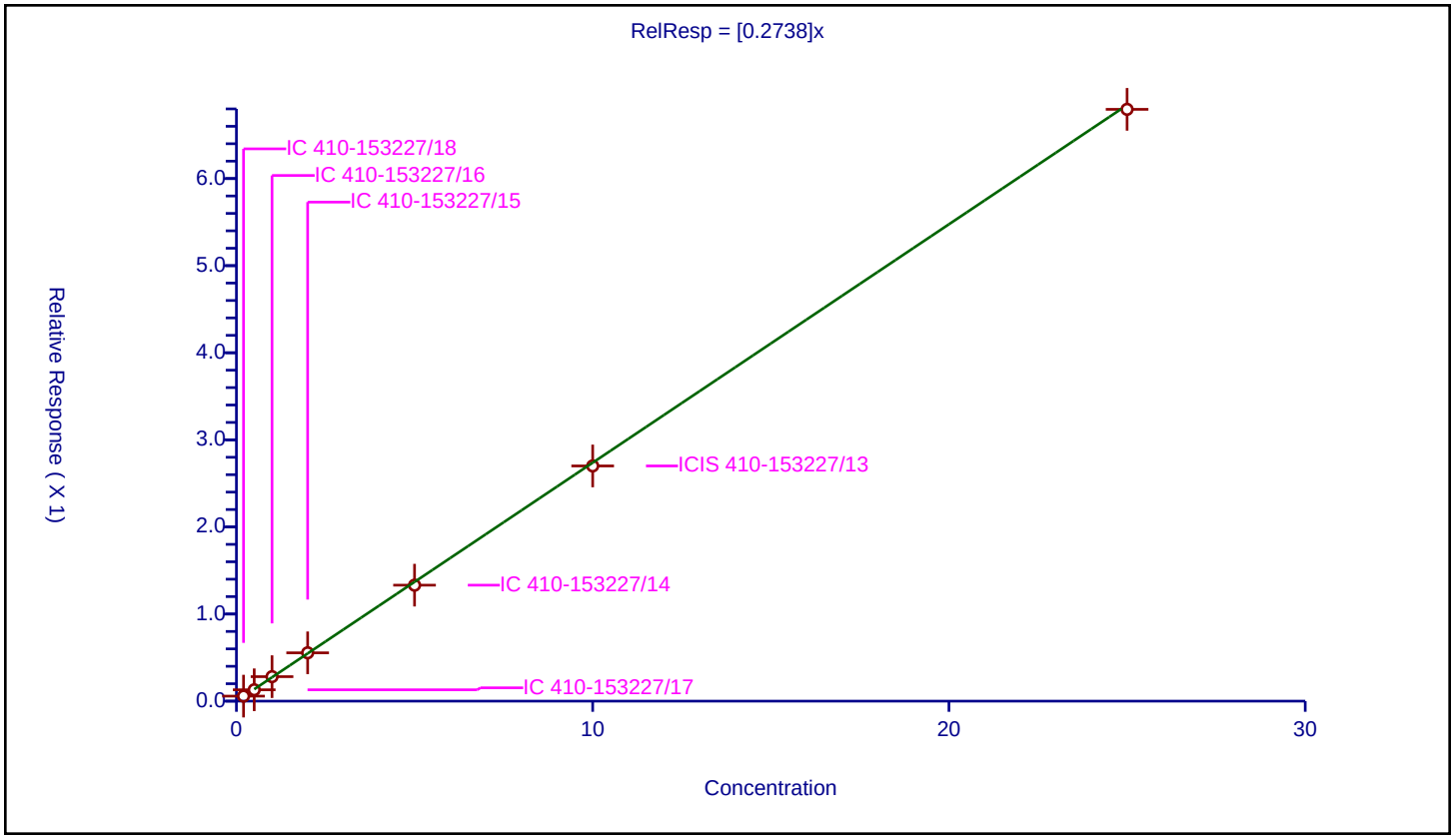
Curve Coefficients

Intercept:	0
Slope:	0.2738

Error Coefficients

Standard Error:	595000
Relative Standard Error:	3.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.057703	10.0	1878059.0	0.288516	Y
2	IC 410-153227/17	0.5	0.13053	10.0	1875578.0	0.261061	Y
3	IC 410-153227/16	1.0	0.28115	10.0	1893045.0	0.28115	Y
4	IC 410-153227/15	2.0	0.554903	10.0	1914569.0	0.277451	Y
5	IC 410-153227/14	5.0	1.331468	10.0	1958598.0	0.266294	Y
6	ICIS 410-153227/13	10.0	2.700466	10.0	1956692.0	0.270047	Y
7	IC 410-153227/12	25.0	6.794813	10.0	1951930.0	0.271793	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

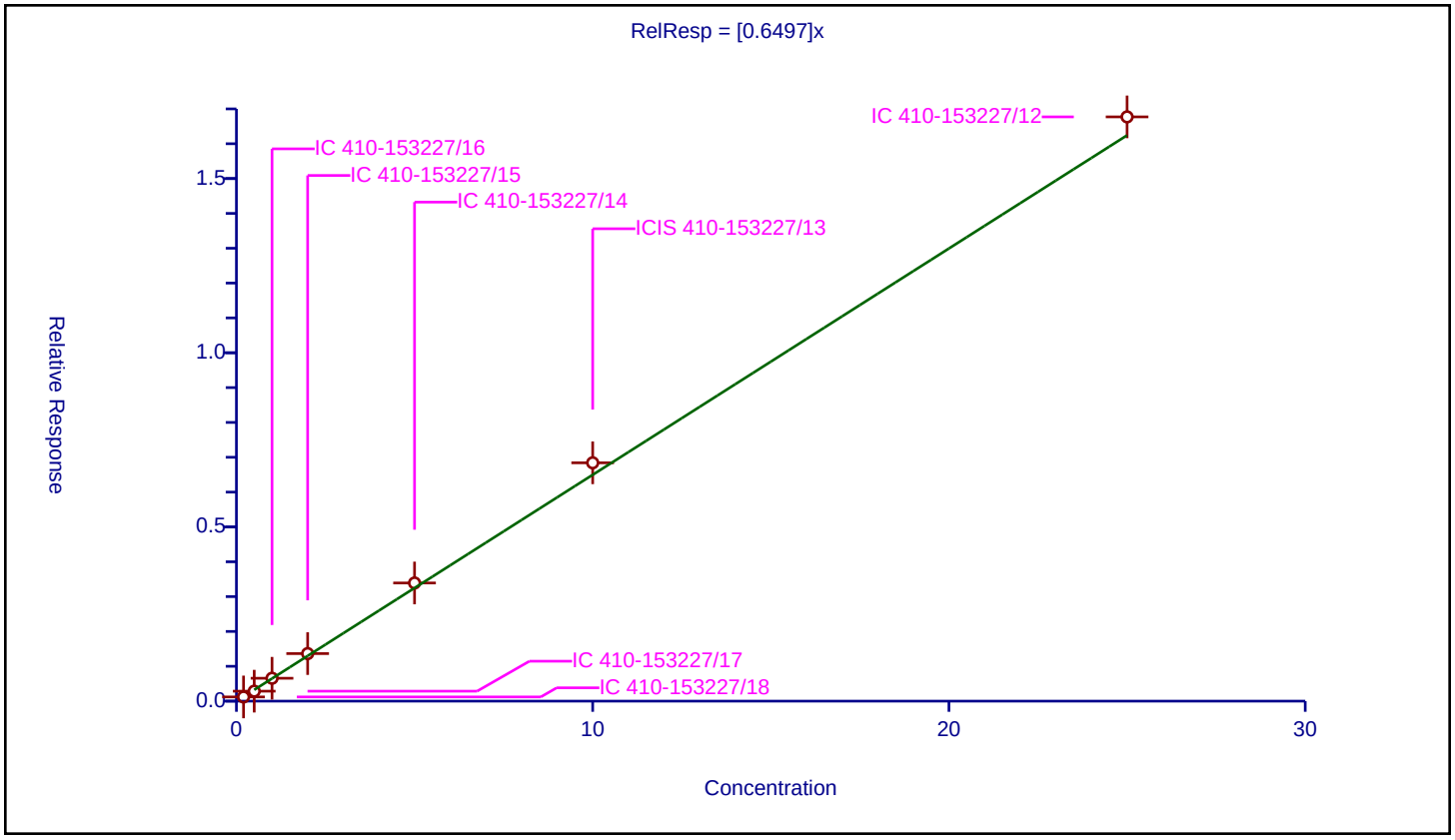
Curve Coefficients

Intercept:	0
Slope:	0.6497

Error Coefficients

Standard Error:	1470000
Relative Standard Error:	6.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.120332	10.0	1878059.0	0.601658	Y
2	IC 410-153227/17	0.5	0.286386	10.0	1875578.0	0.572773	Y
3	IC 410-153227/16	1.0	0.657375	10.0	1893045.0	0.657375	Y
4	IC 410-153227/15	2.0	1.365195	10.0	1914569.0	0.682597	Y
5	IC 410-153227/14	5.0	3.391891	10.0	1958598.0	0.678378	Y
6	ICIS 410-153227/13	10.0	6.840877	10.0	1956692.0	0.684088	Y
7	IC 410-153227/12	25.0	16.770893	10.0	1951930.0	0.670836	Y



Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

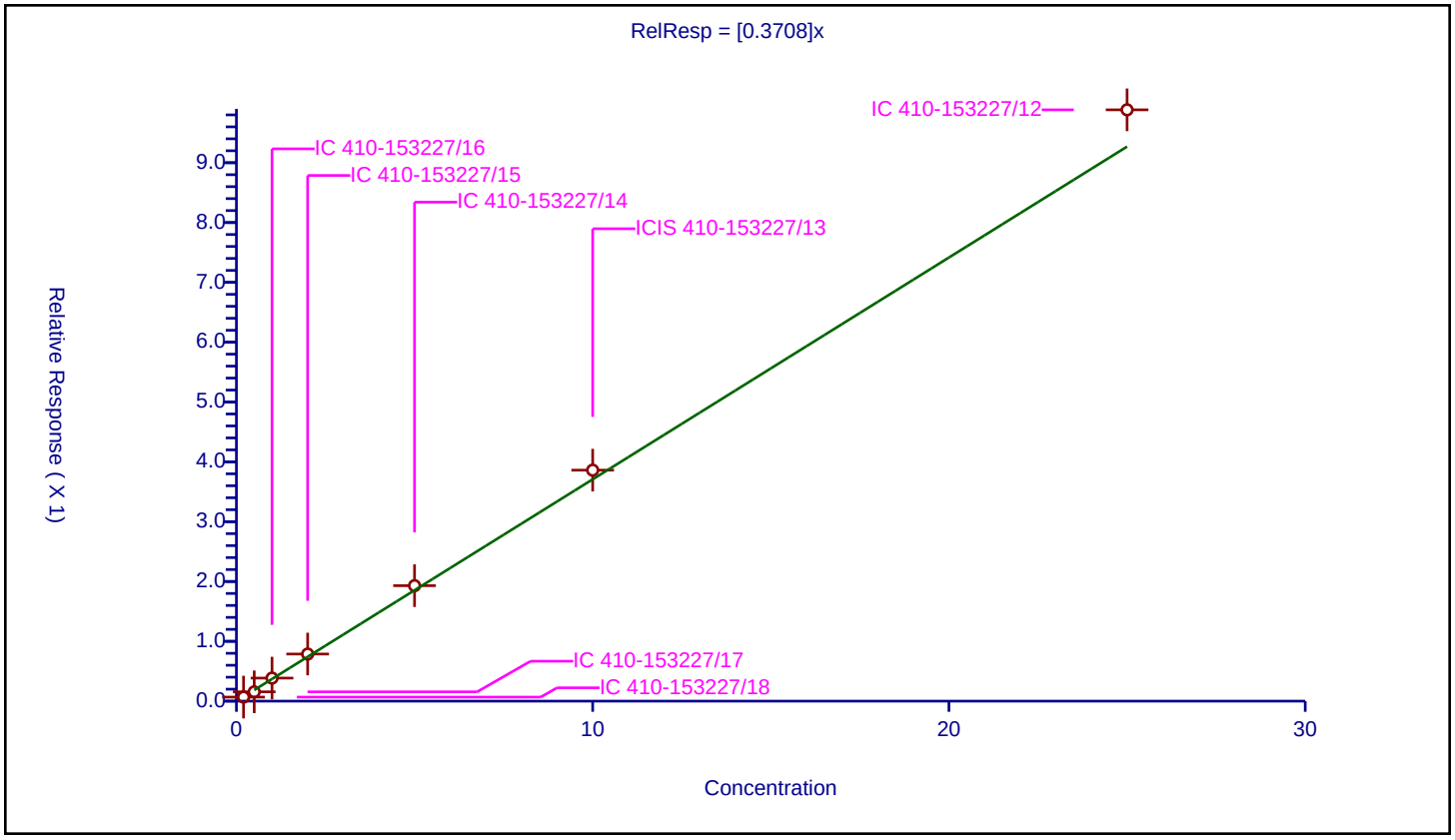
Curve Coefficients

Intercept:	0
Slope:	0.3708

Error Coefficients

Standard Error:	863000
Relative Standard Error:	8.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.067559	10.0	1878059.0	0.337796	Y
2	IC 410-153227/17	0.5	0.155568	10.0	1875578.0	0.311136	Y
3	IC 410-153227/16	1.0	0.385268	10.0	1893045.0	0.385268	Y
4	IC 410-153227/15	2.0	0.787451	10.0	1914569.0	0.393726	Y
5	IC 410-153227/14	5.0	1.930095	10.0	1958598.0	0.386019	Y
6	ICIS 410-153227/13	10.0	3.86095	10.0	1956692.0	0.386095	Y
7	IC 410-153227/12	25.0	9.884499	10.0	1951930.0	0.39538	Y



Calibration / n-Butanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

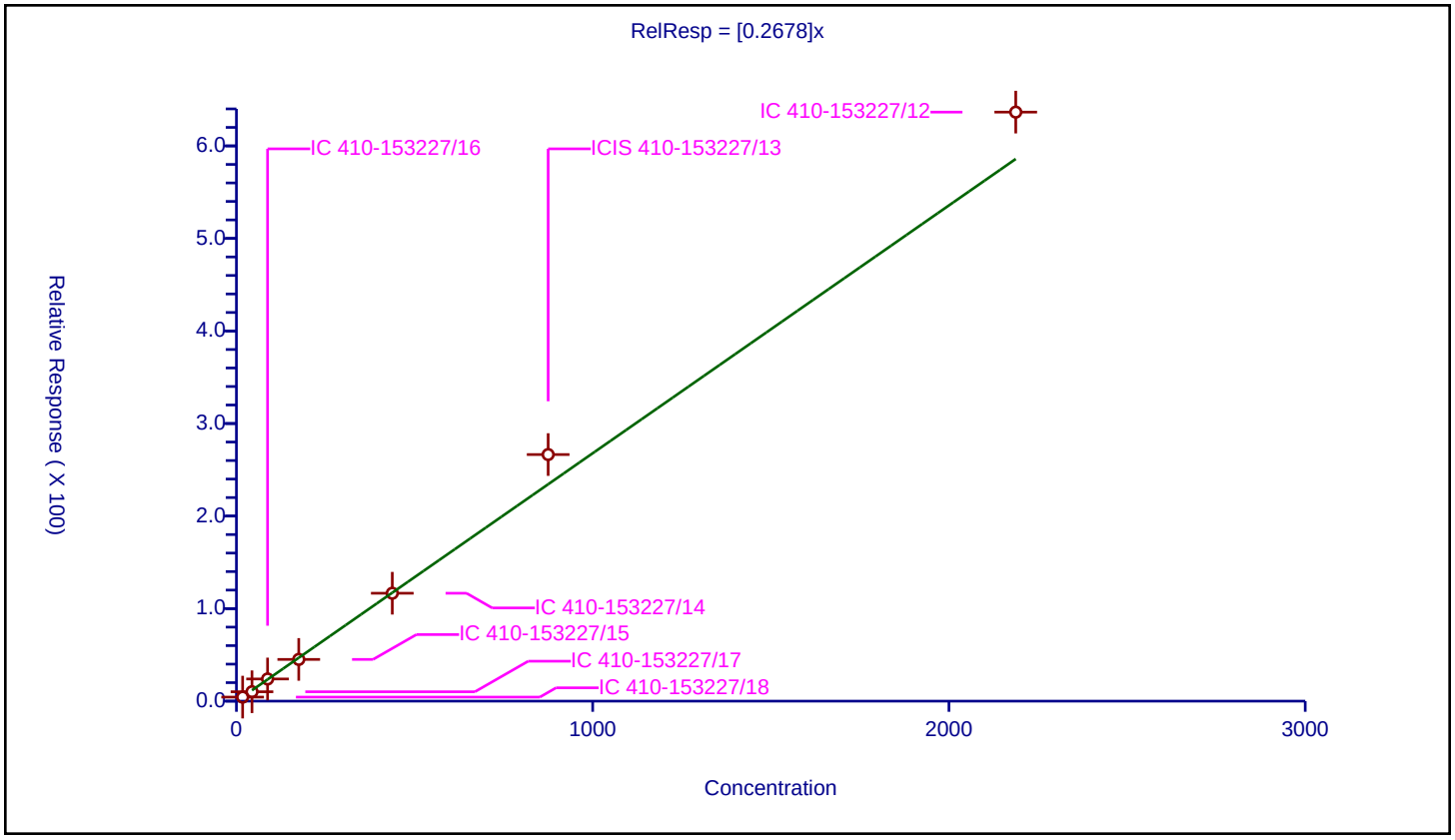
Curve Coefficients

Intercept:	0
Slope:	0.2678

Error Coefficients

Standard Error:	795000
Relative Standard Error:	9.2
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	17.5	4.363798	50.0	158566.0	0.24936	Y
2	IC 410-153227/17	43.75	10.156298	50.0	146579.0	0.232144	Y
3	IC 410-153227/16	87.5	23.95721	50.0	143773.0	0.273797	Y
4	IC 410-153227/15	175.0	45.076195	50.0	119562.0	0.257578	Y
5	IC 410-153227/14	437.5	116.600009	50.0	140518.0	0.266514	Y
6	ICIS 410-153227/13	875.0	266.465232	50.0	143636.0	0.304532	Y
7	IC 410-153227/12	2187.5	636.505916	50.0	137853.0	0.290974	Y



Calibration / Trichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

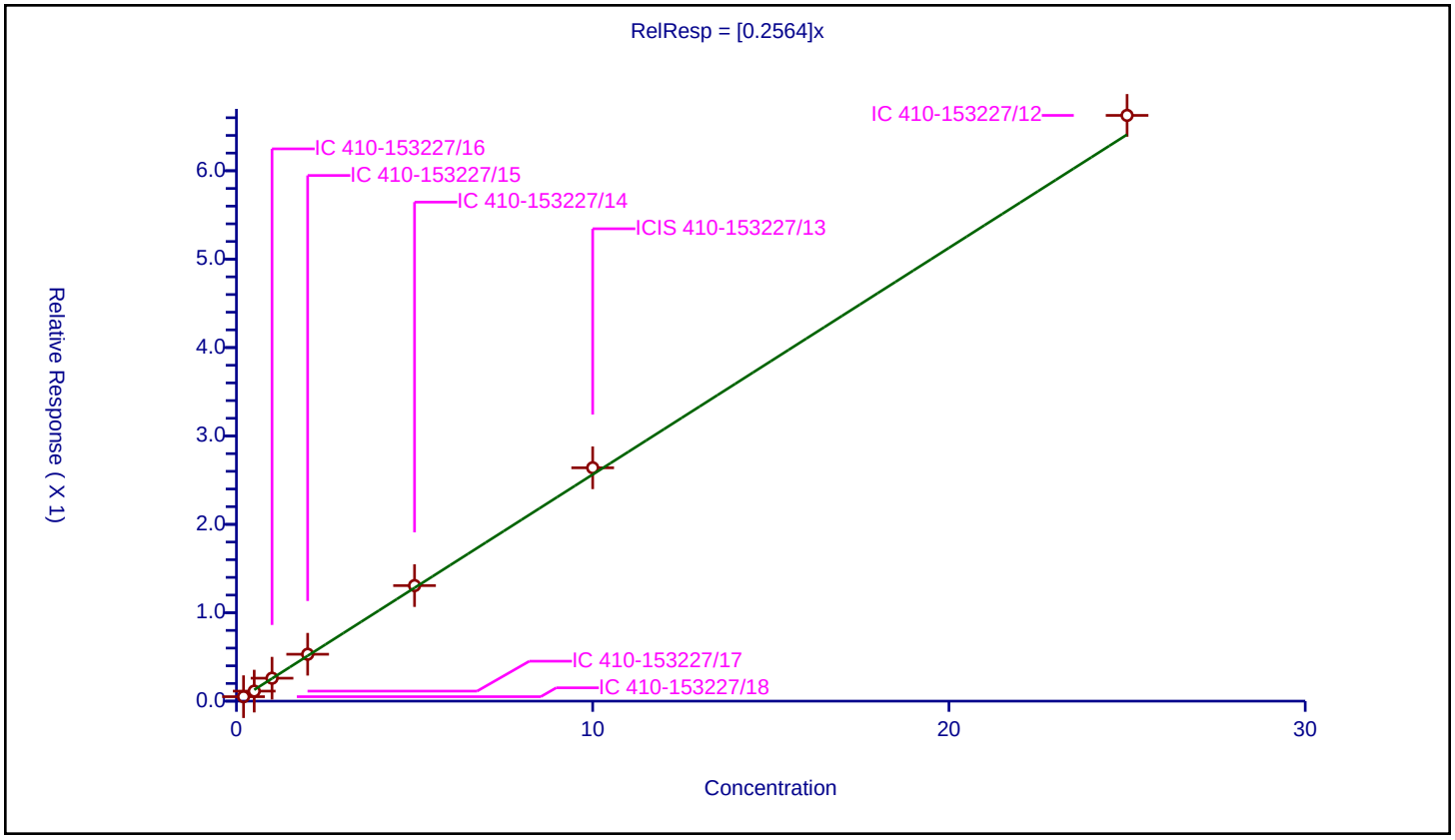
Curve Coefficients

Intercept:	0
Slope:	0.2564

Error Coefficients

Standard Error:	580000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.050446	10.0	1878059.0	0.252228	Y
2	IC 410-153227/17	0.5	0.113554	10.0	1875578.0	0.227109	Y
3	IC 410-153227/16	1.0	0.259619	10.0	1893045.0	0.259619	Y
4	IC 410-153227/15	2.0	0.530501	10.0	1914569.0	0.26525	Y
5	IC 410-153227/14	5.0	1.307129	10.0	1958598.0	0.261426	Y
6	ICIS 410-153227/13	10.0	2.639899	10.0	1956692.0	0.26399	Y
7	IC 410-153227/12	25.0	6.626626	10.0	1951930.0	0.265065	Y



Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

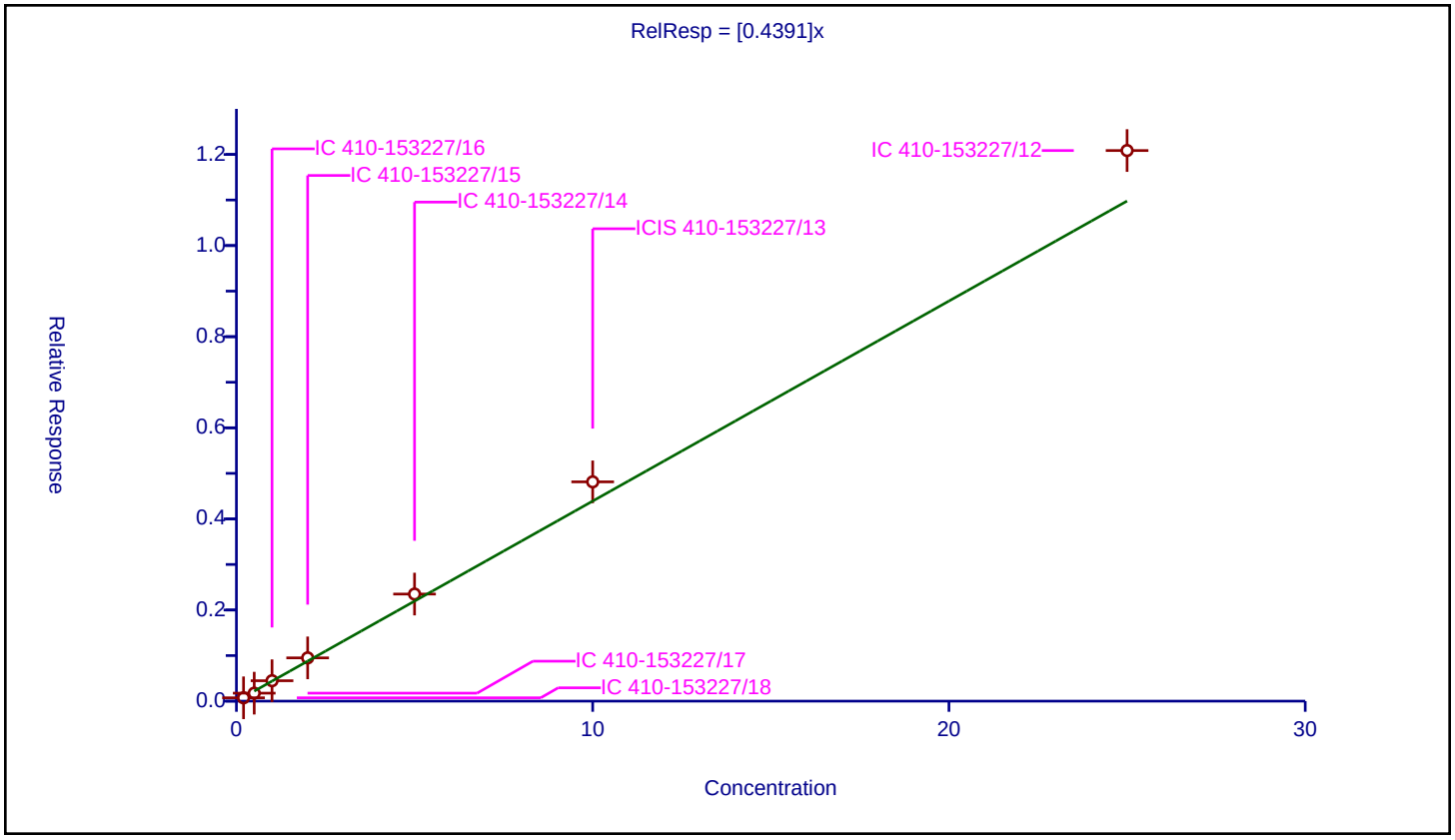
Curve Coefficients

Intercept:	0
Slope:	0.4391

Error Coefficients

Standard Error:	1060000
Relative Standard Error:	12.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.073193	10.0	1878059.0	0.365963	Y
2	IC 410-153227/17	0.5	0.175114	10.0	1875578.0	0.350228	Y
3	IC 410-153227/16	1.0	0.447845	10.0	1893045.0	0.447845	Y
4	IC 410-153227/15	2.0	0.949775	10.0	1914569.0	0.474888	Y
5	IC 410-153227/14	5.0	2.350513	10.0	1958598.0	0.470103	Y
6	ICIS 410-153227/13	10.0	4.813348	10.0	1956692.0	0.481335	Y
7	IC 410-153227/12	25.0	12.085859	10.0	1951930.0	0.483434	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

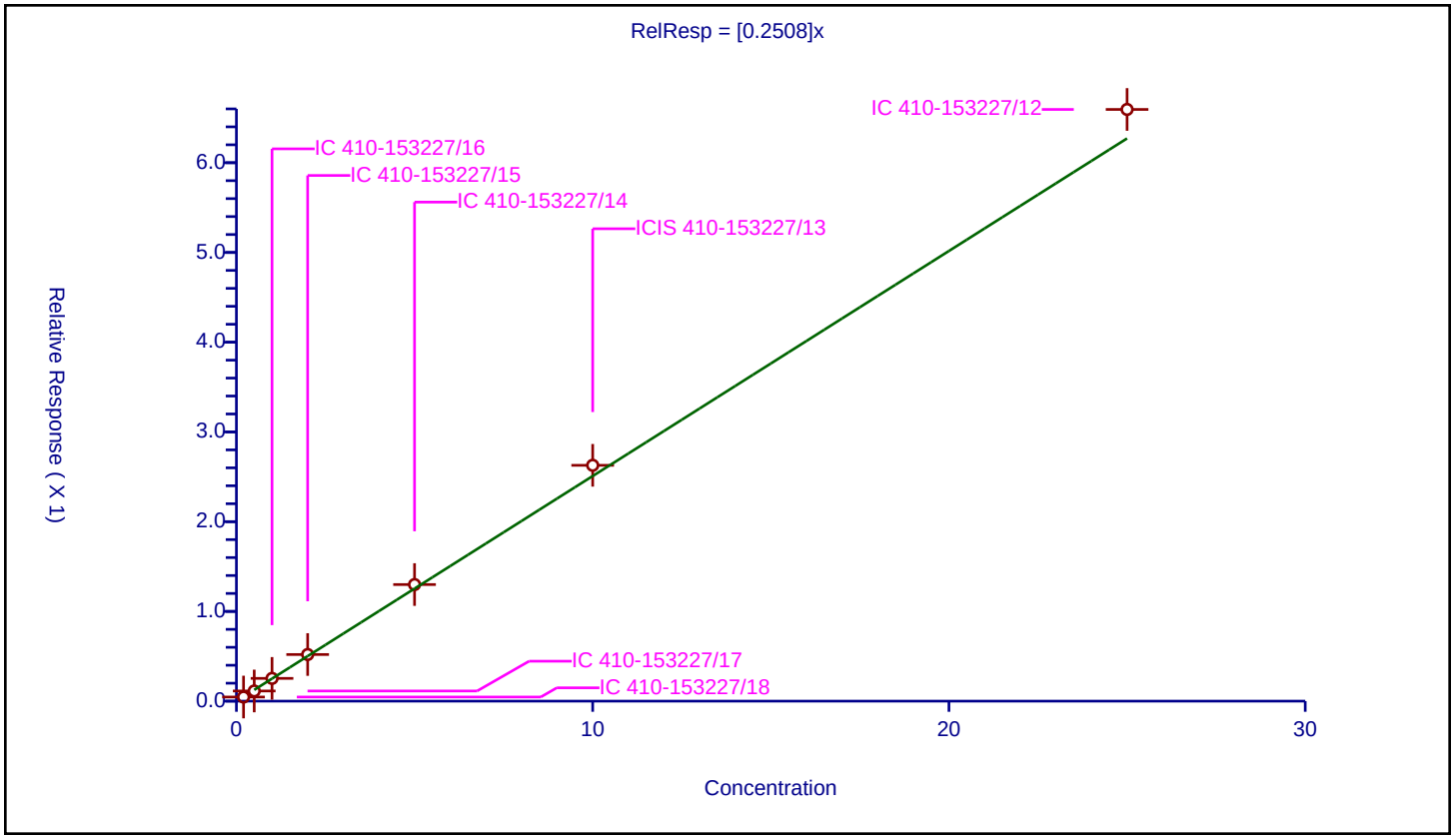
Curve Coefficients

Intercept:	0
Slope:	0.2508

Error Coefficients

Standard Error:	577000
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 410-153227/18	0.2	0.04592	10.0	1878059.0	0.229599	Y
2	IC 410-153227/17	0.5	0.113266	10.0	1875578.0	0.226533	Y
3	IC 410-153227/16	1.0	0.253539	10.0	1893045.0	0.253539	Y
4	IC 410-153227/15	2.0	0.519563	10.0	1914569.0	0.259782	Y
5	IC 410-153227/14	5.0	1.299281	10.0	1958598.0	0.259856	Y
6	ICIS 410-153227/13	10.0	2.628186	10.0	1956692.0	0.262819	Y
7	IC 410-153227/12	25.0	6.593679	10.0	1951930.0	0.263747	Y



Calibration / Methyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

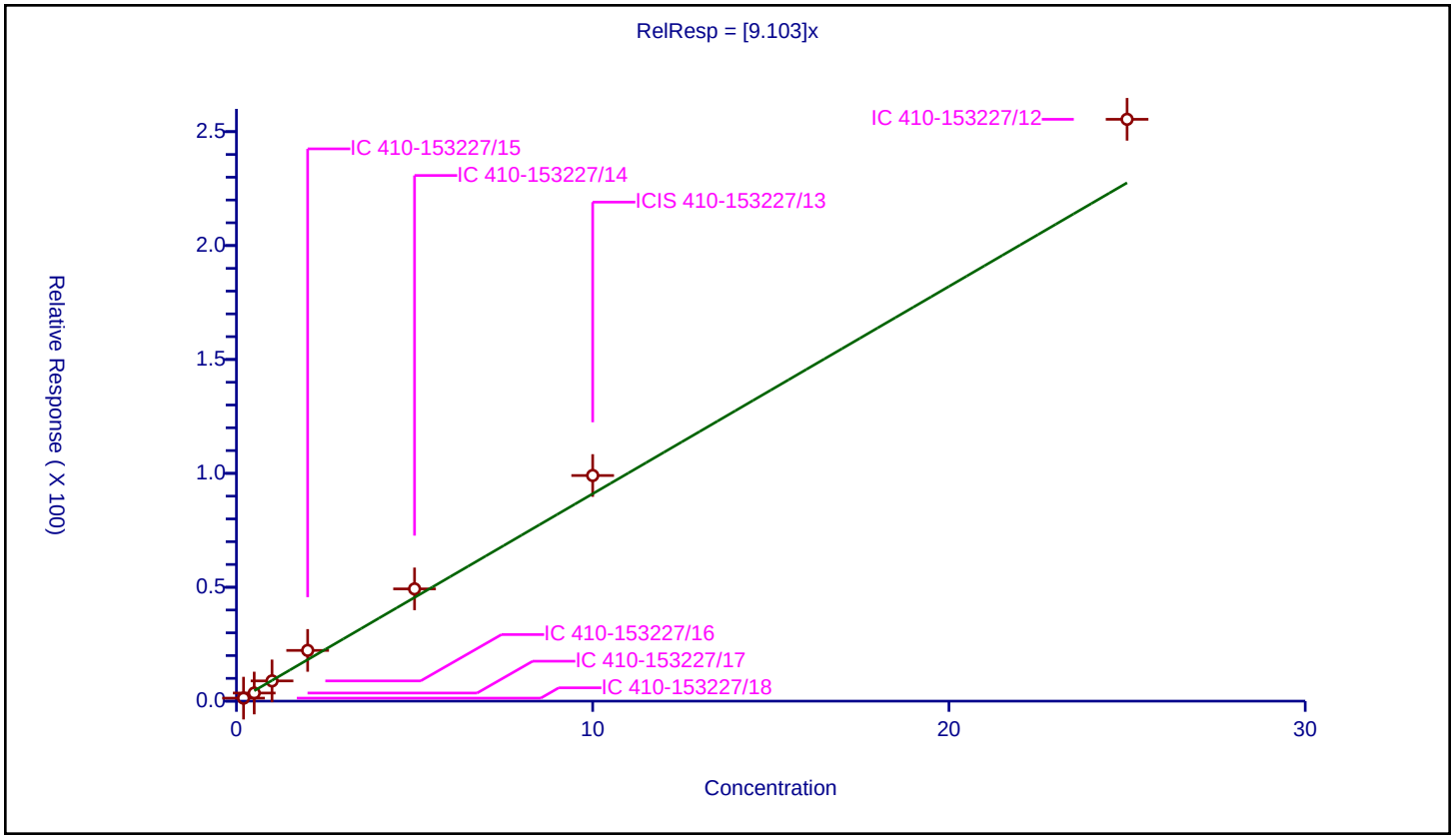
Curve Coefficients

Intercept:	0
Slope:	9.103

Error Coefficients

Standard Error:	316000
Relative Standard Error:	18.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.963

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	1.318694	50.0	158566.0	6.593469	Y
2	IC 410-153227/17	0.5	3.565995	50.0	146579.0	7.13199	Y
3	IC 410-153227/16	1.0	8.880318	50.0	143773.0	8.880318	Y
4	IC 410-153227/15	2.0	22.269617	50.0	119562.0	11.134809	Y
5	IC 410-153227/14	5.0	49.282654	50.0	140518.0	9.856531	Y
6	ICIS 410-153227/13	10.0	99.048289	50.0	143636.0	9.904829	Y
7	IC 410-153227/12	25.0	255.431148	50.0	137853.0	10.217246	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

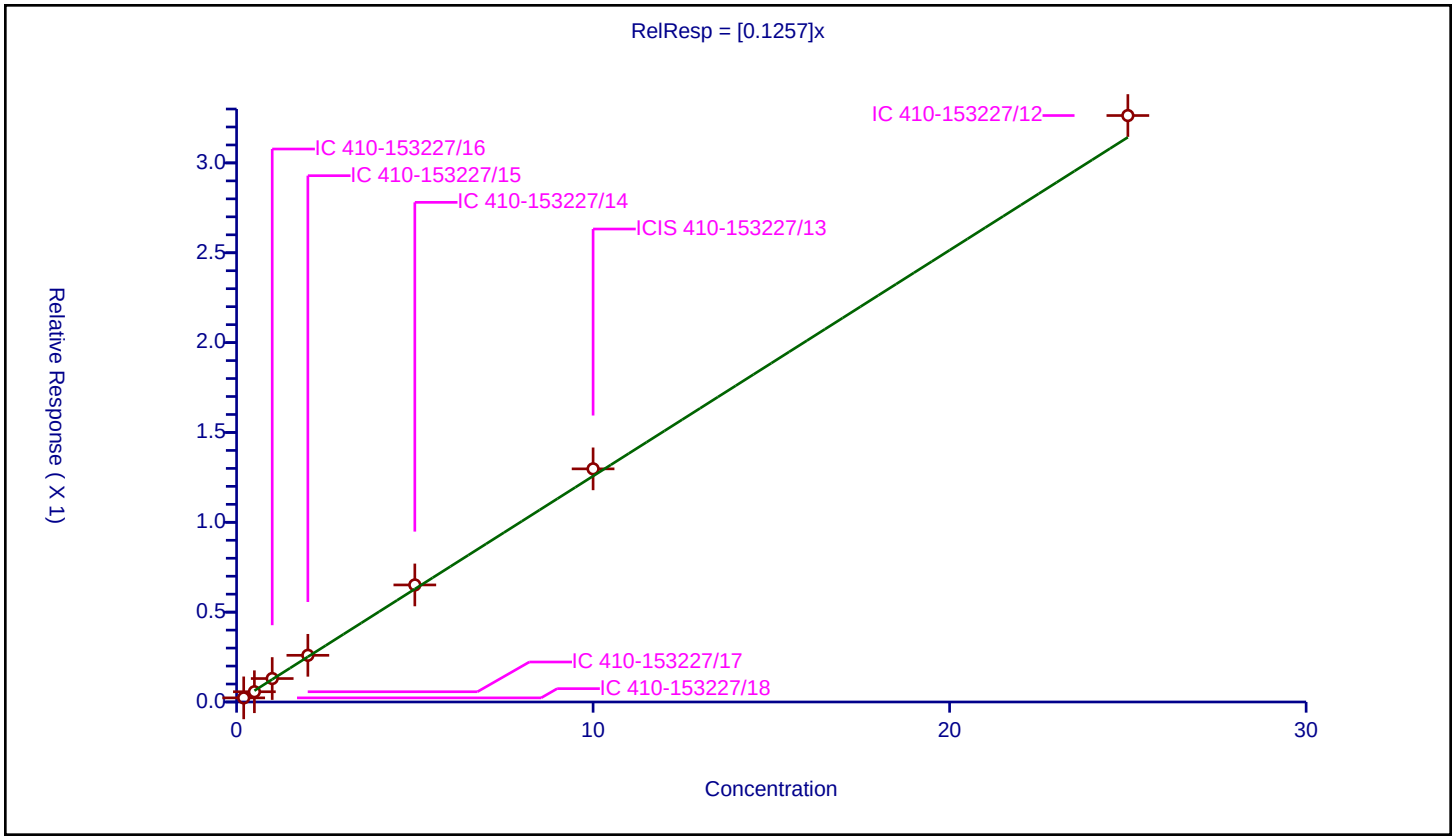
Curve Coefficients

Intercept:	0
Slope:	0.1257

Error Coefficients

Standard Error:	286000
Relative Standard Error:	6.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.022986	10.0	1878059.0	0.114932	Y
2	IC 410-153227/17	0.5	0.057054	10.0	1875578.0	0.114109	Y
3	IC 410-153227/16	1.0	0.13052	10.0	1893045.0	0.13052	Y
4	IC 410-153227/15	2.0	0.25974	10.0	1914569.0	0.12987	Y
5	IC 410-153227/14	5.0	0.651456	10.0	1958598.0	0.130291	Y
6	ICIS 410-153227/13	10.0	1.297384	10.0	1956692.0	0.129738	Y
7	IC 410-153227/12	25.0	3.263713	10.0	1951930.0	0.130549	Y



Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

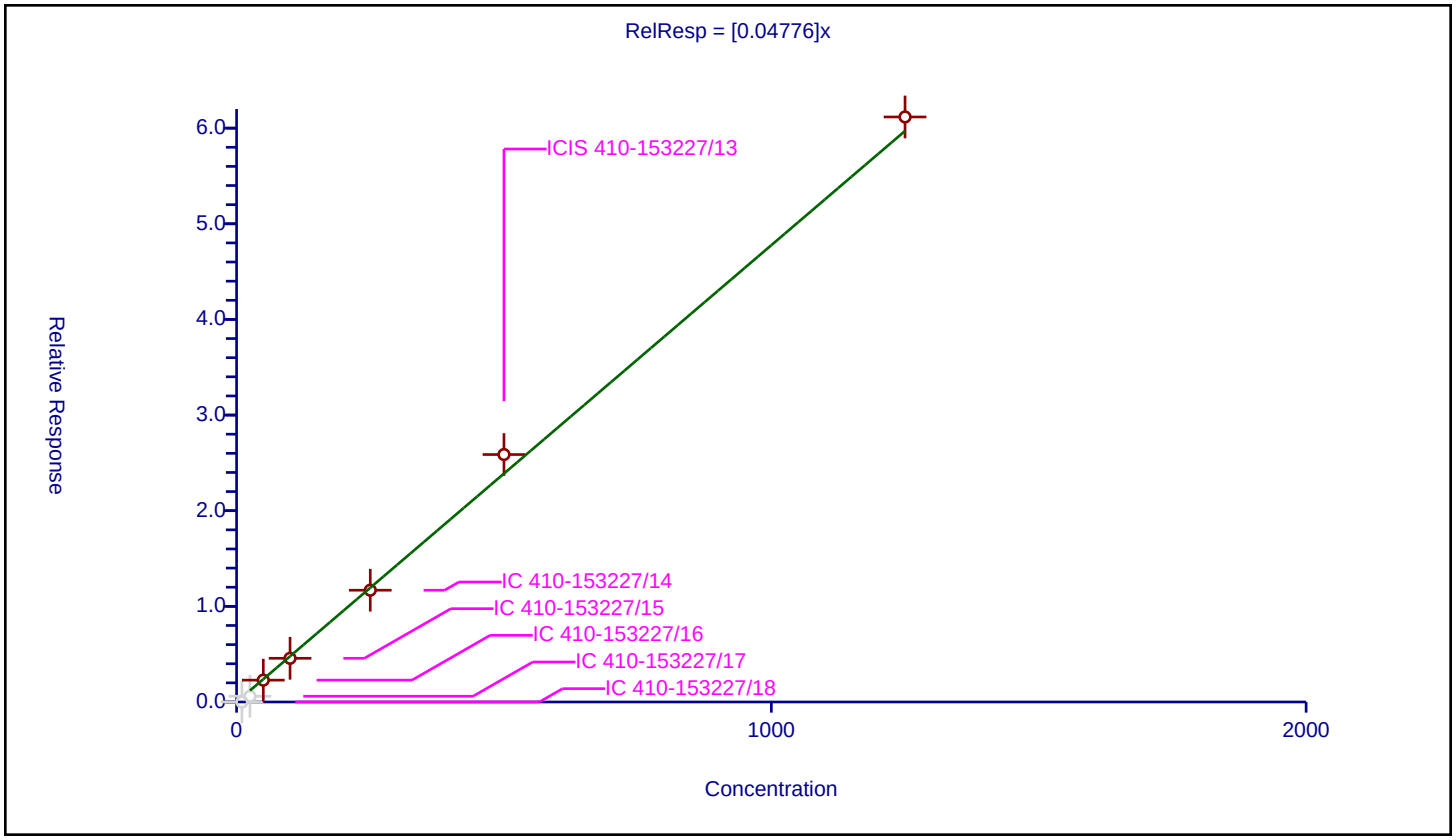
Curve Coefficients

Intercept:	0
Slope:	0.04776

Error Coefficients

Standard Error:	93800
Relative Standard Error:	5.4
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	10.0	0.0	50.0	158566.0	0.0	N
2	IC 410-153227/17	25.0	0.597971	50.0	146579.0	0.023919	N
3	IC 410-153227/16	50.0	2.285547	50.0	143773.0	0.045711	Y
4	IC 410-153227/15	100.0	4.567923	50.0	119562.0	0.045679	Y
5	IC 410-153227/14	250.0	11.686403	50.0	140518.0	0.046746	Y
6	ICIS 410-153227/13	500.0	25.874084	50.0	143636.0	0.051748	Y
7	IC 410-153227/12	1250.0	61.169144	50.0	137853.0	0.048935	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

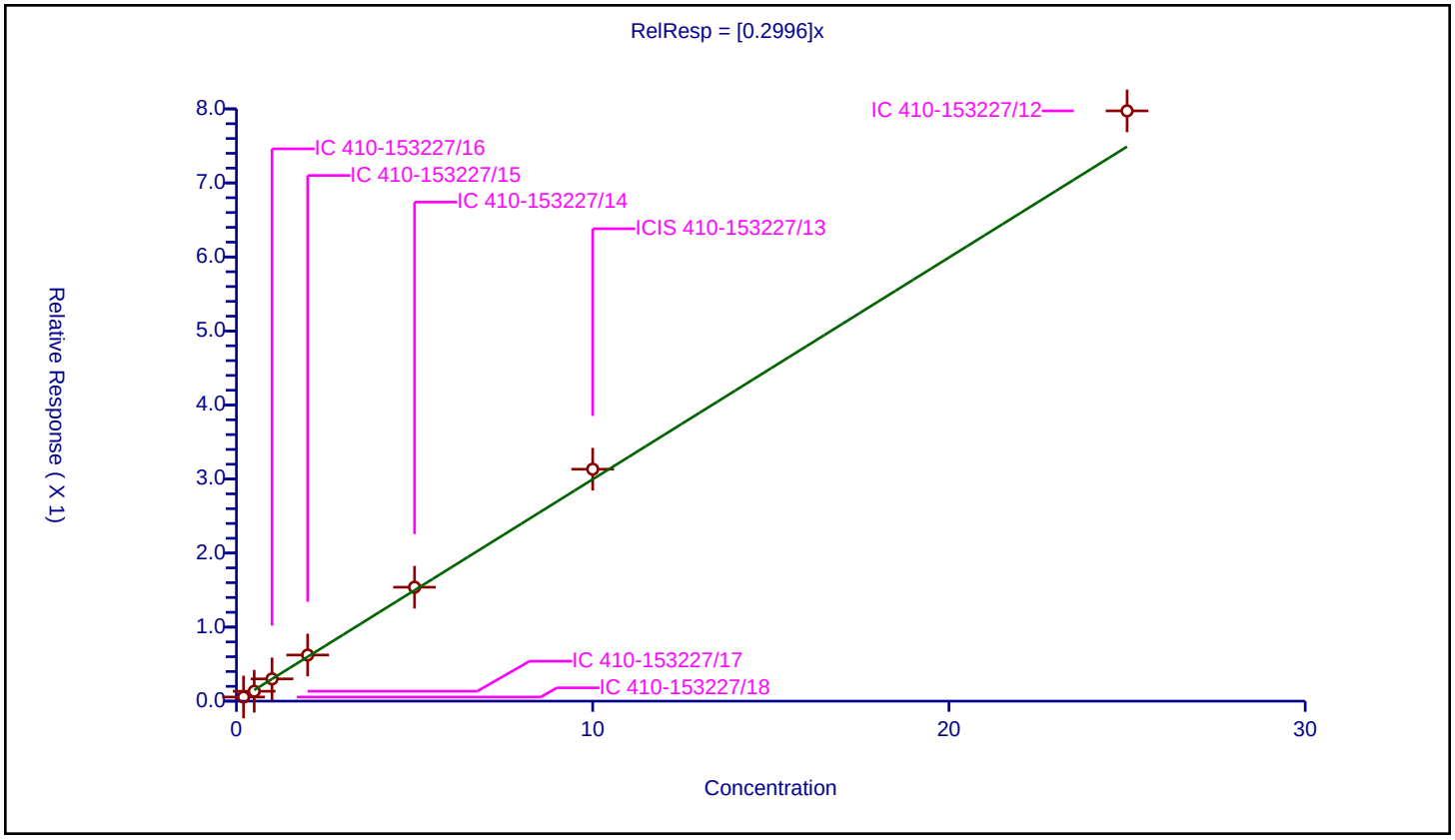
Curve Coefficients

Intercept:	0
Slope:	0.2996

Error Coefficients

Standard Error:	696000
Relative Standard Error:	6.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.055589	10.0	1878059.0	0.277947	Y
2	IC 410-153227/17	0.5	0.133649	10.0	1875578.0	0.267299	Y
3	IC 410-153227/16	1.0	0.300711	10.0	1893045.0	0.300711	Y
4	IC 410-153227/15	2.0	0.622756	10.0	1914569.0	0.311378	Y
5	IC 410-153227/14	5.0	1.538779	10.0	1958598.0	0.307756	Y
6	ICIS 410-153227/13	10.0	3.133068	10.0	1956692.0	0.313307	Y
7	IC 410-153227/12	25.0	7.973155	10.0	1951930.0	0.318926	Y



Calibration / 2-Nitropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

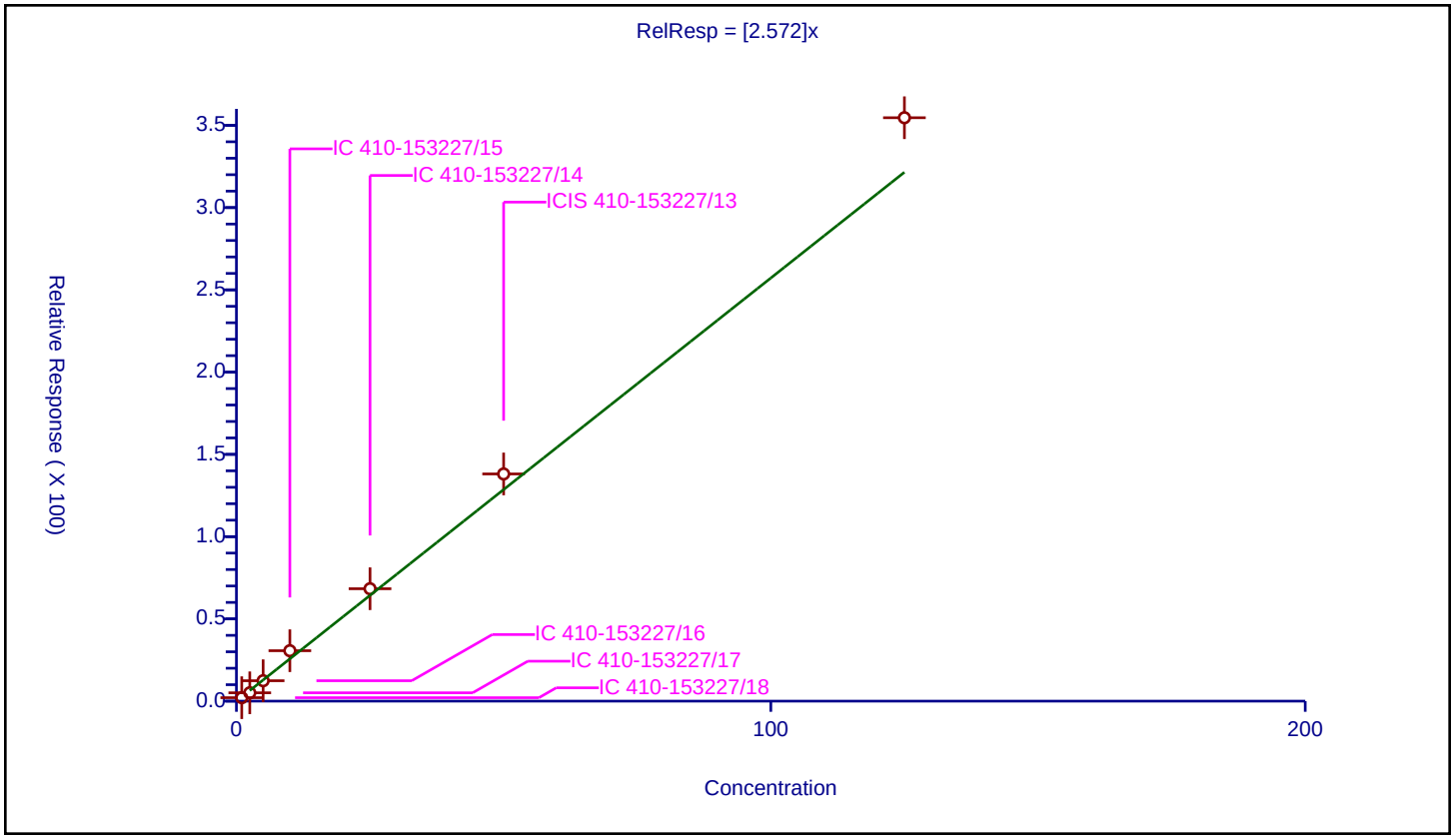
Curve Coefficients

Intercept:	0
Slope:	2.572

Error Coefficients

Standard Error:	439000
Relative Standard Error:	15.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.974

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	1.0	2.092819	50.0	158566.0	2.092819	Y
2	IC 410-153227/17	2.5	5.082242	50.0	146579.0	2.032897	Y
3	IC 410-153227/16	5.0	12.40219	50.0	143773.0	2.480438	Y
4	IC 410-153227/15	10.0	30.655643	50.0	119562.0	3.065564	Y
5	IC 410-153227/14	25.0	68.322208	50.0	140518.0	2.732888	Y
6	ICIS 410-153227/13	50.0	138.104305	50.0	143636.0	2.762086	Y
7	IC 410-153227/12	125.0	354.632834	50.0	137853.0	2.837063	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

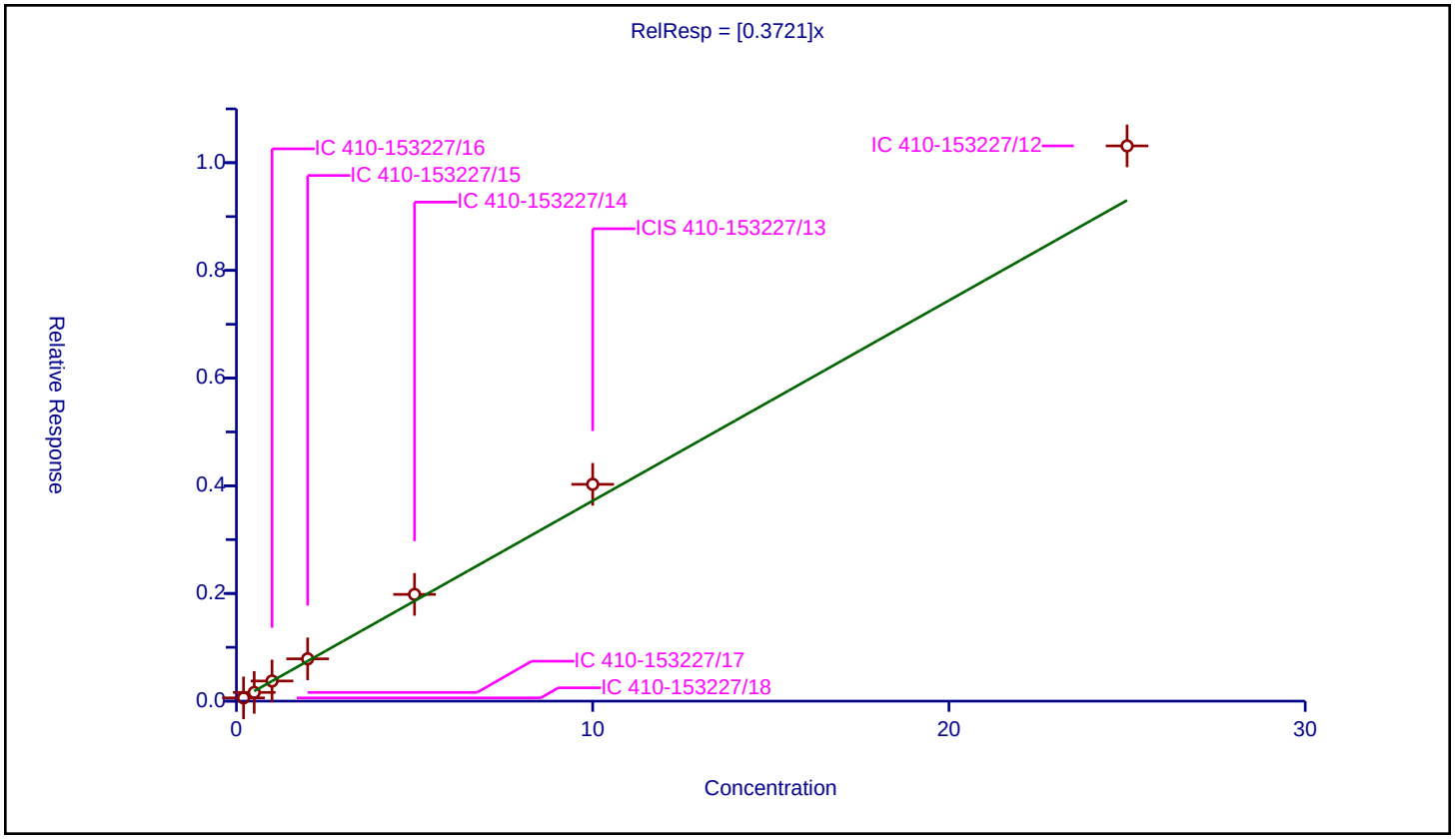
Curve Coefficients

Intercept:	0
Slope:	0.3721

Error Coefficients

Standard Error:	899000
Relative Standard Error:	11.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.060397	10.0	1878059.0	0.301987	Y
2	IC 410-153227/17	0.5	0.162035	10.0	1875578.0	0.324071	Y
3	IC 410-153227/16	1.0	0.374038	10.0	1893045.0	0.374038	Y
4	IC 410-153227/15	2.0	0.785623	10.0	1914569.0	0.392812	Y
5	IC 410-153227/14	5.0	1.982561	10.0	1958598.0	0.396512	Y
6	ICIS 410-153227/13	10.0	4.026817	10.0	1956692.0	0.402682	Y
7	IC 410-153227/12	25.0	10.312424	10.0	1951930.0	0.412497	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

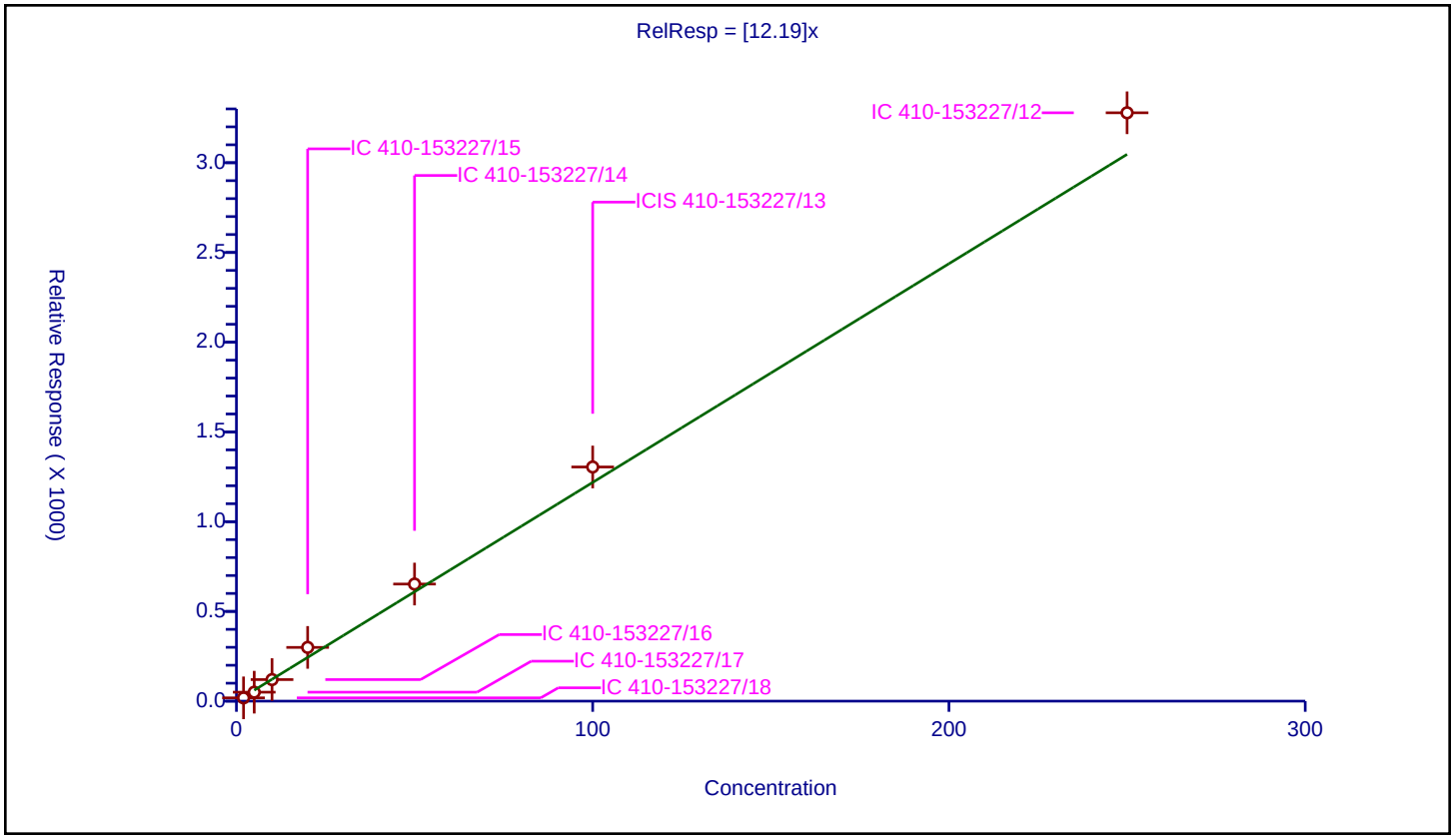
Curve Coefficients

Intercept:	0
Slope:	12.19

Error Coefficients

Standard Error:	4080000
Relative Standard Error:	16.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.970

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	2.0	18.283239	50.0	158566.0	9.141619	Y
2	IC 410-153227/17	5.0	49.914722	50.0	146579.0	9.982944	Y
3	IC 410-153227/16	10.0	120.090351	50.0	143773.0	12.009035	Y
4	IC 410-153227/15	20.0	299.345946	50.0	119562.0	14.967297	Y
5	IC 410-153227/14	50.0	652.423177	50.0	140518.0	13.048464	Y
6	ICIS 410-153227/13	100.0	1304.696594	50.0	143636.0	13.046966	Y
7	IC 410-153227/12	250.0	3278.264891	50.0	137853.0	13.11306	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

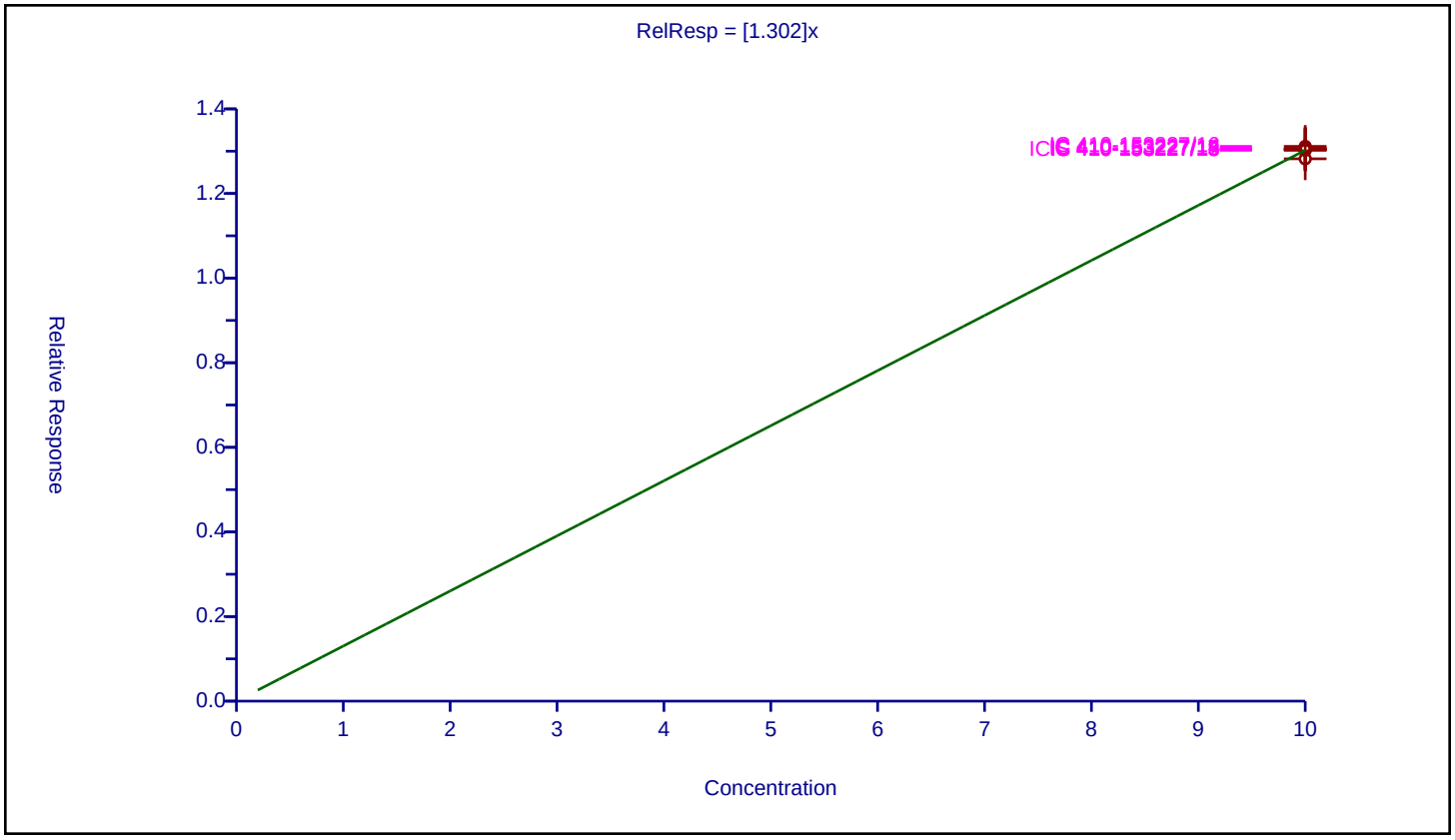
Curve Coefficients

Intercept:	0
Slope:	1.302

Error Coefficients

Standard Error:	2120000
Relative Standard Error:	0.7
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	ICIS 410-153227/13	10.0	13.022604	10.0	1539325.0	1.30226	Y
2	IC 410-153227/12	10.0	12.819987	10.0	1556461.0	1.281999	Y
3	IC 410-153227/14	10.0	13.067322	10.0	1534420.0	1.306732	Y
4	IC 410-153227/15	10.0	13.050707	10.0	1500688.0	1.305071	Y
5	IC 410-153227/16	10.0	13.113639	10.0	1480101.0	1.311364	Y
6	IC 410-153227/17	10.0	13.047266	10.0	1470938.0	1.304727	Y
7	IC 410-153227/18	10.0	13.033408	10.0	1471101.0	1.303341	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

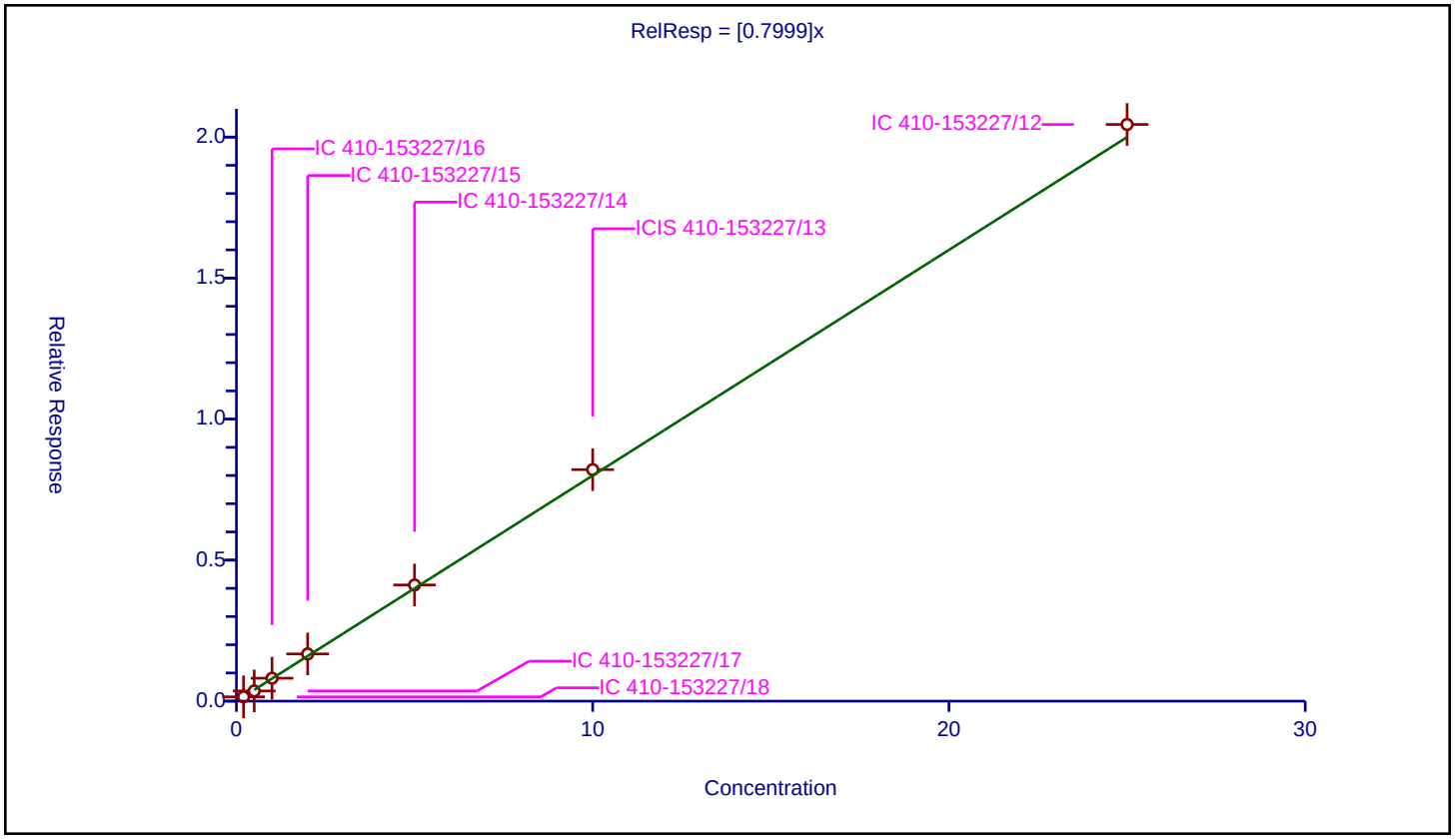
Curve Coefficients

Intercept:	0
Slope:	0.7999

Error Coefficients

Standard Error:	1430000
Relative Standard Error:	5.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.15245	10.0	1471101.0	0.762252	Y
2	IC 410-153227/17	0.5	0.362347	10.0	1470938.0	0.724694	Y
3	IC 410-153227/16	1.0	0.813167	10.0	1480101.0	0.813167	Y
4	IC 410-153227/15	2.0	1.673619	10.0	1500688.0	0.83681	Y
5	IC 410-153227/14	5.0	4.11925	10.0	1534420.0	0.82385	Y
6	ICIS 410-153227/13	10.0	8.209105	10.0	1539325.0	0.82091	Y
7	IC 410-153227/12	25.0	20.44747	10.0	1556461.0	0.817899	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

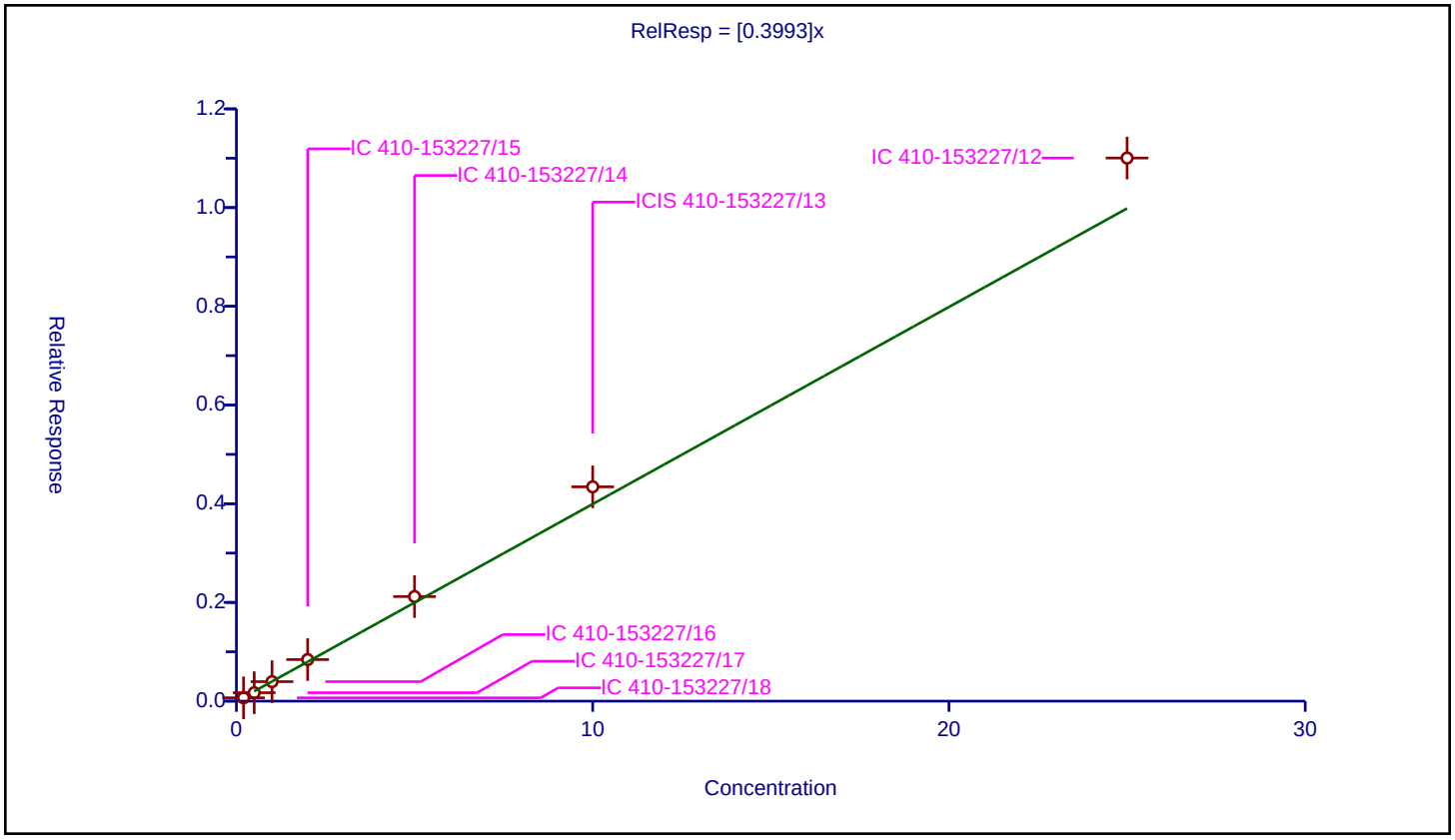
Curve Coefficients

Intercept:	0
Slope:	0.3993

Error Coefficients

Standard Error:	764000
Relative Standard Error:	10.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.986

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.067956	10.0	1471101.0	0.33978	Y
2	IC 410-153227/17	0.5	0.170748	10.0	1470938.0	0.341496	Y
3	IC 410-153227/16	1.0	0.394885	10.0	1480101.0	0.394885	Y
4	IC 410-153227/15	2.0	0.841861	10.0	1500688.0	0.42093	Y
5	IC 410-153227/14	5.0	2.118872	10.0	1534420.0	0.423774	Y
6	ICIS 410-153227/13	10.0	4.342234	10.0	1539325.0	0.434223	Y
7	IC 410-153227/12	25.0	11.004471	10.0	1556461.0	0.440179	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

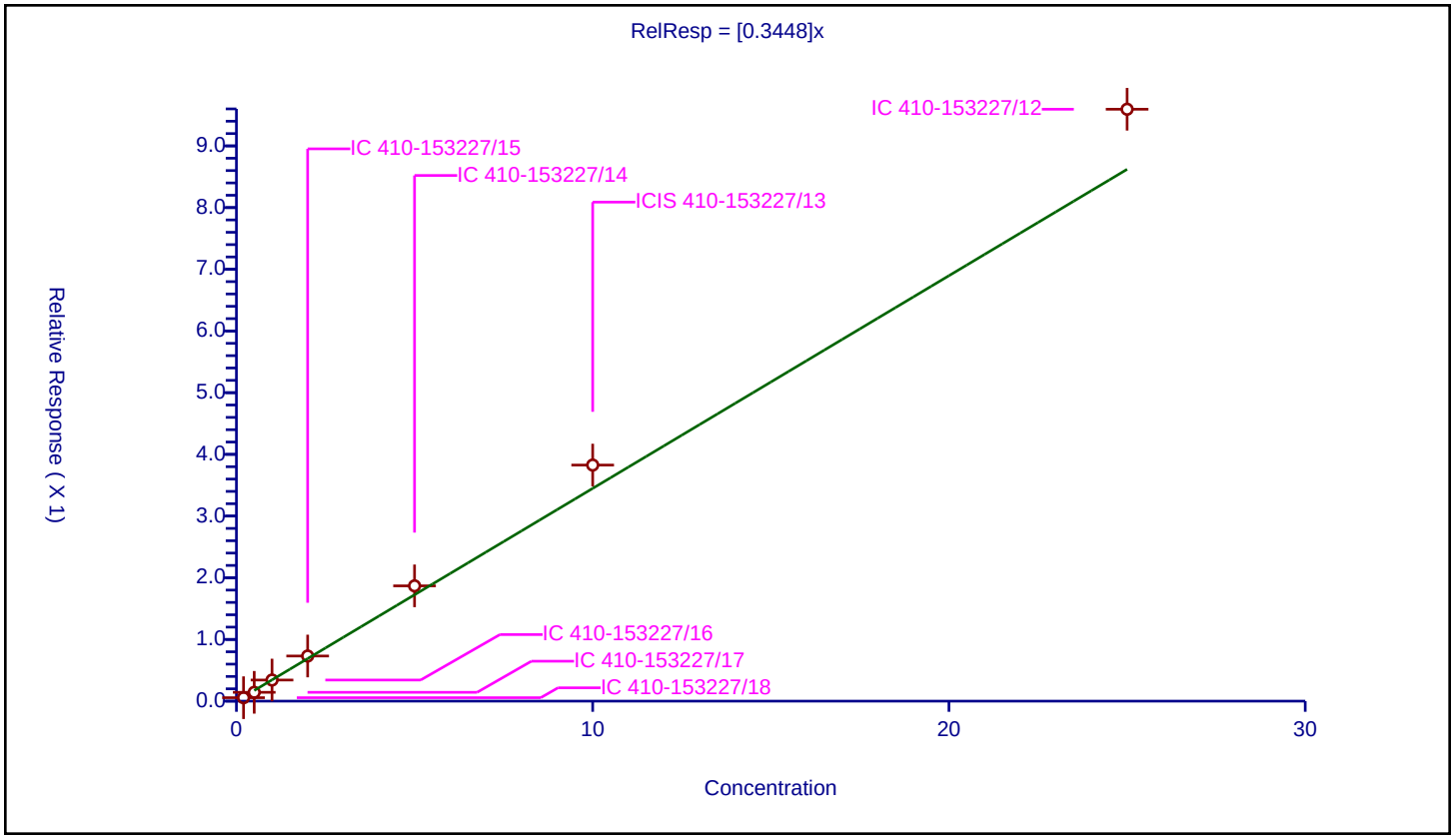
Curve Coefficients

Intercept:	0
Slope:	0.3448

Error Coefficients

Standard Error:	668000
Relative Standard Error:	12.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.981

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.200009	0.055815	10.0	1471101.0	0.279064	Y
2	IC 410-153227/17	0.500022	0.143296	10.0	1470938.0	0.28658	Y
3	IC 410-153227/16	1.000044	0.34224	10.0	1480101.0	0.342225	Y
4	IC 410-153227/15	2.000088	0.731491	10.0	1500688.0	0.36573	Y
5	IC 410-153227/14	5.000219	1.868524	10.0	1534420.0	0.373688	Y
6	ICIS 410-153227/13	10.000438	3.826781	10.0	1539325.0	0.382661	Y
7	IC 410-153227/12	25.001094	9.594188	10.0	1556461.0	0.383751	Y



Calibration / 1,1,2-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

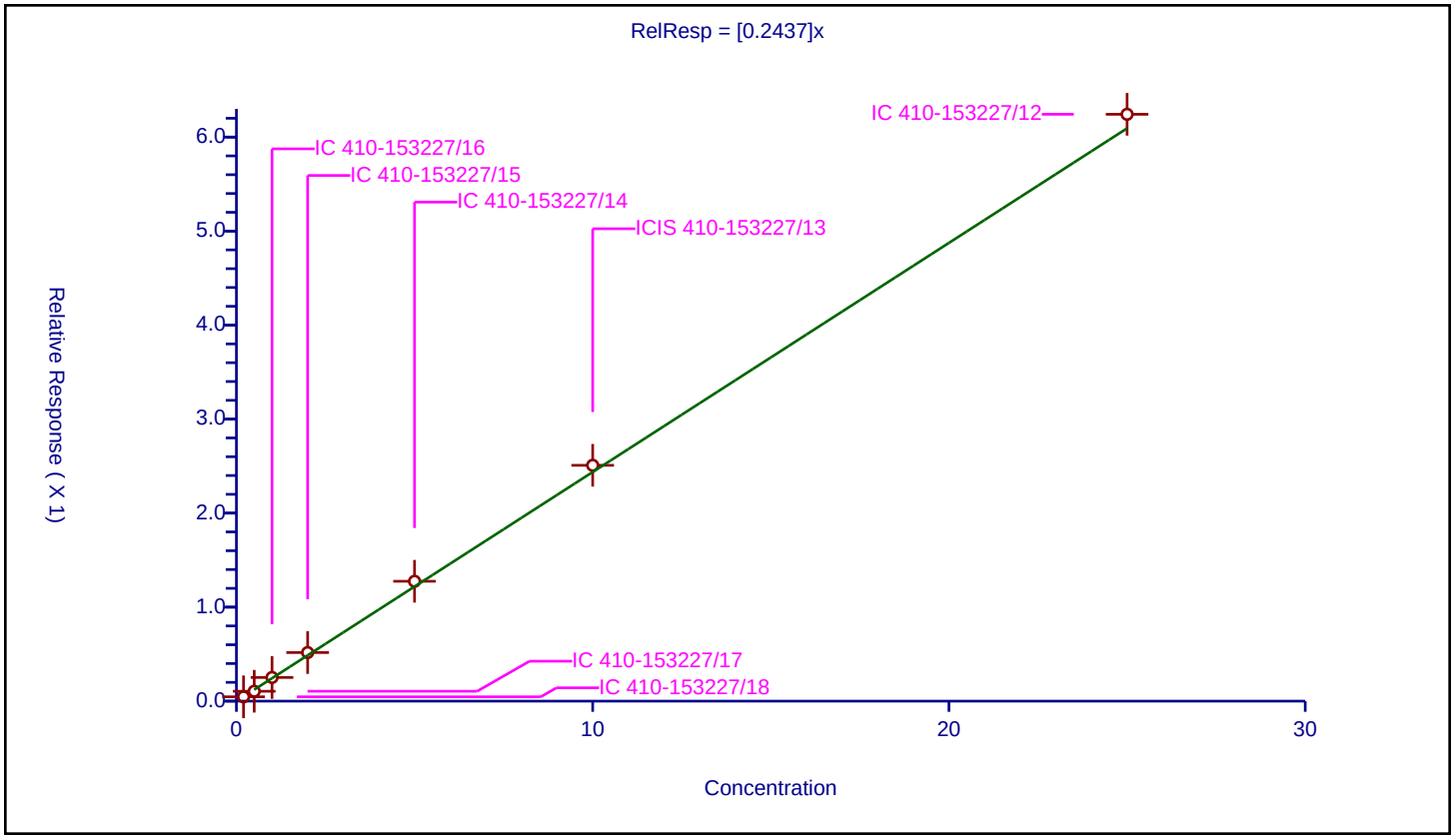
Curve Coefficients

Intercept:	0
Slope:	0.2437

Error Coefficients

Standard Error:	436000
Relative Standard Error:	7.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.045911	10.0	1471101.0	0.229556	Y
2	IC 410-153227/17	0.5	0.105389	10.0	1470938.0	0.210777	Y
3	IC 410-153227/16	1.0	0.251794	10.0	1480101.0	0.251794	Y
4	IC 410-153227/15	2.0	0.516816	10.0	1500688.0	0.258408	Y
5	IC 410-153227/14	5.0	1.274951	10.0	1534420.0	0.25499	Y
6	ICIS 410-153227/13	10.0	2.508619	10.0	1539325.0	0.250862	Y
7	IC 410-153227/12	25.0	6.242424	10.0	1556461.0	0.249697	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

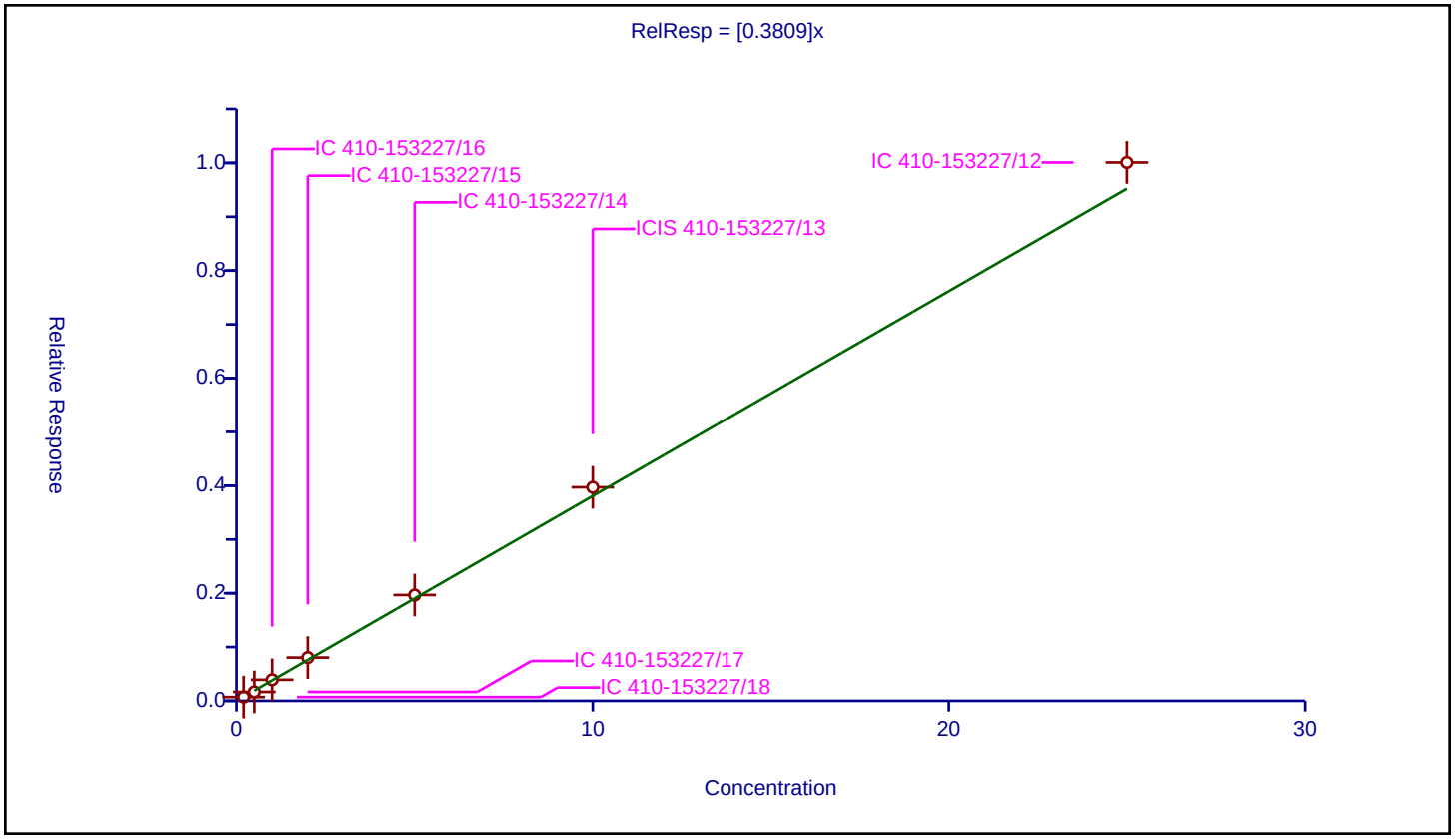
Curve Coefficients

Intercept:	0
Slope:	0.3809

Error Coefficients

Standard Error:	696000
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 410-153227/18	0.2	0.069846	10.0	1471101.0	0.349228	Y
2	IC 410-153227/17	0.5	0.166091	10.0	1470938.0	0.332183	Y
3	IC 410-153227/16	1.0	0.391494	10.0	1480101.0	0.391494	Y
4	IC 410-153227/15	2.0	0.804778	10.0	1500688.0	0.402389	Y
5	IC 410-153227/14	5.0	1.967362	10.0	1534420.0	0.393472	Y
6	ICIS 410-153227/13	10.0	3.970273	10.0	1539325.0	0.397027	Y
7	IC 410-153227/12	25.0	10.008539	10.0	1556461.0	0.400342	Y



Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

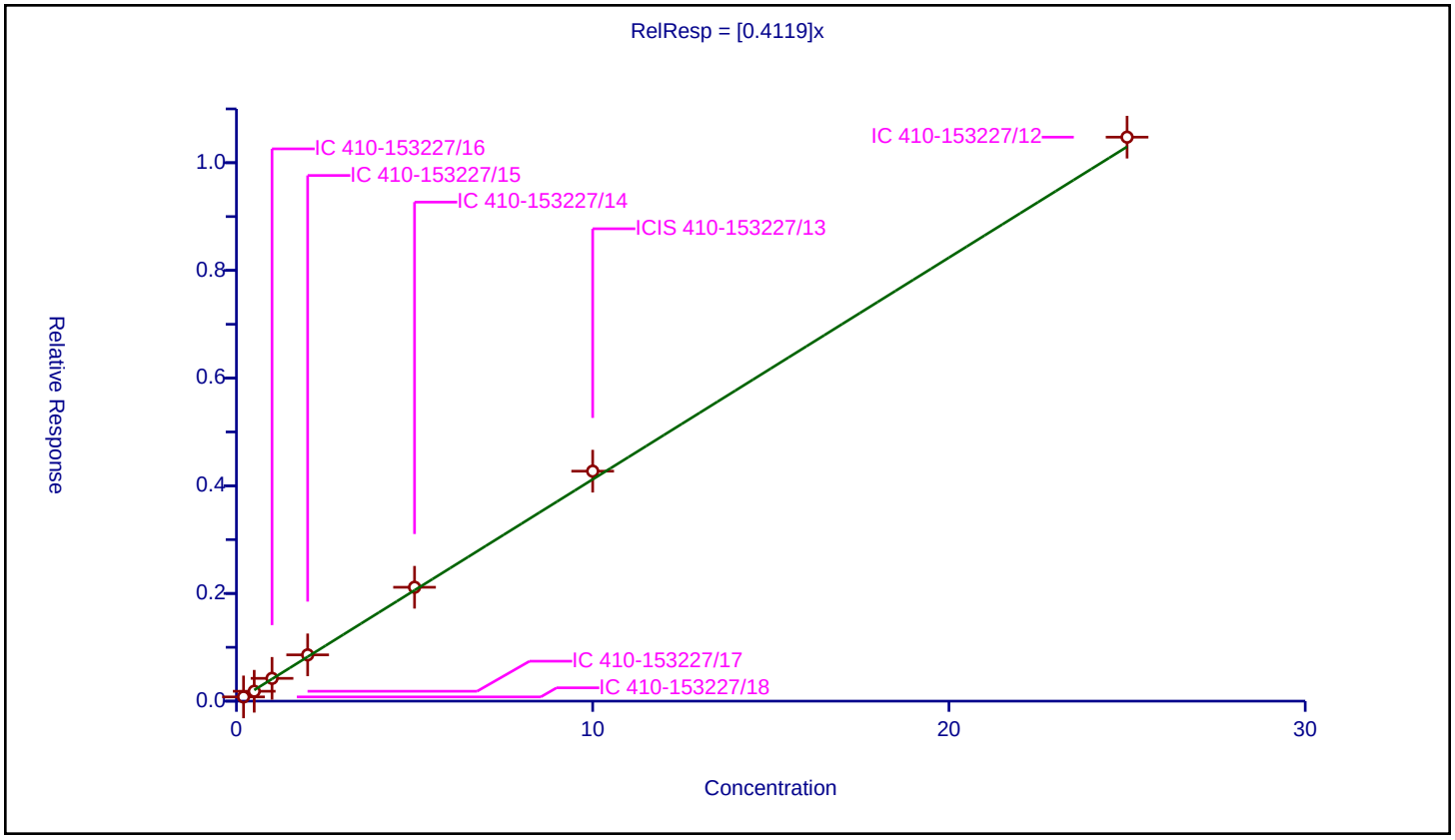
Curve Coefficients

Intercept:	0
Slope:	0.4119

Error Coefficients

Standard Error:	732000
Relative Standard Error:	5.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.078594	10.0	1471101.0	0.392971	Y
2	IC 410-153227/17	0.5	0.184005	10.0	1470938.0	0.36801	Y
3	IC 410-153227/16	1.0	0.423322	10.0	1480101.0	0.423322	Y
4	IC 410-153227/15	2.0	0.859279	10.0	1500688.0	0.42964	Y
5	IC 410-153227/14	5.0	2.115092	10.0	1534420.0	0.423018	Y
6	ICIS 410-153227/13	10.0	4.271424	10.0	1539325.0	0.427142	Y
7	IC 410-153227/12	25.0	10.475129	10.0	1556461.0	0.419005	Y



Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

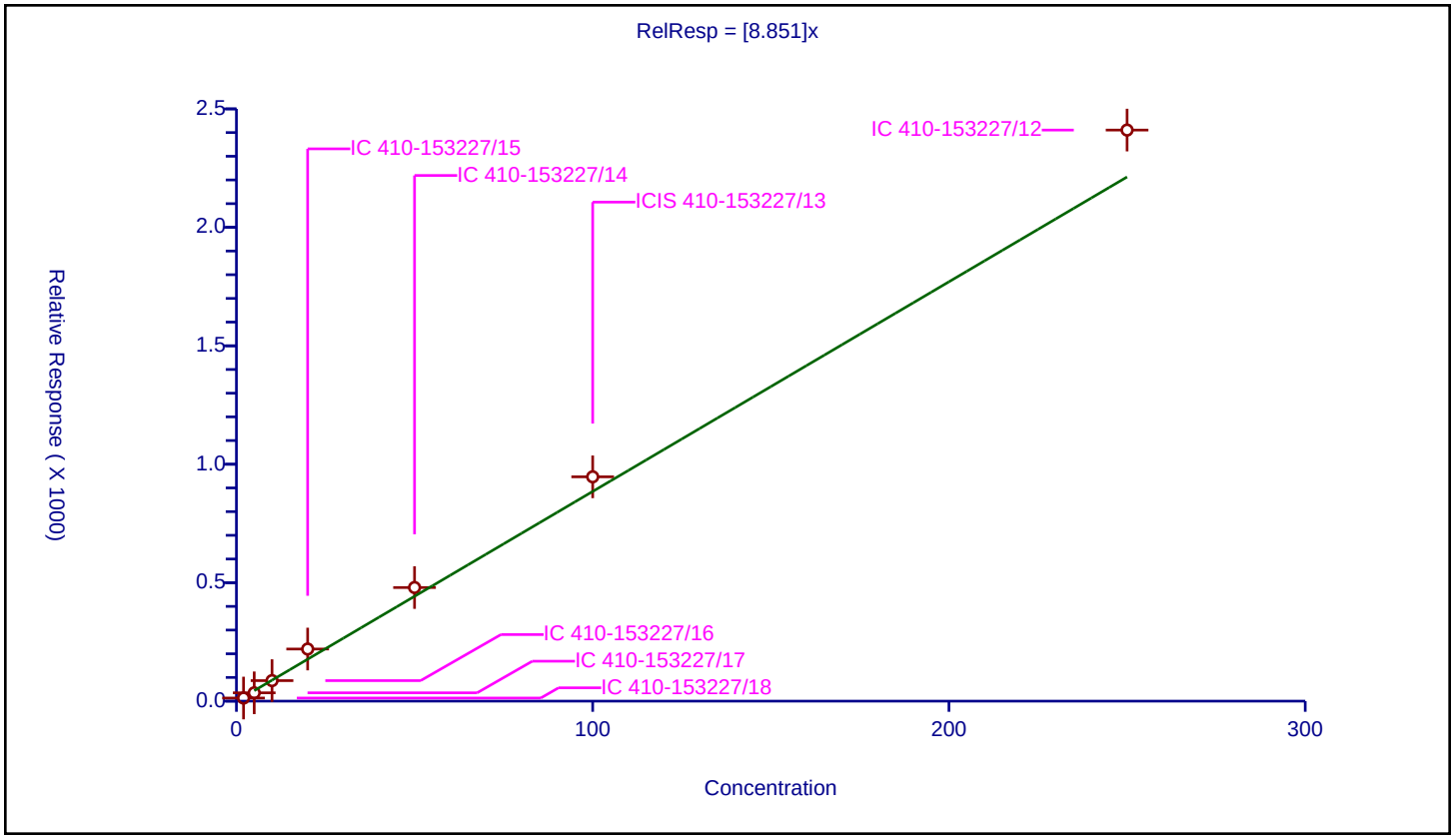
Curve Coefficients

Intercept:	0
Slope:	8.851

Error Coefficients

Standard Error:	2990000
Relative Standard Error:	17.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.965

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	2.0	13.127341	50.0	158566.0	6.563671	Y
2	IC 410-153227/17	5.0	35.131908	50.0	146579.0	7.026382	Y
3	IC 410-153227/16	10.0	86.655005	50.0	143773.0	8.6655	Y
4	IC 410-153227/15	20.0	219.967883	50.0	119562.0	10.998394	Y
5	IC 410-153227/14	50.0	479.575215	50.0	140518.0	9.591504	Y
6	ICIS 410-153227/13	100.0	946.901195	50.0	143636.0	9.469012	Y
7	IC 410-153227/12	250.0	2410.662445	50.0	137853.0	9.64265	Y



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

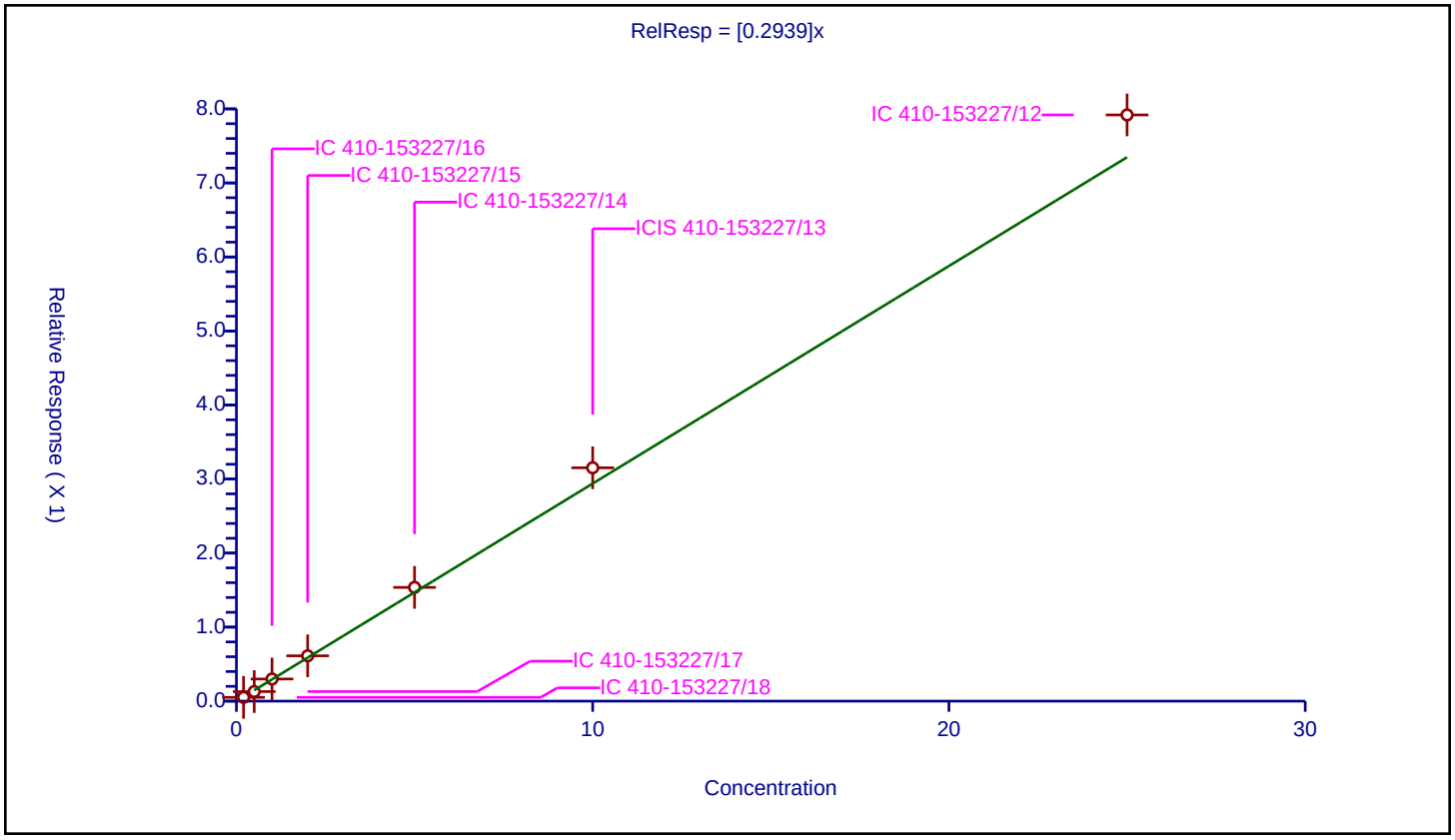
Curve Coefficients

Intercept:	0
Slope:	0.2939

Error Coefficients

Standard Error:	551000
Relative Standard Error:	9.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.050819	10.0	1471101.0	0.254095	Y
2	IC 410-153227/17	0.5	0.129339	10.0	1470938.0	0.258678	Y
3	IC 410-153227/16	1.0	0.299162	10.0	1480101.0	0.299162	Y
4	IC 410-153227/15	2.0	0.612146	10.0	1500688.0	0.306073	Y
5	IC 410-153227/14	5.0	1.536366	10.0	1534420.0	0.307273	Y
6	ICIS 410-153227/13	10.0	3.151972	10.0	1539325.0	0.315197	Y
7	IC 410-153227/12	25.0	7.918213	10.0	1556461.0	0.316729	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

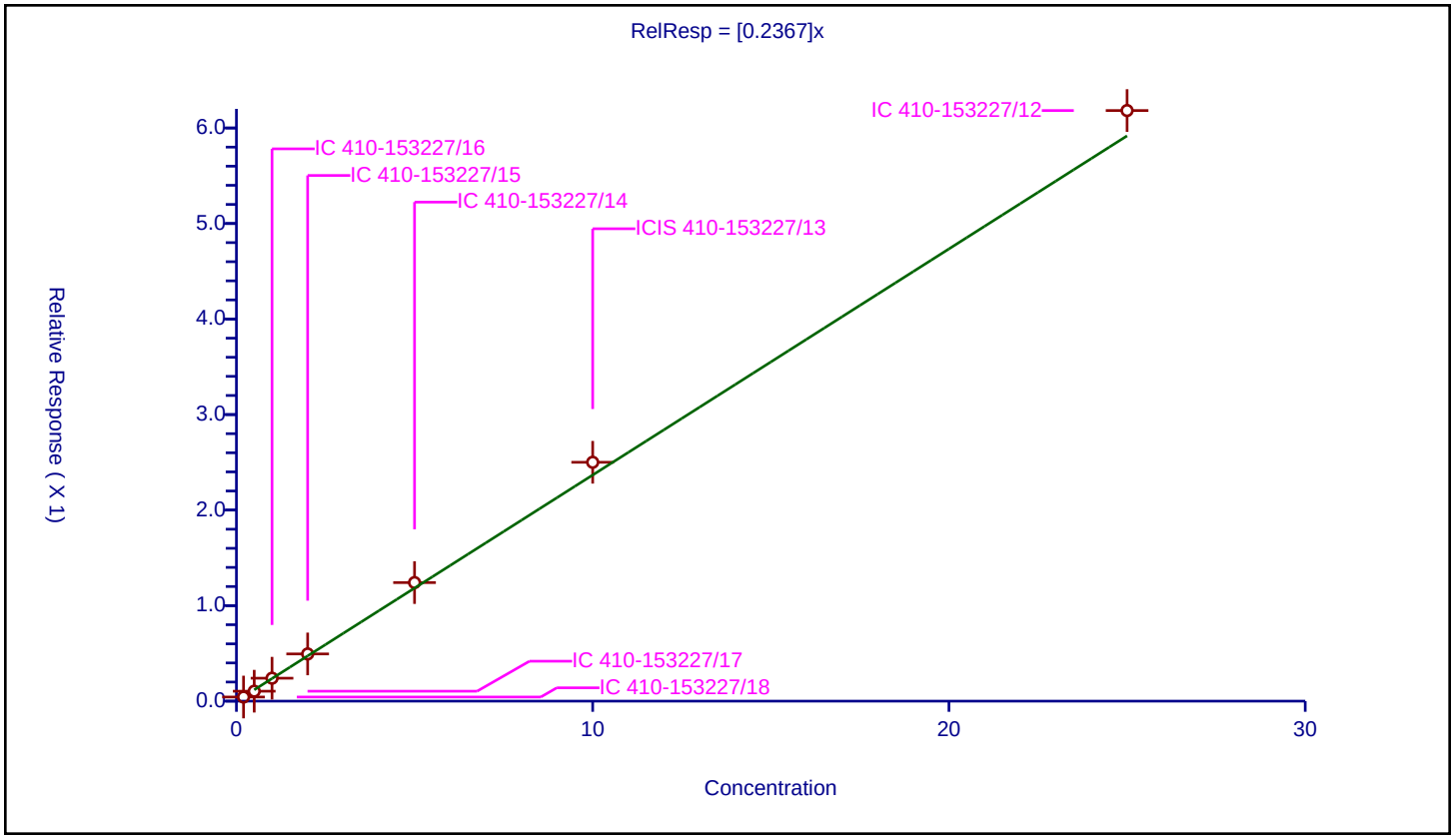
Curve Coefficients

Intercept:	0
Slope:	0.2367

Error Coefficients

Standard Error:	432000
Relative Standard Error:	7.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.043172	10.0	1471101.0	0.215859	Y
2	IC 410-153227/17	0.5	0.104131	10.0	1470938.0	0.208262	Y
3	IC 410-153227/16	1.0	0.240213	10.0	1480101.0	0.240213	Y
4	IC 410-153227/15	2.0	0.49416	10.0	1500688.0	0.24708	Y
5	IC 410-153227/14	5.0	1.241296	10.0	1534420.0	0.248259	Y
6	ICIS 410-153227/13	10.0	2.500505	10.0	1539325.0	0.250051	Y
7	IC 410-153227/12	25.0	6.182648	10.0	1556461.0	0.247306	Y



Calibration / 1-Chlorohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

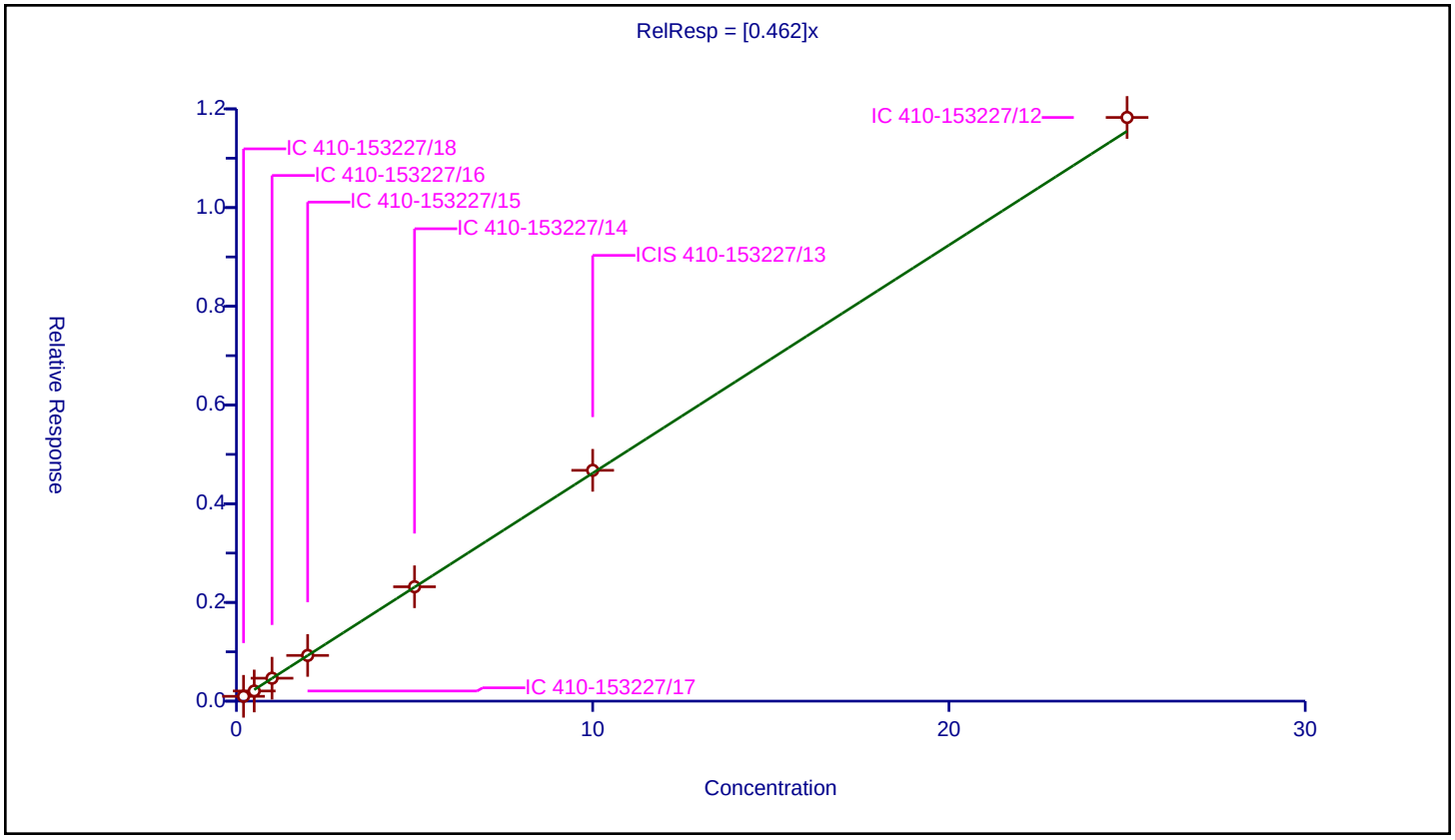
Curve Coefficients

Intercept:	0
Slope:	0.462

Error Coefficients

Standard Error:	822000
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 410-153227/18	0.2	0.09792	10.0	1471101.0	0.489599	Y
2	IC 410-153227/17	0.5	0.206107	10.0	1470938.0	0.412213	Y
3	IC 410-153227/16	1.0	0.464752	10.0	1480101.0	0.464752	Y
4	IC 410-153227/15	2.0	0.926202	10.0	1500688.0	0.463101	Y
5	IC 410-153227/14	5.0	2.317358	10.0	1534420.0	0.463472	Y
6	ICIS 410-153227/13	10.0	4.676959	10.0	1539325.0	0.467696	Y
7	IC 410-153227/12	25.0	11.826291	10.0	1556461.0	0.473052	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

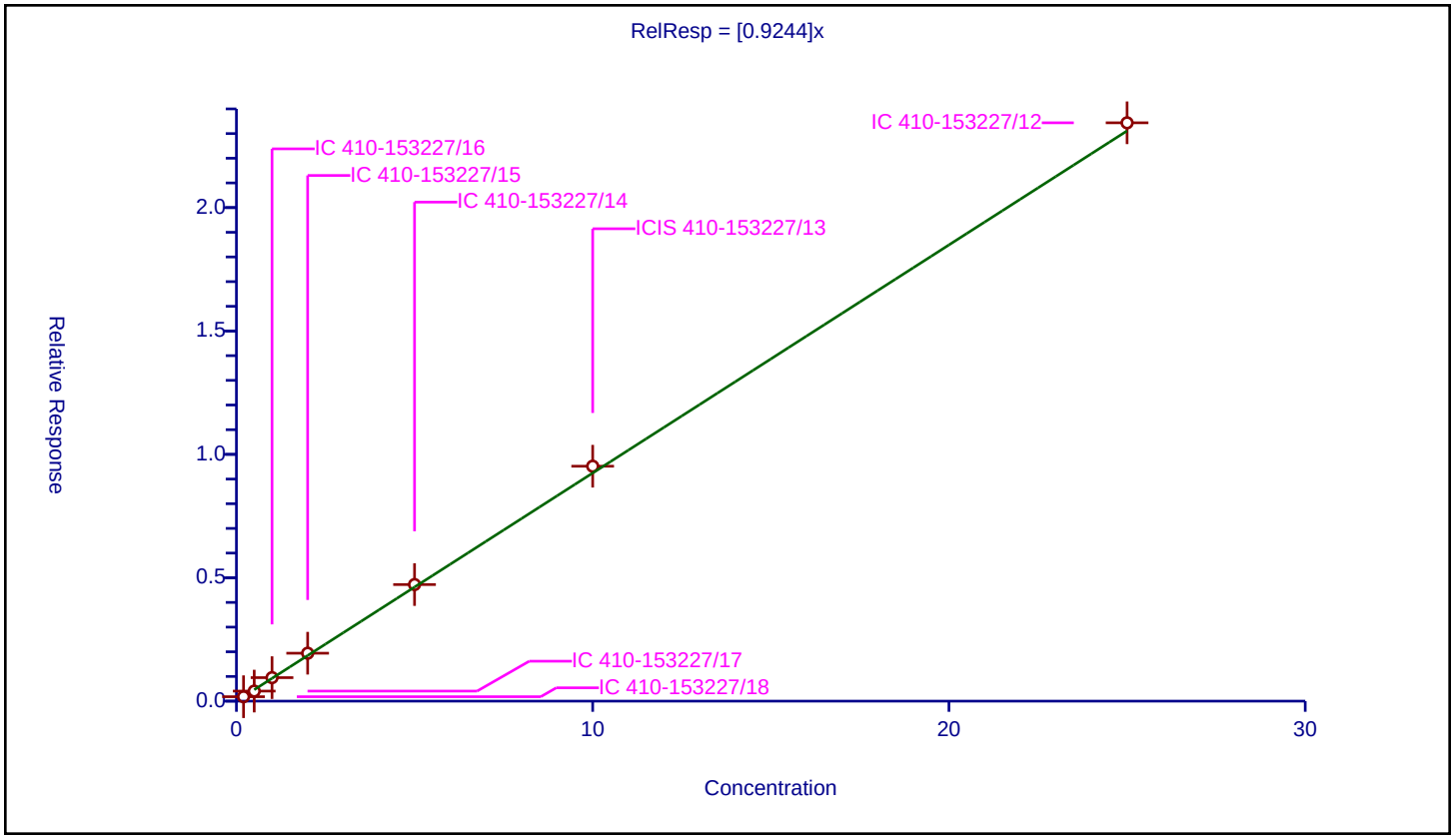
Curve Coefficients

Intercept:	0
Slope:	0.9244

Error Coefficients

Standard Error:	1640000
Relative Standard Error:	5.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.179512	10.0	1471101.0	0.897559	Y
2	IC 410-153227/17	0.5	0.40774	10.0	1470938.0	0.81548	Y
3	IC 410-153227/16	1.0	0.951955	10.0	1480101.0	0.951955	Y
4	IC 410-153227/15	2.0	1.942522	10.0	1500688.0	0.971261	Y
5	IC 410-153227/14	5.0	4.724704	10.0	1534420.0	0.944941	Y
6	ICIS 410-153227/13	10.0	9.520374	10.0	1539325.0	0.952037	Y
7	IC 410-153227/12	25.0	23.436058	10.0	1556461.0	0.937442	Y



Calibration / 1,1,1,2-Tetrachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

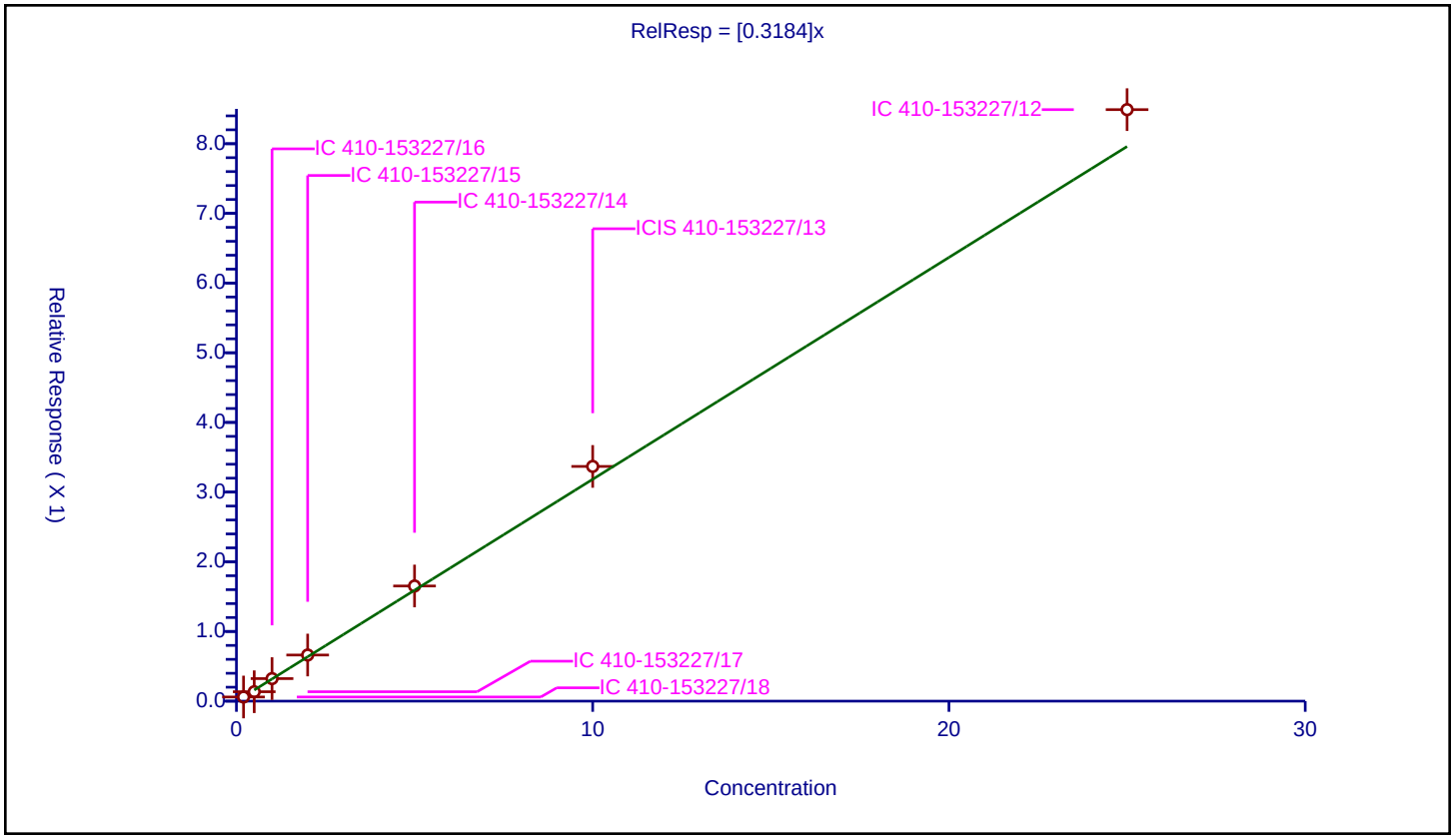
Curve Coefficients

Intercept:	0
Slope:	0.3184

Error Coefficients

Standard Error:	590000
Relative Standard Error:	8.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.059425	10.0	1471101.0	0.297124	Y
2	IC 410-153227/17	0.5	0.135097	10.0	1470938.0	0.270195	Y
3	IC 410-153227/16	1.0	0.323613	10.0	1480101.0	0.323613	Y
4	IC 410-153227/15	2.0	0.66191	10.0	1500688.0	0.330955	Y
5	IC 410-153227/14	5.0	1.652768	10.0	1534420.0	0.330554	Y
6	ICIS 410-153227/13	10.0	3.368632	10.0	1539325.0	0.336863	Y
7	IC 410-153227/12	25.0	8.489374	10.0	1556461.0	0.339575	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

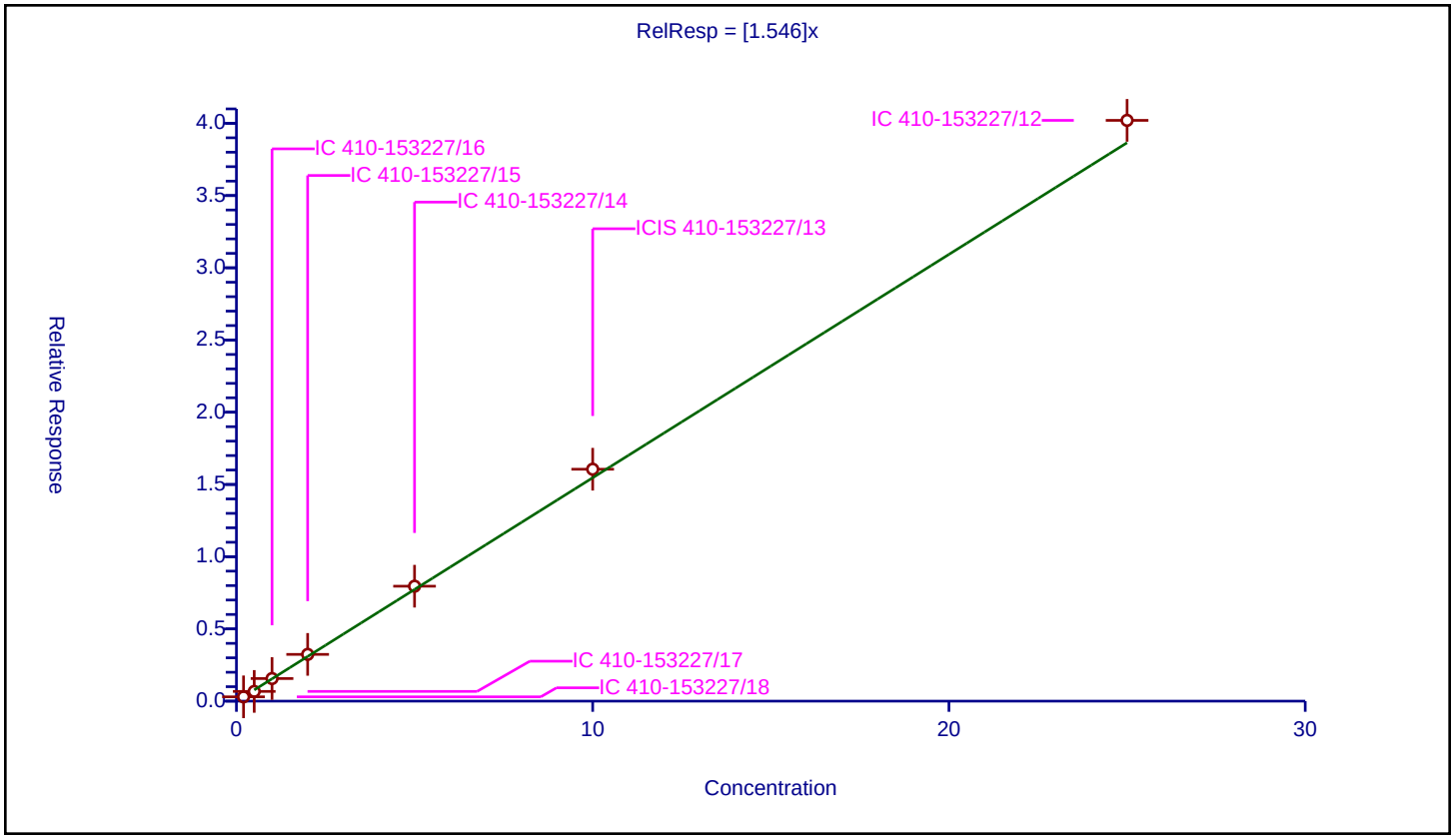
Curve Coefficients

Intercept:	0
Slope:	1.546

Error Coefficients

Standard Error:	2800000
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 410-153227/18	0.2	0.297532	10.0	1471101.0	1.487661	Y
2	IC 410-153227/17	0.5	0.674338	10.0	1470938.0	1.348677	Y
3	IC 410-153227/16	1.0	1.564886	10.0	1480101.0	1.564886	Y
4	IC 410-153227/15	2.0	3.236376	10.0	1500688.0	1.618188	Y
5	IC 410-153227/14	5.0	7.957365	10.0	1534420.0	1.591473	Y
6	ICIS 410-153227/13	10.0	16.054381	10.0	1539325.0	1.605438	Y
7	IC 410-153227/12	25.0	40.2044	10.0	1556461.0	1.608176	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

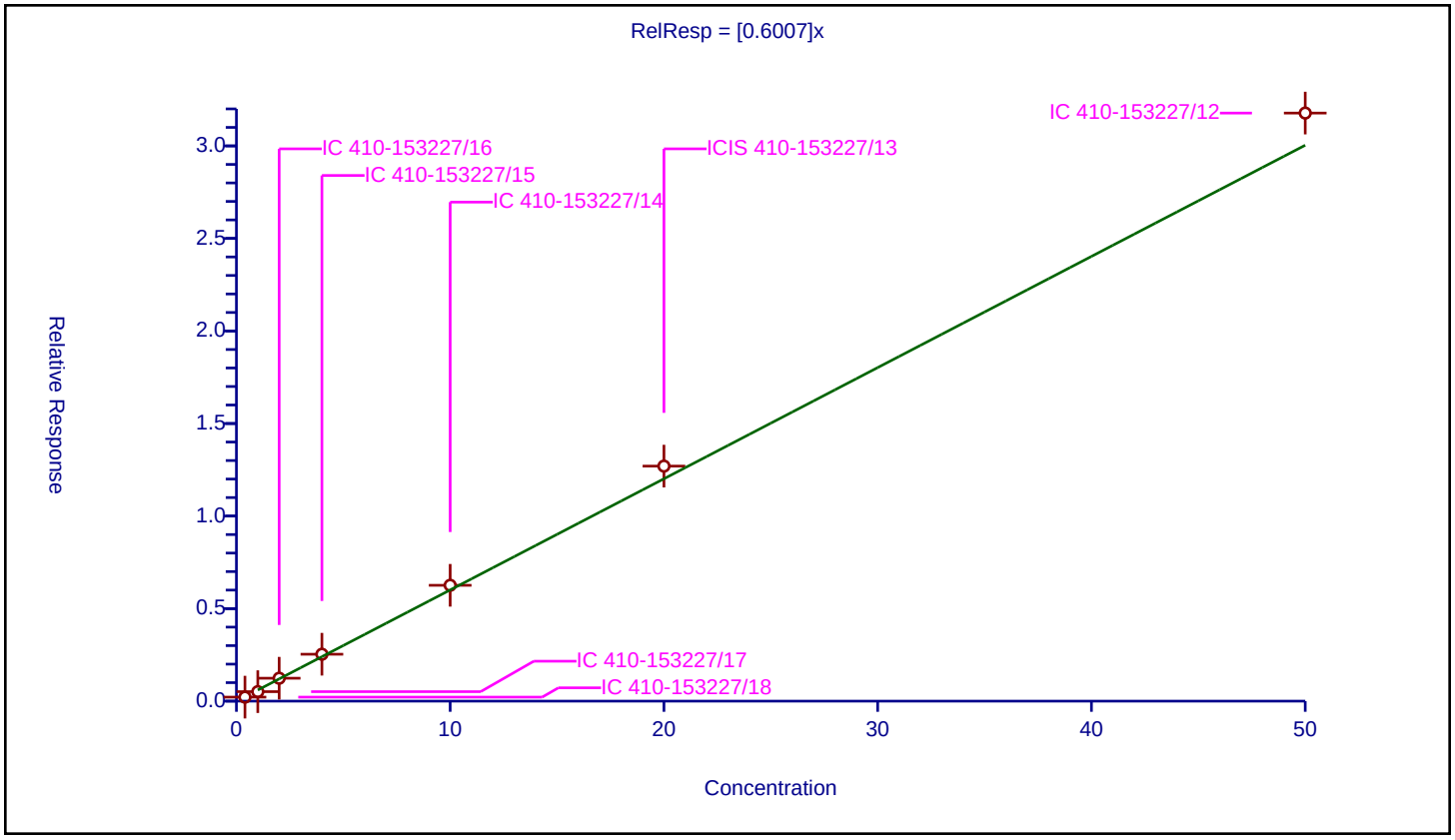
Curve Coefficients

Intercept:	0
Slope:	0.6007

Error Coefficients

Standard Error:	2210000
Relative Standard Error:	8.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.4	0.217279	10.0	1471101.0	0.543199	Y
2	IC 410-153227/17	1.0	0.512625	10.0	1470938.0	0.512625	Y
3	IC 410-153227/16	2.0	1.238233	10.0	1480101.0	0.619117	Y
4	IC 410-153227/15	4.0	2.534897	10.0	1500688.0	0.633724	Y
5	IC 410-153227/14	10.0	6.259916	10.0	1534420.0	0.625992	Y
6	ICIS 410-153227/13	20.0	12.699339	10.0	1539325.0	0.634967	Y
7	IC 410-153227/12	50.0	31.774487	10.0	1556461.0	0.63549	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

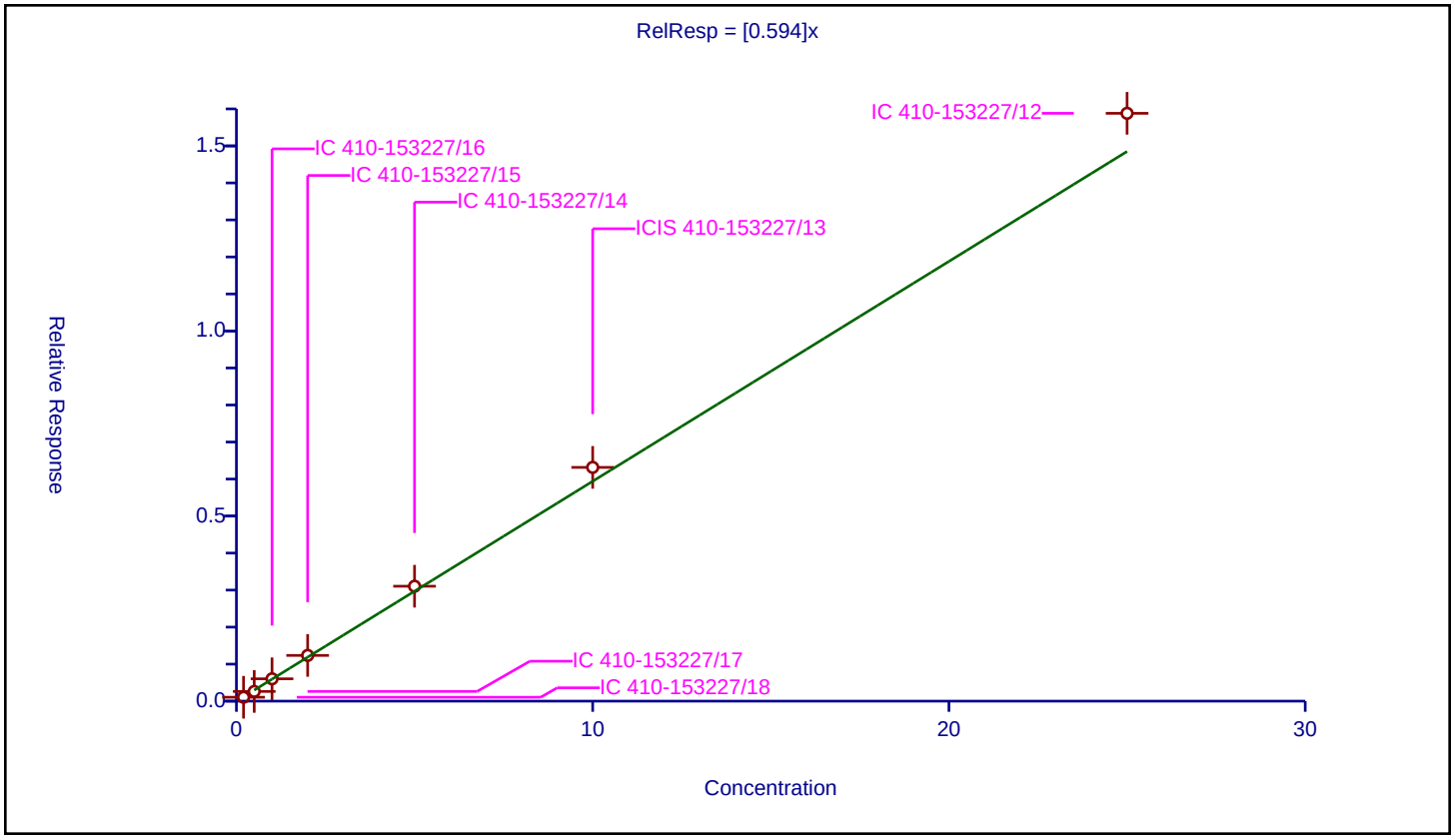
Curve Coefficients

Intercept:	0
Slope:	0.594

Error Coefficients

Standard Error:	1100000
Relative Standard Error:	8.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.105112	10.0	1471101.0	0.525559	Y
2	IC 410-153227/17	0.5	0.262023	10.0	1470938.0	0.524047	Y
3	IC 410-153227/16	1.0	0.603351	10.0	1480101.0	0.603351	Y
4	IC 410-153227/15	2.0	1.235	10.0	1500688.0	0.6175	Y
5	IC 410-153227/14	5.0	3.104385	10.0	1534420.0	0.620877	Y
6	ICIS 410-153227/13	10.0	6.315021	10.0	1539325.0	0.631502	Y
7	IC 410-153227/12	25.0	15.880738	10.0	1556461.0	0.63523	Y



Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

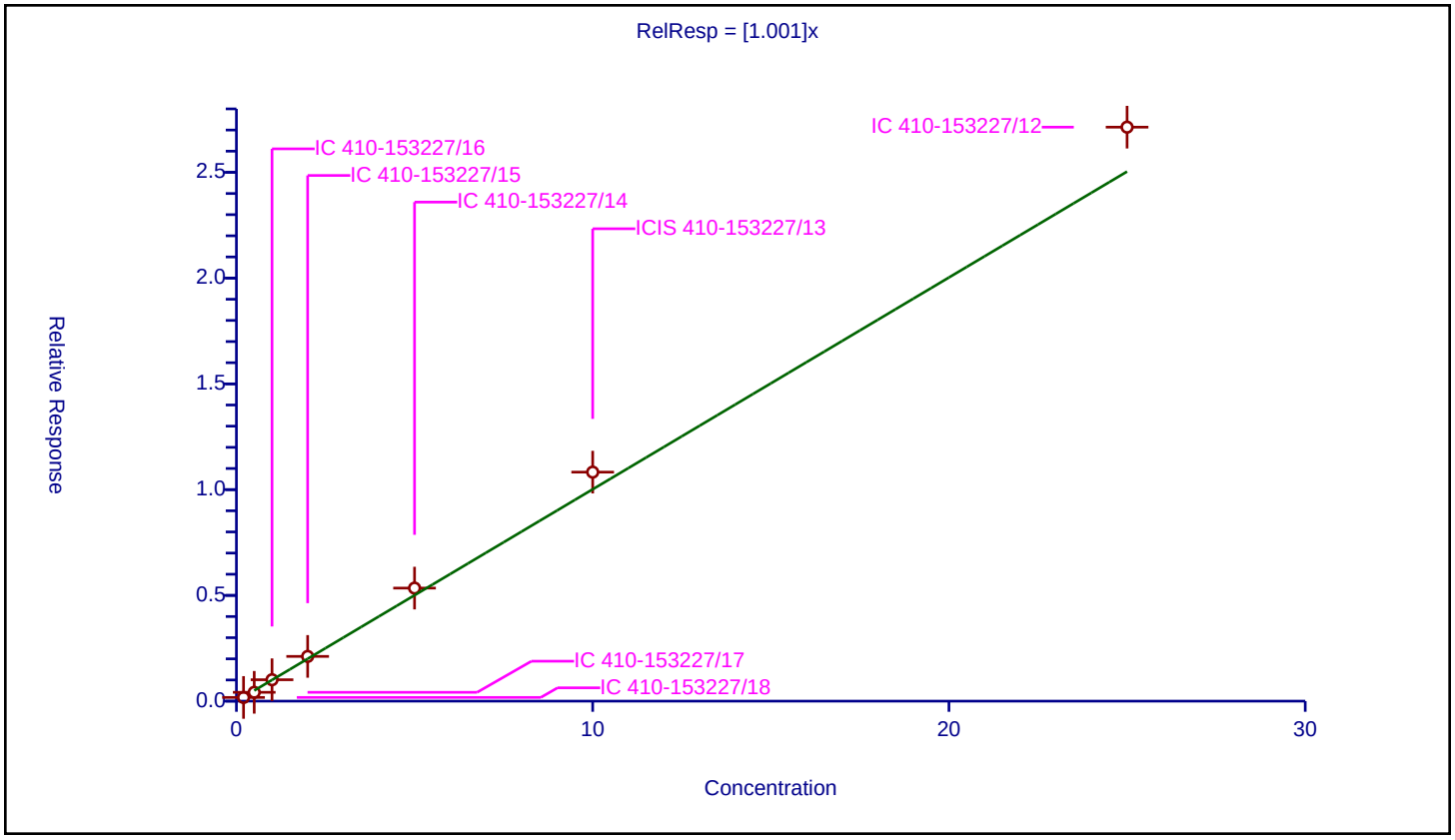
Curve Coefficients

Intercept:	0
Slope:	1.001

Error Coefficients

Standard Error:	1890000
Relative Standard Error:	10.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.173877	10.0	1471101.0	0.869383	Y
2	IC 410-153227/17	0.5	0.417346	10.0	1470938.0	0.834692	Y
3	IC 410-153227/16	1.0	1.011803	10.0	1480101.0	1.011803	Y
4	IC 410-153227/15	2.0	2.114663	10.0	1500688.0	1.057332	Y
5	IC 410-153227/14	5.0	5.344423	10.0	1534420.0	1.068885	Y
6	ICIS 410-153227/13	10.0	10.827077	10.0	1539325.0	1.082708	Y
7	IC 410-153227/12	25.0	27.135765	10.0	1556461.0	1.085431	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

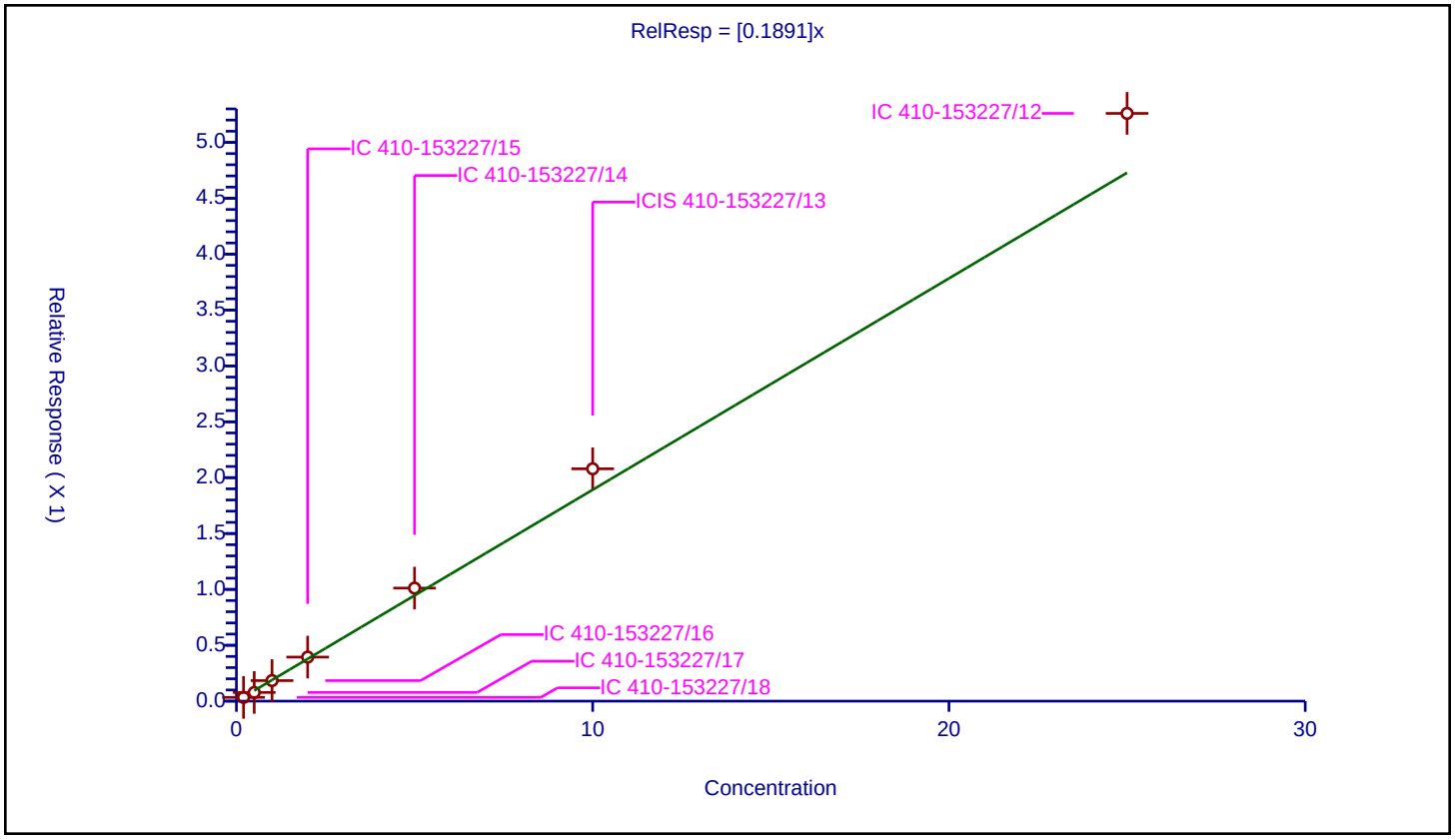
Curve Coefficients

Intercept:	0
Slope:	0.1891

Error Coefficients

Standard Error:	365000
Relative Standard Error:	11.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.03339	10.0	1471101.0	0.16695	Y
2	IC 410-153227/17	0.5	0.077753	10.0	1470938.0	0.155506	Y
3	IC 410-153227/16	1.0	0.183933	10.0	1480101.0	0.183933	Y
4	IC 410-153227/15	2.0	0.394046	10.0	1500688.0	0.197023	Y
5	IC 410-153227/14	5.0	1.011587	10.0	1534420.0	0.202317	Y
6	ICIS 410-153227/13	10.0	2.07921	10.0	1539325.0	0.207921	Y
7	IC 410-153227/12	25.0	5.259721	10.0	1556461.0	0.210389	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

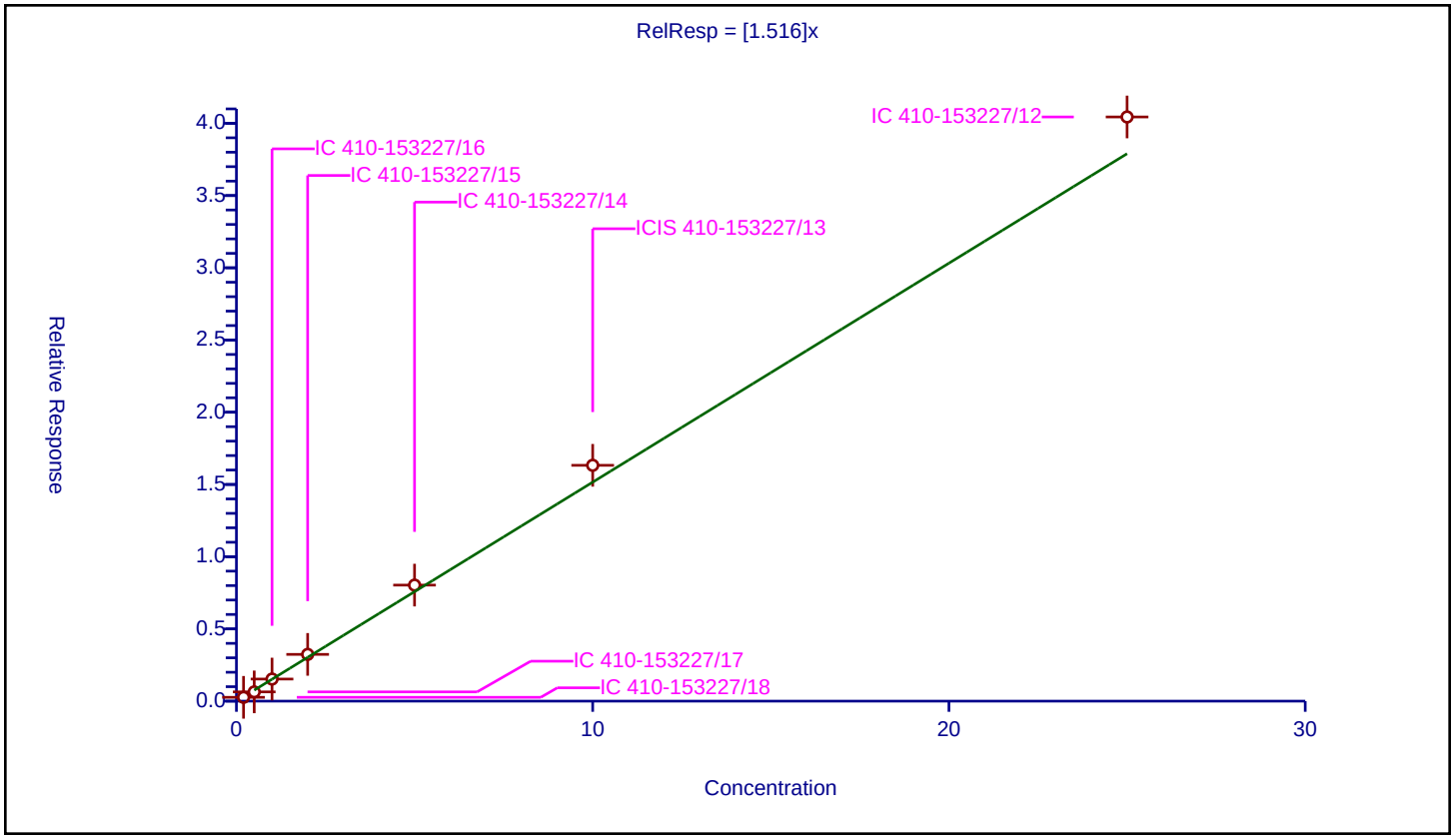
Curve Coefficients

Intercept:	0
Slope:	1.516

Error Coefficients

Standard Error:	2820000
Relative Standard Error:	9.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.265189	10.0	1471101.0	1.325946	Y
2	IC 410-153227/17	0.5	0.640809	10.0	1470938.0	1.281618	Y
3	IC 410-153227/16	1.0	1.529119	10.0	1480101.0	1.529119	Y
4	IC 410-153227/15	2.0	3.236236	10.0	1500688.0	1.618118	Y
5	IC 410-153227/14	5.0	8.032195	10.0	1534420.0	1.606439	Y
6	ICIS 410-153227/13	10.0	16.326318	10.0	1539325.0	1.632632	Y
7	IC 410-153227/12	25.0	40.441424	10.0	1556461.0	1.617657	Y



Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

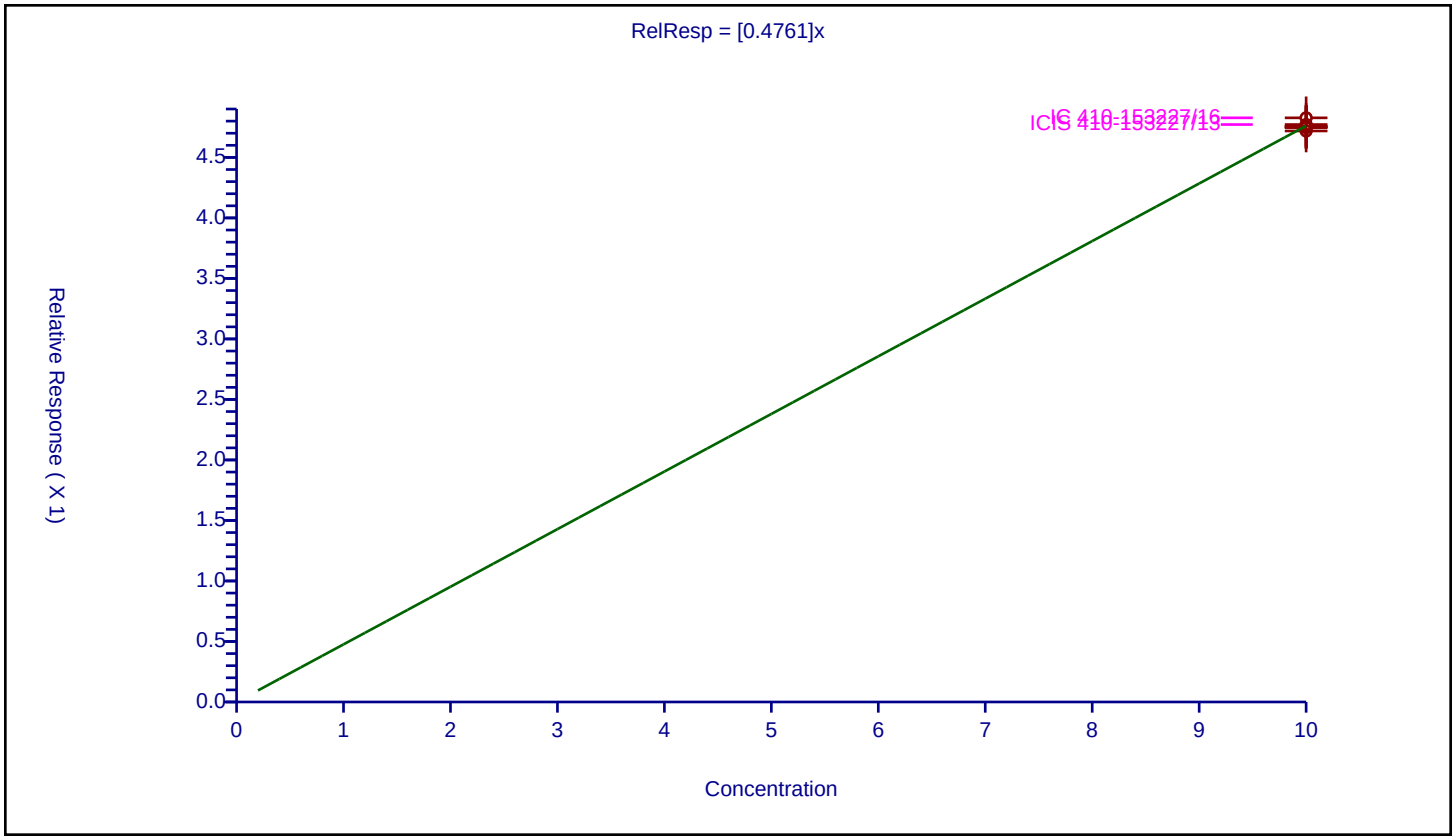
Curve Coefficients

Intercept:	0
Slope:	0.4761

Error Coefficients

Standard Error:	775000
Relative Standard Error:	0.7
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	ICIS 410-153227/13	10.0	4.771819	10.0	1539325.0	0.477182	Y
2	IC 410-153227/14	10.0	4.75538	10.0	1534420.0	0.475538	Y
3	IC 410-153227/12	10.0	4.746126	10.0	1556461.0	0.474613	Y
4	IC 410-153227/15	10.0	4.754466	10.0	1500688.0	0.475447	Y
5	IC 410-153227/16	10.0	4.826988	10.0	1480101.0	0.482699	Y
6	IC 410-153227/17	10.0	4.750615	10.0	1470938.0	0.475061	Y
7	IC 410-153227/18	10.0	4.718677	10.0	1471101.0	0.471868	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

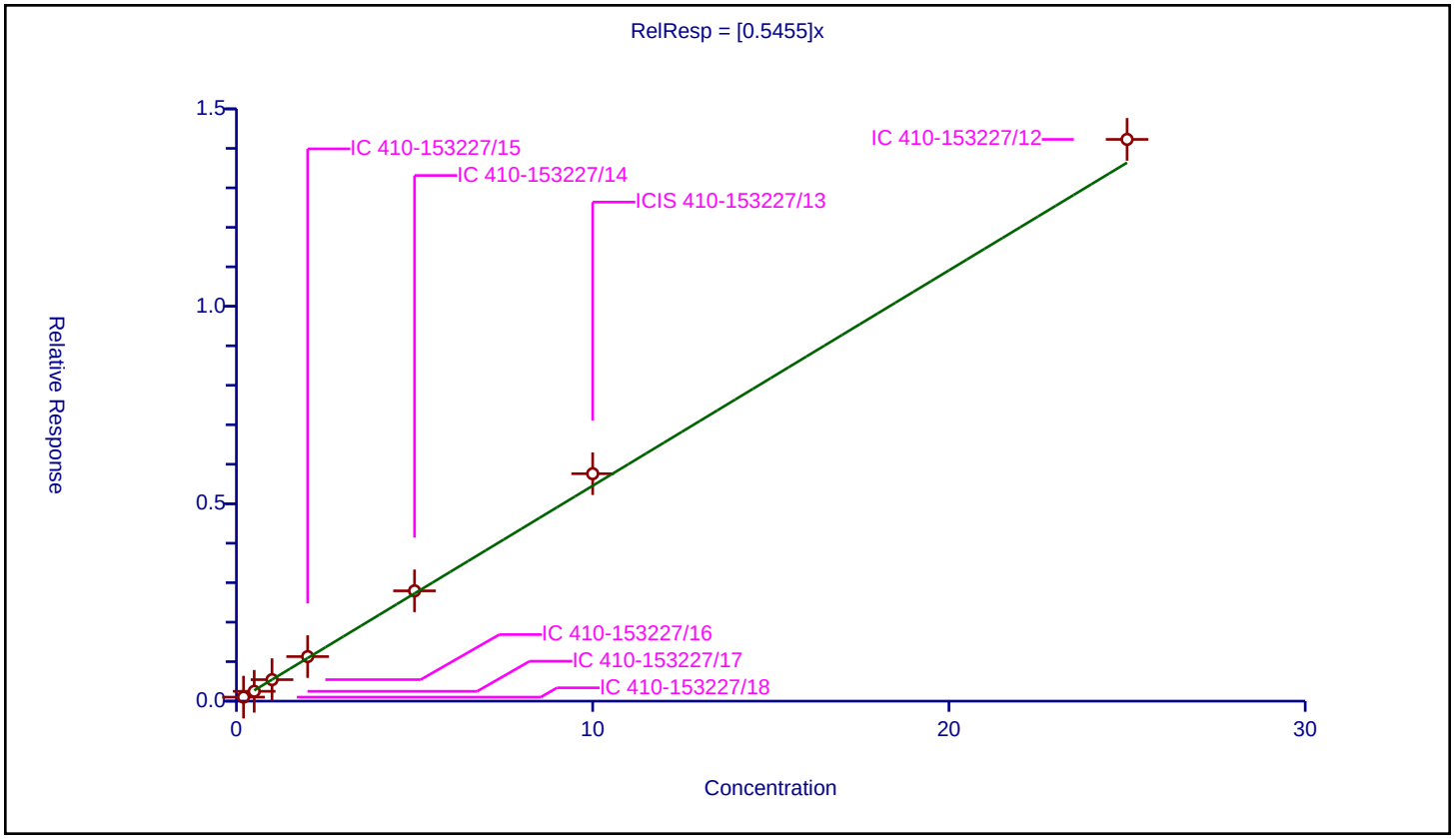
Curve Coefficients

Intercept:	0
Slope:	0.5455

Error Coefficients

Standard Error:	583000
Relative Standard Error:	5.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.101752	10.0	858555.0	0.508762	Y
2	IC 410-153227/17	0.5	0.249073	10.0	857900.0	0.498147	Y
3	IC 410-153227/16	1.0	0.54372	10.0	875966.0	0.54372	Y
4	IC 410-153227/15	2.0	1.128435	10.0	879209.0	0.564217	Y
5	IC 410-153227/14	5.0	2.793784	10.0	897174.0	0.558757	Y
6	ICIS 410-153227/13	10.0	5.760463	10.0	901681.0	0.576046	Y
7	IC 410-153227/12	25.0	14.227325	10.0	914789.0	0.569093	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

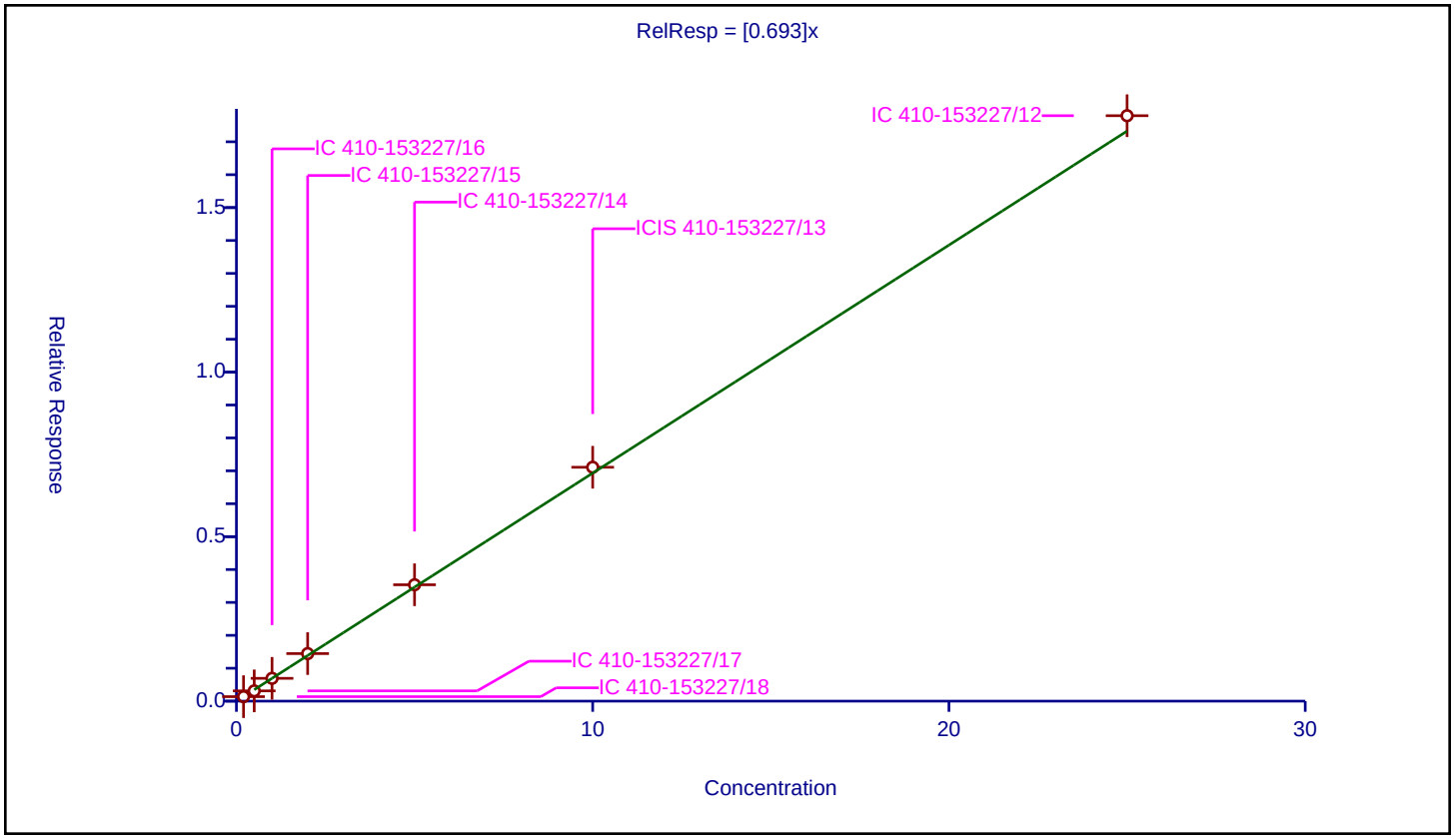
Curve Coefficients

Intercept:	0
Slope:	0.693

Error Coefficients

Standard Error:	728000
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.136147	10.0	858555.0	0.680737	Y
2	IC 410-153227/17	0.5	0.312263	10.0	857900.0	0.624525	Y
3	IC 410-153227/16	1.0	0.693406	10.0	875966.0	0.693406	Y
4	IC 410-153227/15	2.0	1.445129	10.0	879209.0	0.722564	Y
5	IC 410-153227/14	5.0	3.536694	10.0	897174.0	0.707339	Y
6	ICIS 410-153227/13	10.0	7.108589	10.0	901681.0	0.710859	Y
7	IC 410-153227/12	25.0	17.792726	10.0	914789.0	0.711709	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

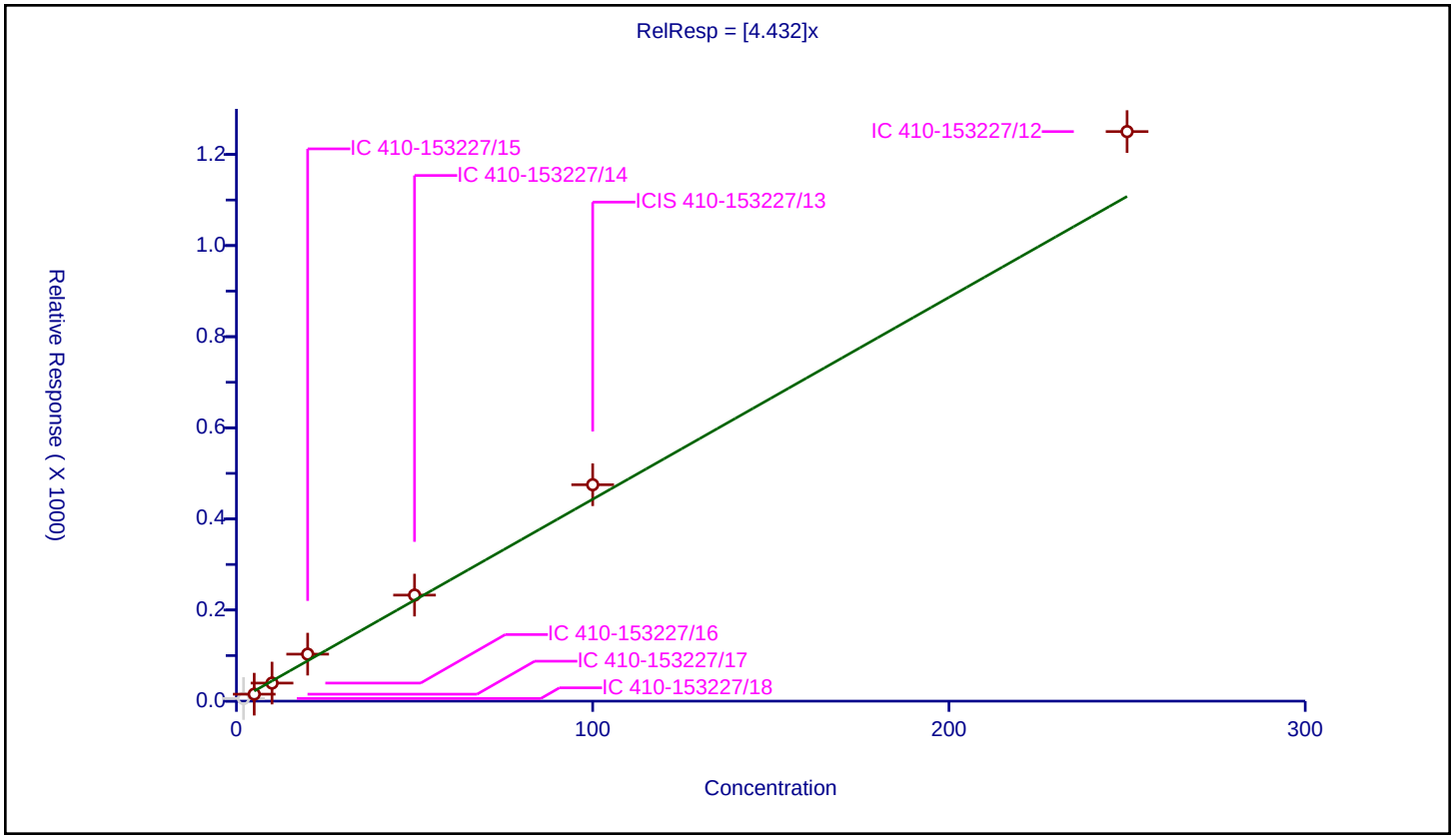
Curve Coefficients

Intercept:	0
Slope:	4.432

Error Coefficients

Standard Error:	1690000
Relative Standard Error:	17.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.962

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	2.0	5.756593	50.0	158566.0	2.878297	N
2	IC 410-153227/17	5.0	15.293801	50.0	146579.0	3.05876	Y
3	IC 410-153227/16	10.0	39.648613	50.0	143773.0	3.964861	Y
4	IC 410-153227/15	20.0	103.177849	50.0	119562.0	5.158892	Y
5	IC 410-153227/14	50.0	232.796866	50.0	140518.0	4.655937	Y
6	ICIS 410-153227/13	100.0	475.018798	50.0	143636.0	4.750188	Y
7	IC 410-153227/12	250.0	1250.170834	50.0	137853.0	5.000683	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

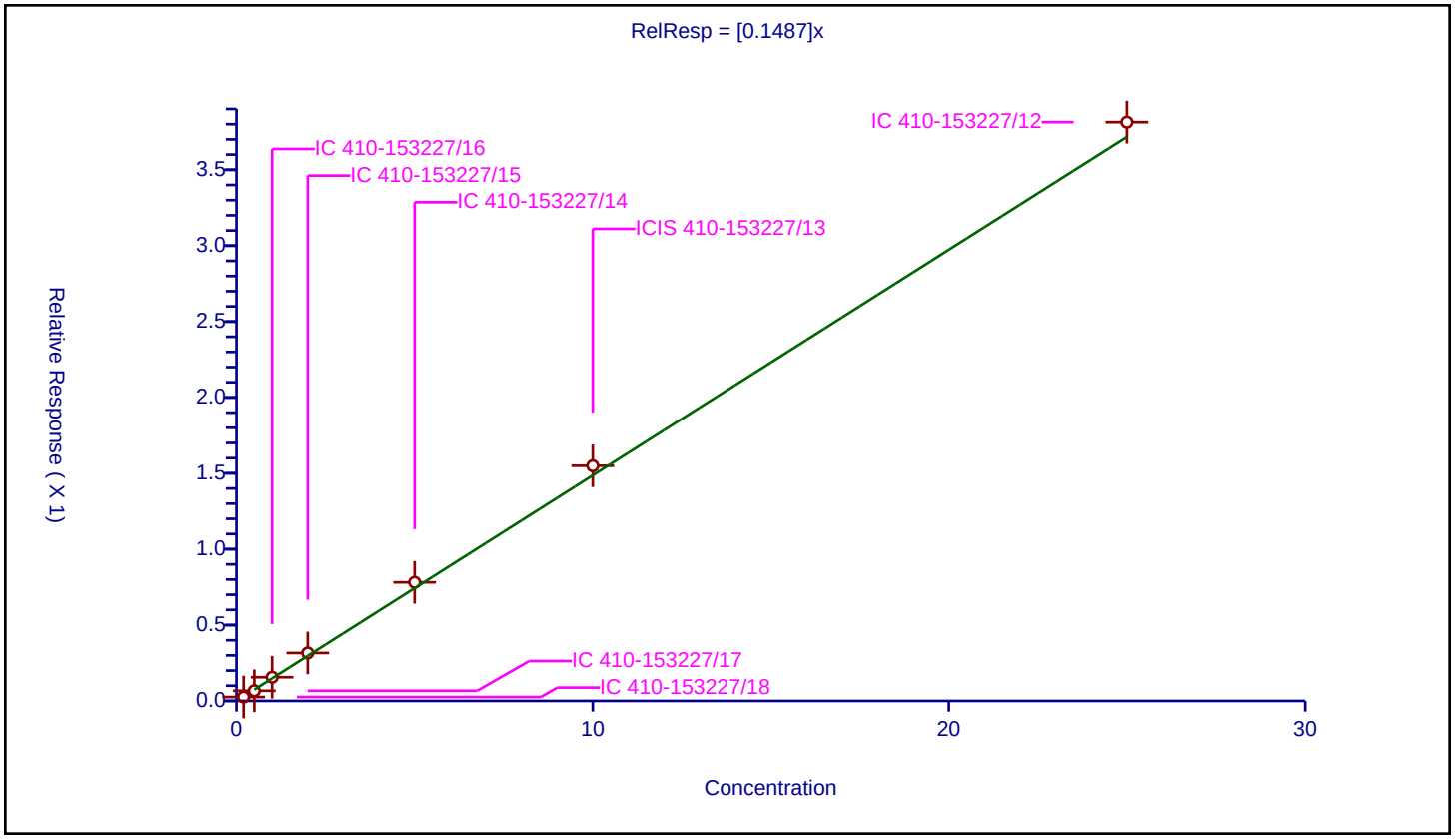
Curve Coefficients

Intercept:	0
Slope:	0.1487

Error Coefficients

Standard Error:	157000
Relative Standard Error:	8.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.025764	10.0	858555.0	0.128821	Y
2	IC 410-153227/17	0.5	0.066838	10.0	857900.0	0.133675	Y
3	IC 410-153227/16	1.0	0.156228	10.0	875966.0	0.156228	Y
4	IC 410-153227/15	2.0	0.316159	10.0	879209.0	0.15808	Y
5	IC 410-153227/14	5.0	0.781666	10.0	897174.0	0.156333	Y
6	ICIS 410-153227/13	10.0	1.549639	10.0	901681.0	0.154964	Y
7	IC 410-153227/12	25.0	3.813437	10.0	914789.0	0.152537	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

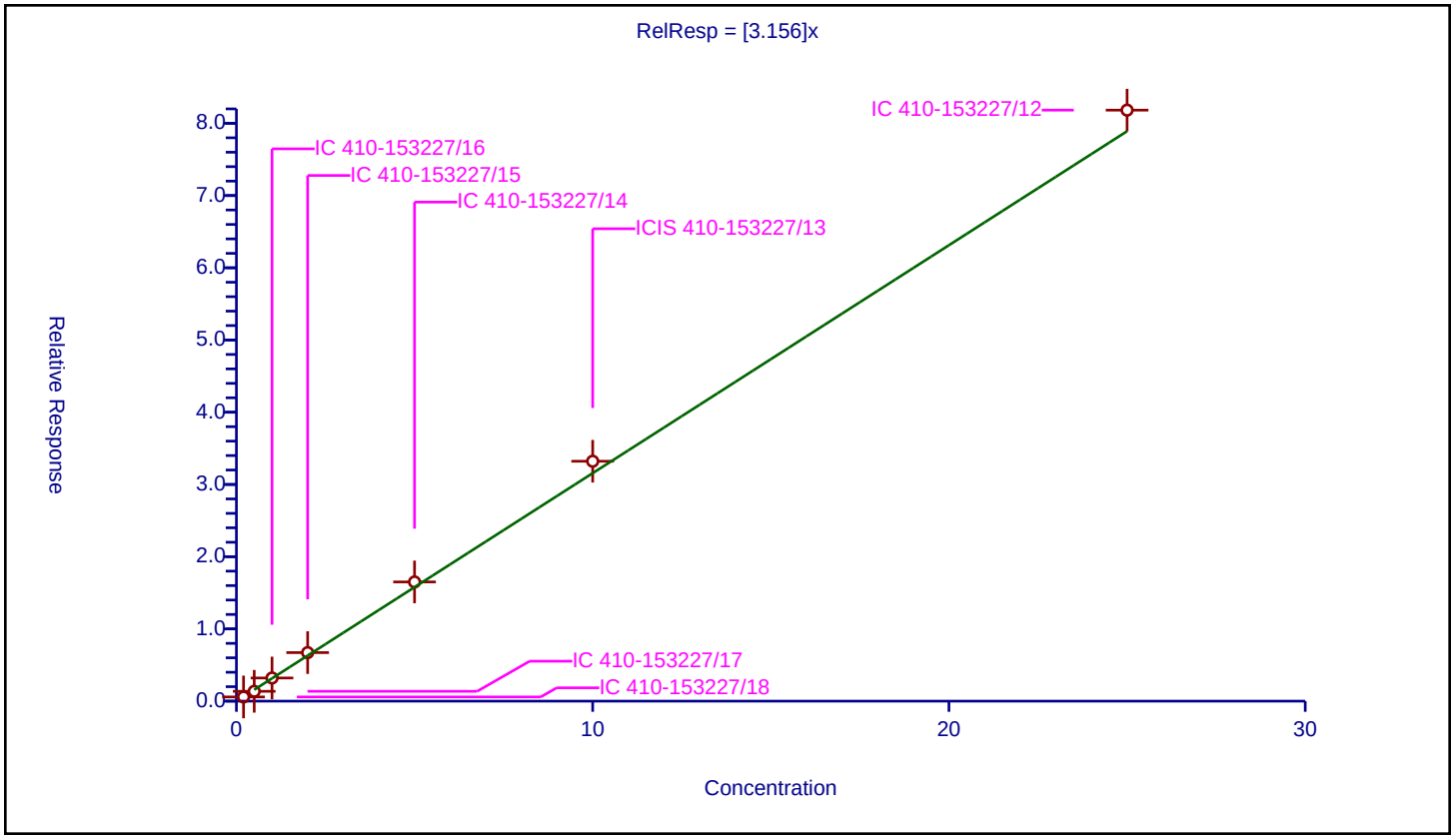
Curve Coefficients

Intercept:	0
Slope:	3.156

Error Coefficients

Standard Error:	3360000
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 410-153227/18	0.2	0.581477	10.0	858555.0	2.907385	Y
2	IC 410-153227/17	0.5	1.363154	10.0	857900.0	2.726308	Y
3	IC 410-153227/16	1.0	3.204873	10.0	875966.0	3.204873	Y
4	IC 410-153227/15	2.0	6.720052	10.0	879209.0	3.360026	Y
5	IC 410-153227/14	5.0	16.502841	10.0	897174.0	3.300568	Y
6	ICIS 410-153227/13	10.0	33.218067	10.0	901681.0	3.321807	Y
7	IC 410-153227/12	25.0	81.825492	10.0	914789.0	3.27302	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

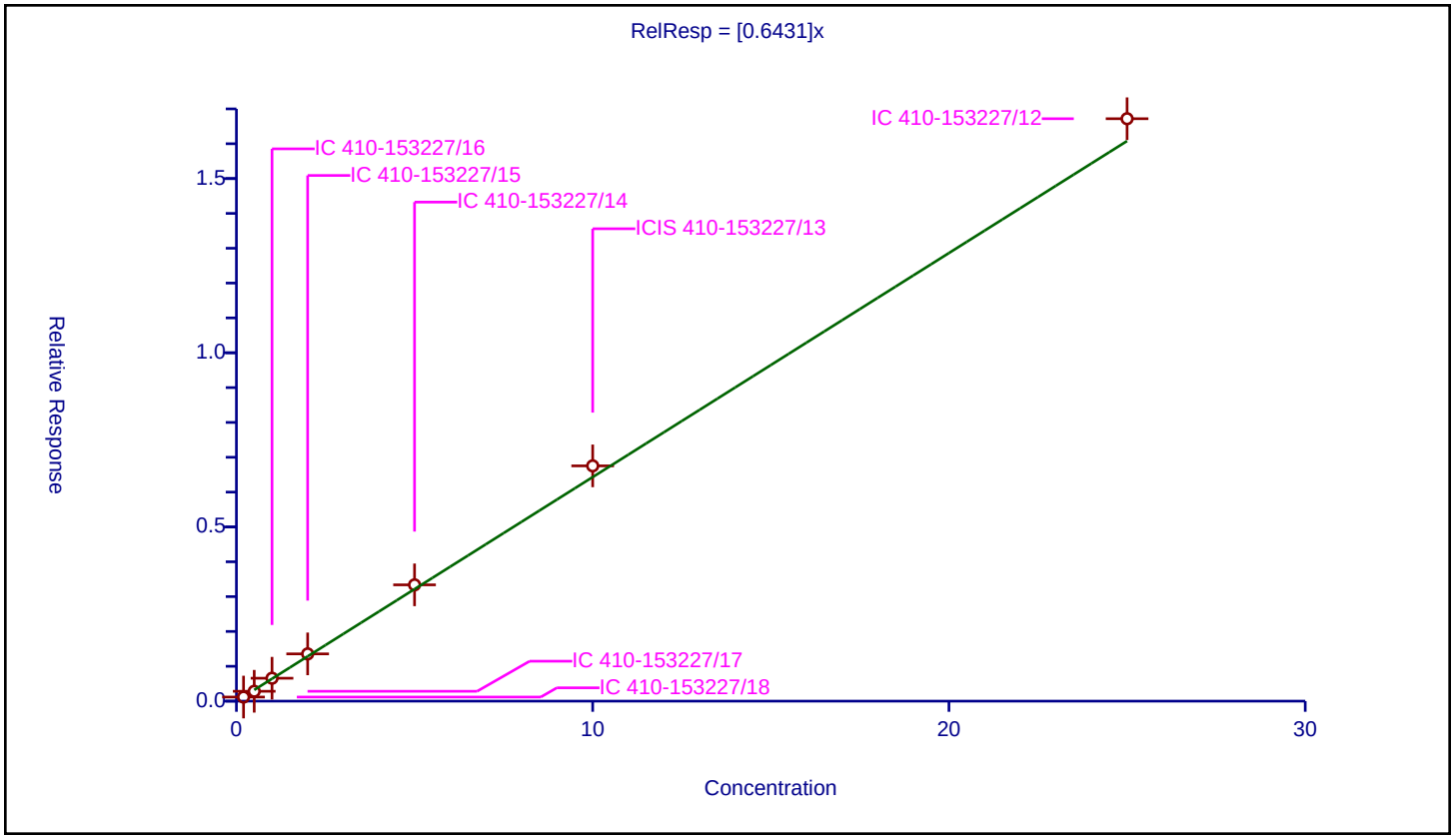
Curve Coefficients

Intercept:	0
Slope:	0.6431

Error Coefficients

Standard Error:	685000
Relative Standard Error:	7.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.117605	10.0	858555.0	0.588023	Y
2	IC 410-153227/17	0.5	0.282982	10.0	857900.0	0.565963	Y
3	IC 410-153227/16	1.0	0.658028	10.0	875966.0	0.658028	Y
4	IC 410-153227/15	2.0	1.356253	10.0	879209.0	0.678127	Y
5	IC 410-153227/14	5.0	3.338416	10.0	897174.0	0.667683	Y
6	ICIS 410-153227/13	10.0	6.753275	10.0	901681.0	0.675328	Y
7	IC 410-153227/12	25.0	16.717626	10.0	914789.0	0.668705	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

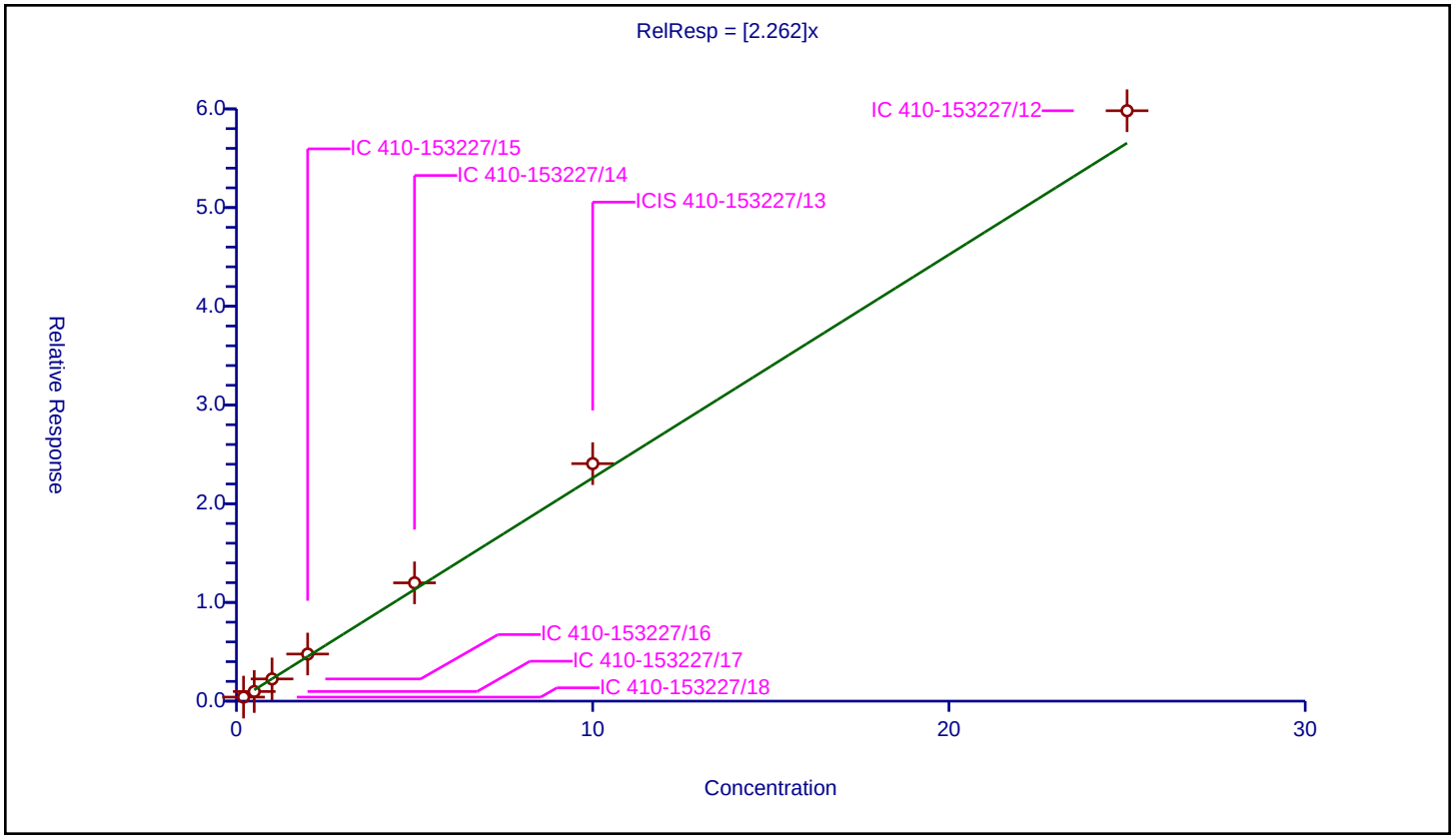
Curve Coefficients

Intercept:	0
Slope:	2.262

Error Coefficients

Standard Error:	2450000
Relative Standard Error:	8.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.409467	10.0	858555.0	2.047335	Y
2	IC 410-153227/17	0.5	0.976431	10.0	857900.0	1.952862	Y
3	IC 410-153227/16	1.0	2.249916	10.0	875966.0	2.249916	Y
4	IC 410-153227/15	2.0	4.771437	10.0	879209.0	2.385718	Y
5	IC 410-153227/14	5.0	11.985379	10.0	897174.0	2.397076	Y
6	ICIS 410-153227/13	10.0	24.062069	10.0	901681.0	2.406207	Y
7	IC 410-153227/12	25.0	59.81411	10.0	914789.0	2.392564	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

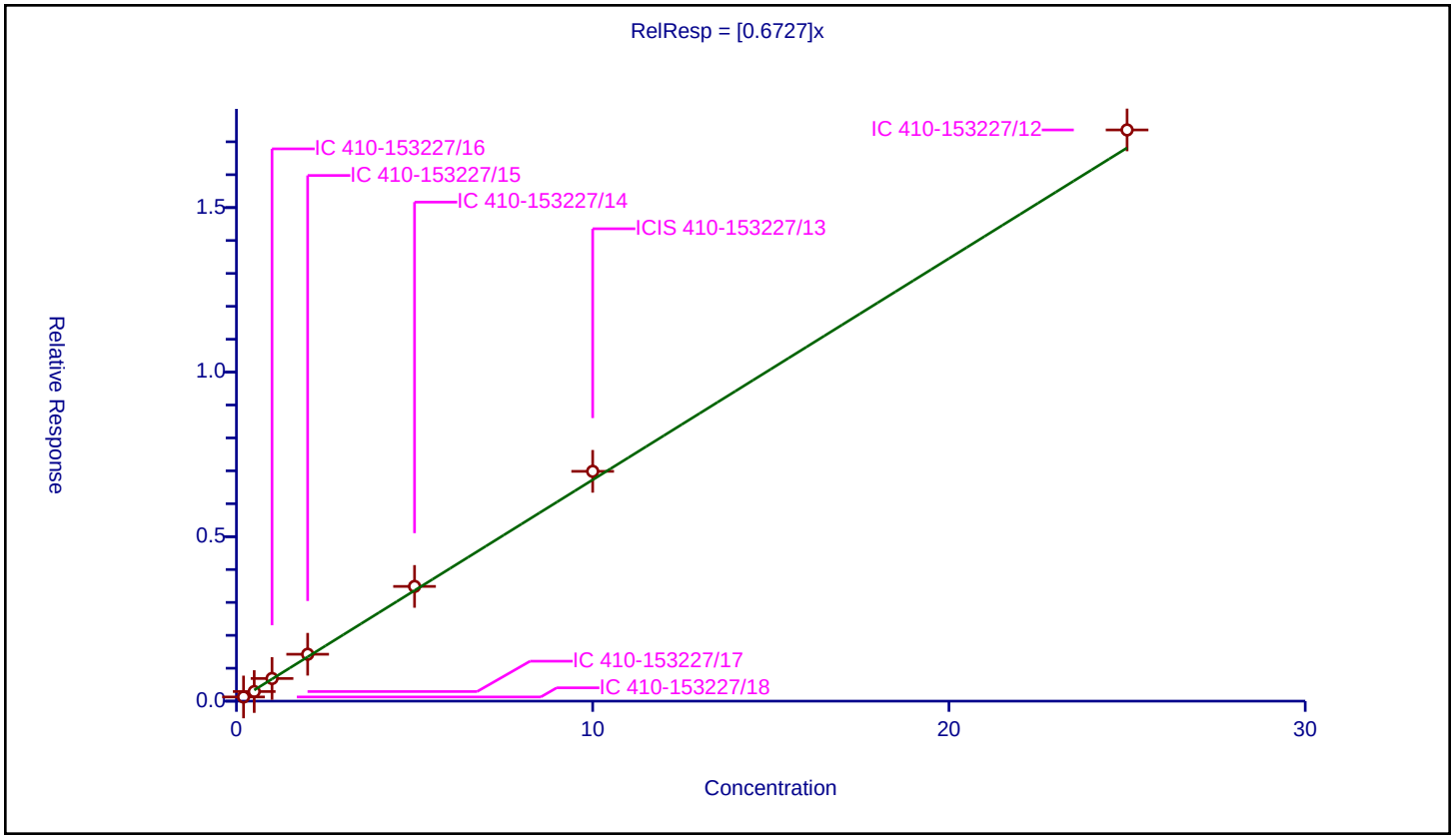
Curve Coefficients

Intercept:	0
Slope:	0.6727

Error Coefficients

Standard Error:	711000
Relative Standard Error:	6.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.126725	10.0	858555.0	0.633623	Y
2	IC 410-153227/17	0.5	0.291829	10.0	857900.0	0.583658	Y
3	IC 410-153227/16	1.0	0.6886	10.0	875966.0	0.6886	Y
4	IC 410-153227/15	2.0	1.425088	10.0	879209.0	0.712544	Y
5	IC 410-153227/14	5.0	3.487049	10.0	897174.0	0.69741	Y
6	ICIS 410-153227/13	10.0	6.984388	10.0	901681.0	0.698439	Y
7	IC 410-153227/12	25.0	17.360714	10.0	914789.0	0.694429	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

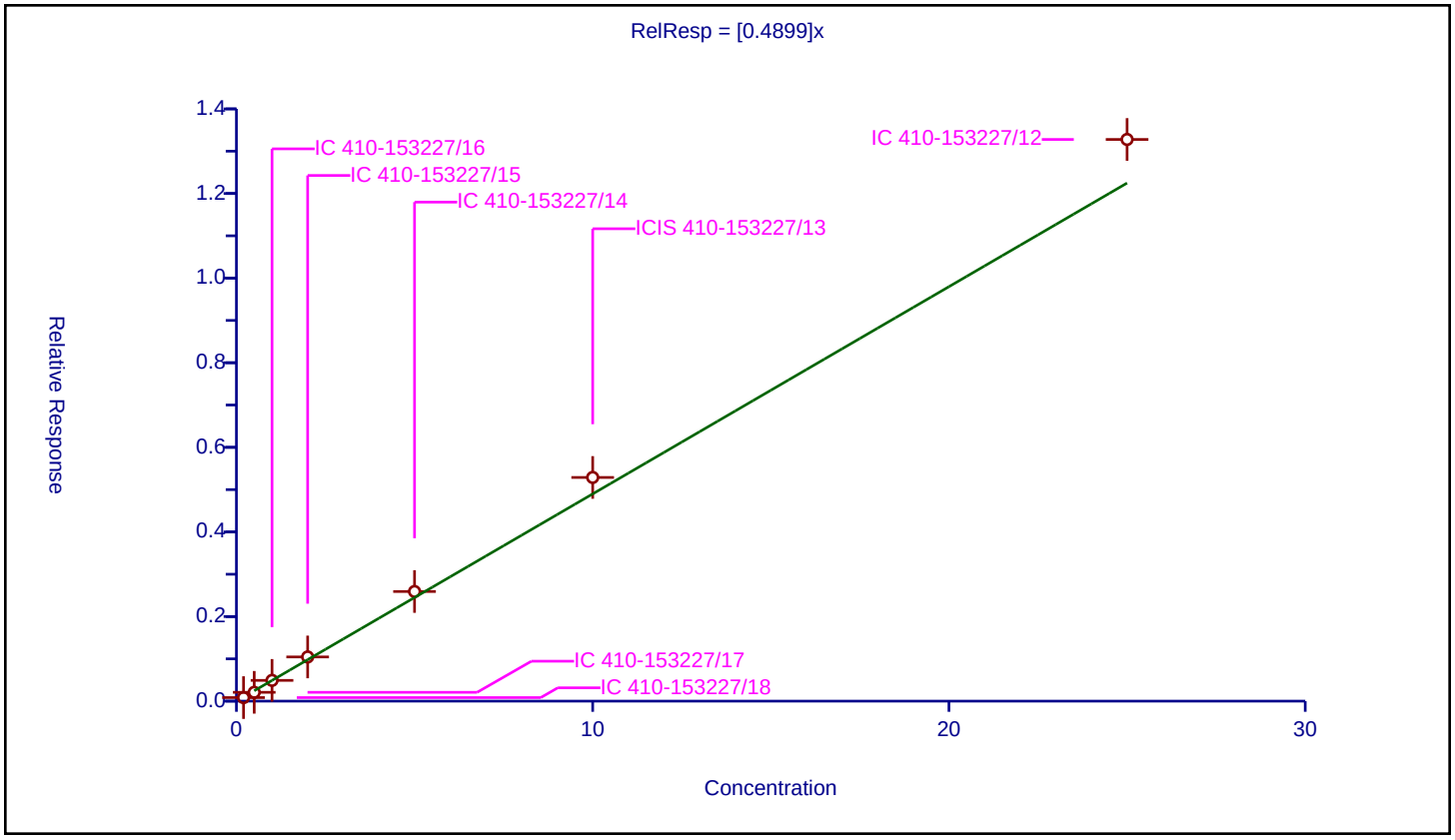
Curve Coefficients

Intercept:	0
Slope:	0.4899

Error Coefficients

Standard Error:	543000
Relative Standard Error:	10.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.084083	10.0	858555.0	0.420416	Y
2	IC 410-153227/17	0.5	0.208637	10.0	857900.0	0.417275	Y
3	IC 410-153227/16	1.0	0.490761	10.0	875966.0	0.490761	Y
4	IC 410-153227/15	2.0	1.04486	10.0	879209.0	0.52243	Y
5	IC 410-153227/14	5.0	2.591827	10.0	897174.0	0.518365	Y
6	ICIS 410-153227/13	10.0	5.28789	10.0	901681.0	0.528789	Y
7	IC 410-153227/12	25.0	13.277412	10.0	914789.0	0.531096	Y



Calibration / Pentachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

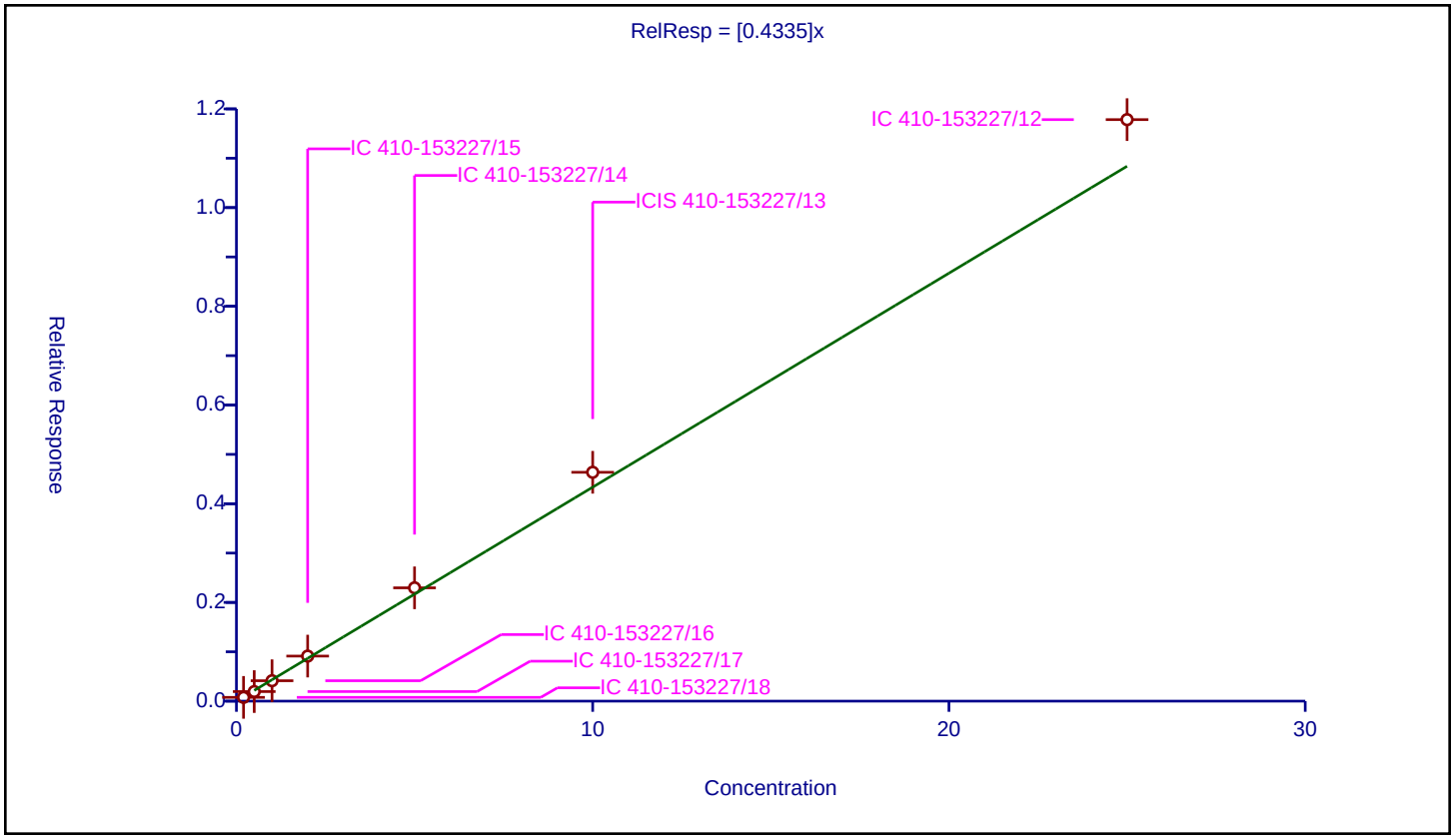
Curve Coefficients

Intercept:	0
Slope:	0.4335

Error Coefficients

Standard Error:	481000
Relative Standard Error:	8.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.076559	10.0	858555.0	0.382794	Y
2	IC 410-153227/17	0.5	0.193915	10.0	857900.0	0.387831	Y
3	IC 410-153227/16	1.0	0.413509	10.0	875966.0	0.413509	Y
4	IC 410-153227/15	2.0	0.913002	10.0	879209.0	0.456501	Y
5	IC 410-153227/14	5.0	2.296032	10.0	897174.0	0.459206	Y
6	ICIS 410-153227/13	10.0	4.636961	10.0	901681.0	0.463696	Y
7	IC 410-153227/12	25.0	11.782662	10.0	914789.0	0.471306	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

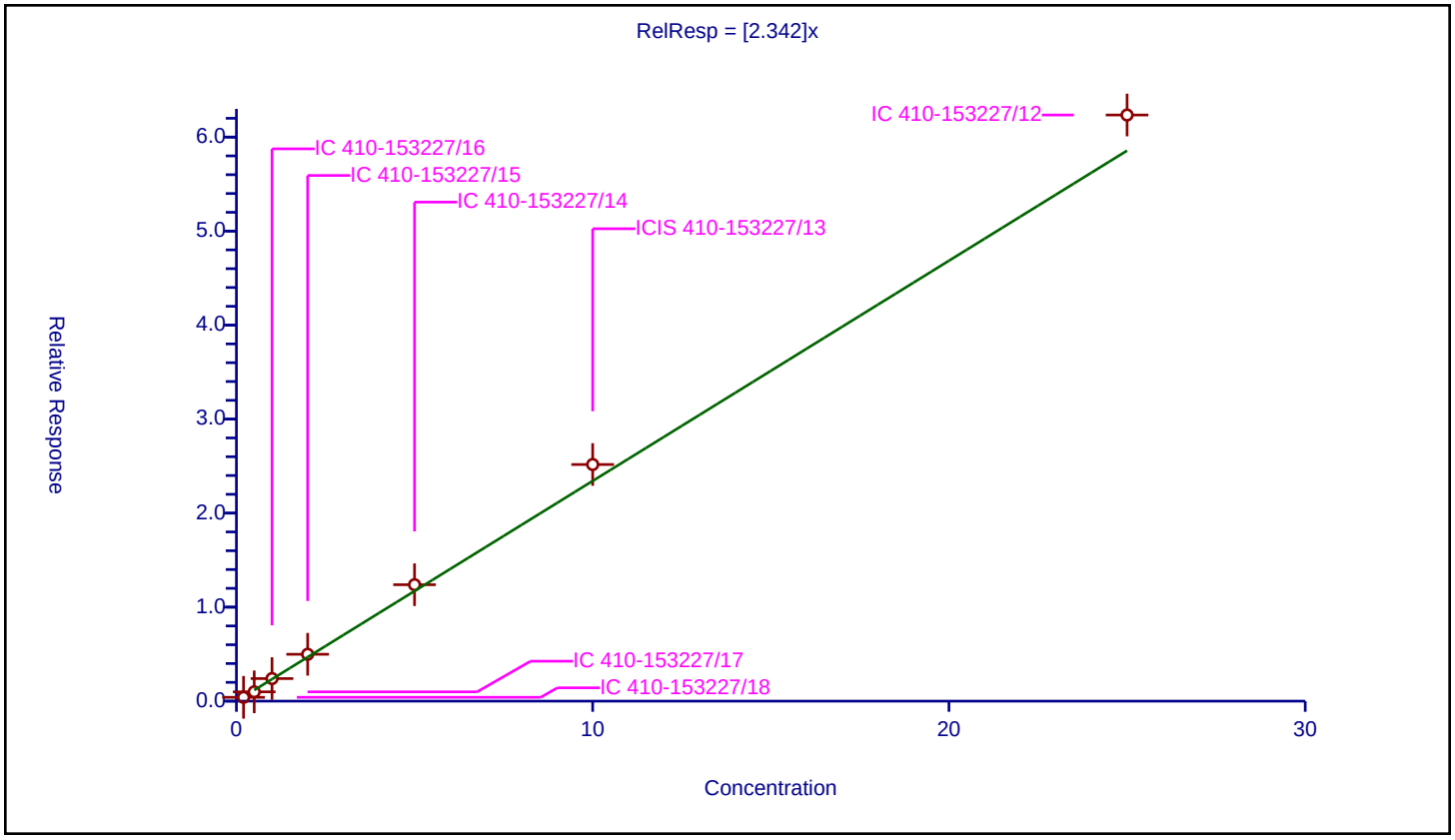
Curve Coefficients

Intercept:	0
Slope:	2.342

Error Coefficients

Standard Error:	2550000
Relative Standard Error:	9.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.406043	10.0	858555.0	2.030214	Y
2	IC 410-153227/17	0.5	0.991572	10.0	857900.0	1.983145	Y
3	IC 410-153227/16	1.0	2.402502	10.0	875966.0	2.402502	Y
4	IC 410-153227/15	2.0	4.98464	10.0	879209.0	2.49232	Y
5	IC 410-153227/14	5.0	12.385769	10.0	897174.0	2.477154	Y
6	ICIS 410-153227/13	10.0	25.171086	10.0	901681.0	2.517109	Y
7	IC 410-153227/12	25.0	62.349307	10.0	914789.0	2.493972	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

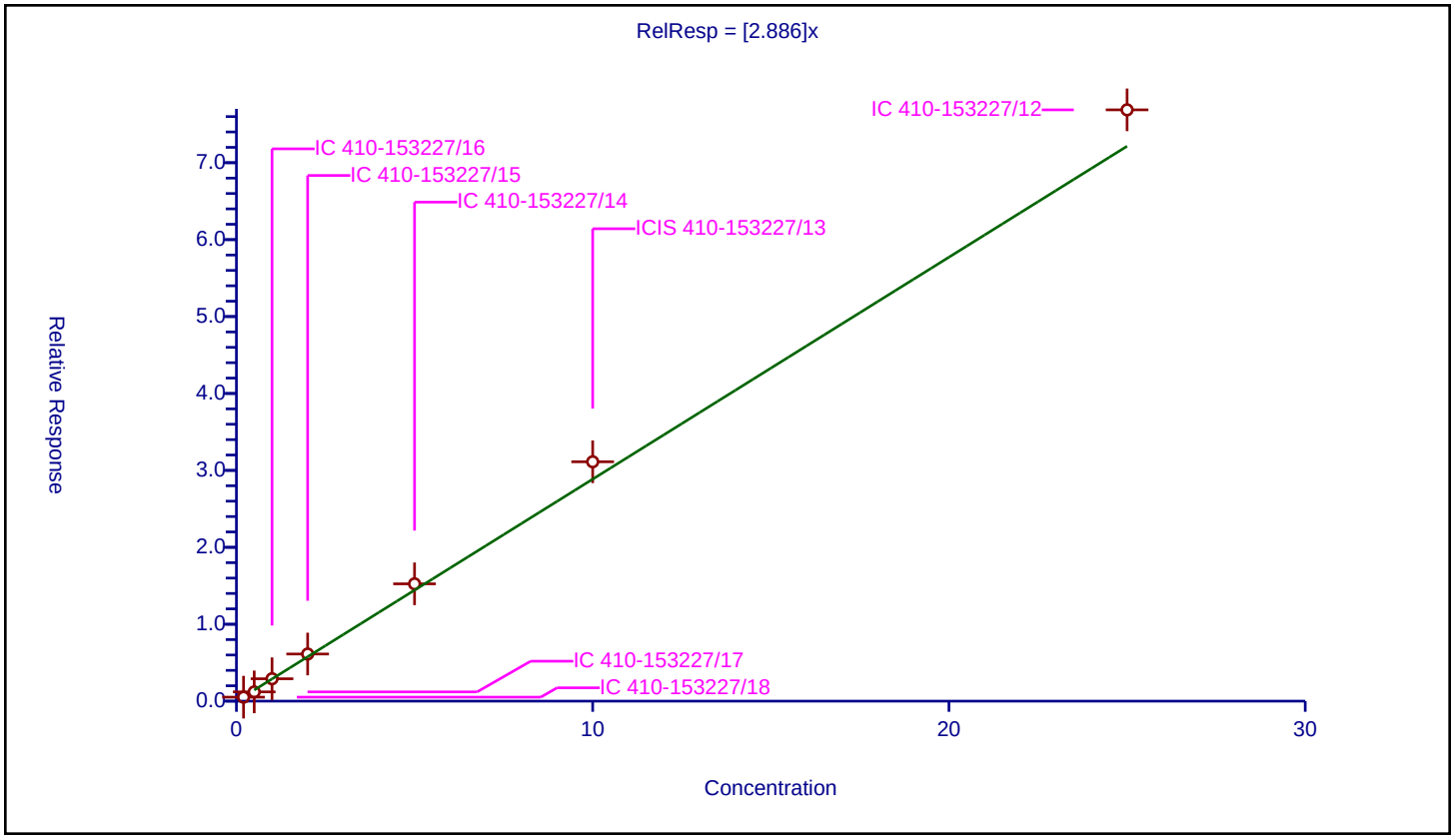
Curve Coefficients

Intercept:	0
Slope:	2.886

Error Coefficients

Standard Error:	3150000
Relative Standard Error:	9.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.516391	10.0	858555.0	2.581955	Y
2	IC 410-153227/17	0.5	1.203275	10.0	857900.0	2.406551	Y
3	IC 410-153227/16	1.0	2.911038	10.0	875966.0	2.911038	Y
4	IC 410-153227/15	2.0	6.128213	10.0	879209.0	3.064106	Y
5	IC 410-153227/14	5.0	15.253217	10.0	897174.0	3.050643	Y
6	ICIS 410-153227/13	10.0	31.120962	10.0	901681.0	3.112096	Y
7	IC 410-153227/12	25.0	76.875749	10.0	914789.0	3.07503	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

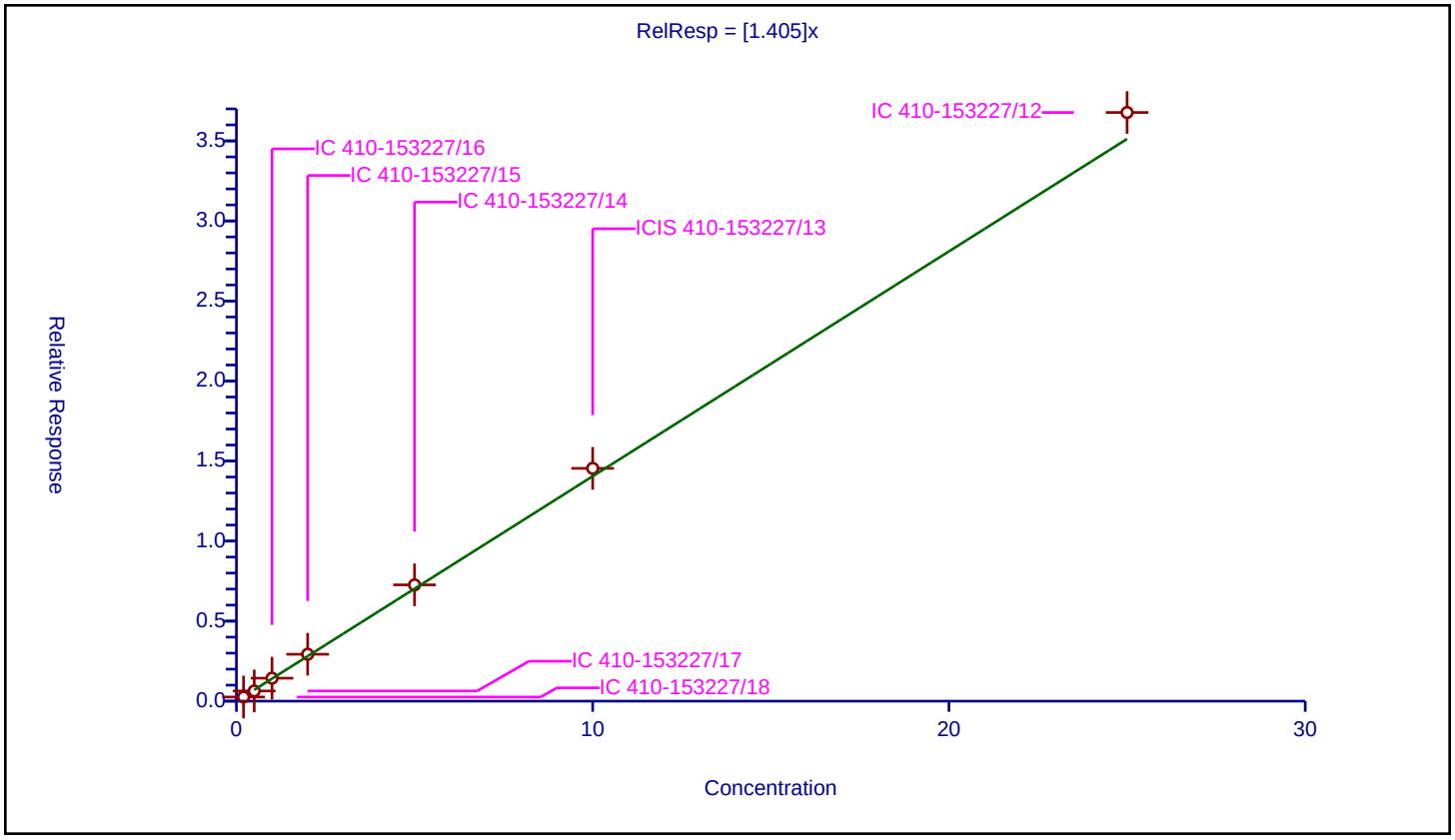
Curve Coefficients

Intercept:	0
Slope:	1.405

Error Coefficients

Standard Error:	1500000
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 410-153227/18	0.2	0.256326	10.0	858555.0	1.28163	Y
2	IC 410-153227/17	0.5	0.637091	10.0	857900.0	1.274181	Y
3	IC 410-153227/16	1.0	1.435604	10.0	875966.0	1.435604	Y
4	IC 410-153227/15	2.0	2.929451	10.0	879209.0	1.464726	Y
5	IC 410-153227/14	5.0	7.263652	10.0	897174.0	1.45273	Y
6	ICIS 410-153227/13	10.0	14.542992	10.0	901681.0	1.454299	Y
7	IC 410-153227/12	25.0	36.775956	10.0	914789.0	1.471038	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

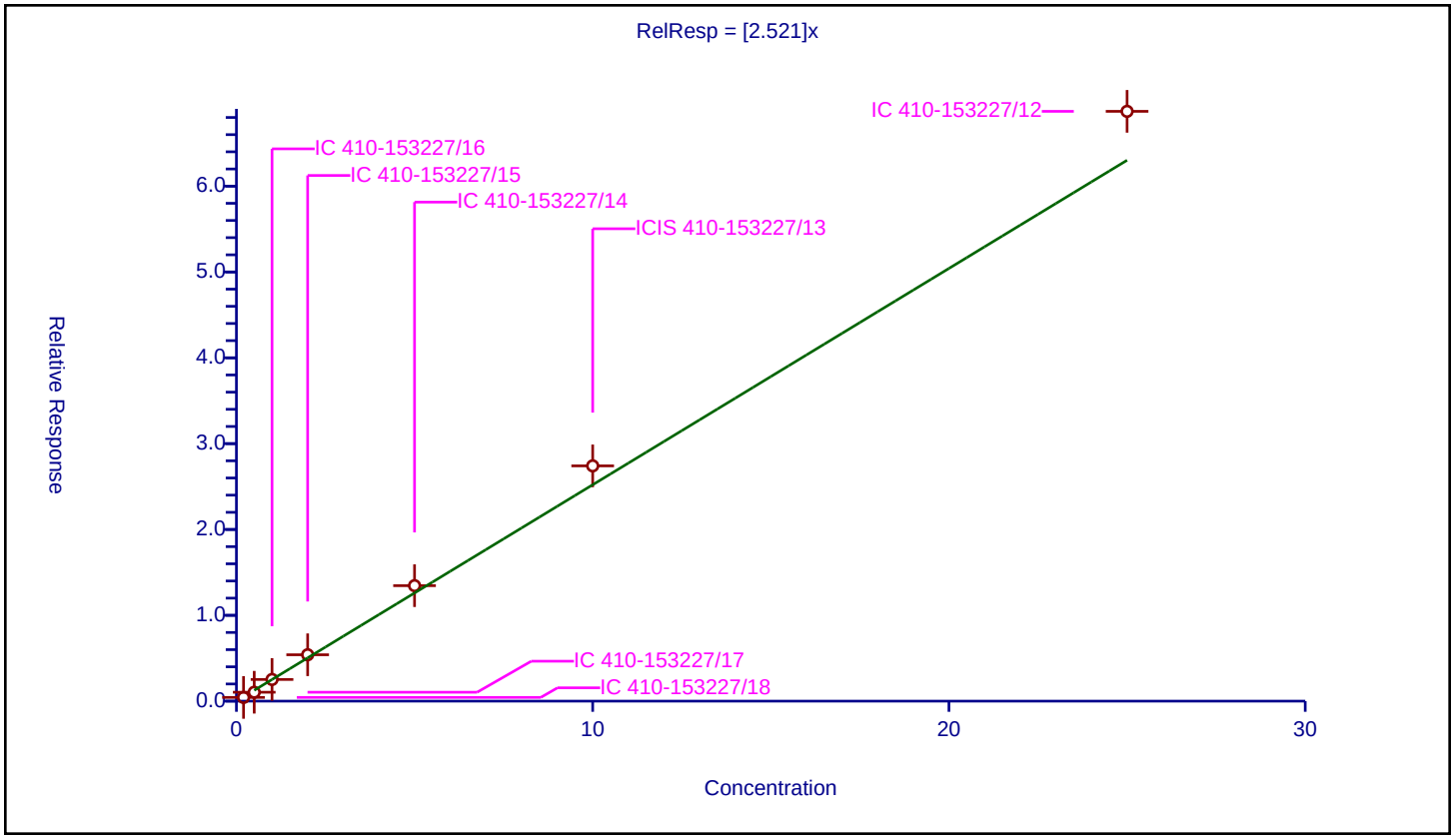
Curve Coefficients

Intercept:	0
Slope:	2.521

Error Coefficients

Standard Error:	2810000
Relative Standard Error:	11.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.432145	10.0	858555.0	2.160724	Y
2	IC 410-153227/17	0.5	1.037615	10.0	857900.0	2.07523	Y
3	IC 410-153227/16	1.0	2.525703	10.0	875966.0	2.525703	Y
4	IC 410-153227/15	2.0	5.40537	10.0	879209.0	2.702685	Y
5	IC 410-153227/14	5.0	13.453355	10.0	897174.0	2.690671	Y
6	ICIS 410-153227/13	10.0	27.411468	10.0	901681.0	2.741147	Y
7	IC 410-153227/12	25.0	68.714971	10.0	914789.0	2.748599	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

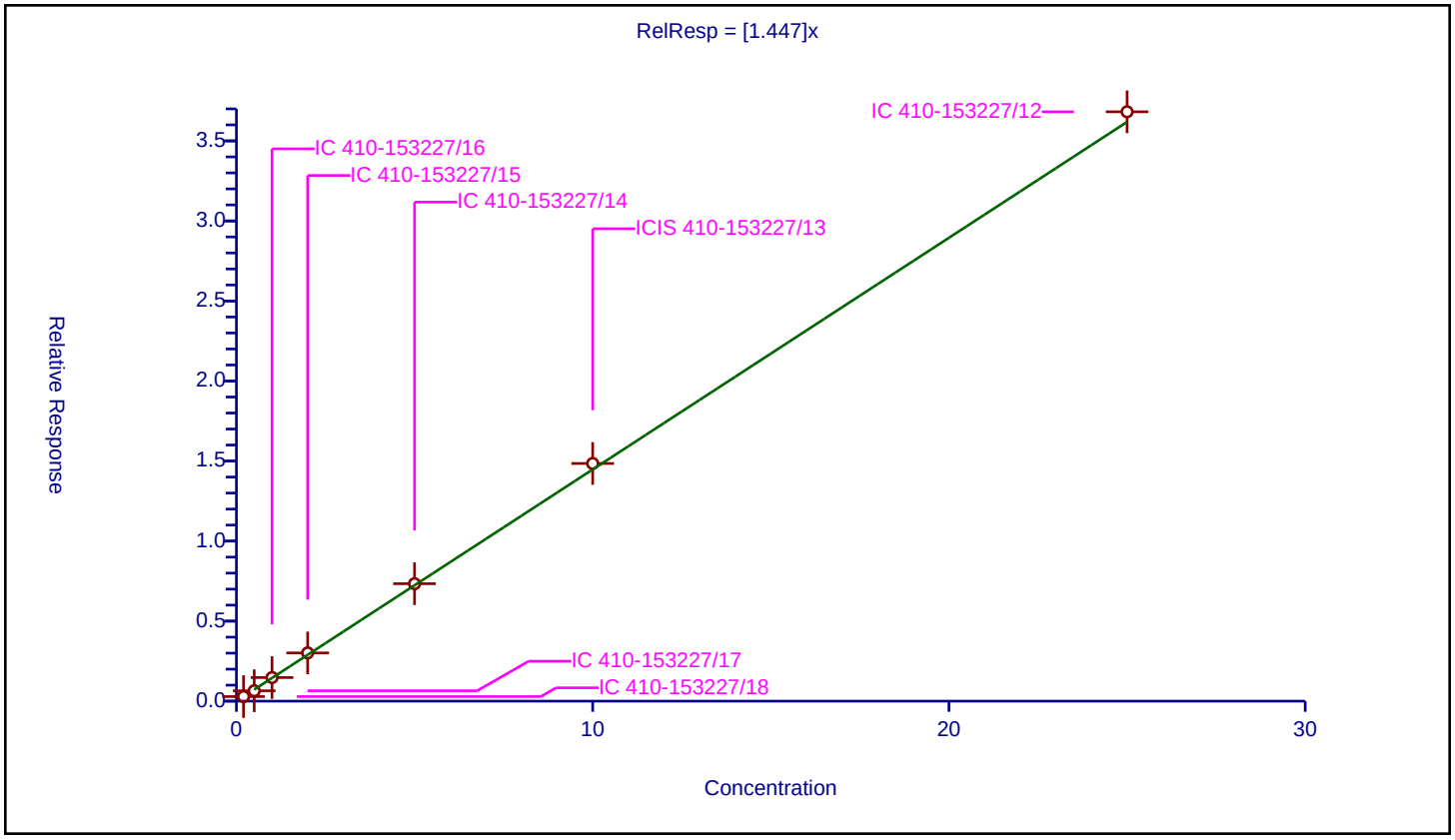
Curve Coefficients

Intercept:	0
Slope:	1.447

Error Coefficients

Standard Error:	1510000
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.285922	10.0	858555.0	1.429611	Y
2	IC 410-153227/17	0.5	0.648898	10.0	857900.0	1.297797	Y
3	IC 410-153227/16	1.0	1.47282	10.0	875966.0	1.47282	Y
4	IC 410-153227/15	2.0	3.012446	10.0	879209.0	1.506223	Y
5	IC 410-153227/14	5.0	7.337874	10.0	897174.0	1.467575	Y
6	ICIS 410-153227/13	10.0	14.847712	10.0	901681.0	1.484771	Y
7	IC 410-153227/12	25.0	36.818469	10.0	914789.0	1.472739	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

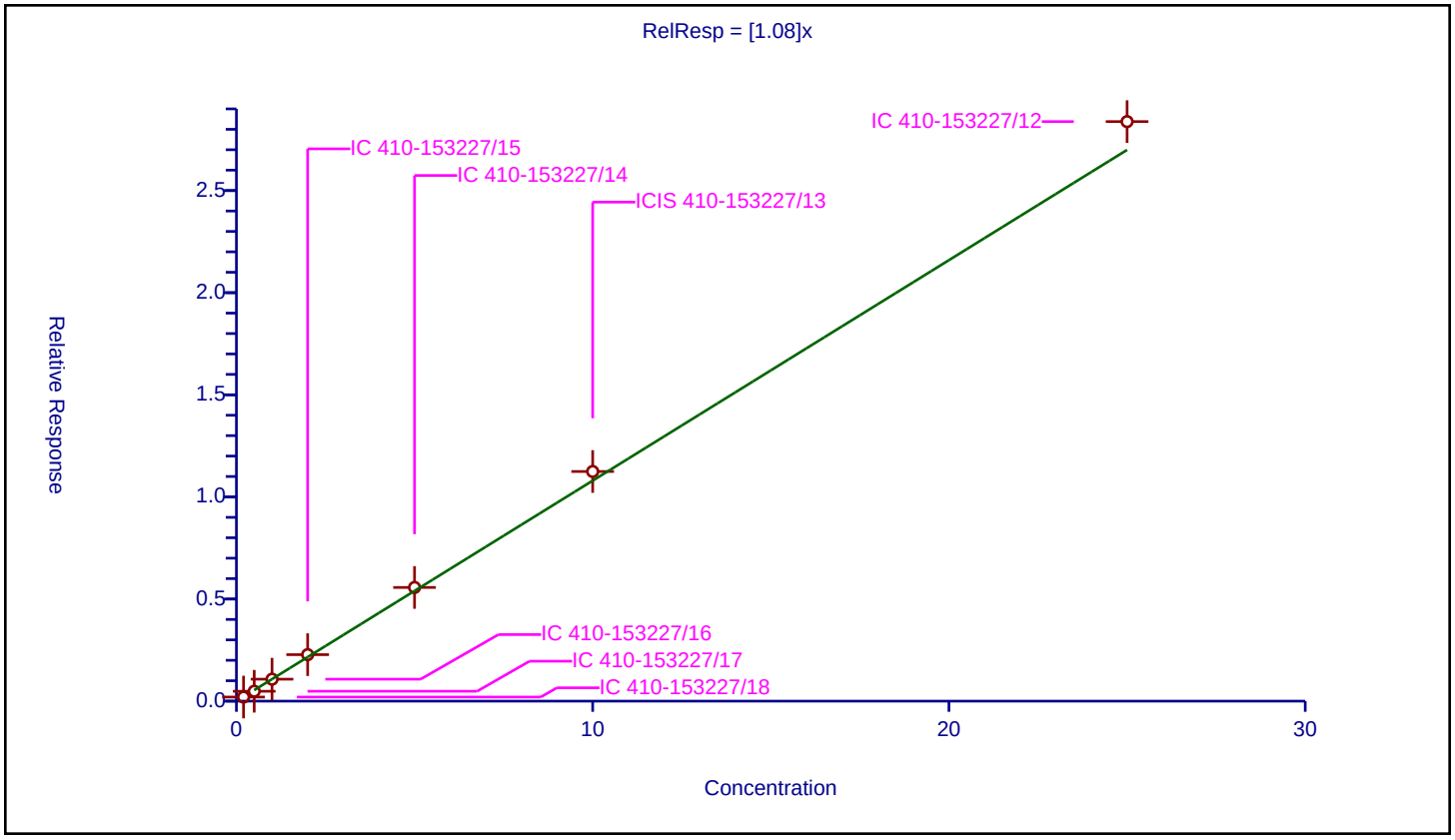
Curve Coefficients

Intercept:	0
Slope:	1.08

Error Coefficients

Standard Error:	1160000
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 410-153227/18	0.2	0.200465	10.0	858555.0	1.002324	Y
2	IC 410-153227/17	0.5	0.484975	10.0	857900.0	0.96995	Y
3	IC 410-153227/16	1.0	1.074676	10.0	875966.0	1.074676	Y
4	IC 410-153227/15	2.0	2.275909	10.0	879209.0	1.137955	Y
5	IC 410-153227/14	5.0	5.56639	10.0	897174.0	1.113278	Y
6	ICIS 410-153227/13	10.0	11.244775	10.0	901681.0	1.124478	Y
7	IC 410-153227/12	25.0	28.378544	10.0	914789.0	1.135142	Y



Calibration / Benzyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

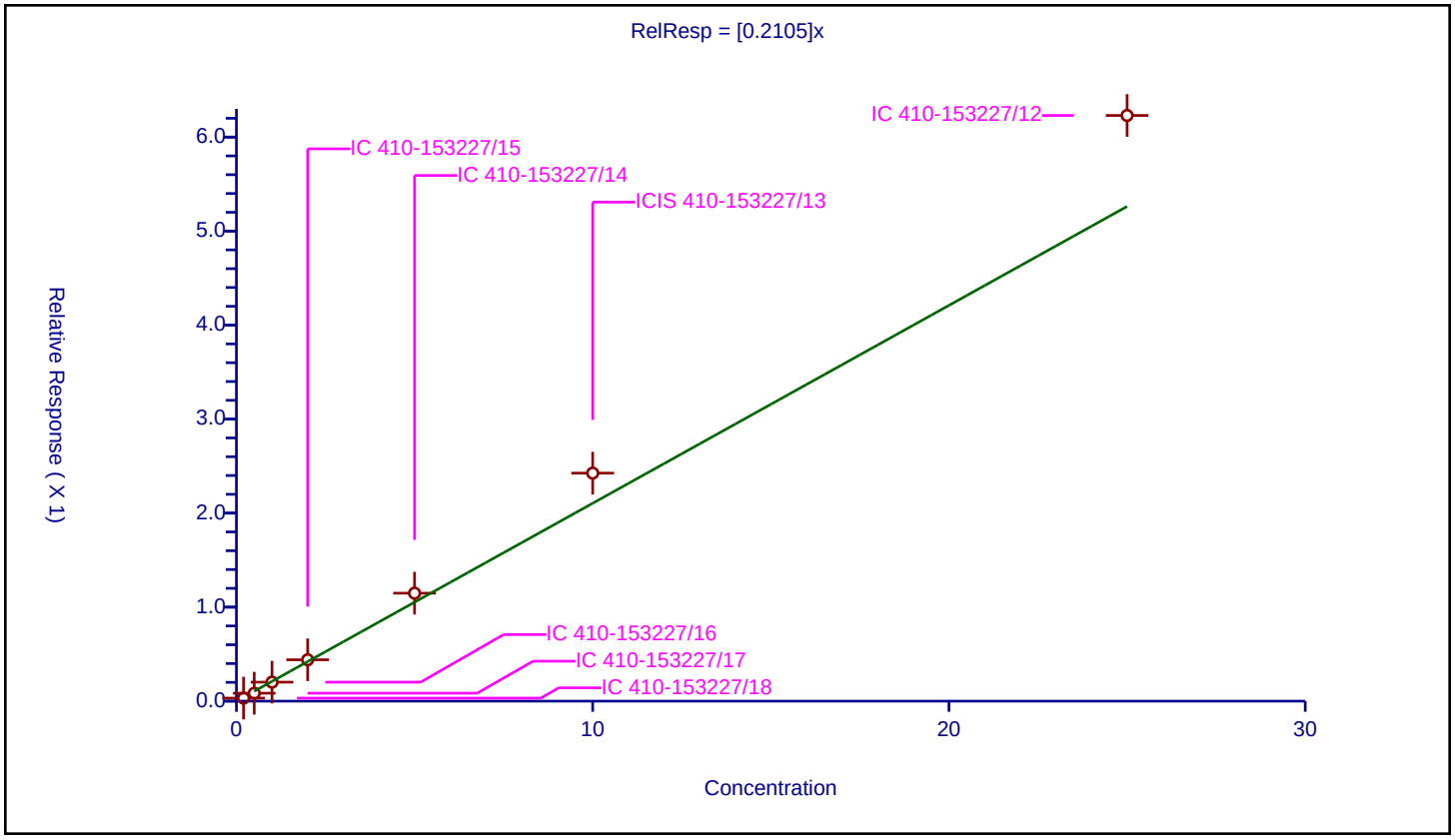
Curve Coefficients

Intercept:	0
Slope:	0.2105

Error Coefficients

Standard Error:	253000
Relative Standard Error:	16.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.970

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.03224	10.0	858555.0	0.161201	Y
2	IC 410-153227/17	0.5	0.084299	10.0	857900.0	0.168598	Y
3	IC 410-153227/16	1.0	0.202131	10.0	875966.0	0.202131	Y
4	IC 410-153227/15	2.0	0.440123	10.0	879209.0	0.220061	Y
5	IC 410-153227/14	5.0	1.148406	10.0	897174.0	0.229681	Y
6	ICIS 410-153227/13	10.0	2.425448	10.0	901681.0	0.242545	Y
7	IC 410-153227/12	25.0	6.230016	10.0	914789.0	0.249201	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

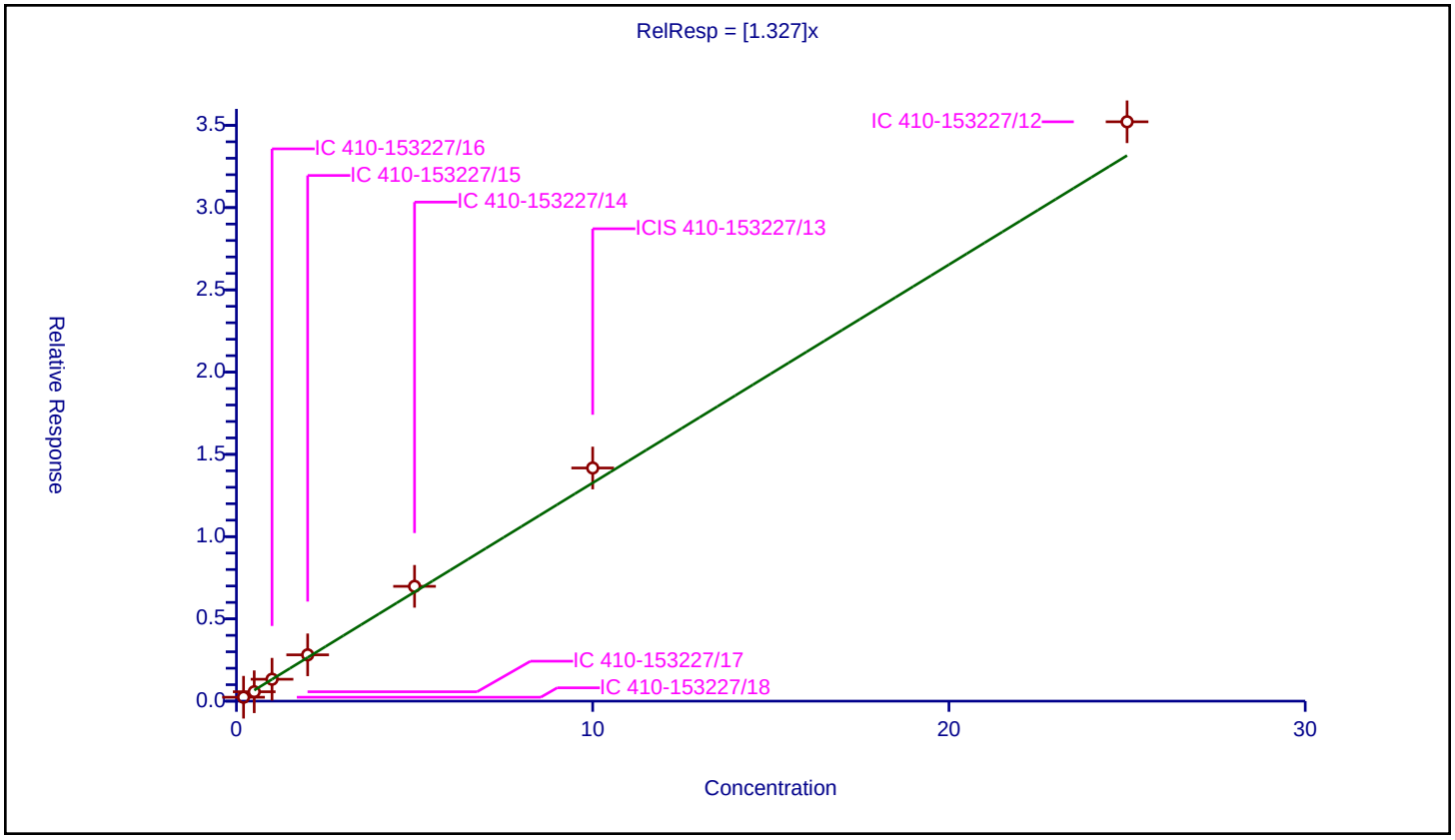
Curve Coefficients

Intercept:	0
Slope:	1.327

Error Coefficients

Standard Error:	1440000
Relative Standard Error:	8.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.237247	10.0	858555.0	1.186237	Y
2	IC 410-153227/17	0.5	0.570218	10.0	857900.0	1.140436	Y
3	IC 410-153227/16	1.0	1.33189	10.0	875966.0	1.33189	Y
4	IC 410-153227/15	2.0	2.813916	10.0	879209.0	1.406958	Y
5	IC 410-153227/14	5.0	6.978312	10.0	897174.0	1.395662	Y
6	ICIS 410-153227/13	10.0	14.170832	10.0	901681.0	1.417083	Y
7	IC 410-153227/12	25.0	35.216143	10.0	914789.0	1.408646	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

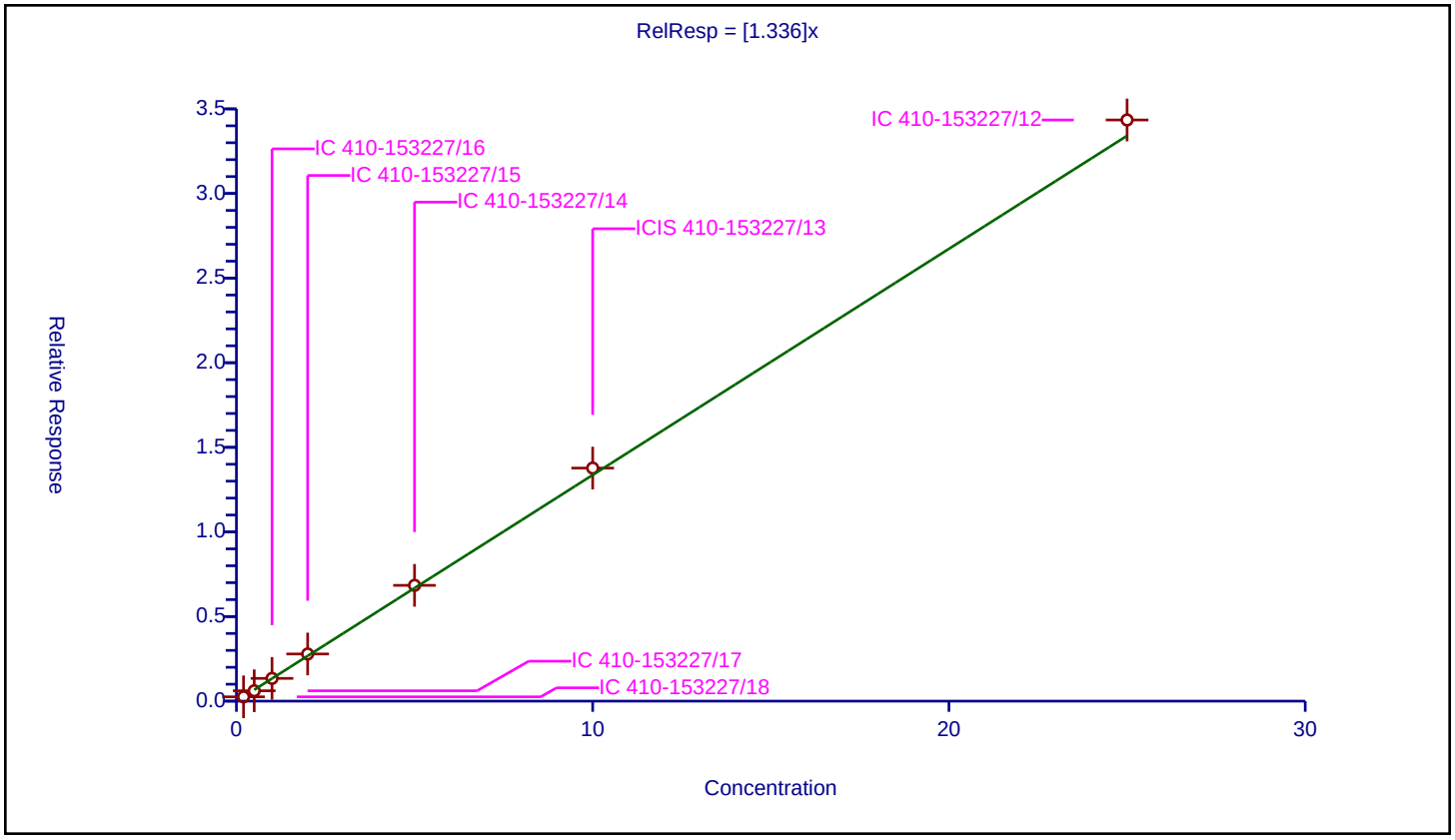
Curve Coefficients

Intercept:	0
Slope:	1.336

Error Coefficients

Standard Error:	1410000
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 410-153227/18	0.2	0.254416	10.0	858555.0	1.272079	Y
2	IC 410-153227/17	0.5	0.612554	10.0	857900.0	1.225108	Y
3	IC 410-153227/16	1.0	1.345052	10.0	875966.0	1.345052	Y
4	IC 410-153227/15	2.0	2.787176	10.0	879209.0	1.393588	Y
5	IC 410-153227/14	5.0	6.842575	10.0	897174.0	1.368515	Y
6	ICIS 410-153227/13	10.0	13.773097	10.0	901681.0	1.37731	Y
7	IC 410-153227/12	25.0	34.345614	10.0	914789.0	1.373825	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

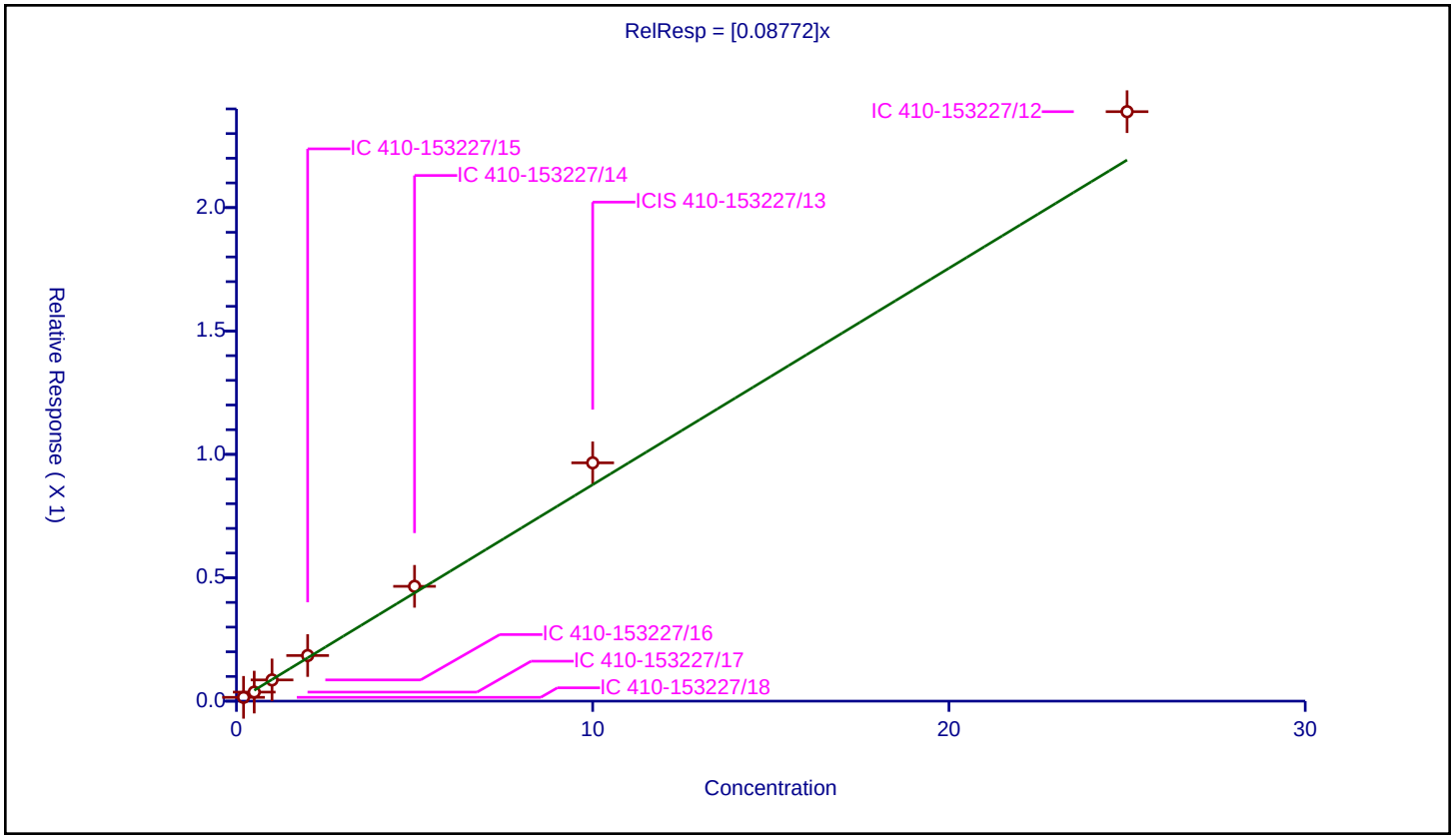
Curve Coefficients

Intercept:	0
Slope:	0.08772

Error Coefficients

Standard Error:	97800
Relative Standard Error:	10.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.015433	10.0	858555.0	0.077165	Y
2	IC 410-153227/17	0.5	0.036659	10.0	857900.0	0.073319	Y
3	IC 410-153227/16	1.0	0.085962	10.0	875966.0	0.085962	Y
4	IC 410-153227/15	2.0	0.184814	10.0	879209.0	0.092407	Y
5	IC 410-153227/14	5.0	0.465272	10.0	897174.0	0.093054	Y
6	ICIS 410-153227/13	10.0	0.965707	10.0	901681.0	0.096571	Y
7	IC 410-153227/12	25.0	2.388748	10.0	914789.0	0.09555	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

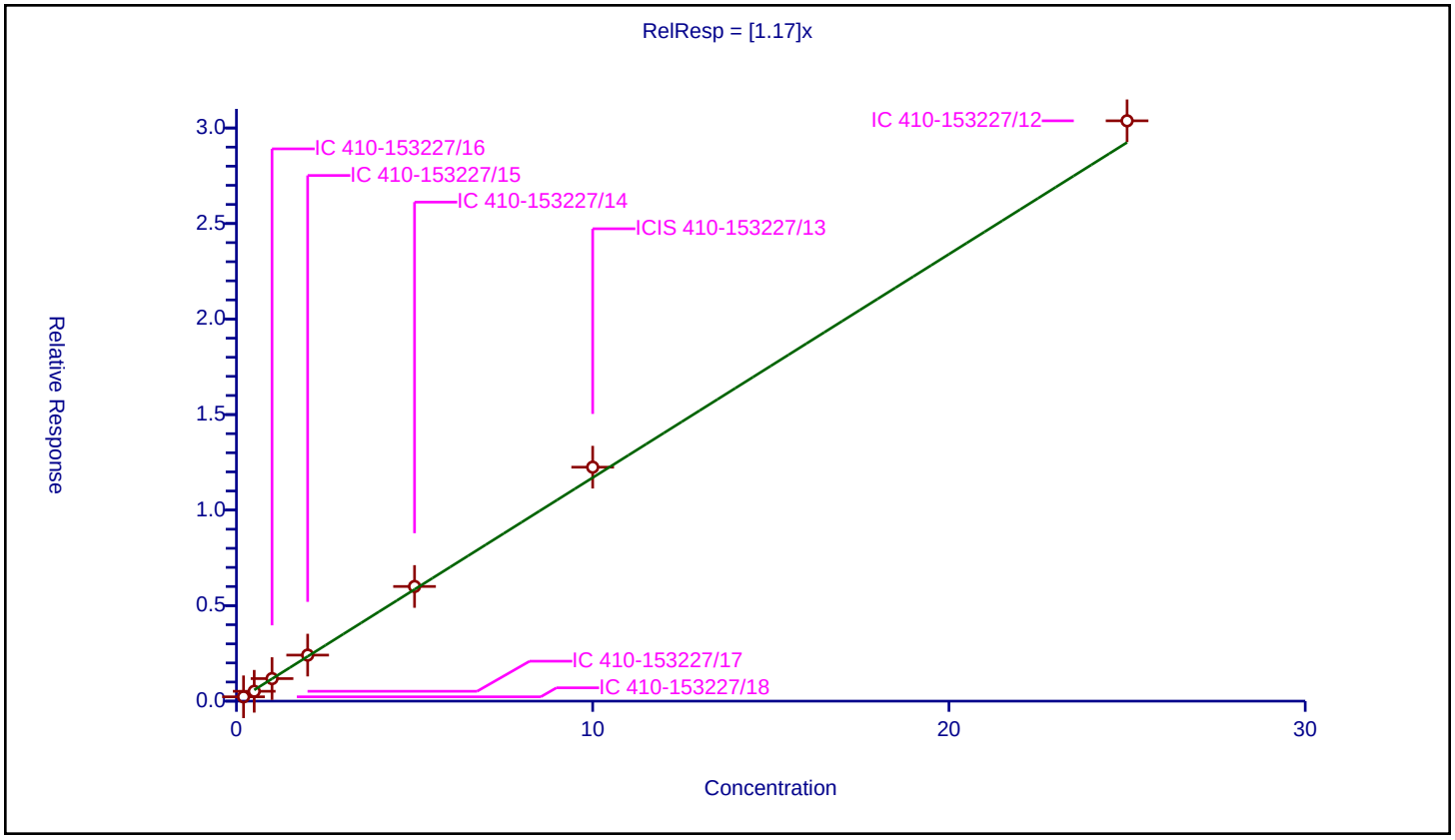
Curve Coefficients

Intercept:	0
Slope:	1.17

Error Coefficients

Standard Error:	1240000
Relative Standard Error:	5.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.225996	10.0	858555.0	1.12998	Y
2	IC 410-153227/17	0.5	0.516284	10.0	857900.0	1.032568	Y
3	IC 410-153227/16	1.0	1.180628	10.0	875966.0	1.180628	Y
4	IC 410-153227/15	2.0	2.410383	10.0	879209.0	1.205191	Y
5	IC 410-153227/14	5.0	6.00198	10.0	897174.0	1.200396	Y
6	ICIS 410-153227/13	10.0	12.24646	10.0	901681.0	1.224646	Y
7	IC 410-153227/12	25.0	30.376513	10.0	914789.0	1.215061	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

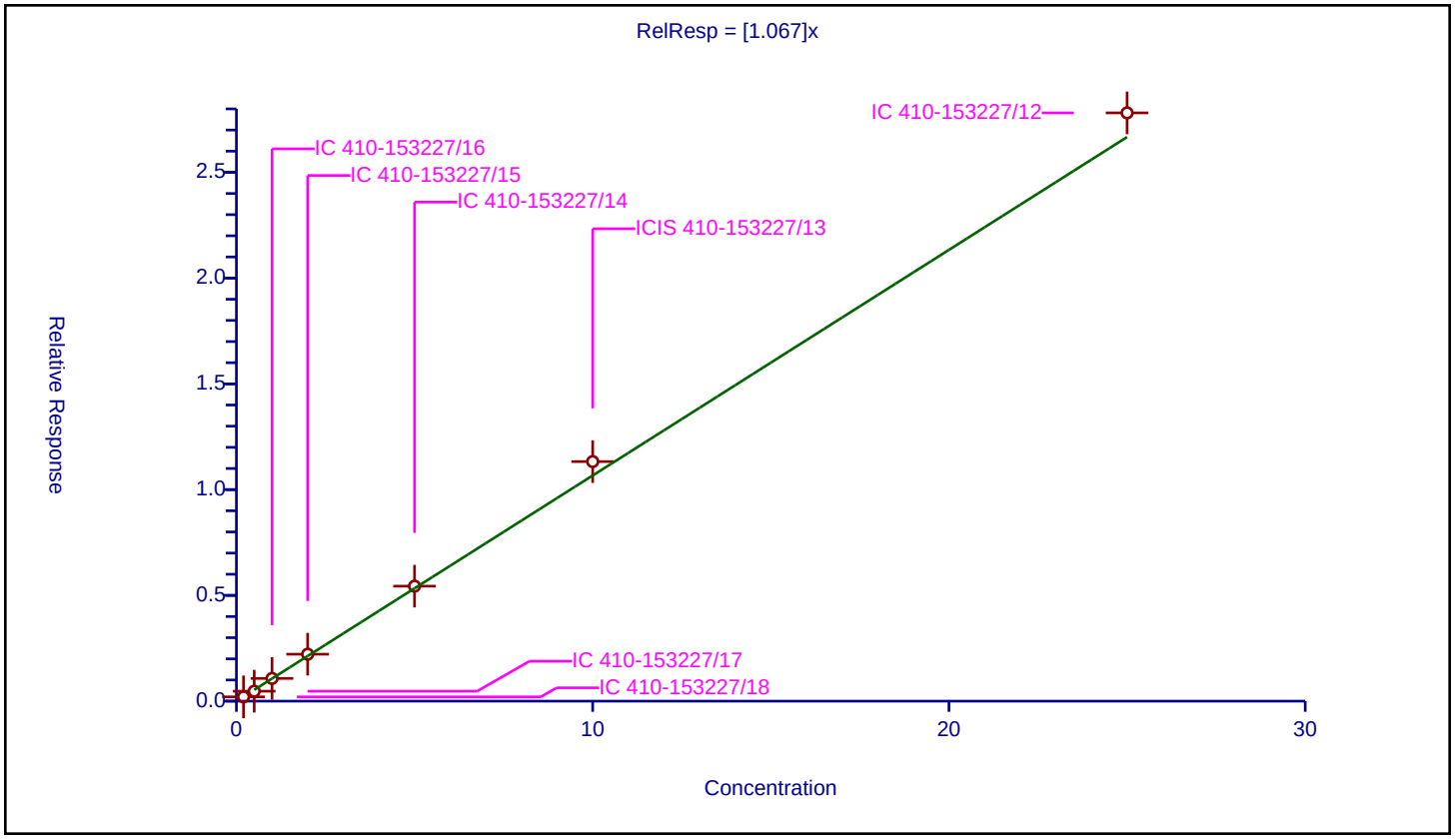
Curve Coefficients

Intercept:	0
Slope:	1.067

Error Coefficients

Standard Error:	1140000
Relative Standard Error:	6.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.20213	10.0	858555.0	1.010652	Y
2	IC 410-153227/17	0.5	0.470078	10.0	857900.0	0.940156	Y
3	IC 410-153227/16	1.0	1.074323	10.0	875966.0	1.074323	Y
4	IC 410-153227/15	2.0	2.219222	10.0	879209.0	1.109611	Y
5	IC 410-153227/14	5.0	5.437106	10.0	897174.0	1.087421	Y
6	ICIS 410-153227/13	10.0	11.326068	10.0	901681.0	1.132607	Y
7	IC 410-153227/12	25.0	27.81073	10.0	914789.0	1.112429	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

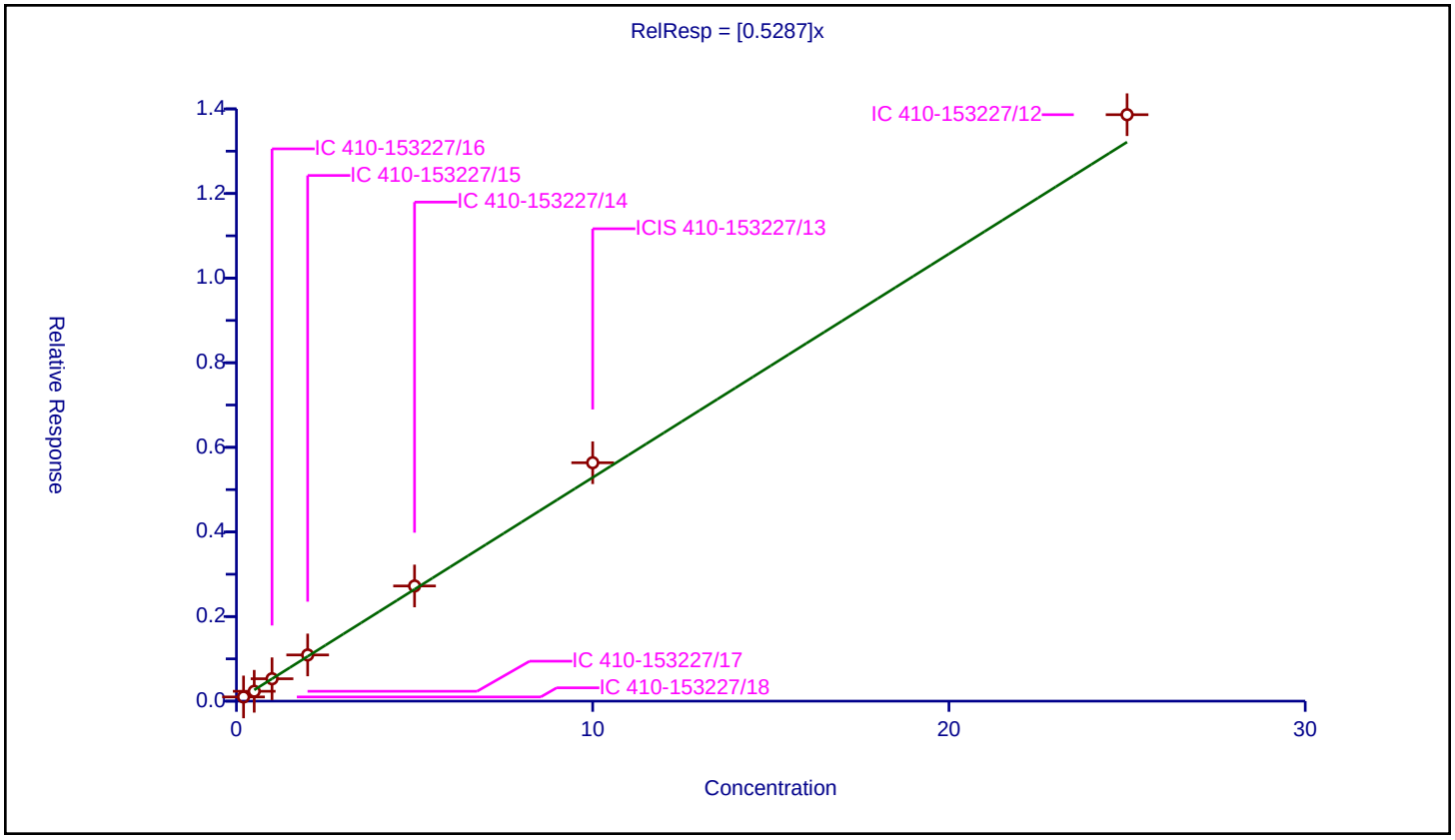
Curve Coefficients

Intercept:	0
Slope:	0.5287

Error Coefficients

Standard Error:	568000
Relative Standard Error:	6.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.099132	10.0	858555.0	0.495658	Y
2	IC 410-153227/17	0.5	0.233559	10.0	857900.0	0.467117	Y
3	IC 410-153227/16	1.0	0.529164	10.0	875966.0	0.529164	Y
4	IC 410-153227/15	2.0	1.092209	10.0	879209.0	0.546105	Y
5	IC 410-153227/14	5.0	2.722649	10.0	897174.0	0.54453	Y
6	ICIS 410-153227/13	10.0	5.636029	10.0	901681.0	0.563603	Y
7	IC 410-153227/12	25.0	13.862825	10.0	914789.0	0.554513	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

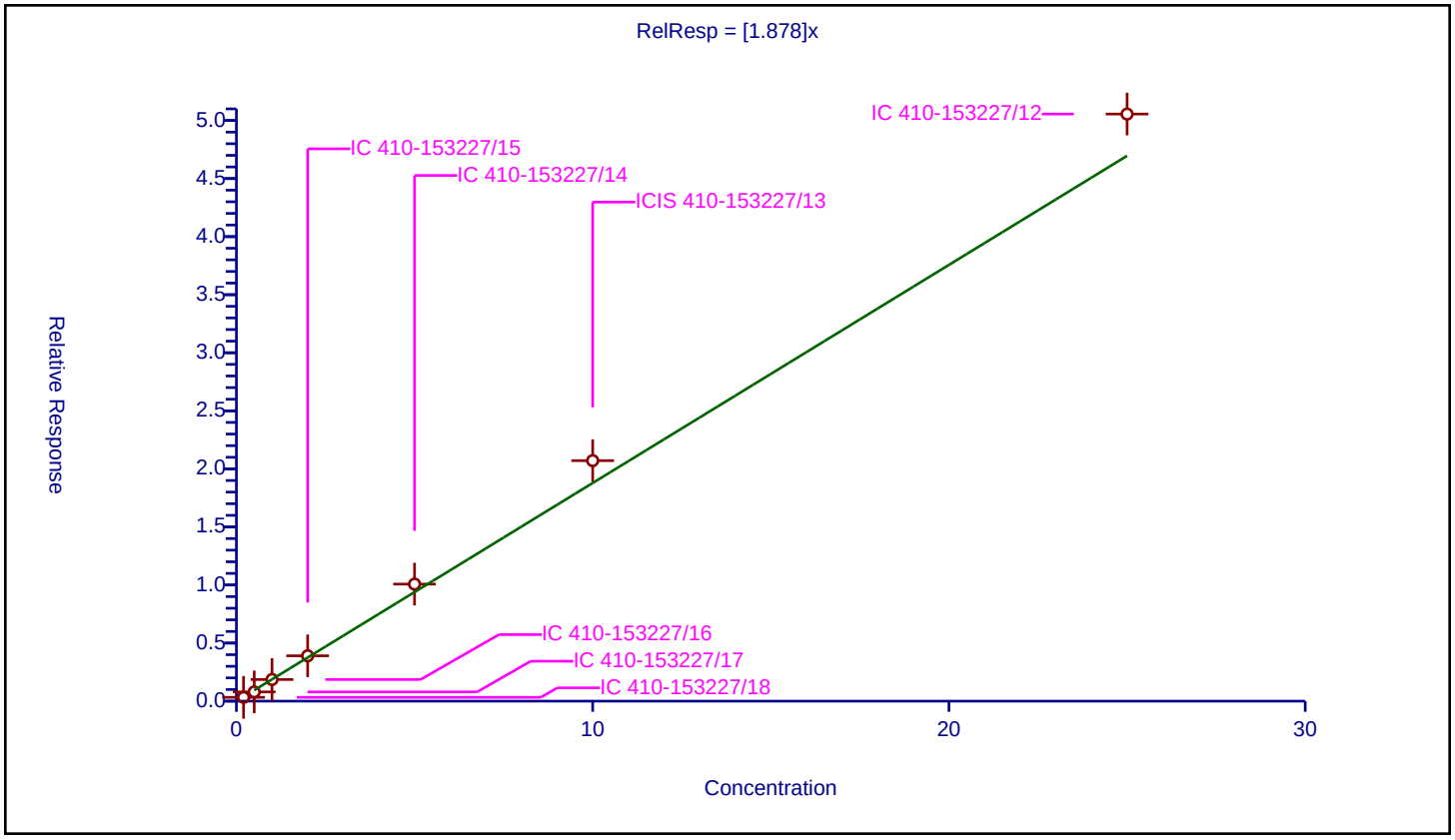
Curve Coefficients

Intercept:	0
Slope:	1.878

Error Coefficients

Standard Error:	2080000
Relative Standard Error:	10.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-153227/18	0.2	0.326642	10.0	858555.0	1.633209	Y
2	IC 410-153227/17	0.5	0.794964	10.0	857900.0	1.589929	Y
3	IC 410-153227/16	1.0	1.864445	10.0	875966.0	1.864445	Y
4	IC 410-153227/15	2.0	3.904566	10.0	879209.0	1.952283	Y
5	IC 410-153227/14	5.0	10.077755	10.0	897174.0	2.015551	Y
6	ICIS 410-153227/13	10.0	20.708277	10.0	901681.0	2.070828	Y
7	IC 410-153227/12	25.0	50.553986	10.0	914789.0	2.022159	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

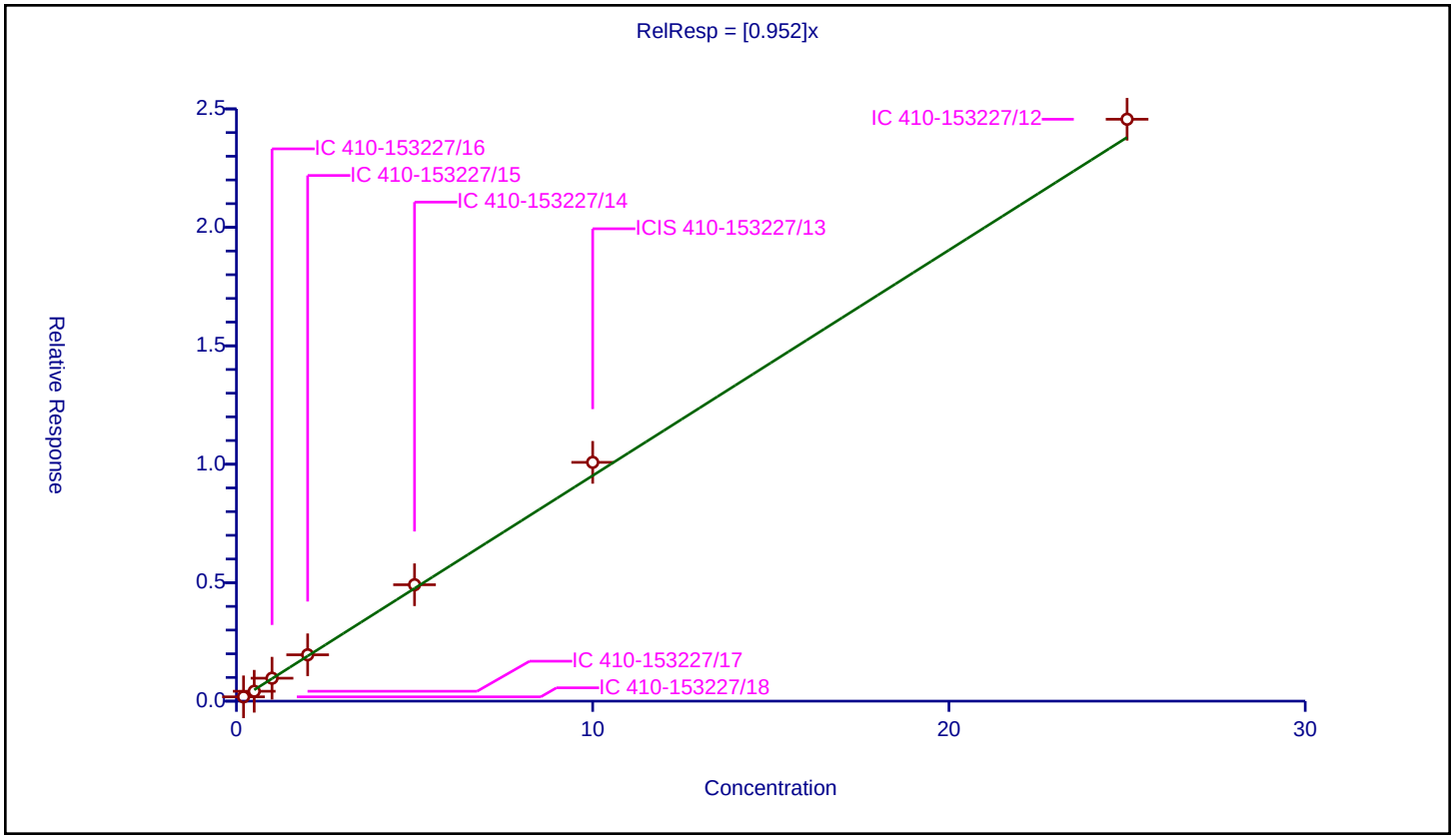
Curve Coefficients

Intercept:	0
Slope:	0.952

Error Coefficients

Standard Error:	1010000
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 410-153227/18	0.2	0.181631	10.0	858555.0	0.908154	Y
2	IC 410-153227/17	0.5	0.417799	10.0	857900.0	0.835599	Y
3	IC 410-153227/16	1.0	0.968405	10.0	875966.0	0.968405	Y
4	IC 410-153227/15	2.0	1.95677	10.0	879209.0	0.978385	Y
5	IC 410-153227/14	5.0	4.913763	10.0	897174.0	0.982753	Y
6	ICIS 410-153227/13	10.0	10.080206	10.0	901681.0	1.008021	Y
7	IC 410-153227/12	25.0	24.562331	10.0	914789.0	0.982493	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-56784-1

SDG No.:

Lab Sample ID: ICV 410-153227/19 Calibration Date: 07/27/2021 22:09

Instrument ID: 16334 Calib Start Date: 07/27/2021 19:35

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/27/2021 21:47

Lab File ID: GL27X19.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	0.2497	0.3123	0.1000	6.25	5.00	25.0	30.0
Chloromethane	Ave	0.3117	0.3366	0.1000	5.40	5.00	8.0	30.0
1,3-Butadiene	Ave	0.3317	0.3340		5.03	5.00	0.7	30.0
Vinyl chloride	Ave	0.3028	0.3317	0.1000	5.48	5.00	9.6	30.0
Bromomethane	Ave	0.2163	0.2257	0.1000	5.22	5.00	4.3	30.0
Chloroethane	Ave	0.1806	0.1905	0.1000	5.27	5.00	5.5	30.0
Dichlorofluoromethane	Ave	0.4198	0.4504		5.36	5.00	7.3	30.0
Trichlorofluoromethane	Ave	0.3883	0.4123	0.1000	5.31	5.00	6.2	30.0
Pentane	None					5.00		30.0
Ethyl ether	Ave	0.1968	0.1682		4.29	5.02	-14.5	30.0
Freon 123a	Ave	0.2884	0.3013		5.22	5.00	4.5	30.0
Acrolein	Ave	2.120	2.227		39.4	37.5	5.0	30.0
1,1-Dichloroethene	Ave	0.2087	0.2369	0.1000	5.68	5.00	13.5	30.0
Freon 113	Ave	0.2263	0.2503	0.1000	5.53	5.00	10.6	30.0
Acetone	Ave	2.590	2.587	0.1000	62.4	62.5	-0.1	30.0
Methyl iodide	Ave	0.3950	0.4140		5.24	5.00	4.8	30.0
Ethyl bromide	Ave	0.1854	0.1820		4.97	5.07	-1.9	30.0
Carbon disulfide	Ave	0.7223	0.7878	0.1000	5.45	5.00	9.1	30.0
Methyl acetate	Ave	7.908	7.854	0.1000	4.97	5.00	-0.7	30.0
Allyl chloride	Ave	0.3564	0.3768		5.28	5.00	5.7	30.0
Methylene Chloride	Ave	0.2393	0.2573	0.1000	5.38	5.00	7.5	30.0
t-Butyl alcohol	Ave	0.8574	0.7804		45.5	50.0	-9.0	30.0
Acrylonitrile	Ave	3.603	3.755		26.0	25.0	4.2	30.0
Methyl tert-butyl ether	Ave	0.6040	0.6232	0.1000	5.16	5.00	3.2	30.0
trans-1,2-Dichloroethene	Ave	0.2334	0.2541	0.1000	5.44	5.00	8.9	30.0
n-Hexane	Ave	0.3372	0.3578		5.31	5.00	6.1	30.0
1,1-Dichloroethane	Ave	0.4103	0.4350	0.2000	5.30	5.00	6.0	30.0
di-Isopropyl ether	Ave	0.7574	0.7867		5.19	5.00	3.9	30.0
2-Chloro-1,3-butadiene	Ave	0.3366	0.3751		5.57	5.00	11.4	30.0
Ethyl t-butyl ether	Ave	0.6904	0.7385		5.35	5.00	7.0	30.0
2-Butanone (MEK)	Ave	4.965	5.352	0.1000	67.4	62.5	7.8	30.0
cis-1,2-Dichloroethene	Ave	0.2600	0.2881	0.1000	5.54	5.00	10.8	30.0
2,2-Dichloropropane	Ave	0.3040	0.3431		5.64	5.00	12.9	30.0
Propionitrile	Ave	1.279	1.173		34.4	37.5	-8.3	30.0
Methacrylonitrile	Ave	4.786	5.102		40.0	37.5	6.6	30.0
Bromochloromethane	Ave	0.1203	0.1326		5.51	5.00	10.2	30.0
Tetrahydrofuran	Ave	1.413	1.544		27.3	25.0	9.3	30.0
Chloroform	Ave	0.4085	0.4381	0.2000	5.36	5.00	7.3	30.0
1,1,1-Trichloroethane	Ave	0.3520	0.3825	0.1000	5.43	5.00	8.7	30.0
Cyclohexane	Ave	0.4101	0.4446	0.1000	5.42	5.00	8.4	30.0
1,1-Dichloropropene	Ave	0.3197	0.3539		5.53	5.00	10.7	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-56784-1

SDG No.:

Lab Sample ID: ICV 410-153227/19 Calibration Date: 07/27/2021 22:09

Instrument ID: 16334 Calib Start Date: 07/27/2021 19:35

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/27/2021 21:47

Lab File ID: GL27X19.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Carbon tetrachloride	Ave	0.3099	0.3365	0.1000	5.43	5.00	8.6	30.0
Isobutyl alcohol	Ave	0.0046	0.0047		126	125	0.9	30.0
Benzene	Ave	0.9748	1.042	0.5000	5.34	5.00	6.9	30.0
1,2-Dichloroethane	Ave	0.2738	0.2704	0.1000	4.94	5.00	-1.2	30.0
t-Amyl methyl ether	Ave	0.6497	0.6748		5.19	5.00	3.9	30.0
n-Heptane	Ave	0.3708	0.3892		5.25	5.00	5.0	30.0
n-Butanol	Ave	0.2678	0.2497		233	250	-6.8	30.0
Trichloroethene	Ave	0.2564	0.2707	0.2000	5.28	5.00	5.6	30.0
Methylcyclohexane	Ave	0.4391	0.4762	0.1000	5.42	5.00	8.4	30.0
1,2-Dichloropropane	Ave	0.2508	0.2709	0.1000	5.40	5.00	8.0	30.0
Methyl methacrylate	Ave	9.103	9.909		5.44	5.00	8.9	30.0
Dibromomethane	Ave	0.1257	0.1338		5.32	5.00	6.5	30.0
1,4-Dioxane	Ave	0.0478	0.0460	0.0050	121	125	-3.6	30.0
Bromodichloromethane	Ave	0.2996	0.3236	0.2000	5.40	5.00	8.0	30.0
2-Nitropropane	Ave	2.572	2.611		5.08	5.00	1.5	30.0
1-Bromo-2-chloroethane	Ave	0.2732	0.2856		5.23	5.00	4.5	30.0
cis-1,3-Dichloropropene	Ave	0.3721	0.3990	0.2000	5.36	5.00	7.2	30.0
4-Methyl-2-pentanone (MIBK)	Ave	12.19	13.54	0.1000	69.4	62.5	11.1	30.0
Toluene	Ave	0.7999	0.8561	0.4000	5.35	5.00	7.0	30.0
trans-1,3-Dichloropropene	Ave	0.3993	0.4478	0.1000	5.61	5.00	12.1	30.0
Ethyl methacrylate	Ave	0.3448	0.3826		5.55	5.00	11.0	30.0
1,1,2-Trichloroethane	Ave	0.2437	0.2628	0.1000	5.39	5.00	7.8	30.0
Tetrachloroethene	Ave	0.3809	0.4184	0.2000	5.49	5.00	9.8	30.0
1,3-Dichloropropane	Ave	0.4119	0.4409		5.35	5.00	7.1	30.0
2-Hexanone	Ave	8.851	10.03	0.1000	70.8	62.5	13.3	30.0
Dibromochloromethane	Ave	0.2939	0.3190		5.43	5.00	8.5	30.0
1,2-Dibromoethane (EDB)	Ave	0.2367	0.2524	0.1000	5.33	5.00	6.6	30.0
1-Chlorohexane	Ave	0.4620	0.4626		5.01	5.00	0.1	30.0
Chlorobenzene	Ave	0.9244	0.9838	0.5000	5.32	5.00	6.4	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3184	0.3463		5.44	5.00	8.8	30.0
Ethylbenzene	Ave	1.546	1.672	0.1000	5.41	5.00	8.1	30.0
m&p-Xylene	Ave	0.6007	0.6622	0.1000	11.0	10.0	10.2	30.0
o-Xylene	Ave	0.5940	0.6426	0.3000	5.41	5.00	8.2	30.0
Styrene	Ave	1.001	1.117	0.3000	5.58	5.00	11.5	30.0
Bromoform	Ave	0.1891	0.2024	0.1000	5.35	5.00	7.0	30.0
Isopropylbenzene	Ave	1.516	1.708	0.1000	5.63	5.00	12.7	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5455	0.5778	0.3000	5.30	5.00	5.9	30.0
Bromobenzene	Ave	0.6930	0.7404		5.34	5.00	6.8	30.0
trans-1,4-Dichloro-2-butene	Ave	4.432	4.110		23.2	25.0	-7.3	30.0
1,2,3-Trichloropropane	Ave	0.1487	0.1581		5.32	5.00	6.4	30.0
N-Propylbenzene	Ave	3.156	3.402		5.39	5.00	7.8	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-56784-1

SDG No.:

Lab Sample ID: ICV 410-153227/19 Calibration Date: 07/27/2021 22:09

Instrument ID: 16334 Calib Start Date: 07/27/2021 19:35

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/27/2021 21:47

Lab File ID: GL27X19.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chlorotoluene	Ave	0.6431	0.6766		5.26	5.00	5.2	30.0
1,3,5-Trimethylbenzene	Ave	2.262	2.432		5.38	5.00	7.5	30.0
4-Chlorotoluene	Ave	0.6727	0.7205		5.36	5.00	7.1	30.0
tert-Butylbenzene	Ave	0.4899	0.5297		5.41	5.00	8.1	30.0
Pentachloroethane	Ave	0.4335	0.4295		4.95	5.00	-0.9	30.0
1,2,4-Trimethylbenzene	Ave	2.342	2.539		5.42	5.00	8.4	30.0
sec-Butylbenzene	Ave	2.886	3.218		5.58	5.00	11.5	30.0
1,3-Dichlorobenzene	Ave	1.405	1.482	0.6000	5.28	5.00	5.5	30.0
p-Isopropyltoluene	Ave	2.521	2.811		5.58	5.00	11.5	30.0
1,4-Dichlorobenzene	Ave	1.447	1.518	0.5000	5.25	5.00	4.9	30.0
1,2,3-Trimethylbenzene	Ave	1.080	1.116		5.17	5.00	3.4	30.0
Benzyl chloride	Ave	0.2105	0.2166		5.15	5.00	2.9	30.0
n-Butylbenzene	Ave	1.327	1.420		5.35	5.00	7.0	30.0
1,2-Dichlorobenzene	Ave	1.336	1.410	0.4000	5.28	5.00	5.5	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.0877	0.0882	0.0500	5.03	5.00	0.6	30.0
1,3,5-Trichlorobenzene	Ave	1.170	1.200		5.13	5.00	2.6	30.0
1,2,4-Trichlorobenzene	Ave	1.067	1.126	0.2000	5.28	5.00	5.6	30.0
Hexachlorobutadiene	Ave	0.5287	0.5609		5.30	5.00	6.1	30.0
Naphthalene	Ave	1.878	2.003		5.33	5.00	6.6	30.0
1,2,3-Trichlorobenzene	Ave	0.9520	1.002		5.26	5.00	5.3	30.0
Dibromofluoromethane (Surr)	Ave	0.2492	0.2485		9.97	10.0	-0.3	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0554	0.0546		9.86	10.0	-1.4	30.0
Toluene-d8 (Surr)	Ave	1.302	1.313		10.1	10.0	0.8	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4761	0.4781		10.0	10.0	0.4	30.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X19.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 27-Jul-2021 22:09:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0035331-019
Misc. Info.: ICV
Operator ID: kas02648 Instrument ID: 16334
Sublist:

Method: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 16:13:07 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1675

First Level Reviewer: spositok Date: 28-Jul-2021 12:12:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.946	1.934	0.012	99	297058	5.00	6.25	
5 Chloromethane	50	2.141	2.136	0.005	99	320212	5.00	5.40	
7 Butadiene	39	2.257	2.245	0.012	92	317738	5.00	5.03	
8 Vinyl chloride	62	2.263	2.251	0.012	98	315573	5.00	5.48	
9 Bromomethane	94	2.580	2.568	0.012	90	214697	5.00	5.22	
10 Chloroethane	64	2.660	2.648	0.012	100	181220	5.00	5.27	
12 Dichlorofluoromethane	67	2.897	2.892	0.005	97	428480	5.00	5.36	
13 Trichlorofluoromethane	101	2.971	2.959	0.012	97	392267	5.00	5.31	
15 Ethyl ether	59	3.196	3.190	0.006	91	160705	5.02	4.29	
17 1,2-Dichloro-1,1,2-trifluoroetha	67	3.294	3.288	0.006	94	286610	5.00	5.22	
18 Acrolein	56	3.379	3.367	0.012	99	228173	37.5	39.4	
19 1,1-Dichloroethene	96	3.513	3.501	0.012	98	225357	5.00	5.68	
20 112TCTFE	101	3.544	3.532	0.012	91	238152	5.00	5.53	
21 Acetone	43	3.562	3.550	0.012	100	441753	62.5	62.4	
23 Iodomethane	142	3.696	3.696	0.000	99	393888	5.00	5.24	
24 Ethyl bromide	108	3.727	3.715	0.012	98	175465	5.07	4.97	
22 Isopropyl alcohol	45	3.836	3.800	0.036	25	45457	37.5	40.6	M
25 Carbon disulfide	76	3.824	3.806	0.018	99	749454	5.00	5.45	
27 Methyl acetate	43	3.946	3.934	0.012	97	107303	5.00	4.97	
28 3-Chloro-1-propene	41	3.970	3.965	0.005	93	358414	5.00	5.28	
29 Methylene Chloride	84	4.159	4.154	0.005	91	244781	5.00	5.38	
* 30 t-Butyl alcohol-d10 (IS)	65	4.257	4.257	0.000	94	136619	50.0	50.0	
31 2-Methyl-2-propanol	59	4.367	4.367	0.000	98	106621	50.0	45.5	
32 Acrylonitrile	53	4.513	4.501	0.012	99	256474	25.0	26.0	
33 Methyl tert-butyl ether	73	4.562	4.550	0.012	90	592899	5.00	5.16	
34 trans-1,2-Dichloroethene	96	4.568	4.556	0.012	100	241778	5.00	5.44	
35 Hexane	57	4.988	4.983	0.005	93	340385	5.00	5.31	
37 1,1-Dichloroethane	63	5.232	5.226	0.006	96	413847	5.00	5.30	
38 Isopropyl ether	45	5.299	5.287	0.012	94	748375	5.00	5.19	
39 2-Chloro-1,3-butadiene	53	5.342	5.336	0.006	90	356868	5.00	5.57	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.830	5.824	0.006	98	702566	5.00	5.35	
41 2-Butanone (MEK)	43	6.049	6.043	0.006	100	913928	62.5	67.4	
42 cis-1,2-Dichloroethene	96	6.068	6.062	0.006	82	274081	5.00	5.54	
43 2,2-Dichloropropane	77	6.086	6.080	0.006	88	326377	5.00	5.64	
45 Propionitrile	54	6.153	6.153	0.000	99	120142	37.5	34.4	
48 Methacrylonitrile	67	6.348	6.348	0.000	92	522792	37.5	40.0	
49 Chlorobromomethane	128	6.397	6.391	0.006	93	126165	5.00	5.51	
50 Tetrahydrofuran	71	6.409	6.409	0.000	87	105442	25.0	27.3	
51 Chloroform	83	6.555	6.549	0.006	93	416815	5.00	5.36	
$ 52 Dibromofluoromethane (Surr)	113	6.769	6.763	0.006	94	472779	10.0	9.97	
53 1,1,1-Trichloroethane	97	6.781	6.769	0.012	98	363908	5.00	5.43	
54 Cyclohexane	56	6.872	6.866	0.006	91	422979	5.00	5.42	
56 Carbon tetrachloride	117	6.982	6.976	0.006	95	320124	5.00	5.43	
57 1,1-Dichloropropene	75	6.982	6.982	0.000	97	336703	5.00	5.53	
58 Isobutyl alcohol	41	7.195	7.196	-0.001	93	111077	125.0	126.2	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.220	7.214	0.006	89	103942	10.0	9.86	
60 Benzene	78	7.250	7.250	0.000	97	990972	5.00	5.34	
61 1,2-Dichloroethane	62	7.323	7.318	0.005	97	257192	5.00	4.94	
63 Tert-amyl methyl ether	73	7.445	7.446	-0.001	98	641949	5.00	5.19	
* 64 Fluorobenzene (IS)	96	7.659	7.653	0.006	99	1902658	10.0	10.0	
65 n-Heptane	43	7.665	7.665	0.000	91	370236	5.00	5.25	
67 n-Butanol	56	8.092	8.086	0.006	90	170576	250.0	233.1	
68 Trichloroethene	95	8.134	8.134	0.000	97	257542	5.00	5.28	
69 Methylcyclohexane	83	8.439	8.439	0.000	91	453007	5.00	5.42	
70 1,2-Dichloropropane	63	8.470	8.470	0.000	97	257672	5.00	5.40	
71 2-ethoxy-2-methyl butane	87	8.482	8.476	0.006	93	363165	5.00	5.26	
72 Methyl methacrylate	69	8.561	8.555	0.006	92	135379	5.00	5.44	
74 Dibromomethane	93	8.579	8.579	0.000	93	127330	5.00	5.32	
73 1,4-Dioxane	88	8.665	8.653	0.012	88	15727	125.0	120.5	M
76 Dichlorobromomethane	83	8.817	8.817	0.000	99	307812	5.00	5.40	
77 2-Nitropropane	41	9.104	9.104	0.000	98	35673	5.00	5.08	
80 1-Bromo-2-chloroethane	63	9.207	9.207	0.000	98	271678	5.00	5.23	
81 cis-1,3-Dichloropropene	75	9.372	9.366	0.006	97	379571	5.00	5.36	
82 4-Methyl-2-pentanone (MIBK)	43	9.549	9.549	0.000	96	2312274	62.5	69.4	
$ 83 Toluene-d8 (Surr)	98	9.683	9.677	0.006	93	1948073	10.0	10.1	
84 Toluene	92	9.756	9.756	0.000	98	635076	5.00	5.35	
96 trans-1,3-Dichloropropene	75	10.018	10.018	0.000	92	332183	5.00	5.61	
98 Ethyl methacrylate	69	10.079	10.079	0.000	89	283831	5.00	5.55	
99 1,1,2-Trichloroethane	97	10.225	10.219	0.006	90	194952	5.00	5.39	
100 Tetrachloroethene	166	10.305	10.305	0.000	98	310360	5.00	5.49	
101 1,3-Dichloropropane	76	10.390	10.384	0.006	90	327084	5.00	5.35	
102 2-Hexanone	43	10.445	10.445	0.000	96	1712879	62.5	70.8	
104 Chlorodibromomethane	129	10.597	10.597	0.000	89	236635	5.00	5.43	
105 Ethylene Dibromide	107	10.707	10.707	0.000	99	187203	5.00	5.33	
* 106 Chlorobenzene-d5 (IS)	117	11.146	11.140	0.006	85	1483632	10.0	10.0	
107 1-Chlorohexane	91	11.152	11.152	0.000	98	343188	5.00	5.01	
108 Chlorobenzene	112	11.170	11.170	0.000	96	729834	5.00	5.32	
110 1,1,1,2-Tetrachloroethane	131	11.249	11.250	-0.001	95	256883	5.00	5.44	
111 Ethylbenzene	91	11.256	11.256	0.000	98	1240438	5.00	5.41	
112 m-Xylene & p-Xylene	106	11.371	11.372	-0.001	100	982516	10.0	11.0	
113 o-Xylene	106	11.701	11.701	0.000	96	476654	5.00	5.41	
114 Styrene	104	11.719	11.719	0.000	95	828561	5.00	5.58	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
115 Bromoform	173	11.871	11.872	-0.001	98	150143	5.00	5.35	
116 Isopropylbenzene	105	12.005	12.000	0.005	95	1267308	5.00	5.63	
$ 119 4-Bromofluorobenzene (Surr)	95	12.146	12.146	0.000	94	709314	10.0	10.0	
120 1,1,2,2-Tetrachloroethane	83	12.249	12.250	-0.001	94	254450	5.00	5.30	
121 Bromobenzene	156	12.261	12.262	-0.001	96	326059	5.00	5.34	
122 trans-1,4-Dichloro-2-butene	53	12.274	12.274	0.000	93	280744	25.0	23.2	
123 1,2,3-Trichloropropane	110	12.298	12.292	0.006	83	69645	5.00	5.32	
124 N-Propylbenzene	91	12.329	12.329	0.000	99	1498350	5.00	5.39	
125 2-Chlorotoluene	126	12.408	12.408	0.000	97	298000	5.00	5.26	
126 1,3,5-Trimethylbenzene	105	12.469	12.469	0.000	94	1071184	5.00	5.38	
127 4-Chlorotoluene	126	12.499	12.499	0.000	97	317309	5.00	5.36	
128 tert-Butylbenzene	134	12.713	12.707	0.006	93	233295	5.00	5.41	
129 Pentachloroethane	167	12.743	12.743	0.000	94	189146	5.00	4.95	
130 1,2,4-Trimethylbenzene	105	12.749	12.749	0.000	97	1118273	5.00	5.42	
131 sec-Butylbenzene	105	12.871	12.871	0.000	94	1417428	5.00	5.58	
132 1,3-Dichlorobenzene	146	12.969	12.969	0.000	99	652780	5.00	5.28	
133 4-Isopropyltoluene	119	12.981	12.981	0.000	97	1237843	5.00	5.58	
* 134 1,4-Dichlorobenzene-d4	152	13.030	13.024	0.006	92	880820	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.042	13.042	0.000	96	668683	5.00	5.25	
136 1,2,3-Trimethylbenzene	120	13.054	13.054	0.000	98	491460	5.00	5.17	
137 Benzyl chloride	126	13.121	13.121	0.000	98	95390	5.00	5.15	
138 p-Diethylbenzene	119	13.182	13.182	0.000	92	721267	5.00	5.26	
139 n-Butylbenzene	92	13.273	13.274	-0.001	97	625439	5.00	5.35	
140 1,2-Dichlorobenzene	146	13.304	13.304	0.000	99	621100	5.00	5.28	
142 1,2-Dibromo-3-Chloropropane	155	13.847	13.847	0.000	89	38858	5.00	5.03	
143 1,3,5-Trichlorobenzene	180	13.968	13.969	-0.001	98	528667	5.00	5.13	
144 1,2,4-Trichlorobenzene	180	14.395	14.395	0.000	94	495946	5.00	5.28	
145 Hexachlorobutadiene	225	14.474	14.475	-0.001	96	247029	5.00	5.30	
146 Naphthalene	128	14.572	14.578	-0.006	97	882158	5.00	5.33	
147 1,2,3-Trichlorobenzene	180	14.718	14.719	-0.001	96	441472	5.00	5.26	
148 2-Methylnaphthalene	142	15.334	15.340	-0.006	92	539295	5.00	5.22	
160 Pentane	43	2.995	2.983	0.012	98	414265	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_Penta_00005	Amount Added:	12.50	Units: uL	
MSV_LCS_VOC#1_00011	Amount Added:	12.50	Units: uL	
MSV_Q_EE_00004	Amount Added:	12.50	Units: uL	
MSV_Q_ETBR_00008	Amount Added:	12.50	Units: uL	
MSV_QC_Gas826_00018	Amount Added:	12.50	Units: uL	
MSV_LCS_ACROL_00013	Amount Added:	12.50	Units: uL	
MSV_29_826ISS_00020	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 05-Aug-2021 16:13:59 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X19.D

Injection Date: 27-Jul-2021 22:09:30 Instrument ID: 16334 Operator ID: kas02648

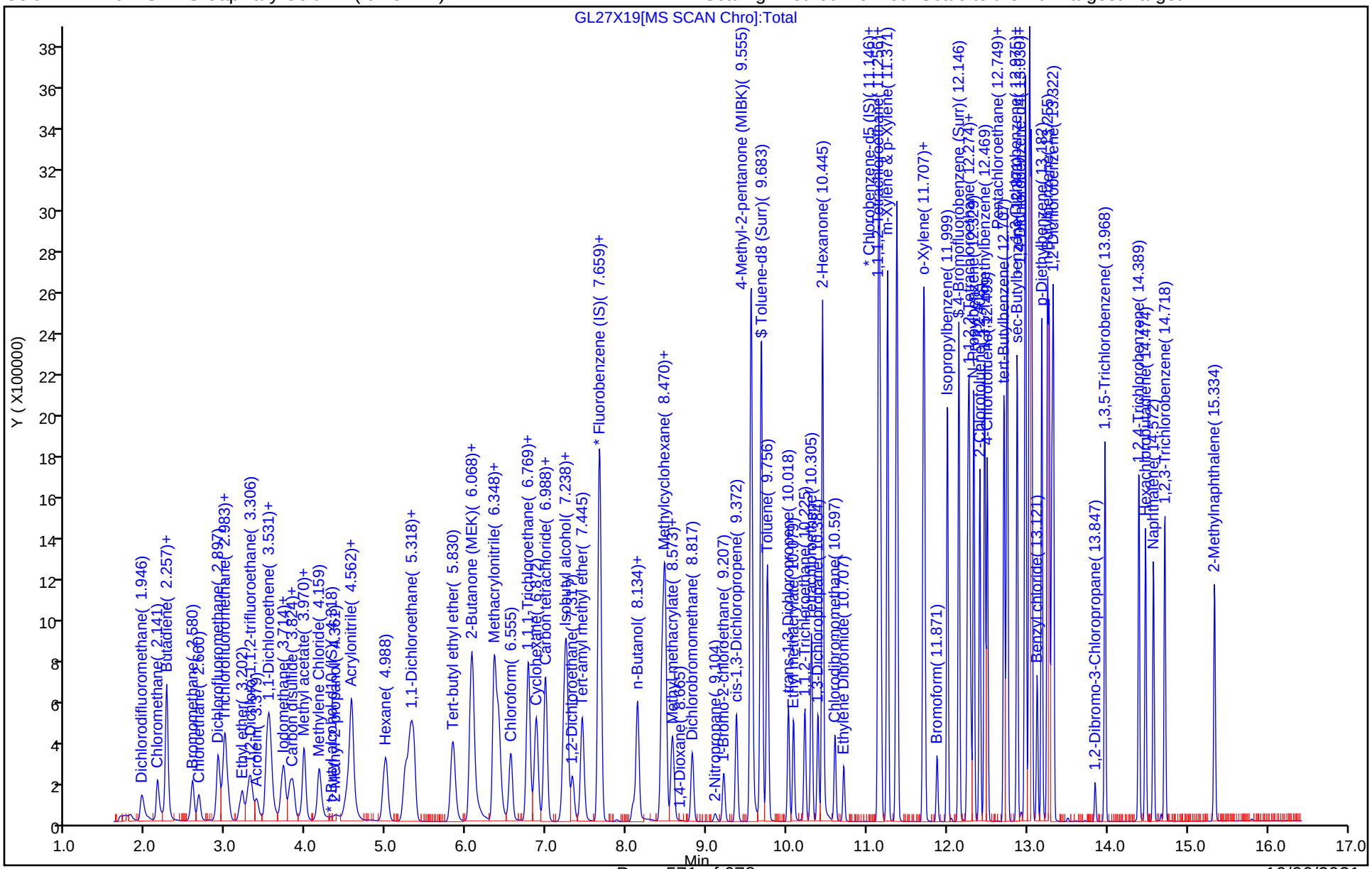
Lims ID: ICV Worklist Smp#: 19

Client ID:

Purge Vol: 25.000 mL Dil. Factor: 1.0000 ALS Bottle#: 19

Method: MSV_16334_25mL Limit Group: MSV - 8260C_D

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



Eurofins Lancaster Laboratories Env, LLC

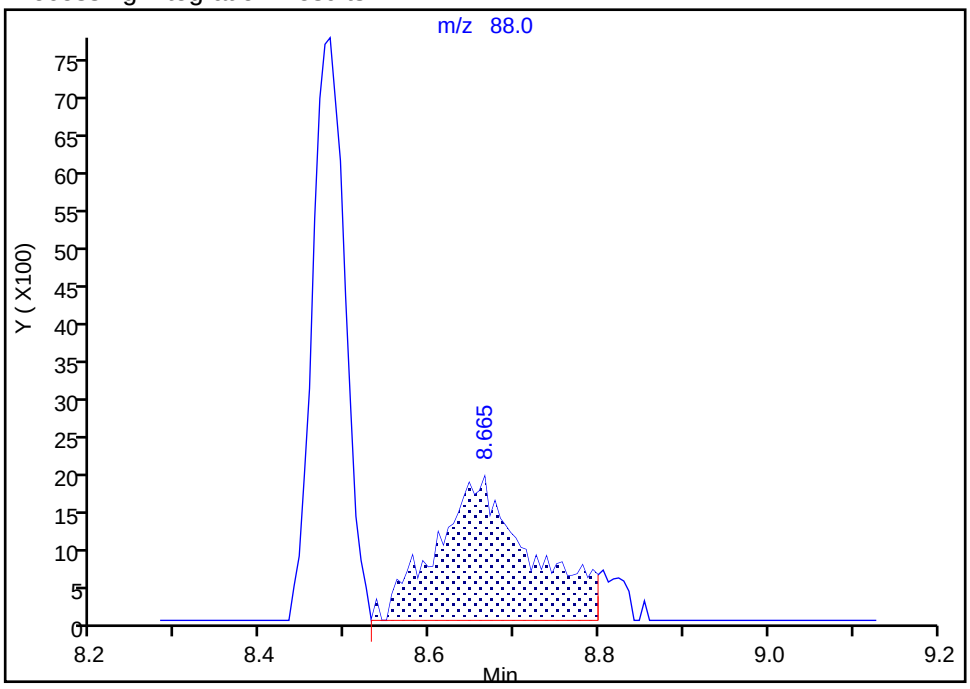
Data File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X19.D				
Injection Date:	27-Jul-2021 22:09:30	Instrument ID:	16334		
Lims ID:	ICV				
Client ID:					
Operator ID:	kas02648	ALS Bottle#:	19	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

73 1,4-Dioxane, CAS: 123-91-1

Signal: 1

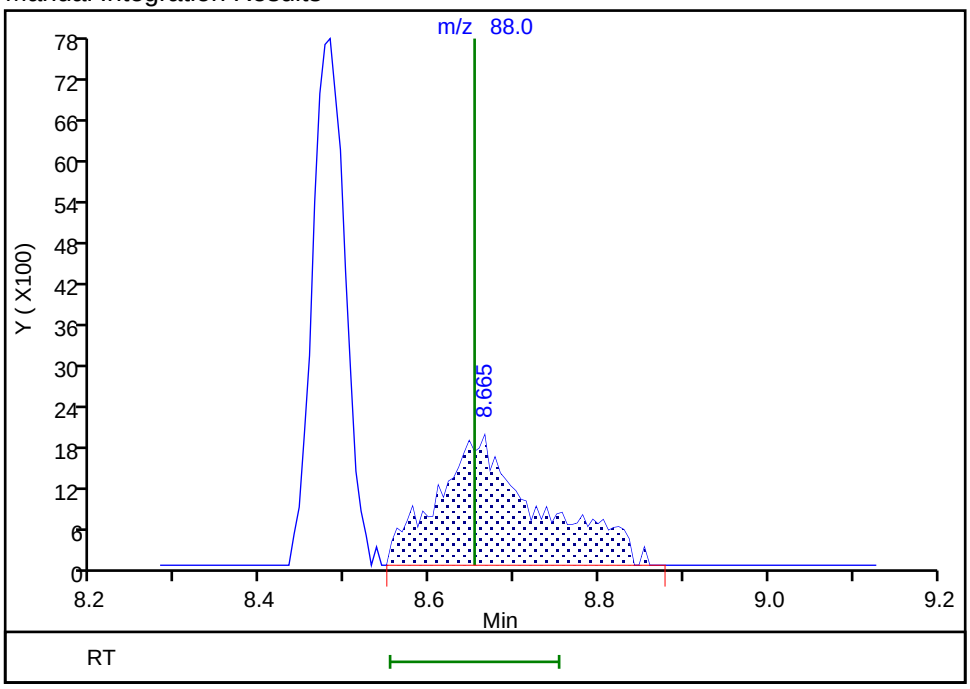
Processing Integration Results

RT: 8.66
Area: 14565
Amount: 111.6015
Amount Units: ug/l



Manual Integration Results

RT: 8.66
Area: 15727
Amount: 120.5051
Amount Units: ug/l



Reviewer: spositok, 28-Jul-2021 12:12:02
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-56784-1

SDG No.:

Lab Sample ID: CCVIS 410-177560/3 Calibration Date: 10/01/2021 08:31

Instrument ID: 16334 Calib Start Date: 07/27/2021 19:35

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/27/2021 21:47

Lab File ID: GO01X02.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	0.2497	0.2495	0.1000	9.99	10.0	-0.0	20.0
Chloromethane	Ave	0.3117	0.2823	0.1000	9.06	10.0	-9.4	20.0
1,3-Butadiene	Ave	0.3317	0.4195		12.6	10.0	26.4*	20.0
Vinyl chloride	Ave	0.3028	0.2809	0.1000	9.28	10.0	-7.2	20.0
Bromomethane	Ave	0.2163	0.2147	0.1000	9.93	10.0	-0.7	20.0
Chloroethane	Ave	0.1806	0.1674	0.1000	9.27	10.0	-7.3	20.0
Dichlorofluoromethane	Ave	0.4198	0.3911		9.32	10.0	-6.8	20.0
Trichlorofluoromethane	Ave	0.3883	0.3900	0.1000	10.0	10.0	0.4	20.0
Pentane	None					10.0		20.0
Ethyl ether	Ave	0.1968	0.1750		8.90	10.0	-11.0	20.0
Freon 123a	Ave	0.2884	0.2654		9.20	10.0	-8.0	20.0
Acrolein	Ave	2.120	1.956		462	501	-7.8	20.0
1,1-Dichloroethene	Ave	0.2087	0.1930	0.1000	9.25	10.0	-7.5	20.0
Freon 113	Ave	0.2263	0.2146	0.1000	9.48	10.0	-5.2	20.0
Acetone	Ave	2.590	2.268	0.1000	87.6	100	-12.4	20.0
Methyl iodide	Ave	0.3950	0.3546		8.98	10.0	-10.2	20.0
Ethyl bromide	Ave	0.1854	0.1775		9.57	9.99	-4.3	20.0
Carbon disulfide	Ave	0.7223	0.6538	0.1000	9.05	10.0	-9.5	20.0
Methyl acetate	Ave	7.908	6.583	0.1000	8.32	10.0	-16.8	20.0
Allyl chloride	Ave	0.3564	0.2848		7.99	10.0	-20.1*	20.0
Methylene Chloride	Ave	0.2393	0.2214	0.1000	9.25	10.0	-7.5	20.0
t-Butyl alcohol	Ave	0.8574	0.6114		143	200	-28.7*	20.0
Acrylonitrile	Ave	3.603	3.459		24.0	25.0	-4.0	20.0
Methyl tert-butyl ether	Ave	0.6040	0.5901	0.1000	9.77	10.0	-2.3	20.0
trans-1,2-Dichloroethene	Ave	0.2334	0.2235	0.1000	9.57	10.0	-4.3	20.0
n-Hexane	Ave	0.3372	0.2986		8.86	10.0	-11.4	20.0
1,1-Dichloroethane	Ave	0.4103	0.3661	0.2000	8.92	10.0	-10.8	20.0
di-Isopropyl ether	Ave	0.7574	0.6574		8.68	10.0	-13.2	20.0
2-Chloro-1,3-butadiene	Ave	0.3366	0.3139		9.32	10.0	-6.8	20.0
Ethyl t-butyl ether	Ave	0.6904	0.6542		9.48	10.0	-5.2	20.0
2-Butanone (MEK)	Ave	4.965	4.567	0.1000	92.0	100	-8.0	20.0
cis-1,2-Dichloroethene	Ave	0.2600	0.2480	0.1000	9.54	10.0	-4.6	20.0
2,2-Dichloropropane	Ave	0.3040	0.3032		9.98	10.0	-0.2	20.0
Propionitrile	Ave	1.279	1.294		202	200	1.1	20.0
Methacrylonitrile	Ave	4.786	4.760		99.4	100	-0.6	20.0
Bromochloromethane	Ave	0.1203	0.1121		9.32	10.0	-6.8	20.0
Tetrahydrofuran	Ave	1.413	1.410		49.9	50.0	-0.2	20.0
Chloroform	Ave	0.4085	0.3893	0.2000	9.53	10.0	-4.7	20.0
1,1,1-Trichloroethane	Ave	0.3520	0.3374	0.1000	9.58	10.0	-4.2	20.0
Cyclohexane	Ave	0.4101	0.3605	0.1000	8.79	10.0	-12.1	20.0
1,1-Dichloropropene	Ave	0.3197	0.2999		9.38	10.0	-6.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-56784-1

SDG No.:

Lab Sample ID: CCVIS 410-177560/3 Calibration Date: 10/01/2021 08:31

Instrument ID: 16334 Calib Start Date: 07/27/2021 19:35

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/27/2021 21:47

Lab File ID: GO01X02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Carbon tetrachloride	Ave	0.3099	0.2842	0.1000	9.17	10.0	-8.3	20.0
Isobutyl alcohol	Ave	0.0046	0.0036		391	500	-21.8*	20.0
Benzene	Ave	0.9748	0.9138	0.5000	9.37	10.0	-6.3	20.0
1,2-Dichloroethane	Ave	0.2738	0.2405	0.1000	8.79	10.0	-12.1	20.0
t-Amyl methyl ether	Ave	0.6497	0.6357		9.78	10.0	-2.2	20.0
n-Heptane	Ave	0.3708	0.3094		8.35	10.0	-16.5	20.0
n-Butanol	Ave	0.2678	0.2615		854	875	-2.4	20.0
Trichloroethene	Ave	0.2564	0.2426	0.2000	9.46	10.0	-5.4	20.0
Methylcyclohexane	Ave	0.4391	0.4158	0.1000	9.47	10.0	-5.3	20.0
1,2-Dichloropropane	Ave	0.2508	0.2259	0.1000	9.00	10.0	-10.0	20.0
Methyl methacrylate	Ave	9.103	8.916		9.80	10.0	-2.0	20.0
Dibromomethane	Ave	0.1257	0.1219		9.70	10.0	-3.0	20.0
1,4-Dioxane	Ave	0.0478	0.0522	0.0050	547	500	9.3	20.0
Bromodichloromethane	Ave	0.2996	0.2902	0.2000	9.69	10.0	-3.1	20.0
2-Nitropropane	Ave	2.572	2.232		43.4	50.0	-13.2	20.0
1-Bromo-2-chloroethane	Ave	0.2732	0.2497		9.14	10.0	-8.6	20.0
cis-1,3-Dichloropropene	Ave	0.3721	0.3596	0.2000	9.67	10.0	-3.3	20.0
4-Methyl-2-pentanone (MIBK)	Ave	12.19	11.57	0.1000	94.9	100	-5.1	20.0
Toluene	Ave	0.7999	0.7831	0.4000	9.79	10.0	-2.1	20.0
trans-1,3-Dichloropropene	Ave	0.3993	0.4011	0.1000	10.0	10.0	0.4	20.0
Ethyl methacrylate	Ave	0.3448	0.3579		10.4	10.0	3.8	20.0
1,1,2-Trichloroethane	Ave	0.2437	0.2442	0.1000	10.0	10.0	0.2	20.0
Tetrachloroethene	Ave	0.3809	0.3404	0.2000	8.94	10.0	-10.6	20.0
1,3-Dichloropropane	Ave	0.4119	0.3941		9.57	10.0	-4.3	20.0
2-Hexanone	Ave	8.851	8.406	0.1000	95.0	100	-5.0	20.0
Dibromochloromethane	Ave	0.2939	0.2817		9.58	10.0	-4.2	20.0
1,2-Dibromoethane (EDB)	Ave	0.2367	0.2336	0.1000	9.87	10.0	-1.3	20.0
1-Chlorohexane	Ave	0.4620	0.4460		9.66	10.0	-3.4	20.0
Chlorobenzene	Ave	0.9244	0.8835	0.5000	9.56	10.0	-4.4	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3184	0.3057		9.60	10.0	-4.0	20.0
Ethylbenzene	Ave	1.546	1.538	0.1000	9.95	10.0	-0.5	20.0
m&p-Xylene	Ave	0.6007	0.5992	0.1000	19.9	20.0	-0.3	20.0
o-Xylene	Ave	0.5940	0.5984	0.3000	10.1	10.0	0.7	20.0
Styrene	Ave	1.001	1.034	0.3000	10.3	10.0	3.3	20.0
Bromoform	Ave	0.1891	0.1749	0.1000	9.25	10.0	-7.5	20.0
Isopropylbenzene	Ave	1.516	1.540	0.1000	10.2	10.0	1.6	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5455	0.5797	0.3000	10.6	10.0	6.3	20.0
Bromobenzene	Ave	0.6930	0.6723		9.70	10.0	-3.0	20.0
trans-1,4-Dichloro-2-butene	Ave	4.432	3.018		68.1	100	-31.9*	20.0
1,2,3-Trichloropropane	Ave	0.1487	0.1583		10.6	10.0	6.5	20.0
N-Propylbenzene	Ave	3.156	3.319		10.5	10.0	5.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-56784-1

SDG No.:

Lab Sample ID: CCVIS 410-177560/3 Calibration Date: 10/01/2021 08:31

Instrument ID: 16334 Calib Start Date: 07/27/2021 19:35

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/27/2021 21:47

Lab File ID: GO01X02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chlorotoluene	Ave	0.6431	0.6708		10.4	10.0	4.3	20.0
1,3,5-Trimethylbenzene	Ave	2.262	2.403		10.6	10.0	6.2	20.0
4-Chlorotoluene	Ave	0.6727	0.6911		10.3	10.0	2.7	20.0
tert-Butylbenzene	Ave	0.4899	0.5152		10.5	10.0	5.2	20.0
Pentachloroethane	Ave	0.4335	0.4236		9.77	10.0	-2.3	20.0
1,2,4-Trimethylbenzene	Ave	2.342	2.501		10.7	10.0	6.8	20.0
sec-Butylbenzene	Ave	2.886	3.060		10.6	10.0	6.0	20.0
1,3-Dichlorobenzene	Ave	1.405	1.387	0.6000	9.87	10.0	-1.3	20.0
p-Isopropyltoluene	Ave	2.521	2.703		10.7	10.0	7.3	20.0
1,4-Dichlorobenzene	Ave	1.447	1.421	0.5000	9.82	10.0	-1.8	20.0
1,2,3-Trimethylbenzene	Ave	1.080	1.107		10.3	10.0	2.6	20.0
Benzyl chloride	Ave	0.2105	0.2399		11.4	10.0	14.0	20.0
n-Butylbenzene	Ave	1.327	1.399		10.5	10.0	5.5	20.0
1,2-Dichlorobenzene	Ave	1.336	1.319	0.4000	9.87	10.0	-1.3	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0877	0.0870	0.0500	9.92	10.0	-0.8	20.0
1,3,5-Trichlorobenzene	Ave	1.170	1.100		9.40	10.0	-6.0	20.0
1,2,4-Trichlorobenzene	Ave	1.067	0.9636	0.2000	9.03	10.0	-9.7	20.0
Hexachlorobutadiene	Ave	0.5287	0.4460		8.44	10.0	-15.6	20.0
Naphthalene	Ave	1.878	1.831		9.75	10.0	-2.5	20.0
1,2,3-Trichlorobenzene	Ave	0.9520	0.8113		8.52	10.0	-14.8	20.0
Dibromofluoromethane (Surr)	Ave	0.2492	0.2371		9.52	10.0	-4.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0554	0.0520		9.38	10.0	-6.2	20.0
Toluene-d8 (Surr)	Ave	1.302	1.258		9.66	10.0	-3.4	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4761	0.4703		9.88	10.0	-1.2	20.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X02.D
Lims ID: CCVIS VSTD10
Client ID:
Sample Type: CCVIS
Inject. Date: 01-Oct-2021 08:31:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040424-003
Misc. Info.: CCVIS VSTD10
Operator ID: SRK36897 Instrument ID: 16334
Sublist: chrom-MSV_16334_25mL*sub4

Method: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Oct-2021 10:55:11 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1607

First Level Reviewer: knouses Date: 01-Oct-2021 09:40:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.940	1.940	0.000	99	629955	10.0	10.0	
5 Chloromethane	50	2.135	2.135	0.000	99	712680	10.0	9.06	
8 Vinyl chloride	62	2.257	2.257	0.000	97	709110	10.0	9.28	
7 Butadiene	39	2.257	2.257	0.000	89	1058936	10.0	12.6	
9 Bromomethane	94	2.587	2.587	0.000	90	542097	10.0	9.93	
10 Chloroethane	64	2.666	2.666	0.000	99	422678	10.0	9.27	
12 Dichlorofluoromethane	67	2.904	2.904	0.000	97	987288	10.0	9.32	
13 Trichlorofluoromethane	101	2.965	2.965	0.000	97	984533	10.0	10.0	M
15 Ethyl ether	59	3.208	3.208	0.000	89	441935	10.0	8.90	
17 1,2-Dichloro-1,1,2-trifluoroetha	67	3.300	3.300	0.000	91	670082	10.0	9.20	
18 Acrolein	56	3.385	3.385	0.000	100	3555098	501.1	462.2	
19 1,1-Dichloroethene	96	3.507	3.507	0.000	96	487283	10.0	9.25	
20 112TCTFE	101	3.556	3.556	0.000	91	541757	10.0	9.48	
21 Acetone	43	3.568	3.568	0.000	100	822751	100.0	87.6	M
23 Iodomethane	142	3.702	3.702	0.000	98	895134	10.0	8.98	
24 Ethyl bromide	108	3.733	3.733	0.000	98	447928	10.0	9.57	
22 Isopropyl alcohol	45	3.800	3.800	0.000	27	232223	200.0	156.4	M
25 Carbon disulfide	76	3.800	3.800	0.000	98	1650583	10.0	9.05	
27 Methyl acetate	43	3.964	3.964	0.000	97	238813	10.0	8.32	
28 3-Chloro-1-propene	41	3.983	3.983	0.000	92	719056	10.0	7.99	
29 Methylene Chloride	84	4.172	4.172	0.000	86	559004	10.0	9.25	
* 30 t-Butyl alcohol-d10 (IS)	65	4.257	4.257	0.000	97	181375	50.0	50.0	
31 2-Methyl-2-propanol	59	4.379	4.379	0.000	99	443596	200.0	142.6	
32 Acrylonitrile	53	4.531	4.531	0.000	99	313671	25.0	24.0	
33 Methyl tert-butyl ether	73	4.574	4.574	0.000	94	1489584	10.0	9.77	
34 trans-1,2-Dichloroethene	96	4.580	4.580	0.000	98	564179	10.0	9.57	
35 Hexane	57	5.007	5.007	0.000	91	753937	10.0	8.86	
37 1,1-Dichloroethane	63	5.245	5.245	0.000	95	924129	10.0	8.92	
38 Isopropyl ether	45	5.312	5.312	0.000	94	1659547	10.0	8.68	
39 2-Chloro-1,3-butadiene	53	5.360	5.360	0.000	89	792333	10.0	9.32	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.842	5.842	0.000	98	1651581	10.0	9.48	
41 2-Butanone (MEK)	43	6.055	6.055	0.000	99	1656561	100.0	92.0	
42 cis-1,2-Dichloroethene	96	6.086	6.086	0.000	80	626111	10.0	9.54	
43 2,2-Dichloropropane	77	6.098	6.098	0.000	85	765552	10.0	9.98	
45 Propionitrile	54	6.165	6.165	0.000	99	938443	200.0	202.3	
48 Methacrylonitrile	67	6.354	6.354	0.000	90	1726525	100.0	99.4	
49 Chlorobromomethane	128	6.409	6.409	0.000	90	283047	10.0	9.32	
50 Tetrahydrofuran	71	6.421	6.421	0.000	87	255762	50.0	49.9	
51 Chloroform	83	6.561	6.561	0.000	92	982668	10.0	9.53	
$ 52 Dibromofluoromethane (Surr)	113	6.775	6.775	0.000	93	598643	10.0	9.52	
53 1,1,1-Trichloroethane	97	6.787	6.787	0.000	97	851681	10.0	9.58	
54 Cyclohexane	56	6.878	6.878	0.000	88	910021	10.0	8.79	
56 Carbon tetrachloride	117	6.994	6.994	0.000	85	717460	10.0	9.17	
57 1,1-Dichloropropene	75	6.994	6.994	0.000	96	757013	10.0	9.38	
58 Isobutyl alcohol	41	7.195	7.195	0.000	95	456944	500.0	391.1	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	92	131227	10.0	9.38	
60 Benzene	78	7.256	7.256	0.000	96	2306844	10.0	9.37	
61 1,2-Dichloroethane	62	7.323	7.323	0.000	97	607195	10.0	8.79	
63 Tert-amyl methyl ether	73	7.451	7.451	0.000	99	1604742	10.0	9.78	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2524501	10.0	10.0	
65 n-Heptane	43	7.671	7.671	0.000	90	781166	10.0	8.35	
67 n-Butanol	56	8.079	8.079	0.000	88	830074	875.0	854.3	
68 Trichloroethene	95	8.134	8.134	0.000	98	612390	10.0	9.46	
69 Methylcyclohexane	83	8.445	8.445	0.000	93	1049688	10.0	9.47	
70 1,2-Dichloropropane	63	8.470	8.470	0.000	97	570183	10.0	9.00	
71 2-ethoxy-2-methyl butane	87	8.488	8.488	0.000	94	897929	10.0	9.81	
72 Methyl methacrylate	69	8.561	8.561	0.000	89	323443	10.0	9.80	
74 Dibromomethane	93	8.579	8.579	0.000	96	307792	10.0	9.70	
73 1,4-Dioxane	88	8.622	8.622	0.000	80	94695	500.0	546.5	M
76 Dichlorobromomethane	83	8.817	8.817	0.000	99	732584	10.0	9.69	
77 2-Nitropropane	41	9.104	9.104	0.000	98	404863	50.0	43.4	
80 1-Bromo-2-chloroethane	63	9.207	9.207	0.000	98	630273	10.0	9.14	
81 cis-1,3-Dichloropropene	75	9.366	9.366	0.000	97	907865	10.0	9.67	
82 4-Methyl-2-pentanone (MIBK)	43	9.549	9.549	0.000	95	4196325	100.0	94.9	
$ 83 Toluene-d8 (Surr)	98	9.671	9.671	0.000	93	2444911	10.0	9.66	
84 Toluene	92	9.750	9.750	0.000	98	1521876	10.0	9.79	
96 trans-1,3-Dichloropropene	75	10.012	10.012	0.000	91	779526	10.0	10.0	
98 Ethyl methacrylate	69	10.073	10.073	0.000	88	695545	10.0	10.4	
99 1,1,2-Trichloroethane	97	10.213	10.213	0.000	90	474672	10.0	10.0	
100 Tetrachloroethene	166	10.298	10.298	0.000	98	661638	10.0	8.94	
101 1,3-Dichloropropane	76	10.378	10.378	0.000	88	765863	10.0	9.57	
102 2-Hexanone	43	10.433	10.433	0.000	95	3049220	100.0	95.0	
104 Chlorodibromomethane	129	10.591	10.591	0.000	90	547432	10.0	9.58	
105 Ethylene Dibromide	107	10.695	10.695	0.000	99	453971	10.0	9.87	
* 106 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	84	1943523	10.0	10.0	
107 1-Chlorohexane	91	11.140	11.140	0.000	94	866902	10.0	9.66	
108 Chlorobenzene	112	11.158	11.158	0.000	95	1717017	10.0	9.56	
110 1,1,1,2-Tetrachloroethane	131	11.237	11.237	0.000	96	594067	10.0	9.60	
111 Ethylbenzene	91	11.243	11.243	0.000	98	2989367	10.0	9.95	
112 m-Xylene & p-Xylene	106	11.353	11.353	0.000	100	2329018	20.0	19.9	
113 o-Xylene	106	11.682	11.682	0.000	96	1162932	10.0	10.1	
114 Styrene	104	11.701	11.701	0.000	95	2009801	10.0	10.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
115 Bromoform	173	11.853	11.853	0.000	97	340007	10.0	9.25	
116 Isopropylbenzene	105	11.981	11.981	0.000	95	2993360	10.0	10.2	
$ 119 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	91	914126	10.0	9.88	
120 1,1,2,2-Tetrachloroethane	83	12.231	12.231	0.000	93	627514	10.0	10.6	
121 Bromobenzene	156	12.243	12.243	0.000	96	727795	10.0	9.70	
122 trans-1,4-Dichloro-2-butene	53	12.255	12.255	0.000	91	1094708	100.0	68.1	
123 1,2,3-Trichloropropane	110	12.274	12.274	0.000	82	171326	10.0	10.6	
124 N-Propylbenzene	91	12.310	12.310	0.000	99	3592674	10.0	10.5	
125 2-Chlorotoluene	126	12.383	12.383	0.000	97	726152	10.0	10.4	
126 1,3,5-Trimethylbenzene	105	12.444	12.444	0.000	94	2601062	10.0	10.6	
127 4-Chlorotoluene	126	12.475	12.475	0.000	97	748166	10.0	10.3	
128 tert-Butylbenzene	134	12.682	12.682	0.000	93	557711	10.0	10.5	
129 Pentachloroethane	167	12.719	12.719	0.000	91	458532	10.0	9.77	
130 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	2707656	10.0	10.7	
131 sec-Butylbenzene	105	12.847	12.847	0.000	94	3312157	10.0	10.6	
132 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	1501658	10.0	9.87	
133 4-Isopropyltoluene	119	12.950	12.950	0.000	97	2926578	10.0	10.7	
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1082521	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.017	13.017	0.000	95	1537843	10.0	9.82	
136 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	98	1198669	10.0	10.3	
137 Benzyl chloride	126	13.097	13.097	0.000	98	259666	10.0	11.4	
138 p-Diethylbenzene	119	13.152	13.152	0.000	92	1785963	10.0	10.6	
139 n-Butylbenzene	92	13.243	13.243	0.000	98	1514560	10.0	10.5	
140 1,2-Dichlorobenzene	146	13.273	13.273	0.000	99	1427852	10.0	9.87	
142 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	89	94158	10.0	9.92	
143 1,3,5-Trichlorobenzene	180	13.938	13.938	0.000	98	1190506	10.0	9.40	
144 1,2,4-Trichlorobenzene	180	14.359	14.359	0.000	94	1043071	10.0	9.03	
145 Hexachlorobutadiene	225	14.438	14.438	0.000	98	482764	10.0	8.44	
146 Naphthalene	128	14.535	14.535	0.000	97	1982041	10.0	9.75	
147 1,2,3-Trichlorobenzene	180	14.676	14.676	0.000	96	878283	10.0	8.52	
148 2-Methylnaphthalene	142	15.285	15.285	0.000	92	1000674	10.0	7.89	
160 Pentane	43	2.995	2.995	0.000	96	704941	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00019	Amount Added: 20.00	Units: uL	
MSV_LL_#2_826_00018	Amount Added: 20.00	Units: uL	
MSV_LL_GAS826_00037	Amount Added: 20.00	Units: uL	
MSV_29_826ISS_00023	Amount Added: 1.00	Units: uL	Run Reagent

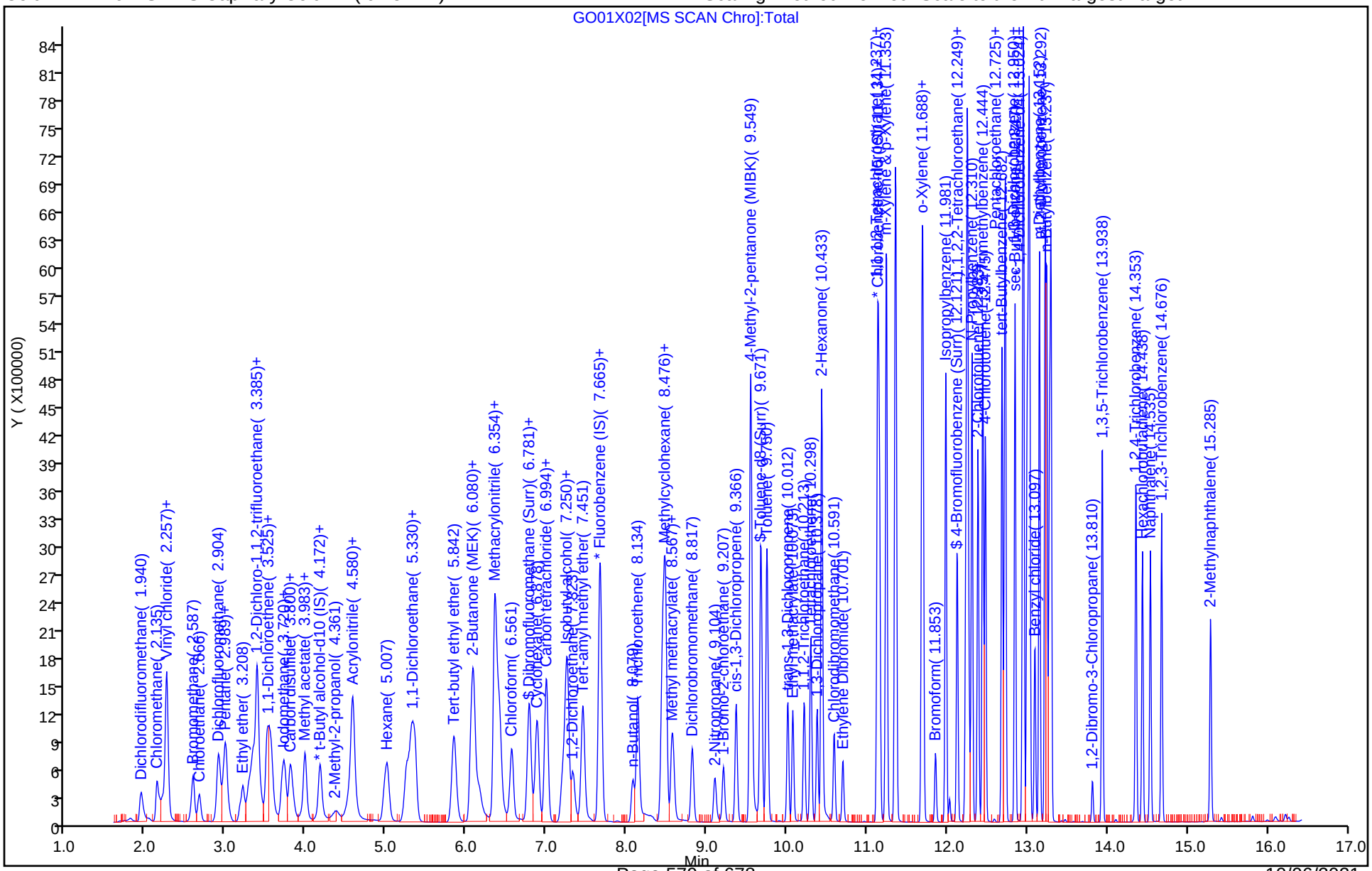
Report Date: 01-Oct-2021 10:55:14 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X02.D

Injection Date:	01-Oct-2021 08:31:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	CCVIS VSTD10			Worklist Smp#:	3
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

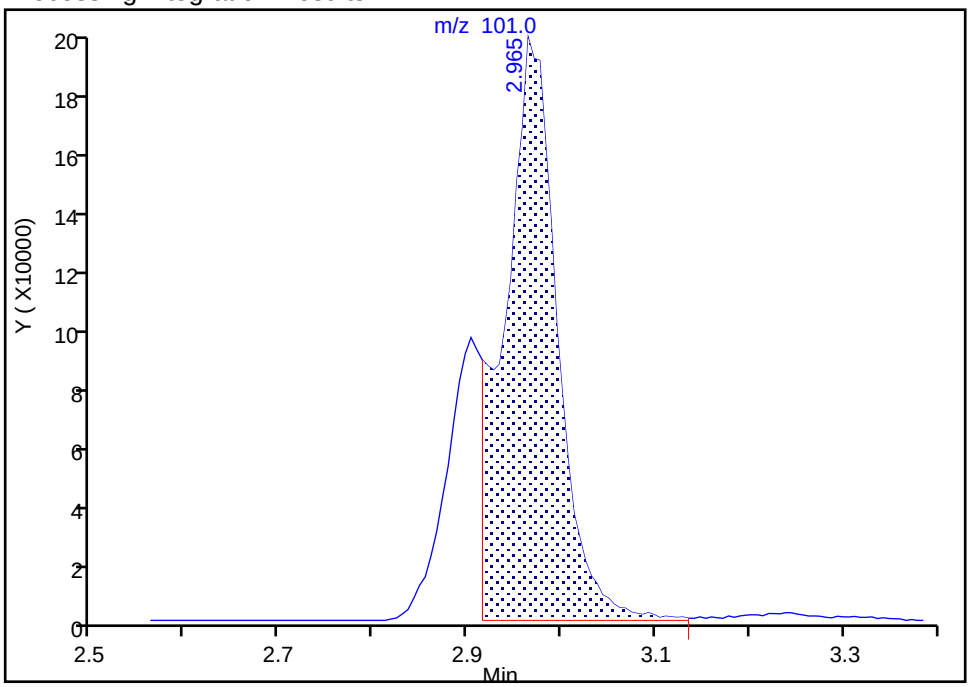
Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X02.D
Injection Date: 01-Oct-2021 08:31:30 Instrument ID: 16334
Lims ID: CCVIS VSTD10
Client ID:
Operator ID: SRK36897 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

13 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

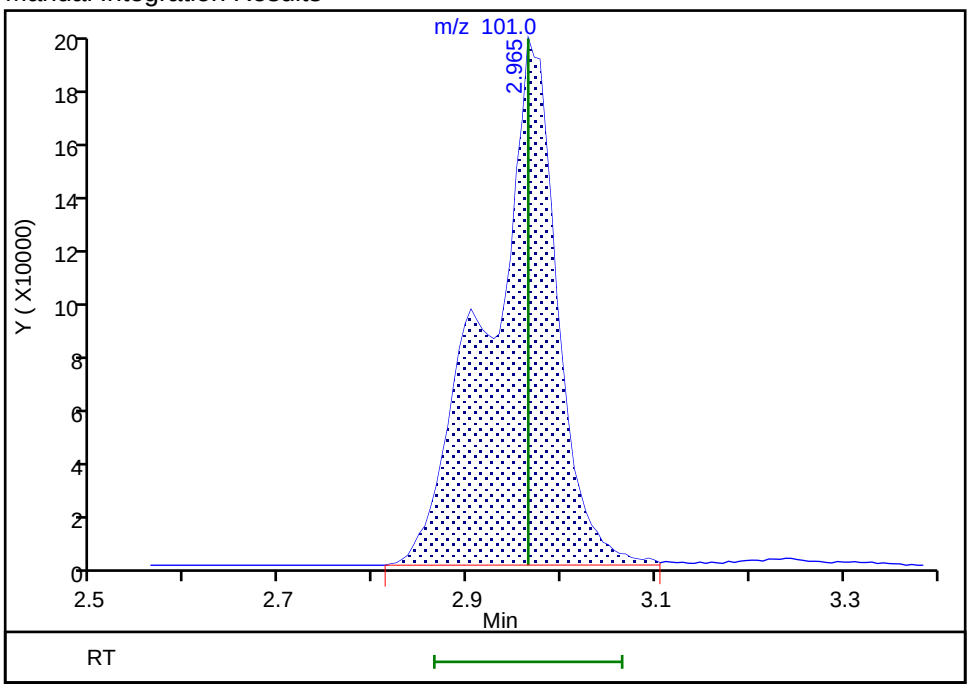
Processing Integration Results

RT: 2.96
Area: 767585
Amount: 7.830569
Amount Units: ug/l



Manual Integration Results

RT: 2.96
Area: 984533
Amount: 10.043778
Amount Units: ug/l



Reviewer: knouses, 01-Oct-2021 09:39:36
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

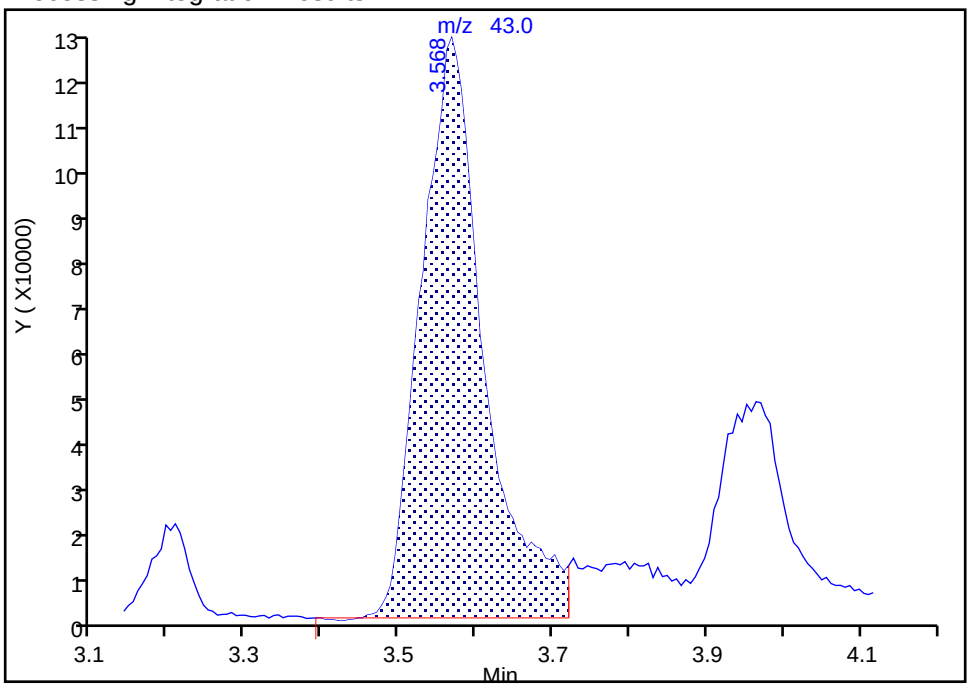
Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X02.D				
Injection Date:	01-Oct-2021 08:31:30	Instrument ID:	16334		
Lims ID:	CCVIS VSTD10				
Client ID:					
Operator ID:	SRK36897	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

21 Acetone, CAS: 67-64-1

Signal: 1

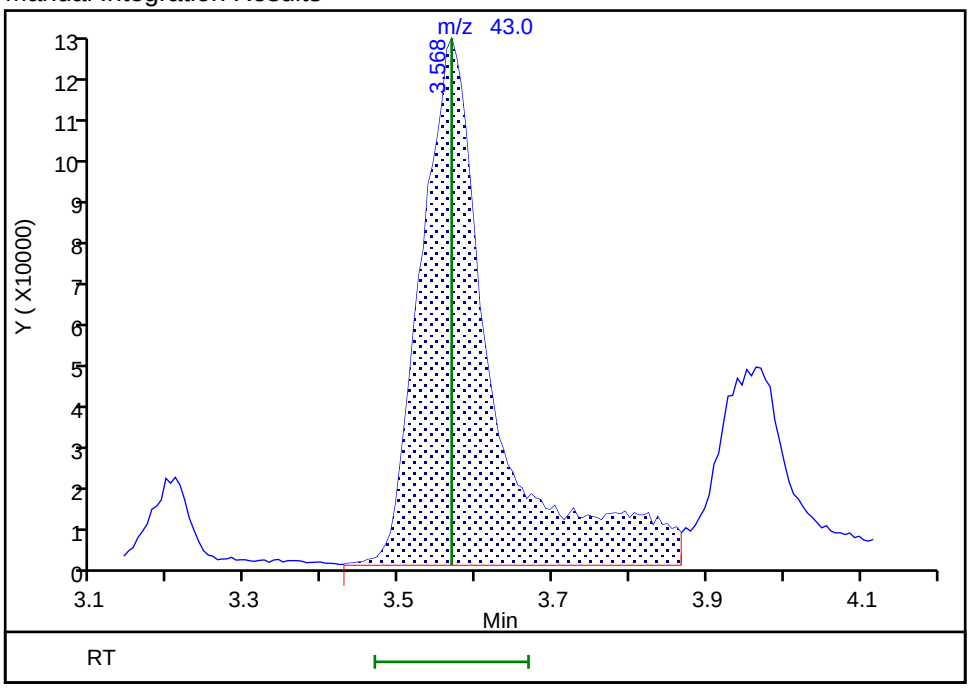
Processing Integration Results

RT: 3.57
Area: 710527
Amount: 75.626369
Amount Units: ug/l



Manual Integration Results

RT: 3.57
Area: 822751
Amount: 87.571156
Amount Units: ug/l



Reviewer: knouses, 01-Oct-2021 09:39:48
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

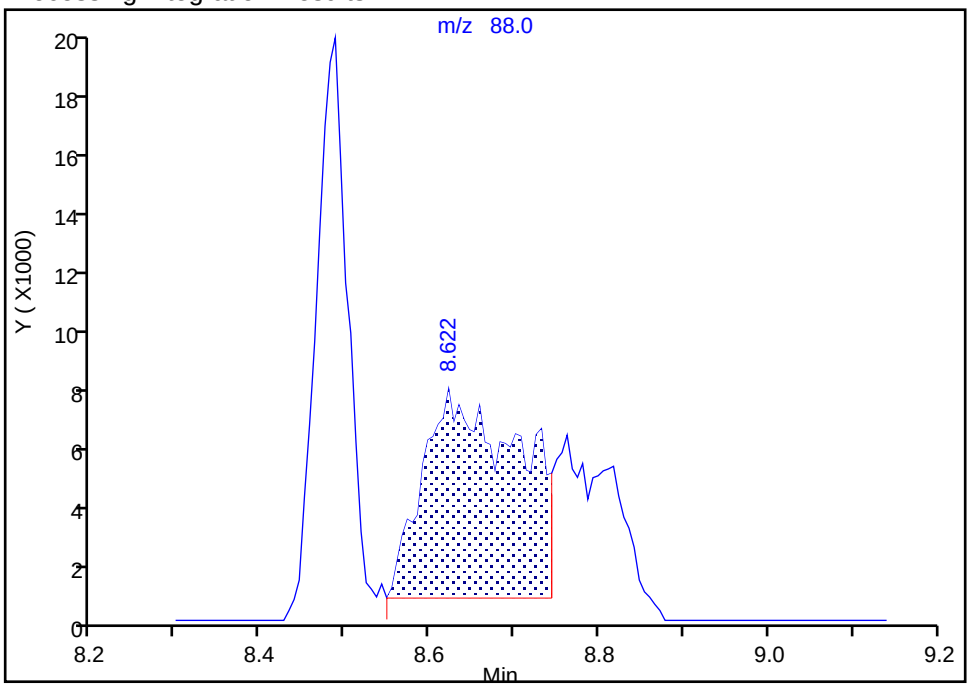
Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X02.D				
Injection Date:	01-Oct-2021 08:31:30	Instrument ID:	16334		
Lims ID:	CCVIS VSTD10				
Client ID:					
Operator ID:	SRK36897	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

73 1,4-Dioxane, CAS: 123-91-1

Signal: 1

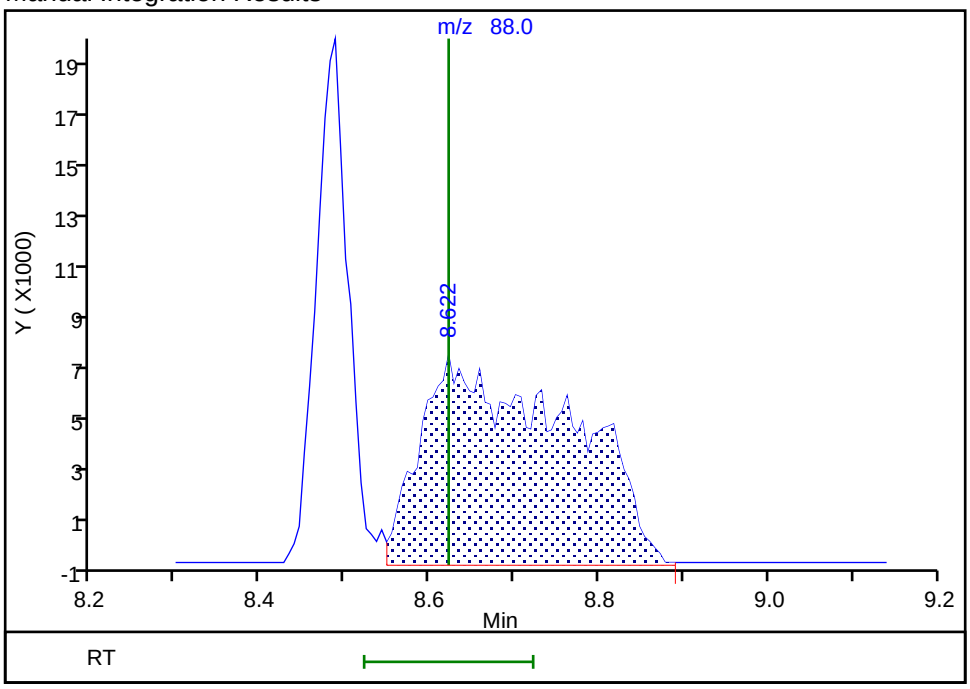
Processing Integration Results

RT: 8.62
Area: 54925
Amount: 317.0029
Amount Units: ug/l



Manual Integration Results

RT: 8.62
Area: 94695
Amount: 546.5379
Amount Units: ug/l



Reviewer: knouses, 01-Oct-2021 09:40:49
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-56784-1

SDG No.:

Lab Sample ID: CCVIS 410-178764/3 Calibration Date: 10/05/2021 09:22

Instrument ID: 16334 Calib Start Date: 07/27/2021 19:35

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/27/2021 21:47

Lab File ID: GO05X02.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	0.2497	0.2482	0.1000	9.94	10.0	-0.6	20.0
Chloromethane	Ave	0.3117	0.2598	0.1000	8.34	10.0	-16.6	20.0
Vinyl chloride	Ave	0.3028	0.2742	0.1000	9.06	10.0	-9.4	20.0
1,3-Butadiene	Ave	0.3317	0.2953		8.90	10.0	-11.0	20.0
Bromomethane	Ave	0.2163	0.2111	0.1000	9.76	10.0	-2.4	20.0
Chloroethane	Ave	0.1806	0.1638	0.1000	9.07	10.0	-9.3	20.0
Dichlorofluoromethane	Ave	0.4198	0.3861		9.20	10.0	-8.0	20.0
Trichlorofluoromethane	Ave	0.3883	0.3885	0.1000	10.0	10.0	0.0	20.0
Pentane	None					10.0		20.0
Ethyl ether	Ave	0.1968	0.1718		8.73	10.0	-12.7	20.0
Freon 123a	Ave	0.2884	0.2606		9.04	10.0	-9.6	20.0
Acrolein	Ave	2.120	2.901		686	501	36.8*	20.0
1,1-Dichloroethene	Ave	0.2087	0.1918	0.1000	9.19	10.0	-8.1	20.0
Freon 113	Ave	0.2263	0.2100	0.1000	9.28	10.0	-7.2	20.0
Acetone	Ave	2.590	3.350	0.1000	129	100	29.3*	20.0
Methyl iodide	Ave	0.3950	0.3469		8.78	10.0	-12.2	20.0
Ethyl bromide	Ave	0.1854	0.1744		9.40	9.99	-5.9	20.0
Carbon disulfide	Ave	0.7223	0.6391	0.1000	8.85	10.0	-11.5	20.0
Methyl acetate	Ave	7.908	7.697	0.1000	9.73	10.0	-2.7	20.0
Allyl chloride	Ave	0.3564	0.2775		7.79	10.0	-22.1*	20.0
Methylene Chloride	Ave	0.2393	0.2208	0.1000	9.23	10.0	-7.7	20.0
t-Butyl alcohol	Ave	0.8574	1.023		239	200	19.3	20.0
Acrylonitrile	Ave	3.603	4.761		33.0	25.0	32.1*	20.0
Methyl tert-butyl ether	Ave	0.6040	0.5763	0.1000	9.54	10.0	-4.6	20.0
trans-1,2-Dichloroethene	Ave	0.2334	0.2222	0.1000	9.52	10.0	-4.8	20.0
n-Hexane	Ave	0.3372	0.2917		8.65	10.0	-13.5	20.0
1,1-Dichloroethane	Ave	0.4103	0.3641	0.2000	8.87	10.0	-11.3	20.0
di-Isopropyl ether	Ave	0.7574	0.6437		8.50	10.0	-15.0	20.0
2-Chloro-1,3-butadiene	Ave	0.3366	0.3063		9.10	10.0	-9.0	20.0
Ethyl t-butyl ether	Ave	0.6904	0.6380		9.24	10.0	-7.6	20.0
2-Butanone (MEK)	Ave	4.965	6.556	0.1000	132	100	32.0*	20.0
cis-1,2-Dichloroethene	Ave	0.2600	0.2462	0.1000	9.47	10.0	-5.3	20.0
2,2-Dichloropropane	Ave	0.3040	0.2930		9.64	10.0	-3.6	20.0
Propionitrile	Ave	1.279	1.920		300	200	50.1*	20.0
Methacrylonitrile	Ave	4.786	6.953		145	100	45.3*	20.0
Bromochloromethane	Ave	0.1203	0.1115		9.27	10.0	-7.3	20.0
Tetrahydrofuran	Ave	1.413	2.057		72.8	50.0	45.6*	20.0
Chloroform	Ave	0.4085	0.3868	0.2000	9.47	10.0	-5.3	20.0
1,1,1-Trichloroethane	Ave	0.3520	0.3263	0.1000	9.27	10.0	-7.3	20.0
Cyclohexane	Ave	0.4101	0.3533	0.1000	8.62	10.0	-13.8	20.0
Carbon tetrachloride	Ave	0.3099	0.2792	0.1000	9.01	10.0	-9.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-56784-1

SDG No.:

Lab Sample ID: CCVIS 410-178764/3 Calibration Date: 10/05/2021 09:22

Instrument ID: 16334 Calib Start Date: 07/27/2021 19:35

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/27/2021 21:47

Lab File ID: GO05X02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1-Dichloropropene	Ave	0.3197	0.2945		9.21	10.0	-7.9	20.0
Isobutyl alcohol	Ave	0.0046	0.0034		366	500	-26.9*	20.0
Benzene	Ave	0.9748	0.9073	0.5000	9.31	10.0	-6.9	20.0
1,2-Dichloroethane	Ave	0.2738	0.2478	0.1000	9.05	10.0	-9.5	20.0
t-Amyl methyl ether	Ave	0.6497	0.6201		9.55	10.0	-4.5	20.0
n-Heptane	Ave	0.3708	0.2995		8.08	10.0	-19.2	20.0
n-Butanol	Ave	0.2678	0.3655		1190	875	36.5*	20.0
Trichloroethene	Ave	0.2564	0.2400	0.2000	9.36	10.0	-6.4	20.0
Methylcyclohexane	Ave	0.4391	0.4106	0.1000	9.35	10.0	-6.5	20.0
1,2-Dichloropropane	Ave	0.2508	0.2228	0.1000	8.88	10.0	-11.2	20.0
Methyl methacrylate	Ave	9.103	13.12		14.4	10.0	44.1*	20.0
Dibromomethane	Ave	0.1257	0.1221		9.71	10.0	-2.9	20.0
1,4-Dioxane	Ave	0.0478	0.0721	0.0050	755	500	50.9*	20.0
Bromodichloromethane	Ave	0.2996	0.2878	0.2000	9.61	10.0	-3.9	20.0
2-Nitropropane	Ave	2.572	3.272		63.6	50.0	27.2*	20.0
1-Bromo-2-chloroethane	Ave	0.2732	0.2489		9.11	10.0	-8.9	20.0
cis-1,3-Dichloropropene	Ave	0.3721	0.3552	0.2000	9.55	10.0	-4.5	20.0
4-Methyl-2-pentanone (MIBK)	Ave	12.19	16.33	0.1000	134	100	34.0*	20.0
Toluene	Ave	0.7999	0.7762	0.4000	9.70	10.0	-3.0	20.0
trans-1,3-Dichloropropene	Ave	0.3993	0.3970	0.1000	9.94	10.0	-0.6	20.0
Ethyl methacrylate	Ave	0.3448	0.3471		10.1	10.0	0.7	20.0
1,1,2-Trichloroethane	Ave	0.2437	0.2417	0.1000	9.92	10.0	-0.8	20.0
Tetrachloroethene	Ave	0.3809	0.3357	0.2000	8.81	10.0	-11.9	20.0
1,3-Dichloropropane	Ave	0.4119	0.3956		9.60	10.0	-4.0	20.0
2-Hexanone	Ave	8.851	12.25	0.1000	138	100	38.4*	20.0
Dibromochloromethane	Ave	0.2939	0.2817		9.59	10.0	-4.1	20.0
1,2-Dibromoethane (EDB)	Ave	0.2367	0.2338	0.1000	9.88	10.0	-1.2	20.0
1-Chlorohexane	Ave	0.4620	0.4333		9.38	10.0	-6.2	20.0
Chlorobenzene	Ave	0.9244	0.8798	0.5000	9.52	10.0	-4.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3184	0.2996		9.41	10.0	-5.9	20.0
Ethylbenzene	Ave	1.546	1.511	0.1000	9.77	10.0	-2.3	20.0
m&p-Xylene	Ave	0.6007	0.5902	0.1000	19.7	20.0	-1.7	20.0
o-Xylene	Ave	0.5940	0.5907	0.3000	9.94	10.0	-0.6	20.0
Styrene	Ave	1.001	1.031	0.3000	10.3	10.0	3.0	20.0
Bromoform	Ave	0.1891	0.1746	0.1000	9.23	10.0	-7.7	20.0
Isopropylbenzene	Ave	1.516	1.514	0.1000	9.99	10.0	-0.1	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5455	0.5767	0.3000	10.6	10.0	5.7	20.0
Bromobenzene	Ave	0.6930	0.6780		9.78	10.0	-2.2	20.0
trans-1,4-Dichloro-2-butene	Ave	4.432	5.857		132	100	32.2*	20.0
1,2,3-Trichloropropane	Ave	0.1487	0.1531		10.3	10.0	3.0	20.0
N-Propylbenzene	Ave	3.156	3.257		10.3	10.0	3.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-56784-1

SDG No.:

Lab Sample ID: CCVIS 410-178764/3 Calibration Date: 10/05/2021 09:22

Instrument ID: 16334 Calib Start Date: 07/27/2021 19:35

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 07/27/2021 21:47

Lab File ID: GO05X02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chlorotoluene	Ave	0.6431	0.6639		10.3	10.0	3.2	20.0
1,3,5-Trimethylbenzene	Ave	2.262	2.384		10.5	10.0	5.4	20.0
4-Chlorotoluene	Ave	0.6727	0.6933		10.3	10.0	3.1	20.0
tert-Butylbenzene	Ave	0.4899	0.4944		10.1	10.0	0.9	20.0
Pentachloroethane	Ave	0.4335	0.4123		9.51	10.0	-4.9	20.0
1,2,4-Trimethylbenzene	Ave	2.342	2.469		10.5	10.0	5.4	20.0
sec-Butylbenzene	Ave	2.886	3.020		10.5	10.0	4.7	20.0
1,3-Dichlorobenzene	Ave	1.405	1.389	0.6000	9.89	10.0	-1.1	20.0
p-Isopropyltoluene	Ave	2.521	2.691		10.7	10.0	6.8	20.0
1,4-Dichlorobenzene	Ave	1.447	1.414	0.5000	9.77	10.0	-2.3	20.0
1,2,3-Trimethylbenzene	Ave	1.080	1.100		10.2	10.0	1.9	20.0
Benzyl chloride	Ave	0.2105	0.2345		11.1	10.0	11.4	20.0
n-Butylbenzene	Ave	1.327	1.377		10.4	10.0	3.8	20.0
1,2-Dichlorobenzene	Ave	1.336	1.296	0.4000	9.70	10.0	-3.0	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0877	0.0812	0.0500	9.26	10.0	-7.4	20.0
1,3,5-Trichlorobenzene	Ave	1.170	1.098		9.39	10.0	-6.1	20.0
1,2,4-Trichlorobenzene	Ave	1.067	0.9667	0.2000	9.06	10.0	-9.4	20.0
Hexachlorobutadiene	Ave	0.5287	0.4434		8.39	10.0	-16.1	20.0
Naphthalene	Ave	1.878	1.816		9.67	10.0	-3.3	20.0
1,2,3-Trichlorobenzene	Ave	0.9520	0.8184		8.60	10.0	-14.0	20.0
Dibromofluoromethane (Surr)	Ave	0.2492	0.2369		9.51	10.0	-4.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0554	0.0540		9.74	10.0	-2.6	20.0
Toluene-d8 (Surr)	Ave	1.302	1.269		9.75	10.0	-2.5	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4761	0.4745		9.97	10.0	-0.3	20.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X02.D
Lims ID: CCVIS VSTD10
Client ID:
Sample Type: CCVIS
Inject. Date: 05-Oct-2021 09:22:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040685-003
Misc. Info.: CCVIS VSTD10
Operator ID: SRK36897 Instrument ID: 16334
Sublist: chrom-MSV_16334_25mL*sub4

Method: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Oct-2021 11:47:33 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1643

First Level Reviewer: knouses Date: 05-Oct-2021 10:10:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.940	1.940	0.000	99	609143	10.0	9.94	
5 Chloromethane	50	2.142	2.142	0.000	99	637575	10.0	8.34	
8 Vinyl chloride	62	2.257	2.257	0.000	98	672946	10.0	9.06	
7 Butadiene	39	2.264	2.264	0.000	92	724651	10.0	8.90	M
9 Bromomethane	94	2.593	2.593	0.000	90	517952	10.0	9.76	
10 Chloroethane	64	2.666	2.666	0.000	99	401928	10.0	9.07	
12 Dichlorofluoromethane	67	2.916	2.916	0.000	97	947339	10.0	9.20	
13 Trichlorofluoromethane	101	2.977	2.977	0.000	98	953200	10.0	10.0	
15 Ethyl ether	59	3.208	3.208	0.000	89	421522	10.0	8.73	
17 1,2-Dichloro-1,1,2-trifluoroetha	67	3.312	3.312	0.000	91	639521	10.0	9.04	
18 Acrolein	56	3.391	3.391	0.000	99	3540051	501.1	685.6	
19 1,1-Dichloroethene	96	3.513	3.513	0.000	95	470705	10.0	9.19	
20 112TCTFE	101	3.556	3.556	0.000	93	515378	10.0	9.28	
21 Acetone	43	3.568	3.568	0.000	100	815659	100.0	129.3	
23 Iodomethane	142	3.702	3.702	0.000	99	851173	10.0	8.78	
24 Ethyl bromide	108	3.733	3.733	0.000	98	427749	10.0	9.40	
22 Isopropyl alcohol	45	3.794	3.794	0.000	31	216056	200.0	149.7	
25 Carbon disulfide	76	3.812	3.812	0.000	98	1568190	10.0	8.85	
27 Methyl acetate	43	3.964	3.964	0.000	97	187428	10.0	9.73	M
28 3-Chloro-1-propene	41	3.989	3.989	0.000	91	681042	10.0	7.79	
29 Methylene Chloride	84	4.172	4.172	0.000	86	541826	10.0	9.23	
* 30 t-Butyl alcohol-d10 (IS)	65	4.251	4.251	0.000	97	121755	50.0	50.0	
31 2-Methyl-2-propanol	59	4.367	4.367	0.000	100	498216	200.0	238.6	
32 Acrylonitrile	53	4.531	4.531	0.000	63	289860	25.0	33.0	
33 Methyl tert-butyl ether	73	4.574	4.574	0.000	89	1414149	10.0	9.54	
34 trans-1,2-Dichloroethene	96	4.580	4.580	0.000	97	545191	10.0	9.52	
35 Hexane	57	5.007	5.007	0.000	91	715698	10.0	8.65	
37 1,1-Dichloroethane	63	5.251	5.251	0.000	96	893430	10.0	8.87	
38 Isopropyl ether	45	5.318	5.318	0.000	94	1579571	10.0	8.50	
39 2-Chloro-1,3-butadiene	53	5.354	5.354	0.000	92	751508	10.0	9.10	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.848	5.848	0.000	97	1565486	10.0	9.24	
41 2-Butanone (MEK)	43	6.062	6.062	0.000	99	1596414	100.0	132.0	
42 cis-1,2-Dichloroethene	96	6.086	6.086	0.000	79	604052	10.0	9.47	
43 2,2-Dichloropropane	77	6.092	6.092	0.000	86	718852	10.0	9.64	
45 Propionitrile	54	6.159	6.159	0.000	100	935029	200.0	300.2	
48 Methacrylonitrile	67	6.354	6.354	0.000	90	1693237	100.0	145.3	
49 Chlorobromomethane	128	6.409	6.409	0.000	90	273652	10.0	9.27	
50 Tetrahydrofuran	71	6.421	6.421	0.000	72	250502	50.0	72.8	
51 Chloroform	83	6.568	6.568	0.000	92	949101	10.0	9.47	
$ 52 Dibromofluoromethane (Surr)	113	6.781	6.781	0.000	93	581286	10.0	9.51	
53 1,1,1-Trichloroethane	97	6.787	6.787	0.000	97	800647	10.0	9.27	
54 Cyclohexane	56	6.885	6.885	0.000	88	867011	10.0	8.62	
56 Carbon tetrachloride	117	6.994	6.994	0.000	96	685045	10.0	9.01	
57 1,1-Dichloropropene	75	7.000	7.000	0.000	98	722699	10.0	9.21	
58 Isobutyl alcohol	41	7.196	7.196	0.000	97	415101	500.0	365.6	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.226	7.226	0.000	92	132438	10.0	9.74	
60 Benzene	78	7.263	7.263	0.000	96	2226260	10.0	9.31	
61 1,2-Dichloroethane	62	7.330	7.330	0.000	98	608040	10.0	9.05	
63 Tert-amyl methyl ether	73	7.452	7.452	0.000	99	1521694	10.0	9.55	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2453780	10.0	10.0	
65 n-Heptane	43	7.671	7.671	0.000	88	735000	10.0	8.08	
67 n-Butanol	56	8.073	8.073	0.000	87	778768	875.0	1194.0	
68 Trichloroethene	95	8.134	8.134	0.000	98	588892	10.0	9.36	
69 Methylcyclohexane	83	8.445	8.445	0.000	90	1007562	10.0	9.35	
70 1,2-Dichloropropane	63	8.470	8.470	0.000	86	546720	10.0	8.88	
71 2-ethoxy-2-methyl butane	87	8.482	8.482	0.000	92	847980	10.0	9.53	
72 Methyl methacrylate	69	8.561	8.561	0.000	89	319449	10.0	14.4	
74 Dibromomethane	93	8.579	8.579	0.000	96	299634	10.0	9.71	
73 1,4-Dioxane	88	8.604	8.604	0.000	83	87769	500.0	754.6	M
76 Dichlorobromomethane	83	8.817	8.817	0.000	99	706239	10.0	9.61	
77 2-Nitropropane	41	9.104	9.104	0.000	98	398383	50.0	63.6	
80 1-Bromo-2-chloroethane	63	9.207	9.207	0.000	98	610801	10.0	9.11	
81 cis-1,3-Dichloropropene	75	9.366	9.366	0.000	97	871651	10.0	9.55	
82 4-Methyl-2-pentanone (MIBK)	43	9.549	9.549	0.000	95	3975926	100.0	134.0	
$ 83 Toluene-d8 (Surr)	98	9.677	9.677	0.000	94	2401610	10.0	9.75	
84 Toluene	92	9.750	9.750	0.000	98	1468562	10.0	9.70	
96 trans-1,3-Dichloropropene	75	10.012	10.012	0.000	91	751021	10.0	9.94	
98 Ethyl methacrylate	69	10.073	10.073	0.000	87	656797	10.0	10.1	
99 1,1,2-Trichloroethane	97	10.213	10.213	0.000	89	457244	10.0	9.92	
100 Tetrachloroethene	166	10.299	10.299	0.000	97	635089	10.0	8.81	
101 1,3-Dichloropropane	76	10.378	10.378	0.000	88	748428	10.0	9.60	
102 2-Hexanone	43	10.433	10.433	0.000	95	2982659	100.0	138.4	
104 Chlorodibromomethane	129	10.591	10.591	0.000	89	533009	10.0	9.59	
105 Ethylene Dibromide	107	10.695	10.695	0.000	99	442338	10.0	9.88	
* 106 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	85	1891914	10.0	10.0	
107 1-Chlorohexane	91	11.140	11.140	0.000	94	819718	10.0	9.38	
108 Chlorobenzene	112	11.152	11.152	0.000	95	1664431	10.0	9.52	
110 1,1,1,2-Tetrachloroethane	131	11.237	11.237	0.000	96	566834	10.0	9.41	
111 Ethylbenzene	91	11.243	11.243	0.000	98	2859260	10.0	9.77	
112 m-Xylene & p-Xylene	106	11.353	11.353	0.000	100	2233311	20.0	19.7	
113 o-Xylene	106	11.682	11.682	0.000	97	1117476	10.0	9.94	
114 Styrene	104	11.701	11.701	0.000	95	1950869	10.0	10.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
115 Bromoform	173	11.853	11.853	0.000	97	330286	10.0	9.23	
116 Isopropylbenzene	105	11.981	11.981	0.000	95	2863855	10.0	9.99	
$ 119 4-Bromofluorobenzene (Surr)	95	12.121	12.121	0.000	90	897651	10.0	9.97	
120 1,1,2,2-Tetrachloroethane	83	12.231	12.231	0.000	93	611530	10.0	10.6	
121 Bromobenzene	156	12.243	12.243	0.000	94	718941	10.0	9.78	
122 trans-1,4-Dichloro-2-butene	53	12.255	12.255	0.000	91	1426278	100.0	132.2	
123 1,2,3-Trichloropropane	110	12.274	12.274	0.000	80	162323	10.0	10.3	
124 N-Propylbenzene	91	12.310	12.310	0.000	99	3453329	10.0	10.3	
125 2-Chlorotoluene	126	12.384	12.384	0.000	97	703915	10.0	10.3	
126 1,3,5-Trimethylbenzene	105	12.444	12.444	0.000	94	2527504	10.0	10.5	
127 4-Chlorotoluene	126	12.475	12.475	0.000	97	735139	10.0	10.3	
128 tert-Butylbenzene	134	12.682	12.682	0.000	93	524238	10.0	10.1	
129 Pentachloroethane	167	12.719	12.719	0.000	89	437208	10.0	9.51	
130 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	2617519	10.0	10.5	
131 sec-Butylbenzene	105	12.847	12.847	0.000	94	3202519	10.0	10.5	
132 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	1472790	10.0	9.89	
133 4-Isopropyltoluene	119	12.950	12.950	0.000	97	2853214	10.0	10.7	
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1060326	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.018	13.018	0.000	95	1499580	10.0	9.77	
136 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	98	1166623	10.0	10.2	
137 Benzyl chloride	126	13.097	13.097	0.000	98	248633	10.0	11.1	
138 p-Diethylbenzene	119	13.152	13.152	0.000	92	1736135	10.0	10.5	
139 n-Butylbenzene	92	13.243	13.243	0.000	97	1460260	10.0	10.4	
140 1,2-Dichlorobenzene	146	13.280	13.280	0.000	99	1374551	10.0	9.70	
142 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	90	86133	10.0	9.26	
143 1,3,5-Trichlorobenzene	180	13.938	13.938	0.000	98	1164258	10.0	9.39	
144 1,2,4-Trichlorobenzene	180	14.353	14.353	0.000	94	1024968	10.0	9.06	
145 Hexachlorobutadiene	225	14.438	14.438	0.000	97	470141	10.0	8.39	
146 Naphthalene	128	14.536	14.536	0.000	97	1926027	10.0	9.67	
147 1,2,3-Trichlorobenzene	180	14.676	14.676	0.000	96	867764	10.0	8.60	
148 2-Methylnaphthalene	142	15.285	15.285	0.000	92	952606	10.0	7.67	
160 Pentane	43	3.001	3.001	0.000	96	662935	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00019	Amount Added: 20.00	Units: uL	
MSV_LL_#2_826_00018	Amount Added: 20.00	Units: uL	
MSV_LL_GAS826_00038	Amount Added: 20.00	Units: uL	
MSV_29_826ISS_00023	Amount Added: 1.00	Units: uL	Run Reagent

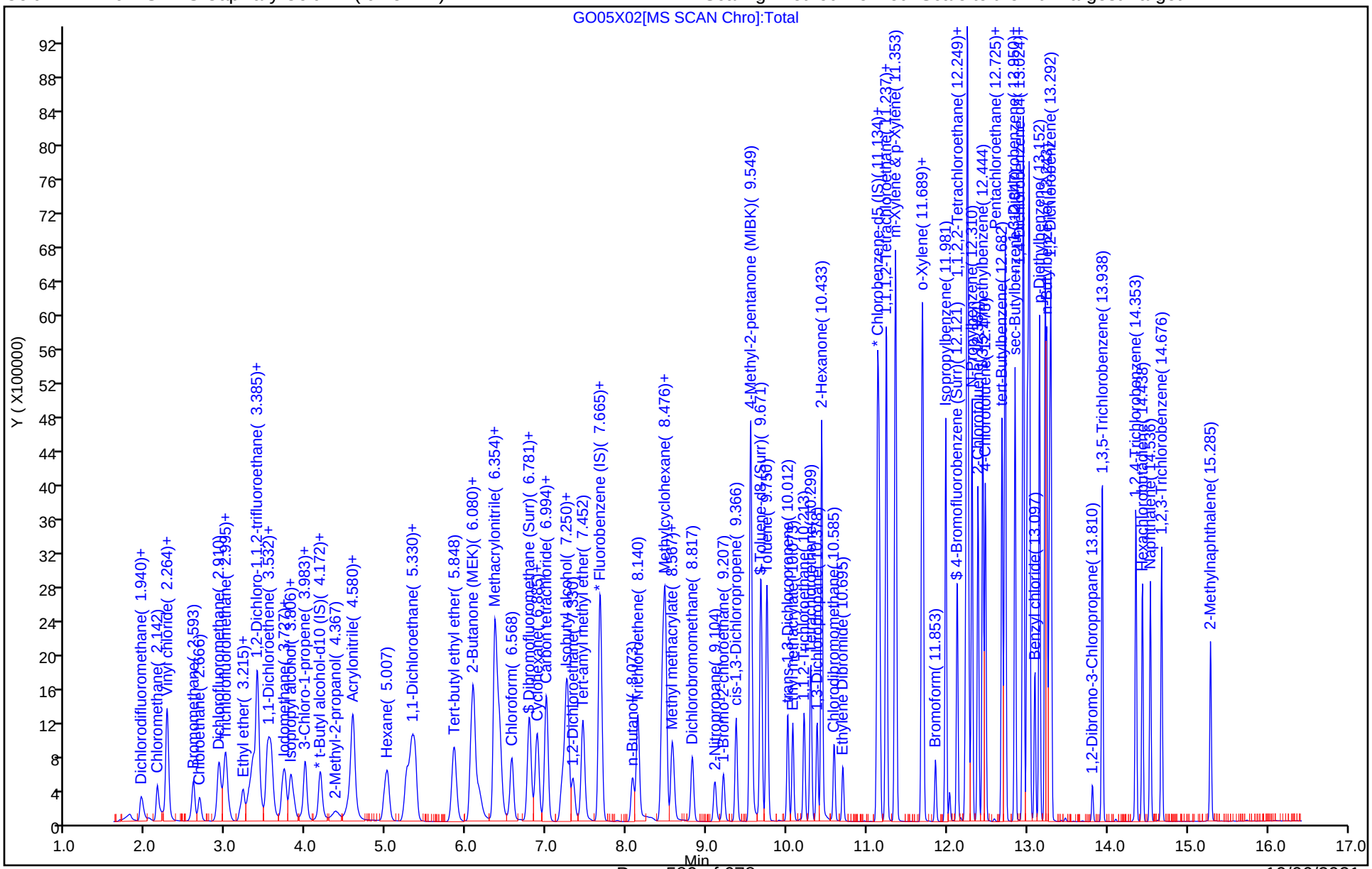
Report Date: 05-Oct-2021 11:47:35 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X02.D

Injection Date:	05-Oct-2021 09:22:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	CCVIS VSTD10			Worklist Smp#:	3
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

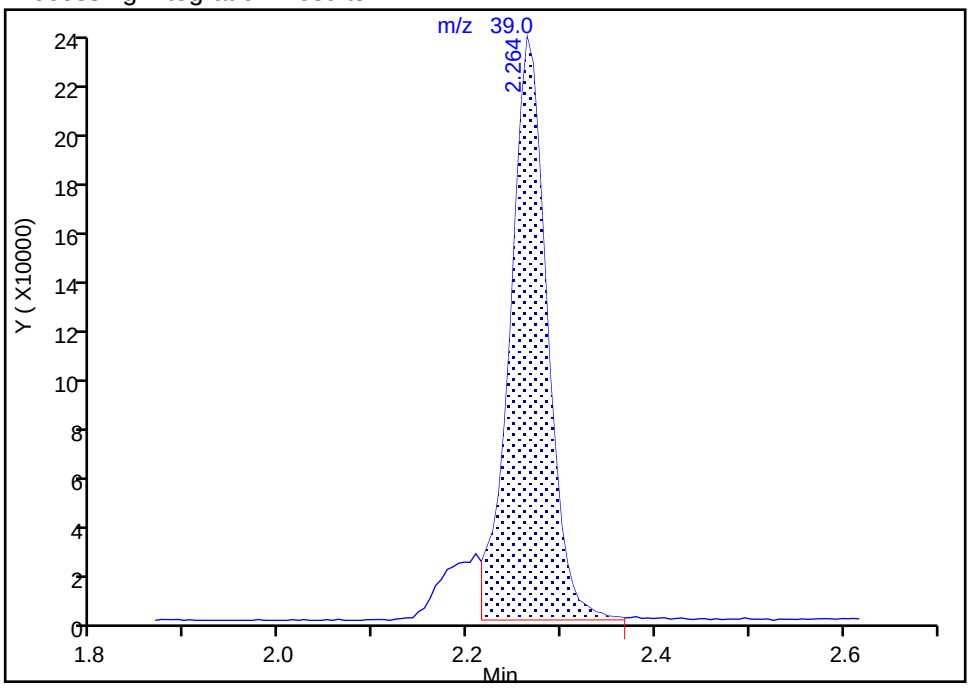
Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X02.D
Injection Date: 05-Oct-2021 09:22:30 Instrument ID: 16334
Lims ID: CCVIS VSTD10
Client ID:
Operator ID: SRK36897 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

7 Butadiene, CAS: 106-99-0

Signal: 1

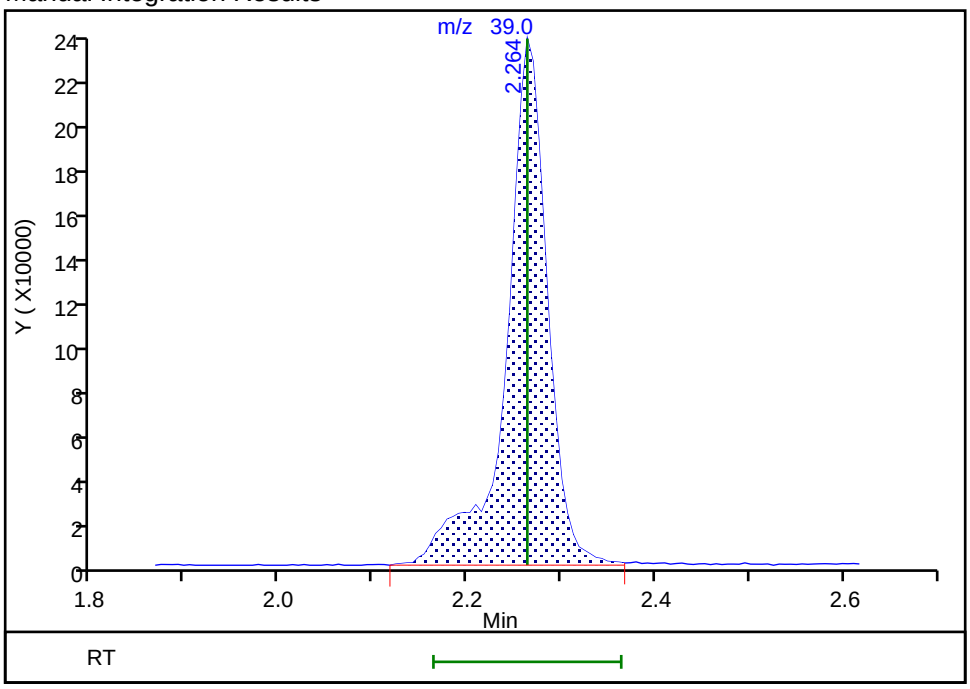
Processing Integration Results

RT: 2.26
Area: 653747
Amount: 8.031466
Amount Units: ug/l



Manual Integration Results

RT: 2.26
Area: 724651
Amount: 8.902542
Amount Units: ug/l



Reviewer: knouses, 05-Oct-2021 10:09:09
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

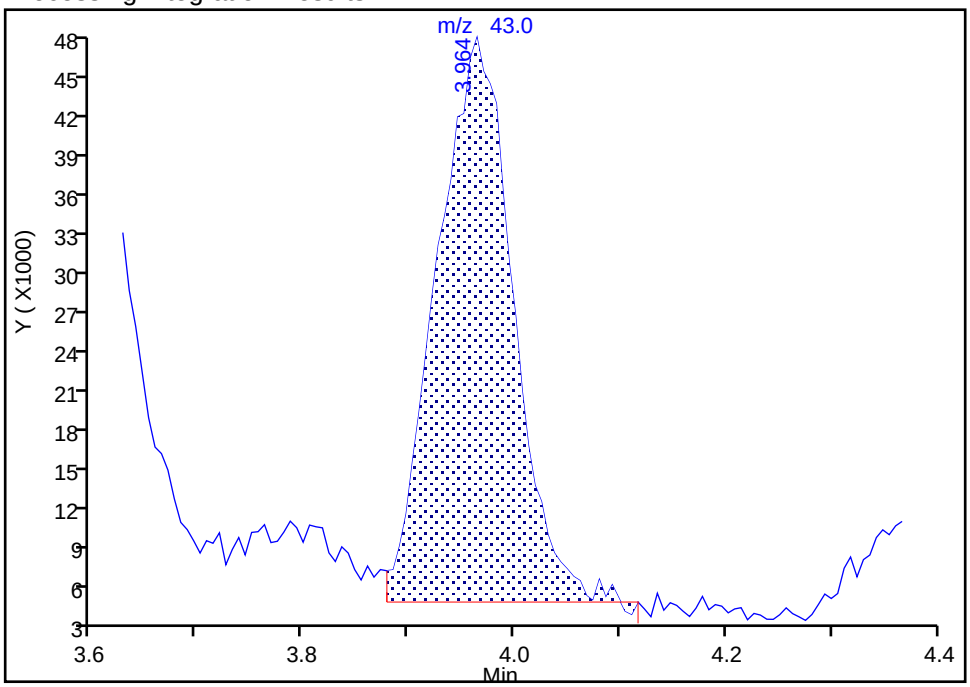
Data File:	\\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X02.D				
Injection Date:	05-Oct-2021 09:22:30	Instrument ID:	16334		
Lims ID:	CCVIS VSTD10				
Client ID:					
Operator ID:	SRK36897	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

27 Methyl acetate, CAS: 79-20-9

Signal: 1

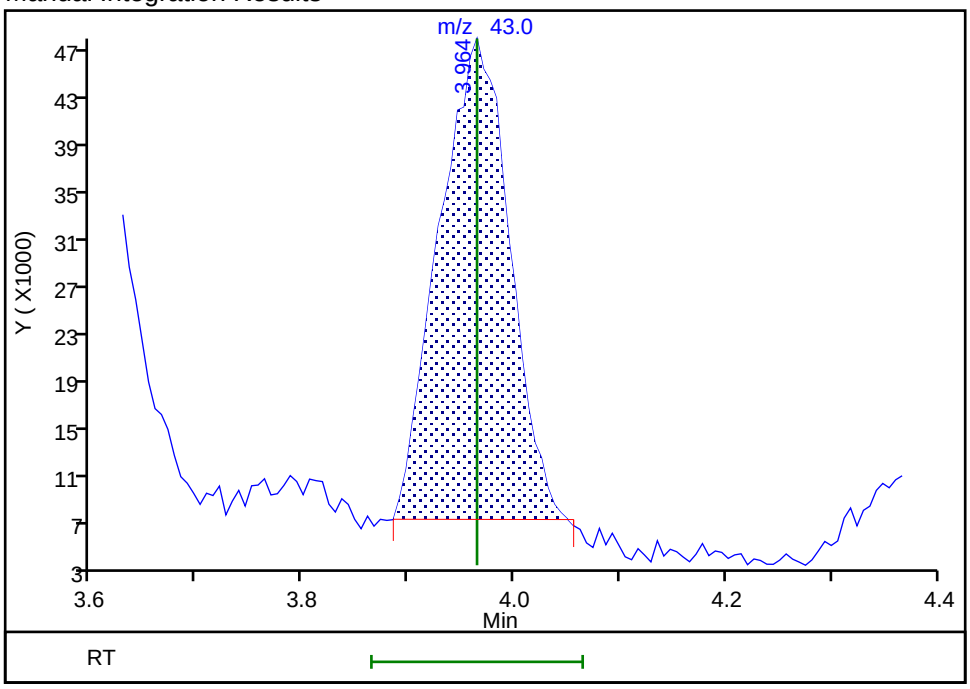
Processing Integration Results

RT: 3.96
Area: 215931
Amount: 11.213256
Amount Units: ug/l



Manual Integration Results

RT: 3.96
Area: 187428
Amount: 9.733101
Amount Units: ug/l



Reviewer: knouses, 05-Oct-2021 10:09:23
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

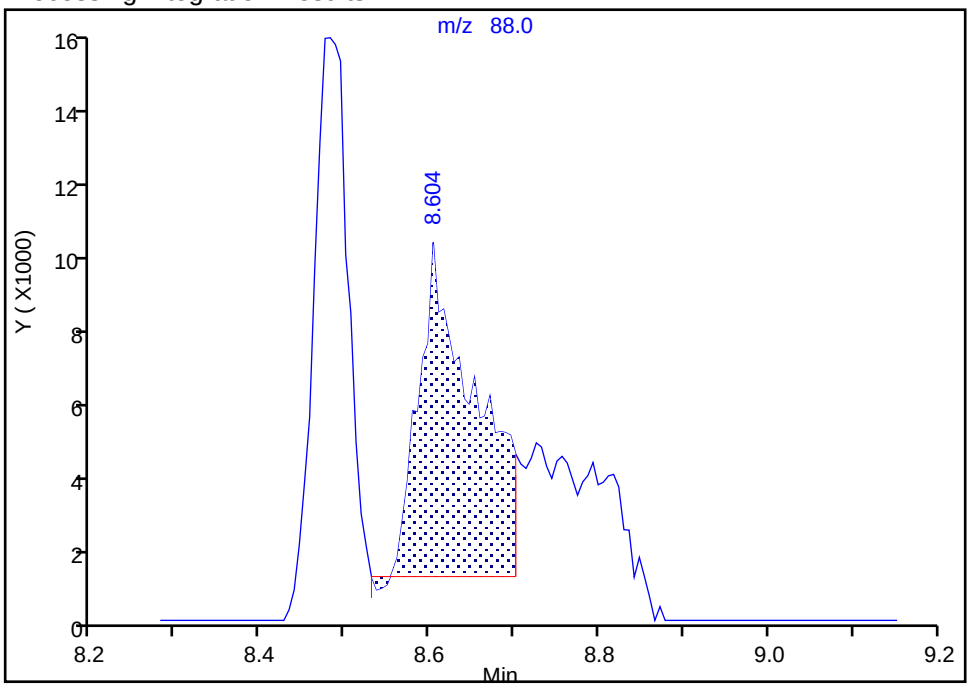
Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X02.D
Injection Date: 05-Oct-2021 09:22:30 Instrument ID: 16334
Lims ID: CCVIS VSTD10
Client ID:
Operator ID: SRK36897 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

73 1,4-Dioxane, CAS: 123-91-1

Signal: 1

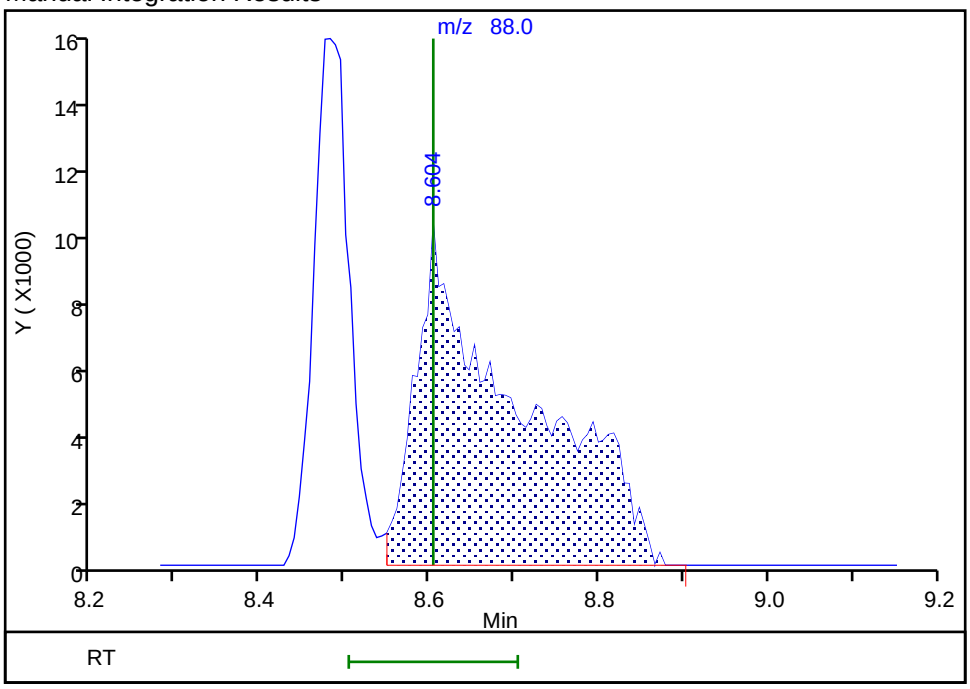
Processing Integration Results

RT: 8.60
Area: 42250
Amount: 363.2541
Amount Units: ug/l



Manual Integration Results

RT: 8.60
Area: 87769
Amount: 754.6142
Amount Units: ug/l



Reviewer: knouses, 05-Oct-2021 10:14:31
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27T02.D				
Lims ID:	bfb				
Client ID:					
Sample Type:	BFB				
Inject. Date:	27-Jul-2021 15:41:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	410-0035331-001				
Misc. Info.:	BFB				
Operator ID:	kas02648	Instrument ID:	16334		
Method:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\MSV_16334_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	05-Aug-2021 16:14:06	Calib Date:	27-Jul-2021 21:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1675				
First Level Reviewer: campbellme		Date:	28-Jul-2021 00:02:09		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 163 BFB	95	5.182	5.182	0.000	91	383102	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

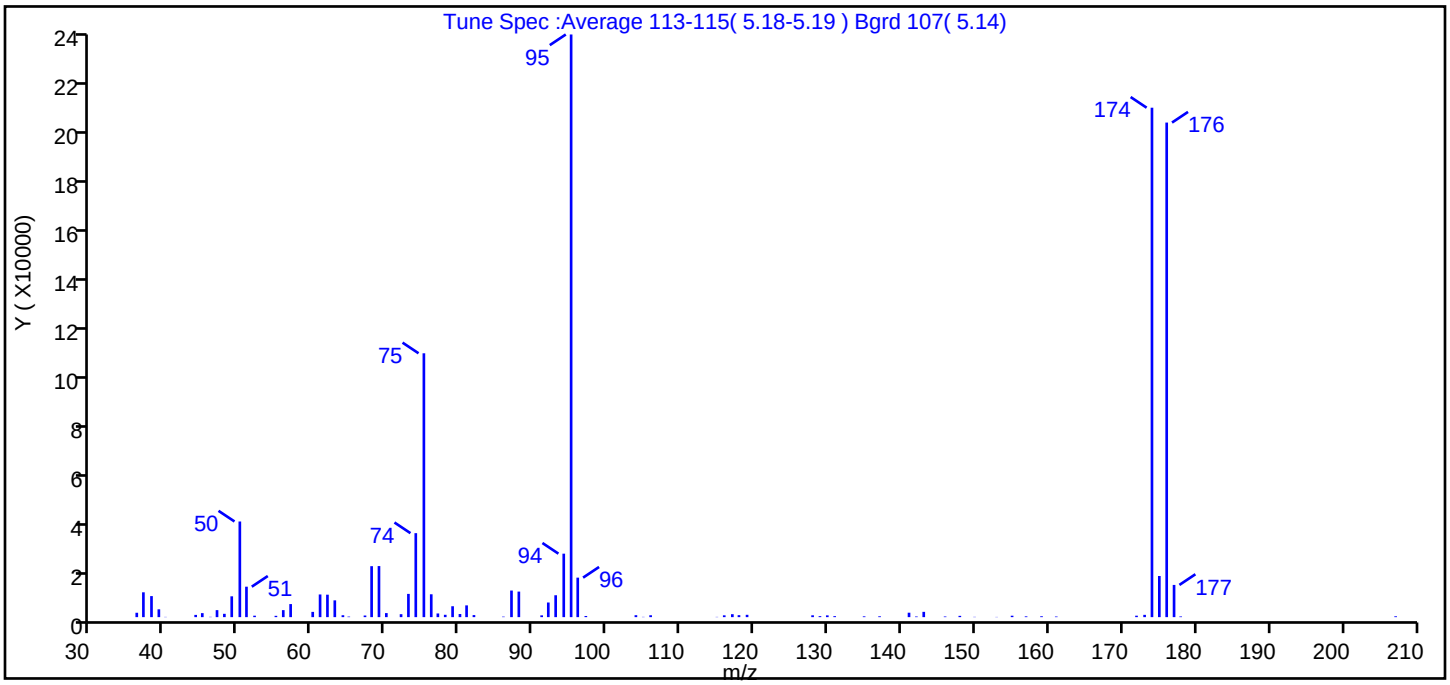
MSV_V_BFB_00006 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27T02.D
Injection Date: 27-Jul-2021 15:41:30 Instrument ID: 16334
Lims ID: bfb
Client ID:
Operator ID: kas02648 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Tune Method: BFB Method 1624

$ 163 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.4
75	30 to 60% of m/z 95	45.3
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	0.4 (0.4)
174	50 to 120% of m/z 95	87.4
175	5 to 9% of m/z 174	7.1 (8.1)
176	Greater than 95% but less than 101% of m/z 174	84.9 (97.1)
177	5 to 9% of m/z 176	5.5 (6.5)

Data File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27T02.D\MSV_16334_25mL.rslt\spectra.d
Injection Date: 27-Jul-2021 15:41:30
Spectrum: Tune Spec :Average 113-115(5.18-5.19) Bgrd 107(5.14)
Base Peak: 95.10
Minimum % Base Peak: 0
Number of Points: 81

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1773	64.00	774	92.00	5923	142.00	264
37.00	10051	65.00	219	93.00	8860	143.00	2143
38.00	8517	67.00	658	94.00	25688	146.00	263
39.00	3166	68.00	20624	95.00	235776	148.00	524
40.00	95	69.00	20664	96.00	15983	150.00	111
44.00	908	70.00	1640	97.00	467	153.00	87
45.00	1623	72.00	1197	104.00	787	155.00	579
46.00	120	73.00	9409	105.00	107	157.00	317
47.00	2835	74.00	33984	106.00	763	159.00	351
48.00	1349	75.00	106768	115.00	98	161.00	250
49.00	8427	76.00	9254	116.00	736	172.00	589
50.00	38704	77.00	1491	117.00	1193	173.00	927
51.00	12322	78.00	952	118.00	802	174.00	206144
52.00	588	79.00	4410	119.00	945	175.00	16648
55.00	536	80.00	1266	128.00	745	176.00	200128
56.00	2838	81.00	4761	129.00	400	177.00	13038
57.00	5287	82.00	833	130.00	714	178.00	276
60.00	2129	86.00	205	131.00	398	207.00	343
61.00	9179	87.00	10767	135.00	317		
62.00	9086	88.00	10338	137.00	339		
63.00	6793	91.00	722	141.00	1797		

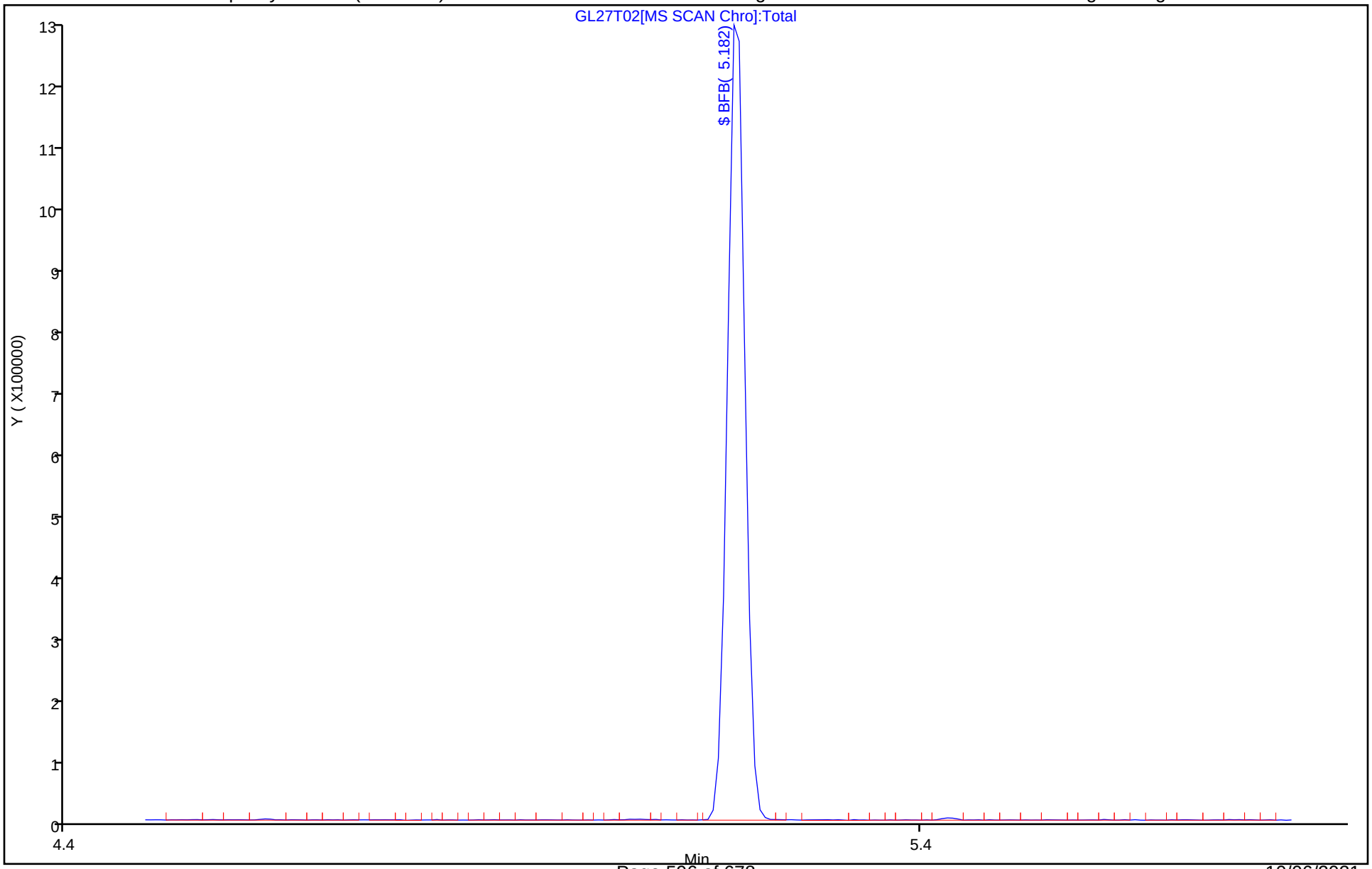
Report Date: 05-Aug-2021 16:14:06 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27T02.D

Injection Date:	27-Jul-2021 15:41:30	Instrument ID:	16334	Operator ID:	kas02648
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01T01.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	01-Oct-2021 07:49:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	410-0040424-001				
Misc. Info.:	BFB				
Operator ID:	SRK36897	Instrument ID:	16334		
Method:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	01-Oct-2021 10:55:40	Calib Date:	27-Jul-2021 21:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1607				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 163 BFB	95	5.164	5.164	0.000	88	559331	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

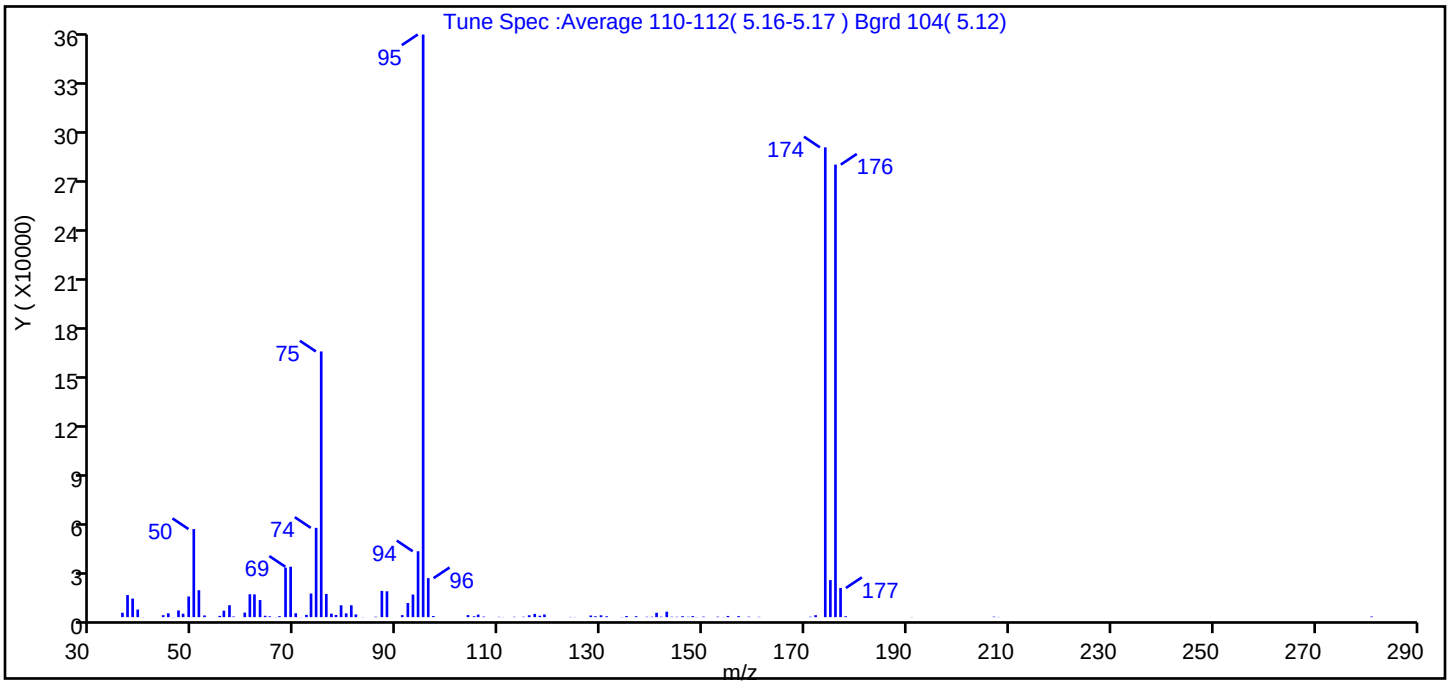
MSV_V_BFB_00006 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01T01.D
Injection Date: 01-Oct-2021 07:49:30 Instrument ID: 16334
Lims ID: BFB
Client ID:
Operator ID: SRK36897 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Tune Method: BFB Method 8260

$ 163 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.1
75	30 to 60% of m/z 95	45.6
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	80.6
175	5 to 9% of m/z 174	6.4 (7.9)
176	Greater than 95% but less than 101% of m/z 174	77.7 (96.3)
177	5 to 9% of m/z 176	5.0 (6.4)

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01T01.D\MSV_16334_25mL.rslt\spectra.d
Injection Date: 01-Oct-2021 07:49:30
Spectrum: Tune Spec :Average 110-112(5.16-5.17) Bgrd 104(5.12)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 103

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2650	68.00	29824	97.00	645	143.00	3266
37.00	13298	69.00	30320	104.00	1221	144.00	240
38.00	11182	70.00	2332	105.00	512	145.00	224
39.00	4562	71.00	83	106.00	1507	146.00	559
40.00	77	72.00	1354	107.00	325	147.00	225
44.00	1192	73.00	14206	110.00	185	148.00	624
45.00	2311	74.00	53712	111.00	90	149.00	85
46.00	84	75.00	159808	113.00	224	150.00	309
47.00	4047	76.00	13948	115.00	227	153.00	287
48.00	2075	77.00	2094	116.00	1129	154.00	84
49.00	12419	78.00	1313	117.00	1945	155.00	731
50.00	52984	79.00	7142	118.00	830	157.00	597
51.00	16191	80.00	2298	119.00	1567	159.00	285
52.00	1030	81.00	7136	124.00	134	161.00	194
55.00	775	82.00	1640	125.00	108	171.00	266
56.00	3882	83.00	90	128.00	980	172.00	1172
57.00	7174	86.00	149	129.00	537	174.00	282560
58.00	365	86.00	179	130.00	1123	175.00	22288
60.00	2724	87.00	15801	131.00	529	176.00	272192
61.00	13774	88.00	15556	134.00	95	177.00	17536
62.00	13672	91.00	1203	135.00	677	178.00	527
63.00	10283	92.00	8487	137.00	564	191.00	105
64.00	839	93.00	13594	139.00	233	207.00	285
65.00	480	94.00	39632	140.00	260	208.00	113
66.00	91	95.00	350464	141.00	2628	281.00	387
67.00	562	96.00	23456	142.00	283		

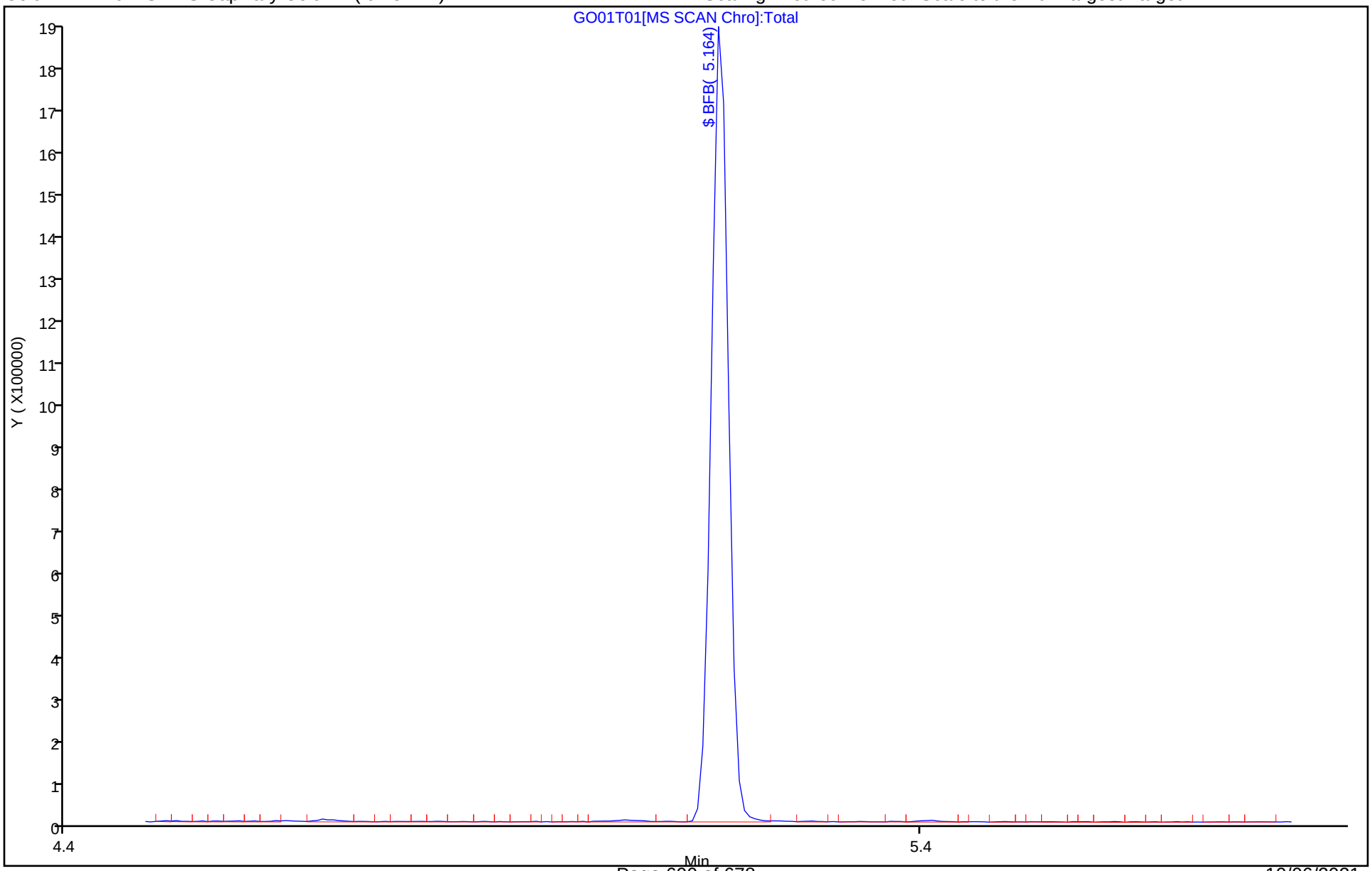
Report Date: 01-Oct-2021 10:55:40 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01T01.D

Injection Date:	01-Oct-2021 07:49:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05T01.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 05-Oct-2021 08:38:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: 410-0040685-001
Misc. Info.: BFB
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Oct-2021 11:47:55 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1643

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 163 BFB	95	5.163	5.163	0.000	88	284607	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

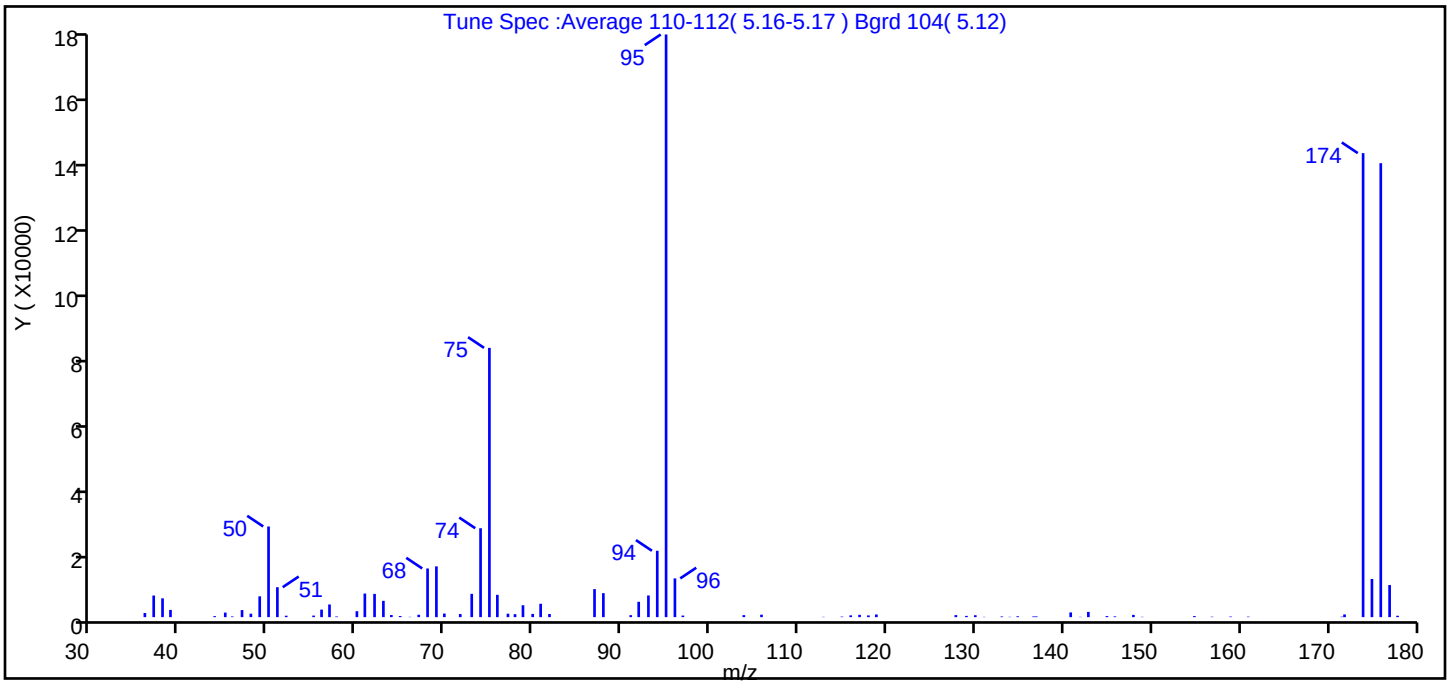
MSV_V_BFB_00006 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05T01.D
Injection Date: 05-Oct-2021 08:38:30 Instrument ID: 16334
Lims ID: BFB
Client ID:
Operator ID: SRK36897 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Tune Method: BFB Method 8260

$ 163 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.6
75	30 to 60% of m/z 95	46.2
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	79.6
175	5 to 9% of m/z 174	6.5 (8.2)
176	Greater than 95% but less than 101% of m/z 174	77.9 (97.8)
177	5 to 9% of m/z 176	5.5 (7.1)

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05T01.D\MSV_16334_25mL.rslt\spectra.d
Injection Date: 05-Oct-2021 08:38:30
Spectrum: Tune Spec :Average 110-112(5.16-5.17) Bgrd 104(5.12)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 83

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1241	64.00	630	92.00	4588	137.00	207
37.00	6457	65.00	329	93.00	6480	137.00	213
38.00	5625	66.00	87	94.00	19840	141.00	1409
39.00	2159	67.00	712	95.00	174144	142.00	86
44.00	301	68.00	14546	96.00	11582	143.00	1571
45.00	1360	69.00	15174	97.00	474	145.00	321
46.00	199	70.00	1074	104.00	600	146.00	224
47.00	2118	72.00	932	106.00	736	148.00	680
48.00	1039	73.00	6962	113.00	86	149.00	94
49.00	6217	74.00	26576	115.00	161	155.00	310
50.00	27096	75.00	80480	116.00	533	157.00	130
51.00	8949	76.00	6663	117.00	693	159.00	172
52.00	432	77.00	1029	118.00	518	161.00	148
55.00	470	78.00	892	119.00	796	172.00	140
56.00	2253	79.00	3562	128.00	604	172.00	811
57.00	3787	80.00	966	129.00	377	174.00	138688
58.00	198	81.00	3998	130.00	568	175.00	11401
60.00	1783	82.00	932	131.00	83	176.00	135680
61.00	7054	87.00	8373	133.00	201	177.00	9602
62.00	6940	88.00	7171	134.00	91	178.00	415
63.00	4875	91.00	587	135.00	251		

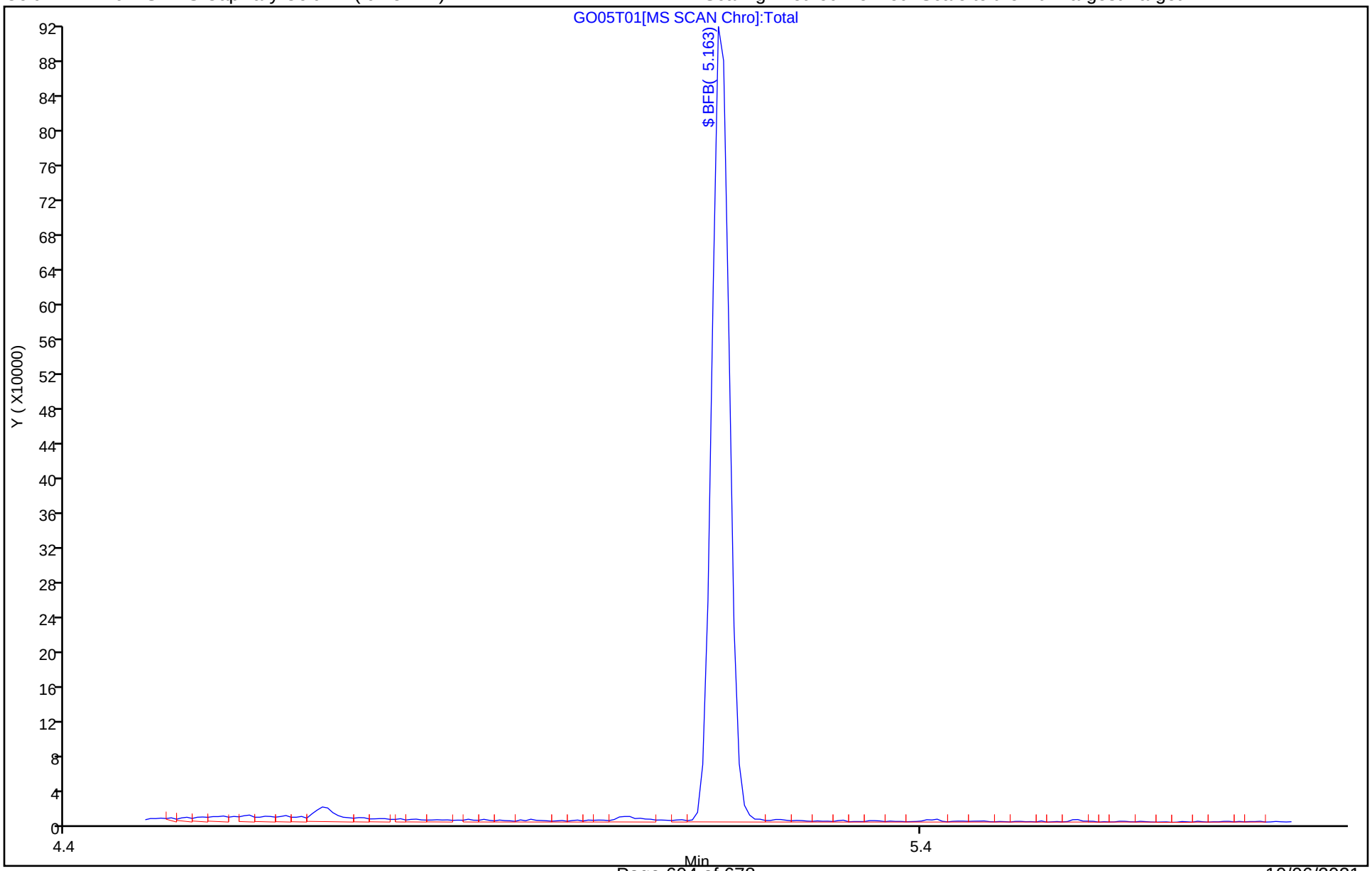
Report Date: 05-Oct-2021 11:47:56 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05T01.D

Injection Date:	05-Oct-2021 08:38:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-177560/7

Matrix: Water Lab File ID: GO01X06.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 10:01

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.: 177560 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.: 410-56784-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-177560/7

Matrix: Water Lab File ID: GO01X06.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 10:01

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.: 177560 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)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	96		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X06.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 01-Oct-2021 10:01:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040424-007
Misc. Info.: MB
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Oct-2021 10:55:11 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1607

First Level Reviewer: knouses Date: 01-Oct-2021 10:50:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.910					ND	
2 Dichlorodifluoromethane	85		1.940					ND	
3 Chlorodifluoromethane	51		1.959					ND	
4 Dimethyl ether	45		2.020					ND	
5 Chloromethane	50		2.135					ND	
8 Vinyl chloride	62		2.257					ND	
7 Butadiene	39		2.257					ND	7
6 2-Chloro-1,1,1-Trifluoroethane	118		2.330					ND	
9 Bromomethane	94		2.587					ND	
10 Chloroethane	64		2.666					ND	
12 Dichlorofluoromethane	67		2.904					ND	
13 Trichlorofluoromethane	101		2.965					ND	
14 Ethanol	45		3.190					ND	
15 Ethyl ether	59		3.208					ND	
17 1,2-Dichloro-1,1,2-trifluoroetha	67		3.300					ND	
18 Acrolein	56		3.385					ND	7
19 1,1-Dichloroethene	96		3.507					ND	
20 112TCTFE	101		3.556					ND	
21 Acetone	43		3.568					ND	7
23 Iodomethane	142		3.702					ND	
24 Ethyl bromide	108		3.733					ND	
22 Isopropyl alcohol	45		3.800					ND	
25 Carbon disulfide	76		3.800					ND	7
26 Acetonitrile	41		3.964					ND	
27 Methyl acetate	43		3.964					ND	
28 3-Chloro-1-propene	41		3.983					ND	
29 Methylene Chloride	84		4.172					ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.257	4.257	0.000	80	216430	50.0	50.0	
31 2-Methyl-2-propanol	59		4.379					ND	
32 Acrylonitrile	53		4.531					ND	
33 Methyl tert-butyl ether	73		4.574					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 trans-1,2-Dichloroethene	96		4.580					ND	
35 Hexane	57		5.007					ND	
36 Vinyl acetate	43		5.214					ND	
37 1,1-Dichloroethane	63		5.245					ND	
38 Isopropyl ether	45		5.312					ND	
39 2-Chloro-1,3-butadiene	53		5.360					ND	
40 Tert-butyl ethyl ether	59		5.842					ND	7
41 2-Butanone (MEK)	43		6.055					ND	
42 cis-1,2-Dichloroethene	96		6.086					ND	
43 2,2-Dichloropropane	77		6.098					ND	7
44 Ethyl acetate	43	6.104	6.104	0.000	1	1063		0.0264	
47 Methyl acrylate	55		6.141					ND	
S 46 1,2-Dichloroethene, Total	100		6.155					ND	7
45 Propionitrile	54		6.165					ND	
48 Methacrylonitrile	67		6.354					ND	
49 Chlorobromomethane	128		6.409					ND	
50 Tetrahydrofuran	71		6.421					ND	
51 Chloroform	83		6.561					ND	
$ 52 Dibromofluoromethane (Surr)	113	6.781	6.775	0.006	93	588883	10.0	9.61	
53 1,1,1-Trichloroethane	97		6.787					ND	
54 Cyclohexane	56		6.878					ND	
55 1-Chlorobutane	56		6.940					ND	
56 Carbon tetrachloride	117		6.994					ND	
57 1,1-Dichloropropene	75		6.994					ND	
58 Isobutyl alcohol	41		7.195					ND	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	38	135488	10.0	9.94	
60 Benzene	78		7.256					ND	
61 1,2-Dichloroethane	62		7.323					ND	
62 Isopropyl acetate	43		7.342					ND	
63 Tert-amyl methyl ether	73		7.451					ND	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2458929	10.0	10.0	
65 n-Heptane	43		7.671					ND	
66 t-Amyl alcohol	73		7.842					ND	
67 n-Butanol	56		8.079					ND	
68 Trichloroethene	95		8.134					ND	
69 Methylcyclohexane	83		8.445					ND	
70 1,2-Dichloropropane	63		8.470					ND	
71 2-ethoxy-2-methyl butane	87		8.488					ND	
72 Methyl methacrylate	69		8.561					ND	
74 Dibromomethane	93		8.579					ND	
73 1,4-Dioxane	88		8.622					ND	
75 n-Propyl acetate	61		8.640					ND	
76 Dichlorobromomethane	83		8.817					ND	
77 2-Nitropropane	41		9.104					ND	
79 2-Chloroethyl vinyl ether	63		9.183					ND	
78 Chloroacetonitrile	75		9.189					ND	
80 1-Bromo-2-chloroethane	63		9.207					ND	
81 cis-1,3-Dichloropropene	75		9.366					ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.549					ND	7
$ 83 Toluene-d8 (Surr)	98	9.677	9.671	0.006	93	2381093	10.0	9.70	
84 Toluene	92		9.750					ND	7
96 trans-1,3-Dichloropropene	75		10.012					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 97 1,3-Dichloropropene, Total	100		10.060					ND	7
98 Ethyl methacrylate	69		10.073					ND	
99 1,1,2-Trichloroethane	97		10.213					ND	
100 Tetrachloroethene	166		10.298					ND	
101 1,3-Dichloropropane	76		10.378					ND	
102 2-Hexanone	43		10.433					ND	
103 n-Butyl acetate	43	10.542	10.561	-0.019	19	486		0.006612	
104 Chlorodibromomethane	129		10.591					ND	
105 Ethylene Dibromide	107		10.695					ND	
* 106 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	85	1884752	10.0	10.0	
107 1-Chlorohexane	91		11.140					ND	7
108 Chlorobenzene	112		11.158					ND	
110 1,1,1,2-Tetrachloroethane	131		11.237					ND	
111 Ethylbenzene	91		11.243					ND	
S 109 Xylenes, Total	106		11.245					ND	7
112 m-Xylene & p-Xylene	106		11.353					ND	
113 o-Xylene	106		11.682					ND	
114 Styrene	104		11.701					ND	
115 Bromoform	173		11.853					ND	
116 Isopropylbenzene	105		11.981					ND	
117 cis-1,4-Dichloro-2-butene	88		12.054					ND	U
118 Cyclohexanone	55		12.091					ND	U
$ 119 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	92	887213	10.0	9.89	
120 1,1,2,2-Tetrachloroethane	83		12.231					ND	
121 Bromobenzene	156		12.243					ND	
122 trans-1,4-Dichloro-2-butene	53		12.255					ND	
123 1,2,3-Trichloropropane	110		12.274					ND	
124 N-Propylbenzene	91		12.310					ND	
125 2-Chlorotoluene	126		12.383					ND	
126 1,3,5-Trimethylbenzene	105		12.444					ND	
127 4-Chlorotoluene	126		12.475					ND	
128 tert-Butylbenzene	134		12.682					ND	
129 Pentachloroethane	167		12.719					ND	
130 1,2,4-Trimethylbenzene	105		12.725					ND	7
131 sec-Butylbenzene	105		12.847					ND	
132 1,3-Dichlorobenzene	146		12.944					ND	7
133 4-Isopropyltoluene	119		12.950					ND	7
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	1034406	10.0	10.0	
135 1,4-Dichlorobenzene	146		13.017					ND	7
136 1,2,3-Trimethylbenzene	120		13.030					ND	7
137 Benzyl chloride	126		13.097					ND	7
138 p-Diethylbenzene	119	13.152	13.152	0.000	1	1043		0.006482	
139 n-Butylbenzene	92		13.243					ND	7
140 1,2-Dichlorobenzene	146		13.273					ND	
141 Hexachloroethane	201		13.499					ND	
142 1,2-Dibromo-3-Chloropropane	155		13.816					ND	
143 1,3,5-Trichlorobenzene	180		13.938					ND	7
144 1,2,4-Trichlorobenzene	180		14.359					ND	7
145 Hexachlorobutadiene	225		14.438					ND	7
146 Naphthalene	128	14.542	14.535	0.007	94	5599		0.0288	
147 1,2,3-Trichlorobenzene	180		14.676					ND	7
148 2-Methylnaphthalene	142	15.291	15.285	0.006	86	6595		0.0544	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
149 1,1-Dichloro-1-fluoroethane	1		0.000					ND	
192 Vinyl acetate (TIC)	1		0.000					ND	
190 Acetonitrile TIC	1		0.000					ND	
162 Pentachloroethane TIC	1		0.000					ND	
161 1,1-Dichloroacetone	1		0.000					ND	
159 Propargyl alcohol TIC	1		0.000					ND	
158 1,3-Dichloro-2-propanol TIC	1		0.000					ND	
191 Isopropyl alcohol TIC	1		0.000					ND	
157 tert-Butyl Formate	1		0.000					ND	
155 Methylal	1		0.000					ND	
154 n-Decane	57		0.000					ND	
153 Propene oxide	1		0.000					ND	
152 1-Bromo-3-Chloropropane	1		0.000					ND	
151 1-Chloropropane	1		0.000					ND	
150 2-Bromo-1-chloropropane	1		0.000					ND	
156 Dodecane	57		0.000					ND	
160 Pentane	43		2.995					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_29_826ISS_00023 Amount Added: 1.00 Units: uL Run Reagent

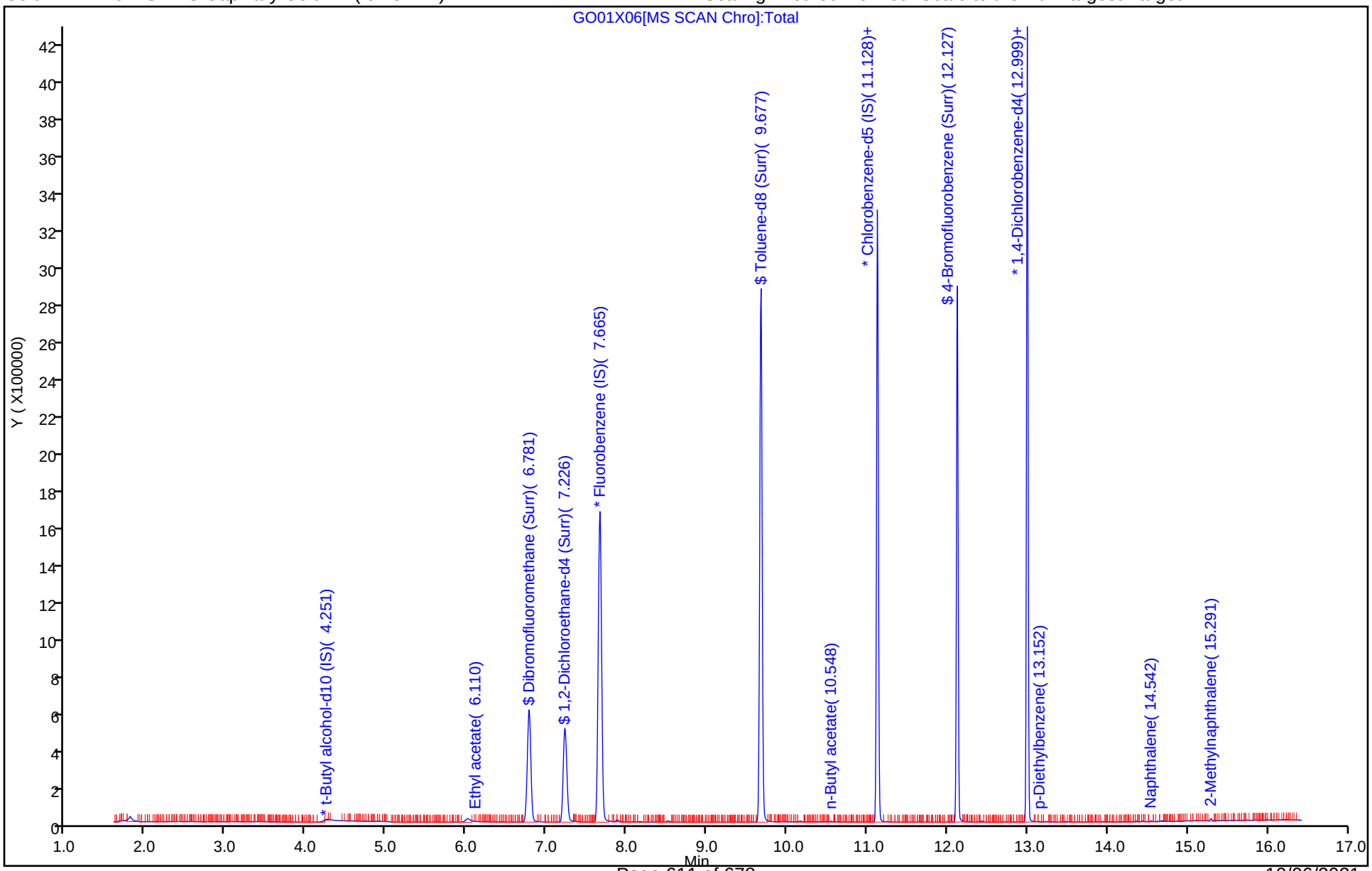
Report Date: 01-Oct-2021 10:55:33 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X06.D

Injection Date:	01-Oct-2021 10:01:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X06.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 01-Oct-2021 10:01:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040424-007
Misc. Info.: MB
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Oct-2021 10:55:11 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1607

First Level Reviewer: knouses Date: 01-Oct-2021 10:50:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	10.0	9.61	96.11
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.94	99.43
$ 83 Toluene-d8 (Surr)	10.0	9.70	97.02
$ 119 4-Bromofluorobenzene (Surr)	10.0	9.89	98.88

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-178764/7

Matrix: Water Lab File ID: GO05X06.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 10/05/2021 10:50

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.: 178764 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.: 410-56784-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-178764/7

Matrix: Water Lab File ID: GO05X06.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 10/05/2021 10:50

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.: 178764 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)	96		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-120
2037-26-5	Toluene-d8 (Surr)	96		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X06.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 05-Oct-2021 10:50:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040685-007
Misc. Info.: MB
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Oct-2021 11:47:33 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1643

First Level Reviewer: knouses Date: 05-Oct-2021 11:45:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.910					ND	
2 Dichlorodifluoromethane	85		1.940					ND	
3 Chlorodifluoromethane	51		1.959					ND	
4 Dimethyl ether	45		2.020					ND	
5 Chloromethane	50		2.142					ND	
8 Vinyl chloride	62		2.257					ND	
7 Butadiene	39		2.264					ND	7
6 2-Chloro-1,1,1-Trifluoroethane	118		2.330					ND	
9 Bromomethane	94		2.593					ND	
10 Chloroethane	64		2.666					ND	
12 Dichlorofluoromethane	67		2.916					ND	
13 Trichlorofluoromethane	101		2.977					ND	
14 Ethanol	45		3.190					ND	
15 Ethyl ether	59		3.208					ND	
17 1,2-Dichloro-1,1,2-trifluoroetha	67		3.312					ND	
18 Acrolein	56	3.361	3.391	-0.030	4	3271		0.4362	7M
19 1,1-Dichloroethene	96		3.513					ND	
20 112TCTFE	101		3.556					ND	
21 Acetone	43		3.568					ND	7
23 Iodomethane	142		3.702					ND	
24 Ethyl bromide	108		3.733					ND	
22 Isopropyl alcohol	45		3.794					ND	
25 Carbon disulfide	76		3.812					ND	7
26 Acetonitrile	41		3.964					ND	
27 Methyl acetate	43		3.964					ND	
28 3-Chloro-1-propene	41		3.989					ND	
29 Methylene Chloride	84		4.172					ND	
* 30 t-Butyl alcohol-d10 (IS)	65	4.251	4.251	0.000	96	176826	50.0	50.0	
31 2-Methyl-2-propanol	59		4.367					ND	
32 Acrylonitrile	53		4.531					ND	
33 Methyl tert-butyl ether	73		4.574					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
34 trans-1,2-Dichloroethene	96		4.580					ND	
35 Hexane	57		5.007					ND	
36 Vinyl acetate	43		5.214					ND	
37 1,1-Dichloroethane	63		5.251					ND	
38 Isopropyl ether	45		5.318					ND	
39 2-Chloro-1,3-butadiene	53		5.354					ND	
40 Tert-butyl ethyl ether	59		5.848					ND	7
41 2-Butanone (MEK)	43		6.062					ND	
42 cis-1,2-Dichloroethene	96		6.086					ND	
43 2,2-Dichloropropane	77		6.092					ND	7
44 Ethyl acetate	43		6.104					ND	7
47 Methyl acrylate	55		6.141					ND	
S 46 1,2-Dichloroethene, Total	100		6.155					ND	7
45 Propionitrile	54		6.159					ND	
48 Methacrylonitrile	67		6.354					ND	
49 Chlorobromomethane	128		6.409					ND	
50 Tetrahydrofuran	71		6.421					ND	
51 Chloroform	83		6.568					ND	
$ 52 Dibromofluoromethane (Surr)	113	6.787	6.781	0.006	94	571323	10.0	9.77	
53 1,1,1-Trichloroethane	97		6.787					ND	
54 Cyclohexane	56		6.885					ND	
55 1-Chlorobutane	56		6.940					ND	
56 Carbon tetrachloride	117		6.994					ND	
57 1,1-Dichloropropene	75		7.000					ND	
58 Isobutyl alcohol	41		7.196					ND	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.238	7.226	0.012	38	124451	10.0	9.57	M
60 Benzene	78		7.263					ND	
61 1,2-Dichloroethane	62		7.330					ND	
62 Isopropyl acetate	43		7.342					ND	
63 Tert-amyl methyl ether	73		7.452					ND	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2347303	10.0	10.0	
65 n-Heptane	43		7.671					ND	7
66 t-Amyl alcohol	73		7.842					ND	
67 n-Butanol	56		8.073					ND	
68 Trichloroethene	95		8.134					ND	
69 Methylcyclohexane	83		8.445					ND	
70 1,2-Dichloropropane	63		8.470					ND	
71 2-ethoxy-2-methyl butane	87		8.482					ND	
72 Methyl methacrylate	69		8.561					ND	
74 Dibromomethane	93		8.579					ND	
73 1,4-Dioxane	88		8.604					ND	
75 n-Propyl acetate	61		8.640					ND	
76 Dichlorobromomethane	83		8.817					ND	
77 2-Nitropropane	41		9.104					ND	
79 2-Chloroethyl vinyl ether	63		9.183					ND	
78 Chloroacetonitrile	75		9.189					ND	
80 1-Bromo-2-chloroethane	63		9.207					ND	
81 cis-1,3-Dichloropropene	75		9.366					ND	
82 4-Methyl-2-pentanone (MIBK)	43		9.549					ND	7
$ 83 Toluene-d8 (Surr)	98	9.677	9.677	0.000	93	2272916	10.0	9.62	
84 Toluene	92		9.750					ND	
96 trans-1,3-Dichloropropene	75		10.012					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 97 1,3-Dichloropropene, Total	100		10.060					ND	7
98 Ethyl methacrylate	69		10.073					ND	
99 1,1,2-Trichloroethane	97		10.213					ND	
100 Tetrachloroethene	166		10.299					ND	
101 1,3-Dichloropropane	76		10.378					ND	
102 2-Hexanone	43		10.433					ND	
103 n-Butyl acetate	43	10.561	10.561	0.000	1	317		0.004480	
104 Chlorodibromomethane	129		10.591					ND	
105 Ethylene Dibromide	107		10.695					ND	
* 106 Chlorobenzene-d5 (IS)	117	11.134	11.128	0.006	84	1814473	10.0	10.0	
107 1-Chlorohexane	91		11.140					ND	7
108 Chlorobenzene	112		11.152					ND	
110 1,1,1,2-Tetrachloroethane	131		11.237					ND	
111 Ethylbenzene	91		11.243					ND	
S 109 Xylenes, Total	106		11.245					ND	7
112 m-Xylene & p-Xylene	106		11.353					ND	
113 o-Xylene	106		11.682					ND	
114 Styrene	104		11.701					ND	
115 Bromoform	173		11.853					ND	
116 Isopropylbenzene	105		11.981					ND	
117 cis-1,4-Dichloro-2-butene	88		12.054					ND	U
118 Cyclohexanone	55		12.091					ND	U
$ 119 4-Bromofluorobenzene (Surr)	95	12.128	12.121	0.007	91	851335	10.0	9.86	
120 1,1,2,2-Tetrachloroethane	83		12.231					ND	
121 Bromobenzene	156		12.243					ND	
122 trans-1,4-Dichloro-2-butene	53		12.255					ND	
123 1,2,3-Trichloropropane	110		12.274					ND	
124 N-Propylbenzene	91		12.310					ND	
125 2-Chlorotoluene	126		12.384					ND	
126 1,3,5-Trimethylbenzene	105		12.444					ND	
127 4-Chlorotoluene	126		12.475					ND	
128 tert-Butylbenzene	134		12.682					ND	
129 Pentachloroethane	167		12.719					ND	
130 1,2,4-Trimethylbenzene	105		12.725					ND	
131 sec-Butylbenzene	105		12.847					ND	
132 1,3-Dichlorobenzene	146		12.944					ND	7
133 4-Isopropyltoluene	119		12.950					ND	7
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	95	986570	10.0	10.0	
135 1,4-Dichlorobenzene	146		13.018					ND	7
136 1,2,3-Trimethylbenzene	120		13.030					ND	7
137 Benzyl chloride	126		13.097					ND	7
138 p-Diethylbenzene	119	13.152	13.152	0.000	1	1006		0.006555	
139 n-Butylbenzene	92		13.243					ND	7
140 1,2-Dichlorobenzene	146		13.280					ND	
141 Hexachloroethane	201		13.499					ND	
142 1,2-Dibromo-3-Chloropropane	155		13.816					ND	
143 1,3,5-Trichlorobenzene	180		13.938					ND	7
144 1,2,4-Trichlorobenzene	180		14.353					ND	
145 Hexachlorobutadiene	225		14.438					ND	7
146 Naphthalene	128		14.536					ND	7
147 1,2,3-Trichlorobenzene	180		14.676					ND	7
148 2-Methylnaphthalene	142	15.292	15.285	0.007	93	4702		0.0407	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
149 1,1-Dichloro-1-fluoroethane	1		0.000					ND	
192 Vinyl acetate (TIC)	1		0.000					ND	
190 Acetonitrile TIC	1		0.000					ND	
162 Pentachloroethane TIC	1		0.000					ND	
161 1,1-Dichloroacetone	1		0.000					ND	
159 Propargyl alcohol TIC	1		0.000					ND	
158 1,3-Dichloro-2-propanol TIC	1		0.000					ND	
191 Isopropyl alcohol TIC	1		0.000					ND	
157 tert-Butyl Formate	1		0.000					ND	
155 Methylal	1		0.000					ND	
154 n-Decane	57		0.000					ND	
153 Propene oxide	1		0.000					ND	
152 1-Bromo-3-Chloropropane	1		0.000					ND	
151 1-Chloropropane	1		0.000					ND	
150 2-Bromo-1-chloropropane	1		0.000					ND	
156 Dodecane	57		0.000					ND	
160 Pentane	43		3.001					ND	

QC Flag Legend

Processing Flags
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated
- U - Marked Undetected

Reagents:

MSV_29_826ISS_00023 Amount Added: 1.00 Units: uL Run Reagent

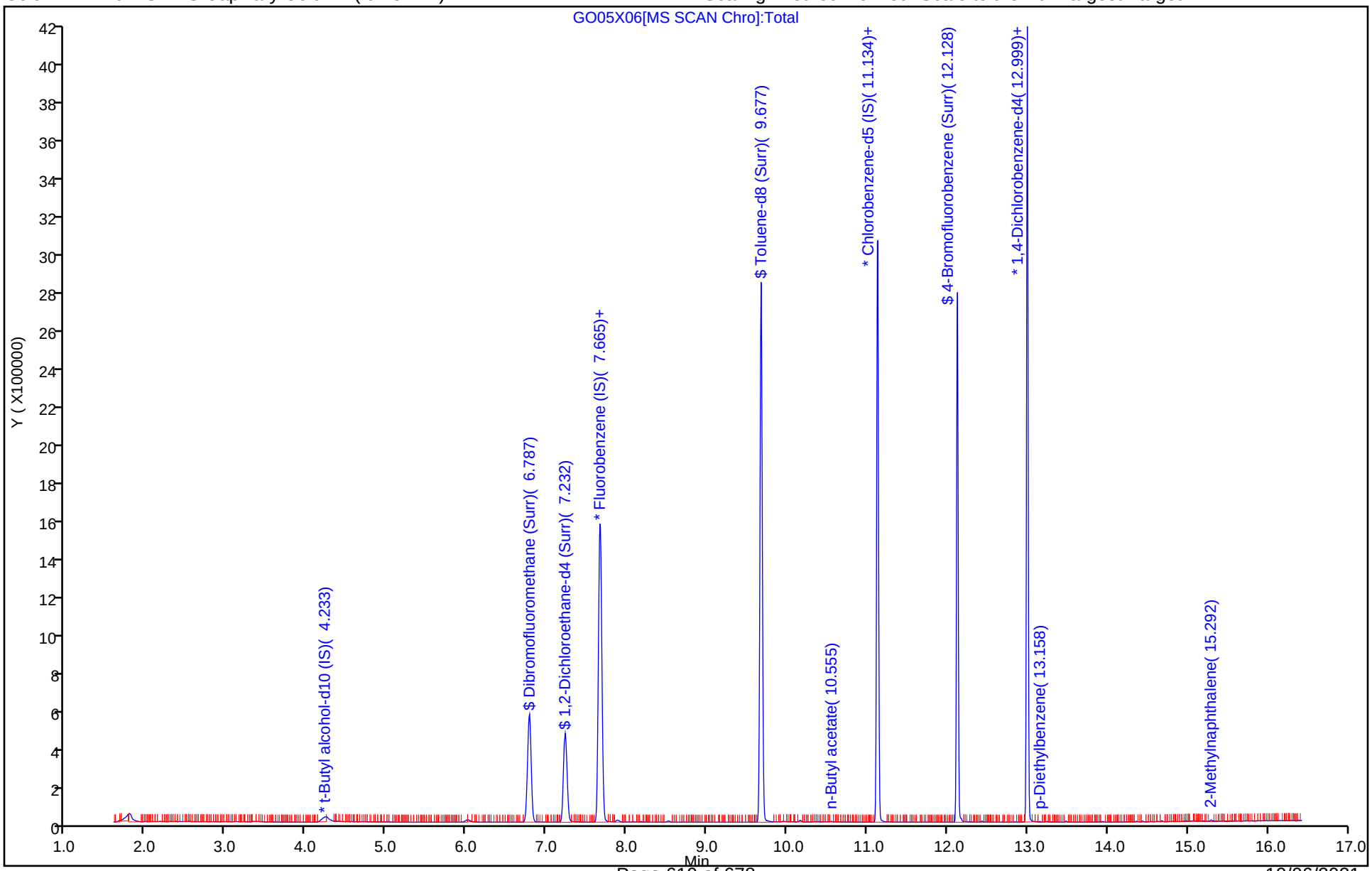
Report Date: 05-Oct-2021 11:47:53 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X06.D

Injection Date:	05-Oct-2021 10:50:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X06.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 05-Oct-2021 10:50:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040685-007
Misc. Info.: MB
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Oct-2021 11:47:33 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1643

First Level Reviewer: knouses Date: 05-Oct-2021 11:45:54

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	10.0	9.77	97.68
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.57	95.68
$ 83 Toluene-d8 (Surr)	10.0	9.62	96.19
$ 119 4-Bromofluorobenzene (Surr)	10.0	9.86	98.56

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

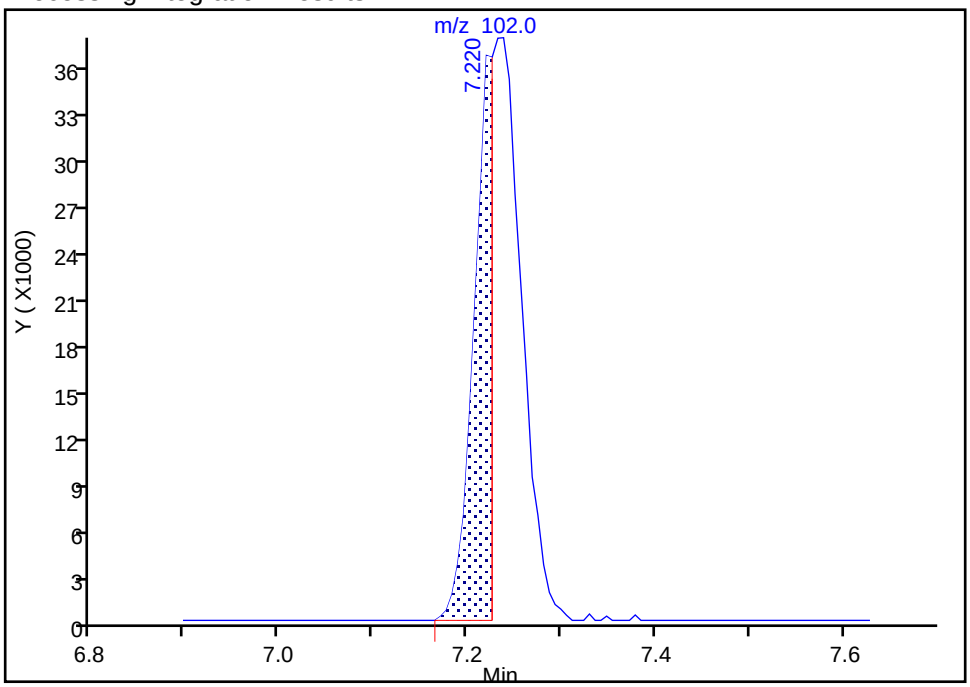
Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X06.D
Injection Date: 05-Oct-2021 10:50:30 Instrument ID: 16334
Lims ID: MB
Client ID:
Operator ID: SRK36897 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

$ 59 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

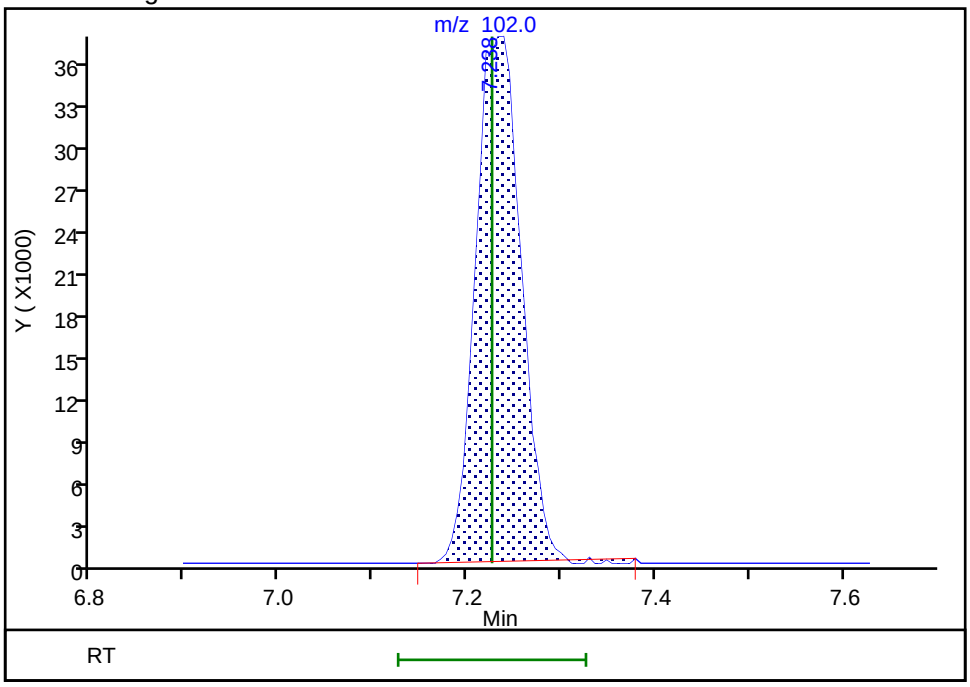
Processing Integration Results

RT: 7.22
Area: 53841
Amount: 4.139280
Amount Units: ug/l



Manual Integration Results

RT: 7.24
Area: 124451
Amount: 9.567756
Amount Units: ug/l



Reviewer: knouses, 05-Oct-2021 11:45:19
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.: 410-56784-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-177560/4

Matrix: Water Lab File ID: GO01X03.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 08:53

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.: 177560 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.77		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.73		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	5.27		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.05		0.50	0.060
75-34-3	1,1-Dichloroethane	4.46		0.50	0.070
75-35-4	1,1-Dichloroethene	4.98		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.96		0.50	0.060
107-06-2	1,2-Dichloroethane	4.44		0.50	0.050
78-87-5	1,2-Dichloropropane	4.50		0.50	0.060
78-93-3	2-Butanone (MEK)	64.1		5.0	0.60
591-78-6	2-Hexanone	68.7		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	64.9		5.0	0.70
67-64-1	Acetone	54.4		5.0	0.90
71-43-2	Benzene	4.69		0.50	0.050
74-97-5	Bromochloromethane	4.77		0.50	0.050
75-27-4	Bromodichloromethane	4.83		0.50	0.050
75-25-2	Bromoform	4.42		1.0	0.30
74-83-9	Bromomethane	4.82		0.50	0.070
75-15-0	Carbon disulfide	4.76		1.0	0.060
56-23-5	Carbon tetrachloride	4.60		0.50	0.070
108-90-7	Chlorobenzene	4.73		0.50	0.060
75-00-3	Chloroethane	4.53		0.50	0.070
67-66-3	Chloroform	4.79		0.50	0.090
74-87-3	Chloromethane	4.40		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	4.95		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.59		0.50	0.050
124-48-1	Dibromochloromethane	4.72		0.50	0.070
100-41-4	Ethylbenzene	4.88		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.86		0.50	0.050
75-09-2	Methylene Chloride	4.78		0.50	0.070
100-42-5	Styrene	5.06		0.50	0.050
127-18-4	Tetrachloroethene	4.29		0.50	0.060
108-88-3	Toluene	4.88		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.75		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.99		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.: 410-56784-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-177560/4

Matrix: Water Lab File ID: GO01X03.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 08:53

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.: 177560 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.40		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)	95		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		80-120
1868-53-7	Dibromofluoromethane (Surr)	95		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 01-Oct-2021 08:53:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040424-004
Misc. Info.: LCS
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Oct-2021 10:55:11 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1607

First Level Reviewer: knouses Date: 01-Oct-2021 09:45:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.934	1.940	-0.006	99	316648	5.00	5.02	
5 Chloromethane	50	2.142	2.135	0.007	98	346986	5.00	4.40	
8 Vinyl chloride	62	2.257	2.257	0.000	98	337041	5.00	4.40	
7 Butadiene	39	2.264	2.257	0.007	91	410248	5.00	4.89	
9 Bromomethane	94	2.587	2.587	0.000	91	263320	5.00	4.82	
10 Chloroethane	64	2.666	2.666	0.000	100	206821	5.00	4.53	
12 Dichlorofluoromethane	67	2.910	2.904	0.006	97	507963	5.00	4.79	
13 Trichlorofluoromethane	101	2.971	2.965	0.006	96	487105	5.00	4.96	M
15 Ethyl ether	59	3.215	3.208	0.007	90	149899	5.02	3.01	
17 1,2-Dichloro-1,1,2-trifluoroetha	67	3.300	3.300	0.000	90	322944	5.00	4.43	
19 1,1-Dichloroethene	96	3.513	3.507	0.006	96	262394	5.00	4.98	
20 112TCTFE	101	3.550	3.556	-0.006	92	280767	5.00	4.91	
21 Acetone	43	3.574	3.568	0.006	99	458034	62.5	54.4	
23 Iodomethane	142	3.702	3.702	0.000	98	459887	5.00	4.61	
24 Ethyl bromide	108	3.739	3.733	0.006	98	182031	5.07	3.88	
22 Isopropyl alcohol	45	3.806	3.800	0.006	28	27579	37.5	18.5	
25 Carbon disulfide	76	3.806	3.800	0.006	98	868533	5.00	4.76	
27 Methyl acetate	43	3.971	3.964	0.007	97	136042	5.00	5.29	
28 3-Chloro-1-propene	41	3.989	3.983	0.006	92	376237	5.00	4.18	
29 Methylene Chloride	84	4.178	4.172	0.006	87	289005	5.00	4.78	
* 30 t-Butyl alcohol-d10 (IS)	65	4.257	4.257	0.000	94	162450	50.0	50.0	
31 2-Methyl-2-propanol	59	4.385	4.379	0.006	99	118238	50.0	42.4	
32 Acrylonitrile	53	4.531	4.531	0.000	99	304721	25.0	26.0	
33 Methyl tert-butyl ether	73	4.580	4.574	0.006	91	741865	5.00	4.86	
34 trans-1,2-Dichloroethene	96	4.580	4.580	0.000	98	280251	5.00	4.75	
35 Hexane	57	5.007	5.007	0.000	90	374900	5.00	4.40	
37 1,1-Dichloroethane	63	5.251	5.245	0.006	96	462072	5.00	4.46	
38 Isopropyl ether	45	5.312	5.312	0.000	94	818401	5.00	4.28	
39 2-Chloro-1,3-butadiene	53	5.360	5.360	0.000	90	397289	5.00	4.67	
40 Tert-butyl ethyl ether	59	5.848	5.842	0.006	97	833111	5.00	4.77	
41 2-Butanone (MEK)	43	6.062	6.055	0.007	99	1034309	62.5	64.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 cis-1,2-Dichloroethene	96	6.086	6.086	0.000	80	325396	5.00	4.95	
43 2,2-Dichloropropane	77	6.098	6.098	0.000	87	400577	5.00	5.21	
45 Propionitrile	54	6.165	6.165	0.000	98	159844	37.5	38.5	
48 Methacrylonitrile	67	6.360	6.354	0.006	90	638833	37.5	41.1	
49 Chlorobromomethane	128	6.415	6.409	0.006	91	145217	5.00	4.77	
50 Tetrahydrofuran	71	6.421	6.421	0.000	76	131455	25.0	28.6	
51 Chloroform	83	6.574	6.561	0.013	92	494587	5.00	4.79	
$ 52 Dibromofluoromethane (Surr)	113	6.781	6.775	0.006	94	600107	10.0	9.53	
53 1,1,1-Trichloroethane	97	6.793	6.787	0.006	97	421174	5.00	4.73	
54 Cyclohexane	56	6.885	6.878	0.007	88	445864	5.00	4.30	
56 Carbon tetrachloride	117	6.994	6.994	0.000	86	360270	5.00	4.60	
57 1,1-Dichloropropene	75	7.000	6.994	0.006	96	378585	5.00	4.69	
58 Isobutyl alcohol	41	7.202	7.195	0.007	91	104112	125.0	89.0	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.226	7.232	-0.006	88	132385	10.0	9.45	
60 Benzene	78	7.263	7.256	0.007	97	1155824	5.00	4.69	
61 1,2-Dichloroethane	62	7.330	7.323	0.007	98	307097	5.00	4.44	
63 Tert-amyl methyl ether	73	7.458	7.451	0.007	99	788138	5.00	4.80	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2527444	10.0	10.0	
65 n-Heptane	43	7.677	7.671	0.006	89	386957	5.00	4.13	
67 n-Butanol	56	8.086	8.079	0.007	89	211770	250.0	243.4	
68 Trichloroethene	95	8.147	8.134	0.013	98	299063	5.00	4.62	
69 Methylcyclohexane	83	8.445	8.445	0.000	89	504207	5.00	4.54	
70 1,2-Dichloropropane	63	8.476	8.470	0.006	96	285382	5.00	4.50	
71 2-ethoxy-2-methyl butane	87	8.482	8.488	-0.006	94	437045	5.00	4.77	
72 Methyl methacrylate	69	8.561	8.561	0.000	91	162194	5.00	5.48	
74 Dibromomethane	93	8.579	8.579	0.000	96	156889	5.00	4.94	
73 1,4-Dioxane	88	8.622	8.622	0.000	28	24565	125.0	158.3	M
76 Dichlorobromomethane	83	8.817	8.817	0.000	99	365619	5.00	4.83	
77 2-Nitropropane	41	9.104	9.104	0.000	98	38738	5.00	4.64	
80 1-Bromo-2-chloroethane	63	9.207	9.207	0.000	98	315090	5.00	4.56	
81 cis-1,3-Dichloropropene	75	9.366	9.366	0.000	97	431876	5.00	4.59	
82 4-Methyl-2-pentanone (MIBK)	43	9.549	9.549	0.000	95	2569514	62.5	64.9	
$ 83 Toluene-d8 (Surr)	98	9.677	9.671	0.006	93	2463499	10.0	9.79	
84 Toluene	92	9.750	9.750	0.000	98	754755	5.00	4.88	
96 trans-1,3-Dichloropropene	75	10.012	10.012	0.000	91	384754	5.00	4.99	
98 Ethyl methacrylate	69	10.073	10.073	0.000	88	330923	5.00	4.97	
99 1,1,2-Trichloroethane	97	10.219	10.213	0.006	89	237609	5.00	5.05	
100 Tetrachloroethene	166	10.299	10.298	0.001	97	315392	5.00	4.29	
101 1,3-Dichloropropane	76	10.378	10.378	0.000	88	378846	5.00	4.76	
102 2-Hexanone	43	10.433	10.433	0.000	95	1975321	62.5	68.7	
104 Chlorodibromomethane	129	10.591	10.591	0.000	90	267962	5.00	4.72	
105 Ethylene Dibromide	107	10.701	10.695	0.006	98	226996	5.00	4.96	
* 106 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	85	1931521	10.0	10.0	
107 1-Chlorohexane	91	11.140	11.140	0.000	96	408935	5.00	4.58	
108 Chlorobenzene	112	11.158	11.158	0.000	96	844711	5.00	4.73	
110 1,1,1,2-Tetrachloroethane	131	11.237	11.237	0.000	95	293185	5.00	4.77	
111 Ethylbenzene	91	11.243	11.243	0.000	98	1457505	5.00	4.88	
112 m-Xylene & p-Xylene	106	11.359	11.353	0.006	100	1141594	10.0	9.84	
113 o-Xylene	106	11.689	11.682	0.007	96	559137	5.00	4.87	
114 Styrene	104	11.701	11.701	0.000	94	979120	5.00	5.06	
115 Bromoform	173	11.853	11.853	0.000	97	161440	5.00	4.42	
116 Isopropylbenzene	105	11.981	11.981	0.000	96	1475720	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
$ 119 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	91	923357	10.0	10.0	
120 1,1,2,2-Tetrachloroethane	83	12.231	12.231	0.000	93	308419	5.00	5.27	
121 Bromobenzene	156	12.243	12.243	0.000	96	369178	5.00	4.96	
122 trans-1,4-Dichloro-2-butene	53	12.255	12.255	0.000	92	244391	25.0	17.0	
123 1,2,3-Trichloropropane	110	12.274	12.274	0.000	83	82035	5.00	5.14	
124 N-Propylbenzene	91	12.310	12.310	0.000	99	1750125	5.00	5.17	
125 2-Chlorotoluene	126	12.384	12.383	0.001	97	352633	5.00	5.11	
126 1,3,5-Trimethylbenzene	105	12.444	12.444	0.000	94	1271885	5.00	5.24	
127 4-Chlorotoluene	126	12.481	12.475	0.006	96	372157	5.00	5.15	
128 tert-Butylbenzene	134	12.682	12.682	0.000	92	259018	5.00	4.93	
130 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	1312182	5.00	5.22	
131 sec-Butylbenzene	105	12.847	12.847	0.000	94	1634337	5.00	5.28	
132 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	741833	5.00	4.92	
133 4-Isopropyltoluene	119	12.957	12.950	0.007	97	1438306	5.00	5.32	
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1073517	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.018	13.017	0.001	95	765509	5.00	4.93	
136 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	98	576005	5.00	4.97	
137 Benzyl chloride	126	13.097	13.097	0.000	98	125534	5.00	5.56	
138 p-Diethylbenzene	119	13.152	13.152	0.000	92	859495	5.00	5.15	
139 n-Butylbenzene	92	13.243	13.243	0.000	97	727971	5.00	5.11	
140 1,2-Dichlorobenzene	146	13.280	13.273	0.007	99	693737	5.00	4.84	
142 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	88	42203	5.00	4.48	
143 1,3,5-Trichlorobenzene	180	13.938	13.938	0.000	98	575213	5.00	4.58	
144 1,2,4-Trichlorobenzene	180	14.359	14.359	0.000	94	520574	5.00	4.55	
145 Hexachlorobutadiene	225	14.438	14.438	0.000	97	245843	5.00	4.33	
146 Naphthalene	128	14.536	14.535	0.001	97	987624	5.00	4.90	
147 1,2,3-Trichlorobenzene	180	14.676	14.676	0.000	96	459565	5.00	4.50	
148 2-Methylnaphthalene	142	15.285	15.285	0.000	92	565610	5.00	4.50	
160 Pentane	43	3.001	2.995	0.006	95	387413	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_EE_00004	Amount Added: 12.50	Units: uL	
MSV_Q_ETBR_00008	Amount Added: 12.50	Units: uL	
MSV_LCS_VOC#1_00020	Amount Added: 12.50	Units: uL	
MSV_QC_Gas826_00038	Amount Added: 12.50	Units: uL	
MSV_29_826ISS_00023	Amount Added: 1.00	Units: uL	Run Reagent

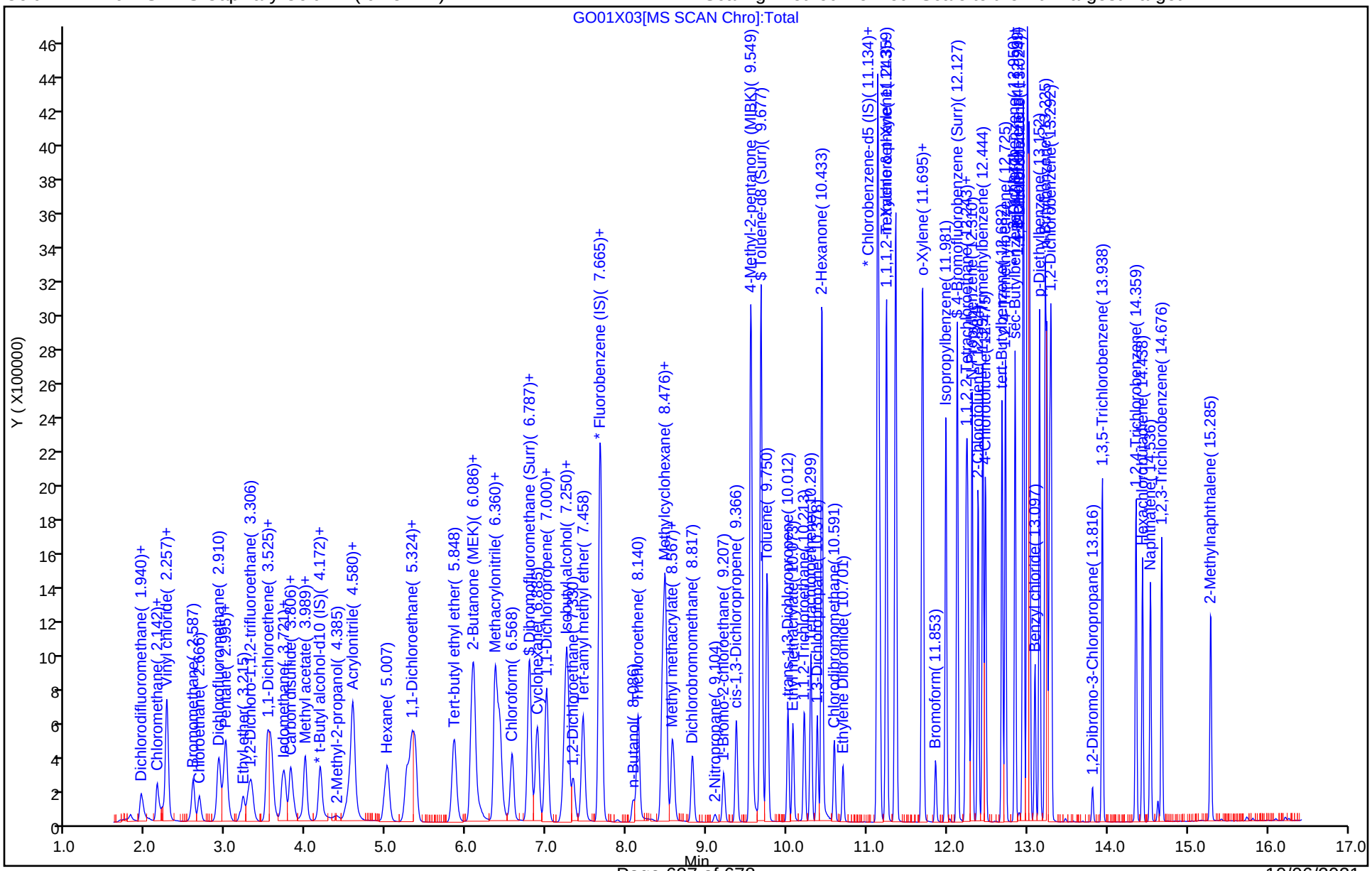
Report Date: 01-Oct-2021 10:55:19 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X03.D

Injection Date:	01-Oct-2021 08:53:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 01-Oct-2021 08:53:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040424-004
Misc. Info.: LCS
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Oct-2021 10:55:11 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1607

First Level Reviewer: knouses Date: 01-Oct-2021 09:45:31

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	10.0	9.53	95.29
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.45	94.52
$ 83 Toluene-d8 (Surr)	10.0	9.79	97.94
$ 119 4-Bromofluorobenzene (Surr)	10.0	10.0	100.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-178764/4

Matrix: Water Lab File ID: GO05X03.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 10/05/2021 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.: 178764 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.96		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.96		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	5.45		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.18		0.50	0.060
75-34-3	1,1-Dichloroethane	4.62		0.50	0.070
75-35-4	1,1-Dichloroethene	5.37		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	5.14		0.50	0.060
107-06-2	1,2-Dichloroethane	4.57		0.50	0.050
78-87-5	1,2-Dichloropropane	4.65		0.50	0.060
78-93-3	2-Butanone (MEK)	60.4		5.0	0.60
591-78-6	2-Hexanone	62.6		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	61.8		5.0	0.70
67-64-1	Acetone	58.9		5.0	0.90
71-43-2	Benzene	4.94		0.50	0.050
74-97-5	Bromochloromethane	5.02		0.50	0.050
75-27-4	Bromodichloromethane	5.05		0.50	0.050
75-25-2	Bromoform	4.62		1.0	0.30
74-83-9	Bromomethane	4.95		0.50	0.070
75-15-0	Carbon disulfide	5.12		1.0	0.060
56-23-5	Carbon tetrachloride	4.84		0.50	0.070
108-90-7	Chlorobenzene	4.95		0.50	0.060
75-00-3	Chloroethane	4.59		0.50	0.070
67-66-3	Chloroform	5.08		0.50	0.090
74-87-3	Chloromethane	4.46		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	5.14		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.75		0.50	0.050
124-48-1	Dibromochloromethane	4.85		0.50	0.070
100-41-4	Ethylbenzene	5.07		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.98		0.50	0.050
75-09-2	Methylene Chloride	4.98		0.50	0.070
100-42-5	Styrene	5.30		0.50	0.050
127-18-4	Tetrachloroethene	4.55		0.50	0.060
108-88-3	Toluene	5.07		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	5.15		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	5.15		0.50	0.060
79-01-6	Trichloroethene	4.89		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-178764/4

Matrix: Water Lab File ID: GO05X03.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 10/05/2021 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.: 178764 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.75		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)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	96		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 05-Oct-2021 09:44:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040685-004
Misc. Info.: LCS
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Oct-2021 11:47:33 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1643

First Level Reviewer: knouses Date: 05-Oct-2021 10:22:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.940	1.940	0.000	99	339831	5.00	5.58	
5 Chloromethane	50	2.142	2.142	0.000	99	339107	5.00	4.46	
8 Vinyl chloride	62	2.257	2.257	0.000	97	351248	5.00	4.75	
7 Butadiene	39	2.270	2.264	0.006	91	322249	5.00	3.98	
9 Bromomethane	94	2.593	2.593	0.000	90	261174	5.00	4.95	
10 Chloroethane	64	2.666	2.666	0.000	99	202281	5.00	4.59	
12 Dichlorofluoromethane	67	2.916	2.916	0.000	97	488774	5.00	4.77	
13 Trichlorofluoromethane	101	2.971	2.977	-0.006	97	472681	5.00	4.99	
15 Ethyl ether	59	3.215	3.208	0.007	90	224617	5.02	4.68	
17 1,2-Dichloro-1,1,2-trifluoroetha	67	3.318	3.312	0.006	90	313726	5.00	4.46	
19 1,1-Dichloroethene	96	3.519	3.513	0.006	96	273311	5.00	5.37	
20 112TCTFE	101	3.556	3.556	0.000	93	280296	5.00	5.08	
21 Acetone	43	3.574	3.568	0.006	100	538000	62.5	58.9	
23 Iodomethane	142	3.708	3.702	0.006	98	466265	5.00	4.84	
24 Ethyl bromide	108	3.739	3.733	0.006	98	230567	5.07	5.09	
22 Isopropyl alcohol	45	3.788	3.794	-0.006	98	48078	37.5	33.5	M
25 Carbon disulfide	76	3.812	3.812	0.000	99	903445	5.00	5.12	
27 Methyl acetate	43	3.977	3.964	0.013	97	155139	5.00	5.56	M
28 3-Chloro-1-propene	41	3.989	3.989	0.000	93	378365	5.00	4.35	
29 Methylene Chloride	84	4.178	4.172	0.006	87	290991	5.00	4.98	
* 30 t-Butyl alcohol-d10 (IS)	65	4.257	4.251	0.006	93	176471	50.0	50.0	
31 2-Methyl-2-propanol	59	4.373	4.367	0.006	99	124518	50.0	41.1	
32 Acrylonitrile	53	4.537	4.531	0.006	98	323621	25.0	25.4	
33 Methyl tert-butyl ether	73	4.586	4.574	0.012	96	734323	5.00	4.98	
34 trans-1,2-Dichloroethene	96	4.586	4.580	0.006	96	293178	5.00	5.15	
35 Hexane	57	5.013	5.007	0.006	91	382477	5.00	4.65	
37 1,1-Dichloroethane	63	5.257	5.251	0.006	96	462191	5.00	4.62	
38 Isopropyl ether	45	5.312	5.318	-0.006	97	799819	5.00	4.33	
39 2-Chloro-1,3-butadiene	53	5.361	5.354	0.006	90	407752	5.00	4.96	
40 Tert-butyl ethyl ether	59	5.848	5.848	0.000	98	820280	5.00	4.87	
41 2-Butanone (MEK)	43	6.062	6.062	0.000	99	1058964	62.5	60.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 cis-1,2-Dichloroethene	96	6.086	6.086	0.000	84	326375	5.00	5.14	
43 2,2-Dichloropropane	77	6.098	6.092	0.006	84	393953	5.00	5.31	
45 Propionitrile	54	6.171	6.159	0.012	99	169437	37.5	37.5	
48 Methacrylonitrile	67	6.360	6.354	0.006	89	657581	37.5	38.9	
49 Chlorobromomethane	128	6.421	6.409	0.012	86	147363	5.00	5.02	
50 Tetrahydrofuran	71	6.421	6.421	0.000	75	132266	25.0	26.5	
51 Chloroform	83	6.574	6.568	0.006	92	506290	5.00	5.08	
$ 52 Dibromofluoromethane (Surr)	113	6.787	6.781	0.006	94	584238	10.0	9.61	
53 1,1,1-Trichloroethane	97	6.793	6.787	0.006	73	426024	5.00	4.96	
54 Cyclohexane	56	6.885	6.885	0.000	89	448549	5.00	4.48	
56 Carbon tetrachloride	117	7.000	6.994	0.006	85	366367	5.00	4.84	
57 1,1-Dichloropropene	75	7.000	7.000	0.000	97	387582	5.00	4.97	
58 Isobutyl alcohol	41	7.196	7.196	0.000	92	97834	125.0	86.6	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.226	0.006	88	133396	10.0	9.86	
60 Benzene	78	7.263	7.263	0.000	97	1175542	5.00	4.94	
61 1,2-Dichloroethane	62	7.336	7.330	0.006	98	305593	5.00	4.57	
63 Tert-amyl methyl ether	73	7.458	7.452	0.006	99	773377	5.00	4.88	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2440572	10.0	10.0	
65 n-Heptane	43	7.677	7.671	0.006	88	387641	5.00	4.28	
67 n-Butanol	56	8.073	8.073	0.000	88	254927	250.0	269.7	
68 Trichloroethene	95	8.140	8.134	0.006	98	306159	5.00	4.89	
69 Methylcyclohexane	83	8.451	8.445	0.006	92	516343	5.00	4.82	
70 1,2-Dichloropropane	63	8.476	8.470	0.006	97	284517	5.00	4.65	
71 2-ethoxy-2-methyl butane	87	8.488	8.482	0.006	95	432536	5.00	4.89	
72 Methyl methacrylate	69	8.561	8.561	0.000	88	161048	5.00	5.01	
74 Dibromomethane	93	8.585	8.579	0.006	95	155288	5.00	5.06	
73 1,4-Dioxane	88	8.610	8.604	0.006	28	29856	125.0	177.1	M
76 Dichlorobromomethane	83	8.823	8.817	0.006	99	369262	5.00	5.05	
77 2-Nitropropane	41	9.110	9.104	0.006	99	39534	5.00	4.36	
80 1-Bromo-2-chloroethane	63	9.207	9.207	0.000	98	307771	5.00	4.62	
81 cis-1,3-Dichloropropene	75	9.366	9.366	0.000	97	431483	5.00	4.75	
82 4-Methyl-2-pentanone (MIBK)	43	9.549	9.549	0.000	95	2659891	62.5	61.8	
$ 83 Toluene-d8 (Surr)	98	9.677	9.677	0.000	93	2378849	10.0	9.77	
84 Toluene	92	9.750	9.750	0.000	98	758379	5.00	5.07	
96 trans-1,3-Dichloropropene	75	10.012	10.012	0.000	92	384857	5.00	5.15	
98 Ethyl methacrylate	69	10.073	10.073	0.000	87	323608	5.00	5.02	
99 1,1,2-Trichloroethane	97	10.213	10.213	0.000	90	235933	5.00	5.18	
100 Tetrachloroethene	166	10.299	10.299	0.000	97	323786	5.00	4.55	
101 1,3-Dichloropropane	76	10.378	10.378	0.000	88	387773	5.00	5.04	
102 2-Hexanone	43	10.433	10.433	0.000	94	1955336	62.5	62.6	
104 Chlorodibromomethane	129	10.591	10.591	0.000	90	266511	5.00	4.85	
105 Ethylene Dibromide	107	10.701	10.695	0.006	99	227583	5.00	5.14	
* 106 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	84	1869881	10.0	10.0	
107 1-Chlorohexane	91	11.140	11.140	0.000	95	412504	5.00	4.78	
108 Chlorobenzene	112	11.158	11.152	0.006	95	855433	5.00	4.95	
110 1,1,1,2-Tetrachloroethane	131	11.237	11.237	0.000	94	295053	5.00	4.96	
111 Ethylbenzene	91	11.244	11.243	0.001	98	1467030	5.00	5.07	
112 m-Xylene & p-Xylene	106	11.359	11.353	0.006	100	1153314	10.0	10.3	
113 o-Xylene	106	11.689	11.682	0.007	96	559893	5.00	5.04	
114 Styrene	104	11.701	11.701	0.000	94	992276	5.00	5.30	
115 Bromoform	173	11.853	11.853	0.000	97	163377	5.00	4.62	
116 Isopropylbenzene	105	11.981	11.981	0.000	95	1490661	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
$ 119 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	92	880955	10.0	9.90	
120 1,1,2,2-Tetrachloroethane	83	12.231	12.231	0.000	93	311570	5.00	5.45	
121 Bromobenzene	156	12.243	12.243	0.000	97	373444	5.00	5.14	
122 trans-1,4-Dichloro-2-butene	53	12.256	12.255	0.001	94	345570	25.0	22.1	
123 1,2,3-Trichloropropane	110	12.274	12.274	0.000	82	86973	5.00	5.59	
124 N-Propylbenzene	91	12.310	12.310	0.000	99	1769184	5.00	5.35	
125 2-Chlorotoluene	126	12.384	12.384	0.000	97	355399	5.00	5.28	
126 1,3,5-Trimethylbenzene	105	12.444	12.444	0.000	93	1276631	5.00	5.39	
127 4-Chlorotoluene	126	12.481	12.475	0.006	96	378391	5.00	5.37	
128 tert-Butylbenzene	134	12.688	12.682	0.006	92	263775	5.00	5.14	
130 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	1321286	5.00	5.39	
131 sec-Butylbenzene	105	12.847	12.847	0.000	94	1660098	5.00	5.49	
132 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	749313	5.00	5.09	
133 4-Isopropyltoluene	119	12.950	12.950	0.000	98	1456694	5.00	5.52	
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1047494	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.018	13.018	0.000	95	771007	5.00	5.09	
136 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	99	580470	5.00	5.13	
137 Benzyl chloride	126	13.097	13.097	0.000	98	119631	5.00	5.43	
138 p-Diethylbenzene	119	13.152	13.152	0.000	91	852184	5.00	5.23	
139 n-Butylbenzene	92	13.243	13.243	0.000	97	741620	5.00	5.34	
140 1,2-Dichlorobenzene	146	13.280	13.280	0.000	99	709150	5.00	5.07	
142 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	88	43608	5.00	4.75	
143 1,3,5-Trichlorobenzene	180	13.938	13.938	0.000	98	586629	5.00	4.79	
144 1,2,4-Trichlorobenzene	180	14.359	14.353	0.006	94	525315	5.00	4.70	
145 Hexachlorobutadiene	225	14.438	14.438	0.000	97	249038	5.00	4.50	
146 Naphthalene	128	14.536	14.536	0.000	97	1002107	5.00	5.09	
147 1,2,3-Trichlorobenzene	180	14.676	14.676	0.000	96	464601	5.00	4.66	
148 2-Methylnaphthalene	142	15.291	15.285	0.006	91	569741	5.00	4.64	
160 Pentane	43	3.001	3.001	0.000	96	413171	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_EE_00004	Amount Added:	12.50	Units: uL	
MSV_Q_ETBR_00008	Amount Added:	12.50	Units: uL	
MSV_LCS_VOC#1_00021	Amount Added:	12.50	Units: uL	
MSV_QC_Gas826_00039	Amount Added:	12.50	Units: uL	
MSV_29_826ISS_00023	Amount Added:	1.00	Units: uL	Run Reagent

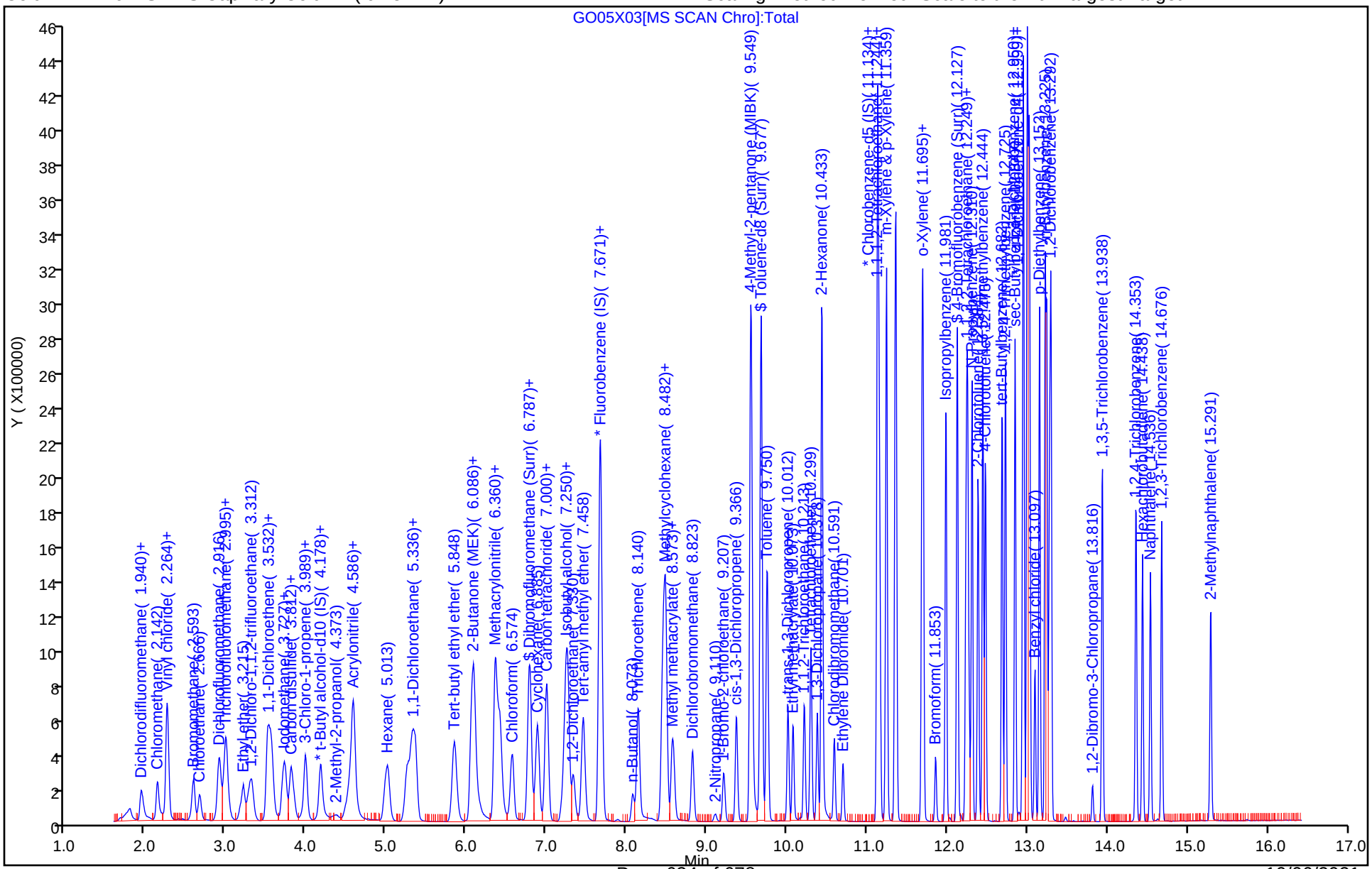
Report Date: 05-Oct-2021 11:47:40 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X03.D

Injection Date:	05-Oct-2021 09:44:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 05-Oct-2021 09:44:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040685-004
Misc. Info.: LCS
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Oct-2021 11:47:33 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1643

First Level Reviewer: knouses Date: 05-Oct-2021 10:22:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	10.0	9.61	96.07
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.86	98.64
$ 83 Toluene-d8 (Surr)	10.0	9.77	97.69
$ 119 4-Bromofluorobenzene (Surr)	10.0	9.90	98.96

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 410-177560/5

Matrix: Water Lab File ID: GO01X04.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 09:15

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.: 177560 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.76		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	5.39		0.50	0.070
79-00-5	1,1,2-Trichloroethane	4.96		0.50	0.060
75-34-3	1,1-Dichloroethane	4.43		0.50	0.070
75-35-4	1,1-Dichloroethene	5.10		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.90		0.50	0.060
107-06-2	1,2-Dichloroethane	4.41		0.50	0.050
78-87-5	1,2-Dichloropropane	4.42		0.50	0.060
78-93-3	2-Butanone (MEK)	57.6		5.0	0.60
591-78-6	2-Hexanone	60.3		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	58.2		5.0	0.70
67-64-1	Acetone	55.9		5.0	0.90
71-43-2	Benzene	4.68		0.50	0.050
74-97-5	Bromochloromethane	4.84		0.50	0.050
75-27-4	Bromodichloromethane	4.83		0.50	0.050
75-25-2	Bromoform	4.38		1.0	0.30
74-83-9	Bromomethane	4.79		0.50	0.070
75-15-0	Carbon disulfide	4.77		1.0	0.060
56-23-5	Carbon tetrachloride	4.59		0.50	0.070
108-90-7	Chlorobenzene	4.70		0.50	0.060
75-00-3	Chloroethane	4.48		0.50	0.070
67-66-3	Chloroform	4.75		0.50	0.090
74-87-3	Chloromethane	4.41		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	4.92		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.61		0.50	0.050
124-48-1	Dibromochloromethane	4.68		0.50	0.070
100-41-4	Ethylbenzene	4.79		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.85		0.50	0.050
75-09-2	Methylene Chloride	4.85		0.50	0.070
100-42-5	Styrene	4.99		0.50	0.050
127-18-4	Tetrachloroethene	4.31		0.50	0.060
108-88-3	Toluene	4.87		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.89		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.95		0.50	0.060
79-01-6	Trichloroethene	4.61		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 410-177560/5

Matrix: Water Lab File ID: GO01X04.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 09:15

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.: 177560 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.50		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)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	97		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X04.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 01-Oct-2021 09:15:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040424-005
Misc. Info.: LCSD
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Oct-2021 10:55:11 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1607

First Level Reviewer: knouses Date: 01-Oct-2021 10:15:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.940	1.940	0.000	99	320769	5.00	5.08	
5 Chloromethane	50	2.135	2.135	0.000	99	347781	5.00	4.41	
8 Vinyl chloride	62	2.251	2.257	-0.006	97	345117	5.00	4.50	
7 Butadiene	39	2.257	2.257	0.000	91	368921	5.00	4.39	
9 Bromomethane	94	2.586	2.587	-0.001	90	262053	5.00	4.79	
10 Chloroethane	64	2.666	2.666	0.000	99	204776	5.00	4.48	
12 Dichlorofluoromethane	67	2.910	2.904	0.006	97	507840	5.00	4.78	
13 Trichlorofluoromethane	101	2.977	2.965	0.012	97	482091	5.00	4.91	M
15 Ethyl ether	59	3.208	3.208	0.000	89	151888	5.02	3.05	
17 1,2-Dichloro-1,1,2-trifluoroetha	67	3.306	3.300	0.006	91	332432	5.00	4.55	
19 1,1-Dichloroethene	96	3.513	3.507	0.006	96	269083	5.00	5.10	
20 112TCTFE	101	3.550	3.556	-0.006	91	279664	5.00	4.88	
21 Acetone	43	3.574	3.568	0.006	100	536675	62.5	55.9	
23 Iodomethane	142	3.702	3.702	0.000	98	460720	5.00	4.61	
24 Ethyl bromide	108	3.733	3.733	0.000	98	180801	5.07	3.85	
22 Isopropyl alcohol	45	3.800	3.800	0.000	25	32722	37.5	22.0	
25 Carbon disulfide	76	3.806	3.800	0.006	98	872369	5.00	4.77	
27 Methyl acetate	43	3.964	3.964	0.000	97	125685	5.00	4.29	
28 3-Chloro-1-propene	41	3.989	3.983	0.006	91	375273	5.00	4.16	
29 Methylene Chloride	84	4.178	4.172	0.006	87	293840	5.00	4.85	
* 30 t-Butyl alcohol-d10 (IS)	65	4.251	4.257	-0.006	92	185320	50.0	50.0	
31 2-Methyl-2-propanol	59	4.373	4.379	-0.006	99	128136	50.0	40.3	
32 Acrylonitrile	53	4.525	4.531	-0.006	100	297755	25.0	22.3	
33 Methyl tert-butyl ether	73	4.580	4.574	0.006	88	741589	5.00	4.85	
34 trans-1,2-Dichloroethene	96	4.586	4.580	0.006	97	288965	5.00	4.89	
35 Hexane	57	5.013	5.007	0.006	91	372123	5.00	4.36	
37 1,1-Dichloroethane	63	5.251	5.245	0.006	96	460293	5.00	4.43	
38 Isopropyl ether	45	5.312	5.312	0.000	94	814978	5.00	4.25	
39 2-Chloro-1,3-butadiene	53	5.360	5.360	0.000	90	398442	5.00	4.68	
40 Tert-butyl ethyl ether	59	5.842	5.842	0.000	97	840466	5.00	4.81	
41 2-Butanone (MEK)	43	6.061	6.055	0.006	99	1060305	62.5	57.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 cis-1,2-Dichloroethene	96	6.086	6.086	0.000	80	324011	5.00	4.92	
43 2,2-Dichloropropane	77	6.098	6.098	0.000	84	395284	5.00	5.14	
45 Propionitrile	54	6.159	6.165	-0.006	98	157016	37.5	33.1	
48 Methacrylonitrile	67	6.360	6.354	0.006	90	659276	37.5	37.2	
49 Chlorobromomethane	128	6.415	6.409	0.006	87	147307	5.00	4.84	
50 Tetrahydrofuran	71	6.421	6.421	0.000	75	135585	25.0	25.9	
51 Chloroform	83	6.567	6.561	0.006	92	491472	5.00	4.75	
$ 52 Dibromofluoromethane (Surr)	113	6.781	6.775	0.006	94	609278	10.0	9.66	
53 1,1,1-Trichloroethane	97	6.793	6.787	0.006	96	420744	5.00	4.72	
54 Cyclohexane	56	6.884	6.878	0.006	88	449340	5.00	4.33	
56 Carbon tetrachloride	117	6.994	6.994	0.000	87	359925	5.00	4.59	
57 1,1-Dichloropropene	75	7.000	6.994	0.006	96	373864	5.00	4.62	
58 Isobutyl alcohol	41	7.195	7.195	0.000	91	111993	125.0	95.6	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	87	136368	10.0	9.72	
60 Benzene	78	7.256	7.256	0.000	97	1155578	5.00	4.68	
61 1,2-Dichloroethane	62	7.336	7.323	0.013	98	305598	5.00	4.41	
63 Tert-amyl methyl ether	73	7.457	7.451	0.006	99	790615	5.00	4.81	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2531005	10.0	10.0	
65 n-Heptane	43	7.671	7.671	0.000	87	384887	5.00	4.10	
67 n-Butanol	56	8.079	8.079	0.000	88	222579	250.0	224.2	
68 Trichloroethene	95	8.140	8.134	0.006	98	298945	5.00	4.61	
69 Methylcyclohexane	83	8.445	8.445	0.000	92	509126	5.00	4.58	
70 1,2-Dichloropropane	63	8.476	8.470	0.006	87	280683	5.00	4.42	
71 2-ethoxy-2-methyl butane	87	8.488	8.488	0.000	94	445873	5.00	4.86	
72 Methyl methacrylate	69	8.561	8.561	0.000	88	162084	5.00	4.80	
74 Dibromomethane	93	8.579	8.579	0.000	96	157037	5.00	4.94	
73 1,4-Dioxane	88	8.616	8.622	-0.006	28	23310	125.0	131.7	M
76 Dichlorobromomethane	83	8.817	8.817	0.000	99	365944	5.00	4.83	
77 2-Nitropropane	41	9.104	9.104	0.000	99	37116	5.00	3.89	
80 1-Bromo-2-chloroethane	63	9.207	9.207	0.000	98	320180	5.00	4.63	
81 cis-1,3-Dichloropropene	75	9.366	9.366	0.000	97	434418	5.00	4.61	
82 4-Methyl-2-pentanone (MIBK)	43	9.549	9.549	0.000	95	2628816	62.5	58.2	
$ 83 Toluene-d8 (Surr)	98	9.677	9.671	0.006	93	2474499	10.0	9.74	
84 Toluene	92	9.750	9.750	0.000	99	760852	5.00	4.87	
96 trans-1,3-Dichloropropene	75	10.012	10.012	0.000	91	385420	5.00	4.95	
98 Ethyl methacrylate	69	10.079	10.073	0.006	88	338975	5.00	5.04	
99 1,1,2-Trichloroethane	97	10.219	10.213	0.006	90	235828	5.00	4.96	
100 Tetrachloroethene	166	10.298	10.298	0.000	97	320529	5.00	4.31	
101 1,3-Dichloropropane	76	10.378	10.378	0.000	88	381194	5.00	4.74	
102 2-Hexanone	43	10.433	10.433	0.000	95	1978182	62.5	60.3	
104 Chlorodibromomethane	129	10.591	10.591	0.000	89	268594	5.00	4.68	
105 Ethylene Dibromide	107	10.701	10.695	0.006	99	226397	5.00	4.90	
* 106 Chlorobenzene-d5 (IS)	117	11.134	11.128	0.006	84	1951154	10.0	10.0	
107 1-Chlorohexane	91	11.140	11.140	0.000	95	411312	5.00	4.56	
108 Chlorobenzene	112	11.158	11.158	0.000	96	847764	5.00	4.70	
110 1,1,1,2-Tetrachloroethane	131	11.237	11.237	0.000	96	295665	5.00	4.76	
111 Ethylbenzene	91	11.243	11.243	0.000	98	1446386	5.00	4.79	
112 m-Xylene & p-Xylene	106	11.359	11.353	0.006	100	1138273	10.0	9.71	
113 o-Xylene	106	11.688	11.682	0.006	96	555233	5.00	4.79	
114 Styrene	104	11.701	11.701	0.000	94	975754	5.00	4.99	
115 Bromoform	173	11.859	11.853	0.006	96	161777	5.00	4.38	
116 Isopropylbenzene	105	11.987	11.981	0.006	95	1478209	5.00	5.00	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 119 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	91	922090	10.0	9.93	
120 1,1,2,2-Tetrachloroethane	83	12.231	12.231	0.000	93	314707	5.00	5.39	
121 Bromobenzene	156	12.243	12.243	0.000	96	370842	5.00	5.00	
122 trans-1,4-Dichloro-2-butene	53	12.255	12.255	0.000	92	258512	25.0	15.7	
123 1,2,3-Trichloropropane	110	12.274	12.274	0.000	82	84116	5.00	5.29	
124 N-Propylbenzene	91	12.310	12.310	0.000	99	1752595	5.00	5.19	
125 2-Chlorotoluene	126	12.383	12.383	0.000	97	361005	5.00	5.24	
126 1,3,5-Trimethylbenzene	105	12.444	12.444	0.000	93	1273573	5.00	5.26	
127 4-Chlorotoluene	126	12.481	12.475	0.006	97	371579	5.00	5.16	
128 tert-Butylbenzene	134	12.688	12.682	0.006	93	260391	5.00	4.97	
130 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	98	1298217	5.00	5.18	
131 sec-Butylbenzene	105	12.847	12.847	0.000	94	1630545	5.00	5.28	
132 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	740002	5.00	4.92	
133 4-Isopropyltoluene	119	12.950	12.950	0.000	97	1430855	5.00	5.30	
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1070318	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.017	13.017	0.000	96	767260	5.00	4.95	
136 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	99	577221	5.00	4.99	
137 Benzyl chloride	126	13.097	13.097	0.000	98	125214	5.00	5.56	
138 p-Diethylbenzene	119	13.152	13.152	0.000	92	849871	5.00	5.10	
139 n-Butylbenzene	92	13.243	13.243	0.000	94	732368	5.00	5.16	
140 1,2-Dichlorobenzene	146	13.280	13.273	0.007	99	701464	5.00	4.90	
142 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	88	42777	5.00	4.56	
143 1,3,5-Trichlorobenzene	180	13.938	13.938	0.000	98	577725	5.00	4.61	
144 1,2,4-Trichlorobenzene	180	14.359	14.359	0.000	95	515676	5.00	4.52	
145 Hexachlorobutadiene	225	14.438	14.438	0.000	97	248713	5.00	4.40	
146 Naphthalene	128	14.535	14.535	0.000	97	959563	5.00	4.77	
147 1,2,3-Trichlorobenzene	180	14.676	14.676	0.000	96	448491	5.00	4.40	
148 2-Methylnaphthalene	142	15.291	15.285	0.006	92	507907	5.00	4.05	
160 Pentane	43	3.001	2.995	0.006	97	398953	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_EE_00004	Amount Added: 12.50	Units: uL	
MSV_Q_ETBR_00008	Amount Added: 12.50	Units: uL	
MSV_LCS_VOC#1_00020	Amount Added: 12.50	Units: uL	
MSV_QC_Gas826_00038	Amount Added: 12.50	Units: uL	
MSV_29_826ISS_00023	Amount Added: 1.00	Units: uL	Run Reagent

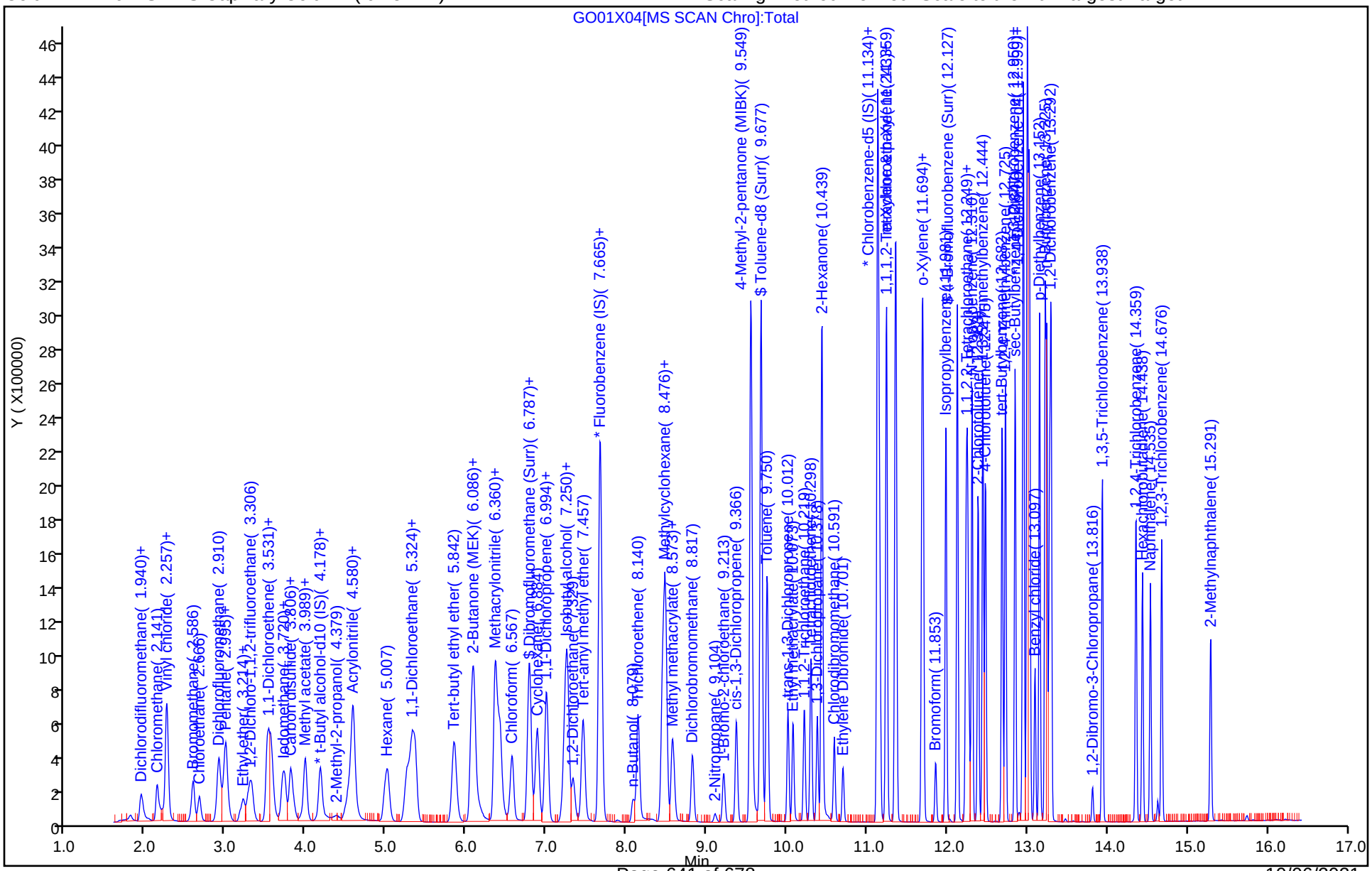
Report Date: 01-Oct-2021 10:55:23 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X04.D

Injection Date:	01-Oct-2021 09:15:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	LCSD			Worklist Smp#:	5
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X04.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 01-Oct-2021 09:15:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040424-005
Misc. Info.: LCSD
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Oct-2021 10:55:11 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1607

First Level Reviewer: knouses Date: 01-Oct-2021 10:15:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	10.0	9.66	96.61
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.72	97.23
$ 83 Toluene-d8 (Surr)	10.0	9.74	97.39
$ 119 4-Bromofluorobenzene (Surr)	10.0	9.93	99.27

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 410-178764/5

Matrix: Water Lab File ID: GO05X04.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 10/05/2021 10:06

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.: 178764 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.80		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.88		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	5.51		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.12		0.50	0.060
75-34-3	1,1-Dichloroethane	4.53		0.50	0.070
75-35-4	1,1-Dichloroethene	5.30		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	5.07		0.50	0.060
107-06-2	1,2-Dichloroethane	4.61		0.50	0.050
78-87-5	1,2-Dichloropropane	4.58		0.50	0.060
78-93-3	2-Butanone (MEK)	56.7		5.0	0.60
591-78-6	2-Hexanone	57.9		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	56.2		5.0	0.70
67-64-1	Acetone	55.1		5.0	0.90
71-43-2	Benzene	4.82		0.50	0.050
74-97-5	Bromochloromethane	4.94		0.50	0.050
75-27-4	Bromodichloromethane	4.94		0.50	0.050
75-25-2	Bromoform	4.65		1.0	0.30
74-83-9	Bromomethane	4.67		0.50	0.070
75-15-0	Carbon disulfide	5.01		1.0	0.060
56-23-5	Carbon tetrachloride	4.70		0.50	0.070
108-90-7	Chlorobenzene	4.87		0.50	0.060
75-00-3	Chloroethane	4.54		0.50	0.070
67-66-3	Chloroform	4.89		0.50	0.090
74-87-3	Chloromethane	4.38		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	5.02		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.69		0.50	0.050
124-48-1	Dibromochloromethane	4.77		0.50	0.070
100-41-4	Ethylbenzene	4.95		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.94		0.50	0.050
75-09-2	Methylene Chloride	4.91		0.50	0.070
100-42-5	Styrene	5.14		0.50	0.050
127-18-4	Tetrachloroethene	4.45		0.50	0.060
108-88-3	Toluene	4.98		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	5.06		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	5.13		0.50	0.060
79-01-6	Trichloroethene	4.73		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 410-178764/5

Matrix: Water Lab File ID: GO05X04.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 10/05/2021 10:06

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.: 178764 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	4.58		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)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		80-120
1868-53-7	Dibromofluoromethane (Surr)	95		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X04.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 05-Oct-2021 10:06:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040685-005
Misc. Info.: LCSD
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Oct-2021 11:47:33 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1643

First Level Reviewer: knouses Date: 05-Oct-2021 11:44:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.940	1.940	0.000	99	356190	5.00	5.80	
5 Chloromethane	50	2.141	2.142	-0.001	99	335786	5.00	4.38	M
8 Vinyl chloride	62	2.257	2.257	0.000	98	341090	5.00	4.58	
7 Butadiene	39	2.263	2.264	-0.001	91	309842	5.00	3.80	
9 Bromomethane	94	2.593	2.593	0.000	91	248197	5.00	4.67	
10 Chloroethane	64	2.666	2.666	0.000	100	201568	5.00	4.54	
12 Dichlorofluoromethane	67	2.916	2.916	0.000	97	477831	5.00	4.63	
13 Trichlorofluoromethane	101	2.971	2.977	-0.006	97	476607	5.00	4.99	
15 Ethyl ether	59	3.208	3.208	0.000	89	221839	5.02	4.59	
17 1,2-Dichloro-1,1,2-trifluoroetha	67	3.306	3.312	-0.006	90	310071	5.00	4.37	
19 1,1-Dichloroethene	96	3.519	3.513	0.006	95	271659	5.00	5.30	
20 112TCTFE	101	3.556	3.556	0.000	92	279792	5.00	5.03	
21 Acetone	43	3.574	3.568	0.006	100	544180	62.5	55.1	
23 Iodomethane	142	3.702	3.702	0.000	98	460097	5.00	4.74	
24 Ethyl bromide	108	3.739	3.733	0.006	98	226986	5.07	4.98	
22 Isopropyl alcohol	45	3.800	3.794	0.006	25	35493	37.5	24.5	
25 Carbon disulfide	76	3.812	3.812	0.000	98	890111	5.00	5.01	
27 Methyl acetate	43	3.977	3.964	0.012	96	160518	5.00	5.32	M
28 3-Chloro-1-propene	41	3.989	3.989	0.000	92	368573	5.00	4.21	
29 Methylene Chloride	84	4.184	4.172	0.012	88	288782	5.00	4.91	
* 30 t-Butyl alcohol-d10 (IS)	65	4.257	4.251	0.006	92	190611	50.0	50.0	
31 2-Methyl-2-propanol	59	4.373	4.367	0.006	99	125820	50.0	38.5	
32 Acrylonitrile	53	4.537	4.531	0.006	97	327950	25.0	23.9	
33 Methyl tert-butyl ether	73	4.580	4.574	0.006	94	733247	5.00	4.94	
34 trans-1,2-Dichloroethene	96	4.586	4.580	0.006	96	290490	5.00	5.06	
35 Hexane	57	5.013	5.007	0.006	90	368381	5.00	4.44	
37 1,1-Dichloroethane	63	5.257	5.251	0.006	95	456529	5.00	4.53	
38 Isopropyl ether	45	5.312	5.318	-0.006	95	795812	5.00	4.27	
39 2-Chloro-1,3-butadiene	53	5.366	5.354	0.012	90	396556	5.00	4.79	
40 Tert-butyl ethyl ether	59	5.854	5.848	0.006	97	808321	5.00	4.76	
41 2-Butanone (MEK)	43	6.061	6.062	-0.001	99	1073536	62.5	56.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 cis-1,2-Dichloroethene	96	6.092	6.086	0.006	80	320551	5.00	5.02	
43 2,2-Dichloropropane	77	6.104	6.092	0.012	85	381041	5.00	5.10	
45 Propionitrile	54	6.171	6.159	0.012	98	171301	37.5	35.1	
48 Methacrylonitrile	67	6.360	6.354	0.006	90	661175	37.5	36.2	
49 Chlorobromomethane	128	6.421	6.409	0.012	90	146143	5.00	4.94	
50 Tetrahydrofuran	71	6.427	6.421	0.006	82	137829	25.0	25.6	
51 Chloroform	83	6.574	6.568	0.006	92	490986	5.00	4.89	
$ 52 Dibromofluoromethane (Surr)	113	6.781	6.781	0.000	94	583763	10.0	9.53	
53 1,1,1-Trichloroethane	97	6.793	6.787	0.006	72	422107	5.00	4.88	
54 Cyclohexane	56	6.884	6.885	-0.001	88	441801	5.00	4.38	
56 Carbon tetrachloride	117	7.000	6.994	0.006	90	358122	5.00	4.70	
57 1,1-Dichloropropene	75	7.000	7.000	0.000	95	374467	5.00	4.76	
58 Isobutyl alcohol	41	7.195	7.196	-0.001	92	110522	125.0	97.2	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.226	0.006	88	131793	10.0	9.68	
60 Benzene	78	7.262	7.263	-0.001	96	1155327	5.00	4.82	
61 1,2-Dichloroethane	62	7.330	7.330	0.000	97	309980	5.00	4.61	
63 Tert-amyl methyl ether	73	7.464	7.452	0.012	99	779001	5.00	4.88	
* 64 Fluorobenzene (IS)	96	7.671	7.665	0.006	99	2458042	10.0	10.0	
65 n-Heptane	43	7.677	7.671	0.006	89	371334	5.00	4.07	
67 n-Butanol	56	8.079	8.073	0.006	85	247510	250.0	242.4	
68 Trichloroethene	95	8.140	8.134	0.006	98	298258	5.00	4.73	
69 Methylcyclohexane	83	8.451	8.445	0.006	90	506597	5.00	4.69	
70 1,2-Dichloropropane	63	8.476	8.470	0.006	97	282677	5.00	4.58	
71 2-ethoxy-2-methyl butane	87	8.488	8.482	0.006	94	432886	5.00	4.86	
72 Methyl methacrylate	69	8.567	8.561	0.006	92	154247	5.00	4.44	
74 Dibromomethane	93	8.585	8.579	0.006	95	156380	5.00	5.06	
73 1,4-Dioxane	88	8.610	8.604	0.006	28	27921	125.0	153.3	M
76 Dichlorobromomethane	83	8.823	8.817	0.006	99	364047	5.00	4.94	
77 2-Nitropropane	41	9.097	9.104	-0.007	98	39698	5.00	4.05	
80 1-Bromo-2-chloroethane	63	9.213	9.207	0.006	98	308340	5.00	4.59	
81 cis-1,3-Dichloropropene	75	9.372	9.366	0.006	97	428758	5.00	4.69	
82 4-Methyl-2-pentanone (MIBK)	43	9.549	9.549	0.000	95	2609530	62.5	56.2	
$ 83 Toluene-d8 (Surr)	98	9.677	9.677	0.000	93	2392287	10.0	9.74	
84 Toluene	92	9.756	9.750	0.006	98	751542	5.00	4.98	
96 trans-1,3-Dichloropropene	75	10.012	10.012	0.000	91	386097	5.00	5.13	
98 Ethyl methacrylate	69	10.079	10.073	0.006	87	328618	5.00	5.05	
99 1,1,2-Trichloroethane	97	10.219	10.213	0.006	90	235341	5.00	5.12	
100 Tetrachloroethene	166	10.298	10.299	-0.001	98	319521	5.00	4.45	
101 1,3-Dichloropropane	76	10.378	10.378	0.000	88	379693	5.00	4.89	
102 2-Hexanone	43	10.439	10.433	0.006	94	1952695	62.5	57.9	
104 Chlorodibromomethane	129	10.591	10.591	0.000	89	264416	5.00	4.77	
105 Ethylene Dibromide	107	10.701	10.695	0.006	98	226530	5.00	5.07	
* 106 Chlorobenzene-d5 (IS)	117	11.128	11.128	0.000	84	1886180	10.0	10.0	
107 1-Chlorohexane	91	11.140	11.140	0.000	94	406312	5.00	4.66	
108 Chlorobenzene	112	11.158	11.152	0.006	95	848977	5.00	4.87	
110 1,1,1,2-Tetrachloroethane	131	11.237	11.237	0.000	95	288542	5.00	4.80	
111 Ethylbenzene	91	11.243	11.243	0.000	98	1442520	5.00	4.95	
112 m-Xylene & p-Xylene	106	11.359	11.353	0.006	100	1138754	10.0	10.1	
113 o-Xylene	106	11.688	11.682	0.006	96	553266	5.00	4.94	
114 Styrene	104	11.701	11.701	0.000	94	970850	5.00	5.14	
115 Bromoform	173	11.859	11.853	0.006	97	166015	5.00	4.65	
116 Isopropylbenzene	105	11.981	11.981	0.000	95	1456876	5.00	5.10	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 119 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	92	899427	10.0	10.0	
120 1,1,2,2-Tetrachloroethane	83	12.231	12.231	0.000	93	316424	5.00	5.51	
121 Bromobenzene	156	12.243	12.243	0.000	93	370887	5.00	5.09	
122 trans-1,4-Dichloro-2-butene	53	12.255	12.255	0.000	92	339282	25.0	20.1	
123 1,2,3-Trichloropropane	110	12.274	12.274	0.000	83	86365	5.00	5.52	
124 N-Propylbenzene	91	12.310	12.310	0.000	99	1743033	5.00	5.25	
125 2-Chlorotoluene	126	12.389	12.384	0.005	97	353302	5.00	5.22	
126 1,3,5-Trimethylbenzene	105	12.444	12.444	0.000	94	1261733	5.00	5.30	
127 4-Chlorotoluene	126	12.475	12.475	0.000	97	378246	5.00	5.34	
128 tert-Butylbenzene	134	12.688	12.682	0.006	92	254952	5.00	4.95	
130 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	1308332	5.00	5.31	
131 sec-Butylbenzene	105	12.847	12.847	0.000	94	1632782	5.00	5.38	
132 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	738963	5.00	5.00	
133 4-Isopropyltoluene	119	12.956	12.950	0.006	97	1429193	5.00	5.39	
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1052425	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.017	13.018	-0.001	95	759160	5.00	4.98	
136 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	98	574610	5.00	5.06	
137 Benzyl chloride	126	13.097	13.097	0.000	98	118998	5.00	5.37	
138 p-Diethylbenzene	119	13.152	13.152	0.000	93	846249	5.00	5.17	
139 n-Butylbenzene	92	13.243	13.243	0.000	97	736801	5.00	5.28	
140 1,2-Dichlorobenzene	146	13.280	13.280	0.000	99	704355	5.00	5.01	
142 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	89	45708	5.00	4.95	
143 1,3,5-Trichlorobenzene	180	13.938	13.938	0.000	98	579874	5.00	4.71	
144 1,2,4-Trichlorobenzene	180	14.359	14.353	0.006	94	519571	5.00	4.63	
145 Hexachlorobutadiene	225	14.438	14.438	0.000	98	245339	5.00	4.41	
146 Naphthalene	128	14.535	14.536	-0.001	97	996376	5.00	5.04	
147 1,2,3-Trichlorobenzene	180	14.676	14.676	0.000	96	455323	5.00	4.54	
148 2-Methylnaphthalene	142	15.285	15.285	0.000	91	536559	5.00	4.35	
160 Pentane	43	3.001	3.001	0.000	95	401673	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_EE_00004	Amount Added:	12.50	Units: uL	
MSV_Q_ETBR_00008	Amount Added:	12.50	Units: uL	
MSV_LCS_VOC#1_00021	Amount Added:	12.50	Units: uL	
MSV_QC_Gas826_00039	Amount Added:	12.50	Units: uL	
MSV_29_826ISS_00023	Amount Added:	1.00	Units: uL	Run Reagent

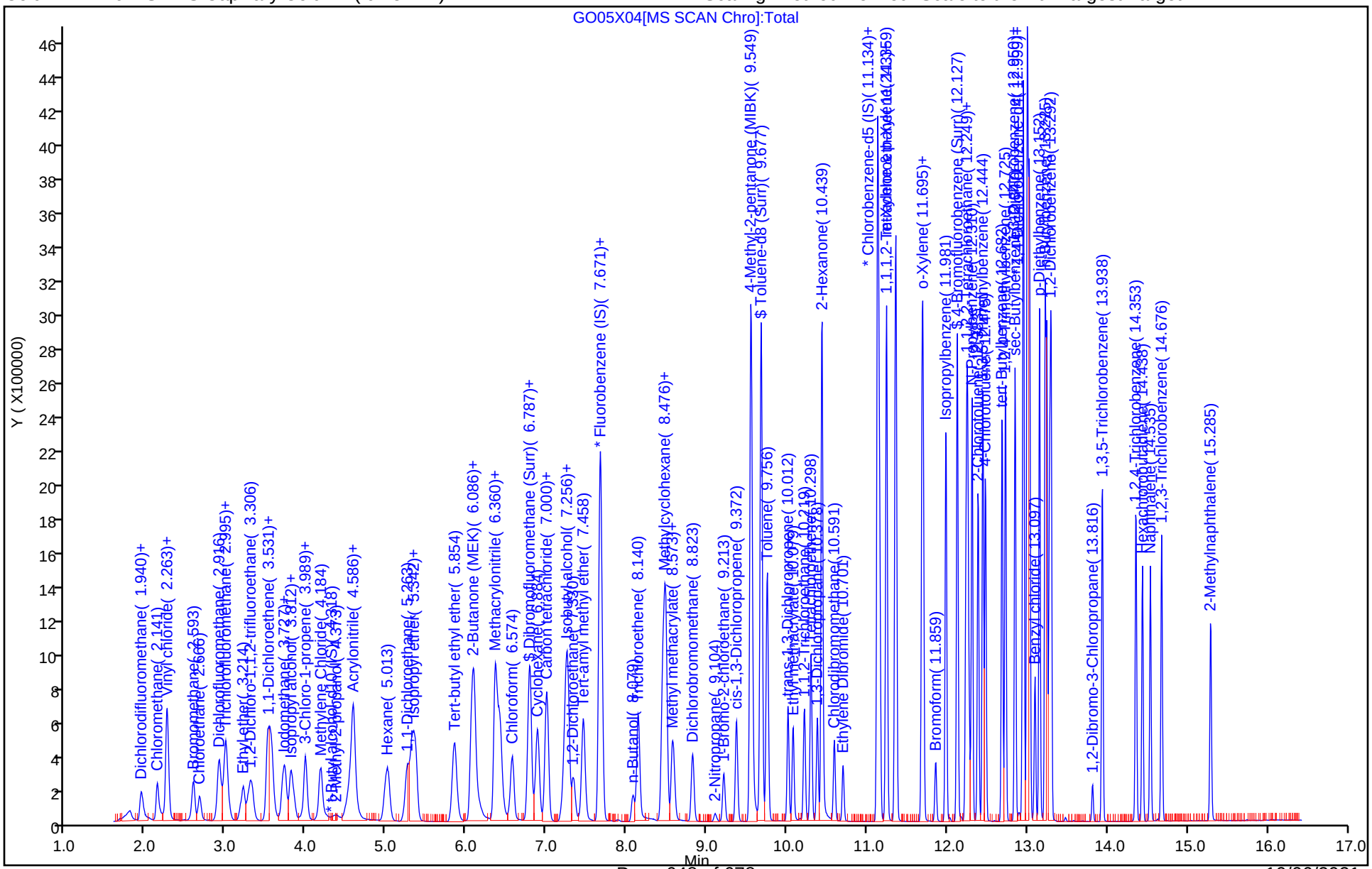
Report Date: 05-Oct-2021 11:47:45 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X04.D

Injection Date:	05-Oct-2021 10:06:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	LCSD			Worklist Smp#:	5
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X04.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 05-Oct-2021 10:06:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040685-005
Misc. Info.: LCSD
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Oct-2021 11:47:33 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1643

First Level Reviewer: knouses Date: 05-Oct-2021 11:44:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	10.0	9.53	95.31
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.68	96.76
$ 83 Toluene-d8 (Surr)	10.0	9.74	97.40
$ 119 4-Bromofluorobenzene (Surr)	10.0	10.0	100.17

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

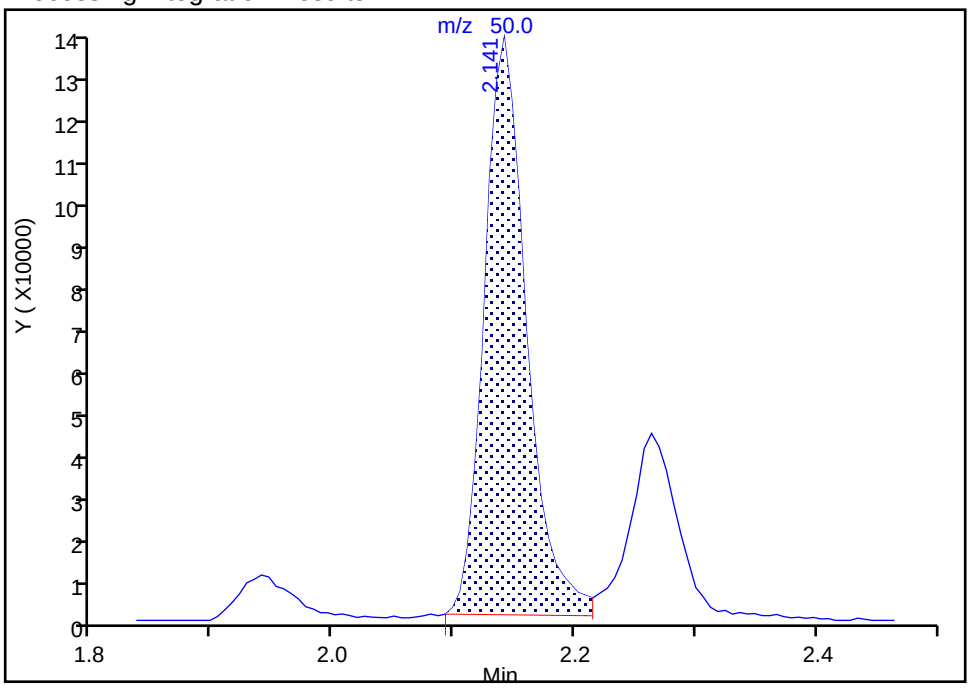
Data File: \\chromfs\Lancaster\ChromData\16334\20211005-40685.b\GO05X04.D
Injection Date: 05-Oct-2021 10:06:30 Instrument ID: 16334
Lims ID: LCSD
Client ID:
Operator ID: SRK36897 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_16334_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

5 Chloromethane, CAS: 74-87-3

Signal: 1

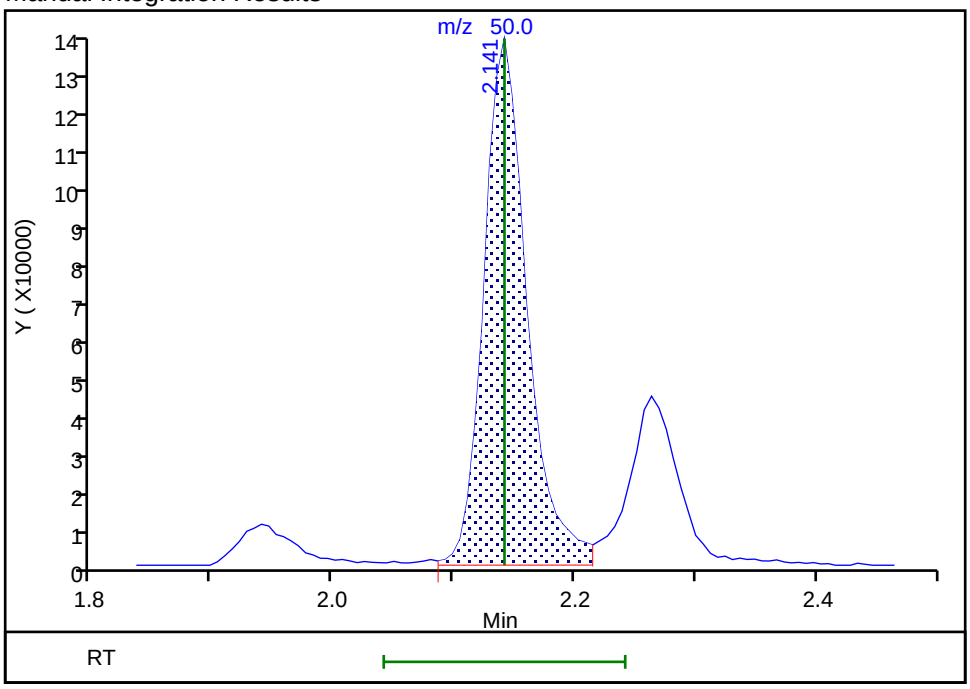
Processing Integration Results

RT: 2.14
Area: 325963
Amount: 4.254361
Amount Units: ug/l



Manual Integration Results

RT: 2.14
Area: 335786
Amount: 4.382567
Amount Units: ug/l



Reviewer: knouses, 05-Oct-2021 10:33:53
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.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MS MS Lab Sample ID: 410-56784-7 MS

Matrix: Water Lab File ID: GO01X17.D

Analysis Method: 8260D Date Collected: 09/24/2021 11:30

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 14:04

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.: 177560 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.10		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.62		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	5.57		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.37		0.50	0.060
75-34-3	1,1-Dichloroethane	5.03		0.50	0.070
75-35-4	1,1-Dichloroethene	6.03		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	5.19		0.50	0.060
107-06-2	1,2-Dichloroethane	4.91		0.50	0.050
78-87-5	1,2-Dichloropropane	4.90		0.50	0.060
78-93-3	2-Butanone (MEK)	62.0		5.0	0.60
591-78-6	2-Hexanone	64.9		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	62.1		5.0	0.70
67-64-1	Acetone	55.8		5.0	0.90
71-43-2	Benzene	5.31		0.50	0.050
74-97-5	Bromochloromethane	5.35		0.50	0.050
75-27-4	Bromodichloromethane	5.14		0.50	0.050
75-25-2	Bromoform	4.57		1.0	0.30
74-83-9	Bromomethane	5.17		0.50	0.070
75-15-0	Carbon disulfide	5.54		1.0	0.060
56-23-5	Carbon tetrachloride	5.33		0.50	0.070
108-90-7	Chlorobenzene	5.30		0.50	0.060
75-00-3	Chloroethane	4.90		0.50	0.070
67-66-3	Chloroform	5.66		0.50	0.090
74-87-3	Chloromethane	4.74		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	6.38		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.86		0.50	0.050
124-48-1	Dibromochloromethane	4.93		0.50	0.070
100-41-4	Ethylbenzene	5.55		0.50	0.060
1634-04-4	Methyl tert-butyl ether	5.21		0.50	0.050
75-09-2	Methylene Chloride	5.28		0.50	0.070
100-42-5	Styrene	5.59		0.50	0.050
127-18-4	Tetrachloroethene	7.96		0.50	0.060
108-88-3	Toluene	5.53		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	5.52		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	5.25		0.50	0.060
79-01-6	Trichloroethene	6.11		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MS MS Lab Sample ID: 410-56784-7 MS

Matrix: Water Lab File ID: GO01X17.D

Analysis Method: 8260D Date Collected: 09/24/2021 11:30

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 14:04

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.: 177560 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	5.01		0.50	0.10
1330-20-7	Xylenes, Total	16.7		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	96		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X17.D
Lims ID: 410-56784-A-7 MS
Client ID: HD-COD-SW-15-0/1-0 MS
Sample Type: MS
Inject. Date: 01-Oct-2021 14:04:30 ALS Bottle#: 17 Worklist Smp#: 20
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040424-020
Misc. Info.: 410-56784-A-7 MS
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Oct-2021 19:10:12 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1602

First Level Reviewer: beckerk Date: 01-Oct-2021 18:59:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.940	1.940	0.000	99	346239	5.00	5.61	
5 Chloromethane	50	2.141	2.135	0.006	99	365373	5.00	4.74	
8 Vinyl chloride	62	2.257	2.257	0.000	98	374371	5.00	5.01	
7 Butadiene	39	2.263	2.257	0.006	90	410891	5.00	5.01	
9 Bromomethane	94	2.593	2.587	0.006	91	276417	5.00	5.17	
10 Chloroethane	64	2.672	2.666	0.006	99	218554	5.00	4.90	
12 Dichlorofluoromethane	67	2.916	2.904	0.012	97	539784	5.00	5.21	
13 Trichlorofluoromethane	101	2.971	2.965	0.006	97	526841	5.00	5.49	
15 Ethyl ether	59	3.214	3.208	0.006	92	246645	5.03	5.07	
17 1,2-Dichloro-1,1,2-trifluoroetha	67	3.306	3.300	0.006	90	355455	5.00	4.99	
19 1,1-Dichloroethene	96	3.513	3.507	0.006	96	310649	5.00	6.03	
20 112TCTFE	101	3.550	3.556	-0.006	91	321050	5.00	5.74	
21 Acetone	43	3.574	3.568	0.006	100	504394	62.6	55.8	
23 Iodomethane	142	3.708	3.702	0.006	98	509866	5.00	5.23	
24 Ethyl bromide	108	3.739	3.733	0.006	98	254278	5.07	5.55	
22 Isopropyl alcohol	45	3.806	3.800	0.006	35	41940	37.5	28.9	
25 Carbon disulfide	76	3.812	3.800	0.012	99	988996	5.00	5.54	
27 Methyl acetate	43	3.970	3.964	0.006	96	124479	5.00	4.51	
28 3-Chloro-1-propene	41	3.989	3.983	0.006	93	414533	5.00	4.71	
29 Methylene Chloride	84	4.178	4.172	0.006	87	312170	5.00	5.28	
* 30 t-Butyl alcohol-d10 (IS)	65	4.239	4.257	-0.018	95	174458	50.0	50.0	
31 2-Methyl-2-propanol	59	4.361	4.379	-0.018	99	134520	50.0	45.0	
32 Acrylonitrile	53	4.531	4.531	0.000	99	329895	25.0	26.2	
33 Methyl tert-butyl ether	73	4.580	4.574	0.006	94	777608	5.00	5.21	
34 trans-1,2-Dichloroethene	96	4.586	4.580	0.006	98	318575	5.00	5.52	
35 Hexane	57	5.013	5.007	0.006	91	429526	5.00	5.16	
37 1,1-Dichloroethane	63	5.251	5.245	0.006	96	509561	5.00	5.03	
38 Isopropyl ether	45	5.306	5.312	-0.006	94	859193	5.00	4.59	
39 2-Chloro-1,3-butadiene	53	5.366	5.360	0.006	90	452379	5.00	5.44	
40 Tert-butyl ethyl ether	59	5.848	5.842	0.006	97	871059	5.00	5.11	
41 2-Butanone (MEK)	43	6.055	6.055	0.000	99	1074243	62.6	62.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 cis-1,2-Dichloroethene	96	6.086	6.086	0.000	80	409873	5.00	6.38	
43 2,2-Dichloropropane	77	6.098	6.098	0.000	86	425632	5.00	5.67	
45 Propionitrile	54	6.171	6.165	0.006	99	161590	37.5	36.2	
48 Methacrylonitrile	67	6.360	6.354	0.006	89	674494	37.5	40.4	
49 Chlorobromomethane	128	6.415	6.409	0.006	89	158948	5.00	5.35	
50 Tetrahydrofuran	71	6.421	6.421	0.000	87	131229	25.0	26.6	
51 Chloroform	83	6.567	6.561	0.006	92	571319	5.00	5.66	
$ 52 Dibromofluoromethane (Surr)	113	6.787	6.775	0.012	94	593713	10.0	9.65	
53 1,1,1-Trichloroethane	97	6.793	6.787	0.006	97	488636	5.00	5.62	
54 Cyclohexane	56	6.884	6.878	0.006	88	514960	5.00	5.08	
56 Carbon tetrachloride	117	7.000	6.994	0.006	88	407717	5.00	5.33	
57 1,1-Dichloropropene	75	7.000	6.994	0.006	97	421225	5.00	5.33	
58 Isobutyl alcohol	41	7.195	7.195	0.000	93	117688	125.1	102.9	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	90	129178	10.0	9.44	
60 Benzene	78	7.262	7.256	0.006	96	1277743	5.00	5.31	
61 1,2-Dichloroethane	62	7.336	7.323	0.013	97	332311	5.00	4.91	
63 Tert-amyl methyl ether	73	7.458	7.451	0.007	99	809087	5.00	5.04	
* 64 Fluorobenzene (IS)	96	7.665	7.665	0.000	99	2470352	10.0	10.0	
65 n-Heptane	43	7.677	7.671	0.006	89	439945	5.00	4.80	
67 n-Butanol	56	8.079	8.079	0.000	88	232186	250.2	248.4	
68 Trichloroethene	95	8.140	8.134	0.006	98	387256	5.00	6.11	
69 Methylcyclohexane	83	8.451	8.445	0.006	92	591717	5.00	5.45	
70 1,2-Dichloropropane	63	8.476	8.470	0.006	86	303475	5.00	4.90	
71 2-ethoxy-2-methyl butane	87	8.488	8.488	0.000	95	459187	5.00	5.13	
72 Methyl methacrylate	69	8.567	8.561	0.006	86	166093	5.00	5.23	
74 Dibromomethane	93	8.579	8.579	0.000	96	164666	5.00	5.30	
73 1,4-Dioxane	88	8.610	8.622	-0.012	27	15073	125.1	90.4	
76 Dichlorobromomethane	83	8.823	8.817	0.006	99	380180	5.00	5.14	
77 2-Nitropropane	41	9.097	9.104	-0.007	96	36911	5.00	4.11	
80 1-Bromo-2-chloroethane	63	9.207	9.207	0.000	98	311084	5.00	4.61	
81 cis-1,3-Dichloropropene	75	9.372	9.366	0.006	97	446400	5.00	4.86	
82 4-Methyl-2-pentanone (MIBK)	43	9.549	9.549	0.000	95	2638589	62.6	62.1	
$ 83 Toluene-d8 (Surr)	98	9.677	9.671	0.006	93	2391612	10.0	9.78	
84 Toluene	92	9.750	9.750	0.000	98	830106	5.00	5.53	
96 trans-1,3-Dichloropropene	75	10.012	10.012	0.000	91	393834	5.00	5.25	
98 Ethyl methacrylate	69	10.073	10.073	0.000	88	349991	5.00	5.41	
99 1,1,2-Trichloroethane	97	10.219	10.213	0.006	89	245603	5.00	5.37	
100 Tetrachloroethene	166	10.298	10.298	0.000	98	568935	5.00	7.96	
101 1,3-Dichloropropane	76	10.378	10.378	0.000	88	400066	5.00	5.17	
102 2-Hexanone	43	10.433	10.433	0.000	95	2003811	62.6	64.9	
104 Chlorodibromomethane	129	10.591	10.591	0.000	89	271769	5.00	4.93	
105 Ethylene Dibromide	107	10.701	10.695	0.006	99	230711	5.00	5.19	
* 106 Chlorobenzene-d5 (IS)	117	11.134	11.128	0.006	85	1877169	10.0	10.0	
107 1-Chlorohexane	91	11.140	11.140	0.000	95	459182	5.00	5.29	
108 Chlorobenzene	112	11.158	11.158	0.000	96	918898	5.00	5.30	
110 1,1,1,2-Tetrachloroethane	131	11.237	11.237	0.000	96	305119	5.00	5.10	
111 Ethylbenzene	91	11.243	11.243	0.000	98	1610238	5.00	5.55	
112 m-Xylene & p-Xylene	106	11.359	11.353	0.006	100	1263978	10.0	11.2	
113 o-Xylene	106	11.688	11.682	0.006	96	611926	5.00	5.49	
114 Styrene	104	11.701	11.701	0.000	94	1050479	5.00	5.59	
115 Bromoform	173	11.853	11.853	0.000	97	162185	5.00	4.57	
116 Isopropylbenzene	105	11.981	11.981	0.000	95	1617633	5.00	5.68	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 119 4-Bromofluorobenzene (Surr)	95	12.127	12.121	0.006	92	880876	10.0	9.86	
120 1,1,2,2-Tetrachloroethane	83	12.231	12.231	0.000	93	318505	5.00	5.57	
121 Bromobenzene	156	12.243	12.243	0.000	96	387665	5.00	5.33	
122 trans-1,4-Dichloro-2-butene	53	12.255	12.255	0.000	92	260290	25.0	16.8	
123 1,2,3-Trichloropropane	110	12.274	12.274	0.000	83	85986	5.00	5.51	
124 N-Propylbenzene	91	12.310	12.310	0.000	99	1930789	5.00	5.83	
125 2-Chlorotoluene	126	12.383	12.383	0.000	97	381071	5.00	5.65	
126 1,3,5-Trimethylbenzene	105	12.444	12.444	0.000	94	1385205	5.00	5.84	
127 4-Chlorotoluene	126	12.475	12.475	0.000	97	403098	5.00	5.71	
128 tert-Butylbenzene	134	12.682	12.682	0.000	92	282914	5.00	5.51	
130 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	97	1427893	5.00	5.81	
131 sec-Butylbenzene	105	12.847	12.847	0.000	94	1829688	5.00	6.04	
132 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	791593	5.00	5.37	
133 4-Isopropyltoluene	119	12.950	12.950	0.000	97	1577188	5.00	5.97	
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1048855	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.017	13.017	0.000	96	818630	5.00	5.39	
136 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	98	623141	5.00	5.50	
137 Benzyl chloride	126	13.097	13.097	0.000	98	121315	5.00	5.50	
138 p-Diethylbenzene	119	13.152	13.152	0.000	92	929633	5.00	5.70	
139 n-Butylbenzene	92	13.243	13.243	0.000	98	813784	5.00	5.85	
140 1,2-Dichlorobenzene	146	13.280	13.273	0.007	99	743027	5.00	5.30	
142 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	89	42682	5.00	4.64	
143 1,3,5-Trichlorobenzene	180	13.938	13.938	0.000	98	617252	5.00	5.03	
144 1,2,4-Trichlorobenzene	180	14.359	14.359	0.000	94	541129	5.00	4.84	
145 Hexachlorobutadiene	225	14.438	14.438	0.000	94	269680	5.00	4.86	
146 Naphthalene	128	14.535	14.535	0.000	97	991315	5.00	5.03	
147 1,2,3-Trichlorobenzene	180	14.676	14.676	0.000	96	472691	5.00	4.73	
148 2-Methylnaphthalene	142	15.285	15.285	0.000	92	483241	5.00	3.93	
160 Pentane	43	3.001	2.995	0.006	96	462146	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

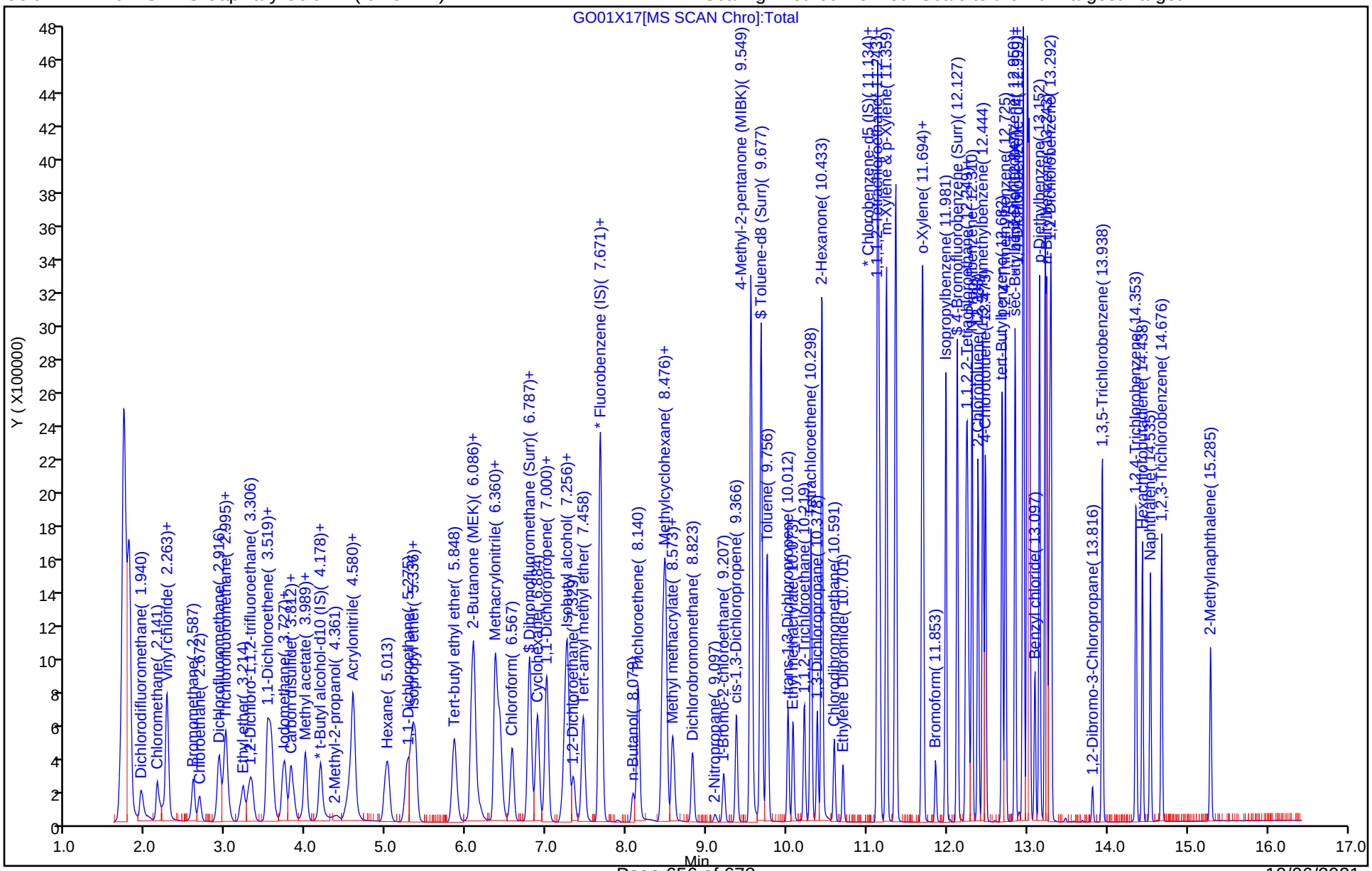
MSV_Q_EE_00004	Amount Added:	5.38	Units: uL	
MSV_Q_ETBR_00008	Amount Added:	5.38	Units: uL	
MSV_LCS_VOC#1_00020	Amount Added:	5.38	Units: uL	
MSV_QC_Gas826_00038	Amount Added:	5.38	Units: uL	
MSV_29_826ISS_00023	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 01-Oct-2021 19:10:40 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X17.D				
Injection Date:	01-Oct-2021 14:04:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	410-56784-A-7 MS			Worklist Smp#:	20
Client ID:	HD-COD-SW-15-0/1-0 MS				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X17.D				
Lims ID:	410-56784-A-7 MS				
Client ID:	HD-COD-SW-15-0/1-0 MS				
Sample Type:	MS				
Inject. Date:	01-Oct-2021 14:04:30	ALS Bottle#:	17	Worklist Smp#:	20
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0040424-020				
Misc. Info.:	410-56784-A-7 MS				
Operator ID:	SRK36897	Instrument ID:	16334		
Method:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	01-Oct-2021 19:10:12	Calib Date:	27-Jul-2021 21:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1602				

First Level Reviewer: beckerk Date: 01-Oct-2021 18:59:33

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	10.0	9.65	96.45
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.44	94.36
$ 83 Toluene-d8 (Surr)	10.0	9.78	97.84
$ 119 4-Bromofluorobenzene (Surr)	10.0	9.86	98.57

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MSD MSD Lab Sample ID: 410-56784-7 MSD

Matrix: Water Lab File ID: GO01X18.D

Analysis Method: 8260D Date Collected: 09/24/2021 11:30

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 14:26

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.: 177560 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.15		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.62		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	5.53		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.37		0.50	0.060
75-34-3	1,1-Dichloroethane	5.01		0.50	0.070
75-35-4	1,1-Dichloroethene	5.93		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	5.24		0.50	0.060
107-06-2	1,2-Dichloroethane	4.82		0.50	0.050
78-87-5	1,2-Dichloropropane	4.85		0.50	0.060
78-93-3	2-Butanone (MEK)	61.0		5.0	0.60
591-78-6	2-Hexanone	64.0		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	60.9		5.0	0.70
67-64-1	Acetone	57.3		5.0	0.90
71-43-2	Benzene	5.25		0.50	0.050
74-97-5	Bromochloromethane	5.26		0.50	0.050
75-27-4	Bromodichloromethane	5.14		0.50	0.050
75-25-2	Bromoform	4.59		1.0	0.30
74-83-9	Bromomethane	5.21		0.50	0.070
75-15-0	Carbon disulfide	5.50		1.0	0.060
56-23-5	Carbon tetrachloride	5.32		0.50	0.070
108-90-7	Chlorobenzene	5.21		0.50	0.060
75-00-3	Chloroethane	4.88		0.50	0.070
67-66-3	Chloroform	5.54		0.50	0.090
74-87-3	Chloromethane	4.89		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	6.34		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.87		0.50	0.050
124-48-1	Dibromochloromethane	4.88		0.50	0.070
100-41-4	Ethylbenzene	5.46		0.50	0.060
1634-04-4	Methyl tert-butyl ether	5.10		0.50	0.050
75-09-2	Methylene Chloride	5.17		0.50	0.070
100-42-5	Styrene	5.49		0.50	0.050
127-18-4	Tetrachloroethene	7.89		0.50	0.060
108-88-3	Toluene	5.57		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	5.49		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	5.25		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-56784-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MSD MSD Lab Sample ID: 410-56784-7 MSD

Matrix: Water Lab File ID: GO01X18.D

Analysis Method: 8260D Date Collected: 09/24/2021 11:30

Sample wt/vol: 25(mL) Date Analyzed: 10/01/2021 14:26

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.: 177560 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	6.08		0.50	0.060
75-01-4	Vinyl chloride	5.00		0.50	0.10
1330-20-7	Xylenes, Total	16.5		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		80-120
1868-53-7	Dibromofluoromethane (Surr)	96		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X18.D
Lims ID: 410-56784-A-7 MSD
Client ID: HD-COD-SW-15-0/1-0 MSD
Sample Type: MSD
Inject. Date: 01-Oct-2021 14:26:30 ALS Bottle#: 18 Worklist Smp#: 21
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0040424-021
Misc. Info.: 410-56784-A-7 MSD
Operator ID: SRK36897 Instrument ID: 16334

Method: \\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Oct-2021 19:10:12 Calib Date: 27-Jul-2021 21:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1602

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.947	1.940	0.007	99	358656	5.00	5.74	
5 Chloromethane	50	2.142	2.135	0.007	99	381763	5.00	4.89	
8 Vinyl chloride	62	2.258	2.257	0.001	98	378515	5.00	5.00	
7 Butadiene	39	2.264	2.257	0.007	92	459038	5.00	5.53	
9 Bromomethane	94	2.593	2.587	0.006	90	281846	5.00	5.21	
10 Chloroethane	64	2.672	2.666	0.006	99	220414	5.00	4.88	
12 Dichlorofluoromethane	67	2.916	2.904	0.012	97	545763	5.00	5.20	
13 Trichlorofluoromethane	101	2.977	2.965	0.012	97	433441	5.00	4.46	
15 Ethyl ether	59	3.215	3.208	0.007	89	246603	5.03	5.01	
17 1,2-Dichloro-1,1,2-trifluoroetha	67	3.306	3.300	0.006	91	368523	5.00	5.11	
19 1,1-Dichloroethene	96	3.519	3.507	0.012	97	309509	5.00	5.93	
20 112TCTFE	101	3.562	3.556	0.006	94	321367	5.00	5.68	
21 Acetone	43	3.574	3.568	0.006	100	529106	62.6	57.3	
23 Iodomethane	142	3.708	3.702	0.006	98	504967	5.00	5.11	
24 Ethyl bromide	108	3.739	3.733	0.006	97	253560	5.07	5.46	
22 Isopropyl alcohol	45	3.806	3.800	0.006	25	37112	37.5	25.2	
25 Carbon disulfide	76	3.812	3.800	0.012	98	993253	5.00	5.50	
27 Methyl acetate	43	3.983	3.964	0.019	94	122180	5.00	4.33	
28 3-Chloro-1-propene	41	3.995	3.983	0.012	92	413939	5.00	4.64	
29 Methylene Chloride	84	4.178	4.172	0.006	87	309576	5.00	5.17	
* 30 t-Butyl alcohol-d10 (IS)	65	4.251	4.257	-0.006	92	178274	50.0	50.0	
31 2-Methyl-2-propanol	59	4.385	4.379	0.006	99	135131	50.0	44.2	
32 Acrylonitrile	53	4.531	4.531	0.000	98	322077	25.0	25.1	
33 Methyl tert-butyl ether	73	4.586	4.574	0.012	89	770788	5.00	5.10	
34 trans-1,2-Dichloroethene	96	4.586	4.580	0.006	97	320644	5.00	5.49	
35 Hexane	57	5.013	5.007	0.006	90	429909	5.00	5.10	
37 1,1-Dichloroethane	63	5.257	5.245	0.012	96	514705	5.00	5.01	
38 Isopropyl ether	45	5.324	5.312	0.012	94	865539	5.00	4.57	
39 2-Chloro-1,3-butadiene	53	5.367	5.360	0.007	89	453056	5.00	5.38	
40 Tert-butyl ethyl ether	59	5.854	5.842	0.012	97	873102	5.00	5.05	
41 2-Butanone (MEK)	43	6.056	6.055	0.001	99	1079485	62.6	61.0	
42 cis-1,2-Dichloroethene	96	6.092	6.086	0.006	79	412518	5.00	6.34	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
43 2,2-Dichloropropane	77	6.098	6.098	0.000	85	431884	5.00	5.68	
45 Propionitrile	54	6.177	6.165	0.012	99	147091	37.5	32.3	
48 Methacrylonitrile	67	6.360	6.354	0.006	89	674811	37.5	39.5	
49 Chlorobromomethane	128	6.415	6.409	0.006	90	158342	5.00	5.26	
50 Tetrahydrofuran	71	6.421	6.421	0.000	72	132613	25.0	26.3	
51 Chloroform	83	6.574	6.561	0.013	92	566082	5.00	5.54	
$ 52 Dibromofluoromethane (Surr)	113	6.787	6.775	0.012	94	595565	10.0	9.55	
53 1,1,1-Trichloroethane	97	6.793	6.787	0.006	78	494959	5.00	5.62	
54 Cyclohexane	56	6.891	6.878	0.013	89	525246	5.00	5.12	
56 Carbon tetrachloride	117	7.000	6.994	0.006	92	412360	5.00	5.32	
57 1,1-Dichloropropene	75	7.000	6.994	0.006	96	428212	5.00	5.35	
58 Isobutyl alcohol	41	7.189	7.195	-0.006	92	115106	125.1	99.4	
$ 59 1,2-Dichloroethane-d4 (Surr)	102	7.232	7.232	0.000	89	133049	10.0	9.60	
60 Benzene	78	7.263	7.256	0.007	97	1280845	5.00	5.25	
61 1,2-Dichloroethane	62	7.336	7.323	0.013	97	330296	5.00	4.82	
63 Tert-amyl methyl ether	73	7.458	7.451	0.007	99	818698	5.00	5.04	
* 64 Fluorobenzene (IS)	96	7.671	7.665	0.006	99	2502065	10.0	10.0	
65 n-Heptane	43	7.677	7.671	0.006	86	436796	5.00	4.71	
67 n-Butanol	56	8.080	8.079	0.001	87	241690	250.2	253.1	
68 Trichloroethene	95	8.147	8.134	0.013	98	390256	5.00	6.08	
69 Methylcyclohexane	83	8.445	8.445	0.000	91	589814	5.00	5.37	
70 1,2-Dichloropropane	63	8.476	8.470	0.006	88	304694	5.00	4.85	
71 2-ethoxy-2-methyl butane	87	8.488	8.488	0.000	94	463251	5.00	5.11	
72 Methyl methacrylate	69	8.561	8.561	0.000	87	169711	5.00	5.23	
74 Dibromomethane	93	8.586	8.579	0.007	94	163709	5.00	5.20	
73 1,4-Dioxane	88	8.610	8.622	-0.012	29	10988	125.1	64.5	
76 Dichlorobromomethane	83	8.823	8.817	0.006	99	385271	5.00	5.14	
77 2-Nitropropane	41	9.110	9.104	0.006	98	38903	5.00	4.24	
80 1-Bromo-2-chloroethane	63	9.213	9.207	0.006	98	324847	5.00	4.75	
81 cis-1,3-Dichloropropene	75	9.372	9.366	0.006	97	453437	5.00	4.87	
82 4-Methyl-2-pentanone (MIBK)	43	9.549	9.549	0.000	95	2645700	62.6	60.9	
$ 83 Toluene-d8 (Surr)	98	9.677	9.671	0.006	93	2431344	10.0	9.80	
84 Toluene	92	9.750	9.750	0.000	98	848578	5.00	5.57	
96 trans-1,3-Dichloropropene	75	10.012	10.012	0.000	91	399559	5.00	5.25	
98 Ethyl methacrylate	69	10.079	10.073	0.006	88	347465	5.00	5.29	
99 1,1,2-Trichloroethane	97	10.213	10.213	0.000	90	249364	5.00	5.37	
100 Tetrachloroethene	166	10.299	10.298	0.001	98	572257	5.00	7.89	
101 1,3-Dichloropropane	76	10.378	10.378	0.000	88	407065	5.00	5.19	
102 2-Hexanone	43	10.433	10.433	0.000	95	2018817	62.6	64.0	
104 Chlorodibromomethane	129	10.591	10.591	0.000	89	273005	5.00	4.88	
105 Ethylene Dibromide	107	10.695	10.695	0.000	99	236251	5.00	5.24	
* 106 Chlorobenzene-d5 (IS)	117	11.134	11.128	0.006	84	1905201	10.0	10.0	
107 1-Chlorohexane	91	11.140	11.140	0.000	95	465741	5.00	5.29	
108 Chlorobenzene	112	11.158	11.158	0.000	95	917098	5.00	5.21	
110 1,1,1,2-Tetrachloroethane	131	11.237	11.237	0.000	94	312189	5.00	5.15	
111 Ethylbenzene	91	11.244	11.243	0.001	98	1607310	5.00	5.46	
112 m-Xylene & p-Xylene	106	11.359	11.353	0.006	100	1270378	10.0	11.1	
113 o-Xylene	106	11.683	11.682	0.000	96	606171	5.00	5.36	
114 Styrene	104	11.701	11.701	0.000	94	1046850	5.00	5.49	
115 Bromoform	173	11.853	11.853	0.000	96	165580	5.00	4.59	
116 Isopropylbenzene	105	11.981	11.981	0.000	95	1634760	5.00	5.66	
$ 119 4-Bromofluorobenzene (Surr)	95	12.128	12.121	0.007	92	907501	10.0	10.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
120 1,1,2,2-Tetrachloroethane	83	12.231	12.231	0.000	94	319374	5.00	5.53	
121 Bromobenzene	156	12.243	12.243	0.000	96	396260	5.00	5.40	
122 trans-1,4-Dichloro-2-butene	53	12.256	12.255	0.001	91	261241	25.0	16.5	
123 1,2,3-Trichloropropane	110	12.274	12.274	0.000	82	86764	5.00	5.51	
124 N-Propylbenzene	91	12.310	12.310	0.000	99	1943749	5.00	5.81	
125 2-Chlorotoluene	126	12.384	12.383	0.001	97	384220	5.00	5.64	
126 1,3,5-Trimethylbenzene	105	12.445	12.444	0.001	94	1385992	5.00	5.79	
127 4-Chlorotoluene	126	12.481	12.475	0.006	97	399644	5.00	5.61	
128 tert-Butylbenzene	134	12.682	12.682	0.000	92	283036	5.00	5.45	
130 1,2,4-Trimethylbenzene	105	12.725	12.725	0.000	98	1433866	5.00	5.78	
131 sec-Butylbenzene	105	12.847	12.847	0.000	94	1823887	5.00	5.97	
132 1,3-Dichlorobenzene	146	12.944	12.944	0.000	98	800788	5.00	5.38	
133 4-Isopropyltoluene	119	12.951	12.950	0.001	97	1593567	5.00	5.97	
* 134 1,4-Dichlorobenzene-d4	152	12.999	12.999	0.000	94	1059177	10.0	10.0	
135 1,4-Dichlorobenzene	146	13.018	13.017	0.001	95	814906	5.00	5.32	
136 1,2,3-Trimethylbenzene	120	13.030	13.030	0.000	98	623856	5.00	5.46	
137 Benzyl chloride	126	13.097	13.097	0.000	98	122020	5.00	5.47	
138 p-Diethylbenzene	119	13.152	13.152	0.000	92	932675	5.00	5.66	
139 n-Butylbenzene	92	13.243	13.243	0.000	97	814390	5.00	5.80	
140 1,2-Dichlorobenzene	146	13.280	13.273	0.007	99	744470	5.00	5.26	
142 1,2-Dibromo-3-Chloropropane	155	13.816	13.816	0.000	87	43207	5.00	4.65	
143 1,3,5-Trichlorobenzene	180	13.938	13.938	0.000	98	627814	5.00	5.07	
144 1,2,4-Trichlorobenzene	180	14.359	14.359	0.000	94	551321	5.00	4.88	
145 Hexachlorobutadiene	225	14.438	14.438	0.000	97	271645	5.00	4.85	
146 Naphthalene	128	14.536	14.535	0.001	97	999823	5.00	5.03	
147 1,2,3-Trichlorobenzene	180	14.676	14.676	0.000	95	476411	5.00	4.72	
148 2-Methylnaphthalene	142	15.285	15.285	0.000	91	528320	5.00	4.26	
160 Pentane	43	3.001	2.995	0.006	96	462167	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

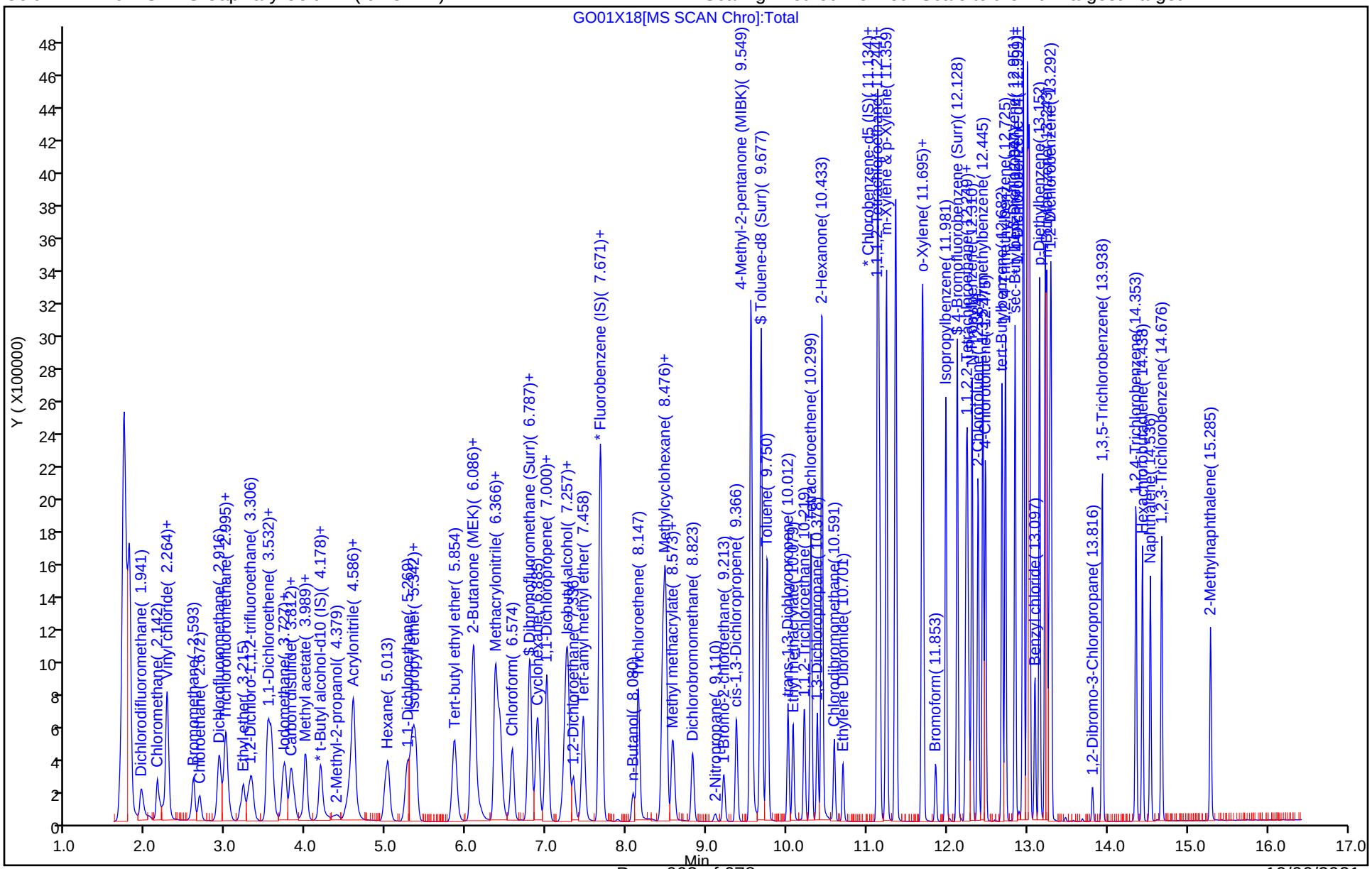
MSV_Q_EE_00004	Amount Added:	5.38	Units: uL	
MSV_Q_ETBR_00008	Amount Added:	5.38	Units: uL	
MSV_LCS_VOC#1_00020	Amount Added:	5.38	Units: uL	
MSV_QC_Gas826_00038	Amount Added:	5.38	Units: uL	
MSV_29_826ISS_00023	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 01-Oct-2021 19:10:42 Chrom Revision: 2.3 22-Sep-2021 15:38:46

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X18.D				
Injection Date:	01-Oct-2021 14:26:30	Instrument ID:	16334	Operator ID:	SRK36897
Lims ID:	410-56784-A-7 MSD			Worklist Smp#:	21
Client ID:	HD-COD-SW-15-0/1-0 MSD				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	MSV_16334_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\GO01X18.D				
Lims ID:	410-56784-A-7 MSD				
Client ID:	HD-COD-SW-15-0/1-0 MSD				
Sample Type:	MSD				
Inject. Date:	01-Oct-2021 14:26:30	ALS Bottle#:	18	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0040424-021				
Misc. Info.:	410-56784-A-7 MSD				
Operator ID:	SRK36897	Instrument ID:	16334		
Method:	\\chromfs\Lancaster\ChromData\16334\20211001-40424.b\MSV_16334_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	01-Oct-2021 19:10:12	Calib Date:	27-Jul-2021 21:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\16334\20210727-35331.b\GL27X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1602				

Compound	Amount Added	Amount Recovered	% Rec.
$ 52 Dibromofluoromethane (Surr)	10.0	9.55	95.53
$ 59 1,2-Dichloroethane-d4 (Surr)	10.0	9.60	95.96
$ 83 Toluene-d8 (Surr)	10.0	9.80	98.00
$ 119 4-Bromofluorobenzene (Surr)	10.0	10.0	100.06

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-56784-1

SDG No.:

Instrument ID: 16334 Start Date: 07/27/2021 15:41

Analysis Batch Number: 153227 End Date: 07/28/2021 01:07

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-153227/1		07/27/2021 15:41	1	GL27T02.D	R-624SilMS 30m 0.25(mm)
IC 410-153227/3		07/27/2021 16:17	1		R-624SilMS 30m 0.25(mm)
IC 410-153227/4		07/27/2021 16:39	1		R-624SilMS 30m 0.25(mm)
IC 410-153227/5		07/27/2021 17:01	1		R-624SilMS 30m 0.25(mm)
IC 410-153227/6		07/27/2021 17:23	1		R-624SilMS 30m 0.25(mm)
IC 410-153227/7		07/27/2021 17:45	1		R-624SilMS 30m 0.25(mm)
IC 410-153227/8		07/27/2021 18:07	1		R-624SilMS 30m 0.25(mm)
IC 410-153227/9		07/27/2021 18:29	1		R-624SilMS 30m 0.25(mm)
IC 410-153227/12		07/27/2021 19:35	1	GL27X12.D	R-624SilMS 30m 0.25(mm)
ICIS 410-153227/13		07/27/2021 19:57	1	GL27X13.D	R-624SilMS 30m 0.25(mm)
IC 410-153227/14		07/27/2021 20:19	1	GL27X14.D	R-624SilMS 30m 0.25(mm)
IC 410-153227/15		07/27/2021 20:41	1	GL27X15.D	R-624SilMS 30m 0.25(mm)
IC 410-153227/16		07/27/2021 21:03	1	GL27X16.D	R-624SilMS 30m 0.25(mm)
IC 410-153227/17		07/27/2021 21:25	1	GL27X17.D	R-624SilMS 30m 0.25(mm)
IC 410-153227/18		07/27/2021 21:47	1	GL27X18.D	R-624SilMS 30m 0.25(mm)
ICV 410-153227/19		07/27/2021 22:09	1	GL27X19.D	R-624SilMS 30m 0.25(mm)
ICV 410-153227/10		07/28/2021 01:07	1		R-624SilMS 30m 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-56784-1

SDG No.:

Instrument ID: 16334 Start Date: 10/01/2021 07:49

Analysis Batch Number: 177560 End Date: 10/01/2021 17:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-177560/1		10/01/2021 07:49	1	GO01T01.D	R-624SilMS 30m 0.25(mm)
CCVIS 410-177560/3		10/01/2021 08:31	1	GO01X02.D	R-624SilMS 30m 0.25(mm)
LCS 410-177560/4		10/01/2021 08:53	1	GO01X03.D	R-624SilMS 30m 0.25(mm)
LCSD 410-177560/5		10/01/2021 09:15	1	GO01X04.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		10/01/2021 09:37	1		R-624SilMS 30m 0.25(mm)
MB 410-177560/7		10/01/2021 10:01	1	GO01X06.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		10/01/2021 10:23	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		10/01/2021 10:45	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		10/01/2021 11:07	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		10/01/2021 11:52	10		R-624SilMS 30m 0.25(mm)
ZZZZZ		10/01/2021 12:14	10		R-624SilMS 30m 0.25(mm)
ZZZZZ		10/01/2021 12:36	10		R-624SilMS 30m 0.25(mm)
ZZZZZ		10/01/2021 13:20	1		R-624SilMS 30m 0.25(mm)
410-56784-7	HD-COD-SW-15-0/1-0	10/01/2021 13:42	1	GO01X16.D	R-624SilMS 30m 0.25(mm)
410-56784-7 MS	HD-COD-SW-15-0/1-0 MS MS	10/01/2021 14:04	1	GO01X17.D	R-624SilMS 30m 0.25(mm)
410-56784-7 MSD	HD-COD-SW-15-0/1-0 MSD MSD	10/01/2021 14:26	1	GO01X18.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		10/01/2021 15:10	1		R-624SilMS 30m 0.25(mm)
410-56784-1	HD-COD-SW-29-0/1-0	10/01/2021 15:32	1	GO01X21.D	R-624SilMS 30m 0.25(mm)
410-56784-2	HD-COD-SW-8-0/1-0	10/01/2021 15:54	1	GO01X22.D	R-624SilMS 30m 0.25(mm)
410-56784-3	HD-COD-SW-13-0/1-0	10/01/2021 16:16	1	GO01X23.D	R-624SilMS 30m 0.25(mm)
410-56784-4	HD-COD-SW-16-0/1-0	10/01/2021 16:38	1	GO01X24.D	R-624SilMS 30m 0.25(mm)
410-56784-5	HD-COD-SW-17-0/1-0	10/01/2021 17:00	1	GO01X25.D	R-624SilMS 30m 0.25(mm)
410-56784-6	HD-COD-SW-6-0/1-0	10/01/2021 17:22	1	GO01X26.D	R-624SilMS 30m 0.25(mm)
410-56784-8	HD-COD-SW-27-0/1-0	10/01/2021 17:44	1	GO01X27.D	R-624SilMS 30m 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-56784-1

SDG No.:

Instrument ID: 16334 Start Date: 10/05/2021 08:38

Analysis Batch Number: 178764 End Date: 10/05/2021 18:02

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-178764/1		10/05/2021 08:38	1	GO05T01.D	R-624SilMS 30m 0.25(mm)
CCVIS 410-178764/3		10/05/2021 09:22	1	GO05X02.D	R-624SilMS 30m 0.25(mm)
LCS 410-178764/4		10/05/2021 09:44	1	GO05X03.D	R-624SilMS 30m 0.25(mm)
LCSD 410-178764/5		10/05/2021 10:06	1	GO05X04.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		10/05/2021 10:28	1		R-624SilMS 30m 0.25(mm)
MB 410-178764/7		10/05/2021 10:50	1	GO05X06.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		10/05/2021 11:27	50		R-624SilMS 30m 0.25(mm)
ZZZZZ		10/05/2021 11:49	50		R-624SilMS 30m 0.25(mm)
ZZZZZ		10/05/2021 12:11	50		R-624SilMS 30m 0.25(mm)
ZZZZZ		10/05/2021 12:33	500		R-624SilMS 30m 0.25(mm)
ZZZZZ		10/05/2021 12:55	1		R-624SilMS 30m 0.25(mm)
410-56784-14	HD-QC1-0/1-2	10/05/2021 13:16	1	GO05X12.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		10/05/2021 13:39	1		R-624SilMS 30m 0.25(mm)
410-56784-9	HD-COD-SW-28-0/1-0	10/05/2021 14:01	1	GO05X14.D	R-624SilMS 30m 0.25(mm)
410-56784-10	HD-COD-SW-7-0/1-0	10/05/2021 14:23	1	GO05X15.D	R-624SilMS 30m 0.25(mm)
410-56784-11	HD-COD-SW-9-0/1-0	10/05/2021 14:45	1	GO05X16.D	R-624SilMS 30m 0.25(mm)
410-56784-12	HD-QC1-0/1-1	10/05/2021 15:07	1	GO05X17.D	R-624SilMS 30m 0.25(mm)
410-56784-13	HD-COD-SW-26-0/1-0	10/05/2021 15:29	1	GO05X18.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		10/05/2021 15:51	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		10/05/2021 16:13	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		10/05/2021 16:35	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		10/05/2021 16:57	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		10/05/2021 17:19	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		10/05/2021 17:41	50		R-624SilMS 30m 0.25(mm)
ZZZZZ		10/05/2021 18:02	500		R-624SilMS 30m 0.25(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-56784-1

SDG No.:

Batch Number: 153227 Batch Start Date: 07/27/21 15:41 Batch Analyst: Sposito, Kevin A

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Lot#Vial	MSV_29_826ISS 00020	MSV_LCS_ACROL 00013	MSV_LCS_Penta 00005
BFB 410-153227/1		8260D		1 uL	1 uL				
IC 410-153227/12		8260D		25 mL	25 mL	2602	1 uL		
ICIS 410-153227/13		8260D		25 mL	25 mL	2602	1 uL		
IC 410-153227/14		8260D		25 mL	25 mL	2602	1 uL		
IC 410-153227/15		8260D		25 mL	25 mL	2602	1 uL		
IC 410-153227/16		8260D		25 mL	25 mL	2602	1 uL		
IC 410-153227/17		8260D		25 mL	25 mL	2602	1 uL		
IC 410-153227/18		8260D		25 mL	25 mL	2602	1 uL		
ICV 410-153227/19		8260D		25 mL	25 mL	2602	1 uL	12.5 uL	12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LCS_VOC#1 00011	MSV_LL_#1_826 00011	MSV_LL_#2_826 00011	MSV_LL_GAS826 00018	MSV_Q_EE 00004	MSV_Q_ETBR 00008
BFB 410-153227/1		8260D							
IC 410-153227/12		8260D			25 uL	25 uL	25 uL		
ICIS 410-153227/13		8260D			10 uL	10 uL	10 uL		
IC 410-153227/14		8260D			5 uL	5 uL	5 uL		
IC 410-153227/15		8260D			2 uL	2 uL	2 uL		
IC 410-153227/16		8260D			2 uL	2 uL	2 uL		
IC 410-153227/17		8260D			2 uL	2 uL	2 uL		
IC 410-153227/18		8260D			2 uL	2 uL	2 uL		
ICV 410-153227/19		8260D		12.5 uL				12.5 uL	12.5 uL

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-56784-1

SDG No.:

Batch Number: 153227 Batch Start Date: 07/27/21 15:41 Batch Analyst: Sposito, Kevin A

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QC_Gas826 00018	MSV_V_BFB 00006				
BFB 410-153227/1		8260D			1 uL				
IC 410-153227/12		8260D							
ICIS 410-153227/13		8260D							
IC 410-153227/14		8260D							
IC 410-153227/15		8260D							
IC 410-153227/16		8260D							
IC 410-153227/17		8260D							
IC 410-153227/18		8260D							
ICV 410-153227/19		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.: 410-56784-1

SDG No.:

Batch Number: 177560 Batch Start Date: 10/01/21 07:49 Batch Analyst: Knouse, Shian

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloCheck	Headspace	Lot#Vial
BFB 410-177560/1		8260D		1 uL	1 uL				
CCVIS 410-177560/3		8260D		25 mL	25 mL				2602
LCS 410-177560/4		8260D		25 mL	25 mL				2602
LCSD 410-177560/5		8260D		25 mL	25 mL				2602
MB 410-177560/7		8260D		25 mL	25 mL				2602
410-56784-A-7	HD-COD-SW-15-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-56784-A-7 MS	HD-COD-SW-15-0/1-0 MS	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-56784-A-7 MSD	HD-COD-SW-15-0/1-0 MSD	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-56784-A-1	HD-COD-SW-29-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-56784-A-2	HD-COD-SW-8-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-56784-A-3	HD-COD-SW-13-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-56784-A-4	HD-COD-SW-16-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-56784-A-5	HD-COD-SW-17-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-56784-A-6	HD-COD-SW-6-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-56784-A-8	HD-COD-SW-27-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_29_826ISS 00023	MSV_LCS_VOC#1 00020	MSV_LL_#1_826 00019	MSV_LL_#2_826 00018	MSV_LL_GAS826 00037	MSV_Q_EE 00004
BFB 410-177560/1		8260D							
CCVIS 410-177560/3		8260D		1 uL		20 uL	20 uL	20 uL	
LCS 410-177560/4		8260D		1 uL	12.5 uL				12.5 uL
LCSD 410-177560/5		8260D		1 uL	12.5 uL				12.5 uL
MB 410-177560/7		8260D		1 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-56784-1

SDG No.:

Batch Number: 177560 Batch Start Date: 10/01/21 07:49 Batch Analyst: Knouse, Shian

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_29_826ISS 00023	MSV_LCS_VOC#1 00020	MSV_LL_#1_826 00019	MSV_LL_#2_826 00018	MSV_LL_GAS826 00037	MSV_Q_EE 00004
410-56784-A-7	HD-COD-SW-15-0/1-0	8260D	T	1 uL					
410-56784-A-7 MS	HD-COD-SW-15-0/1-0 MS	8260D	T	1 uL	5.38 uL				5.38 uL
410-56784-A-7 MSD	HD-COD-SW-15-0/1-0 MSD	8260D	T	1 uL	5.38 uL				5.38 uL
410-56784-A-1	HD-COD-SW-29-0/1-0	8260D	T	1 uL					
410-56784-A-2	HD-COD-SW-8-0/1-0	8260D	T	1 uL					
410-56784-A-3	HD-COD-SW-13-0/1-0	8260D	T	1 uL					
410-56784-A-4	HD-COD-SW-16-0/1-0	8260D	T	1 uL					
410-56784-A-5	HD-COD-SW-17-0/1-0	8260D	T	1 uL					
410-56784-A-6	HD-COD-SW-6-0/1-0	8260D	T	1 uL					
410-56784-A-8	HD-COD-SW-27-0/1-0	8260D	T	1 uL					

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_ETBR 00008	MSV_QC_Gas826 00038	MSV_V_BFB 00006			
BFB 410-177560/1		8260D				1 uL			
CCVIS 410-177560/3		8260D							
LCS 410-177560/4		8260D		12.5 uL	12.5 uL				
LCSD 410-177560/5		8260D		12.5 uL	12.5 uL				
MB 410-177560/7		8260D							
410-56784-A-7	HD-COD-SW-15-0/1-0	8260D	T						
410-56784-A-7 MS	HD-COD-SW-15-0/1-0 MS	8260D	T	5.38 uL	5.38 uL				
410-56784-A-7 MSD	HD-COD-SW-15-0/1-0 MSD	8260D	T	5.38 uL	5.38 uL				
410-56784-A-1	HD-COD-SW-29-0/1-0	8260D	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-56784-1

SDG No.:

Batch Number: 177560 Batch Start Date: 10/01/21 07:49 Batch Analyst: Knouse, Shian

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_ETBR 00008	MSV_QC_Gas826 00038	MSV_V_BFB 00006			
410-56784-A-2	HD-COD-SW-8-0/1-0	8260D	T						
410-56784-A-3	HD-COD-SW-13-0/1-0	8260D	T						
410-56784-A-4	HD-COD-SW-16-0/1-0	8260D	T						
410-56784-A-5	HD-COD-SW-17-0/1-0	8260D	T						
410-56784-A-6	HD-COD-SW-6-0/1-0	8260D	T						
410-56784-A-8	HD-COD-SW-27-0/1-0	8260D	T						

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-56784-1

SDG No.:

Batch Number: 178764 Batch Start Date: 10/05/21 08:38 Batch Analyst: Knouse, Shian

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloCheck	Headspace	Lot#Vial
BFB 410-178764/1		8260D		1 uL	1 uL				
CCVIS 410-178764/3		8260D		25 mL	25 mL				2602
LCS 410-178764/4		8260D		25 mL	25 mL				2602
LCSD 410-178764/5		8260D		25 mL	25 mL				2602
MB 410-178764/7		8260D		25 mL	25 mL				2602
410-56784-A-14	HD-QC1-0/1-2	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-56784-A-9	HD-COD-SW-28-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-56784-A-10	HD-COD-SW-7-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-56784-A-11	HD-COD-SW-9-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-56784-A-12	HD-QC1-0/1-1	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-56784-A-13	HD-COD-SW-26-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_29_826ISS 00023	MSV_LCS_VOC#1 00021	MSV_LL_#1_826 00019	MSV_LL_#2_826 00018	MSV_LL_GAS826 00038	MSV_Q_EE 00004
BFB 410-178764/1		8260D							
CCVIS 410-178764/3		8260D		1 uL		20 uL	20 uL	20 uL	
LCS 410-178764/4		8260D		1 uL	12.5 uL				12.5 uL
LCSD 410-178764/5		8260D		1 uL	12.5 uL				12.5 uL
MB 410-178764/7		8260D		1 uL					
410-56784-A-14	HD-QC1-0/1-2	8260D	T	1 uL					
410-56784-A-9	HD-COD-SW-28-0/1-0	8260D	T	1 uL					
410-56784-A-10	HD-COD-SW-7-0/1-0	8260D	T	1 uL					
410-56784-A-11	HD-COD-SW-9-0/1-0	8260D	T	1 uL					
410-56784-A-12	HD-QC1-0/1-1	8260D	T	1 uL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-56784-1

SDG No.:

Batch Number: 178764 Batch Start Date: 10/05/21 08:38 Batch Analyst: Knouse, Shian

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_29_826ISS 00023	MSV_LCS_VOC#1 00021	MSV_LL_#1_826 00019	MSV_LL_#2_826 00018	MSV_LL_GAS826 00038	MSV_Q_EE 00004
410-56784-A-13	HD-COD-SW-26-0/1-0	8260D	T	1 uL					

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_ETBR 00008	MSV_QC_Gas826 00039	MSV_V_BFB 00006			
BFB 410-178764/1		8260D				1 uL			
CCVIS 410-178764/3		8260D							
LCS 410-178764/4		8260D		12.5 uL	12.5 uL				
LCSD 410-178764/5		8260D		12.5 uL	12.5 uL				
MB 410-178764/7		8260D							
410-56784-A-14	HD-QC1-0/1-2	8260D	T						
410-56784-A-9	HD-COD-SW-28-0/1-0	8260D	T						
410-56784-A-10	HD-COD-SW-7-0/1-0	8260D	T						
410-56784-A-11	HD-COD-SW-9-0/1-0	8260D	T						
410-56784-A-12	HD-QC1-0/1-1	8260D	T						
410-56784-A-13	HD-COD-SW-26-0/1-0	8260D	T						

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

Environmental Ar[illegible] ain of Custody

eurofins

Lancaster Laboratories Environmental

410-56784 Chain of Custody

Acct # _____ Group _____

Client: Groundwater Sciences Corporation	SAMPLING EVENT		
Project Name/#: ~~2021 Comprehensive Sampling~~ MONTHLY SURFACE WATER	Site ID #: fYNOP, York PA		
Project Manager: Chris O'Neil	P.O. #: 10012.47		
Sampler: Casey Littlefield / Erin Peeling / Kelly Bauer (GSC)	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: Aqueous VOCs via 8260D (Benzene only) Low Level	Preservation Codes: H	Remarks
HD-COD-SW-29-Ø/1-Ø	9/24/21	Ø830	X					SW					3	X		
HD-COD-SW-8-Ø/1-Ø		Ø845														
HD-COD-SW-13-Ø/1-Ø		Ø910														
HD-COD-SW-16-Ø/1-Ø		Ø930														
HD-COD-SW-17-Ø/1-Ø		Ø945														
HD-COD-SW-6-Ø/1-Ø		1015														
HD-COD-SW-15-Ø/1-Ø		1130														
HD-COD-SW-27-Ø/1-Ø		1120														
HD-COD-SW-28-Ø/1-Ø		1245														
HD-COD-SW-7-Ø/1-Ø		1105														

Preservation Codes: H = HCl; T = Thiosulfate; N = HNO_3; B = NaOH; S = H_2SO_4; P = H_3PO_4; O = Other

For Lab Use Only: SF #: _____ SCR #: _____

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: ON-FILE

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
CASEY LITTLEFIELD	9/24/21	1344	R. Wolf	9/24/21	1344
R. Wolf	9/24/21		WP FED EX		
				9/25/21	1019

Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other _____

Temperature upon receipt 0.8 °C

Environmental Analysis Request/Chain of Custody

eurofins

Lancaster Laboratories Environmental

Acct. # _____ Group # _____ Sample # _____

Client: Groundwater Sciences Corporation — MONTHLY SURFACE WATER SAMPLING EVENT			
Project Name/#: ~~2021 Comprehensive Sampling~~	Site ID #: fYNOP, York PA		
Project Manager: Chris O'Neil	P.O. #: 10012.47		
Sampler: Casey Littlefield / ~~Erin Peeling / Kelly Bauer (GSC)~~	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 / NPDES / Surface) / Other	Total # of Containers	Aqueous VOCs via 8260D (standard level, ~~LOW LEVEL~~)	Remarks
~~SW~~ HD-COD-SW-9-Ø/1-Ø	9/24/21	1230	X		GW	3	X	
HD-QC1-Ø/1-1		ØBØØ						DUPLICATE
HD-COD-SW-26-Ø/1-Ø		1Ø35						
HD-QC1-Ø/1-2		—			W	2		TRIP BLANK
HD-COD-SW-15-Ø/1-ØMS		113Ø	X		GW	3		
HD-COD-SW-15-Ø/1-ØMSD		113Ø	X		GW	3		

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: ON-FILE

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
CASEY LITTLEFIELD	9/24/21	1344	R. Hostetter	9/24/21	1344
R. Hostetter	9/24/21		WP FED EX		
			R. Hostetter	9/25/21	1019

Relinquished by Commercial Carrier: UPS _____ FedEx ☑ Other _____

Temperature upon receipt 0.8 °C

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 410-56784-1

Login Number: 56784
List Number: 2
Creator: Hess, Anna

List Source: Eurofins Lancaster Laboratories Env, LLC

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	True	