ANALYTICAL REPORT

Job Number: 410-49448-1

Job Description: fYNOP Monthly Surface Water

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

Attention: Christopher O'Neil

Approved for release.
Nicole Brown
Project Manager
8/5/2021 5:01 PM

Designee for
Marrissa C Williams, Project Manager
2425 New Holland Pike, Lancaster, PA, 17601
(717)556-7246
Marrissa.Williams@eurofinset.com
08/05/2021

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.

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike, Lancaster, PA 17601
Tel (717) 656-2300 Fax (717) 656-2681 www.EurofinsUS.com

Table of Contents

Table of Contents

Definitions/Glossary

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

Job ID: 410-49448-1

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
410-49448-1

Receipt
The samples were received on 7/30/2021 12:24 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.6°C

GC/MS VOA
Method 8260D_LL: The continuing calibration verification (CCV) analyzed on 410-156699 is compliant under 8260C/D method criteria for Acetone. The software does not display the % Drift data to the whole number as is listed in the method (i.e. limit of 20%). When applying the evaluation to a whole number, the check passes the criteria with a value of 20% Drift.

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

Detection Summary

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

Job ID: 410-49448-1

Client Sample ID: HD-COD-SW-6-0/1-0 — Lab Sample ID: 410-49448-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.8	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.11	J	0.50	0.050	ug/L	1		8260D	Total/NA
Trichloroethene	0.072	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-7-0/1-0 — Lab Sample ID: 410-49448-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.8	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	0.19	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.085	J	0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.13	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-8-0/1-0 — Lab Sample ID: 410-49448-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.2	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.13	J	0.50	0.050	ug/L	1		8260D	Total/NA
Trichloroethene	0.099	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-9-0/1-0 — Lab Sample ID: 410-49448-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.4	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	0.078	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.081	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-13-0/1-0 — Lab Sample ID: 410-49448-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.4	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.14	J	0.50	0.050	ug/L	1		8260D	Total/NA
Trichloroethene	0.12	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-15-0/1-0 — Lab Sample ID: 410-49448-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.12	J	0.50	0.060	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.086	J	0.50	0.060	ug/L	1		8260D	Total/NA
Chloroform	0.29	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.67		0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	2.2		0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.83		0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-16-0/1-0 — Lab Sample ID: 410-49448-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.4	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.18	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.062	J	0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.11	J	0.50	0.060	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 410-49448-1

Client Sample ID: HD-COD-SW-17-0/1-0 — Lab Sample ID: 410-49448-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.9	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA
Carbon disulfide	0.089	J	1.0	0.060	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.20	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.23	J	0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.20	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-26-0/1-0 — Lab Sample ID: 410-49448-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.3	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA
Chloroform	0.30	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.12	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	1.3		0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.12	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-27-0/1-0 — Lab Sample ID: 410-49448-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.5	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA
Chloroform	0.16	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.20	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.29	J	0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.24	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-28-0/1-0 — Lab Sample ID: 410-49448-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.0	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA
Chloroform	0.11	J	0.50	0.090	ug/L	1		8260D	Total/NA
Chloromethane	0.063	J	0.50	0.060	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.14	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.10	J	0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.10	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-29-0/1-0 — Lab Sample ID: 410-49448-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.8	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.13	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.064	J	0.50	0.060	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: 410-49448-15

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	0.23	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.28	J	0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.20	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-QC1-0/1-2 — Lab Sample ID: 410-49448-16

No Detections.

This Detection Summary does not include radiochemical test results.

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

Date Collected: 07/29/21 09:45
Date Received: 07/30/21 12:24

Lab Sample ID: 410-49448-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/04/21 23:31	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			08/04/21 23:31	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/04/21 23:31	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			08/04/21 23:31	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			08/04/21 23:31	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			08/04/21 23:31	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			08/04/21 23:31	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			08/04/21 23:31	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			08/04/21 23:31	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			08/04/21 23:31	1
2-Hexanone	ND		5.0	0.60	ug/L			08/04/21 23:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			08/04/21 23:31	1
Acetone	**1.8**	**J ^c**	5.0	0.90	ug/L			08/04/21 23:31	1
Benzene	ND		0.50	0.050	ug/L			08/04/21 23:31	1
Bromochloromethane	ND		0.50	0.050	ug/L			08/04/21 23:31	1
Bromodichloromethane	ND		0.50	0.050	ug/L			08/04/21 23:31	1
Bromoform	ND		1.0	0.30	ug/L			08/04/21 23:31	1
Bromomethane	ND		0.50	0.070	ug/L			08/04/21 23:31	1
Carbon disulfide	ND		1.0	0.060	ug/L			08/04/21 23:31	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			08/04/21 23:31	1
Chlorobenzene	ND		0.50	0.060	ug/L			08/04/21 23:31	1
Chloroethane	ND		0.50	0.070	ug/L			08/04/21 23:31	1
Chloroform	ND		0.50	0.090	ug/L			08/04/21 23:31	1
Chloromethane	ND		0.50	0.060	ug/L			08/04/21 23:31	1
cis-1,2-Dichloroethene	**0.11**	**J**	0.50	0.050	ug/L			08/04/21 23:31	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			08/04/21 23:31	1
Dibromochloromethane	ND		0.50	0.070	ug/L			08/04/21 23:31	1
Ethylbenzene	ND		0.50	0.060	ug/L			08/04/21 23:31	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			08/04/21 23:31	1
Methylene Chloride	ND		0.50	0.070	ug/L			08/04/21 23:31	1
Styrene	ND		0.50	0.050	ug/L			08/04/21 23:31	1
Tetrachloroethene	ND		0.50	0.060	ug/L			08/04/21 23:31	1
Toluene	ND		0.50	0.070	ug/L			08/04/21 23:31	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			08/04/21 23:31	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			08/04/21 23:31	1
Trichloroethene	**0.072**	**J**	0.50	0.060	ug/L			08/04/21 23:31	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/04/21 23:31	1
Xylenes, Total	ND		1.0	0.15	ug/L			08/04/21 23:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*08/04/21 23:31*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*08/04/21 23:31*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*08/04/21 23:31*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*08/04/21 23:31*	*1*

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

Date Collected: 07/29/21 10:35
Date Received: 07/30/21 12:24

Lab Sample ID: 410-49448-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/04/21 23:52	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			08/04/21 23:52	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/04/21 23:52	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			08/04/21 23:52	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			08/04/21 23:52	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			08/04/21 23:52	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			08/04/21 23:52	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			08/04/21 23:52	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			08/04/21 23:52	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			08/04/21 23:52	1
2-Hexanone	ND		5.0	0.60	ug/L			08/04/21 23:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			08/04/21 23:52	1
Acetone	**1.8**	**J ^c**	5.0	0.90	ug/L			08/04/21 23:52	1
Benzene	ND		0.50	0.050	ug/L			08/04/21 23:52	1
Bromochloromethane	ND		0.50	0.050	ug/L			08/04/21 23:52	1
Bromodichloromethane	ND		0.50	0.050	ug/L			08/04/21 23:52	1
Bromoform	ND		1.0	0.30	ug/L			08/04/21 23:52	1
Bromomethane	ND		0.50	0.070	ug/L			08/04/21 23:52	1
Carbon disulfide	ND		1.0	0.060	ug/L			08/04/21 23:52	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			08/04/21 23:52	1
Chlorobenzene	ND		0.50	0.060	ug/L			08/04/21 23:52	1
Chloroethane	ND		0.50	0.070	ug/L			08/04/21 23:52	1
Chloroform	**0.12**	**J**	0.50	0.090	ug/L			08/04/21 23:52	1
Chloromethane	ND		0.50	0.060	ug/L			08/04/21 23:52	1
cis-1,2-Dichloroethene	**0.19**	**J**	0.50	0.050	ug/L			08/04/21 23:52	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			08/04/21 23:52	1
Dibromochloromethane	ND		0.50	0.070	ug/L			08/04/21 23:52	1
Ethylbenzene	ND		0.50	0.060	ug/L			08/04/21 23:52	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			08/04/21 23:52	1
Methylene Chloride	ND		0.50	0.070	ug/L			08/04/21 23:52	1
Styrene	ND		0.50	0.050	ug/L			08/04/21 23:52	1
Tetrachloroethene	**0.085**	**J**	0.50	0.060	ug/L			08/04/21 23:52	1
Toluene	ND		0.50	0.070	ug/L			08/04/21 23:52	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			08/04/21 23:52	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			08/04/21 23:52	1
Trichloroethene	**0.13**	**J**	0.50	0.060	ug/L			08/04/21 23:52	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/04/21 23:52	1
Xylenes, Total	ND		1.0	0.15	ug/L			08/04/21 23:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*08/04/21 23:52*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*08/04/21 23:52*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*08/04/21 23:52*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*08/04/21 23:52*	*1*

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

Date Collected: 07/29/21 08:25
Date Received: 07/30/21 12:24

Lab Sample ID: 410-49448-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/05/21 00:13	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			08/05/21 00:13	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/05/21 00:13	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			08/05/21 00:13	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			08/05/21 00:13	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			08/05/21 00:13	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			08/05/21 00:13	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			08/05/21 00:13	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			08/05/21 00:13	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			08/05/21 00:13	1
2-Hexanone	ND		5.0	0.60	ug/L			08/05/21 00:13	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			08/05/21 00:13	1
Acetone	**2.2**	**J ^c**	5.0	0.90	ug/L			08/05/21 00:13	1
Benzene	ND		0.50	0.050	ug/L			08/05/21 00:13	1
Bromochloromethane	ND		0.50	0.050	ug/L			08/05/21 00:13	1
Bromodichloromethane	ND		0.50	0.050	ug/L			08/05/21 00:13	1
Bromoform	ND		1.0	0.30	ug/L			08/05/21 00:13	1
Bromomethane	ND		0.50	0.070	ug/L			08/05/21 00:13	1
Carbon disulfide	ND		1.0	0.060	ug/L			08/05/21 00:13	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			08/05/21 00:13	1
Chlorobenzene	ND		0.50	0.060	ug/L			08/05/21 00:13	1
Chloroethane	ND		0.50	0.070	ug/L			08/05/21 00:13	1
Chloroform	ND		0.50	0.090	ug/L			08/05/21 00:13	1
Chloromethane	ND		0.50	0.060	ug/L			08/05/21 00:13	1
cis-1,2-Dichloroethene	**0.13**	**J**	0.50	0.050	ug/L			08/05/21 00:13	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			08/05/21 00:13	1
Dibromochloromethane	ND		0.50	0.070	ug/L			08/05/21 00:13	1
Ethylbenzene	ND		0.50	0.060	ug/L			08/05/21 00:13	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			08/05/21 00:13	1
Methylene Chloride	ND		0.50	0.070	ug/L			08/05/21 00:13	1
Styrene	ND		0.50	0.050	ug/L			08/05/21 00:13	1
Tetrachloroethene	ND		0.50	0.060	ug/L			08/05/21 00:13	1
Toluene	ND		0.50	0.070	ug/L			08/05/21 00:13	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			08/05/21 00:13	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			08/05/21 00:13	1
Trichloroethene	**0.099**	**J**	0.50	0.060	ug/L			08/05/21 00:13	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/05/21 00:13	1
Xylenes, Total	ND		1.0	0.15	ug/L			08/05/21 00:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*08/05/21 00:13*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*08/05/21 00:13*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*08/05/21 00:13*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*08/05/21 00:13*	*1*

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

Date Collected: 07/29/21 11:25
Date Received: 07/30/21 12:24

Lab Sample ID: 410-49448-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/05/21 00:34	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			08/05/21 00:34	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/05/21 00:34	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			08/05/21 00:34	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			08/05/21 00:34	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			08/05/21 00:34	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			08/05/21 00:34	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			08/05/21 00:34	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			08/05/21 00:34	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			08/05/21 00:34	1
2-Hexanone	ND		5.0	0.60	ug/L			08/05/21 00:34	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			08/05/21 00:34	1
Acetone	**4.4**	**J ^c**	5.0	0.90	ug/L			08/05/21 00:34	1
Benzene	ND		0.50	0.050	ug/L			08/05/21 00:34	1
Bromochloromethane	ND		0.50	0.050	ug/L			08/05/21 00:34	1
Bromodichloromethane	ND		0.50	0.050	ug/L			08/05/21 00:34	1
Bromoform	ND		1.0	0.30	ug/L			08/05/21 00:34	1
Bromomethane	ND		0.50	0.070	ug/L			08/05/21 00:34	1
Carbon disulfide	ND		1.0	0.060	ug/L			08/05/21 00:34	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			08/05/21 00:34	1
Chlorobenzene	ND		0.50	0.060	ug/L			08/05/21 00:34	1
Chloroethane	ND		0.50	0.070	ug/L			08/05/21 00:34	1
Chloroform	**0.12**	**J**	0.50	0.090	ug/L			08/05/21 00:34	1
Chloromethane	ND		0.50	0.060	ug/L			08/05/21 00:34	1
cis-1,2-Dichloroethene	**0.078**	**J**	0.50	0.050	ug/L			08/05/21 00:34	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			08/05/21 00:34	1
Dibromochloromethane	ND		0.50	0.070	ug/L			08/05/21 00:34	1
Ethylbenzene	ND		0.50	0.060	ug/L			08/05/21 00:34	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			08/05/21 00:34	1
Methylene Chloride	ND		0.50	0.070	ug/L			08/05/21 00:34	1
Styrene	ND		0.50	0.050	ug/L			08/05/21 00:34	1
Tetrachloroethene	**0.081**	**J**	0.50	0.060	ug/L			08/05/21 00:34	1
Toluene	ND		0.50	0.070	ug/L			08/05/21 00:34	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			08/05/21 00:34	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			08/05/21 00:34	1
Trichloroethene	ND		0.50	0.060	ug/L			08/05/21 00:34	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/05/21 00:34	1
Xylenes, Total	ND		1.0	0.15	ug/L			08/05/21 00:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*08/05/21 00:34*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*08/05/21 00:34*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*08/05/21 00:34*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*08/05/21 00:34*	*1*

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

Date Collected: 07/29/21 08:50
Date Received: 07/30/21 12:24

Lab Sample ID: 410-49448-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/05/21 00:54	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			08/05/21 00:54	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/05/21 00:54	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			08/05/21 00:54	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			08/05/21 00:54	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			08/05/21 00:54	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			08/05/21 00:54	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			08/05/21 00:54	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			08/05/21 00:54	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			08/05/21 00:54	1
2-Hexanone	ND		5.0	0.60	ug/L			08/05/21 00:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			08/05/21 00:54	1
Acetone	**2.4**	**J ^c**	5.0	0.90	ug/L			08/05/21 00:54	1
Benzene	ND		0.50	0.050	ug/L			08/05/21 00:54	1
Bromochloromethane	ND		0.50	0.050	ug/L			08/05/21 00:54	1
Bromodichloromethane	ND		0.50	0.050	ug/L			08/05/21 00:54	1
Bromoform	ND		1.0	0.30	ug/L			08/05/21 00:54	1
Bromomethane	ND		0.50	0.070	ug/L			08/05/21 00:54	1
Carbon disulfide	ND		1.0	0.060	ug/L			08/05/21 00:54	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			08/05/21 00:54	1
Chlorobenzene	ND		0.50	0.060	ug/L			08/05/21 00:54	1
Chloroethane	ND		0.50	0.070	ug/L			08/05/21 00:54	1
Chloroform	ND		0.50	0.090	ug/L			08/05/21 00:54	1
Chloromethane	ND		0.50	0.060	ug/L			08/05/21 00:54	1
cis-1,2-Dichloroethene	**0.14**	**J**	0.50	0.050	ug/L			08/05/21 00:54	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			08/05/21 00:54	1
Dibromochloromethane	ND		0.50	0.070	ug/L			08/05/21 00:54	1
Ethylbenzene	ND		0.50	0.060	ug/L			08/05/21 00:54	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			08/05/21 00:54	1
Methylene Chloride	ND		0.50	0.070	ug/L			08/05/21 00:54	1
Styrene	ND		0.50	0.050	ug/L			08/05/21 00:54	1
Tetrachloroethene	ND		0.50	0.060	ug/L			08/05/21 00:54	1
Toluene	ND		0.50	0.070	ug/L			08/05/21 00:54	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			08/05/21 00:54	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			08/05/21 00:54	1
Trichloroethene	**0.12**	**J**	0.50	0.060	ug/L			08/05/21 00:54	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/05/21 00:54	1
Xylenes, Total	ND		1.0	0.15	ug/L			08/05/21 00:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*08/05/21 00:54*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*08/05/21 00:54*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*08/05/21 00:54*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*08/05/21 00:54*	*1*

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

Date Collected: 07/29/21 11:00
Date Received: 07/30/21 12:24

Lab Sample ID: 410-49448-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/04/21 22:09	1
1,1,1-Trichloroethane	**0.12**	**J**	0.50	0.060	ug/L			08/04/21 22:09	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/04/21 22:09	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			08/04/21 22:09	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			08/04/21 22:09	1
1,1-Dichloroethene	**0.086**	**J**	0.50	0.060	ug/L			08/04/21 22:09	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			08/04/21 22:09	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			08/04/21 22:09	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			08/04/21 22:09	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			08/04/21 22:09	1
2-Hexanone	ND		5.0	0.60	ug/L			08/04/21 22:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			08/04/21 22:09	1
Acetone	ND	^c	5.0	0.90	ug/L			08/04/21 22:09	1
Benzene	ND		0.50	0.050	ug/L			08/04/21 22:09	1
Bromochloromethane	ND		0.50	0.050	ug/L			08/04/21 22:09	1
Bromodichloromethane	ND		0.50	0.050	ug/L			08/04/21 22:09	1
Bromoform	ND		1.0	0.30	ug/L			08/04/21 22:09	1
Bromomethane	ND		0.50	0.070	ug/L			08/04/21 22:09	1
Carbon disulfide	ND		1.0	0.060	ug/L			08/04/21 22:09	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			08/04/21 22:09	1
Chlorobenzene	ND		0.50	0.060	ug/L			08/04/21 22:09	1
Chloroethane	ND		0.50	0.070	ug/L			08/04/21 22:09	1
Chloroform	**0.29**	**J**	0.50	0.090	ug/L			08/04/21 22:09	1
Chloromethane	ND		0.50	0.060	ug/L			08/04/21 22:09	1
cis-1,2-Dichloroethene	**0.67**		0.50	0.050	ug/L			08/04/21 22:09	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			08/04/21 22:09	1
Dibromochloromethane	ND		0.50	0.070	ug/L			08/04/21 22:09	1
Ethylbenzene	ND		0.50	0.060	ug/L			08/04/21 22:09	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			08/04/21 22:09	1
Methylene Chloride	ND		0.50	0.070	ug/L			08/04/21 22:09	1
Styrene	ND		0.50	0.050	ug/L			08/04/21 22:09	1
Tetrachloroethene	**2.2**		0.50	0.060	ug/L			08/04/21 22:09	1
Toluene	ND		0.50	0.070	ug/L			08/04/21 22:09	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			08/04/21 22:09	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			08/04/21 22:09	1
Trichloroethene	**0.83**		0.50	0.060	ug/L			08/04/21 22:09	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/04/21 22:09	1
Xylenes, Total	ND		1.0	0.15	ug/L			08/04/21 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*08/04/21 22:09*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*08/04/21 22:09*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 120*		*08/04/21 22:09*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*08/04/21 22:09*	*1*

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

Date Collected: 07/29/21 09:10
Date Received: 07/30/21 12:24

Lab Sample ID: 410-49448-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/05/21 01:15	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			08/05/21 01:15	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/05/21 01:15	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			08/05/21 01:15	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			08/05/21 01:15	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			08/05/21 01:15	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			08/05/21 01:15	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			08/05/21 01:15	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			08/05/21 01:15	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			08/05/21 01:15	1
2-Hexanone	ND		5.0	0.60	ug/L			08/05/21 01:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			08/05/21 01:15	1
Acetone	**1.4**	**J ^c**	5.0	0.90	ug/L			08/05/21 01:15	1
Benzene	ND		0.50	0.050	ug/L			08/05/21 01:15	1
Bromochloromethane	ND		0.50	0.050	ug/L			08/05/21 01:15	1
Bromodichloromethane	ND		0.50	0.050	ug/L			08/05/21 01:15	1
Bromoform	ND		1.0	0.30	ug/L			08/05/21 01:15	1
Bromomethane	ND		0.50	0.070	ug/L			08/05/21 01:15	1
Carbon disulfide	ND		1.0	0.060	ug/L			08/05/21 01:15	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			08/05/21 01:15	1
Chlorobenzene	ND		0.50	0.060	ug/L			08/05/21 01:15	1
Chloroethane	ND		0.50	0.070	ug/L			08/05/21 01:15	1
Chloroform	ND		0.50	0.090	ug/L			08/05/21 01:15	1
Chloromethane	ND		0.50	0.060	ug/L			08/05/21 01:15	1
cis-1,2-Dichloroethene	**0.18**	**J**	0.50	0.050	ug/L			08/05/21 01:15	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			08/05/21 01:15	1
Dibromochloromethane	ND		0.50	0.070	ug/L			08/05/21 01:15	1
Ethylbenzene	ND		0.50	0.060	ug/L			08/05/21 01:15	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			08/05/21 01:15	1
Methylene Chloride	ND		0.50	0.070	ug/L			08/05/21 01:15	1
Styrene	ND		0.50	0.050	ug/L			08/05/21 01:15	1
Tetrachloroethene	**0.062**	**J**	0.50	0.060	ug/L			08/05/21 01:15	1
Toluene	ND		0.50	0.070	ug/L			08/05/21 01:15	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			08/05/21 01:15	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			08/05/21 01:15	1
Trichloroethene	**0.11**	**J**	0.50	0.060	ug/L			08/05/21 01:15	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/05/21 01:15	1
Xylenes, Total	ND		1.0	0.15	ug/L			08/05/21 01:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*80 - 120*		*08/05/21 01:15*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*08/05/21 01:15*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*08/05/21 01:15*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*08/05/21 01:15*	*1*

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

Date Collected: 07/29/21 09:25
Date Received: 07/30/21 12:24

Lab Sample ID: 410-49448-10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/05/21 01:36	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			08/05/21 01:36	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/05/21 01:36	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			08/05/21 01:36	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			08/05/21 01:36	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			08/05/21 01:36	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			08/05/21 01:36	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			08/05/21 01:36	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			08/05/21 01:36	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			08/05/21 01:36	1
2-Hexanone	ND		5.0	0.60	ug/L			08/05/21 01:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			08/05/21 01:36	1
Acetone	**1.9**	**J ^c**	5.0	0.90	ug/L			08/05/21 01:36	1
Benzene	ND		0.50	0.050	ug/L			08/05/21 01:36	1
Bromochloromethane	ND		0.50	0.050	ug/L			08/05/21 01:36	1
Bromodichloromethane	ND		0.50	0.050	ug/L			08/05/21 01:36	1
Bromoform	ND		1.0	0.30	ug/L			08/05/21 01:36	1
Bromomethane	ND		0.50	0.070	ug/L			08/05/21 01:36	1
Carbon disulfide	**0.089**	**J**	1.0	0.060	ug/L			08/05/21 01:36	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			08/05/21 01:36	1
Chlorobenzene	ND		0.50	0.060	ug/L			08/05/21 01:36	1
Chloroethane	ND		0.50	0.070	ug/L			08/05/21 01:36	1
Chloroform	ND		0.50	0.090	ug/L			08/05/21 01:36	1
Chloromethane	ND		0.50	0.060	ug/L			08/05/21 01:36	1
cis-1,2-Dichloroethene	**0.20**	**J**	0.50	0.050	ug/L			08/05/21 01:36	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			08/05/21 01:36	1
Dibromochloromethane	ND		0.50	0.070	ug/L			08/05/21 01:36	1
Ethylbenzene	ND		0.50	0.060	ug/L			08/05/21 01:36	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			08/05/21 01:36	1
Methylene Chloride	ND		0.50	0.070	ug/L			08/05/21 01:36	1
Styrene	ND		0.50	0.050	ug/L			08/05/21 01:36	1
Tetrachloroethene	**0.23**	**J**	0.50	0.060	ug/L			08/05/21 01:36	1
Toluene	ND		0.50	0.070	ug/L			08/05/21 01:36	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			08/05/21 01:36	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			08/05/21 01:36	1
Trichloroethene	**0.20**	**J**	0.50	0.060	ug/L			08/05/21 01:36	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/05/21 01:36	1
Xylenes, Total	ND		1.0	0.15	ug/L			08/05/21 01:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*08/05/21 01:36*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*08/05/21 01:36*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*08/05/21 01:36*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*08/05/21 01:36*	*1*

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

Date Collected: 07/29/21 10:10
Date Received: 07/30/21 12:24

Lab Sample ID: 410-49448-11

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/05/21 01:56	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			08/05/21 01:56	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/05/21 01:56	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			08/05/21 01:56	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			08/05/21 01:56	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			08/05/21 01:56	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			08/05/21 01:56	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			08/05/21 01:56	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			08/05/21 01:56	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			08/05/21 01:56	1
2-Hexanone	ND		5.0	0.60	ug/L			08/05/21 01:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			08/05/21 01:56	1
Acetone	**1.3**	**J ^c**	5.0	0.90	ug/L			08/05/21 01:56	1
Benzene	ND		0.50	0.050	ug/L			08/05/21 01:56	1
Bromochloromethane	ND		0.50	0.050	ug/L			08/05/21 01:56	1
Bromodichloromethane	ND		0.50	0.050	ug/L			08/05/21 01:56	1
Bromoform	ND		1.0	0.30	ug/L			08/05/21 01:56	1
Bromomethane	ND		0.50	0.070	ug/L			08/05/21 01:56	1
Carbon disulfide	ND		1.0	0.060	ug/L			08/05/21 01:56	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			08/05/21 01:56	1
Chlorobenzene	ND		0.50	0.060	ug/L			08/05/21 01:56	1
Chloroethane	ND		0.50	0.070	ug/L			08/05/21 01:56	1
Chloroform	**0.30**	**J**	0.50	0.090	ug/L			08/05/21 01:56	1
Chloromethane	ND		0.50	0.060	ug/L			08/05/21 01:56	1
cis-1,2-Dichloroethene	**0.12**	**J**	0.50	0.050	ug/L			08/05/21 01:56	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			08/05/21 01:56	1
Dibromochloromethane	ND		0.50	0.070	ug/L			08/05/21 01:56	1
Ethylbenzene	ND		0.50	0.060	ug/L			08/05/21 01:56	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			08/05/21 01:56	1
Methylene Chloride	ND		0.50	0.070	ug/L			08/05/21 01:56	1
Styrene	ND		0.50	0.050	ug/L			08/05/21 01:56	1
Tetrachloroethene	**1.3**		0.50	0.060	ug/L			08/05/21 01:56	1
Toluene	ND		0.50	0.070	ug/L			08/05/21 01:56	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			08/05/21 01:56	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			08/05/21 01:56	1
Trichloroethene	**0.12**	**J**	0.50	0.060	ug/L			08/05/21 01:56	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/05/21 01:56	1
Xylenes, Total	ND		1.0	0.15	ug/L			08/05/21 01:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*08/05/21 01:56*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*08/05/21 01:56*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*08/05/21 01:56*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*08/05/21 01:56*	*1*

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

Date Collected: 07/29/21 10:50
Date Received: 07/30/21 12:24

Lab Sample ID: 410-49448-12

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/05/21 02:17	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			08/05/21 02:17	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/05/21 02:17	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			08/05/21 02:17	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			08/05/21 02:17	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			08/05/21 02:17	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			08/05/21 02:17	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			08/05/21 02:17	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			08/05/21 02:17	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			08/05/21 02:17	1
2-Hexanone	ND		5.0	0.60	ug/L			08/05/21 02:17	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			08/05/21 02:17	1
Acetone	**1.5**	**J ^c**	5.0	0.90	ug/L			08/05/21 02:17	1
Benzene	ND		0.50	0.050	ug/L			08/05/21 02:17	1
Bromochloromethane	ND		0.50	0.050	ug/L			08/05/21 02:17	1
Bromodichloromethane	ND		0.50	0.050	ug/L			08/05/21 02:17	1
Bromoform	ND		1.0	0.30	ug/L			08/05/21 02:17	1
Bromomethane	ND		0.50	0.070	ug/L			08/05/21 02:17	1
Carbon disulfide	ND		1.0	0.060	ug/L			08/05/21 02:17	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			08/05/21 02:17	1
Chlorobenzene	ND		0.50	0.060	ug/L			08/05/21 02:17	1
Chloroethane	ND		0.50	0.070	ug/L			08/05/21 02:17	1
Chloroform	**0.16**	**J**	0.50	0.090	ug/L			08/05/21 02:17	1
Chloromethane	ND		0.50	0.060	ug/L			08/05/21 02:17	1
cis-1,2-Dichloroethene	**0.20**	**J**	0.50	0.050	ug/L			08/05/21 02:17	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			08/05/21 02:17	1
Dibromochloromethane	ND		0.50	0.070	ug/L			08/05/21 02:17	1
Ethylbenzene	ND		0.50	0.060	ug/L			08/05/21 02:17	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			08/05/21 02:17	1
Methylene Chloride	ND		0.50	0.070	ug/L			08/05/21 02:17	1
Styrene	ND		0.50	0.050	ug/L			08/05/21 02:17	1
Tetrachloroethene	**0.29**	**J**	0.50	0.060	ug/L			08/05/21 02:17	1
Toluene	ND		0.50	0.070	ug/L			08/05/21 02:17	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			08/05/21 02:17	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			08/05/21 02:17	1
Trichloroethene	**0.24**	**J**	0.50	0.060	ug/L			08/05/21 02:17	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/05/21 02:17	1
Xylenes, Total	ND		1.0	0.15	ug/L			08/05/21 02:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*08/05/21 02:17*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*08/05/21 02:17*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*08/05/21 02:17*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*08/05/21 02:17*	*1*

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

Date Collected: 07/29/21 11:40
Date Received: 07/30/21 12:24

Lab Sample ID: 410-49448-13

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/05/21 02:38	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			08/05/21 02:38	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/05/21 02:38	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			08/05/21 02:38	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			08/05/21 02:38	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			08/05/21 02:38	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			08/05/21 02:38	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			08/05/21 02:38	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			08/05/21 02:38	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			08/05/21 02:38	1
2-Hexanone	ND		5.0	0.60	ug/L			08/05/21 02:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			08/05/21 02:38	1
Acetone	**3.0**	**J ^c**	5.0	0.90	ug/L			08/05/21 02:38	1
Benzene	ND		0.50	0.050	ug/L			08/05/21 02:38	1
Bromochloromethane	ND		0.50	0.050	ug/L			08/05/21 02:38	1
Bromodichloromethane	ND		0.50	0.050	ug/L			08/05/21 02:38	1
Bromoform	ND		1.0	0.30	ug/L			08/05/21 02:38	1
Bromomethane	ND		0.50	0.070	ug/L			08/05/21 02:38	1
Carbon disulfide	ND		1.0	0.060	ug/L			08/05/21 02:38	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			08/05/21 02:38	1
Chlorobenzene	ND		0.50	0.060	ug/L			08/05/21 02:38	1
Chloroethane	ND		0.50	0.070	ug/L			08/05/21 02:38	1
Chloroform	**0.11**	**J**	0.50	0.090	ug/L			08/05/21 02:38	1
Chloromethane	**0.063**	**J**	0.50	0.060	ug/L			08/05/21 02:38	1
cis-1,2-Dichloroethene	**0.14**	**J**	0.50	0.050	ug/L			08/05/21 02:38	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			08/05/21 02:38	1
Dibromochloromethane	ND		0.50	0.070	ug/L			08/05/21 02:38	1
Ethylbenzene	ND		0.50	0.060	ug/L			08/05/21 02:38	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			08/05/21 02:38	1
Methylene Chloride	ND		0.50	0.070	ug/L			08/05/21 02:38	1
Styrene	ND		0.50	0.050	ug/L			08/05/21 02:38	1
Tetrachloroethene	**0.10**	**J**	0.50	0.060	ug/L			08/05/21 02:38	1
Toluene	ND		0.50	0.070	ug/L			08/05/21 02:38	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			08/05/21 02:38	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			08/05/21 02:38	1
Trichloroethene	**0.10**	**J**	0.50	0.060	ug/L			08/05/21 02:38	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/05/21 02:38	1
Xylenes, Total	ND		1.0	0.15	ug/L			08/05/21 02:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*08/05/21 02:38*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*08/05/21 02:38*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*08/05/21 02:38*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*08/05/21 02:38*	*1*

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

Date Collected: 07/29/21 08:15
Date Received: 07/30/21 12:24

Lab Sample ID: 410-49448-14

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/05/21 02:59	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			08/05/21 02:59	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/05/21 02:59	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			08/05/21 02:59	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			08/05/21 02:59	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			08/05/21 02:59	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			08/05/21 02:59	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			08/05/21 02:59	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			08/05/21 02:59	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			08/05/21 02:59	1
2-Hexanone	ND		5.0	0.60	ug/L			08/05/21 02:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			08/05/21 02:59	1
Acetone	**2.8**	**J ^c**	5.0	0.90	ug/L			08/05/21 02:59	1
Benzene	ND		0.50	0.050	ug/L			08/05/21 02:59	1
Bromochloromethane	ND		0.50	0.050	ug/L			08/05/21 02:59	1
Bromodichloromethane	ND		0.50	0.050	ug/L			08/05/21 02:59	1
Bromoform	ND		1.0	0.30	ug/L			08/05/21 02:59	1
Bromomethane	ND		0.50	0.070	ug/L			08/05/21 02:59	1
Carbon disulfide	ND		1.0	0.060	ug/L			08/05/21 02:59	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			08/05/21 02:59	1
Chlorobenzene	ND		0.50	0.060	ug/L			08/05/21 02:59	1
Chloroethane	ND		0.50	0.070	ug/L			08/05/21 02:59	1
Chloroform	ND		0.50	0.090	ug/L			08/05/21 02:59	1
Chloromethane	ND		0.50	0.060	ug/L			08/05/21 02:59	1
cis-1,2-Dichloroethene	**0.13**	**J**	0.50	0.050	ug/L			08/05/21 02:59	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			08/05/21 02:59	1
Dibromochloromethane	ND		0.50	0.070	ug/L			08/05/21 02:59	1
Ethylbenzene	ND		0.50	0.060	ug/L			08/05/21 02:59	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			08/05/21 02:59	1
Methylene Chloride	ND		0.50	0.070	ug/L			08/05/21 02:59	1
Styrene	ND		0.50	0.050	ug/L			08/05/21 02:59	1
Tetrachloroethene	**0.064**	**J**	0.50	0.060	ug/L			08/05/21 02:59	1
Toluene	ND		0.50	0.070	ug/L			08/05/21 02:59	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			08/05/21 02:59	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			08/05/21 02:59	1
Trichloroethene	**0.11**	**J**	0.50	0.060	ug/L			08/05/21 02:59	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/05/21 02:59	1
Xylenes, Total	ND		1.0	0.15	ug/L			08/05/21 02:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*08/05/21 02:59*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*08/05/21 02:59*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*08/05/21 02:59*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*08/05/21 02:59*	*1*

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

Date Collected: 07/29/21 12:00
Date Received: 07/30/21 12:24

Lab Sample ID: 410-49448-15

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/05/21 03:19	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			08/05/21 03:19	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/05/21 03:19	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			08/05/21 03:19	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			08/05/21 03:19	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			08/05/21 03:19	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			08/05/21 03:19	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			08/05/21 03:19	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			08/05/21 03:19	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			08/05/21 03:19	1
2-Hexanone	ND		5.0	0.60	ug/L			08/05/21 03:19	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			08/05/21 03:19	1
Acetone	**1.6**	**J ^c**	5.0	0.90	ug/L			08/05/21 03:19	1
Benzene	ND		0.50	0.050	ug/L			08/05/21 03:19	1
Bromochloromethane	ND		0.50	0.050	ug/L			08/05/21 03:19	1
Bromodichloromethane	ND		0.50	0.050	ug/L			08/05/21 03:19	1
Bromoform	ND		1.0	0.30	ug/L			08/05/21 03:19	1
Bromomethane	ND		0.50	0.070	ug/L			08/05/21 03:19	1
Carbon disulfide	ND		1.0	0.060	ug/L			08/05/21 03:19	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			08/05/21 03:19	1
Chlorobenzene	ND		0.50	0.060	ug/L			08/05/21 03:19	1
Chloroethane	ND		0.50	0.070	ug/L			08/05/21 03:19	1
Chloroform	ND		0.50	0.090	ug/L			08/05/21 03:19	1
Chloromethane	ND		0.50	0.060	ug/L			08/05/21 03:19	1
cis-1,2-Dichloroethene	**0.23**	**J**	0.50	0.050	ug/L			08/05/21 03:19	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			08/05/21 03:19	1
Dibromochloromethane	ND		0.50	0.070	ug/L			08/05/21 03:19	1
Ethylbenzene	ND		0.50	0.060	ug/L			08/05/21 03:19	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			08/05/21 03:19	1
Methylene Chloride	ND		0.50	0.070	ug/L			08/05/21 03:19	1
Styrene	ND		0.50	0.050	ug/L			08/05/21 03:19	1
Tetrachloroethene	**0.28**	**J**	0.50	0.060	ug/L			08/05/21 03:19	1
Toluene	ND		0.50	0.070	ug/L			08/05/21 03:19	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			08/05/21 03:19	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			08/05/21 03:19	1
Trichloroethene	**0.20**	**J**	0.50	0.060	ug/L			08/05/21 03:19	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/05/21 03:19	1
Xylenes, Total	ND		1.0	0.15	ug/L			08/05/21 03:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*08/05/21 03:19*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*08/05/21 03:19*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*08/05/21 03:19*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*08/05/21 03:19*	*1*

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

Date Collected: 07/29/21 00:00
Date Received: 07/30/21 12:24

Lab Sample ID: 410-49448-16

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/04/21 20:46	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			08/04/21 20:46	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/04/21 20:46	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			08/04/21 20:46	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			08/04/21 20:46	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			08/04/21 20:46	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			08/04/21 20:46	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			08/04/21 20:46	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			08/04/21 20:46	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			08/04/21 20:46	1
2-Hexanone	ND		5.0	0.60	ug/L			08/04/21 20:46	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			08/04/21 20:46	1
Acetone	ND	^c	5.0	0.90	ug/L			08/04/21 20:46	1
Benzene	ND		0.50	0.050	ug/L			08/04/21 20:46	1
Bromochloromethane	ND		0.50	0.050	ug/L			08/04/21 20:46	1
Bromodichloromethane	ND		0.50	0.050	ug/L			08/04/21 20:46	1
Bromoform	ND		1.0	0.30	ug/L			08/04/21 20:46	1
Bromomethane	ND		0.50	0.070	ug/L			08/04/21 20:46	1
Carbon disulfide	ND		1.0	0.060	ug/L			08/04/21 20:46	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			08/04/21 20:46	1
Chlorobenzene	ND		0.50	0.060	ug/L			08/04/21 20:46	1
Chloroethane	ND		0.50	0.070	ug/L			08/04/21 20:46	1
Chloroform	ND		0.50	0.090	ug/L			08/04/21 20:46	1
Chloromethane	ND		0.50	0.060	ug/L			08/04/21 20:46	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			08/04/21 20:46	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			08/04/21 20:46	1
Dibromochloromethane	ND		0.50	0.070	ug/L			08/04/21 20:46	1
Ethylbenzene	ND		0.50	0.060	ug/L			08/04/21 20:46	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			08/04/21 20:46	1
Methylene Chloride	ND		0.50	0.070	ug/L			08/04/21 20:46	1
Styrene	ND		0.50	0.050	ug/L			08/04/21 20:46	1
Tetrachloroethene	ND		0.50	0.060	ug/L			08/04/21 20:46	1
Toluene	ND		0.50	0.070	ug/L			08/04/21 20:46	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			08/04/21 20:46	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			08/04/21 20:46	1
Trichloroethene	ND		0.50	0.060	ug/L			08/04/21 20:46	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/04/21 20:46	1
Xylenes, Total	ND		1.0	0.15	ug/L			08/04/21 20:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*		*08/04/21 20:46*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*08/04/21 20:46*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 120*		*08/04/21 20:46*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*08/04/21 20:46*	*1*

Default Detection Limits

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

Job ID: 410-49448-1

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

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

Surrogate Summary

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

Job ID: 410-49448-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-49448-1	HD-COD-SW-6-0/1-0	103	96	106	94
410-49448-2	HD-COD-SW-7-0/1-0	103	96	107	94
410-49448-3	HD-COD-SW-8-0/1-0	102	98	105	94
410-49448-4	HD-COD-SW-9-0/1-0	102	98	107	95
410-49448-5	HD-COD-SW-13-0/1-0	99	97	105	94
410-49448-6	HD-COD-SW-15-0/1-0	103	98	105	95
410-49448-6 MS	HD-COD-SW-15-0/1-0 MS	100	100	106	96
410-49448-6 MSD	HD-COD-SW-15-0/1-0 MSD	100	99	108	95
410-49448-9	HD-COD-SW-16-0/1-0	111	98	110	94
410-49448-10	HD-COD-SW-17-0/1-0	102	96	106	93
410-49448-11	HD-COD-SW-26-0/1-0	103	97	106	95
410-49448-12	HD-COD-SW-27-0/1-0	103	97	107	94
410-49448-13	HD-COD-SW-28-0/1-0	102	96	106	94
410-49448-14	HD-COD-SW-29-0/1-0	101	98	107	95
410-49448-15	HD-QC1-0/1-1	102	96	107	93
410-49448-16	HD-QC1-0/1-2	98	97	106	95
LCS 410-156699/4	Lab Control Sample	108	99	107	94
MB 410-156699/6	Method Blank	100	98	107	95

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 410-156699/6
Matrix: Water
Analysis Batch: 156699

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			08/04/21 19:43	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			08/04/21 19:43	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			08/04/21 19:43	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			08/04/21 19:43	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			08/04/21 19:43	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			08/04/21 19:43	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			08/04/21 19:43	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			08/04/21 19:43	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			08/04/21 19:43	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			08/04/21 19:43	1
2-Hexanone	ND		5.0	0.60	ug/L			08/04/21 19:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			08/04/21 19:43	1
Acetone	ND		5.0	0.90	ug/L			08/04/21 19:43	1
Benzene	ND		0.50	0.050	ug/L			08/04/21 19:43	1
Bromochloromethane	ND		0.50	0.050	ug/L			08/04/21 19:43	1
Bromodichloromethane	ND		0.50	0.050	ug/L			08/04/21 19:43	1
Bromoform	ND		1.0	0.30	ug/L			08/04/21 19:43	1
Bromomethane	ND		0.50	0.070	ug/L			08/04/21 19:43	1
Carbon disulfide	ND		1.0	0.060	ug/L			08/04/21 19:43	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			08/04/21 19:43	1
Chlorobenzene	ND		0.50	0.060	ug/L			08/04/21 19:43	1
Chloroethane	ND		0.50	0.070	ug/L			08/04/21 19:43	1
Chloroform	ND		0.50	0.090	ug/L			08/04/21 19:43	1
Chloromethane	ND		0.50	0.060	ug/L			08/04/21 19:43	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			08/04/21 19:43	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			08/04/21 19:43	1
Dibromochloromethane	ND		0.50	0.070	ug/L			08/04/21 19:43	1
Ethylbenzene	ND		0.50	0.060	ug/L			08/04/21 19:43	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			08/04/21 19:43	1
Methylene Chloride	ND		0.50	0.070	ug/L			08/04/21 19:43	1
Styrene	ND		0.50	0.050	ug/L			08/04/21 19:43	1
Tetrachloroethene	ND		0.50	0.060	ug/L			08/04/21 19:43	1
Toluene	ND		0.50	0.070	ug/L			08/04/21 19:43	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			08/04/21 19:43	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			08/04/21 19:43	1
Trichloroethene	ND		0.50	0.060	ug/L			08/04/21 19:43	1
Vinyl chloride	ND		0.50	0.10	ug/L			08/04/21 19:43	1
Xylenes, Total	ND		1.0	0.15	ug/L			08/04/21 19:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*08/04/21 19:43*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*08/04/21 19:43*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*08/04/21 19:43*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*08/04/21 19:43*	*1*

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

Lab Sample ID: LCS 410-156699/4
Matrix: Water
Analysis Batch: 156699

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	4.61		ug/L		92	71 - 134
1,1,1-Trichloroethane	5.00	4.84		ug/L		97	78 - 126
1,1,2,2-Tetrachloroethane	5.00	4.24		ug/L		85	75 - 123
1,1,2-Trichloroethane	5.00	4.43		ug/L		89	80 - 120
1,1-Dichloroethane	5.00	4.56		ug/L		91	74 - 120
1,1-Dichloroethene	5.00	4.65		ug/L		93	80 - 131
1,2-Dibromoethane (EDB)	5.00	4.42		ug/L		88	80 - 120
1,2-Dichloroethane	5.00	4.95		ug/L		99	69 - 122
1,2-Dichloropropane	5.00	4.68		ug/L		94	80 - 120
2-Butanone (MEK)	62.5	56.8		ug/L		91	59 - 141
2-Hexanone	62.5	59.6		ug/L		95	52 - 140
4-Methyl-2-pentanone (MIBK)	62.5	56.8		ug/L		91	55 - 140
Acetone	62.5	49.4		ug/L		79	60 - 146
Benzene	5.00	4.74		ug/L		95	80 - 120
Bromochloromethane	5.00	5.01		ug/L		100	80 - 120
Bromodichloromethane	5.00	5.03		ug/L		101	73 - 124
Bromoform	5.00	4.70		ug/L		94	49 - 144
Bromomethane	5.00	5.13		ug/L		103	60 - 136
Carbon disulfide	5.00	4.45		ug/L		89	67 - 130
Carbon tetrachloride	5.00	4.88		ug/L		98	64 - 141
Chlorobenzene	5.00	4.42		ug/L		88	80 - 120
Chloroethane	5.00	4.78		ug/L		96	63 - 120
Chloroform	5.00	4.88		ug/L		98	80 - 120
Chloromethane	5.00	5.15		ug/L		103	56 - 124
cis-1,2-Dichloroethene	5.00	4.81		ug/L		96	80 - 122
cis-1,3-Dichloropropene	5.00	4.80		ug/L		96	67 - 121
Dibromochloromethane	5.00	4.54		ug/L		91	64 - 138
Ethylbenzene	5.00	4.37		ug/L		87	80 - 120
Methyl tert-butyl ether	5.00	4.67		ug/L		93	69 - 120
Methylene Chloride	5.00	4.77		ug/L		95	80 - 120
Styrene	5.00	4.49		ug/L		90	80 - 120
Tetrachloroethene	5.00	4.35		ug/L		87	80 - 120
Toluene	5.00	4.29		ug/L		86	80 - 120
trans-1,2-Dichloroethene	5.00	4.64		ug/L		93	80 - 122
trans-1,3-Dichloropropene	5.00	4.51		ug/L		90	61 - 129
Trichloroethene	5.00	4.77		ug/L		95	80 - 120
Vinyl chloride	5.00	5.10		ug/L		102	60 - 125
Xylenes, Total	15.0	13.4		ug/L		89	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*107*		*80 - 120*
Toluene-d8 (Surr)	*94*		*80 - 120*

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

Lab Sample ID: 410-49448-6 MS
Matrix: Water
Analysis Batch: 156699

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	5.11		ug/L		102	71 - 134
1,1,1-Trichloroethane	0.12	J	5.00	5.66		ug/L		111	78 - 126
1,1,2,2-Tetrachloroethane	ND		5.00	4.48		ug/L		90	75 - 123
1,1,2-Trichloroethane	ND		5.00	4.77		ug/L		95	80 - 120
1,1-Dichloroethane	ND		5.00	5.19		ug/L		104	74 - 120
1,1-Dichloroethene	0.086	J	5.00	5.60		ug/L		110	80 - 131
1,2-Dibromoethane (EDB)	ND		5.00	4.72		ug/L		94	80 - 120
1,2-Dichloroethane	ND		5.00	5.18		ug/L		103	69 - 122
1,2-Dichloropropane	ND		5.00	5.06		ug/L		101	80 - 120
2-Butanone (MEK)	ND		62.6	58.3		ug/L		93	59 - 141
2-Hexanone	ND		62.6	61.3		ug/L		98	52 - 140
4-Methyl-2-pentanone (MIBK)	ND		62.6	58.7		ug/L		94	55 - 140
Acetone	ND	^c	62.6	51.1		ug/L		82	60 - 146
Benzene	ND		5.00	5.20		ug/L		104	80 - 120
Bromochloromethane	ND		5.00	5.29		ug/L		106	80 - 120
Bromodichloromethane	ND		5.00	5.34		ug/L		107	73 - 124
Bromoform	ND		5.00	5.01		ug/L		100	49 - 144
Bromomethane	ND		5.00	5.41		ug/L		108	60 - 136
Carbon disulfide	ND		5.00	5.39		ug/L		108	67 - 130
Carbon tetrachloride	ND		5.00	5.84		ug/L		117	64 - 141
Chlorobenzene	ND		5.00	4.96		ug/L		99	80 - 120
Chloroethane	ND		5.00	5.30		ug/L		106	63 - 120
Chloroform	0.29	J	5.00	5.72		ug/L		108	80 - 120
Chloromethane	ND		5.00	5.41		ug/L		108	80 - 120
cis-1,2-Dichloroethene	0.67		5.00	5.91		ug/L		105	80 - 122
cis-1,3-Dichloropropene	ND		5.00	5.08		ug/L		101	67 - 121
Dibromochloromethane	ND		5.00	4.91		ug/L		98	64 - 138
Ethylbenzene	ND		5.00	5.02		ug/L		100	80 - 120
Methyl tert-butyl ether	ND		5.00	4.91		ug/L		98	69 - 120
Methylene Chloride	ND		5.00	5.21		ug/L		104	80 - 120
Styrene	ND		5.00	5.05		ug/L		101	80 - 120
Tetrachloroethene	2.2		5.00	7.36		ug/L		104	80 - 120
Toluene	ND		5.00	4.83		ug/L		97	80 - 120
trans-1,2-Dichloroethene	ND		5.00	5.19		ug/L		104	80 - 122
trans-1,3-Dichloropropene	ND		5.00	4.87		ug/L		97	61 - 129
Trichloroethene	0.83		5.00	6.19		ug/L		107	80 - 120
Vinyl chloride	ND		5.00	5.68		ug/L		113	60 - 125
Xylenes, Total	ND		15.0	15.1		ug/L		101	80 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*80 - 120*
Toluene-d8 (Surr)	*96*		*80 - 120*

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

Lab Sample ID: 410-49448-6 MSD
Matrix: Water
Analysis Batch: 156699

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	4.81		ug/L		96	71 - 134	6	30
1,1,1-Trichloroethane	0.12	J	5.00	5.47		ug/L		107	78 - 126	3	30
1,1,2,2-Tetrachloroethane	ND		5.00	4.25		ug/L		85	75 - 123	5	30
1,1,2-Trichloroethane	ND		5.00	4.57		ug/L		91	80 - 120	4	30
1,1-Dichloroethane	ND		5.00	5.03		ug/L		101	74 - 120	3	30
1,1-Dichloroethene	0.086	J	5.00	5.42		ug/L		106	80 - 131	3	30
1,2-Dibromoethane (EDB)	ND		5.00	4.46		ug/L		89	80 - 120	6	30
1,2-Dichloroethane	ND		5.00	5.00		ug/L		100	69 - 122	4	30
1,2-Dichloropropane	ND		5.00	4.80		ug/L		96	80 - 120	5	30
2-Butanone (MEK)	ND		62.6	57.0		ug/L		91	59 - 141	2	30
2-Hexanone	ND		62.6	61.1		ug/L		98	52 - 140	0	30
4-Methyl-2-pentanone (MIBK)	ND		62.6	58.7		ug/L		94	55 - 140	0	30
Acetone	ND	^c	62.6	49.7		ug/L		79	60 - 146	3	30
Benzene	ND		5.00	4.97		ug/L		99	80 - 120	5	30
Bromochloromethane	ND		5.00	5.16		ug/L		103	80 - 120	2	30
Bromodichloromethane	ND		5.00	5.23		ug/L		104	73 - 124	2	30
Bromoform	ND		5.00	4.80		ug/L		96	49 - 144	4	30
Bromomethane	ND		5.00	5.44		ug/L		109	60 - 136	0	30
Carbon disulfide	ND		5.00	5.17		ug/L		103	67 - 130	4	30
Carbon tetrachloride	ND		5.00	5.66		ug/L		113	64 - 141	3	30
Chlorobenzene	ND		5.00	4.70		ug/L		94	80 - 120	5	30
Chloroethane	ND		5.00	5.25		ug/L		105	63 - 120	1	30
Chloroform	0.29	J	5.00	5.44		ug/L		103	80 - 120	5	30
Chloromethane	ND		5.00	5.57		ug/L		111	80 - 120	3	30
cis-1,2-Dichloroethene	0.67		5.00	5.68		ug/L		100	80 - 122	4	30
cis-1,3-Dichloropropene	ND		5.00	4.89		ug/L		98	67 - 121	4	30
Dibromochloromethane	ND		5.00	4.68		ug/L		94	64 - 138	5	30
Ethylbenzene	ND		5.00	4.74		ug/L		95	80 - 120	6	30
Methyl tert-butyl ether	ND		5.00	4.78		ug/L		96	69 - 120	3	30
Methylene Chloride	ND		5.00	5.00		ug/L		100	80 - 120	4	30
Styrene	ND		5.00	4.76		ug/L		95	80 - 120	6	30
Tetrachloroethene	2.2		5.00	7.03		ug/L		98	80 - 120	5	30
Toluene	ND		5.00	4.62		ug/L		92	80 - 120	5	30
trans-1,2-Dichloroethene	ND		5.00	5.10		ug/L		102	80 - 122	2	30
trans-1,3-Dichloropropene	ND		5.00	4.68		ug/L		94	61 - 129	4	30
Trichloroethene	0.83		5.00	5.86		ug/L		101	80 - 120	6	30
Vinyl chloride	ND		5.00	5.72		ug/L		114	60 - 125	1	30
Xylenes, Total	ND		15.0	14.5		ug/L		97	80 - 120	4	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*108*		*80 - 120*
Toluene-d8 (Surr)	*95*		*80 - 120*

QC Association Summary

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

Job ID: 410-49448-1

GC/MS VOA

Analysis Batch: 156699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-49448-1	HD-COD-SW-6-0/1-0	Total/NA	Water	8260D	
410-49448-2	HD-COD-SW-7-0/1-0	Total/NA	Water	8260D	
410-49448-3	HD-COD-SW-8-0/1-0	Total/NA	Water	8260D	
410-49448-4	HD-COD-SW-9-0/1-0	Total/NA	Water	8260D	
410-49448-5	HD-COD-SW-13-0/1-0	Total/NA	Water	8260D	
410-49448-6	HD-COD-SW-15-0/1-0	Total/NA	Water	8260D	
410-49448-9	HD-COD-SW-16-0/1-0	Total/NA	Water	8260D	
410-49448-10	HD-COD-SW-17-0/1-0	Total/NA	Water	8260D	
410-49448-11	HD-COD-SW-26-0/1-0	Total/NA	Water	8260D	
410-49448-12	HD-COD-SW-27-0/1-0	Total/NA	Water	8260D	
410-49448-13	HD-COD-SW-28-0/1-0	Total/NA	Water	8260D	
410-49448-14	HD-COD-SW-29-0/1-0	Total/NA	Water	8260D	
410-49448-15	HD-QC1-0/1-1	Total/NA	Water	8260D	
410-49448-16	HD-QC1-0/1-2	Total/NA	Water	8260D	
MB 410-156699/6	Method Blank	Total/NA	Water	8260D	
LCS 410-156699/4	Lab Control Sample	Total/NA	Water	8260D	
410-49448-6 MS	HD-COD-SW-15-0/1-0 MS	Total/NA	Water	8260D	
410-49448-6 MSD	HD-COD-SW-15-0/1-0 MSD	Total/NA	Water	8260D	

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

Lab Sample ID: 410-49448-1

Date Collected: 07/29/21 09:45

Matrix: Water

Date Received: 07/30/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	156699	08/04/21 23:31	K4WN	ELLE

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

Lab Sample ID: 410-49448-2

Date Collected: 07/29/21 10:35

Matrix: Water

Date Received: 07/30/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	156699	08/04/21 23:52	K4WN	ELLE

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

Lab Sample ID: 410-49448-3

Date Collected: 07/29/21 08:25

Matrix: Water

Date Received: 07/30/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	156699	08/05/21 00:13	K4WN	ELLE

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

Lab Sample ID: 410-49448-4

Date Collected: 07/29/21 11:25

Matrix: Water

Date Received: 07/30/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	156699	08/05/21 00:34	K4WN	ELLE

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

Lab Sample ID: 410-49448-5

Date Collected: 07/29/21 08:50

Matrix: Water

Date Received: 07/30/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	156699	08/05/21 00:54	K4WN	ELLE

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

Lab Sample ID: 410-49448-6

Date Collected: 07/29/21 11:00

Matrix: Water

Date Received: 07/30/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	156699	08/04/21 22:09	K4WN	ELLE

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

Lab Sample ID: 410-49448-9

Date Collected: 07/29/21 09:10

Matrix: Water

Date Received: 07/30/21 12:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	156699	08/05/21 01:15	K4WN	ELLE

Lab Chronicle

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

Job ID: 410-49448-1

Client Sample ID: HD-COD-SW-17-0/1-0
Date Collected: 07/29/21 09:25
Date Received: 07/30/21 12:24

Lab Sample ID: 410-49448-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	156699	08/05/21 01:36	K4WN	ELLE

Client Sample ID: HD-COD-SW-26-0/1-0
Date Collected: 07/29/21 10:10
Date Received: 07/30/21 12:24

Lab Sample ID: 410-49448-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	156699	08/05/21 01:56	K4WN	ELLE

Client Sample ID: HD-COD-SW-27-0/1-0
Date Collected: 07/29/21 10:50
Date Received: 07/30/21 12:24

Lab Sample ID: 410-49448-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	156699	08/05/21 02:17	K4WN	ELLE

Client Sample ID: HD-COD-SW-28-0/1-0
Date Collected: 07/29/21 11:40
Date Received: 07/30/21 12:24

Lab Sample ID: 410-49448-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	156699	08/05/21 02:38	K4WN	ELLE

Client Sample ID: HD-COD-SW-29-0/1-0
Date Collected: 07/29/21 08:15
Date Received: 07/30/21 12:24

Lab Sample ID: 410-49448-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	156699	08/05/21 02:59	K4WN	ELLE

Client Sample ID: HD-QC1-0/1-1
Date Collected: 07/29/21 12:00
Date Received: 07/30/21 12:24

Lab Sample ID: 410-49448-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	156699	08/05/21 03:19	K4WN	ELLE

Client Sample ID: HD-QC1-0/1-2
Date Collected: 07/29/21 00:00
Date Received: 07/30/21 12:24

Lab Sample ID: 410-49448-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	156699	08/04/21 20:46	K4WN	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: 410-49448-1
Project/Site: fYNOP Monthly Surface Water

Laboratory: Eurofins Lancaster Laboratories Env, LLC

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

Authority	Program	Identification Number	Expiration Date
Pennsylvania	NELAP	36-00037	01-31-22

Method Summary

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

Job ID: 410-49448-1

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

Protocol References:

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

Laboratory References:

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

Sample Summary

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

Job ID: 410-49448-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-49448-1	HD-COD-SW-6-0/1-0	Water	07/29/21 09:45	07/30/21 12:24
410-49448-2	HD-COD-SW-7-0/1-0	Water	07/29/21 10:35	07/30/21 12:24
410-49448-3	HD-COD-SW-8-0/1-0	Water	07/29/21 08:25	07/30/21 12:24
410-49448-4	HD-COD-SW-9-0/1-0	Water	07/29/21 11:25	07/30/21 12:24
410-49448-5	HD-COD-SW-13-0/1-0	Water	07/29/21 08:50	07/30/21 12:24
410-49448-6	HD-COD-SW-15-0/1-0	Water	07/29/21 11:00	07/30/21 12:24
410-49448-6 MS	HD-COD-SW-15-0/1-0 MS	Water	07/29/21 11:00	07/30/21 12:24
410-49448-6 MSD	HD-COD-SW-15-0/1-0 MSD	Water	07/29/21 11:00	07/30/21 12:24
410-49448-9	HD-COD-SW-16-0/1-0	Water	07/29/21 09:10	07/30/21 12:24
410-49448-10	HD-COD-SW-17-0/1-0	Water	07/29/21 09:25	07/30/21 12:24
410-49448-11	HD-COD-SW-26-0/1-0	Water	07/29/21 10:10	07/30/21 12:24
410-49448-12	HD-COD-SW-27-0/1-0	Water	07/29/21 10:50	07/30/21 12:24
410-49448-13	HD-COD-SW-28-0/1-0	Water	07/29/21 11:40	07/30/21 12:24
410-49448-14	HD-COD-SW-29-0/1-0	Water	07/29/21 08:15	07/30/21 12:24
410-49448-15	HD-QC1-0/1-1	Water	07/29/21 12:00	07/30/21 12:24
410-49448-16	HD-QC1-0/1-2	Water	07/29/21 00:00	07/30/21 12:24

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-49448-1

SDG No.:

Instrument ID: 19094 Analysis Batch Number: 143886

Lab Sample ID: IC 410-143886/14 Client Sample ID:

Date Analyzed: 06/30/21 18:47 Lab File ID: HU30I11.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.62	Incomplete Integration	campbellme	07/01/21 00:52
1,4-Dioxane	8.67	Incomplete Integration	campbellme	07/01/21 00:42

Lab Sample ID: ICIS 410-143886/15 Client Sample ID:

Date Analyzed: 06/30/21 19:08 Lab File ID: HU30I12.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane	7.43	Incomplete Integration	campbellme	07/01/21 00:40
1,4-Dioxane	8.67	Incomplete Integration	campbellme	07/01/21 00:40

Lab Sample ID: IC 410-143886/16 Client Sample ID:

Date Analyzed: 06/30/21 19:29 Lab File ID: HU30I13.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.62	Incomplete Integration	campbellme	07/01/21 00:52
1,4-Dioxane	8.68	Incomplete Integration	campbellme	07/01/21 00:43

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-49448-1

SDG No.:

Instrument ID: 19094 Analysis Batch Number: 143886

Lab Sample ID: IC 410-143886/17 Client Sample ID:

Date Analyzed: 06/30/21 19:49 Lab File ID: HU30I14.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	2.01	Incomplete Integration	campbellme	07/01/21 00:44
Acetone	3.61	Incomplete Integration	campbellme	07/01/21 00:51
Acrylonitrile	4.62	Incomplete Integration	campbellme	07/01/21 00:44
1,4-Dioxane	8.67	Incomplete Integration	campbellme	07/01/21 00:44

Lab Sample ID: IC 410-143886/18 Client Sample ID:

Date Analyzed: 06/30/21 20:10 Lab File ID: HU30I15.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Vinyl chloride	2.31	Incomplete Integration	campbellme	07/01/21 00:45
Acrolein	3.45	Incomplete Integration	campbellme	07/01/21 00:45
Acetone	3.62	Incomplete Integration	campbellme	07/01/21 00:45
t-Butyl alcohol	4.37	Incomplete Integration	campbellme	07/01/21 00:46

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-49448-1

SDG No.:

Instrument ID: 19094 Analysis Batch Number: 143886

Lab Sample ID: IC 410-143886/19 Client Sample ID:

Date Analyzed: 06/30/21 20:31 Lab File ID: HU30I16.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Vinyl chloride	2.32	Incomplete Integration	campbellme	07/01/21 00:47
Acetone	3.62	Incomplete Integration	campbellme	07/01/21 00:47
t-Butyl alcohol	4.39	Incomplete Integration	campbellme	07/01/21 00:47
Acrylonitrile	4.62	Incomplete Integration	campbellme	07/01/21 00:47
Propionitrile	6.23	Incomplete Integration	campbellme	07/01/21 00:47
Isobutyl alcohol	7.24	Incomplete Integration	campbellme	07/01/21 00:48
1,4-Dioxane	8.68	Incomplete Integration	campbellme	07/01/21 00:48

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-49448-1

SDG No.:

Instrument ID: 19094 Analysis Batch Number: 143886

Lab Sample ID: IC 410-143886/20 Client Sample ID:

Date Analyzed: 06/30/21 20:52 Lab File ID: HU30I17.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	2.01	Incomplete Integration	campbellme	07/01/21 00:48
Chloromethane	2.20	Incomplete Integration	campbellme	07/01/21 00:48
Vinyl chloride	2.32	Incomplete Integration	campbellme	07/01/21 00:48
Acrolein	3.46	Incomplete Integration	campbellme	07/01/21 00:49
Carbon disulfide	3.93	Incomplete Integration	campbellme	07/01/21 00:49
t-Butyl alcohol	4.39	Incomplete Integration	campbellme	07/01/21 00:49
Acrylonitrile	4.64	Incomplete Integration	campbellme	07/01/21 00:49
Propionitrile	6.24	Incomplete Integration	campbellme	07/01/21 00:49
1,4-Dioxane	8.67	Incomplete Integration	campbellme	07/01/21 00:49
2-Nitropropane	9.20	Incomplete Integration	campbellme	07/01/21 00:50

Lab Sample ID: ICV 410-143886/21 Client Sample ID:

Date Analyzed: 06/30/21 21:12 Lab File ID: HU30V11.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acrolein	3.45	Incomplete Integration	campbellme	07/01/21 01:02
Acetone	3.62	Incomplete Integration	campbellme	07/01/21 01:03
1,4-Dioxane	8.67	Incomplete Integration	campbellme	07/01/21 01:03

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-49448-1

SDG No.:

Instrument ID: 19094 Analysis Batch Number: 156699

Lab Sample ID: CCVIS 410-156699/3 Client Sample ID:

Date Analyzed: 08/04/21 18:42 Lab File ID: HG04C01.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	4.06	Incomplete Integration	campbellme	08/04/21 19:08
t-Butyl alcohol	4.40	Incomplete Integration	campbellme	08/04/21 19:08
1,4-Dioxane	8.67	Incomplete Integration	campbellme	08/04/21 19:09

Lab Sample ID: LCS 410-156699/4 Client Sample ID:

Date Analyzed: 08/04/21 19:02 Lab File ID: HG04L01.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane-d4 (Surr)	7.34	Incomplete Integration	campbellme	08/04/21 19:31

Lab Sample ID: 410-49448-16 Client Sample ID: HD-QC1-0/1-2

Date Analyzed: 08/04/21 20:46 Lab File ID: HG04S03.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane-d4 (Surr)	7.34	Incomplete Integration	kaewrungrueangp	08/05/21 10:49
Acetone		Invalid Compound ID	kaewrungrueangp	08/05/21 10:49

Lab Sample ID: 410-49448-6 Client Sample ID: HD-COD-SW-15-0/1-0

Date Analyzed: 08/04/21 22:09 Lab File ID: HG04S07.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl tert-butyl ether	4.70	Incomplete Integration	kaewrungrueangp	08/05/21 10:53

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-49448-1

SDG No.:

Instrument ID: 19094 Analysis Batch Number: 156699

Lab Sample ID: 410-49448-1 Client Sample ID: HD-COD-SW-6-0/1-0

Date Analyzed: 08/04/21 23:31 Lab File ID: HG04S11.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.67	Incomplete Integration	kaewrungrueangp	08/05/21 11:04
Trichloroethene	8.26	Incomplete Integration	kaewrungrueangp	08/05/21 11:05
1,2-Dichloroethane		Invalid Compound ID	kaewrungrueangp	08/05/21 11:04

Lab Sample ID: 410-49448-3 Client Sample ID: HD-COD-SW-8-0/1-0

Date Analyzed: 08/05/21 00:13 Lab File ID: HG04S13.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.67	Incomplete Integration	kaewrungrueangp	08/05/21 11:52
Trichloroethene	8.26	Incomplete Integration	kaewrungrueangp	08/05/21 11:52
1,2-Dichloroethane		Invalid Compound ID	kaewrungrueangp	08/05/21 11:52

Lab Sample ID: 410-49448-5 Client Sample ID: HD-COD-SW-13-0/1-0

Date Analyzed: 08/05/21 00:54 Lab File ID: HG04S15.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane		Invalid Compound ID	kaewrungrueangp	08/05/21 13:00

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-49448-1

SDG No.:

Instrument ID: 19094 Analysis Batch Number: 156699

Lab Sample ID: 410-49448-9 Client Sample ID: HD-COD-SW-16-0/1-0

Date Analyzed: 08/05/21 01:15 Lab File ID: HG04S16.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.68	Incomplete Integration	kaewrungrueangp	08/05/21 13:01
1,2-Dichloroethane		Invalid Compound ID	kaewrungrueangp	08/05/21 13:01

Lab Sample ID: 410-49448-10 Client Sample ID: HD-COD-SW-17-0/1-0

Date Analyzed: 08/05/21 01:36 Lab File ID: HG04S17.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.93	Incomplete Integration	kaewrungrueangp	08/05/21 13:03
1,2-Dichloroethane		Invalid Compound ID	kaewrungrueangp	08/05/21 13:03

Lab Sample ID: 410-49448-12 Client Sample ID: HD-COD-SW-27-0/1-0

Date Analyzed: 08/05/21 02:17 Lab File ID: HG04S19.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichloroethene	8.25	Incomplete Integration	kaewrungrueangp	08/05/21 13:44
1,2-Dichloroethane		Invalid Compound ID	kaewrungrueangp	08/05/21 13:43

Lab Sample ID: 410-49448-13 Client Sample ID: HD-COD-SW-28-0/1-0

Date Analyzed: 08/05/21 02:38 Lab File ID: HG04S20.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane		Invalid Compound ID	kaewrungrueangp	08/05/21 14:03

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-49448-1

SDG No.:

Instrument ID: 19094 Analysis Batch Number: 156699

Lab Sample ID: 410-49448-14 Client Sample ID: HD-COD-SW-29-0/1-0

Date Analyzed: 08/05/21 02:59 Lab File ID: HG04S21.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichloroethene	8.24	Incomplete Integration	kaewrungrueangp	08/05/21 14:24
1,2-Dichloroethane		Invalid Compound ID	kaewrungrueangp	08/05/21 14:24

Lab Sample ID: 410-49448-15 Client Sample ID: HD-QC1-0/1-1

Date Analyzed: 08/05/21 03:19 Lab File ID: HG04S22.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichloroethene	8.26	Incomplete Integration	kaewrungrueangp	08/05/21 14:45

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MSV_LCS_VOC#1_00007	07/28/21	06/28/21	Methanol, Lot DZ644	25 mL	MSV_M_MIX1SEC_00009	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_00009	1 mL	Carbon disulfide	40 ug/mL
							Methyl tert-butyl ether	40 ug/mL
					MSV_Q_Ketones_00010	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_00009	04/30/24		Restek, Lot A0171815		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							Benzene	1000 ug/mL
							Bromochloromethane	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobenzene	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Methylene Chloride	1000 ug/mL
							Styrene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
.MSV_M_MIX2SEC_00009	04/30/24		Restek, Lot A0171837		(Purchased Reagent)		Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
.MSV_Q_Ketones_00010	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_00012	09/01/21	08/02/21	Methanol, Lot DZ644	25 mL	MSV_M_MIX1SEC_00015	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_00015	1 mL	Carbon disulfide	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl tert-butyl ether	40 ug/mL
					MSV_Q_Ketones_00016	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_00015	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_00015	04/30/24		Restek, Lot A0171837		(Purchased Reagent)		Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
.MSV_Q_Ketones_00016	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_00006	07/24/21	06/28/21	Methanol, Lot DZ644	1 mL	MSV_CCV_VOC#1_00007	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
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,2,3-Trimethylbenzene	50 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00007	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	2500.02 ug/mL
					MSV_V_VOA2_00093	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_00007	07/28/21	06/28/21	Methanol, Lot DZ644	5 mL	MSV_EM_Work_00001	1 mL	Ethyl methacrylate	1000.04 ug/mL
					MSV_MegaMIX#1_00007	1 mL	1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,1-Dichloropropene	1000 ug/mL
							1,2,3-Trichlorobenzene	1000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
					MSV_MegaMix#2_00007	1 mL	1,1,2-Trichloro-1,2,2-trifluoroethane	1000 ug/mL
							1,2,3-Trimethylbenzene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00007	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
							1,1-Dichloropropene	5000 ug/mL
							1,2,3-Trichlorobenzene	5000 ug/mL
							1,2,3-Trichloropropane	5000 ug/mL
							1,2,4-Trichlorobenzene	5000 ug/mL
							1,2,4-Trimethylbenzene	5000 ug/mL
							1,2-Dibromo-3-Chloropropane	5000 ug/mL
							1,2-Dibromoethane (EDB)	5000 ug/mL
							1,2-Dichlorobenzene	5000 ug/mL
							1,2-Dichloroethane	5000 ug/mL
							1,2-Dichloropropane	5000 ug/mL
							1,3,5-Trimethylbenzene	5000 ug/mL
							1,3-Dichlorobenzene	5000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00007	05/31/24		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
							Acrylonitrile	12500 ug/mL
							Benzyl chloride	5000 ug/mL
							Carbon disulfide	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00007	07/24/21	06/28/21	Methanol, Lot DZ644	5 mL	MSV_V_Ketones_00007	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_00017	0.5 mL	Acrolein	12500.1 ug/mL
..MSV_V_Ketones_00007	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_00017	07/24/21	05/25/21	Methanol, Lot DZ644	10 mL	MSV_VACR_STK_00019	9.254 mL	Acrolein	125001 ug/mL
...MSV_VACR_STK_00019	07/24/21	05/25/21	Methanol, Lot DZ644	10 mL	MSV_ACROLEIN_00012	1.4416 g	Acrolein	135078 ug/mL
....MSV_ACROLEIN_00012	09/30/21	Chem Service, Lot 10804400			(Purchased Reagent)		Acrolein	0.937 g/g
.MSV_V_VOA2_00093	07/28/21	06/28/21	Methanol, Lot DZ644	5 mL	MSV_V#2B_00223	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_00223	04/30/22	Restek, Lot A0159694			(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_00012	09/01/21	08/02/21	Methanol, Lot DZ644	1 mL	MSV_CCV_VOC#1_00013	50 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00012	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_00013	09/01/21	08/02/21	Methanol, Lot DZ644	5 mL	MSV_MegaMIX#1_00012	1 mL	1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							Benzene	1000 ug/mL
							Bromochloromethane	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00012	1 mL	Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
..MSV_MegaMIX#1_00012	09/01/21		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
							1,2-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_00012	09/01/21		Restek, Lot A0172089		(Purchased Reagent)		Carbon disulfide	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
.MSV_CCV_VOC#3_00012	09/01/21	08/02/21	Methanol, Lot DZ644	5 mL	MSV_V_Ketones_00012	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_00012	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

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MSV_LL_#2_826_00007	07/07/21	06/28/21	Methanol, Lot DZ644	1 mL	MSV_V_EE_00005	50 uL	Ethyl ether	50.0035 ug/mL
					MSV_V_PentaCL_00002	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_00002	07/18/21	Restek, Lot A0171341			(Purchased Reagent)		Pentachloroethane	5000 ug/mL
MSV_LL_GAS826_00010	07/05/21	06/28/21	Methanol, Lot DZ644	1 mL	MSV_CCV_GASES_00026	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_00026	07/05/21	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_00020	08/09/21	08/02/21	Methanol, Lot DZ644	1 mL	MSV_CCV_GASES_00049	25 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_CCV_GASES_00049	08/09/21	Restek, Lot A0172364			(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_LLcentISS_00001	11/25/21	05/25/21	Methanol, Lot DZ644	50 mL	MSV_8260_SS_00366	1 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
					MSV_Cus826_IS_00310	1 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5 (IS)	50 ug/mL
							Fluorobenzene (IS)	50 ug/mL
							t-Butyl alcohol-d10 (IS)	250 ug/mL
.MSV_8260_SS_00366	03/31/22	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_00310	05/31/23	Restek, Lot A0160586			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chlorobenzene-d5 (IS)	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_QC_Gas826_00010	07/05/21	06/28/21	Methanol, Lot DZ644	1 mL	MSV_QC_2K_GAS_00012	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_QC_2K_GAS_00012	07/05/21		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_00020	08/09/21	08/02/21	Methanol, Lot DZ644	1 mL	MSV_QC_2K_GAS_00023	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_QC_2K_GAS_00023	08/09/21		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_00005							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Xylenes, Total	
					MSV_VBFB_STK_00005	0.124 mL	BFB	49.8282 ug/mL
.MSV_VBFB_STK_00005	07/14/21	01/14/21	Methanol, Lot DZ644	10 mL	MSV_4BFB_NEAT_00004	1.0046 g	BFB	100460 ug/mL
..MSV_4BFB_NEAT_00004	02/28/25		Chem Service, Lot 10727100		(Purchased Reagent)		BFB	1 g/g
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_00366

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)

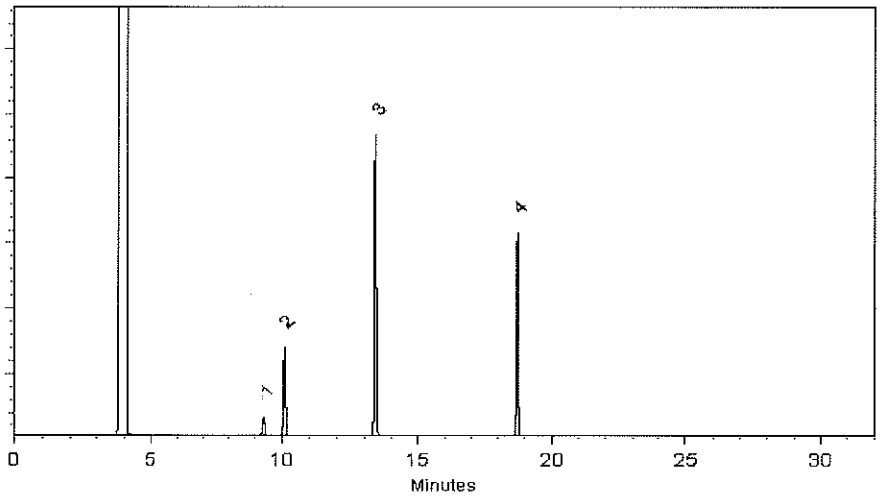
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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_ACROLEIN_00012

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

CERTIFICATE OF ANALYSIS

Acrolein

CATALOG NUMBER	RPN-11030-1G
LOT NUMBER	10804400
DATE CERTIFIED	09/30/20
EXPIRATION DATE	09/30/21
CAS NUMBER	107-02-8
MOLECULAR FORMULA	C3H4O
MOLECULAR WEIGHT	56.06
STORAGE	Refrigerator storage (2 - 8 °C)
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.
NOTES	Contains water and hydroquinone as an inhibitor.

Analytical Test	Value
% PURITY (GC/TCD)	93.7

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

Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

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

CERTIFICATE OF ANALYSIS

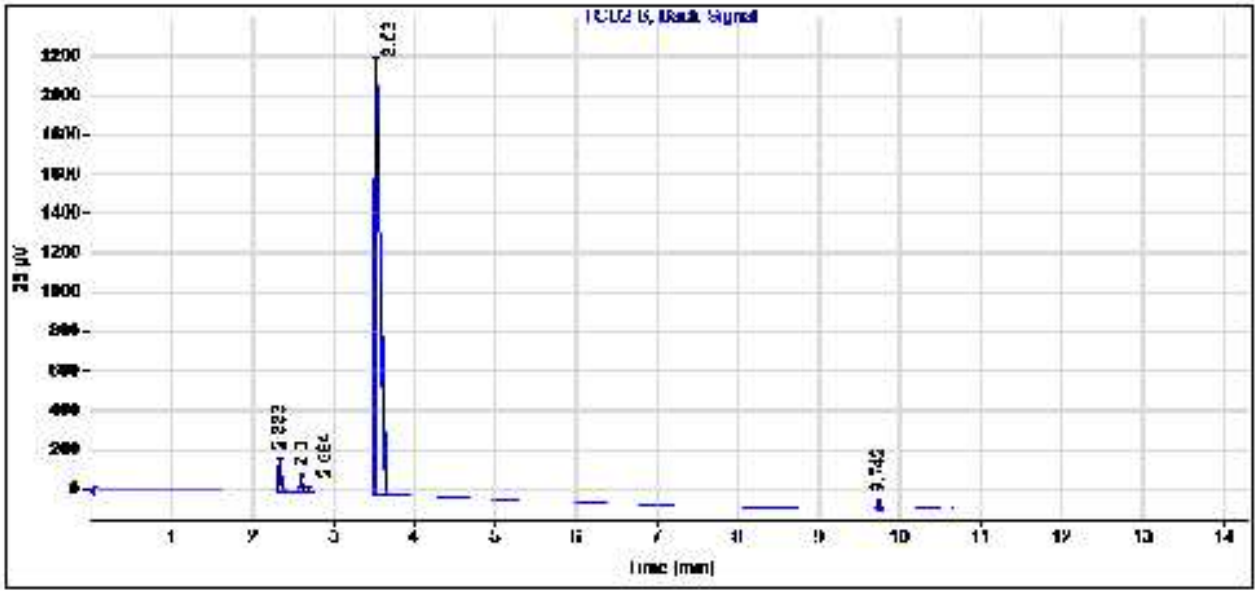
Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\CHEM32\1\DATA\2020 DATA\0920\SIG2022755.D

Sample name: Acrolein

Instrument: GC 1
Injection date: 9/30/2020 9:06:04 AM
Acq. method: GASBOMB_TCD.M
Column name: DB-624 (30m x 0.53mm x 3.0um)

Sample type: Blank
Location:
Injection volume: 1.0uL



Signal: TCD2 B, Back Signal

RT [min]	Type	Width [min]	Area	Height	Area%
2.333	BB	0.0403	382.4806	147.1463	3.9725
2.600	BV	0.0380	151.1861	63.0647	1.5703
2.684	VB	0.0386	21.2574	8.3698	0.2208
3.530	BB S	0.0570	9029.5508	2193.4321	93.7829
9.742	BB	0.0333	43.6692	20.1758	0.4536
		Sum	9628.1440		

Reagent

MSV_CCV_GASES_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

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)

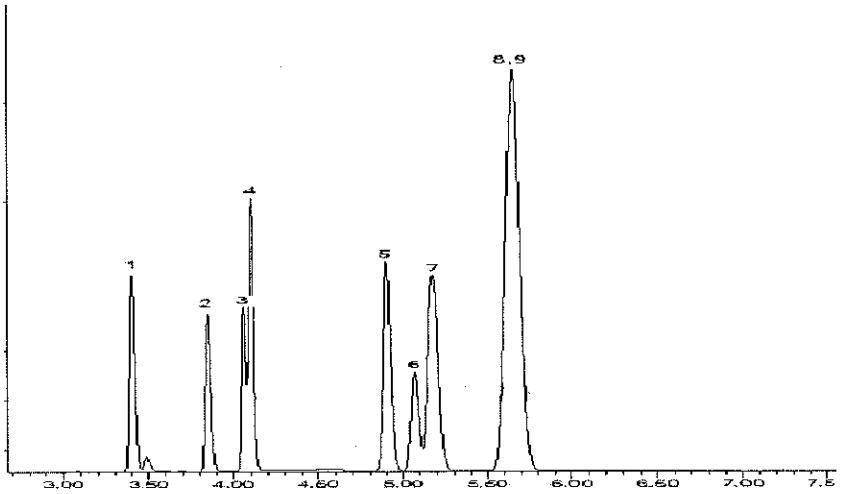
Carrier Gas:
helium-constant flow 2.0 mL/min.

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_00049

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)

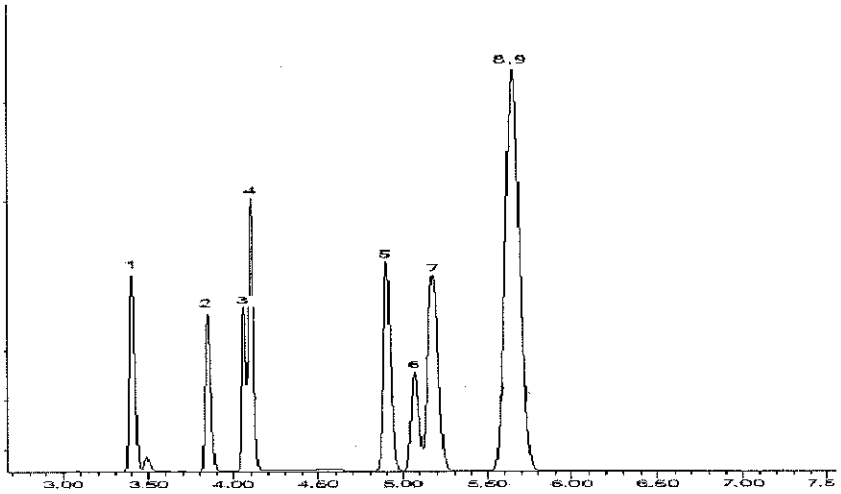
Carrier Gas:
helium-constant flow 2.0 mL/min.

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_00310

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. : 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)

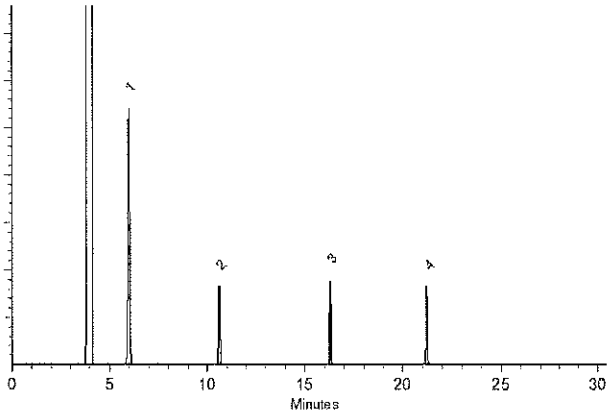
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

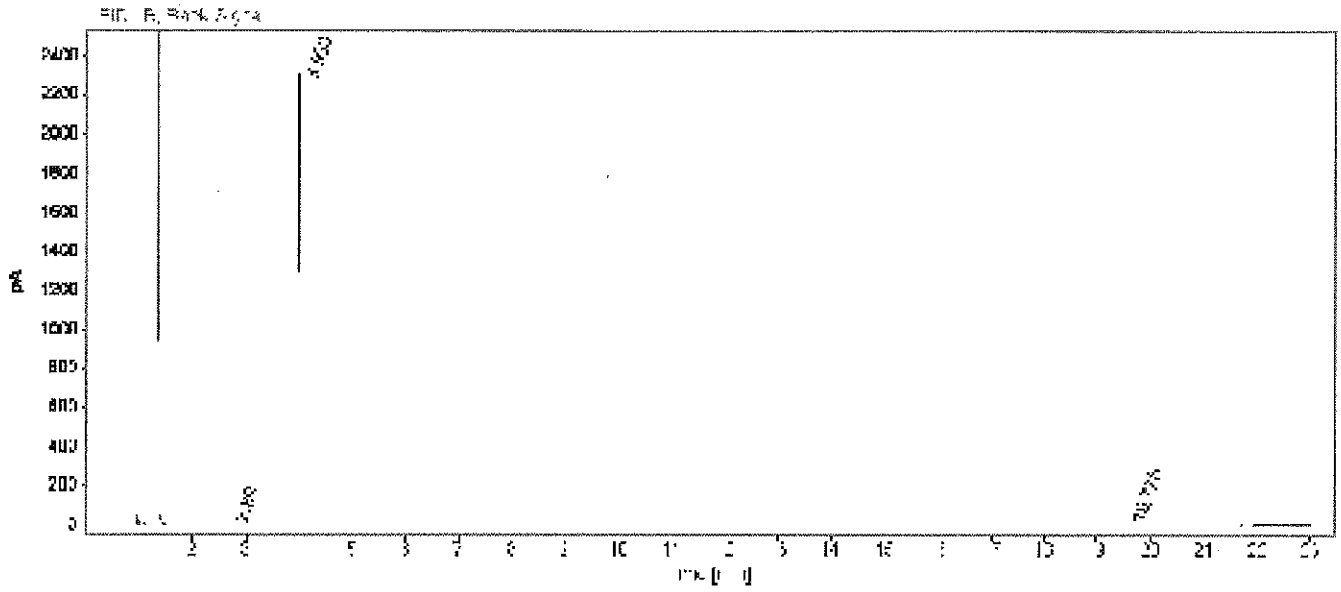
Print Date: 05/20/21

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_00009

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)

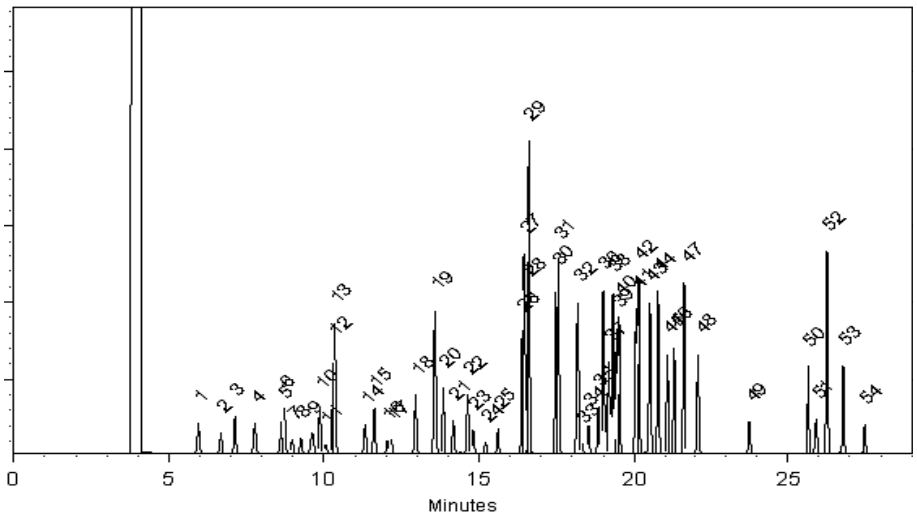
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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_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. : 577493 **Lot No.:** A0171815

Description : Custom VOC MegaMix®.SEC #1 Standard

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

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

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

Ship: Ambient

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

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

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

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

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

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

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

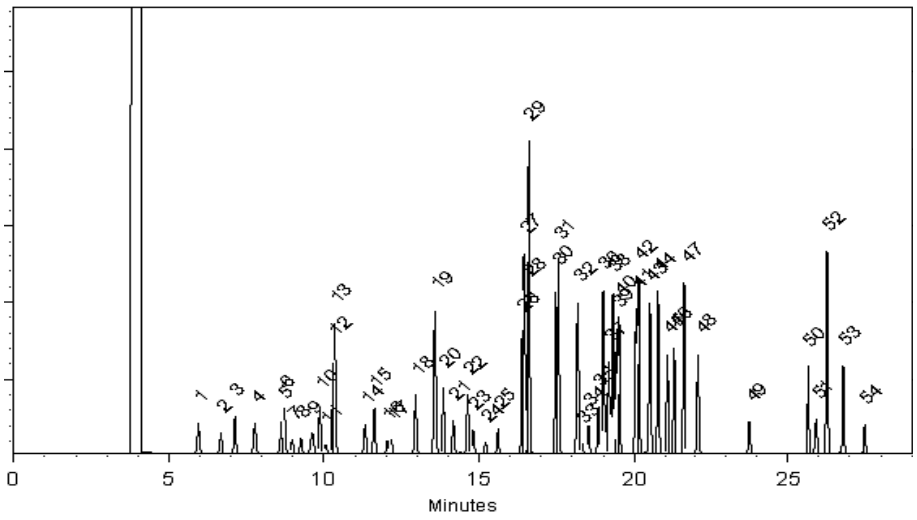
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Bradley Meyer - Mix Technician

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

Alexis Shelow - Operations Tech I

Date Passed: 30-Apr-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_M_MIX2SEC_00009

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)

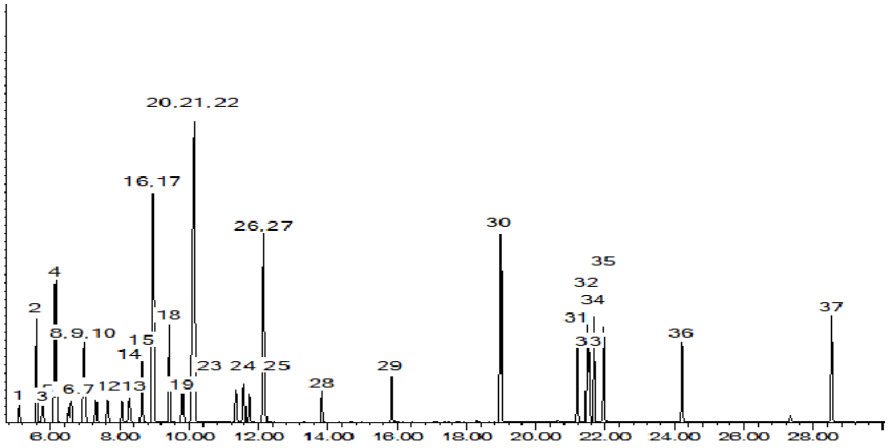
Carrier Gas:
helium-constant pressure 30 psi

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_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. : 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)

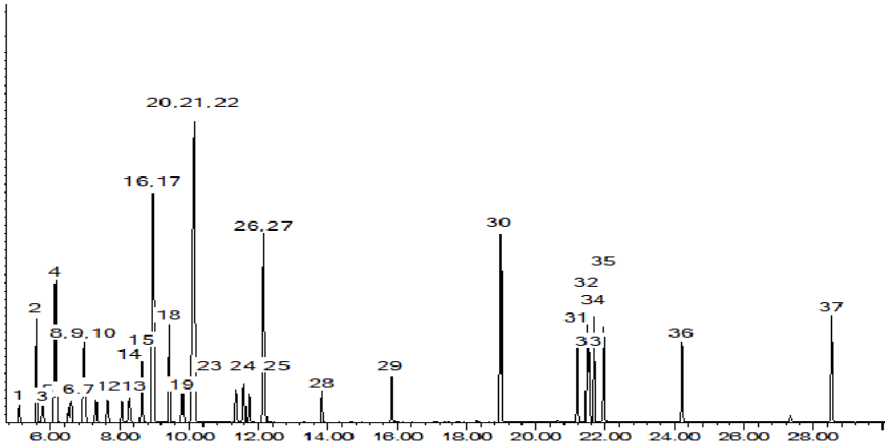
Carrier Gas:
helium-constant pressure 30 psi

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_00007

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)

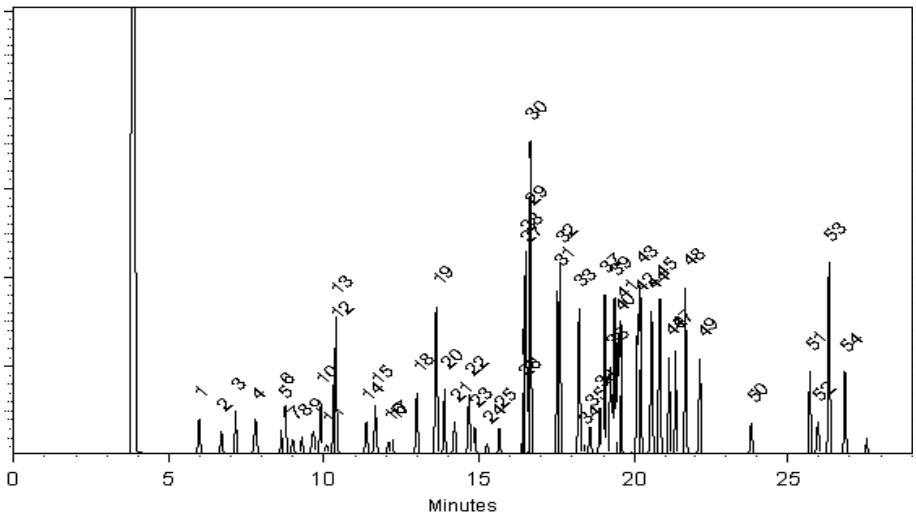
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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_00012

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

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	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)

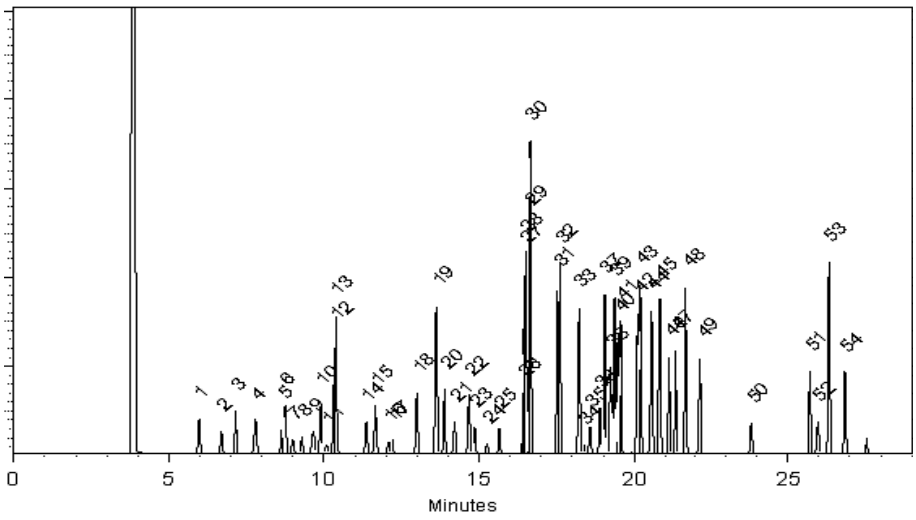
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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_00007

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. : 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)

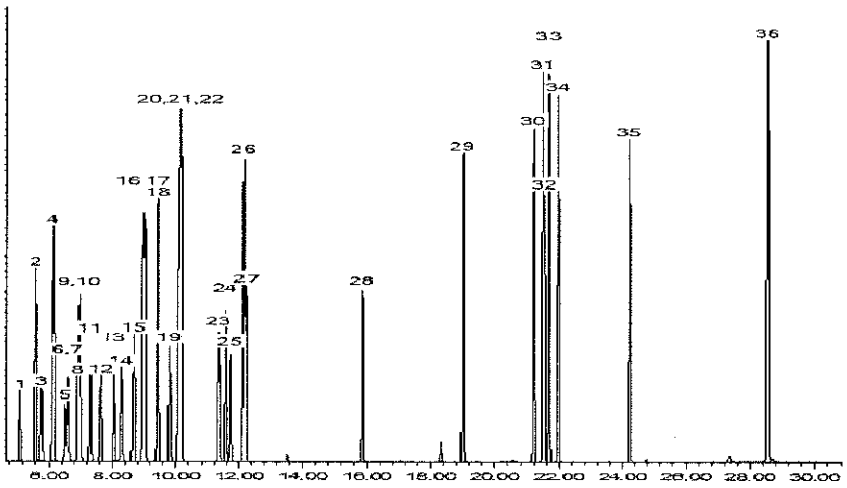
Carrier Gas:
hellum-constant pressure 30 psi

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_00012

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. : 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)

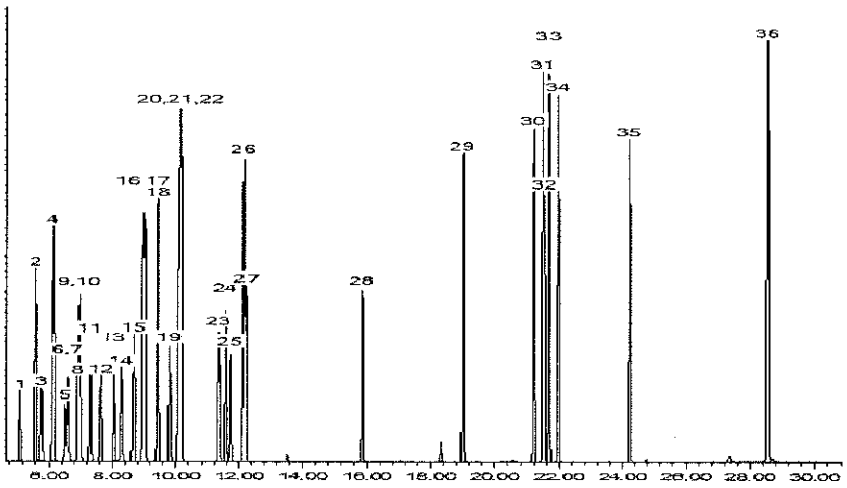
Carrier Gas:
hellum-constant pressure 30 psi

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_00010

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)

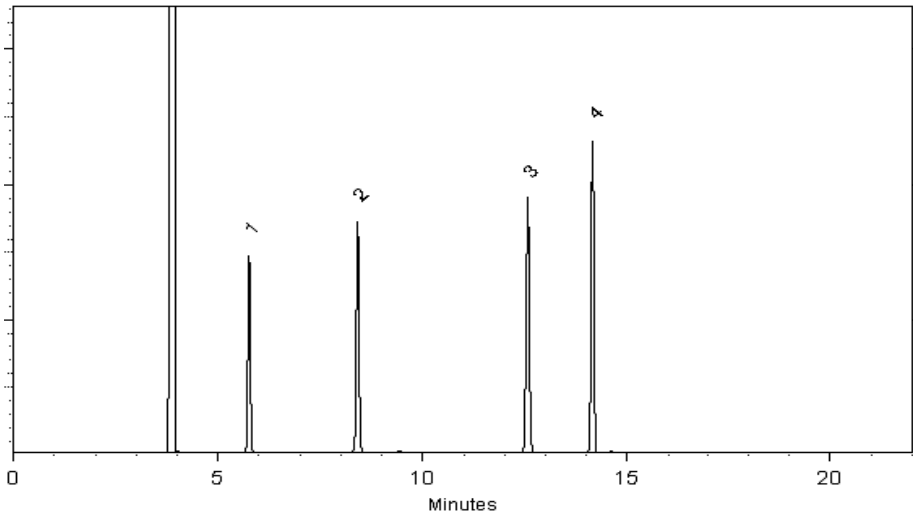
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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_00016

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)

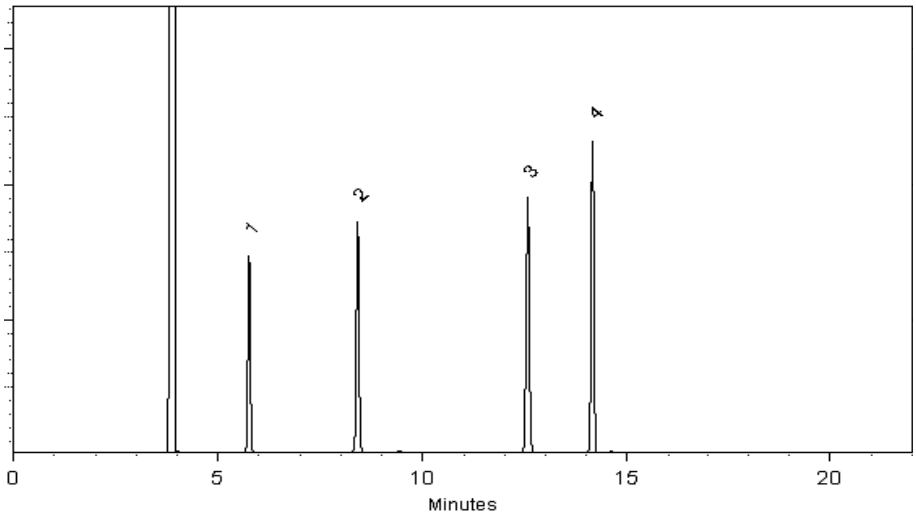
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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_00012

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)

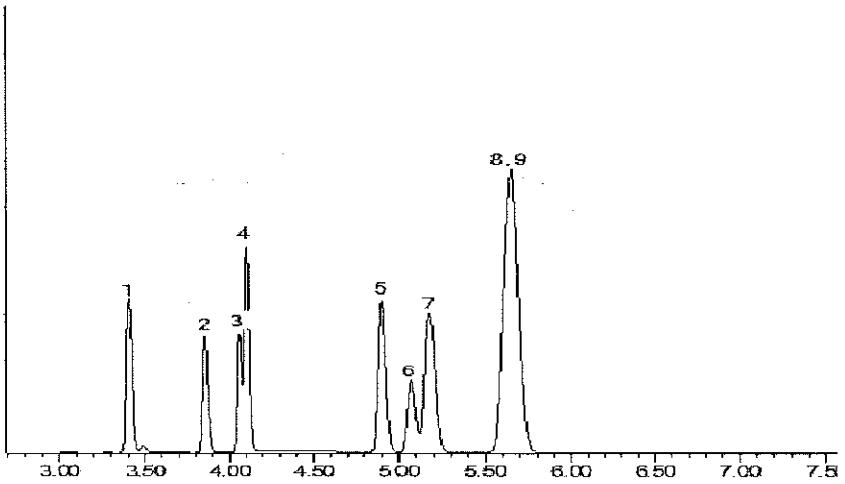
Carrier Gas:
helium-constant flow 2.0 mL/min.

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_QC_2K_GAS_00023

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)

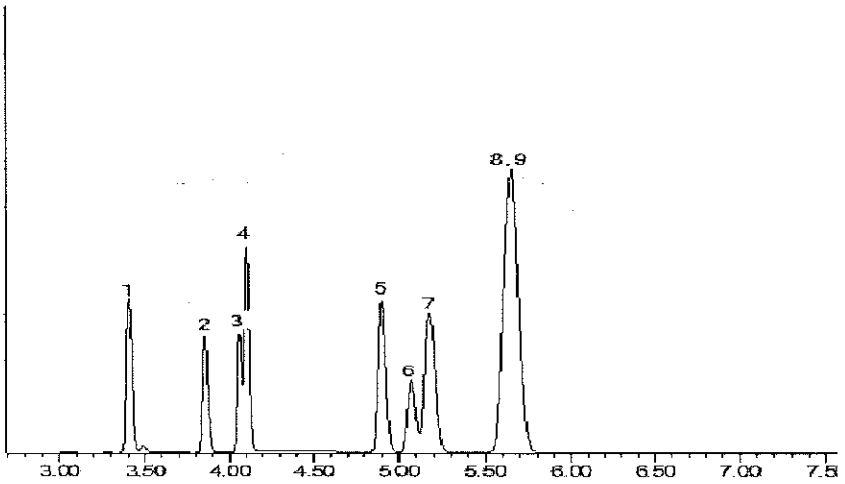
Carrier Gas:
helium-constant flow 2.0 mL/min.

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_00223

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.:** A0159694

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, 2022 **Storage:** 0°C or colder

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%	25,019.2 µg/mL	+/- 146.4929 µg/mL
2	tert-Butanol (TBA)	75-65-0	99%	25,022.4 µg/mL	+/- 146.5117 µg/mL
3	Propionitrile	107-12-0	99%	25,020.0 µg/mL	+/- 146.4976 µg/mL
4	Methacrylonitrile	126-98-7	99%	12,533.6 µg/mL	+/- 73.3870 µg/mL
5	Isobutanol (2-Methyl-1-propanol)	78-83-1	99%	62,702.0 µg/mL	+/- 367.1151 µg/mL
6	1-Butanol	71-36-3	99%	125,150.0 µg/mL	+/- 732.7430 µg/mL
7	1,4-Dioxane	123-91-1	99%	62,550.0 µg/mL	+/- 366.2251 µg/mL
8	trans-1,4-dichloro-2-butene	110-57-6	95%	12,549.5 µg/mL	+/- 73.4801 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)

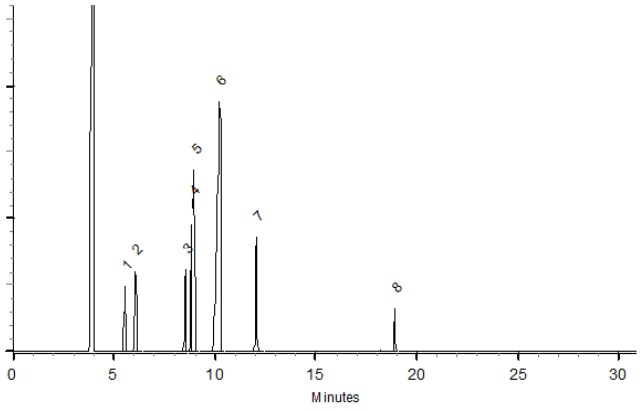
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Clara Windle - Operations Technician I

Date Mixed: 07-Apr-2020 **Balance:** B251644995

Fang-Yun Lo - QC Analyst

Date Passed: 10-Apr-2020

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_00007

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)

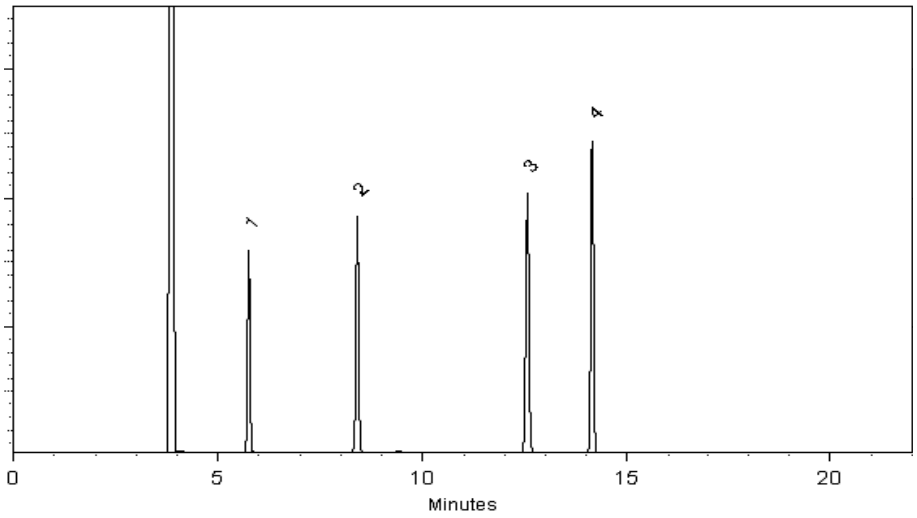
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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_00012

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)

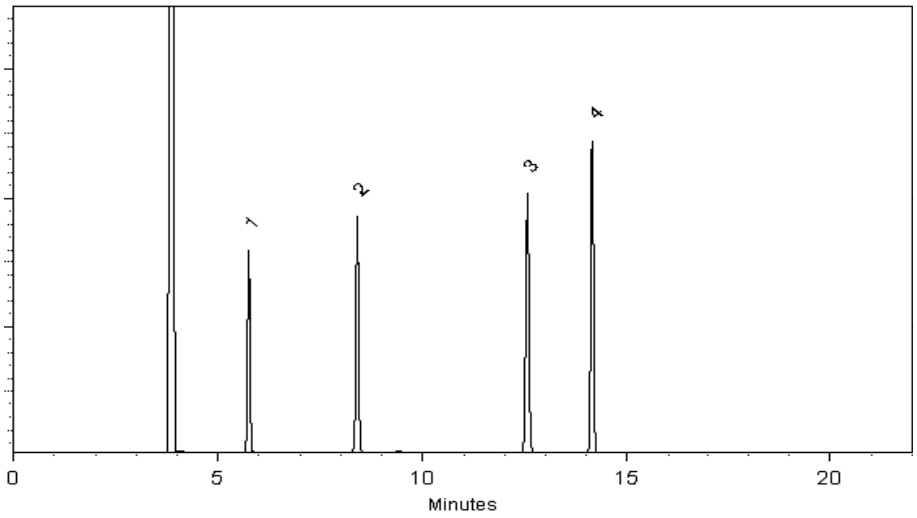
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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_00002

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)

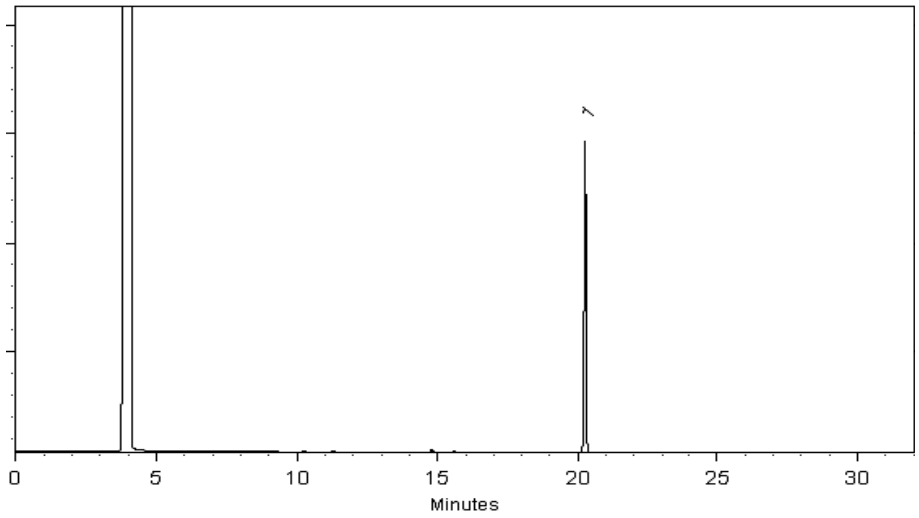
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.: 410-49448-1

SDG No.:

Matrix: Water Level: Low

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

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
HD-COD-SW-6-0/1-0	410-49448-1	106	103	94	96
HD-COD-SW-7-0/1-0	410-49448-2	107	103	94	96
HD-COD-SW-8-0/1-0	410-49448-3	105	102	94	98
HD-COD-SW-9-0/1-0	410-49448-4	107	102	95	98
HD-COD-SW-13-0/1-0	410-49448-5	105	99	94	97
HD-COD-SW-15-0/1-0	410-49448-6	105	103	95	98
HD-COD-SW-16-0/1-0	410-49448-9	110	111	94	98
HD-COD-SW-17-0/1-0	410-49448-10	106	102	93	96
HD-COD-SW-26-0/1-0	410-49448-11	106	103	95	97
HD-COD-SW-27-0/1-0	410-49448-12	107	103	94	97
HD-COD-SW-28-0/1-0	410-49448-13	106	102	94	96
HD-COD-SW-29-0/1-0	410-49448-14	107	101	95	98
HD-QC1-0/1-1	410-49448-15	107	102	93	96
HD-QC1-0/1-2	410-49448-16	106	98	95	97
	MB 410-156699/6	107	100	95	98
	LCS 410-156699/4	107	108	94	99
HD-COD-SW-15-0/1-0 MS MS	410-49448-6 MS	106	100	96	100
HD-COD-SW-15-0/1-0 MSD MSD	410-49448-6 MSD	108	100	95	99

	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 Job No.: 410-49448-1

SDG No.:

Matrix: Water Level: Low Lab File ID: HG04L01.D

Lab ID: LCS 410-156699/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	4.61	92	71-134	
1,1,1-Trichloroethane	5.00	4.84	97	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.24	85	75-123	
1,1,2-Trichloroethane	5.00	4.43	89	80-120	
1,1-Dichloroethane	5.00	4.56	91	74-120	
1,1-Dichloroethene	5.00	4.65	93	80-131	
1,2-Dibromoethane (EDB)	5.00	4.42	88	80-120	
1,2-Dichloroethane	5.00	4.95	99	69-122	
1,2-Dichloropropane	5.00	4.68	94	80-120	
2-Butanone (MEK)	62.5	56.8	91	59-141	
2-Hexanone	62.5	59.6	95	52-140	
4-Methyl-2-pentanone (MIBK)	62.5	56.8	91	55-140	
Acetone	62.5	49.4	79	60-146	
Benzene	5.00	4.74	95	80-120	
Bromochloromethane	5.00	5.01	100	80-120	
Bromodichloromethane	5.00	5.03	101	73-124	
Bromoform	5.00	4.70	94	49-144	
Bromomethane	5.00	5.13	103	60-136	
Carbon disulfide	5.00	4.45	89	67-130	
Carbon tetrachloride	5.00	4.88	98	64-141	
Chlorobenzene	5.00	4.42	88	80-120	
Chloroethane	5.00	4.78	96	63-120	
Chloroform	5.00	4.88	98	80-120	
Chloromethane	5.00	5.15	103	56-124	
cis-1,2-Dichloroethene	5.00	4.81	96	80-122	
cis-1,3-Dichloropropene	5.00	4.80	96	67-121	
Dibromochloromethane	5.00	4.54	91	64-138	
Ethylbenzene	5.00	4.37	87	80-120	
Methyl tert-butyl ether	5.00	4.67	93	69-120	
Methylene Chloride	5.00	4.77	95	80-120	
Styrene	5.00	4.49	90	80-120	
Tetrachloroethene	5.00	4.35	87	80-120	
Toluene	5.00	4.29	86	80-120	
trans-1,2-Dichloroethene	5.00	4.64	93	80-122	
trans-1,3-Dichloropropene	5.00	4.51	90	61-129	
Trichloroethene	5.00	4.77	95	80-120	
Vinyl chloride	5.00	5.10	102	60-125	
Xylenes, Total	15.0	13.4	89	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 Job No.: 410-49448-1

SDG No.:

Matrix: Water Level: Low Lab File ID: HG04S08.D

Lab ID: 410-49448-6 MS Client ID: HD-COD-SW-15-0/1-0 MS MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	ND	5.11	102	71-134	
1,1,1-Trichloroethane	5.00	0.12 J	5.66	111	78-126	
1,1,2,2-Tetrachloroethane	5.00	ND	4.48	90	75-123	
1,1,2-Trichloroethane	5.00	ND	4.77	95	80-120	
1,1-Dichloroethane	5.00	ND	5.19	104	74-120	
1,1-Dichloroethene	5.00	0.086 J	5.60	110	80-131	
1,2-Dibromoethane (EDB)	5.00	ND	4.72	94	80-120	
1,2-Dichloroethane	5.00	ND	5.18	103	69-122	
1,2-Dichloropropane	5.00	ND	5.06	101	80-120	
2-Butanone (MEK)	62.6	ND	58.3	93	59-141	
2-Hexanone	62.6	ND	61.3	98	52-140	
4-Methyl-2-pentanone (MIBK)	62.6	ND	58.7	94	55-140	
Acetone	62.6	ND	51.1	82	60-146	
Benzene	5.00	ND	5.20	104	80-120	
Bromochloromethane	5.00	ND	5.29	106	80-120	
Bromodichloromethane	5.00	ND	5.34	107	73-124	
Bromoform	5.00	ND	5.01	100	49-144	
Bromomethane	5.00	ND	5.41	108	60-136	
Carbon disulfide	5.00	ND	5.39	108	67-130	
Carbon tetrachloride	5.00	ND	5.84	117	64-141	
Chlorobenzene	5.00	ND	4.96	99	80-120	
Chloroethane	5.00	ND	5.30	106	63-120	
Chloroform	5.00	0.29 J	5.72	108	80-120	
Chloromethane	5.00	ND	5.41	108	80-120	
cis-1,2-Dichloroethene	5.00	0.67	5.91	105	80-122	
cis-1,3-Dichloropropene	5.00	ND	5.08	101	67-121	
Dibromochloromethane	5.00	ND	4.91	98	64-138	
Ethylbenzene	5.00	ND	5.02	100	80-120	
Methyl tert-butyl ether	5.00	ND	4.91	98	69-120	
Methylene Chloride	5.00	ND	5.21	104	80-120	
Styrene	5.00	ND	5.05	101	80-120	
Tetrachloroethene	5.00	2.2	7.36	104	80-120	
Toluene	5.00	ND	4.83	97	80-120	
trans-1,2-Dichloroethene	5.00	ND	5.19	104	80-122	
trans-1,3-Dichloropropene	5.00	ND	4.87	97	61-129	
Trichloroethene	5.00	0.83	6.19	107	80-120	
Vinyl chloride	5.00	ND	5.68	113	60-125	
Xylenes, Total	15.0	ND	15.1	101	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 Job No.: 410-49448-1

SDG No.:

Matrix: Water Level: Low Lab File ID: HG04S09.D

Lab ID: 410-49448-6 MSD Client ID: HD-COD-SW-15-0/1-0 MSD MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	4.81	96	6	30	71-134	
1,1,1-Trichloroethane	5.00	5.47	107	3	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.25	85	5	30	75-123	
1,1,2-Trichloroethane	5.00	4.57	91	4	30	80-120	
1,1-Dichloroethane	5.00	5.03	101	3	30	74-120	
1,1-Dichloroethene	5.00	5.42	106	3	30	80-131	
1,2-Dibromoethane (EDB)	5.00	4.46	89	6	30	80-120	
1,2-Dichloroethane	5.00	5.00	100	4	30	69-122	
1,2-Dichloropropane	5.00	4.80	96	5	30	80-120	
2-Butanone (MEK)	62.6	57.0	91	2	30	59-141	
2-Hexanone	62.6	61.1	98	0	30	52-140	
4-Methyl-2-pentanone (MIBK)	62.6	58.7	94	0	30	55-140	
Acetone	62.6	49.7	79	3	30	60-146	
Benzene	5.00	4.97	99	5	30	80-120	
Bromochloromethane	5.00	5.16	103	2	30	80-120	
Bromodichloromethane	5.00	5.23	104	2	30	73-124	
Bromoform	5.00	4.80	96	4	30	49-144	
Bromomethane	5.00	5.44	109	0	30	60-136	
Carbon disulfide	5.00	5.17	103	4	30	67-130	
Carbon tetrachloride	5.00	5.66	113	3	30	64-141	
Chlorobenzene	5.00	4.70	94	5	30	80-120	
Chloroethane	5.00	5.25	105	1	30	63-120	
Chloroform	5.00	5.44	103	5	30	80-120	
Chloromethane	5.00	5.57	111	3	30	80-120	
cis-1,2-Dichloroethene	5.00	5.68	100	4	30	80-122	
cis-1,3-Dichloropropene	5.00	4.89	98	4	30	67-121	
Dibromochloromethane	5.00	4.68	94	5	30	64-138	
Ethylbenzene	5.00	4.74	95	6	30	80-120	
Methyl tert-butyl ether	5.00	4.78	96	3	30	69-120	
Methylene Chloride	5.00	5.00	100	4	30	80-120	
Styrene	5.00	4.76	95	6	30	80-120	
Tetrachloroethene	5.00	7.03	98	5	30	80-120	
Toluene	5.00	4.62	92	5	30	80-120	
trans-1,2-Dichloroethene	5.00	5.10	102	2	30	80-122	
trans-1,3-Dichloropropene	5.00	4.68	94	4	30	61-129	
Trichloroethene	5.00	5.86	101	6	30	80-120	
Vinyl chloride	5.00	5.72	114	1	30	60-125	
Xylenes, Total	15.0	14.5	97	4	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.: 410-49448-1

SDG No.:

Lab File ID: HG04B01.D Lab Sample ID: MB 410-156699/6

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

Instrument ID: 19094 Date Analyzed: 08/04/2021 19:43

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 410-156699/4	HG04L01.D	08/04/2021 19:
HD-QC1-0/1-2	410-49448-16	HG04S03.D	08/04/2021 20:
HD-COD-SW-15-0/1-0	410-49448-6	HG04S07.D	08/04/2021 22:
HD-COD-SW-15-0/1-0 MS MS	410-49448-6 MS	HG04S08.D	08/04/2021 22:
HD-COD-SW-15-0/1-0 MSD MSD	410-49448-6 MSD	HG04S09.D	08/04/2021 22:
HD-COD-SW-6-0/1-0	410-49448-1	HG04S11.D	08/04/2021 23:
HD-COD-SW-7-0/1-0	410-49448-2	HG04S12.D	08/04/2021 23:
HD-COD-SW-8-0/1-0	410-49448-3	HG04S13.D	08/05/2021 00:
HD-COD-SW-9-0/1-0	410-49448-4	HG04S14.D	08/05/2021 00:
HD-COD-SW-13-0/1-0	410-49448-5	HG04S15.D	08/05/2021 00:
HD-COD-SW-16-0/1-0	410-49448-9	HG04S16.D	08/05/2021 01:
HD-COD-SW-17-0/1-0	410-49448-10	HG04S17.D	08/05/2021 01:
HD-COD-SW-26-0/1-0	410-49448-11	HG04S18.D	08/05/2021 01:
HD-COD-SW-27-0/1-0	410-49448-12	HG04S19.D	08/05/2021 02:
HD-COD-SW-28-0/1-0	410-49448-13	HG04S20.D	08/05/2021 02:
HD-COD-SW-29-0/1-0	410-49448-14	HG04S21.D	08/05/2021 02:
HD-QC1-0/1-1	410-49448-15	HG04S22.D	08/05/2021 03:

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Lab File ID: HU30T03.D BFB Injection Date: 06/30/2021

Instrument ID: 19094 BFB Injection Time: 14:20

Analysis Batch No.: 143886

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.1	
75	30.0 - 60.0 % of mass 95	45.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.3	
173	Less than 2.0 % of mass 174	0.8	(1.0) 1
174	Greater than 50% of mass 95	79.6	
175	5.0 - 9.0 % of mass 174	6.0	(7.6) 1
176	95.0 - 101.0 % of mass 174	77.3	(97.1) 1
177	5.0 - 9.0 % of mass 176	5.4	(6.9) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 410-143886/14	HU30I11.D	06/30/2021	18:47
	ICIS 410-143886/15	HU30I12.D	06/30/2021	19:08
	IC 410-143886/16	HU30I13.D	06/30/2021	19:29
	IC 410-143886/17	HU30I14.D	06/30/2021	19:49
	IC 410-143886/18	HU30I15.D	06/30/2021	20:10
	IC 410-143886/19	HU30I16.D	06/30/2021	20:31
	IC 410-143886/20	HU30I17.D	06/30/2021	20:52
	ICV 410-143886/21	HU30V11.D	06/30/2021	21:12

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Lab File ID: HG04T01.D BFB Injection Date: 08/04/2021

Instrument ID: 19094 BFB Injection Time: 18:03

Analysis Batch No.: 156699

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.0	
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	6.1	
173	Less than 2.0 % of mass 174	0.7	(0.8) 1
174	Greater than 50% of mass 95	86.2	
175	5.0 - 9.0 % of mass 174	7.3	(8.5) 1
176	95.0 - 101.0 % of mass 174	84.8	(98.4) 1
177	5.0 - 9.0 % of mass 176	5.9	(6.9) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-156699/3	HG04C01.D	08/04/2021	18:42
	LCS 410-156699/4	HG04L01.D	08/04/2021	19:02
	MB 410-156699/6	HG04B01.D	08/04/2021	19:43
HD-QC1-0/1-2	410-49448-16	HG04S03.D	08/04/2021	20:46
HD-COD-SW-15-0/1-0	410-49448-6	HG04S07.D	08/04/2021	22:09
HD-COD-SW-15-0/1-0 MS MS	410-49448-6 MS	HG04S08.D	08/04/2021	22:29
HD-COD-SW-15-0/1-0 MSD MSD	410-49448-6 MSD	HG04S09.D	08/04/2021	22:50
HD-COD-SW-6-0/1-0	410-49448-1	HG04S11.D	08/04/2021	23:31
HD-COD-SW-7-0/1-0	410-49448-2	HG04S12.D	08/04/2021	23:52
HD-COD-SW-8-0/1-0	410-49448-3	HG04S13.D	08/05/2021	0:13
HD-COD-SW-9-0/1-0	410-49448-4	HG04S14.D	08/05/2021	0:34
HD-COD-SW-13-0/1-0	410-49448-5	HG04S15.D	08/05/2021	0:54
HD-COD-SW-16-0/1-0	410-49448-9	HG04S16.D	08/05/2021	1:15
HD-COD-SW-17-0/1-0	410-49448-10	HG04S17.D	08/05/2021	1:36
HD-COD-SW-26-0/1-0	410-49448-11	HG04S18.D	08/05/2021	1:56
HD-COD-SW-27-0/1-0	410-49448-12	HG04S19.D	08/05/2021	2:17
HD-COD-SW-28-0/1-0	410-49448-13	HG04S20.D	08/05/2021	2:38
HD-COD-SW-29-0/1-0	410-49448-14	HG04S21.D	08/05/2021	2:59
HD-QC1-0/1-1	410-49448-15	HG04S22.D	08/05/2021	3:19

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Sample No.: ICIS 410-143886/15 Date Analyzed: 06/30/2021 19:08

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

Lab File ID (Standard): HU30I12.D Heated Purge: (Y/N) N

Calibration ID: 28257

		TBAd10		FB		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT
INITIAL CALIBRATION MID-POINT		123880	4.26	2368765	7.77	1741980	11.24
UPPER LIMIT		247760	4.76	4737530	8.27	3483960	11.74
LOWER LIMIT		61940	3.76	1184383	7.27	870990	10.74
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-143886/21		121400	4.25	2305813	7.77	1714728	11.24
CCVIS 410-156699/3		140130	4.28	2386189	7.78	1975896	11.21

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.: 410-49448-1

SDG No.:

Sample No.: ICIS 410-143886/15 Date Analyzed: 06/30/2021 19:08

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

Lab File ID (Standard): HU30I12.D Heated Purge: (Y/N) N

Calibration ID: 28257

		DCBd4					
		AREA #	RT #	#	RT #	#	RT
INITIAL CALIBRATION MID-POINT		925399	13.12				
UPPER LIMIT		1850798	13.62				
LOWER LIMIT		462700	12.62				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-143886/21		915426	13.12				
CCVIS 410-156699/3		1091873	13.08				

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.: 410-49448-1

SDG No.:

Sample No.: CCVIS 410-156699/3 Date Analyzed: 08/04/2021 18:42

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

Lab File ID (Standard): HG04C01.D Heated Purge: (Y/N) N

Calibration ID: 28257

		TBAd10		FB		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT
12/24 HOUR STD		140130	4.28	2386189	7.78	1975896	11.21
UPPER LIMIT		280260	4.78	4772378	8.28	3951792	11.71
LOWER LIMIT		70065	3.78	1193095	7.28	987948	10.71
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-156699/4		131372	4.28	2425660	7.78	2013409	11.21
MB 410-156699/6		141165	4.30	2421817	7.78	1983801	11.21
410-49448-16	HD-QC1-0/1-2	126043	4.28	2404935	7.78	1957056	11.21
410-49448-6	HD-COD-SW-15-0/1-0	115226	4.28	2348504	7.78	1902344	11.21
410-49448-6 MS	HD-COD-SW-15-0/1-0 MS MS	125523	4.32	2372435	7.78	1917561	11.21
410-49448-6 MSD	HD-COD-SW-15-0/1-0 MSD MSD	121585	4.28	2401550	7.78	1958370	11.21
410-49448-1	HD-COD-SW-6-0/1-0	125282	4.26	2371805	7.78	1962114	11.21
410-49448-2	HD-COD-SW-7-0/1-0	142948	4.29	2398434	7.78	1973810	11.21
410-49448-3	HD-COD-SW-8-0/1-0	129838	4.25	2392734	7.77	1986348	11.21
410-49448-4	HD-COD-SW-9-0/1-0	116568	4.26	2382069	7.78	1938453	11.21
410-49448-5	HD-COD-SW-13-0/1-0	122290	4.28	2443879	7.78	2003802	11.21
410-49448-9	HD-COD-SW-16-0/1-0	146974	4.29	1951791	7.78	1628115	11.21
410-49448-10	HD-COD-SW-17-0/1-0	130529	4.29	2333107	7.78	1931944	11.21
410-49448-11	HD-COD-SW-26-0/1-0	133898	4.26	2453369	7.78	2021815	11.21
410-49448-12	HD-COD-SW-27-0/1-0	124275	4.28	2332684	7.78	1912080	11.21
410-49448-13	HD-COD-SW-28-0/1-0	117332	4.26	2320196	7.78	1936936	11.21
410-49448-14	HD-COD-SW-29-0/1-0	120874	4.28	2311899	7.78	1898169	11.21
410-49448-15	HD-QC1-0/1-1	129712	4.27	2315022	7.78	1922166	11.21

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.: 410-49448-1

SDG No.:

Sample No.: CCVIS 410-156699/3 Date Analyzed: 08/04/2021 18:42

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

Lab File ID (Standard): HG04C01.D Heated Purge: (Y/N) N

Calibration ID: 28257

		DCBd4					
		AREA #	RT #	#	RT #	#	RT
12/24 HOUR STD		1091873	13.08				
UPPER LIMIT		2183746	13.58				
LOWER LIMIT		545937	12.58				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-156699/4		1100603	13.08				
MB 410-156699/6		1097251	13.08				
410-49448-16	HD-QC1-0/1-2	1085493	13.08				
410-49448-6	HD-COD-SW-15-0/1-0	1044210	13.08				
410-49448-6 MS	HD-COD-SW-15-0/1-0 MS MS	1069112	13.08				
410-49448-6 MSD	HD-COD-SW-15-0/1-0 MSD MSD	1086111	13.08				
410-49448-1	HD-COD-SW-6-0/1-0	1078574	13.08				
410-49448-2	HD-COD-SW-7-0/1-0	1077270	13.08				
410-49448-3	HD-COD-SW-8-0/1-0	1070500	13.08				
410-49448-4	HD-COD-SW-9-0/1-0	1083064	13.08				
410-49448-5	HD-COD-SW-13-0/1-0	1105177	13.08				
410-49448-9	HD-COD-SW-16-0/1-0	909300	13.08				
410-49448-10	HD-COD-SW-17-0/1-0	1053269	13.08				
410-49448-11	HD-COD-SW-26-0/1-0	1114483	13.08				
410-49448-12	HD-COD-SW-27-0/1-0	1044685	13.08				
410-49448-13	HD-COD-SW-28-0/1-0	1064382	13.08				
410-49448-14	HD-COD-SW-29-0/1-0	1060147	13.08				
410-49448-15	HD-QC1-0/1-1	1060563	13.08				

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.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 410-49448-1

Matrix: Water Lab File ID: HG04S11.D

Analysis Method: 8260D Date Collected: 07/29/2021 09:45

Sample wt/vol: 25(mL) Date Analyzed: 08/04/2021 23:31

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 156699 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.8	J ^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	0.11	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.072	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 410-49448-1

Matrix: Water Lab File ID: HG04S11.D

Analysis Method: 8260D Date Collected: 07/29/2021 09:45

Sample wt/vol: 25(mL) Date Analyzed: 08/04/2021 23:31

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 156699 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	106		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S11.D
Lims ID: 410-49448-A-1
Client ID: HD-COD-SW-6-0/1-0
Sample Type: Client
Inject. Date: 04-Aug-2021 23:31:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-017
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 11:05:59 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 11:05:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Chloromethane	50	2.190	2.190	0.000	1	2487	0.0305	
7 Vinyl chloride	62		2.312				ND	7
9 Bromomethane	94		2.641				ND	
10 Chloroethane	64		2.727				ND	
18 1,1-Dichloroethene	96		3.611				ND	
19 Acetone	43	3.660	3.635	0.025	70	16226	1.76	
24 Carbon disulfide	76		3.934				ND	7
* 28 t-Butyl alcohol-d10 (IS)	65	4.257	4.281	-0.024	82	125282	50.0	
29 Methylene Chloride	84		4.281				ND	
32 Methyl tert-butyl ether	73		4.702				ND	
33 trans-1,2-Dichloroethene	96		4.714				ND	
35 1,1-Dichloroethane	63		5.367				ND	
41 2-Butanone (MEK)	43		6.147				ND	7
42 cis-1,2-Dichloroethene	96	6.196	6.196	0.000	76	8040	0.1075	
48 Chlorobromomethane	128		6.525				ND	
50 Chloroform	83	6.671	6.677	-0.006	44	7554	0.0646	M
$ 51 Dibromofluoromethane (Surr)	113	6.879	6.891	-0.012	93	606412	10.6	
52 1,1,1-Trichloroethane	97		6.909				ND	
56 Carbon tetrachloride	117		7.122				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.342	7.336	0.006	47	119100	10.3	
59 Benzene	78		7.378				ND	7
60 1,2-Dichloroethane	62		7.439				ND	U
* 65 Fluorobenzene (IS)	96	7.775	7.775	0.000	99	2371805	10.0	
67 Trichloroethene	95	8.262	8.256	0.006	93	5271	0.0721	M
70 1,2-Dichloropropane	63		8.585				ND	
75 Dichlorobromomethane	83		8.927				ND	
80 cis-1,3-Dichloropropene	75		9.463				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.628				ND	7
$ 82 Toluene-d8 (Surr)	98	9.768	9.768	0.000	93	2489727	9.44	
83 Toluene	92	9.847	9.847	0.000	97	13266	0.0660	
85 trans-1,3-Dichloropropene	75		10.097				ND	
87 1,1,2-Trichloroethane	97		10.299				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
88 Tetrachloroethene	166		10.390				ND	7
91 2-Hexanone	43		10.506				ND	7
93 Chlorodibromomethane	129		10.670				ND	
94 Ethylene Dibromide	107		10.786				ND	
* 97 Chlorobenzene-d5 (IS)	117	11.213	11.213	0.000	85	1962114	10.0	
98 Chlorobenzene	112		11.237				ND	
S 95 Xylenes, Total	106		11.245				ND	7
99 1,1,1,2-Tetrachloroethane	131		11.317				ND	
100 Ethylbenzene	91		11.323				ND	7
101 m-Xylene & p-Xylene	106	11.426	11.439	-0.013	94	6748	0.0465	
102 o-Xylene	106		11.762				ND	7
103 Styrene	104		11.780				ND	7
104 Bromoform	173		11.938				ND	
$ 108 4-Bromofluorobenzene (Surr)	95	12.201	12.201	0.000	91	925742	9.62	
109 1,1,2,2-Tetrachloroethane	83		12.298				ND	
* 124 1,4-Dichlorobenzene-d4	152	13.079	13.078	0.001	95	1078574	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

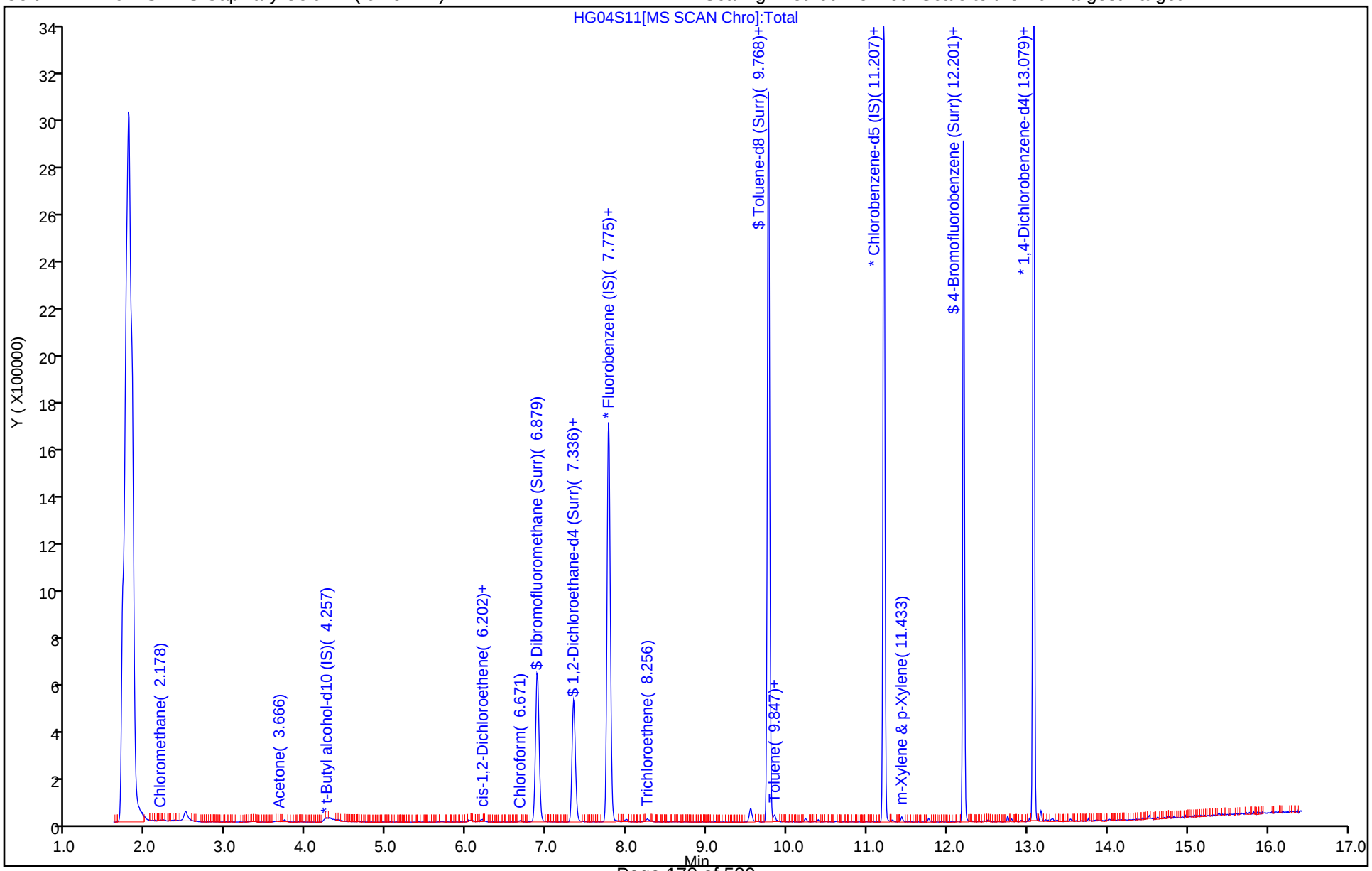
MSV_LLcentISS_00001 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 05-Aug-2021 11:05:59 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S11.D				
Injection Date:	04-Aug-2021 23:31:30	Instrument ID:	19094	Operator ID:	MEC29284
Lims ID:	410-49448-A-1	Lab Sample ID:	410-49448-1	Worklist Smp#:	17
Client ID:	HD-COD-SW-6-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S11.D				
Lims ID:	410-49448-A-1				
Client ID:	HD-COD-SW-6-0/1-0				
Sample Type:	Client				
Inject. Date:	04-Aug-2021 23:31:30	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0036053-017				
Operator ID:	MEC29284	Instrument ID:	19094		
Method:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	05-Aug-2021 11:05:59	Calib Date:	30-Jun-2021 20:52:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1672				

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 11:05:59

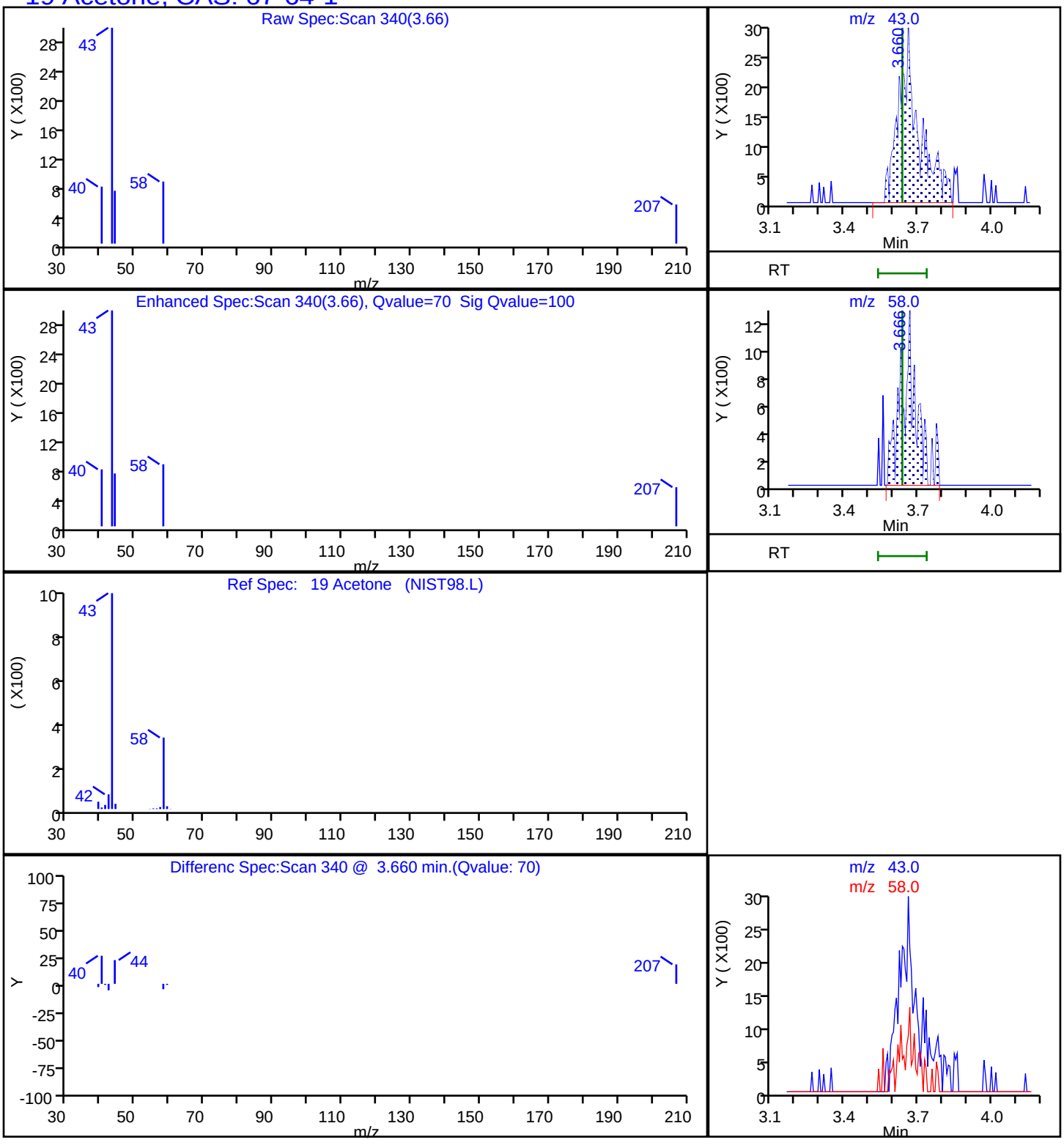
Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	10.0	10.6	105.68
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	102.79
$ 82 Toluene-d8 (Surr)	10.0	9.44	94.43
$ 108 4-Bromofluorobenzene (Surr)	10.0	9.62	96.22

Report Date: 05-Aug-2021 11:05:59 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S11.D				
Injection Date:	04-Aug-2021 23:31:30	Instrument ID:	19094		
Lims ID:	410-49448-A-1	Lab Sample ID:	410-49448-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

19 Acetone, CAS: 67-64-1

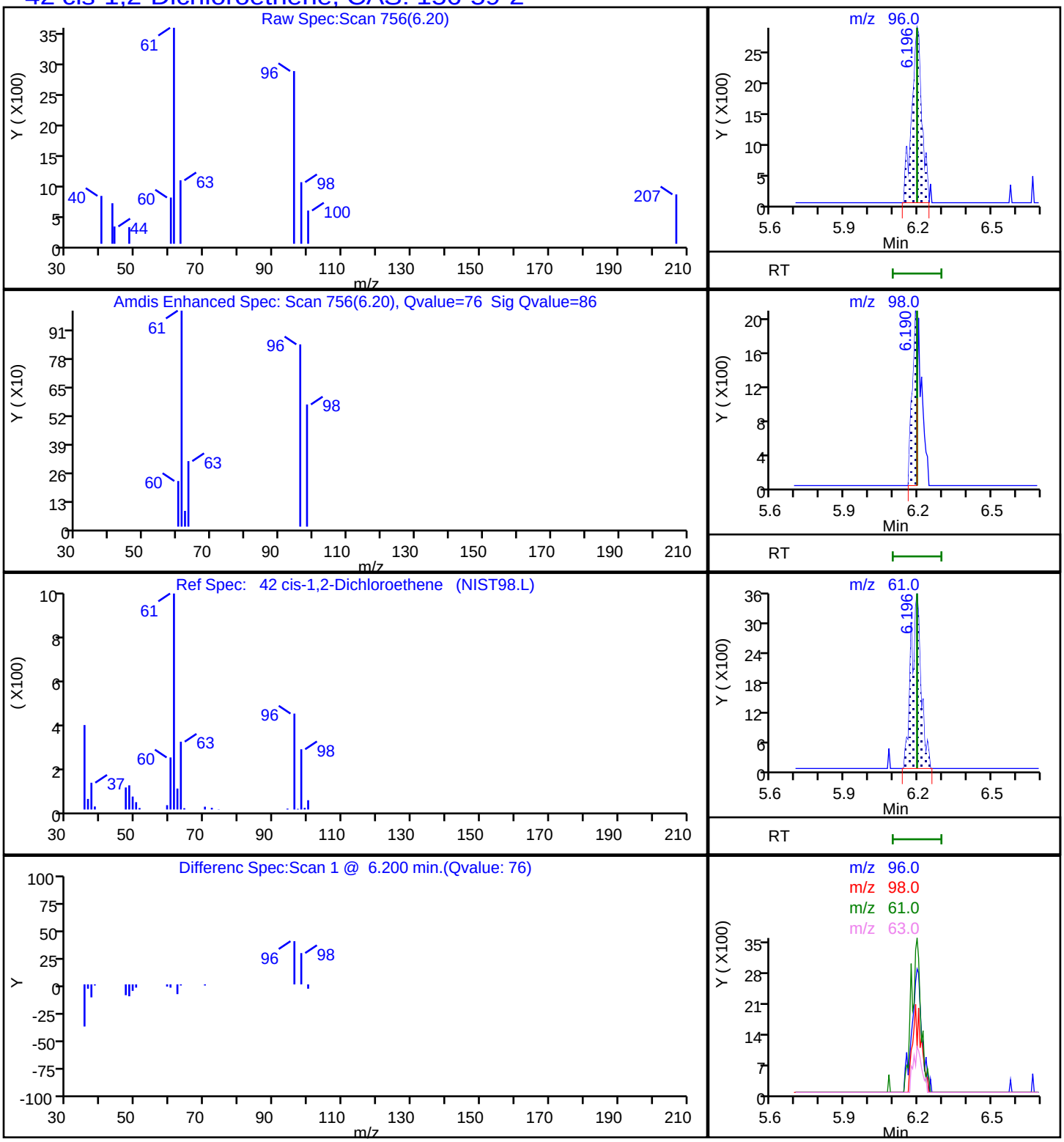


Report Date: 05-Aug-2021 11:05:59 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S11.D				
Injection Date:	04-Aug-2021 23:31:30	Instrument ID:	19094		
Lims ID:	410-49448-A-1	Lab Sample ID:	410-49448-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

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



Report Date: 05-Aug-2021 11:05:59 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S11.D

Injection Date: 04-Aug-2021 23:31:30 Instrument ID: 19094

Lims ID: 410-49448-A-1 Lab Sample ID: 410-49448-1

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

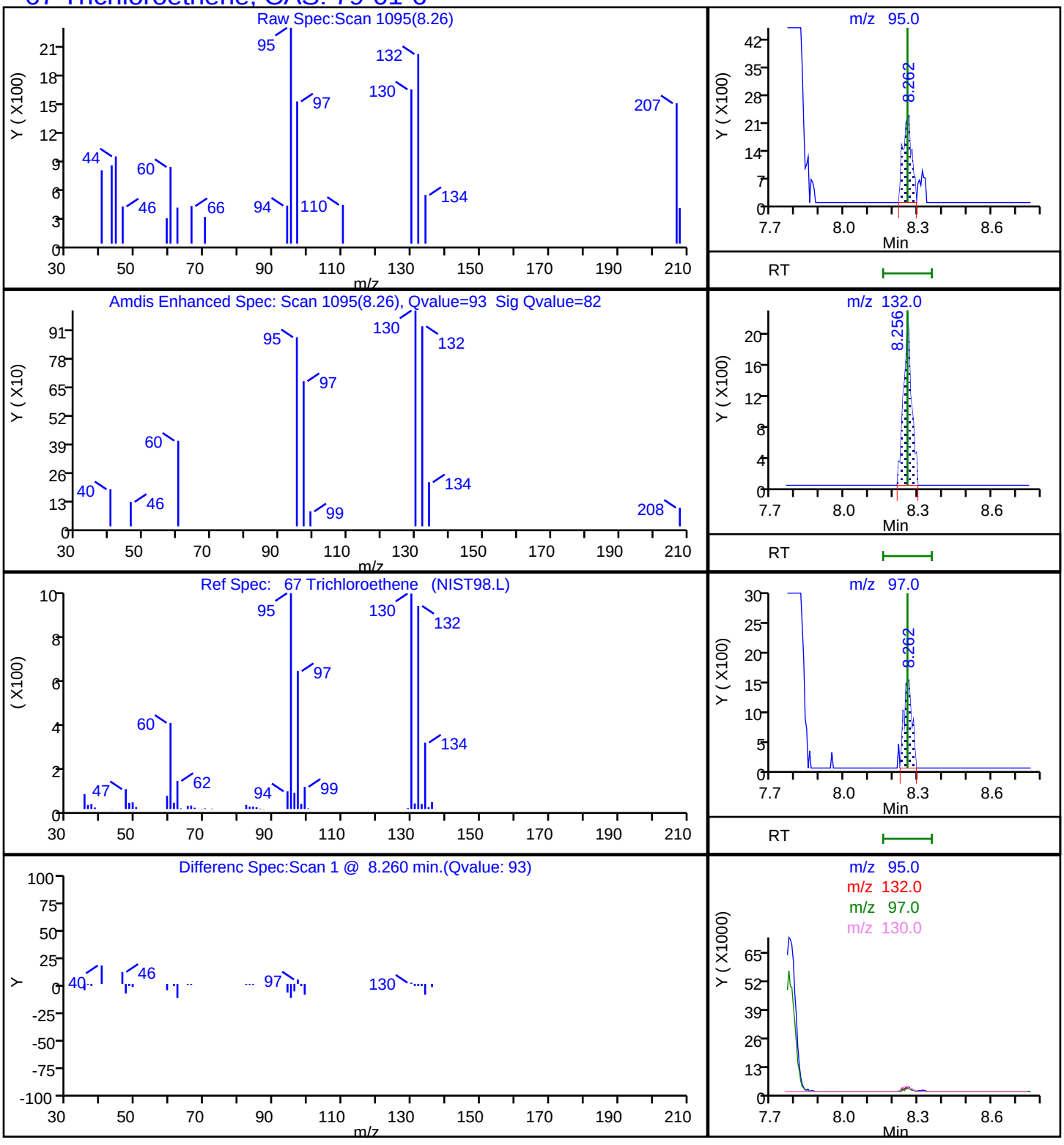
Operator ID: MEC29284 ALS Bottle#: 16 Worklist Smp#: 17

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_19094_25mL Limit Group: MSV - 8260C_D

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

67 Trichloroethene, CAS: 79-01-6



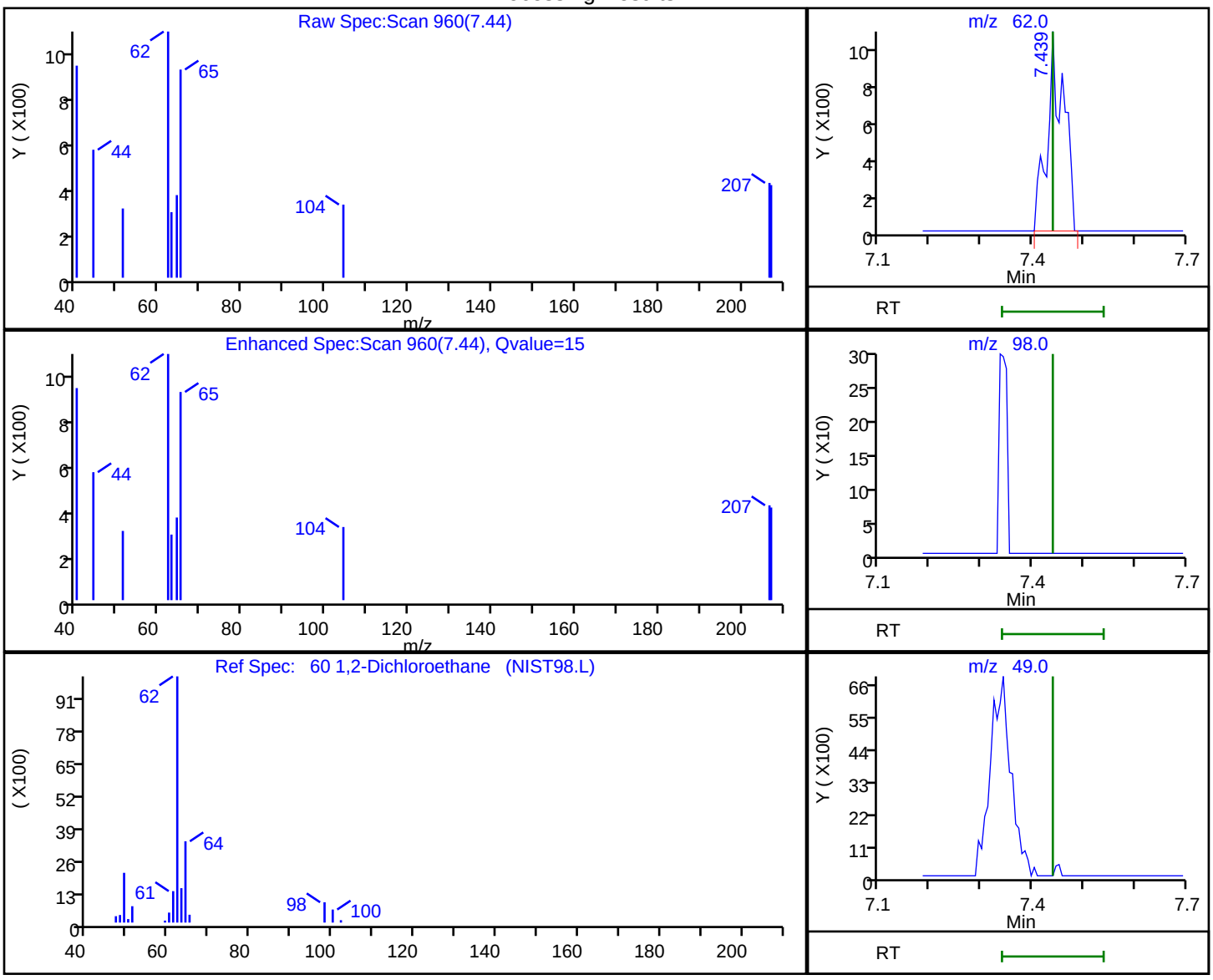
User Disabled Compound Report

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S11.D				
Injection Date:	04-Aug-2021 23:31:30	Instrument ID:	19094		
Lims ID:	410-49448-A-1	Lab Sample ID:	410-49448-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

60 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.44	62.00	2279	0.032849
7.44	98.00	0	
7.44	49.00	0	

Reviewer: kaewrungrueangp, 05-Aug-2021 11:04:35

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

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

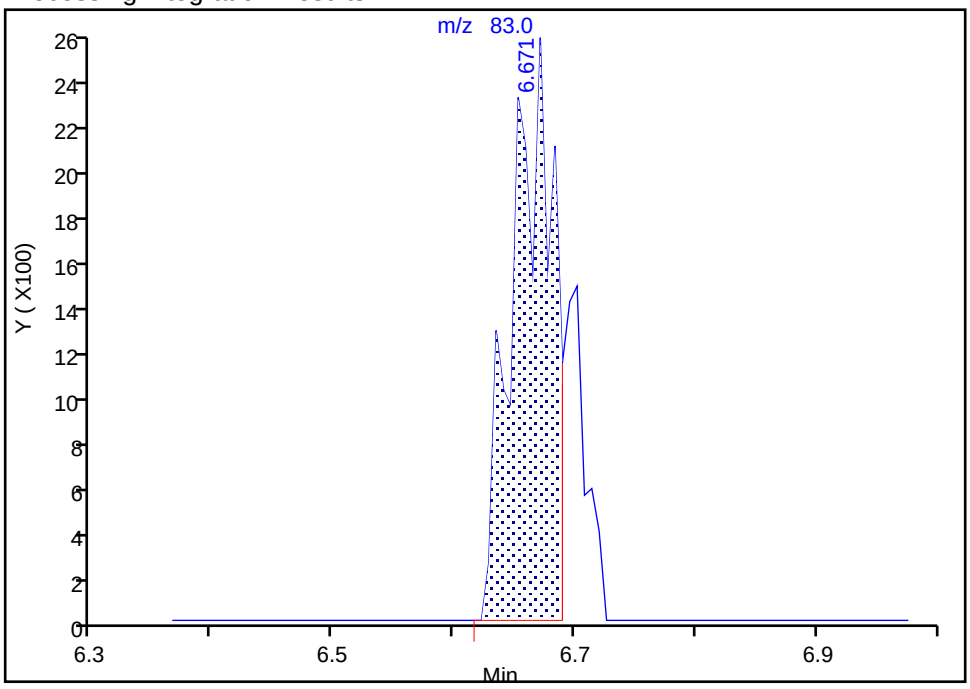
Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S11.D				
Injection Date:	04-Aug-2021 23:31:30	Instrument ID:	19094		
Lims ID:	410-49448-A-1	Lab Sample ID:	410-49448-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

50 Chloroform, CAS: 67-66-3

Signal: 1

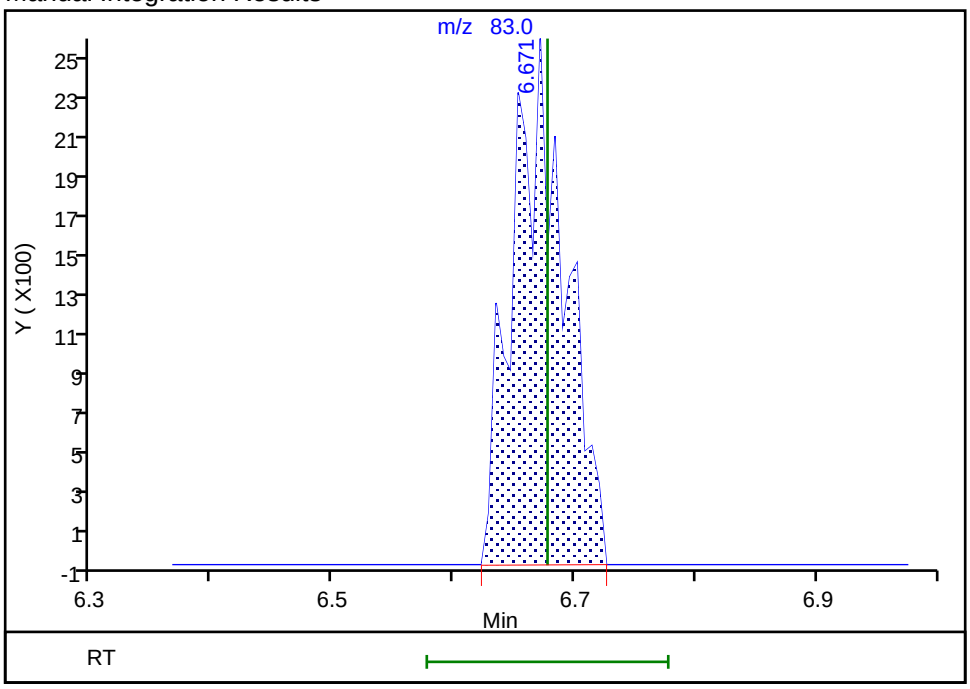
Processing Integration Results

RT: 6.67
Area: 5966
Amount: 0.051020
Amount Units: ug/l



Manual Integration Results

RT: 6.67
Area: 7554
Amount: 0.064600
Amount Units: ug/l



Reviewer: kaewrungrueangp, 05-Aug-2021 11:04:22

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

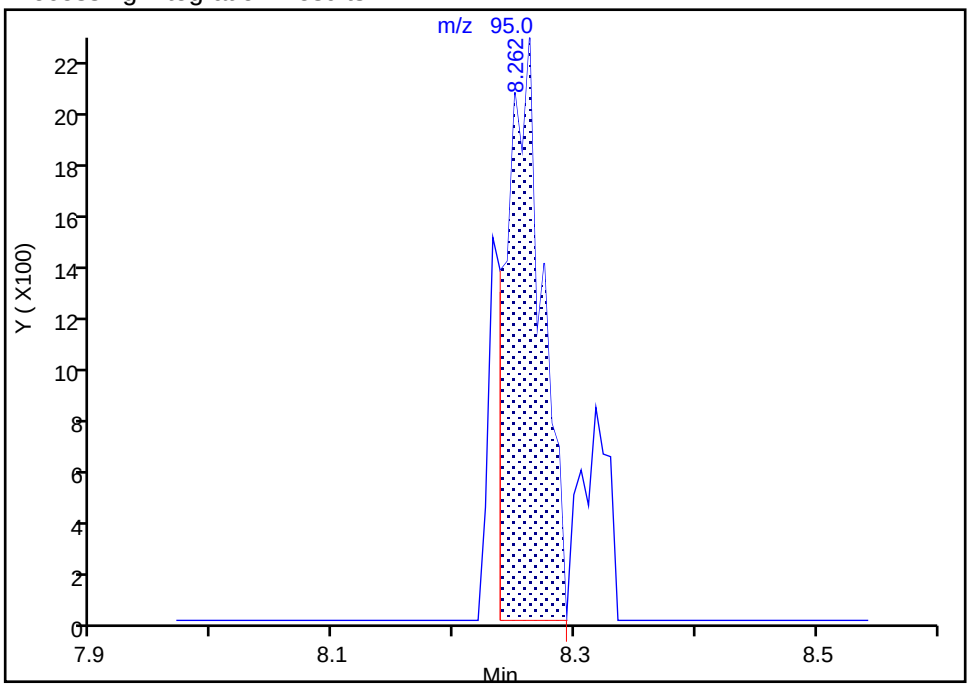
Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S11.D				
Injection Date:	04-Aug-2021 23:31:30	Instrument ID:	19094		
Lims ID:	410-49448-A-1	Lab Sample ID:	410-49448-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6

Signal: 1

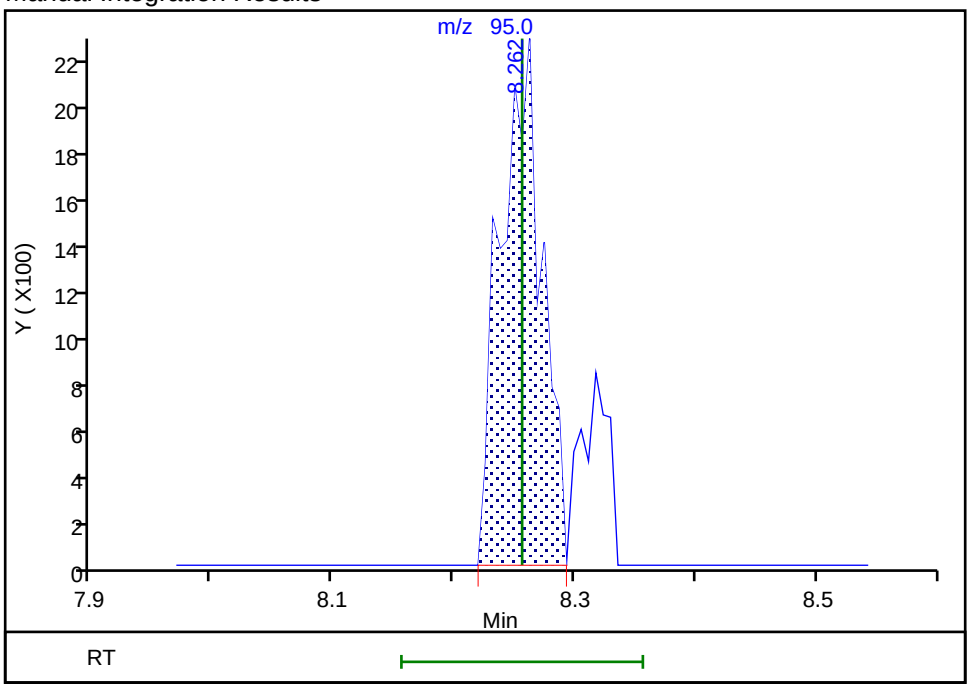
Processing Integration Results

RT: 8.26
Area: 4581
Amount: 0.062658
Amount Units: ug/l



Manual Integration Results

RT: 8.26
Area: 5271
Amount: 0.072096
Amount Units: ug/l



Reviewer: kaewrungrueangp, 05-Aug-2021 11:05:27

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.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 410-49448-2

Matrix: Water Lab File ID: HG04S12.D

Analysis Method: 8260D Date Collected: 07/29/2021 10:35

Sample wt/vol: 25(mL) Date Analyzed: 08/04/2021 23:52

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 156699 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.8	J ^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	0.19	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	0.085	J	0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.13	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 410-49448-2

Matrix: Water Lab File ID: HG04S12.D

Analysis Method: 8260D Date Collected: 07/29/2021 10:35

Sample wt/vol: 25(mL) Date Analyzed: 08/04/2021 23:52

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 156699 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	107		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S12.D
Lims ID: 410-49448-A-2
Client ID: HD-COD-SW-7-0/1-0
Sample Type: Client
Inject. Date: 04-Aug-2021 23:52:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-018
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 04-Aug-2021 22:35:26 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 11:50:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Chloromethane	50	2.190	2.190	0.000	4	4465	0.0542	
7 Vinyl chloride	62		2.312				ND	7
9 Bromomethane	94		2.641				ND	
10 Chloroethane	64		2.727				ND	
18 1,1-Dichloroethene	96		3.611				ND	
19 Acetone	43	3.647	3.635	0.012	72	19082	1.82	
24 Carbon disulfide	76		3.934				ND	7
* 28 t-Butyl alcohol-d10 (IS)	65	4.287	4.281	0.006	79	142948	50.0	
29 Methylene Chloride	84		4.281				ND	
32 Methyl tert-butyl ether	73		4.702				ND	7
33 trans-1,2-Dichloroethene	96		4.714				ND	7
35 1,1-Dichloroethane	63		5.367				ND	
41 2-Butanone (MEK)	43		6.147				ND	7
42 cis-1,2-Dichloroethene	96	6.202	6.196	0.006	78	14452	0.1911	
48 Chlorobromomethane	128		6.525				ND	
50 Chloroform	83	6.677	6.677	0.000	91	14009	0.1185	
$ 51 Dibromofluoromethane (Surr)	113	6.884	6.891	-0.007	93	620175	10.7	
52 1,1,1-Trichloroethane	97		6.909				ND	
56 Carbon tetrachloride	117		7.122				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.336	7.336	0.000	47	120122	10.3	
59 Benzene	78		7.378				ND	7
60 1,2-Dichloroethane	62	7.451	7.439	0.012	6	1880	0.0268	
* 65 Fluorobenzene (IS)	96	7.775	7.775	0.000	99	2398434	10.0	
67 Trichloroethene	95	8.256	8.256	0.000	94	9766	0.1321	
70 1,2-Dichloropropane	63		8.585				ND	
75 Dichlorobromomethane	83		8.927				ND	7
80 cis-1,3-Dichloropropene	75		9.463				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.628				ND	7
$ 82 Toluene-d8 (Surr)	98	9.768	9.768	0.000	93	2486363	9.37	
83 Toluene	92	9.847	9.847	0.000	96	9164	0.0453	
85 trans-1,3-Dichloropropene	75		10.097				ND	
87 1,1,2-Trichloroethane	97		10.299				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
88 Tetrachloroethene	166	10.390	10.390	0.000	94	7421	0.0846	
91 2-Hexanone	43		10.506				ND	7
93 Chlorodibromomethane	129		10.670				ND	
94 Ethylene Dibromide	107		10.786				ND	
* 97 Chlorobenzene-d5 (IS)	117	11.213	11.213	0.000	85	1973810	10.0	
98 Chlorobenzene	112		11.237				ND	7
S 95 Xylenes, Total	106		11.245				ND	7
99 1,1,1,2-Tetrachloroethane	131		11.317				ND	
100 Ethylbenzene	91		11.323				ND	7
101 m-Xylene & p-Xylene	106		11.439				ND	7
102 o-Xylene	106		11.762				ND	7
103 Styrene	104		11.780				ND	7
104 Bromoform	173		11.938				ND	
$ 108 4-Bromofluorobenzene (Surr)	95	12.207	12.201	0.006	92	932793	9.64	
109 1,1,2,2-Tetrachloroethane	83		12.298				ND	
* 124 1,4-Dichlorobenzene-d4	152	13.078	13.078	0.000	95	1077270	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_LLcentISS_00001 Amount Added: 5.00 Units: uL Run Reagent

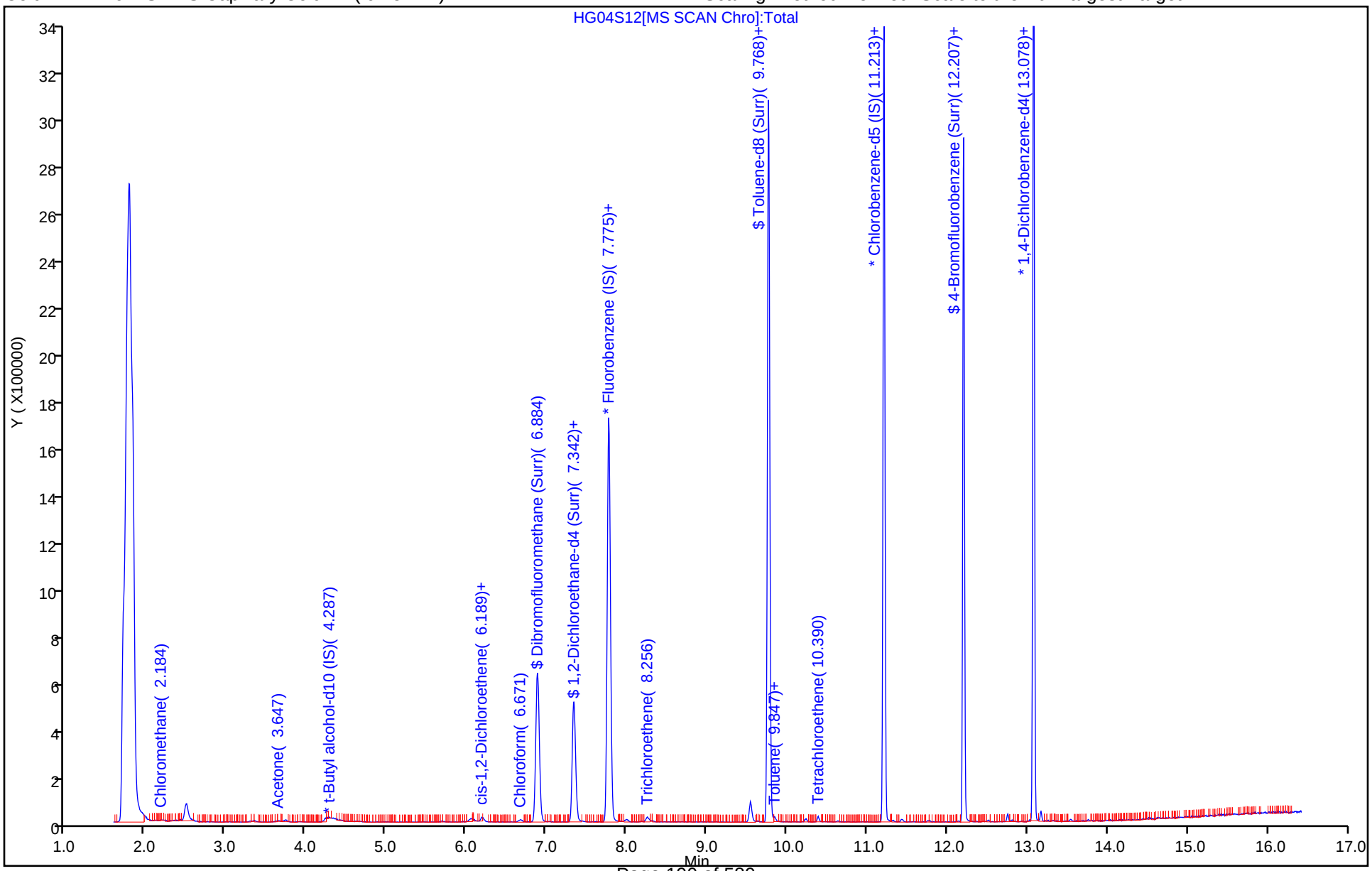
Report Date: 05-Aug-2021 11:50:58 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S12.D

Injection Date:	04-Aug-2021 23:52:30	Instrument ID:	19094	Operator ID:	MEC29284
Lims ID:	410-49448-A-2	Lab Sample ID:	410-49448-2	Worklist Smp#:	18
Client ID:	HD-COD-SW-7-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S12.D				
Lims ID:	410-49448-A-2				
Client ID:	HD-COD-SW-7-0/1-0				
Sample Type:	Client				
Inject. Date:	04-Aug-2021 23:52:30	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0036053-018				
Operator ID:	MEC29284	Instrument ID:	19094		
Method:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	04-Aug-2021 22:35:26	Calib Date:	30-Jun-2021 20:52:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1672				

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 11:50:57

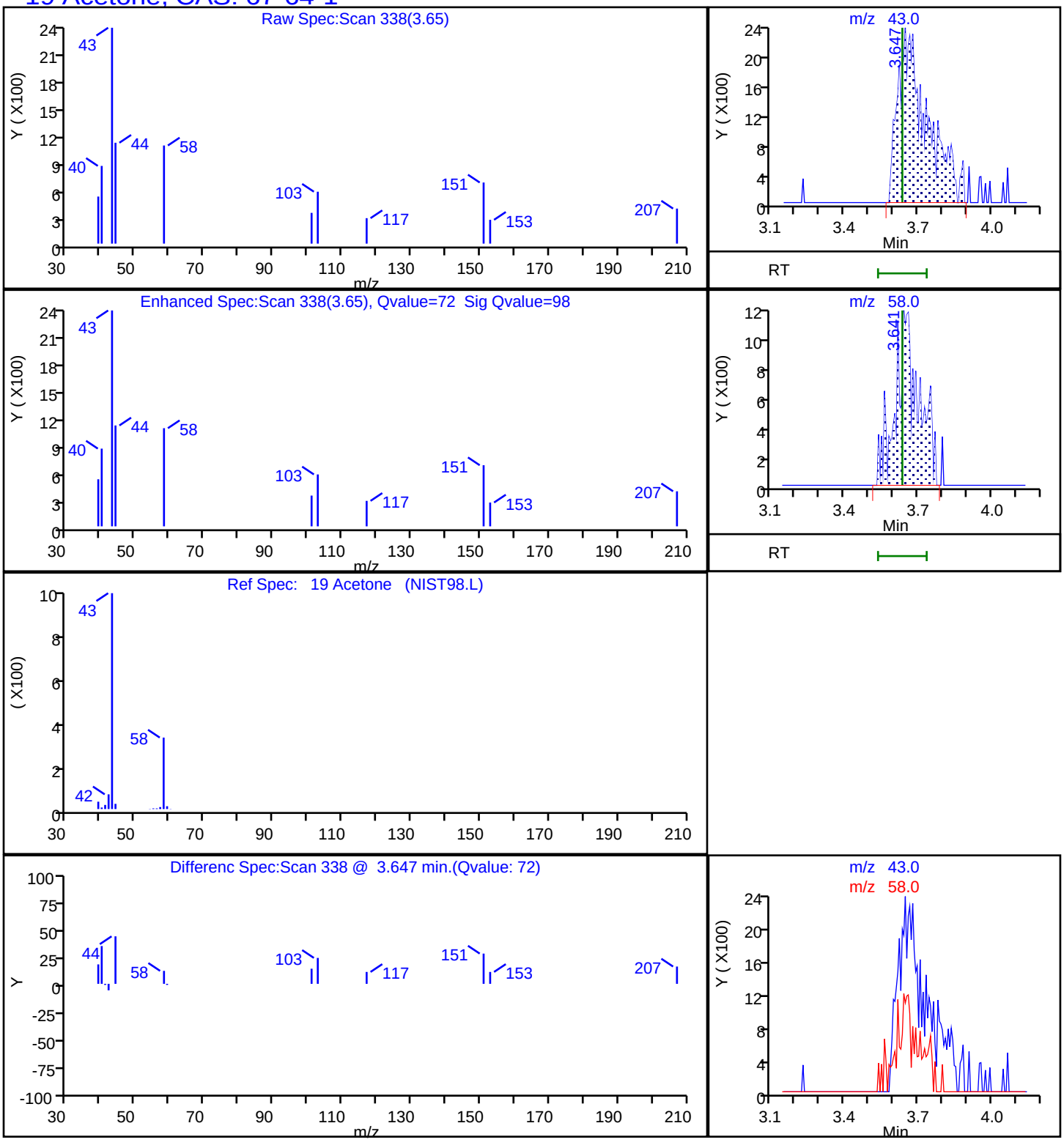
Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	10.0	10.7	106.88
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	102.52
$ 82 Toluene-d8 (Surr)	10.0	9.37	93.75
$ 108 4-Bromofluorobenzene (Surr)	10.0	9.64	96.38

Report Date: 05-Aug-2021 11:50:58 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S12.D				
Injection Date:	04-Aug-2021 23:52:30	Instrument ID:	19094		
Lims ID:	410-49448-A-2	Lab Sample ID:	410-49448-2		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

19 Acetone, CAS: 67-64-1



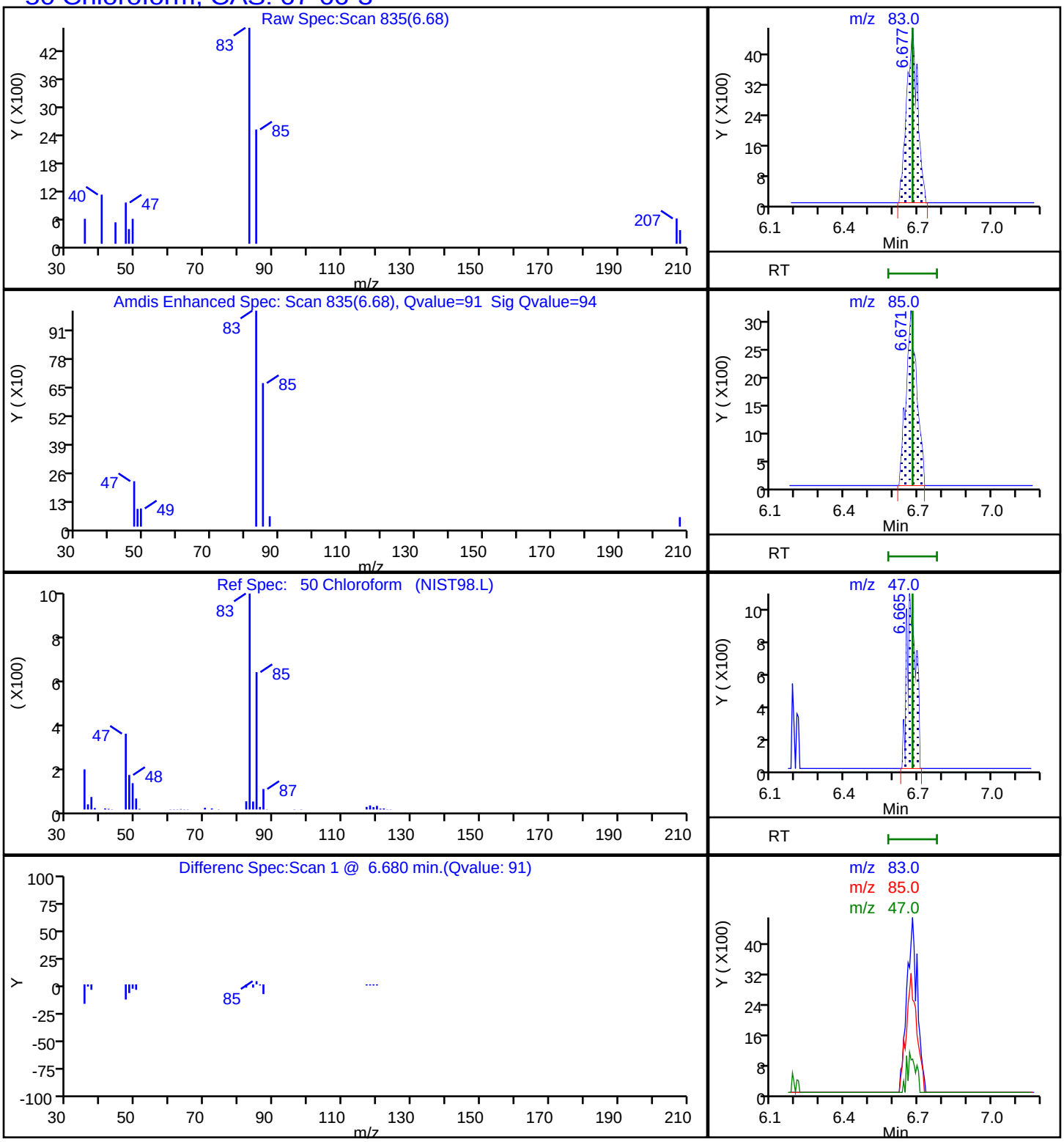
Report Date: 05-Aug-2021 11:50:58 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S12.D

Injection Date:	04-Aug-2021 23:52:30	Instrument ID:	19094		
Lims ID:	410-49448-A-2	Lab Sample ID:	410-49448-2		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

50 Chloroform, CAS: 67-66-3



Report Date: 05-Aug-2021 11:50:58 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S12.D

Injection Date: 04-Aug-2021 23:52:30 Instrument ID: 19094

Lims ID: 410-49448-A-2 Lab Sample ID: 410-49448-2

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

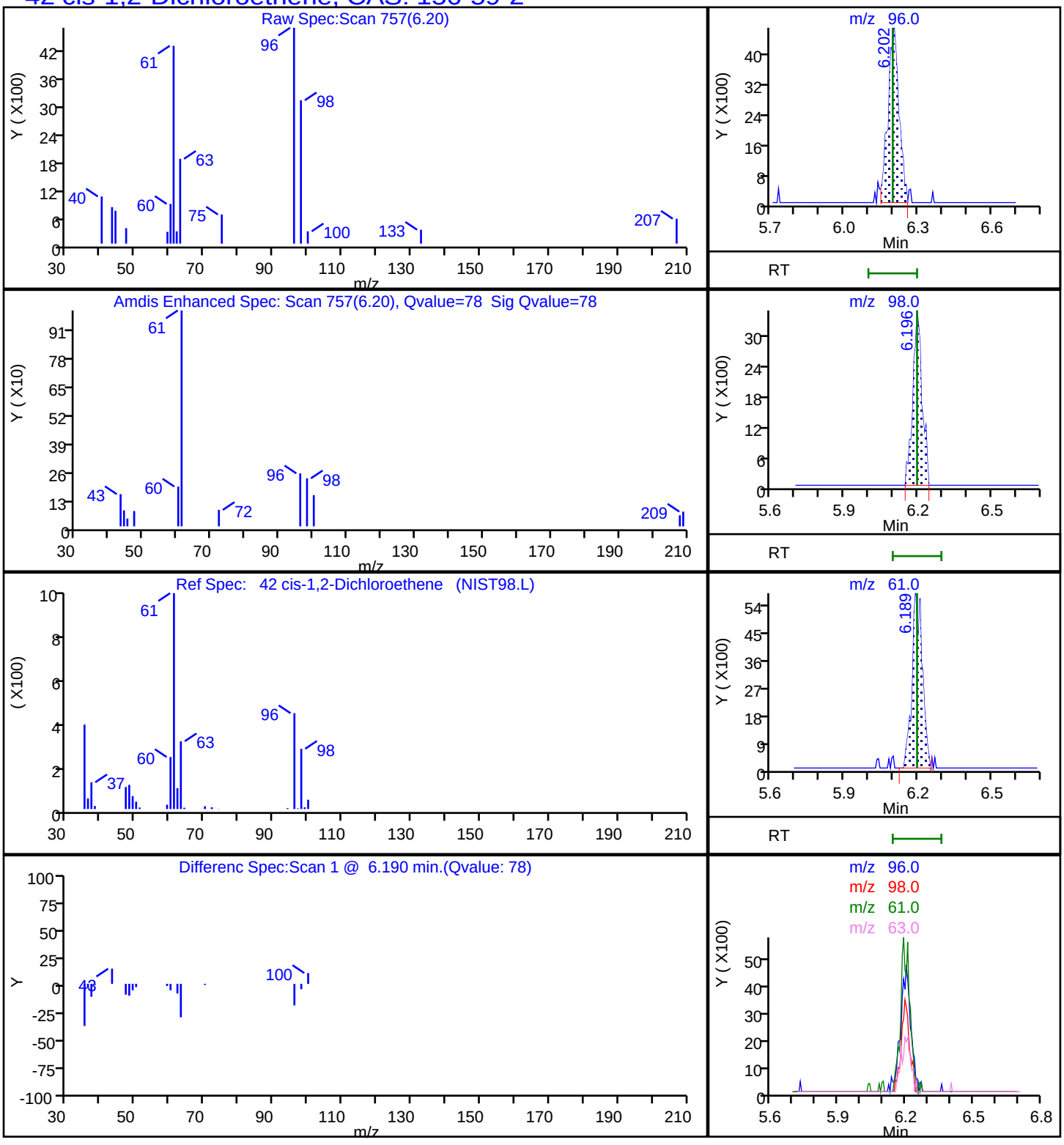
Operator ID: MEC29284 ALS Bottle#: 17 Worklist Smp#: 18

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_19094_25mL Limit Group: MSV - 8260C_D

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

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



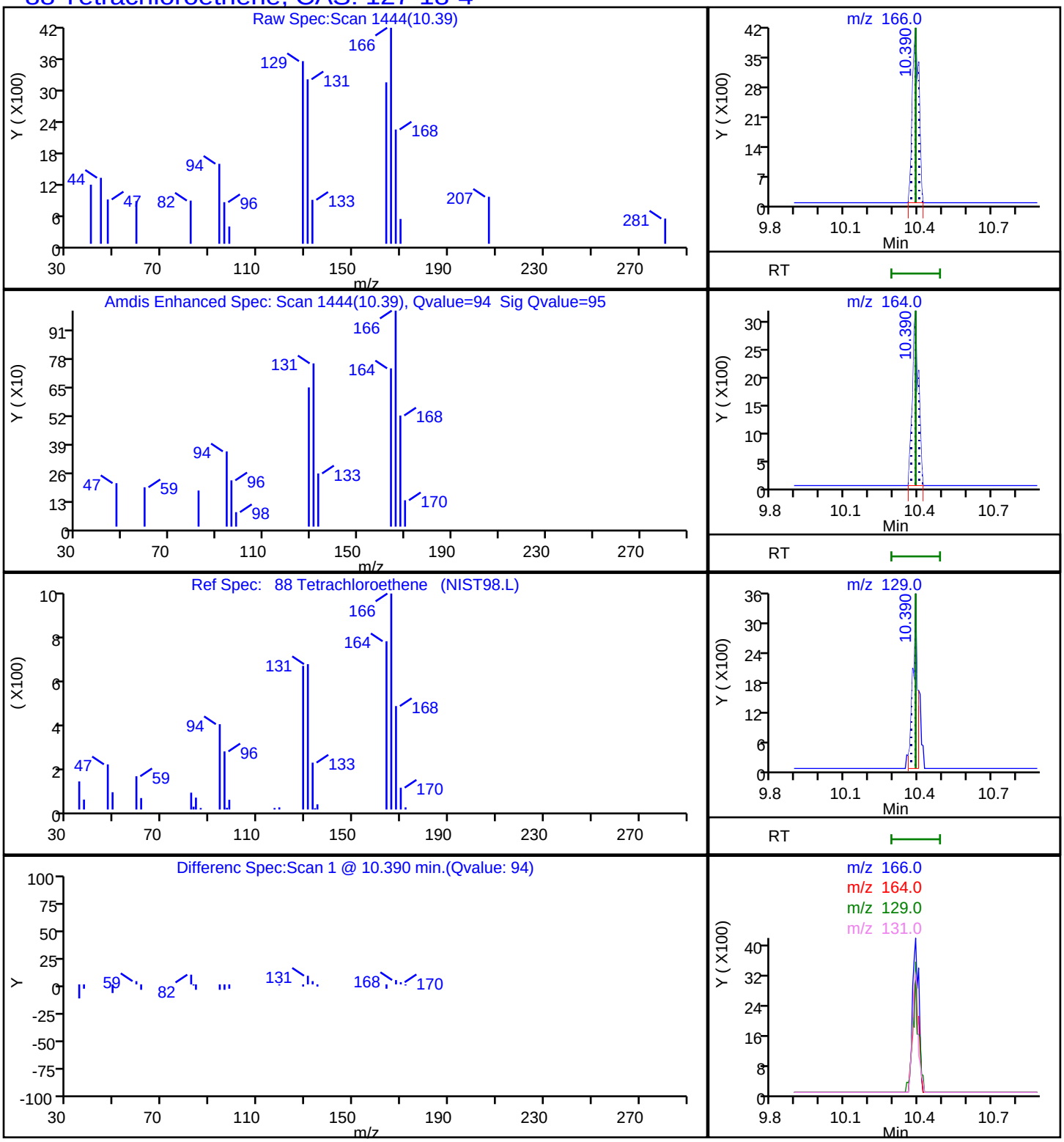
Report Date: 05-Aug-2021 11:50:58 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S12.D

Injection Date:	04-Aug-2021 23:52:30	Instrument ID:	19094		
Lims ID:	410-49448-A-2	Lab Sample ID:	410-49448-2		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

88 Tetrachloroethene, CAS: 127-18-4



Report Date: 05-Aug-2021 11:50:58 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S12.D

Injection Date: 04-Aug-2021 23:52:30 Instrument ID: 19094

Lims ID: 410-49448-A-2 Lab Sample ID: 410-49448-2

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

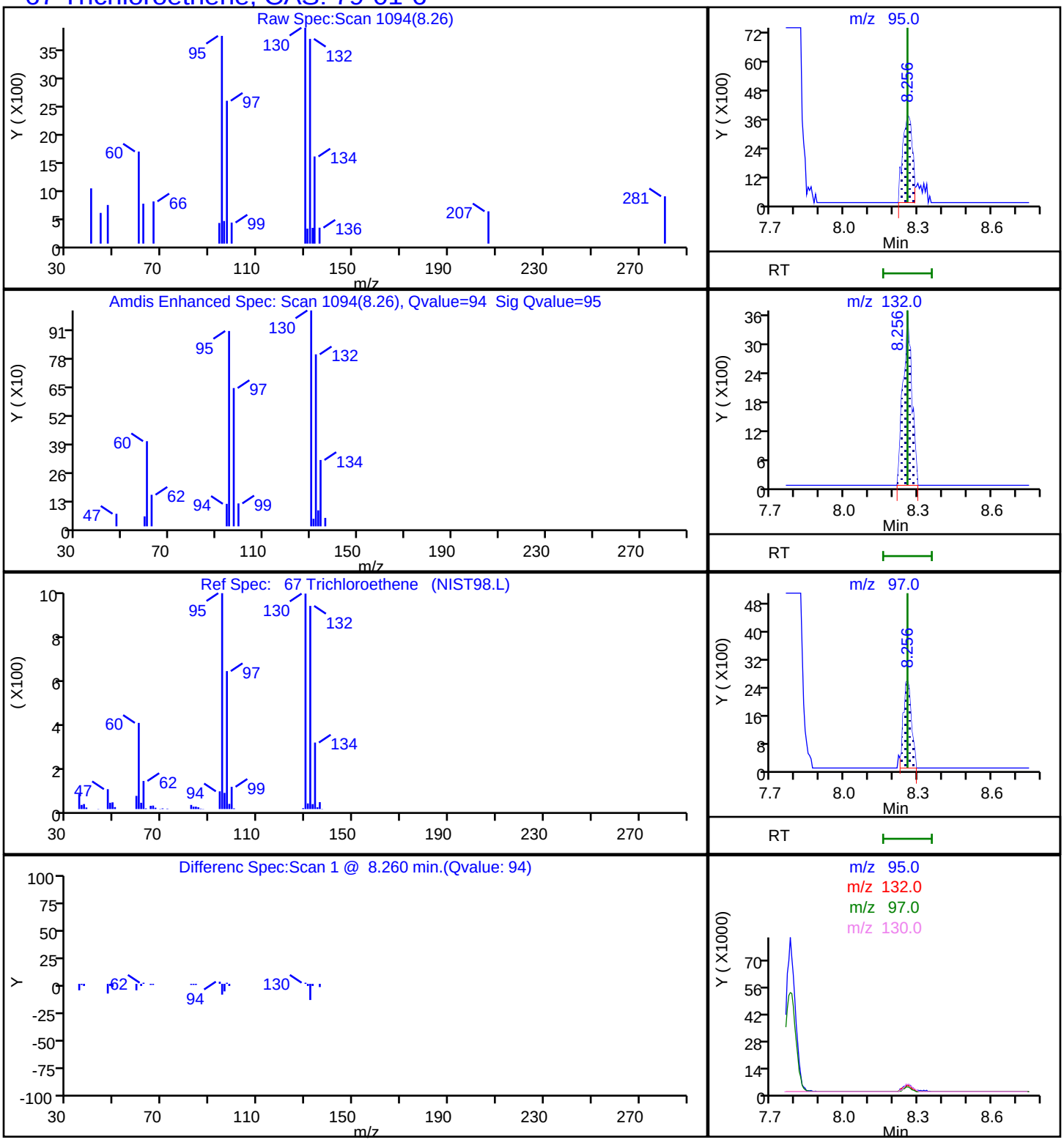
Operator ID: MEC29284 ALS Bottle#: 17 Worklist Smp#: 18

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_19094_25mL Limit Group: MSV - 8260C_D

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

67 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 410-49448-3

Matrix: Water Lab File ID: HG04S13.D

Analysis Method: 8260D Date Collected: 07/29/2021 08:25

Sample wt/vol: 25(mL) Date Analyzed: 08/05/2021 00:13

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 156699 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.2	J ^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	0.13	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.099	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 410-49448-3

Matrix: Water Lab File ID: HG04S13.D

Analysis Method: 8260D Date Collected: 07/29/2021 08:25

Sample wt/vol: 25(mL) Date Analyzed: 08/05/2021 00:13

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 156699 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)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	105		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S13.D
Lims ID: 410-49448-A-3
Client ID: HD-COD-SW-8-0/1-0
Sample Type: Client
Inject. Date: 05-Aug-2021 00:13:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-019
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 11:53:08 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 11:53:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Chloromethane	50	2.178	2.190	-0.012	1	3716	0.0452	
7 Vinyl chloride	62		2.312				ND	7
9 Bromomethane	94		2.641				ND	
10 Chloroethane	64		2.727				ND	
18 1,1-Dichloroethene	96		3.611				ND	
19 Acetone	43	3.623	3.635	-0.012	80	20702	2.17	
24 Carbon disulfide	76		3.934				ND	7
* 28 t-Butyl alcohol-d10 (IS)	65	4.245	4.281	-0.036	35	129838	50.0	
29 Methylene Chloride	84		4.281				ND	
32 Methyl tert-butyl ether	73		4.702				ND	
33 trans-1,2-Dichloroethene	96		4.714				ND	
35 1,1-Dichloroethane	63		5.367				ND	
41 2-Butanone (MEK)	43		6.147				ND	7
42 cis-1,2-Dichloroethene	96	6.189	6.196	-0.007	75	9975	0.1322	
48 Chlorobromomethane	128		6.525				ND	
50 Chloroform	83	6.671	6.677	-0.006	15	9754	0.0827	M
$ 51 Dibromofluoromethane (Surr)	113	6.884	6.891	-0.007	94	609465	10.5	
52 1,1,1-Trichloroethane	97		6.909				ND	
56 Carbon tetrachloride	117		7.122				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.336	7.336	0.000	47	118674	10.2	
59 Benzene	78		7.378				ND	7
60 1,2-Dichloroethane	62		7.439				ND	U
* 65 Fluorobenzene (IS)	96	7.768	7.775	-0.007	99	2392734	10.0	
67 Trichloroethene	95	8.256	8.256	0.000	91	7292	0.0989	M
70 1,2-Dichloropropane	63		8.585				ND	
75 Dichlorobromomethane	83		8.927				ND	
80 cis-1,3-Dichloropropene	75		9.463				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.628				ND	7
$ 82 Toluene-d8 (Surr)	98	9.768	9.768	0.000	93	2512970	9.42	
83 Toluene	92	9.847	9.847	0.000	97	12933	0.0635	
85 trans-1,3-Dichloropropene	75		10.097				ND	
87 1,1,2-Trichloroethane	97		10.299				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
88 Tetrachloroethene	166	10.396	10.390	0.006	89	4592	0.0520	
91 2-Hexanone	43		10.506				ND	7
93 Chlorodibromomethane	129		10.670				ND	
94 Ethylene Dibromide	107		10.786				ND	
* 97 Chlorobenzene-d5 (IS)	117	11.213	11.213	0.000	85	1986348	10.0	
98 Chlorobenzene	112		11.237				ND	
S 95 Xylenes, Total	106		11.245				ND	7
99 1,1,1,2-Tetrachloroethane	131		11.317				ND	
100 Ethylbenzene	91		11.323				ND	7
101 m-Xylene & p-Xylene	106		11.439				ND	7
102 o-Xylene	106		11.762				ND	7
103 Styrene	104		11.780				ND	7
104 Bromoform	173		11.938				ND	
$ 108 4-Bromofluorobenzene (Surr)	95	12.201	12.201	-0.001	94	951756	9.77	
109 1,1,2,2-Tetrachloroethane	83		12.298				ND	
* 124 1,4-Dichlorobenzene-d4	152	13.078	13.078	0.000	95	1070500	10.0	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
U - Marked Undetected

Reagents:

MSV_LLcentISS_00001 Amount Added: 5.00 Units: uL Run Reagent

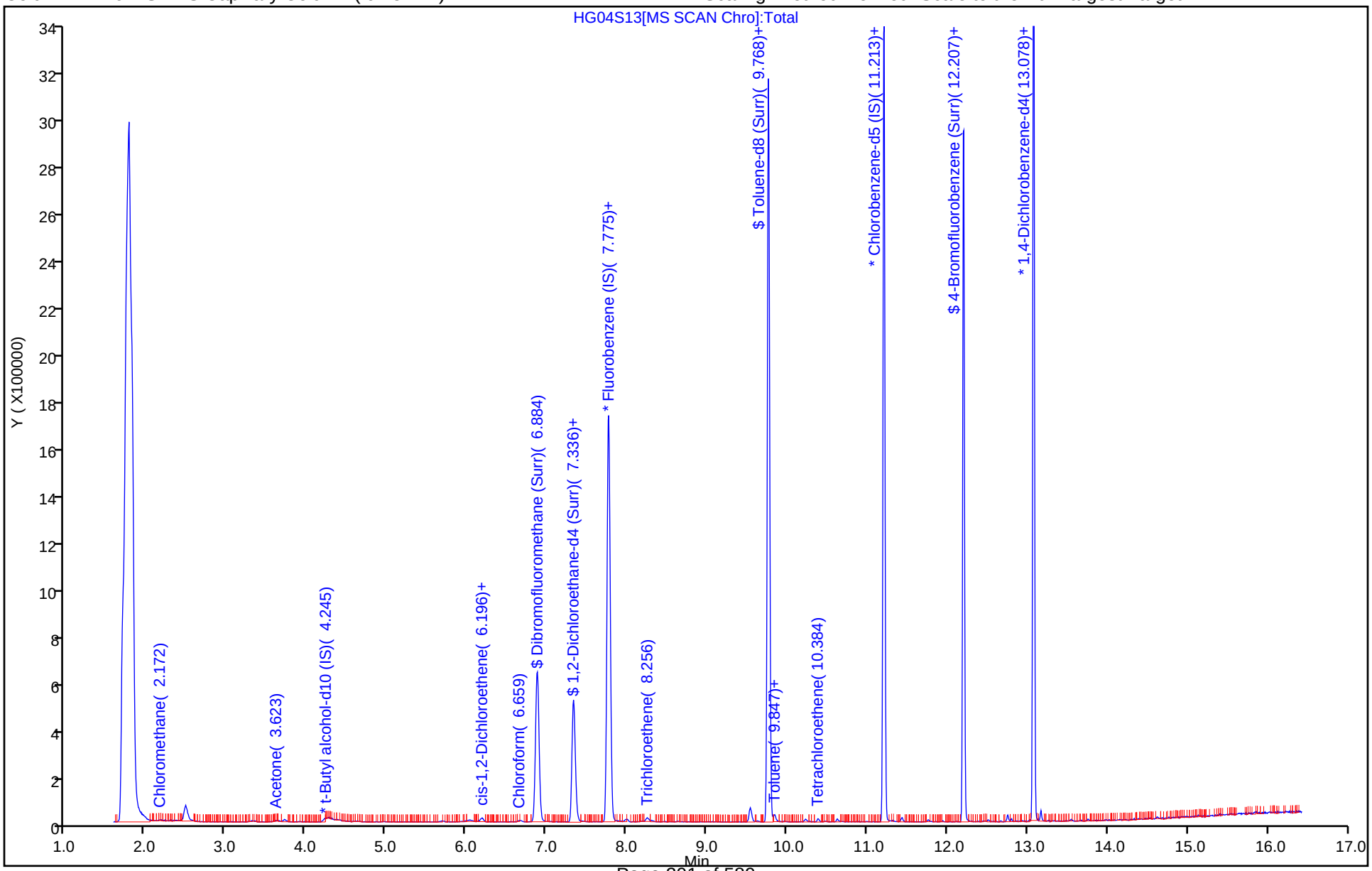
Report Date: 05-Aug-2021 11:53:09 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S13.D

Injection Date:	05-Aug-2021 00:13:30	Instrument ID:	19094	Operator ID:	MEC29284
Lims ID:	410-49448-A-3	Lab Sample ID:	410-49448-3	Worklist Smp#:	19
Client ID:	HD-COD-SW-8-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S13.D				
Lims ID:	410-49448-A-3				
Client ID:	HD-COD-SW-8-0/1-0				
Sample Type:	Client				
Inject. Date:	05-Aug-2021 00:13:30	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0036053-019				
Operator ID:	MEC29284	Instrument ID:	19094		
Method:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	05-Aug-2021 11:53:08	Calib Date:	30-Jun-2021 20:52:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1672				

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 11:53:08

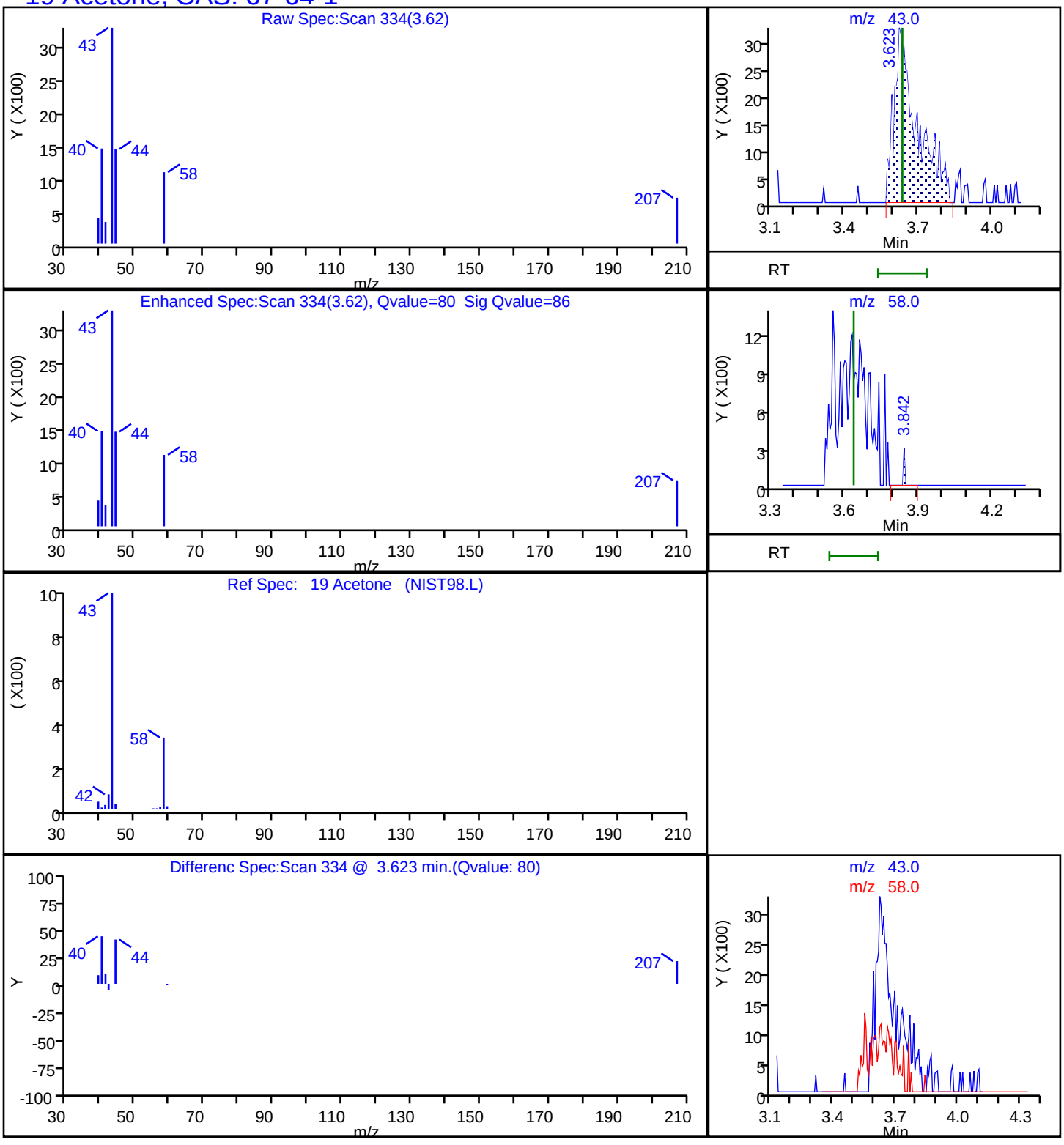
Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	10.0	10.5	105.28
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.53
$ 82 Toluene-d8 (Surr)	10.0	9.42	94.15
$ 108 4-Bromofluorobenzene (Surr)	10.0	9.77	97.72

Report Date: 05-Aug-2021 11:53:09 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S13.D				
Injection Date:	05-Aug-2021 00:13:30	Instrument ID:	19094		
Lims ID:	410-49448-A-3	Lab Sample ID:	410-49448-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

19 Acetone, CAS: 67-64-1

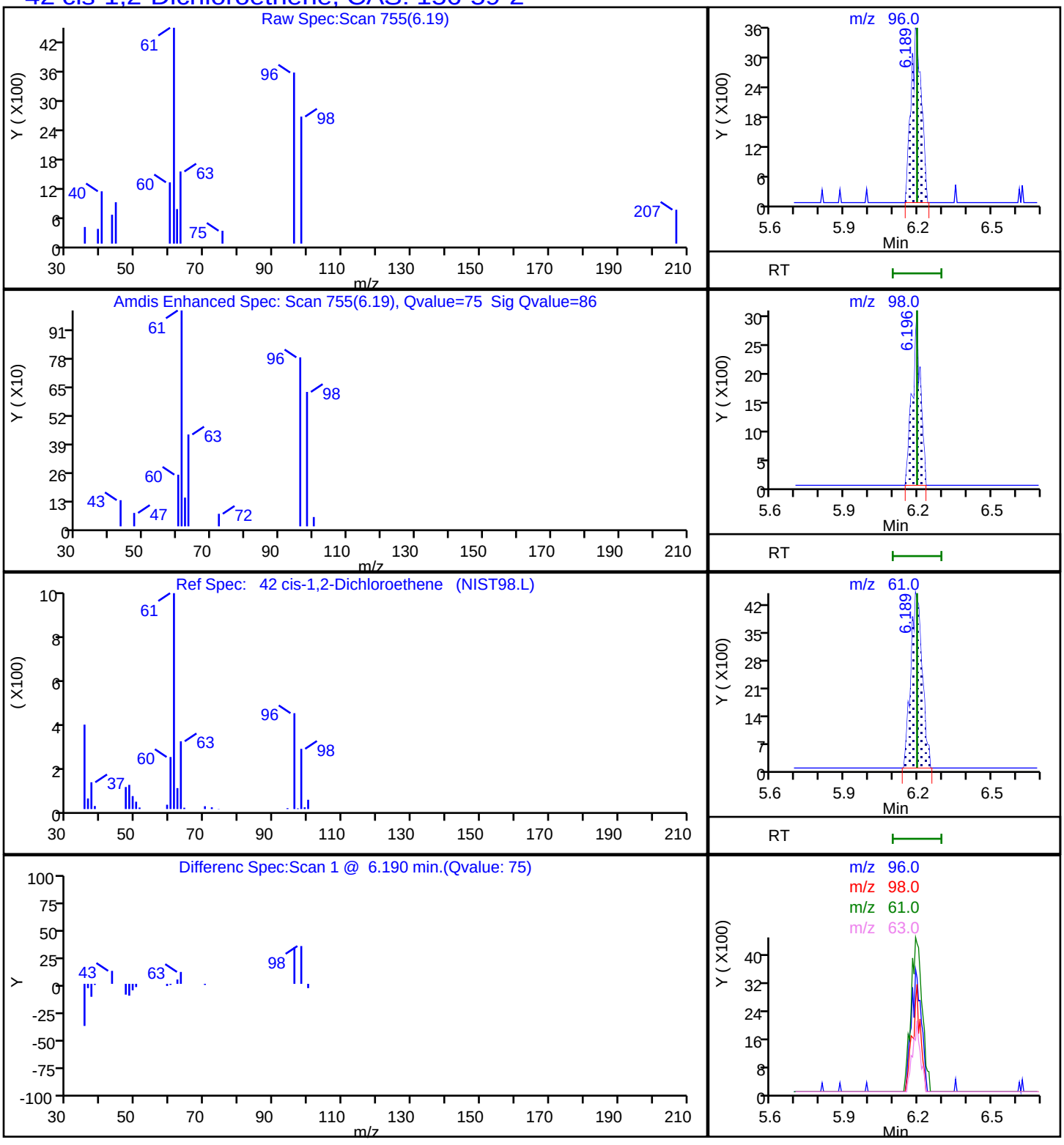


Report Date: 05-Aug-2021 11:53:09 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S13.D				
Injection Date:	05-Aug-2021 00:13:30	Instrument ID:	19094		
Lims ID:	410-49448-A-3	Lab Sample ID:	410-49448-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

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

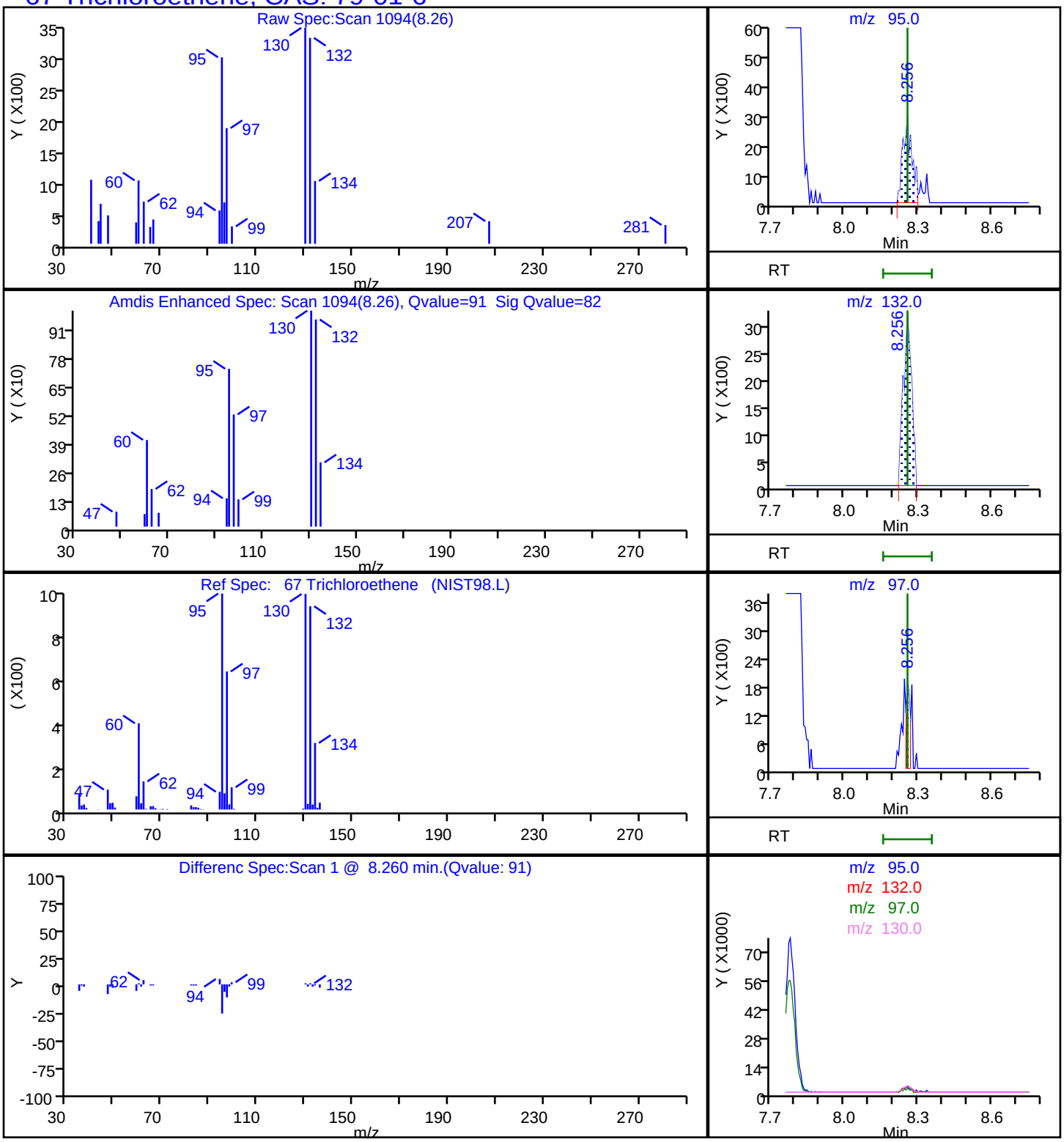


Report Date: 05-Aug-2021 11:53:09 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S13.D				
Injection Date:	05-Aug-2021 00:13:30	Instrument ID:	19094		
Lims ID:	410-49448-A-3	Lab Sample ID:	410-49448-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6



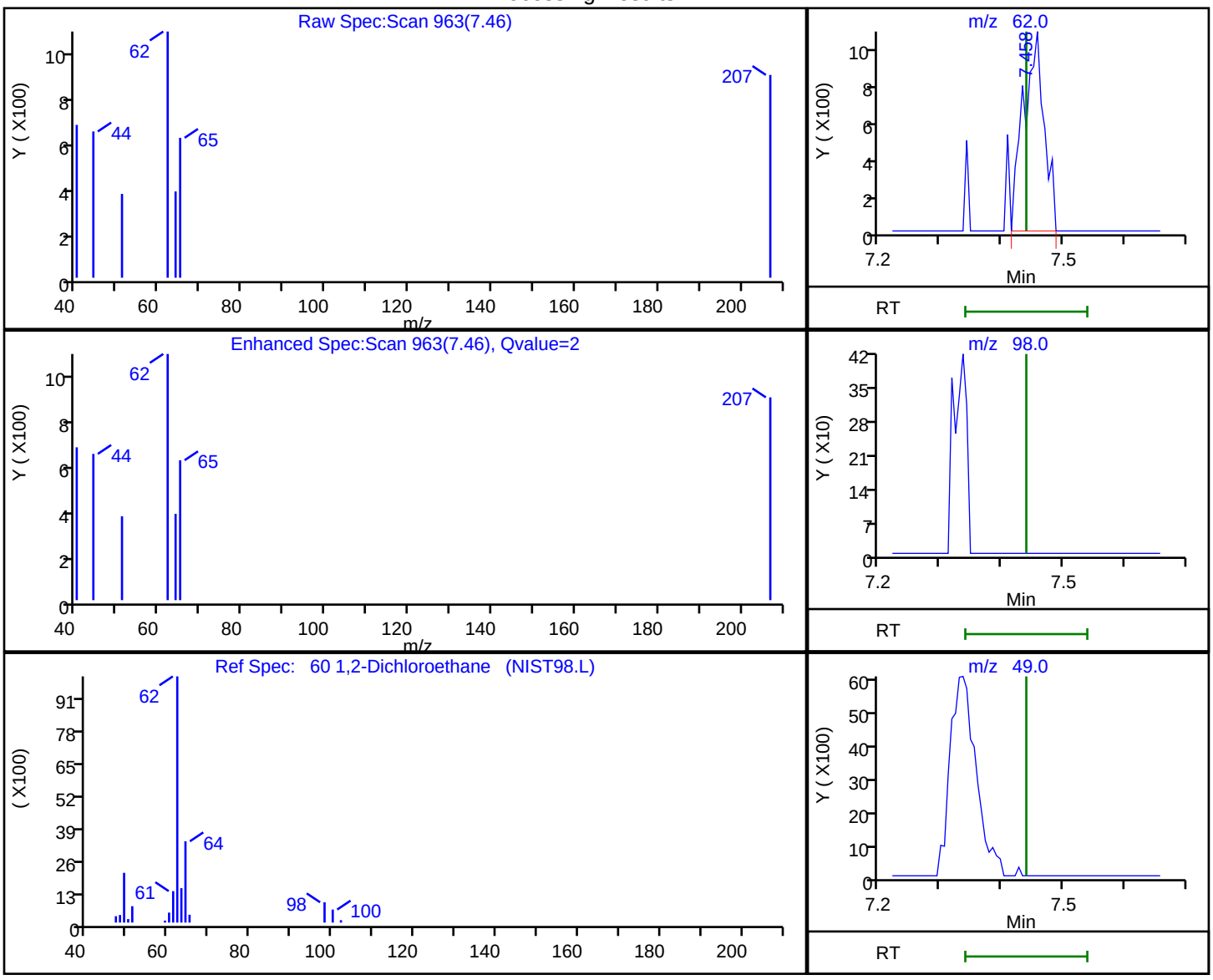
User Disabled Compound Report

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S13.D				
Injection Date:	05-Aug-2021 00:13:30	Instrument ID:	19094		
Lims ID:	410-49448-A-3	Lab Sample ID:	410-49448-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

60 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.46	62.00	2368	0.033833
7.44	98.00	0	
7.44	49.00	0	

Reviewer: kaewrungrueangp, 05-Aug-2021 11:52:35

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

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

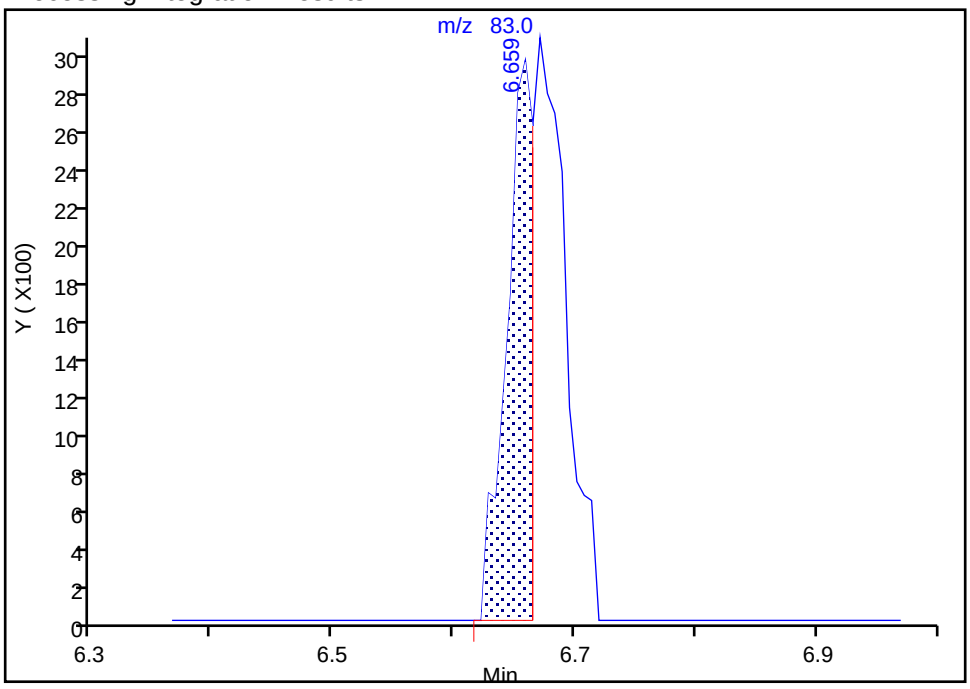
Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S13.D				
Injection Date:	05-Aug-2021 00:13:30	Instrument ID:	19094		
Lims ID:	410-49448-A-3	Lab Sample ID:	410-49448-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

50 Chloroform, CAS: 67-66-3

Signal: 1

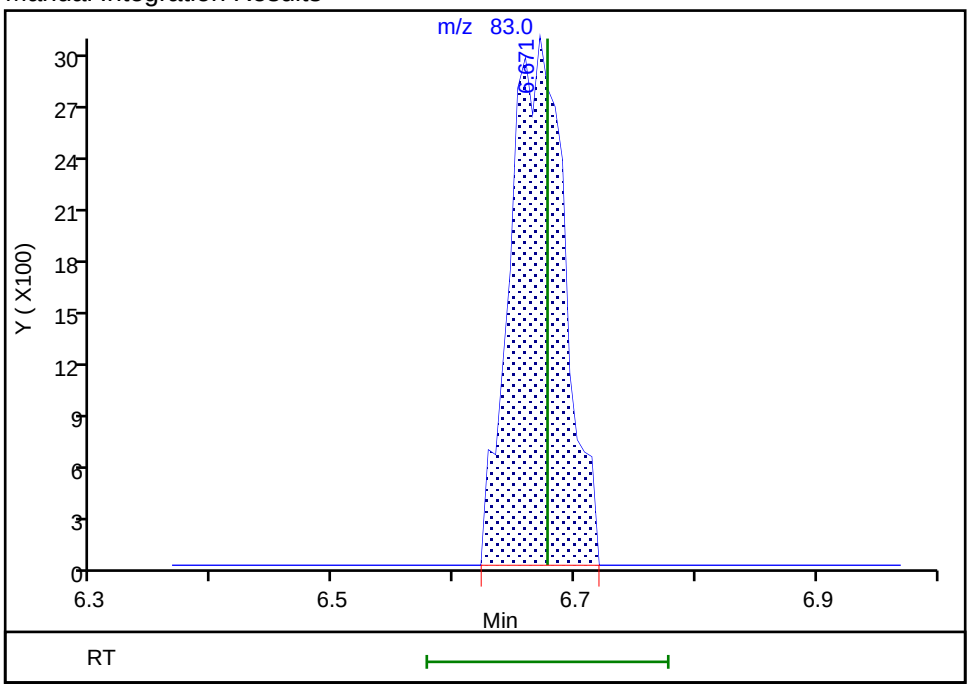
Processing Integration Results

RT: 6.66
Area: 4606
Amount: 0.039045
Amount Units: ug/l



Manual Integration Results

RT: 6.67
Area: 9754
Amount: 0.082684
Amount Units: ug/l



Reviewer: kaewrungrueangp, 05-Aug-2021 11:52:11

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

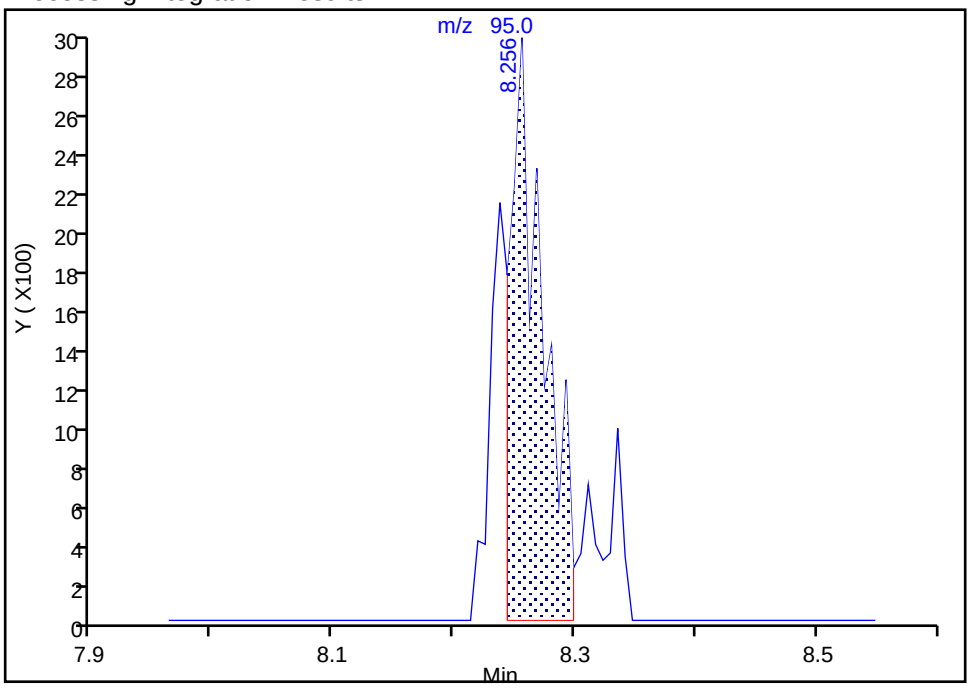
Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S13.D				
Injection Date:	05-Aug-2021 00:13:30	Instrument ID:	19094		
Lims ID:	410-49448-A-3	Lab Sample ID:	410-49448-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6

Signal: 1

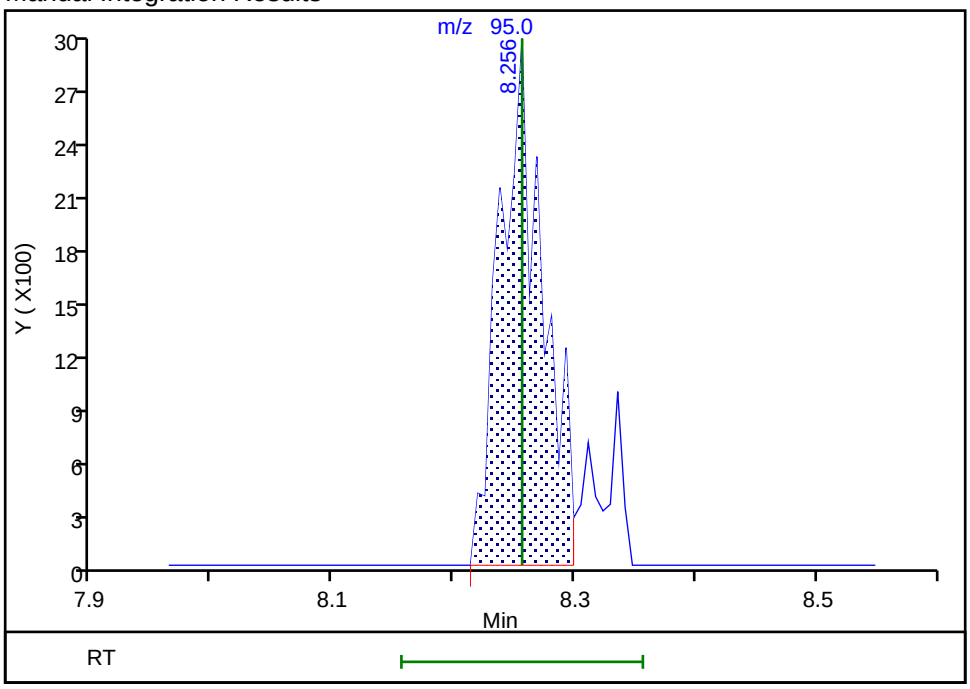
Processing Integration Results

RT: 8.26
Area: 5632
Amount: 0.076360
Amount Units: ug/l



Manual Integration Results

RT: 8.26
Area: 7292
Amount: 0.098866
Amount Units: ug/l



Reviewer: kaewrungrueangp, 05-Aug-2021 11:52:46

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.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 410-49448-4

Matrix: Water Lab File ID: HG04S14.D

Analysis Method: 8260D Date Collected: 07/29/2021 11:25

Sample wt/vol: 25(mL) Date Analyzed: 08/05/2021 00:34

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 156699 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	4.4	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	0.078	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	0.081	J	0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 410-49448-4

Matrix: Water Lab File ID: HG04S14.D

Analysis Method: 8260D Date Collected: 07/29/2021 11:25

Sample wt/vol: 25(mL) Date Analyzed: 08/05/2021 00:34

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 156699 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)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	107		80-120
2037-26-5	Toluene-d8 (Surr)	95		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S14.D
Lims ID: 410-49448-A-4
Client ID: HD-COD-SW-9-0/1-0
Sample Type: Client
Inject. Date: 05-Aug-2021 00:34:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-020
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 04-Aug-2021 22:55:31 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 11:59:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Chloromethane	50	2.172	2.190	-0.018	1	3251	0.0398	
7 Vinyl chloride	62		2.312				ND	
9 Bromomethane	94		2.641				ND	
10 Chloroethane	64		2.727				ND	
18 1,1-Dichloroethene	96		3.611				ND	
19 Acetone	43	3.660	3.635	0.025	75	37522	4.38	
24 Carbon disulfide	76		3.934				ND	7
* 28 t-Butyl alcohol-d10 (IS)	65	4.263	4.281	-0.018	89	116568	50.0	
29 Methylene Chloride	84		4.281				ND	7
32 Methyl tert-butyl ether	73		4.702				ND	
33 trans-1,2-Dichloroethene	96		4.714				ND	
35 1,1-Dichloroethane	63		5.367				ND	
41 2-Butanone (MEK)	43		6.147				ND	7
42 cis-1,2-Dichloroethene	96	6.184	6.196	-0.012	39	5836	0.0777	
48 Chlorobromomethane	128		6.525				ND	
50 Chloroform	83	6.665	6.677	-0.012	90	13654	0.1163	
$ 51 Dibromofluoromethane (Surr)	113	6.885	6.891	-0.006	94	617444	10.7	
52 1,1,1-Trichloroethane	97		6.909				ND	
56 Carbon tetrachloride	117		7.122				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.330	7.336	-0.006	47	118361	10.2	
59 Benzene	78		7.378				ND	7
60 1,2-Dichloroethane	62		7.439				ND	7
* 65 Fluorobenzene (IS)	96	7.775	7.775	0.000	99	2382069	10.0	
67 Trichloroethene	95		8.256				ND	7
70 1,2-Dichloropropane	63		8.585				ND	
75 Dichlorobromomethane	83		8.927				ND	
80 cis-1,3-Dichloropropene	75		9.463				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.628				ND	7
$ 82 Toluene-d8 (Surr)	98	9.768	9.768	0.000	93	2462358	9.45	
83 Toluene	92	9.847	9.847	0.000	93	11970	0.0602	
85 trans-1,3-Dichloropropene	75		10.097				ND	
87 1,1,2-Trichloroethane	97		10.299				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
88 Tetrachloroethene	166	10.390	10.390	0.000	93	7004	0.0813	
91 2-Hexanone	43		10.506				ND	7
93 Chlorodibromomethane	129		10.670				ND	
94 Ethylene Dibromide	107		10.786				ND	
* 97 Chlorobenzene-d5 (IS)	117	11.213	11.213	0.000	85	1938453	10.0	
98 Chlorobenzene	112		11.237				ND	7
S 95 Xylenes, Total	106		11.245				ND	7
99 1,1,1,2-Tetrachloroethane	131		11.317				ND	
100 Ethylbenzene	91		11.323				ND	7
101 m-Xylene & p-Xylene	106	11.439	11.439	0.000	96	5998	0.0418	
102 o-Xylene	106		11.762				ND	7
103 Styrene	104		11.780				ND	7
104 Bromoform	173		11.938				ND	
$ 108 4-Bromofluorobenzene (Surr)	95	12.201	12.201	0.000	91	935456	9.84	
109 1,1,2,2-Tetrachloroethane	83		12.298				ND	
* 124 1,4-Dichlorobenzene-d4	152	13.079	13.078	0.001	95	1083064	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_LLcentISS_00001 Amount Added: 5.00 Units: uL Run Reagent

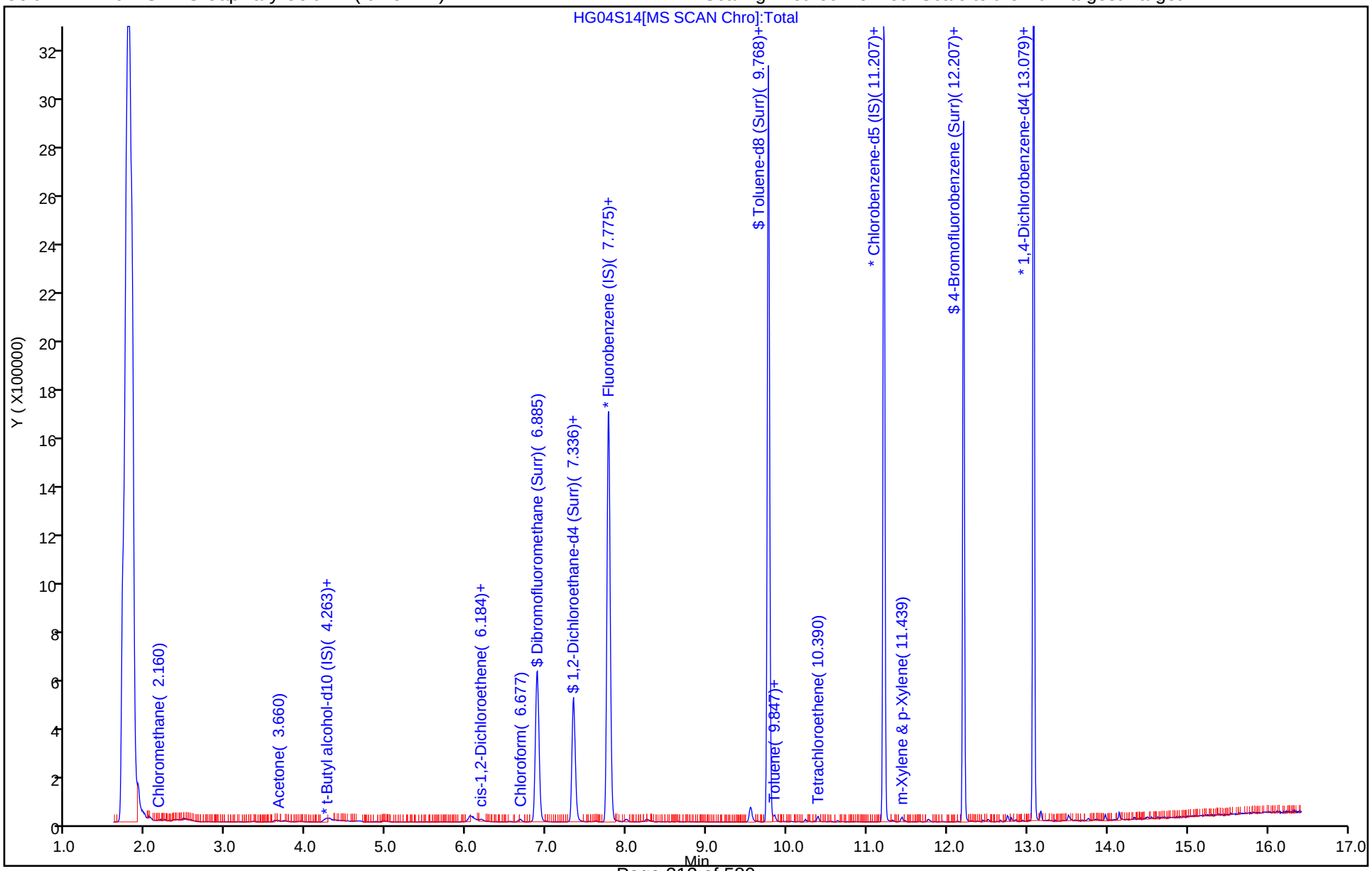
Report Date: 05-Aug-2021 11:59:54 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S14.D

Injection Date:	05-Aug-2021 00:34:30	Instrument ID:	19094	Operator ID:	MEC29284
Lims ID:	410-49448-A-4	Lab Sample ID:	410-49448-4	Worklist Smp#:	20
Client ID:	HD-COD-SW-9-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S14.D				
Lims ID:	410-49448-A-4				
Client ID:	HD-COD-SW-9-0/1-0				
Sample Type:	Client				
Inject. Date:	05-Aug-2021 00:34:30	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0036053-020				
Operator ID:	MEC29284	Instrument ID:	19094		
Method:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	04-Aug-2021 22:55:31	Calib Date:	30-Jun-2021 20:52:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1672				

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 11:59:54

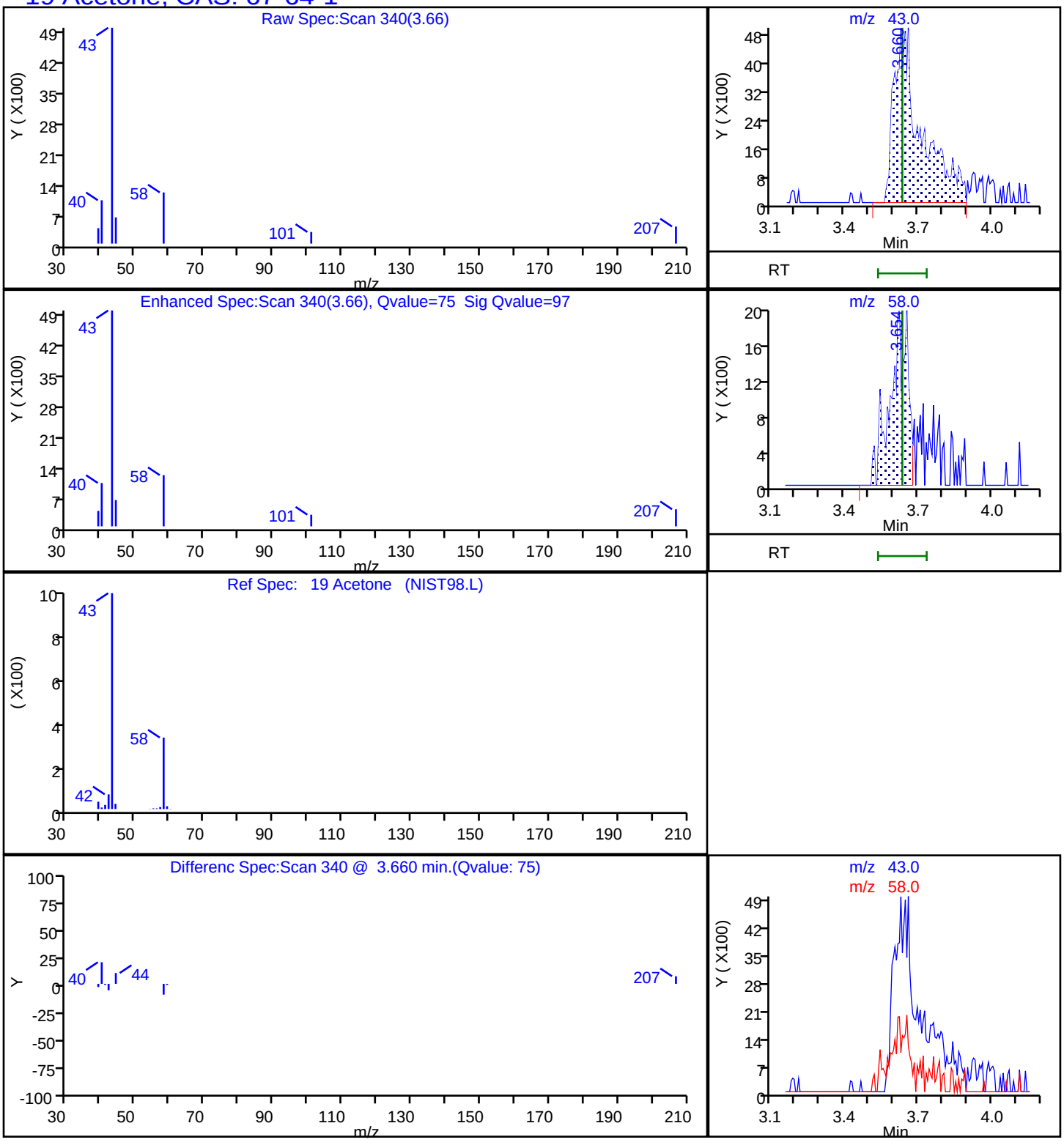
Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	10.0	10.7	107.14
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.72
$ 82 Toluene-d8 (Surr)	10.0	9.45	94.54
$ 108 4-Bromofluorobenzene (Surr)	10.0	9.84	98.42

Report Date: 05-Aug-2021 11:59:54 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S14.D				
Injection Date:	05-Aug-2021 00:34:30	Instrument ID:	19094		
Lims ID:	410-49448-A-4	Lab Sample ID:	410-49448-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

19 Acetone, CAS: 67-64-1



Report Date: 05-Aug-2021 11:59:54 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S14.D

Injection Date: 05-Aug-2021 00:34:30 Instrument ID: 19094

Lims ID: 410-49448-A-4 Lab Sample ID: 410-49448-4

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

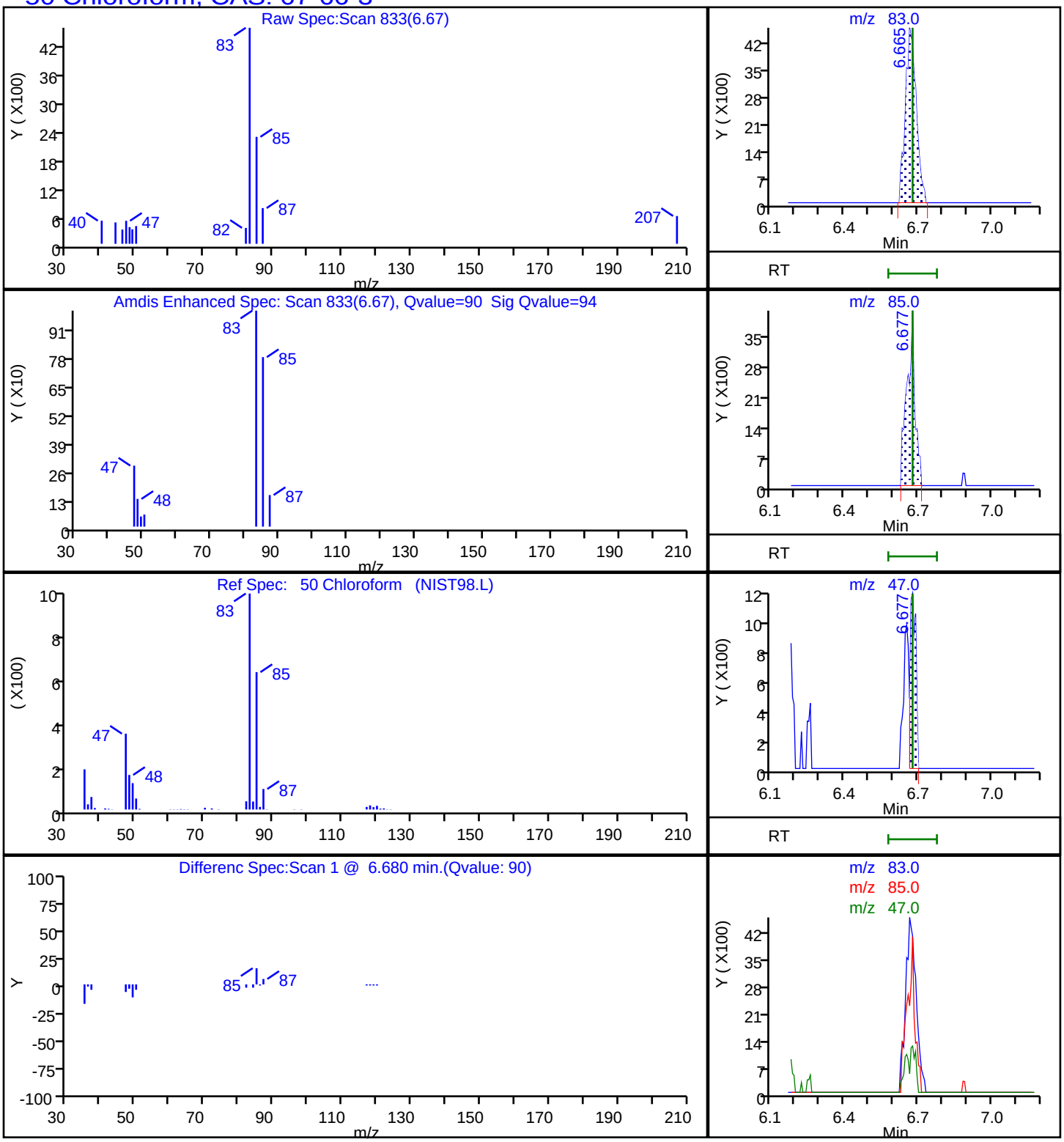
Operator ID: MEC29284 ALS Bottle#: 19 Worklist Smp#: 20

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_19094_25mL Limit Group: MSV - 8260C_D

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

50 Chloroform, CAS: 67-66-3

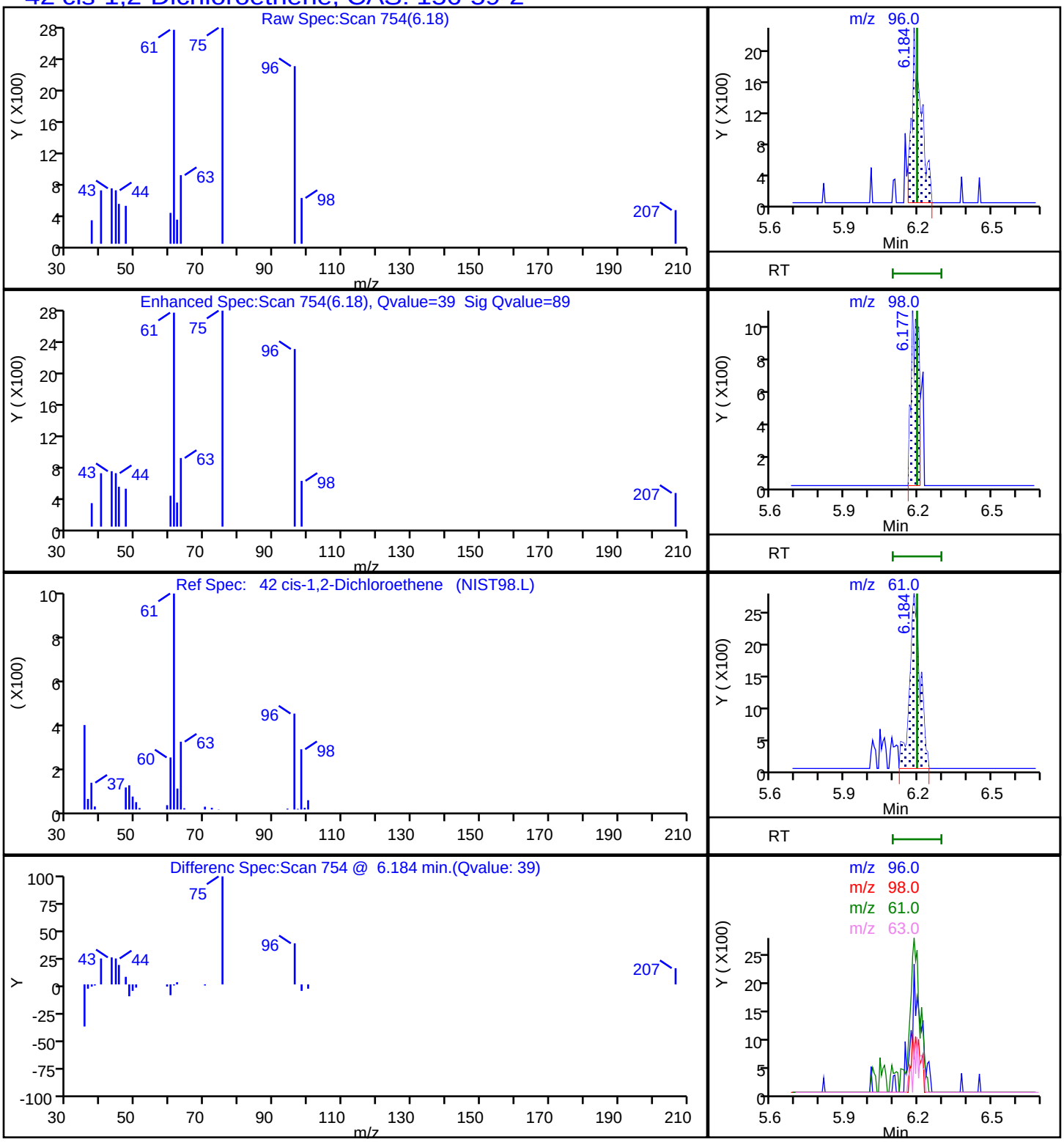


Report Date: 05-Aug-2021 11:59:54 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S14.D				
Injection Date:	05-Aug-2021 00:34:30	Instrument ID:	19094		
Lims ID:	410-49448-A-4	Lab Sample ID:	410-49448-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

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

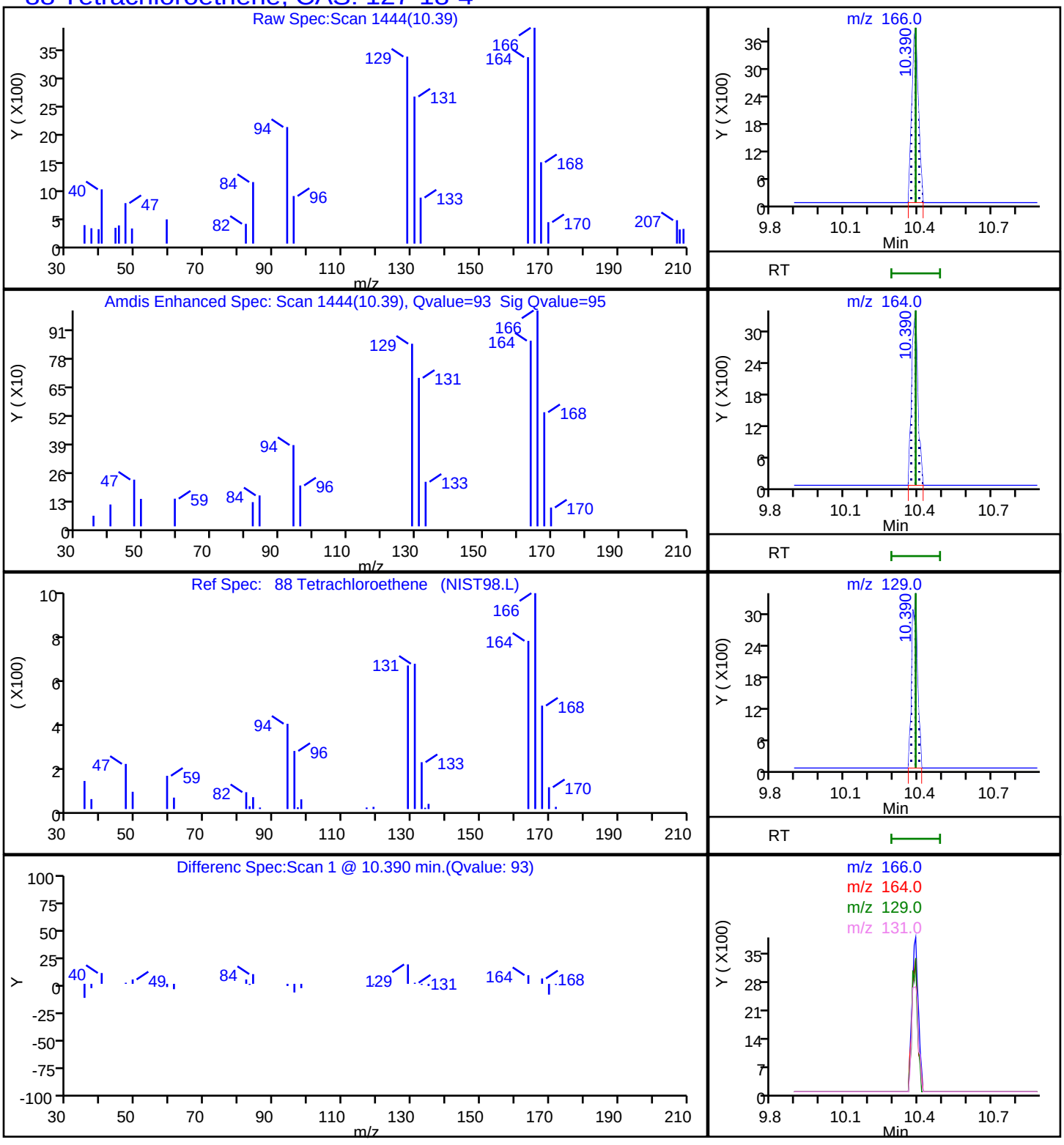


Report Date: 05-Aug-2021 11:59:54 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S14.D				
Injection Date:	05-Aug-2021 00:34:30	Instrument ID:	19094		
Lims ID:	410-49448-A-4	Lab Sample ID:	410-49448-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

88 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 410-49448-5

Matrix: Water Lab File ID: HG04S15.D

Analysis Method: 8260D Date Collected: 07/29/2021 08:50

Sample wt/vol: 25(mL) Date Analyzed: 08/05/2021 00:54

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.: 156699 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.4	J ^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	0.14	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	ND		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.12	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 410-49448-5

Matrix: Water Lab File ID: HG04S15.D

Analysis Method: 8260D Date Collected: 07/29/2021 08:50

Sample wt/vol: 25(mL) Date Analyzed: 08/05/2021 00:54

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.: 156699 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)	105		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S15.D
Lims ID: 410-49448-A-5
Client ID: HD-COD-SW-13-0/1-0
Sample Type: Client
Inject. Date: 05-Aug-2021 00:54:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-021
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 13:00:34 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 13:00:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Chloromethane	50	2.184	2.190	-0.006	3	2850	0.0340	
7 Vinyl chloride	62		2.312				ND	7
9 Bromomethane	94		2.641				ND	
10 Chloroethane	64		2.727				ND	
18 1,1-Dichloroethene	96		3.611				ND	
19 Acetone	43	3.641	3.635	0.006	74	21177	2.36	
24 Carbon disulfide	76		3.934				ND	7
* 28 t-Butyl alcohol-d10 (IS)	65	4.281	4.281	0.000	63	122290	50.0	
29 Methylene Chloride	84		4.281				ND	
32 Methyl tert-butyl ether	73		4.702				ND	
33 trans-1,2-Dichloroethene	96		4.714				ND	
35 1,1-Dichloroethane	63		5.367				ND	
41 2-Butanone (MEK)	43		6.147				ND	7
42 cis-1,2-Dichloroethene	96	6.190	6.196	-0.006	76	10725	0.1392	
48 Chlorobromomethane	128		6.525				ND	
50 Chloroform	83	6.677	6.677	0.000	27	6510	0.0540	
$ 51 Dibromofluoromethane (Surr)	113	6.885	6.891	-0.006	93	620827	10.5	
52 1,1,1-Trichloroethane	97		6.909				ND	
56 Carbon tetrachloride	117		7.122				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.342	7.336	0.006	47	118513	9.93	
59 Benzene	78		7.378				ND	7
60 1,2-Dichloroethane	62		7.439				ND	U
* 65 Fluorobenzene (IS)	96	7.775	7.775	0.000	99	2443879	10.0	
67 Trichloroethene	95	8.256	8.256	0.000	95	8738	0.1160	
70 1,2-Dichloropropane	63		8.585				ND	
75 Dichlorobromomethane	83		8.927				ND	
80 cis-1,3-Dichloropropene	75		9.463				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.628				ND	7
$ 82 Toluene-d8 (Surr)	98	9.768	9.768	0.000	93	2519995	9.36	
83 Toluene	92	9.835	9.847	-0.012	96	11067	0.0539	
85 trans-1,3-Dichloropropene	75		10.097				ND	
87 1,1,2-Trichloroethane	97		10.299				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
88 Tetrachloroethene	166	10.390	10.390	0.000	90	5047	0.0567	
91 2-Hexanone	43		10.506				ND	7
93 Chlorodibromomethane	129		10.670				ND	
94 Ethylene Dibromide	107		10.786				ND	
* 97 Chlorobenzene-d5 (IS)	117	11.213	11.213	0.000	85	2003802	10.0	
98 Chlorobenzene	112		11.237				ND	
S 95 Xylenes, Total	106		11.245				ND	7
99 1,1,1,2-Tetrachloroethane	131		11.317				ND	
100 Ethylbenzene	91		11.323				ND	7
101 m-Xylene & p-Xylene	106		11.439				ND	7
102 o-Xylene	106		11.762				ND	7
103 Styrene	104		11.780				ND	7
104 Bromoform	173		11.938				ND	
$ 108 4-Bromofluorobenzene (Surr)	95	12.201	12.201	0.000	91	948875	9.66	
109 1,1,2,2-Tetrachloroethane	83		12.298				ND	
* 124 1,4-Dichlorobenzene-d4	152	13.078	13.078	0.000	95	1105177	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

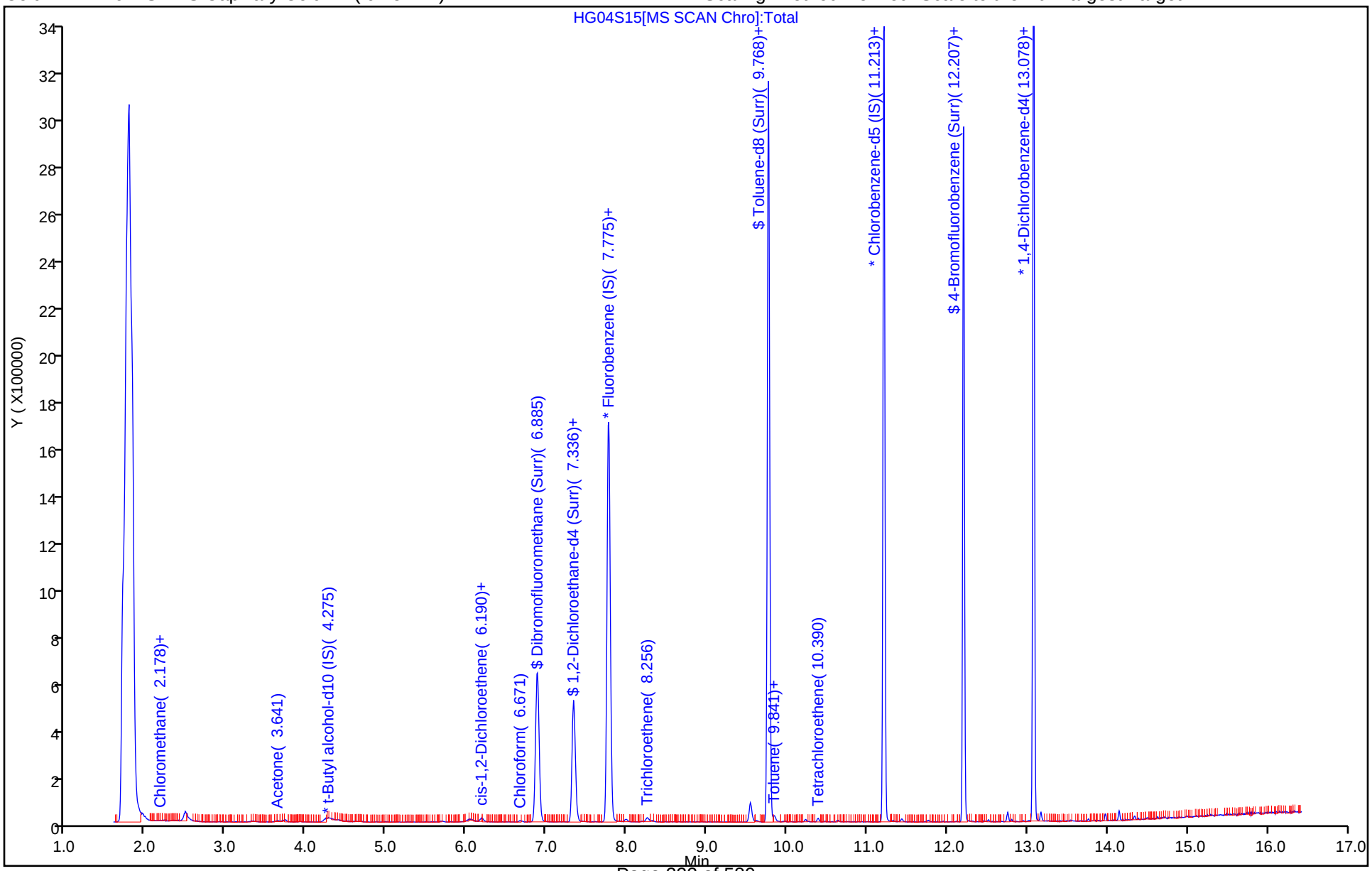
MSV_LLcentISS_00001 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 05-Aug-2021 13:00:37 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S15.D				
Injection Date:	05-Aug-2021 00:54:30	Instrument ID:	19094	Operator ID:	MEC29284
Lims ID:	410-49448-A-5	Lab Sample ID:	410-49448-5	Worklist Smp#:	21
Client ID:	HD-COD-SW-13-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S15.D
Lims ID: 410-49448-A-5
Client ID: HD-COD-SW-13-0/1-0
Sample Type: Client
Inject. Date: 05-Aug-2021 00:54:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-021
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 13:00:34 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 13:00:34

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	10.0	10.5	105.00
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	9.93	99.27
$ 82 Toluene-d8 (Surr)	10.0	9.36	93.59
$ 108 4-Bromofluorobenzene (Surr)	10.0	9.66	96.57

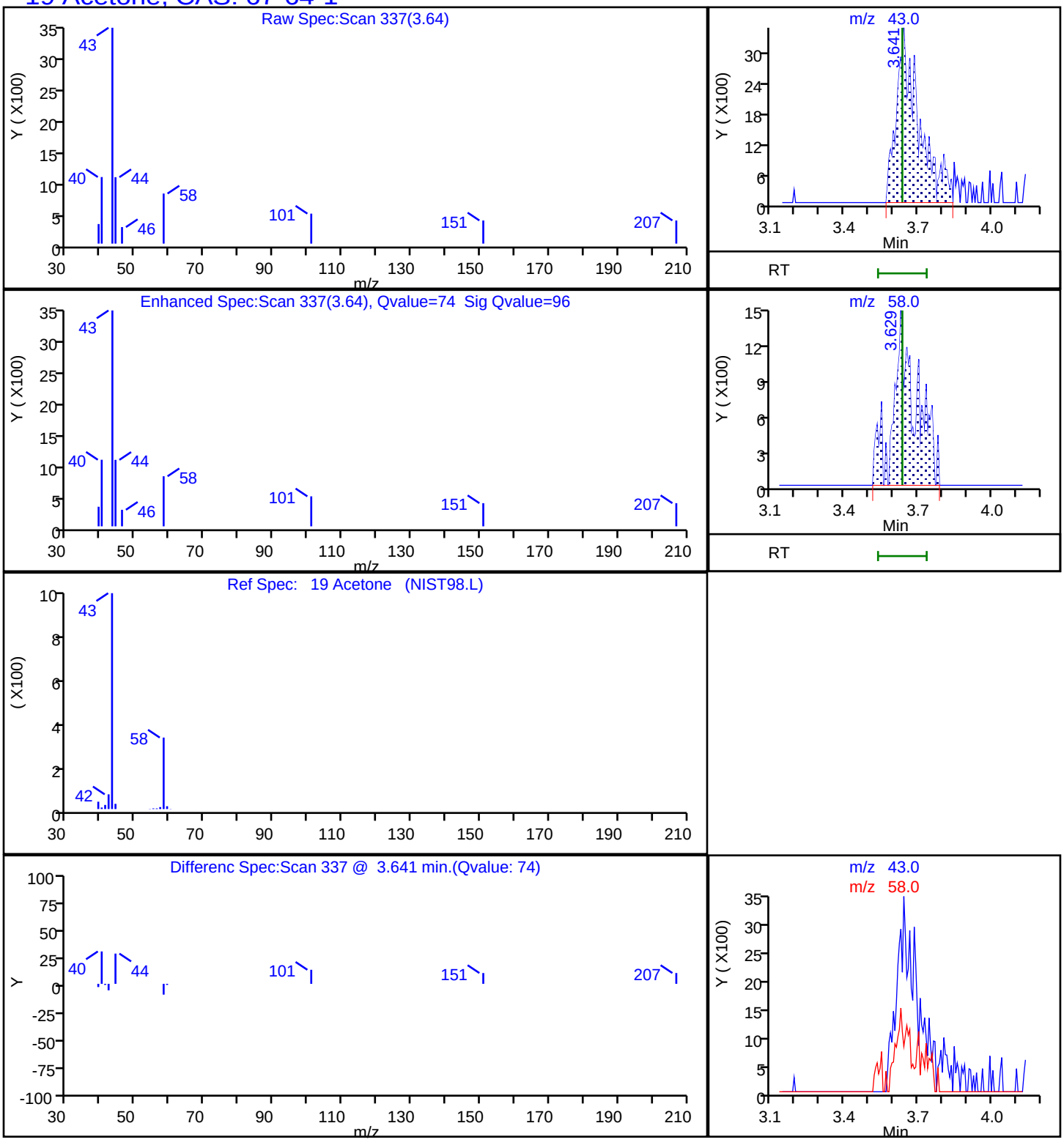
Report Date: 05-Aug-2021 13:00:38 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S15.D

Injection Date:	05-Aug-2021 00:54:30	Instrument ID:	19094		
Lims ID:	410-49448-A-5	Lab Sample ID:	410-49448-5		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

19 Acetone, CAS: 67-64-1

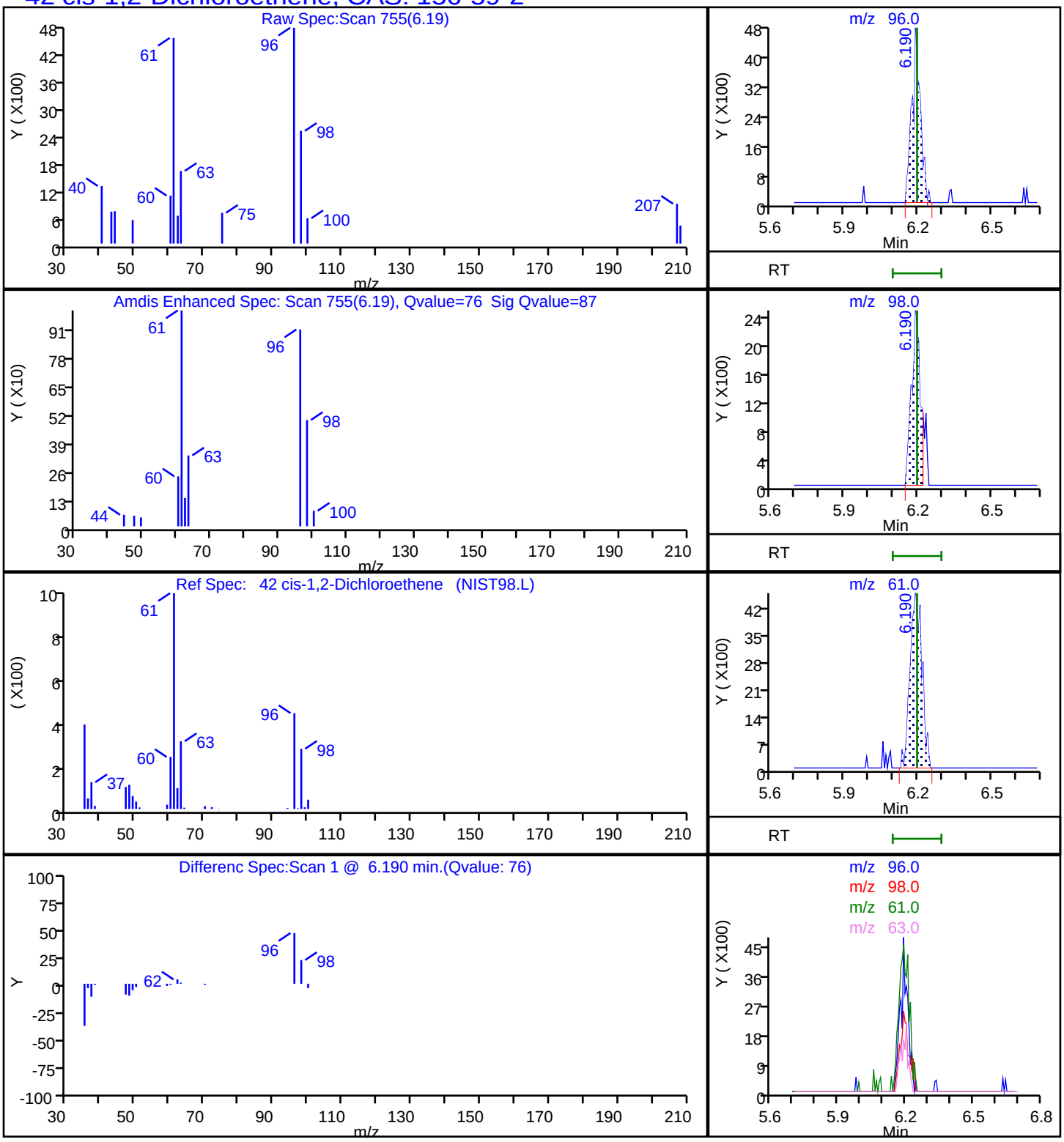


Report Date: 05-Aug-2021 13:00:39 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S15.D				
Injection Date:	05-Aug-2021 00:54:30	Instrument ID:	19094		
Lims ID:	410-49448-A-5	Lab Sample ID:	410-49448-5		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

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

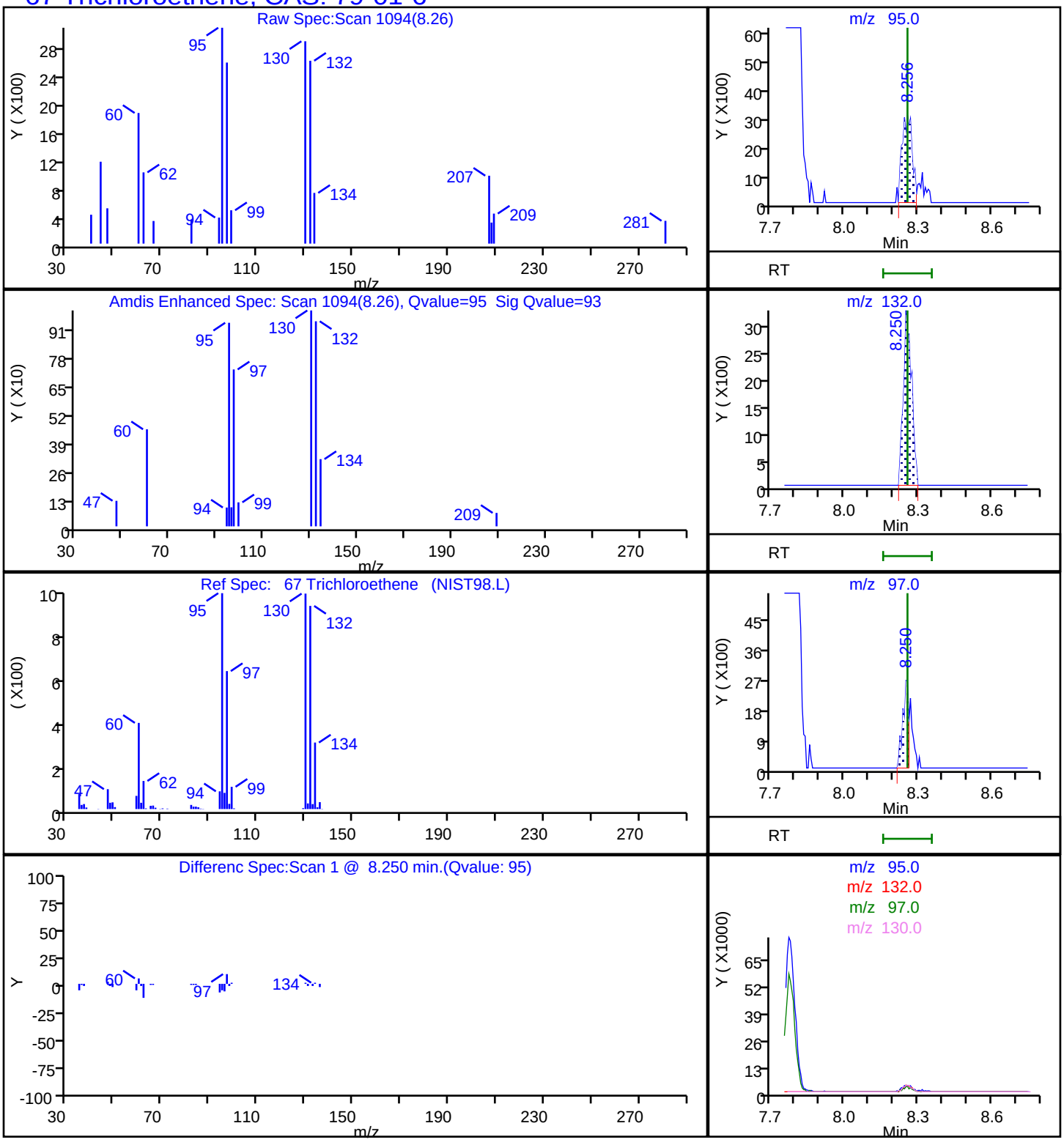


Report Date: 05-Aug-2021 13:00:39 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S15.D				
Injection Date:	05-Aug-2021 00:54:30	Instrument ID:	19094		
Lims ID:	410-49448-A-5	Lab Sample ID:	410-49448-5		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6



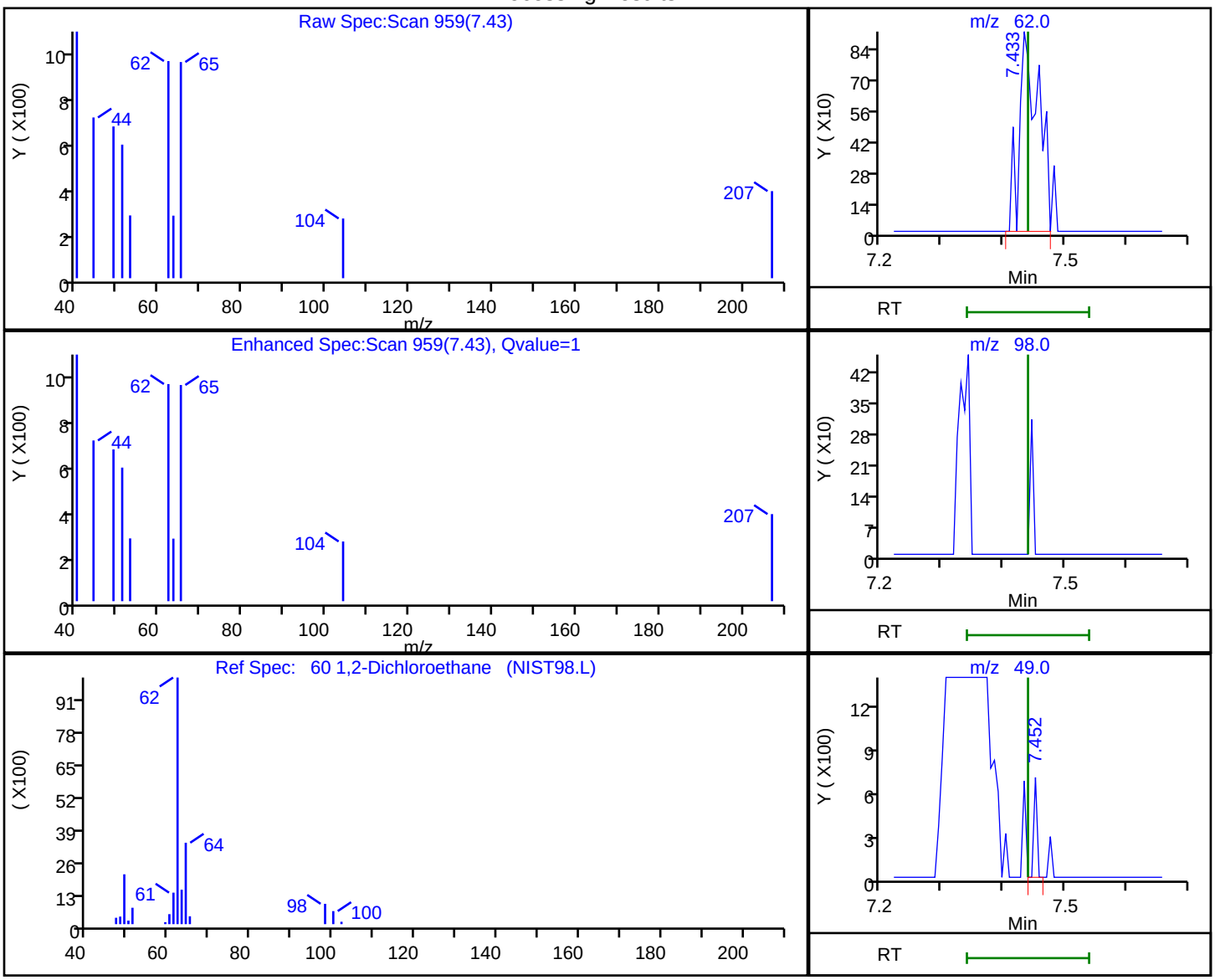
User Disabled Compound Report

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S15.D				
Injection Date:	05-Aug-2021 00:54:30	Instrument ID:	19094		
Lims ID:	410-49448-A-5	Lab Sample ID:	410-49448-5		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

60 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.43	62.00	2024	0.028313
7.44	98.00	0	
7.45	49.00	244	

Reviewer: kaewrungrueangp, 05-Aug-2021 13:00:10

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 410-49448-6

Matrix: Water Lab File ID: HG04S07.D

Analysis Method: 8260D Date Collected: 07/29/2021 11:00

Sample wt/vol: 25(mL) Date Analyzed: 08/04/2021 22:09

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 156699 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	0.12	J	0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	0.086	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	^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	0.29	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.67		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	2.2		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	0.83		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 410-49448-6

Matrix: Water Lab File ID: HG04S07.D

Analysis Method: 8260D Date Collected: 07/29/2021 11:00

Sample wt/vol: 25(mL) Date Analyzed: 08/04/2021 22:09

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 156699 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	105		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\19094\20210804-36053.b\HG04S07.D
Lims ID: 410-49448-A-6
Client ID: HD-COD-SW-15-0/1-0
Sample Type: Client
Inject. Date: 04-Aug-2021 22:09:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-013
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 10:57:21 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 10:58:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.885				ND	
3 Dichlorodifluoromethane	85		1.989				ND	
4 Dimethyl ether	45		2.074				ND	
2 Chlorodifluoromethane	51		2.093				ND	7
6 Chloromethane	50		2.190				ND	
5 2-Chloro-1,1,1-Trifluoroethane	118		2.233				ND	
8 Butadiene	39		2.306				ND	7
7 Vinyl chloride	62		2.312				ND	7
9 Bromomethane	94		2.641				ND	
10 Chloroethane	64		2.727				ND	
11 Dichlorofluoromethane	67		2.977				ND	7
13 Trichlorofluoromethane	101		3.056				ND	
12 Ethanol	45		3.111				ND	
15 Ethyl ether	59		3.294				ND	
16 1,2-Dichloro-1,1,2-trifluoroetha	67		3.373				ND	
T 184 Ethanol TIC	45		3.440				ND	7
17 Acrolein	56		3.458				ND	
18 1,1-Dichloroethene	96	3.617	3.611	0.006	90	5316	0.0856	
19 Acetone	43		3.635				ND	7
20 112TCTFE	101		3.647				ND	
21 Isopropyl alcohol	45		3.763				ND	
22 Iodomethane	142		3.812				ND	
23 Ethyl bromide	108		3.842				ND	
24 Carbon disulfide	76		3.934				ND	7
25 Acetonitrile	41		4.013				ND	
26 Methyl acetate	43		4.056				ND	
27 3-Chloro-1-propene	41		4.098				ND	
T 185 Acetonitrile TIC	41		4.214				ND	U
* 28 t-Butyl alcohol-d10 (IS)	65	4.281	4.281	0.000	86	115226	50.0	
29 Methylene Chloride	84		4.281				ND	
30 2-Methyl-2-propanol	59		4.403				ND	
31 Acrylonitrile	53		4.629				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
32 Methyl tert-butyl ether	73	4.696	4.702	-0.006	39	5751	0.0391	M
33 trans-1,2-Dichloroethene	96		4.714				ND	7
34 Hexane	57		5.135				ND	
36 Vinyl acetate	43		5.330				ND	
35 1,1-Dichloroethane	63	5.373	5.367	0.006	1	6186	0.0502	
37 Isopropyl ether	45		5.428				ND	
38 2-Chloro-1,3-butadiene	53		5.476				ND	
T 187 Vinyl acetate (TIC)	43		5.537				ND	
39 Tert-butyl ethyl ether	59		5.958				ND	
41 2-Butanone (MEK)	43		6.147				ND	7
S 40 1,2-Dichloroethene, Total	100				0		0.6663	
42 cis-1,2-Dichloroethene	96	6.196	6.196	0.000	79	49333	0.6663	
44 Ethyl acetate	43		6.208				ND	
43 2,2-Dichloropropane	77		6.214				ND	
45 Propionitrile	54		6.232				ND	
47 Methacrylonitrile	67		6.452				ND	
46 Methyl acrylate	55		6.482				ND	
48 Chlorobromomethane	128		6.525				ND	
49 Tetrahydrofuran	71		6.531				ND	
50 Chloroform	83	6.677	6.677	0.000	93	33508	0.2894	
$ 51 Dibromofluoromethane (Surr)	113	6.891	6.891	0.000	93	599205	10.5	
52 1,1,1-Trichloroethane	97	6.915	6.909	0.006	83	12552	0.1180	
53 Cyclohexane	56		7.006				ND	
55 1,1-Dichloropropene	75		7.116				ND	
56 Carbon tetrachloride	117		7.122				ND	7
57 Isobutyl alcohol	41		7.244				ND	
54 1-Chlorobutane	56		7.250				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.342	7.336	0.006	47	118422	10.3	
59 Benzene	78		7.378				ND	7
61 Isopropyl acetate	43		7.439				ND	
60 1,2-Dichloroethane	62		7.439				ND	7
62 Tert-amyl methyl ether	73		7.567				ND	
* 65 Fluorobenzene (IS)	96	7.775	7.775	0.000	99	2348504	10.0	
64 n-Heptane	43		7.793				ND	
63 t-Amyl alcohol	73	7.769	7.842	-0.073	34	27050	NC	
66 n-Butanol	56		8.122				ND	
67 Trichloroethene	95	8.262	8.256	0.006	97	59873	0.8271	
68 Methylcyclohexane	83		8.567				ND	
70 1,2-Dichloropropane	63		8.585				ND	
69 2-ethoxy-2-methyl butane	87		8.592				ND	
71 Methyl methacrylate	69		8.665				ND	
72 1,4-Dioxane	88		8.665				ND	
73 Dibromomethane	93		8.695				ND	
74 n-Propyl acetate	61		8.750				ND	
75 Dichlorobromomethane	83		8.927				ND	
76 2-Nitropropane	41		9.189				ND	7
78 2-Chloroethyl vinyl ether	63		9.299				ND	
79 1-Bromo-2-chloroethane	63		9.317				ND	
77 Chloroacetonitrile	75		9.427				ND	
80 cis-1,3-Dichloropropene	75		9.463				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.628				ND	7
$ 82 Toluene-d8 (Surr)	98	9.768	9.768	0.000	93	2417753	9.46	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
83 Toluene	92		9.847				ND	7
T 176 Epibromohydrin TIC	57		10.000				ND	U
T 180 2-Bromo-3-chloropropene TIC	75		10.000				ND	U
T 172 2,3-Dibromo-1-propanol TIC	57		10.000				ND	U
T 178 Vinyl bromide TIC	106		10.000				ND	U
T 177 Chloroacetaldehyde TIC	50		10.000				ND	U
T 174 Monochloroacetic acid TIC	50		10.000				ND	U
T 173 2-Bromoethanol TIC	45		10.000				ND	U
T 182 2,3-Dibromopropene TIC	119		10.000				ND	U
T 179 Epichlorohydrin TIC	57		10.000				ND	U
T 181 Ethylene oxide TIC	44		10.000				ND	
T 183 3-Chloro-1,2-propanediol TIC	44		10.000				ND	U
T 175 2-Chloroethanol TIC	44		10.000				ND	
S 84 1,3-Dichloropropene, Total	100		10.060				ND	7
85 trans-1,3-Dichloropropene	75		10.097				ND	
86 Ethyl methacrylate	69		10.152				ND	
87 1,1,2-Trichloroethane	97		10.299				ND	7
88 Tetrachloroethene	166	10.390	10.390	0.000	98	182026	2.15	
89 1,3-Dichloropropane	76		10.457				ND	
91 2-Hexanone	43		10.506				ND	
92 n-Butyl acetate	43		10.646				ND	U
93 Chlorodibromomethane	129		10.670				ND	
94 Ethylene Dibromide	107		10.786				ND	
* 97 Chlorobenzene-d5 (IS)	117	11.213	11.213	0.000	85	1902344	10.0	
96 1-Chlorohexane	91		11.219				ND	7
98 Chlorobenzene	112		11.237				ND	
S 95 Xylenes, Total	106		11.245				ND	7
99 1,1,1,2-Tetrachloroethane	131		11.317				ND	
100 Ethylbenzene	91		11.323				ND	7
101 m-Xylene & p-Xylene	106		11.439				ND	7
102 o-Xylene	106		11.762				ND	7
103 Styrene	104		11.780				ND	7
104 Bromoform	173		11.938				ND	
105 Isopropylbenzene	105		12.060				ND	
106 cis-1,4-Dichloro-2-butene	88		12.133				ND	U
107 Cyclohexanone	55		12.170				ND	
$ 108 4-Bromofluorobenzene (Surr)	95	12.207	12.201	0.006	91	915504	9.81	
109 1,1,2,2-Tetrachloroethane	83		12.298				ND	
111 Bromobenzene	156		12.323				ND	
110 trans-1,4-Dichloro-2-butene	53		12.323				ND	
112 1,2,3-Trichloropropane	110		12.347				ND	
113 N-Propylbenzene	91		12.383				ND	7
114 2-Chlorotoluene	126		12.463				ND	
115 1,3,5-Trimethylbenzene	105		12.518				ND	7
116 4-Chlorotoluene	126		12.554				ND	
118 tert-Butylbenzene	134		12.761				ND	
119 Pentachloroethane	167		12.798				ND	
120 1,2,4-Trimethylbenzene	105		12.804				ND	7
121 sec-Butylbenzene	105		12.926				ND	7
122 1,3-Dichlorobenzene	146		13.024				ND	7
123 4-Isopropyltoluene	119		13.030				ND	7
* 124 1,4-Dichlorobenzene-d4	152	13.079	13.078	0.000	95	1044210	10.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
125 1,4-Dichlorobenzene	146		13.097				ND	7
126 1,2,3-Trimethylbenzene	120		13.103				ND	7
127 Benzyl chloride	126		13.170				ND	7
130 n-Butylbenzene	92		13.322				ND	
131 1,2-Dichlorobenzene	146		13.353				ND	
129 p-Diethylbenzene	119		13.371				ND	
133 Hexachloroethane	201		13.682				ND	
134 1,2-Dibromo-3-Chloropropane	155		13.895				ND	
135 1,3,5-Trichlorobenzene	180		14.017				ND	
136 1,2,4-Trichlorobenzene	180		14.438				ND	
137 Hexachlorobutadiene	225		14.523				ND	7
138 Naphthalene	128		14.621				ND	7
139 1,2,3-Trichlorobenzene	180		14.761				ND	
140 2-Methylnaphthalene	142		15.389				ND	
151 tert-Butyl Formate	1		0.000				ND	
152 Dodecane	57		0.000				ND	
157 Methylal	1		0.000				ND	
142 1,1-Dichloro-1-fluoroethane	1		0.000				ND	
150 Propene oxide	1		0.000				ND	
162 1-Chloropropane	1		0.000				ND	
163 1-Bromo-3-Chloropropane	1		0.000				ND	
160 n-Decane	57		0.000				ND	
161 2-Bromo-1-chloropropane	1		0.000				ND	
186 Isopropyl alcohol TIC	1		0.000				ND	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- 7 - Failed Limit of Detection

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

Reagents:

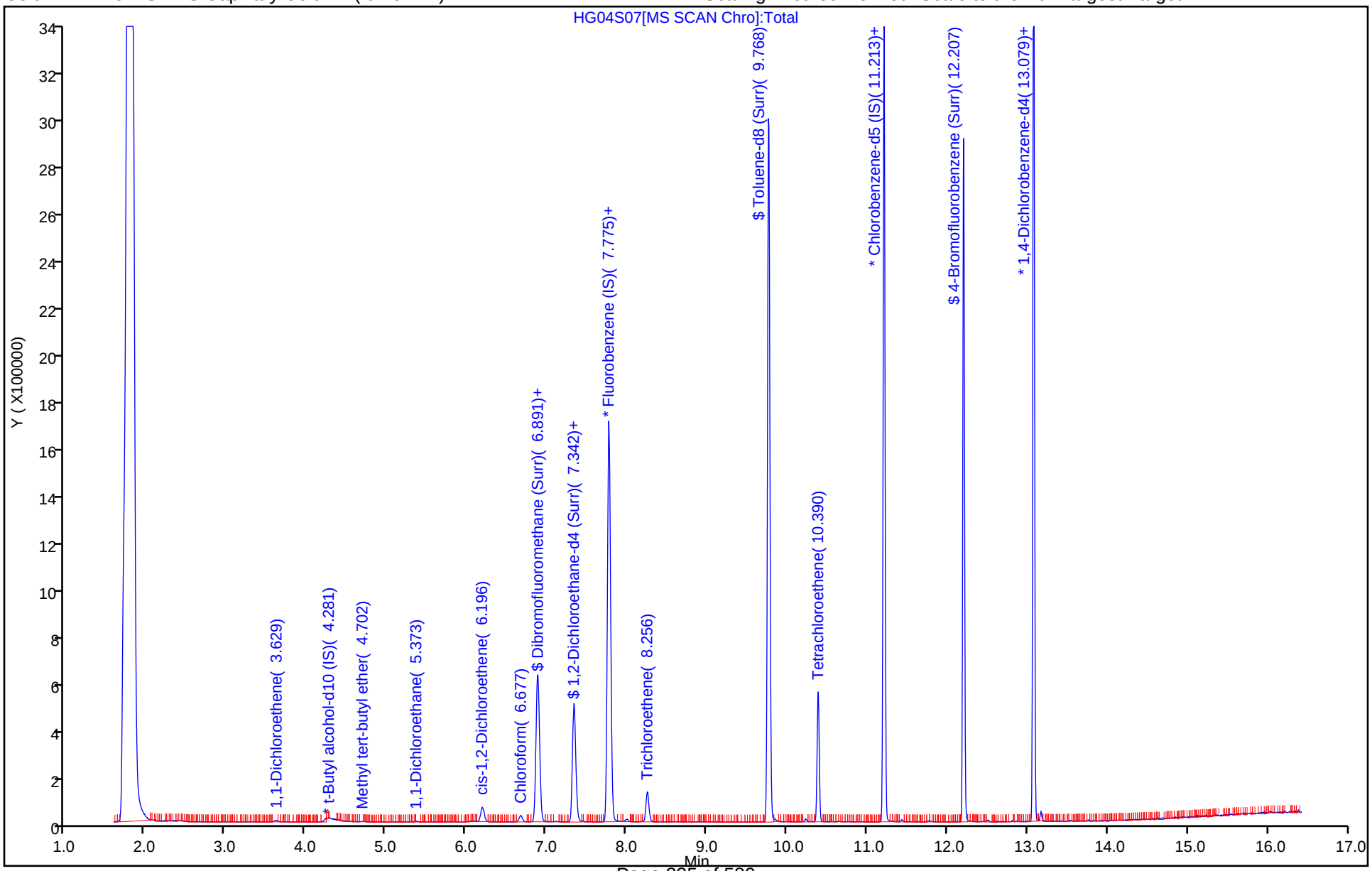
MSV_LLcentISS_00001 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 05-Aug-2021 10:58:17 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S07.D				
Injection Date:	04-Aug-2021 22:09:30	Instrument ID:	19094	Operator ID:	MEC29284
Lims ID:	410-49448-A-6	Lab Sample ID:	410-49448-6	Worklist Smp#:	13
Client ID:	HD-COD-SW-15-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S07.D
Lims ID: 410-49448-A-6
Client ID: HD-COD-SW-15-0/1-0
Sample Type: Client
Inject. Date: 04-Aug-2021 22:09:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-013
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 10:57:21 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 10:58:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	10.0	10.5	105.46
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.22
$ 82 Toluene-d8 (Surr)	10.0	9.46	94.58
$ 108 4-Bromofluorobenzene (Surr)	10.0	9.81	98.14

Report Date: 05-Aug-2021 10:58:17 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S07.D

Injection Date: 04-Aug-2021 22:09:30 Instrument ID: 19094

Lims ID: 410-49448-A-6 Lab Sample ID: 410-49448-6

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

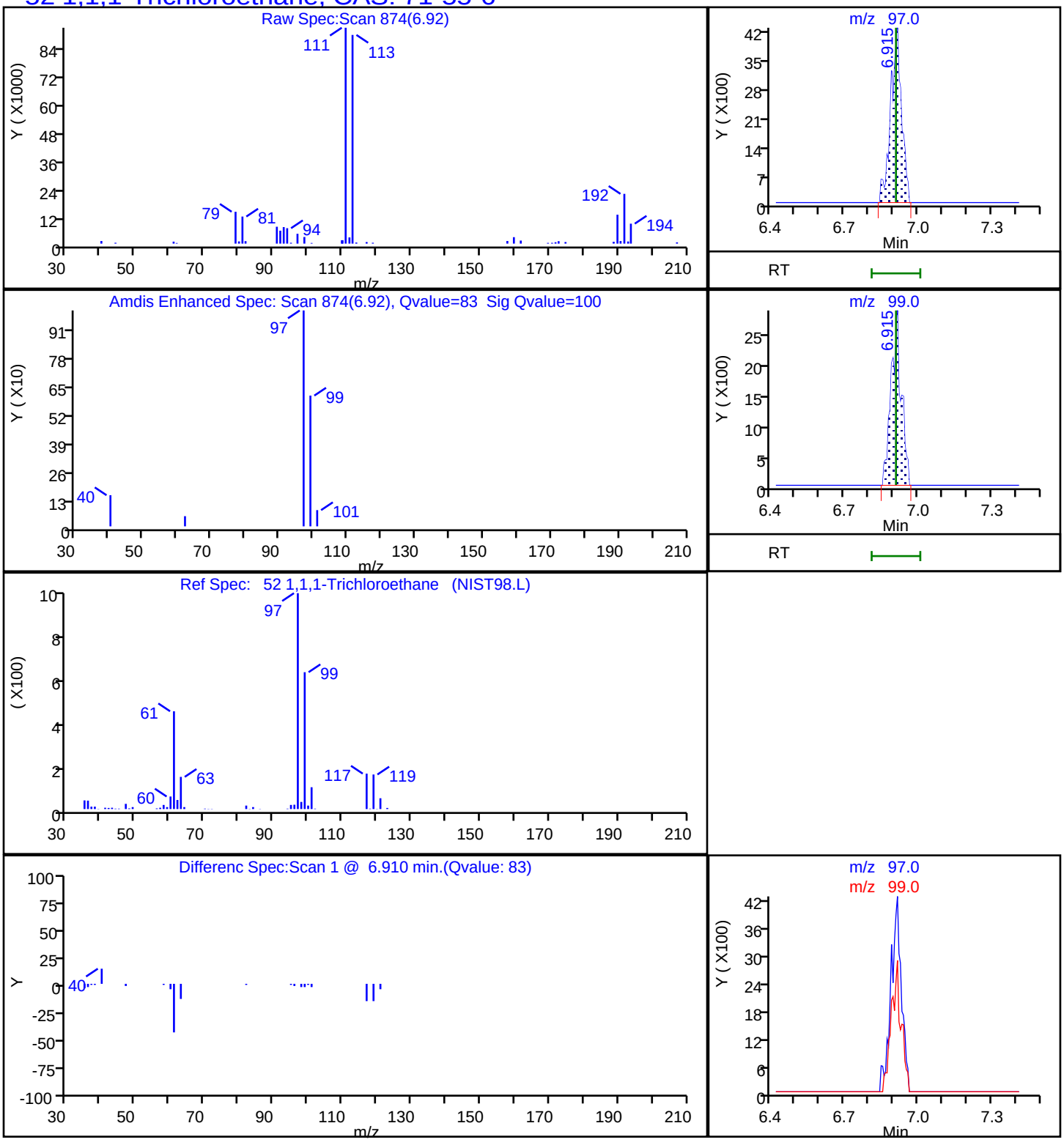
Operator ID: MEC29284 ALS Bottle#: 12 Worklist Smp#: 13

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_19094_25mL Limit Group: MSV - 8260C_D

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

52 1,1,1-Trichloroethane, CAS: 71-55-6



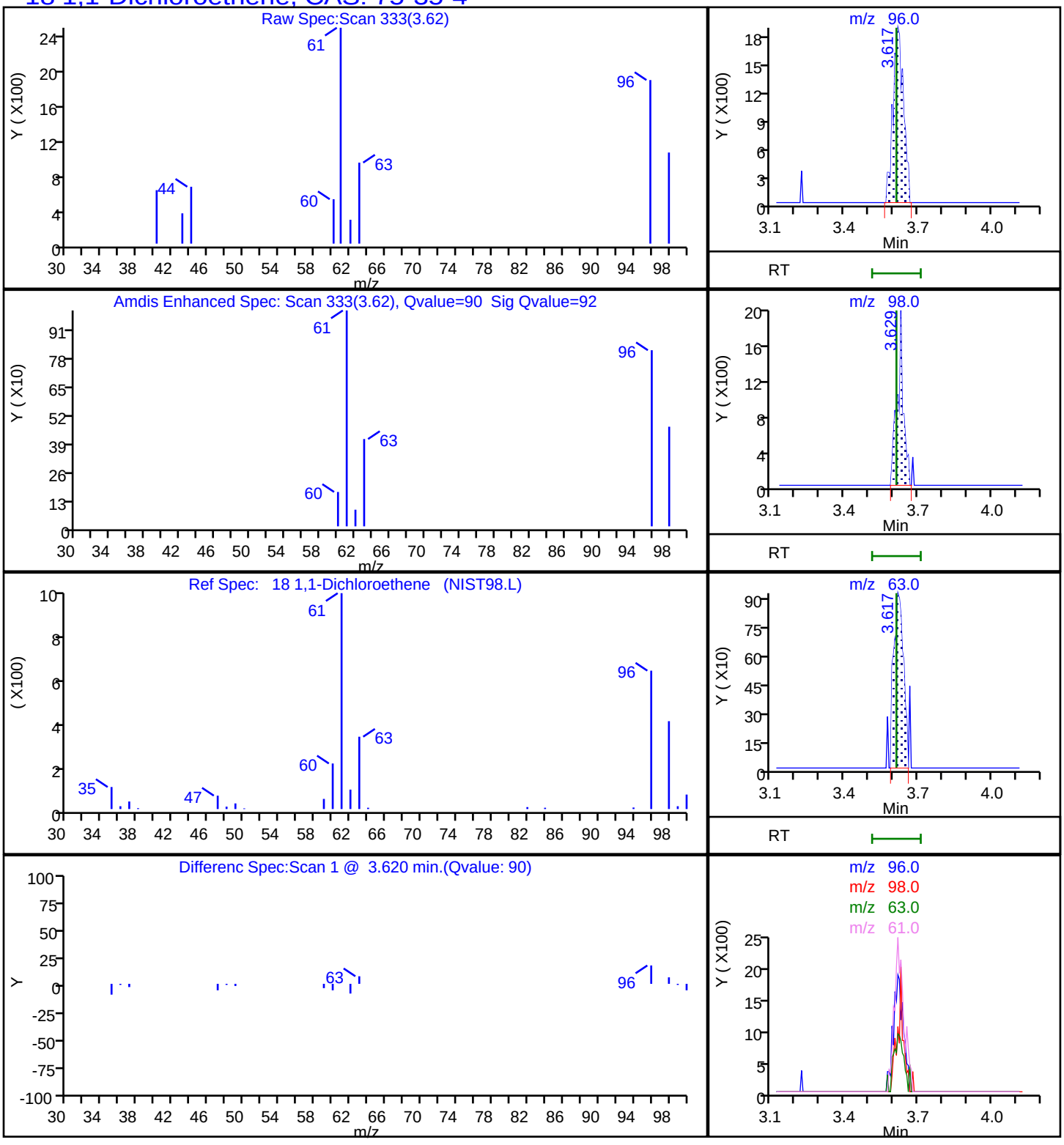
Report Date: 05-Aug-2021 10:58:17 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S07.D

Injection Date:	04-Aug-2021 22:09:30	Instrument ID:	19094		
Lims ID:	410-49448-A-6	Lab Sample ID:	410-49448-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

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



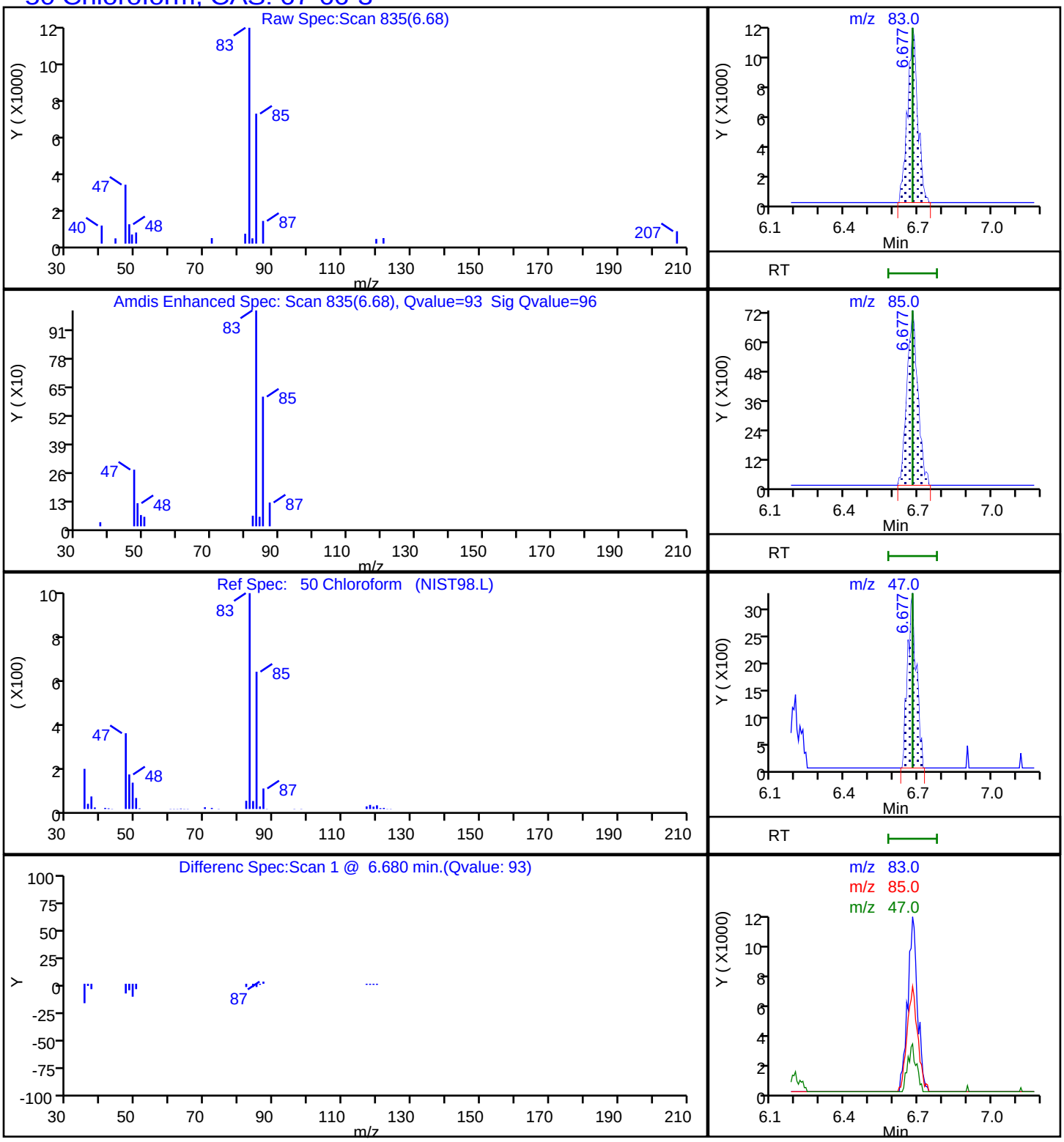
Report Date: 05-Aug-2021 10:58:17 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S07.D

Injection Date:	04-Aug-2021 22:09:30	Instrument ID:	19094		
Lims ID:	410-49448-A-6	Lab Sample ID:	410-49448-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

50 Chloroform, CAS: 67-66-3



Report Date: 05-Aug-2021 10:58:17 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S07.D

Injection Date: 04-Aug-2021 22:09:30 Instrument ID: 19094

Lims ID: 410-49448-A-6 Lab Sample ID: 410-49448-6

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

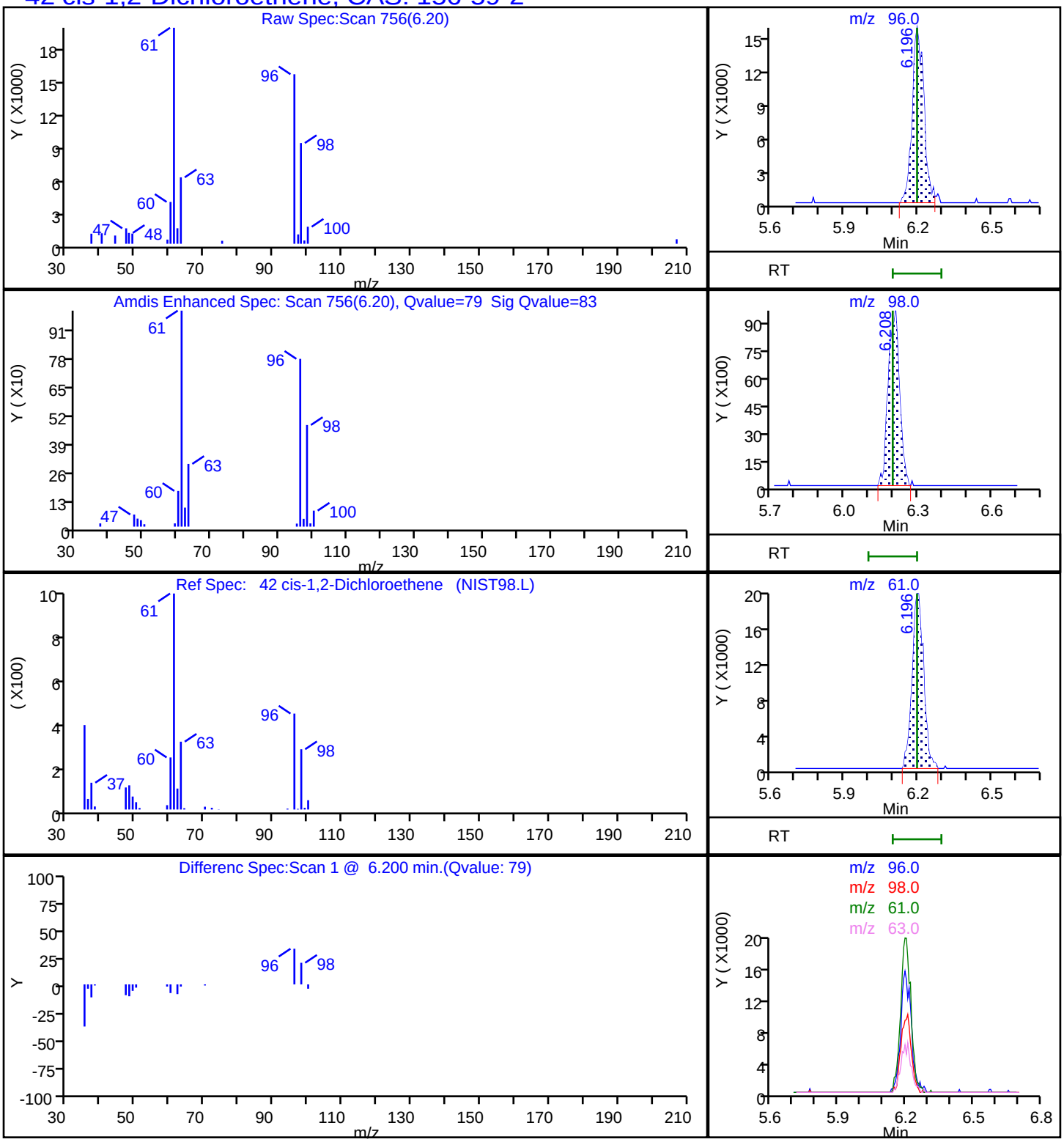
Operator ID: MEC29284 ALS Bottle#: 12 Worklist Smp#: 13

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_19094_25mL Limit Group: MSV - 8260C_D

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

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



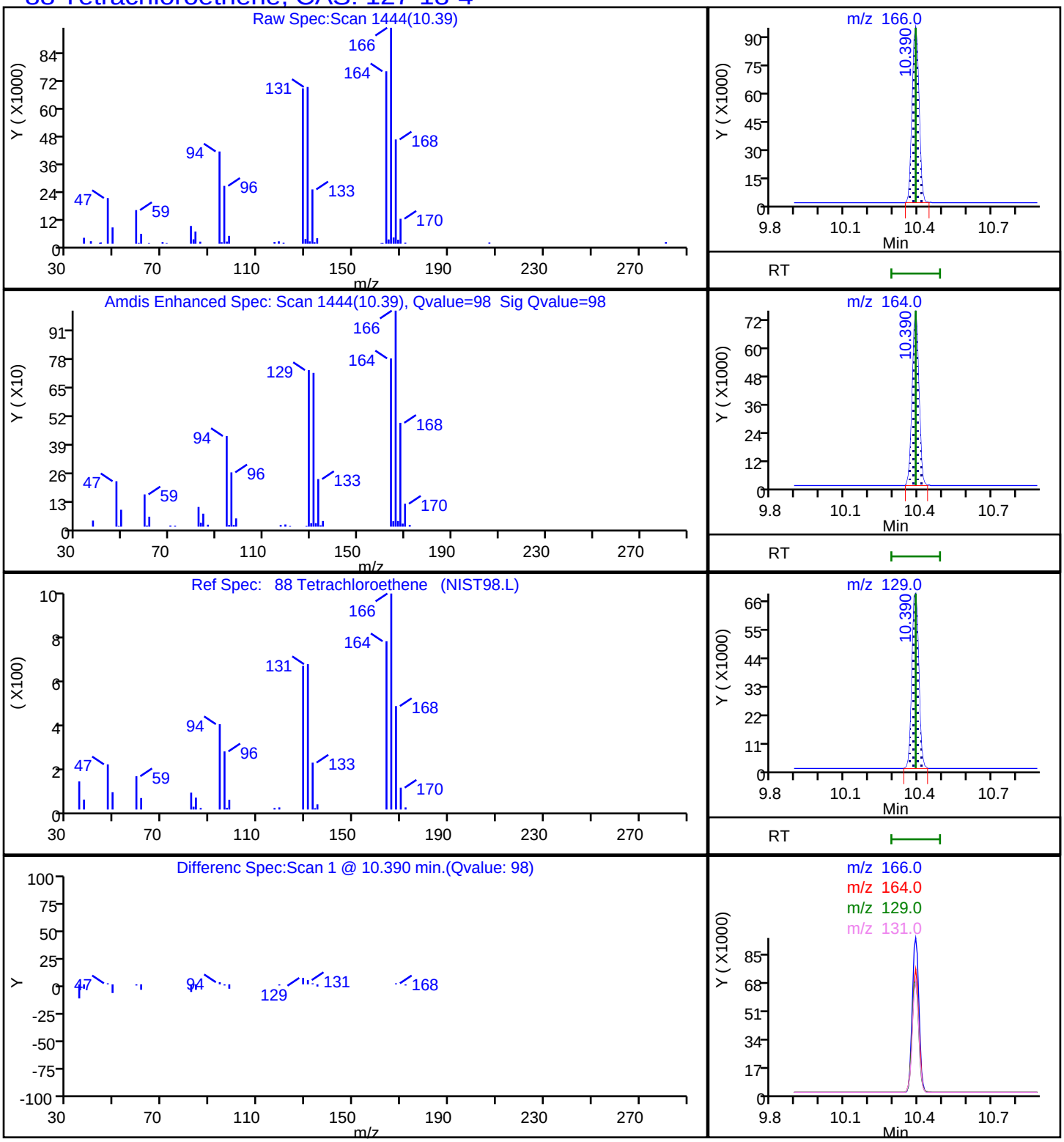
Report Date: 05-Aug-2021 10:58:19 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S07.D

Injection Date:	04-Aug-2021 22:09:30	Instrument ID:	19094		
Lims ID:	410-49448-A-6	Lab Sample ID:	410-49448-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

88 Tetrachloroethene, CAS: 127-18-4



Report Date: 05-Aug-2021 10:58:17 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S07.D

Injection Date: 04-Aug-2021 22:09:30 Instrument ID: 19094

Lims ID: 410-49448-A-6 Lab Sample ID: 410-49448-6

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

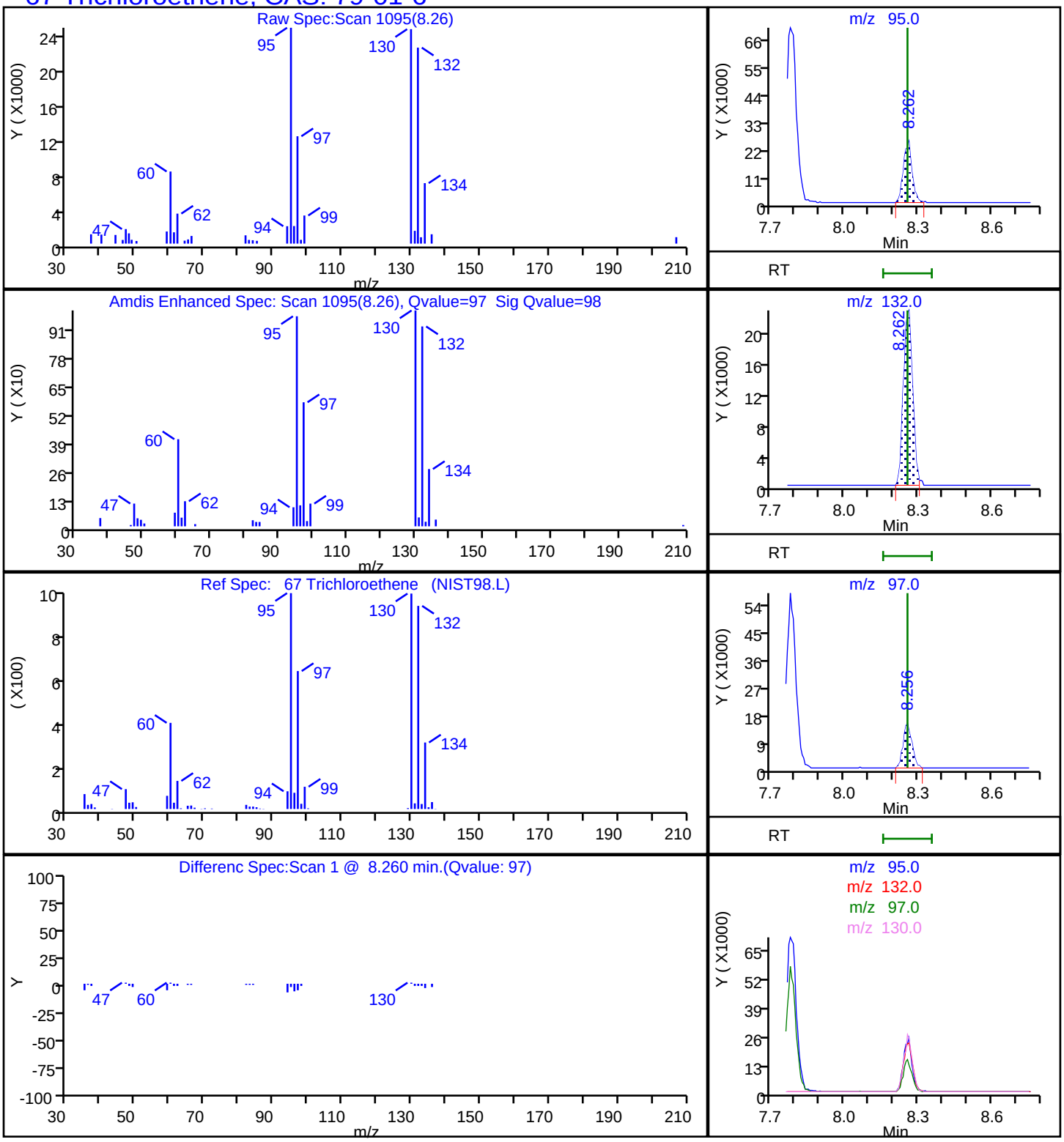
Operator ID: MEC29284 ALS Bottle#: 12 Worklist Smp#: 13

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_19094_25mL Limit Group: MSV - 8260C_D

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

67 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

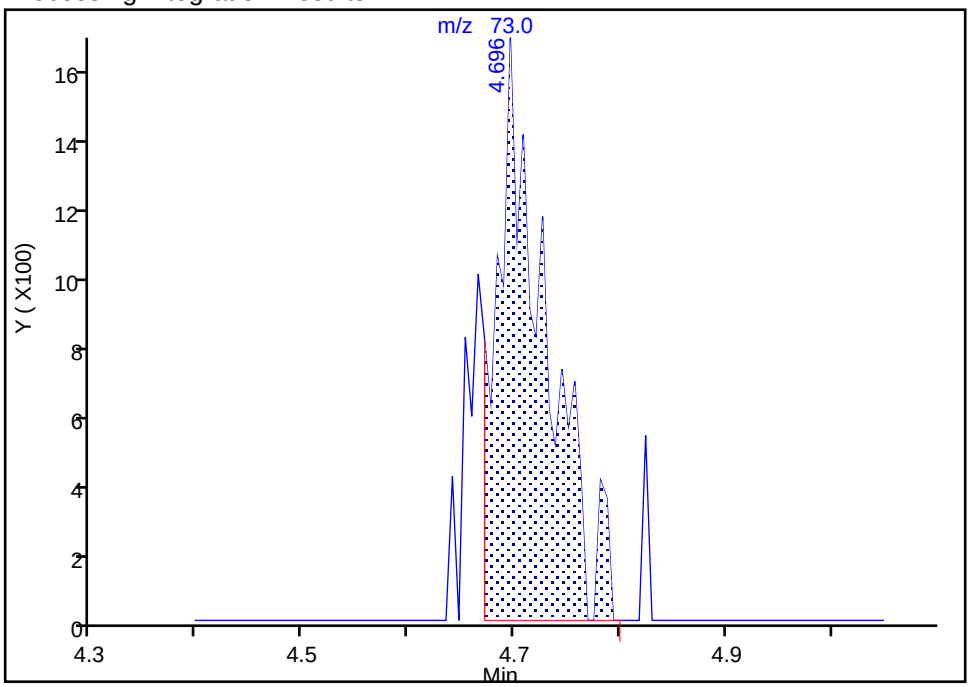
Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S07.D				
Injection Date:	04-Aug-2021 22:09:30	Instrument ID:	19094		
Lims ID:	410-49448-A-6	Lab Sample ID:	410-49448-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

32 Methyl tert-butyl ether, CAS: 1634-04-4

Signal: 1

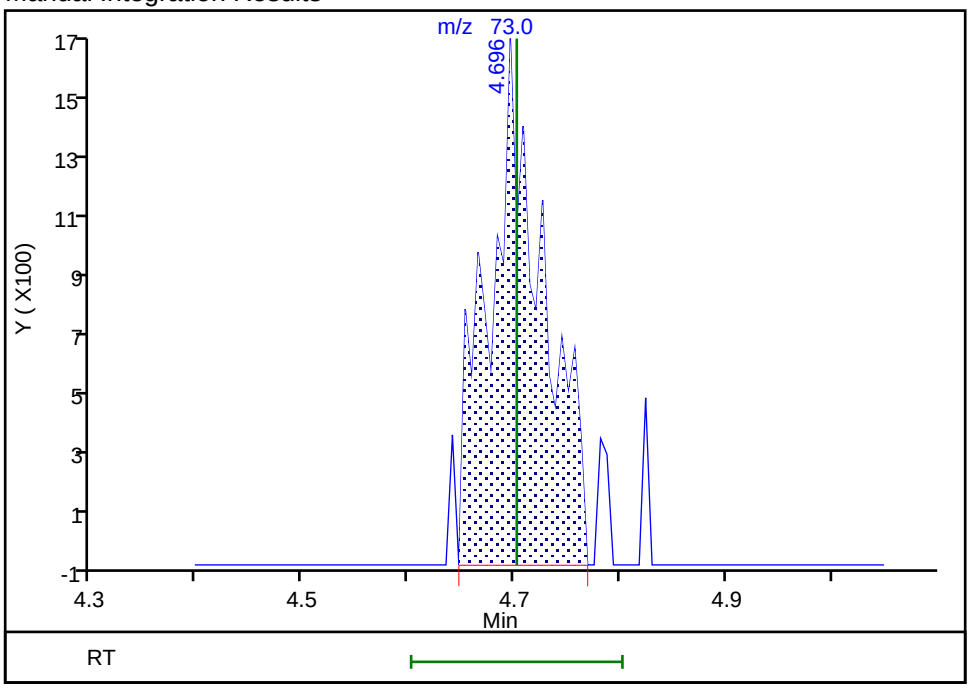
Processing Integration Results

RT: 4.70
Area: 5162
Amount: 0.035051
Amount Units: ug/l



Manual Integration Results

RT: 4.70
Area: 5751
Amount: 0.039050
Amount Units: ug/l



Reviewer: kaewrungrueangp, 05-Aug-2021 10:53:32

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.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 410-49448-9

Matrix: Water Lab File ID: HG04S16.D

Analysis Method: 8260D Date Collected: 07/29/2021 09:10

Sample wt/vol: 25(mL) Date Analyzed: 08/05/2021 01:15

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.: 156699 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 ^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	0.18	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	0.062	J	0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.11	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 410-49448-9

Matrix: Water Lab File ID: HG04S16.D

Analysis Method: 8260D Date Collected: 07/29/2021 09:10

Sample wt/vol: 25(mL) Date Analyzed: 08/05/2021 01:15

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.: 156699 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	110		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S16.D
Lims ID: 410-49448-A-9
Client ID: HD-COD-SW-16-0/1-0
Sample Type: Client
Inject. Date: 05-Aug-2021 01:15:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-022
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 13:02:09 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 13:02:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Chloromethane	50	2.190	2.190	0.000	16	2882	0.0430	
7 Vinyl chloride	62		2.312				ND	7
9 Bromomethane	94		2.641				ND	
10 Chloroethane	64		2.727				ND	
18 1,1-Dichloroethene	96		3.611				ND	
19 Acetone	43	3.641	3.635	0.006	82	15241	1.41	
24 Carbon disulfide	76		3.934				ND	7
* 28 t-Butyl alcohol-d10 (IS)	65	4.287	4.281	0.006	90	146974	50.0	
29 Methylene Chloride	84		4.281				ND	
32 Methyl tert-butyl ether	73		4.702				ND	
33 trans-1,2-Dichloroethene	96		4.714				ND	7
35 1,1-Dichloroethane	63		5.367				ND	
41 2-Butanone (MEK)	43		6.147				ND	7
42 cis-1,2-Dichloroethene	96	6.202	6.196	0.006	77	11139	0.1810	
48 Chlorobromomethane	128		6.525				ND	
50 Chloroform	83	6.683	6.677	0.006	30	7574	0.0787	M
$ 51 Dibromofluoromethane (Surr)	113	6.885	6.891	-0.007	94	518741	11.0	
52 1,1,1-Trichloroethane	97		6.909				ND	
56 Carbon tetrachloride	117		7.122				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.342	7.336	0.006	47	105431	11.1	
59 Benzene	78		7.378				ND	7
60 1,2-Dichloroethane	62		7.439				ND	U
* 65 Fluorobenzene (IS)	96	7.775	7.775	0.000	99	1951791	10.0	
67 Trichloroethene	95	8.262	8.256	0.006	95	6398	0.1063	
70 1,2-Dichloropropane	63		8.585				ND	
75 Dichlorobromomethane	83		8.927				ND	
80 cis-1,3-Dichloropropene	75		9.463				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.628				ND	7
$ 82 Toluene-d8 (Surr)	98	9.768	9.768	0.000	94	2058420	9.41	
83 Toluene	92	9.841	9.847	-0.006	96	8610	0.0516	
85 trans-1,3-Dichloropropene	75		10.097				ND	
87 1,1,2-Trichloroethane	97		10.299				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
88 Tetrachloroethene	166	10.396	10.390	0.006	94	4474	0.0618	
91 2-Hexanone	43		10.506				ND	7
93 Chlorodibromomethane	129		10.670				ND	
94 Ethylene Dibromide	107		10.786				ND	
* 97 Chlorobenzene-d5 (IS)	117	11.213	11.213	0.000	85	1628115	10.0	
98 Chlorobenzene	112		11.237				ND	
S 95 Xylenes, Total	106		11.245				ND	7
99 1,1,1,2-Tetrachloroethane	131		11.317				ND	
100 Ethylbenzene	91		11.323				ND	7
101 m-Xylene & p-Xylene	106		11.439				ND	7
102 o-Xylene	106		11.762				ND	7
103 Styrene	104		11.780				ND	7
104 Bromoform	173		11.938				ND	
$ 108 4-Bromofluorobenzene (Surr)	95	12.201	12.201	0.000	90	783348	9.81	
109 1,1,2,2-Tetrachloroethane	83		12.298				ND	
* 124 1,4-Dichlorobenzene-d4	152	13.078	13.078	0.000	95	909300	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

MSV_LLcentISS_00001 Amount Added: 5.00 Units: uL Run Reagent

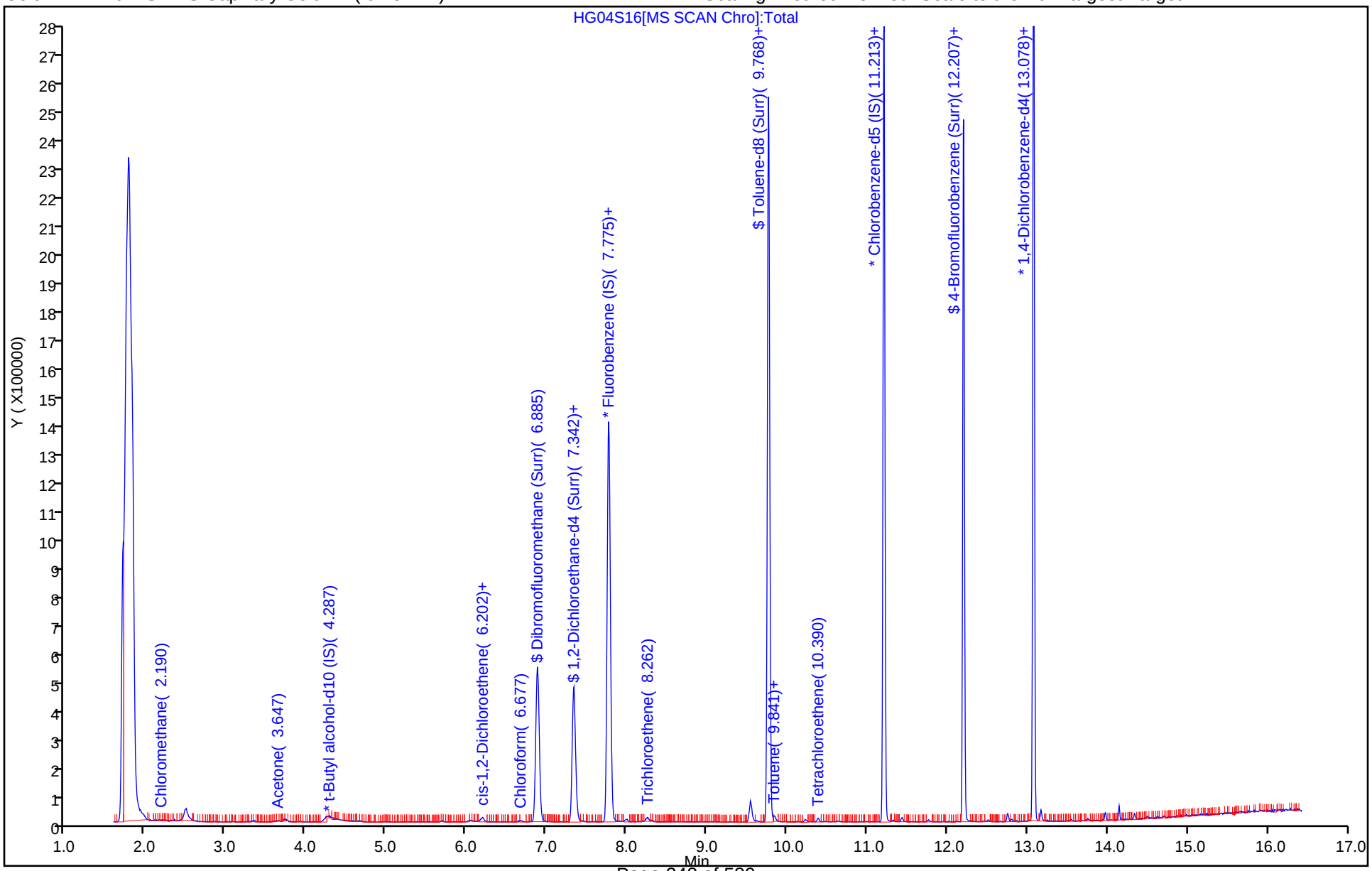
Report Date: 05-Aug-2021 13:02:37 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S16.D

Injection Date:	05-Aug-2021 01:15:30	Instrument ID:	19094	Operator ID:	MEC29284
Lims ID:	410-49448-A-9	Lab Sample ID:	410-49448-9	Worklist Smp#:	22
Client ID:	HD-COD-SW-16-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S16.D				
Lims ID:	410-49448-A-9				
Client ID:	HD-COD-SW-16-0/1-0				
Sample Type:	Client				
Inject. Date:	05-Aug-2021 01:15:30	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0036053-022				
Operator ID:	MEC29284	Instrument ID:	19094		
Method:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	05-Aug-2021 13:02:09	Calib Date:	30-Jun-2021 20:52:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1672				

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 13:02:37

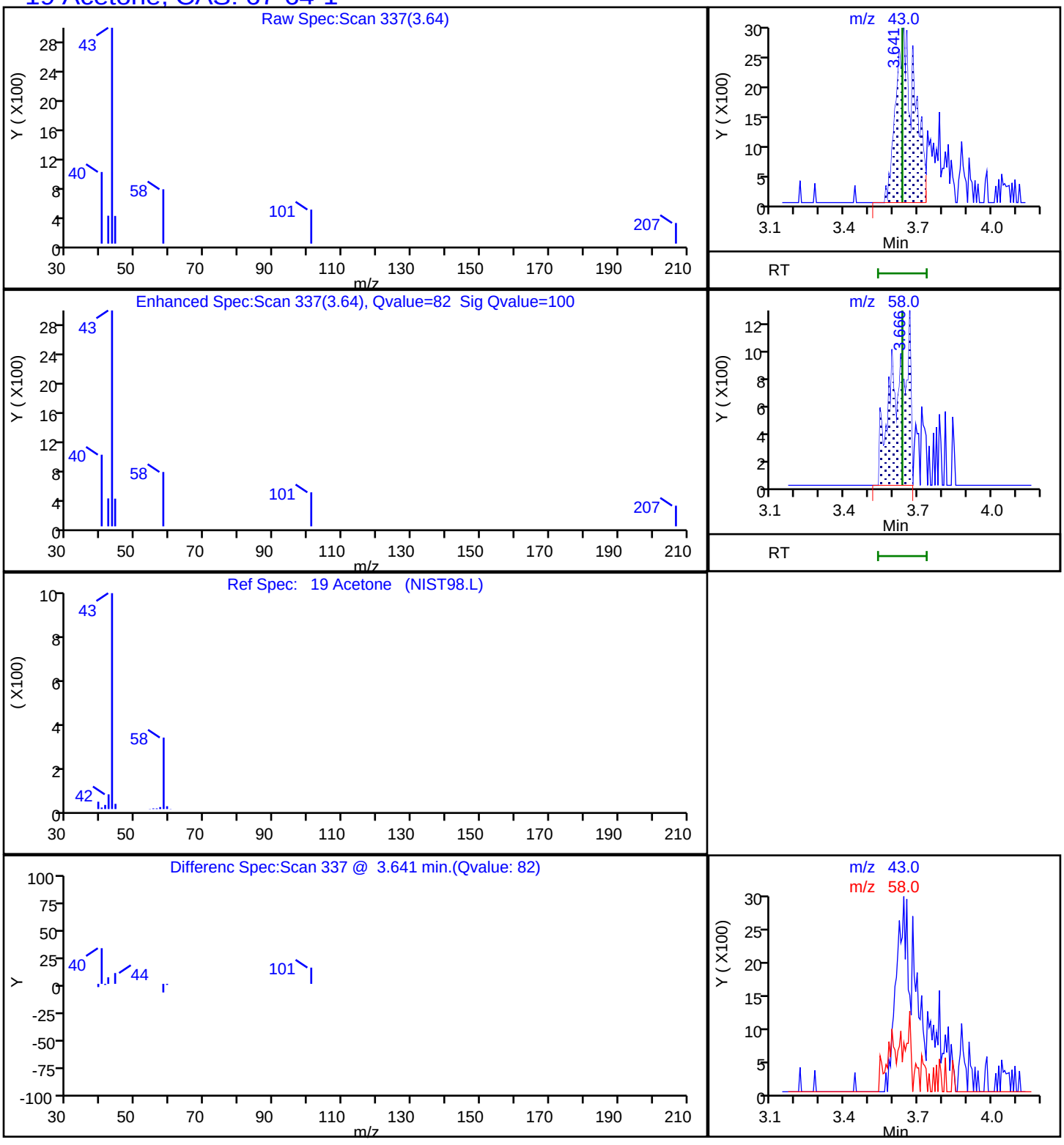
Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	10.0	11.0	109.85
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	11.1	110.58
$ 82 Toluene-d8 (Surr)	10.0	9.41	94.09
$ 108 4-Bromofluorobenzene (Surr)	10.0	9.81	98.12

Report Date: 05-Aug-2021 13:02:37 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S16.D				
Injection Date:	05-Aug-2021 01:15:30	Instrument ID:	19094		
Lims ID:	410-49448-A-9	Lab Sample ID:	410-49448-9		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

19 Acetone, CAS: 67-64-1

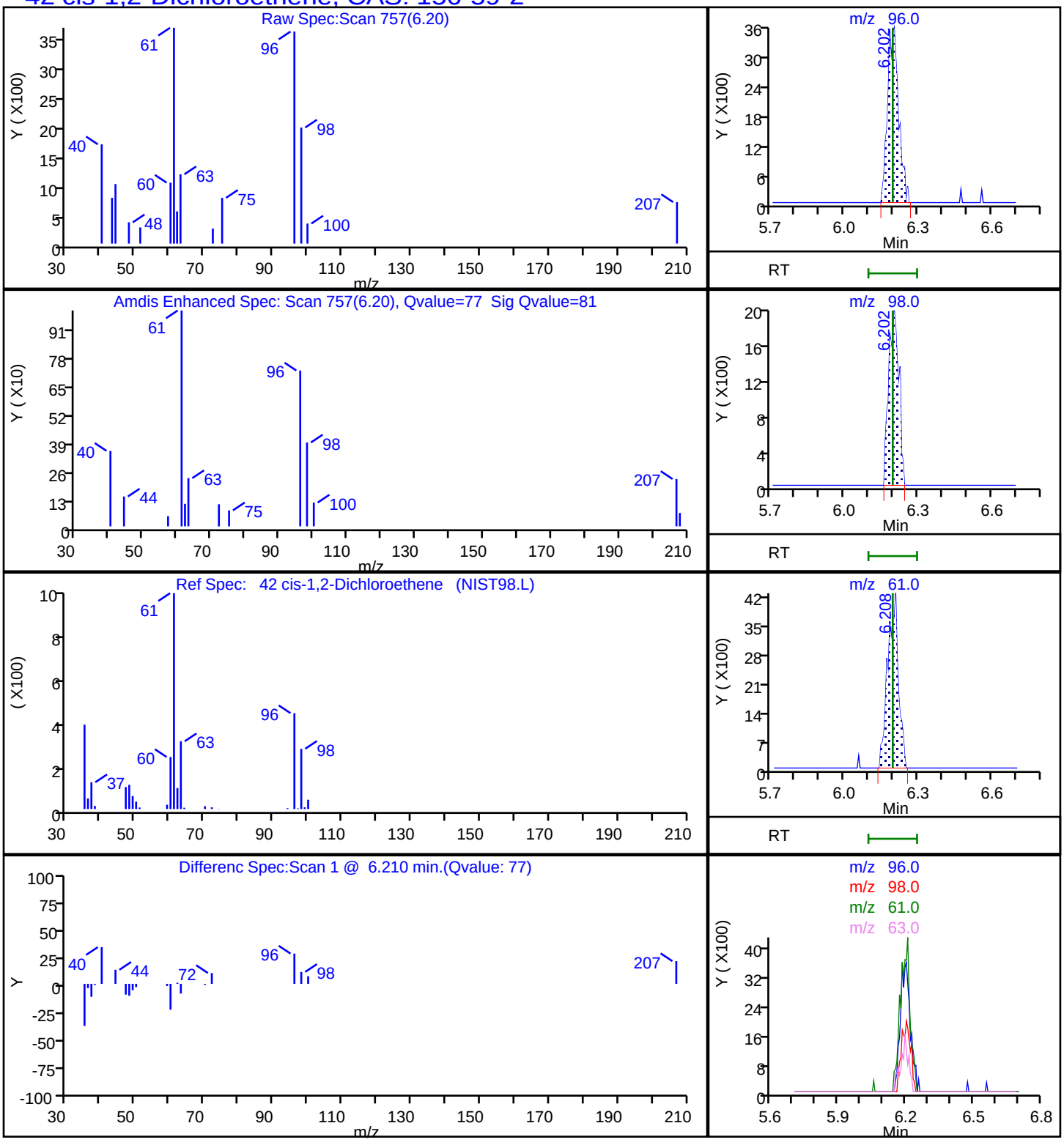


Report Date: 05-Aug-2021 13:02:37 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S16.D				
Injection Date:	05-Aug-2021 01:15:30	Instrument ID:	19094		
Lims ID:	410-49448-A-9	Lab Sample ID:	410-49448-9		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

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



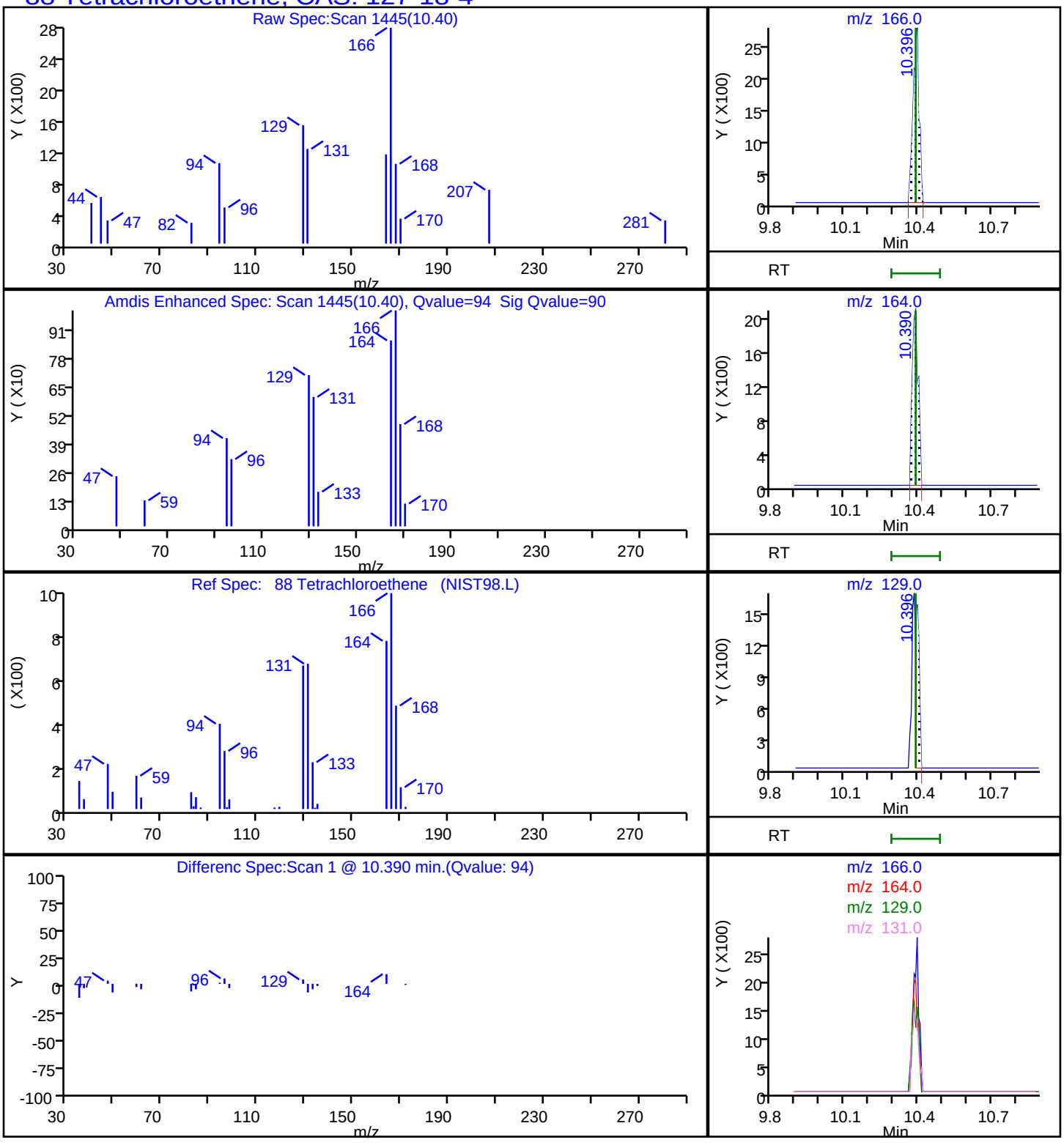
Report Date: 05-Aug-2021 13:02:37 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S16.D

Injection Date:	05-Aug-2021 01:15:30	Instrument ID:	19094		
Lims ID:	410-49448-A-9	Lab Sample ID:	410-49448-9		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

88 Tetrachloroethene, CAS: 127-18-4



Report Date: 05-Aug-2021 13:02:37 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S16.D

Injection Date: 05-Aug-2021 01:15:30 Instrument ID: 19094

Lims ID: 410-49448-A-9 Lab Sample ID: 410-49448-9

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

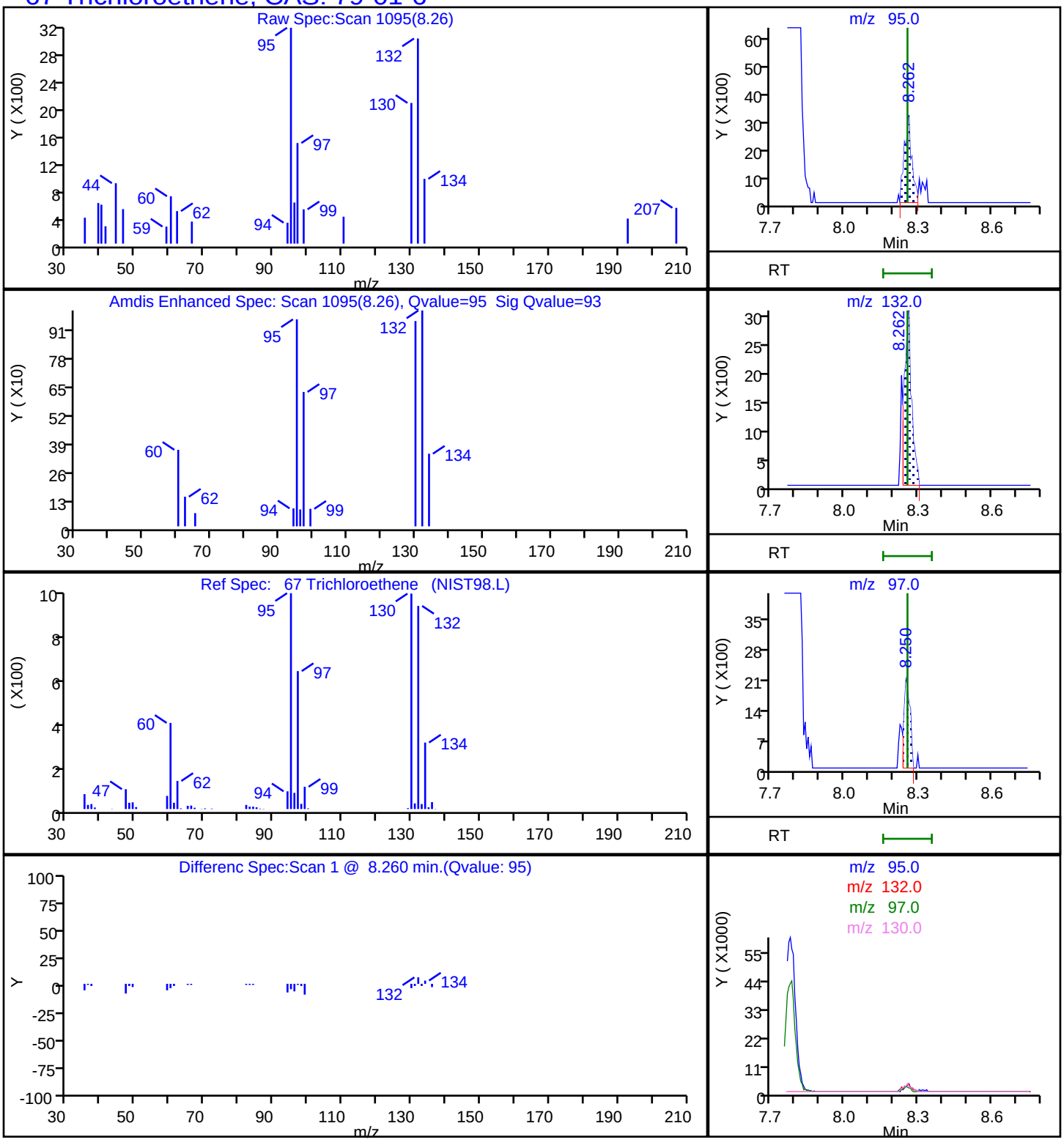
Operator ID: MEC29284 ALS Bottle#: 21 Worklist Smp#: 22

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_19094_25mL Limit Group: MSV - 8260C_D

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

67 Trichloroethene, CAS: 79-01-6



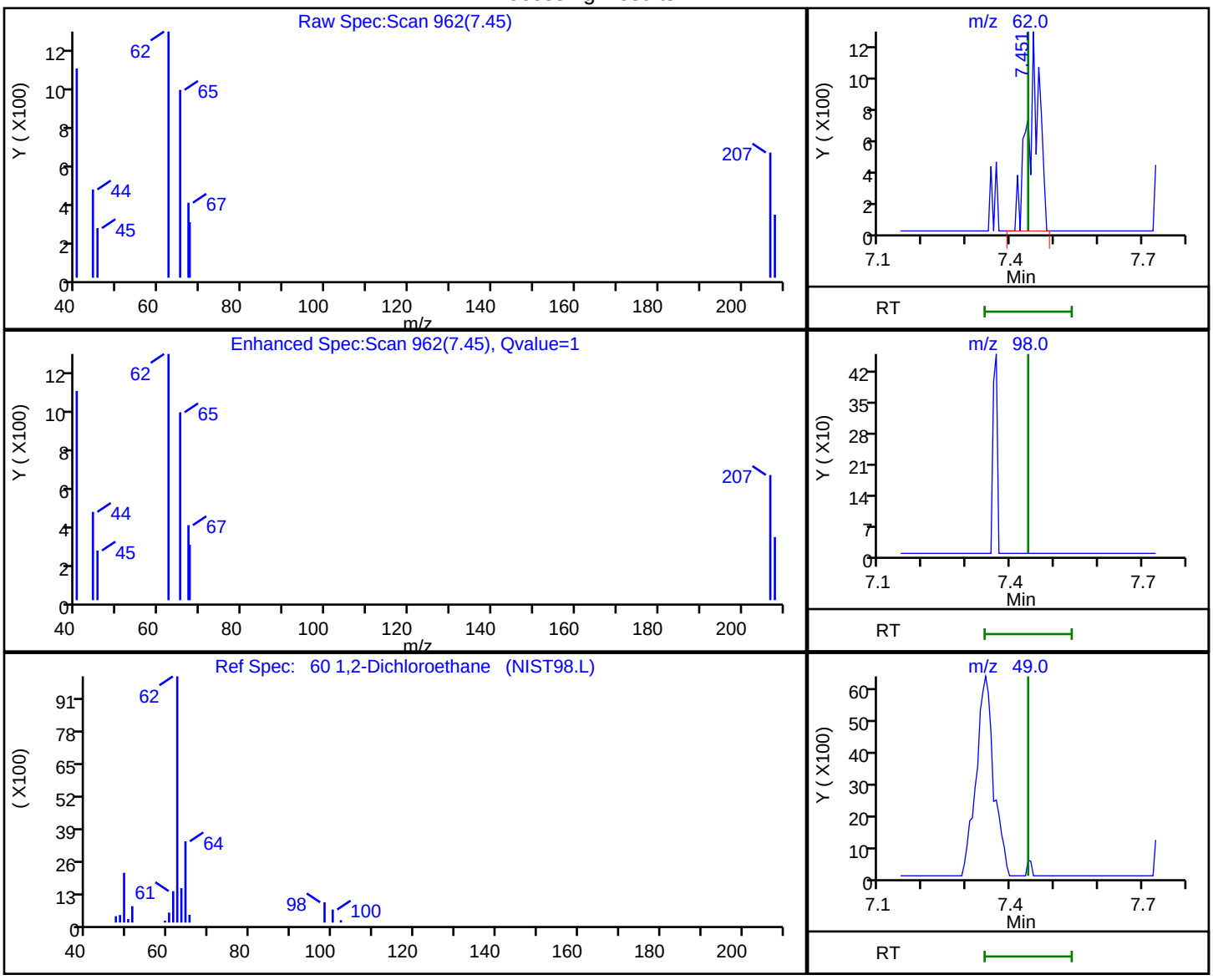
User Disabled Compound Report

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S16.D				
Injection Date:	05-Aug-2021 01:15:30	Instrument ID:	19094		
Lims ID:	410-49448-A-9	Lab Sample ID:	410-49448-9		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

60 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.45	62.00	2444	0.042808
7.44	98.00	0	
7.44	49.00	0	

Reviewer: kaewrungrueangp, 05-Aug-2021 13:01:46

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

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

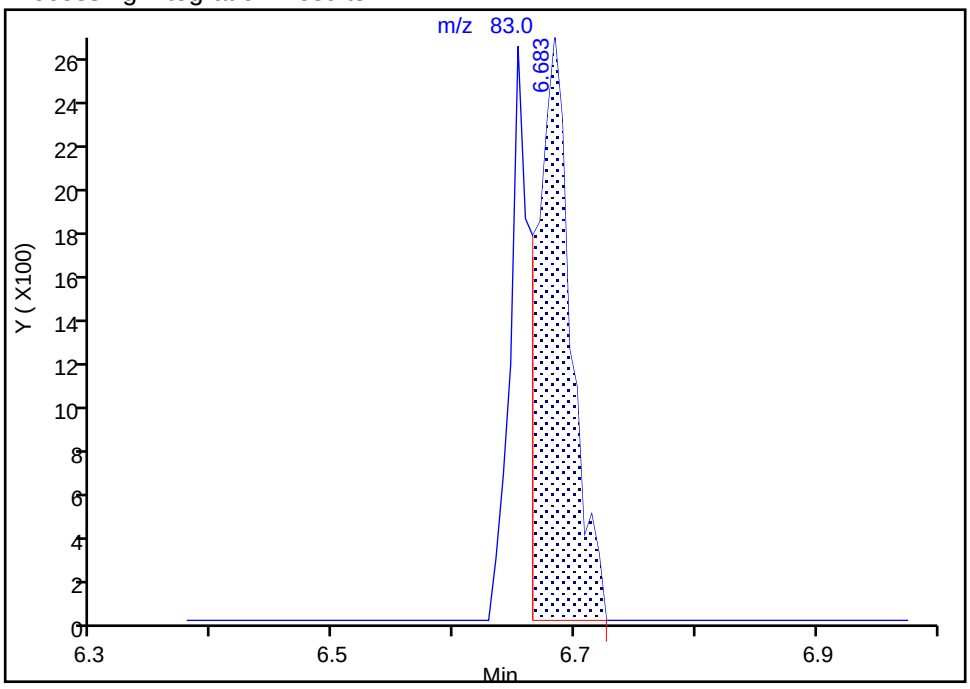
Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S16.D				
Injection Date:	05-Aug-2021 01:15:30	Instrument ID:	19094		
Lims ID:	410-49448-A-9	Lab Sample ID:	410-49448-9		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

50 Chloroform, CAS: 67-66-3

Signal: 1

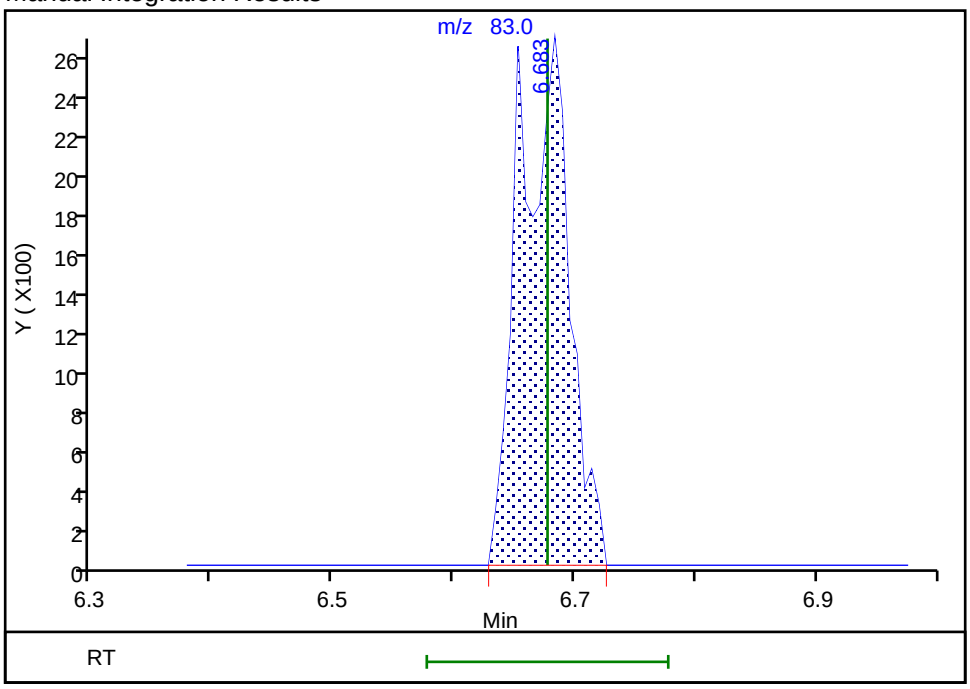
Processing Integration Results

RT: 6.68
Area: 5189
Amount: 0.053924
Amount Units: ug/l



Manual Integration Results

RT: 6.68
Area: 7574
Amount: 0.078709
Amount Units: ug/l



Reviewer: kaewrungrueangp, 05-Aug-2021 13:01:33

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.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 410-49448-10

Matrix: Water Lab File ID: HG04S17.D

Analysis Method: 8260D Date Collected: 07/29/2021 09:25

Sample wt/vol: 25(mL) Date Analyzed: 08/05/2021 01:36

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.: 156699 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.9	J ^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	0.089	J	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	0.20	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	0.23	J	0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.20	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 410-49448-10

Matrix: Water Lab File ID: HG04S17.D

Analysis Method: 8260D Date Collected: 07/29/2021 09:25

Sample wt/vol: 25(mL) Date Analyzed: 08/05/2021 01:36

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.: 156699 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)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	106		80-120
2037-26-5	Toluene-d8 (Surr)	93		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S17.D
Lims ID: 410-49448-A-10
Client ID: HD-COD-SW-17-0/1-0
Sample Type: Client
Inject. Date: 05-Aug-2021 01:36:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-023
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 13:04:15 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 13:04:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Chloromethane	50	2.190	2.190	0.000	26	4215	0.0526	
7 Vinyl chloride	62		2.312				ND	7
9 Bromomethane	94		2.641				ND	
10 Chloroethane	64		2.727				ND	
18 1,1-Dichloroethene	96		3.611				ND	
19 Acetone	43	3.660	3.635	0.025	68	18658	1.95	
24 Carbon disulfide	76	3.934	3.934	0.000	99	16511	0.0890	M
* 28 t-Butyl alcohol-d10 (IS)	65	4.288	4.281	0.007	88	130529	50.0	
29 Methylene Chloride	84		4.281				ND	
32 Methyl tert-butyl ether	73		4.702				ND	
33 trans-1,2-Dichloroethene	96		4.714				ND	7
35 1,1-Dichloroethane	63		5.367				ND	
41 2-Butanone (MEK)	43		6.147				ND	7
42 cis-1,2-Dichloroethene	96	6.202	6.196	0.006	76	14865	0.2021	
48 Chlorobromomethane	128		6.525				ND	
50 Chloroform	83	6.671	6.677	-0.006	25	8731	0.0759	
$ 51 Dibromofluoromethane (Surr)	113	6.885	6.891	-0.006	93	600782	10.6	
52 1,1,1-Trichloroethane	97		6.909				ND	7
56 Carbon tetrachloride	117		7.122				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.342	7.336	0.006	58	116560	10.2	
59 Benzene	78		7.378				ND	7
60 1,2-Dichloroethane	62		7.439				ND	U
* 65 Fluorobenzene (IS)	96	7.781	7.775	0.006	99	2333107	10.0	
67 Trichloroethene	95	8.256	8.256	0.000	94	14117	0.1963	
70 1,2-Dichloropropane	63		8.585				ND	
75 Dichlorobromomethane	83		8.927				ND	7
80 cis-1,3-Dichloropropene	75		9.463				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.628				ND	7
$ 82 Toluene-d8 (Surr)	98	9.768	9.768	0.000	93	2418307	9.32	
83 Toluene	92	9.841	9.847	-0.006	96	9882	0.0499	
85 trans-1,3-Dichloropropene	75		10.097				ND	
87 1,1,2-Trichloroethane	97		10.299				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
88 Tetrachloroethene	166	10.390	10.390	0.000	94	19449	0.2264	
91 2-Hexanone	43		10.506				ND	7
93 Chlorodibromomethane	129		10.670				ND	
94 Ethylene Dibromide	107		10.786				ND	
* 97 Chlorobenzene-d5 (IS)	117	11.213	11.213	0.000	85	1931944	10.0	
98 Chlorobenzene	112		11.237				ND	7
S 95 Xylenes, Total	106		11.245				ND	7
99 1,1,1,2-Tetrachloroethane	131		11.317				ND	
100 Ethylbenzene	91		11.323				ND	7
101 m-Xylene & p-Xylene	106		11.439				ND	7
102 o-Xylene	106		11.762				ND	7
103 Styrene	104		11.780				ND	7
104 Bromoform	173		11.938				ND	
$ 108 4-Bromofluorobenzene (Surr)	95	12.201	12.201	0.000	92	913958	9.65	
109 1,1,2,2-Tetrachloroethane	83		12.298				ND	
* 124 1,4-Dichlorobenzene-d4	152	13.078	13.078	0.000	95	1053269	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

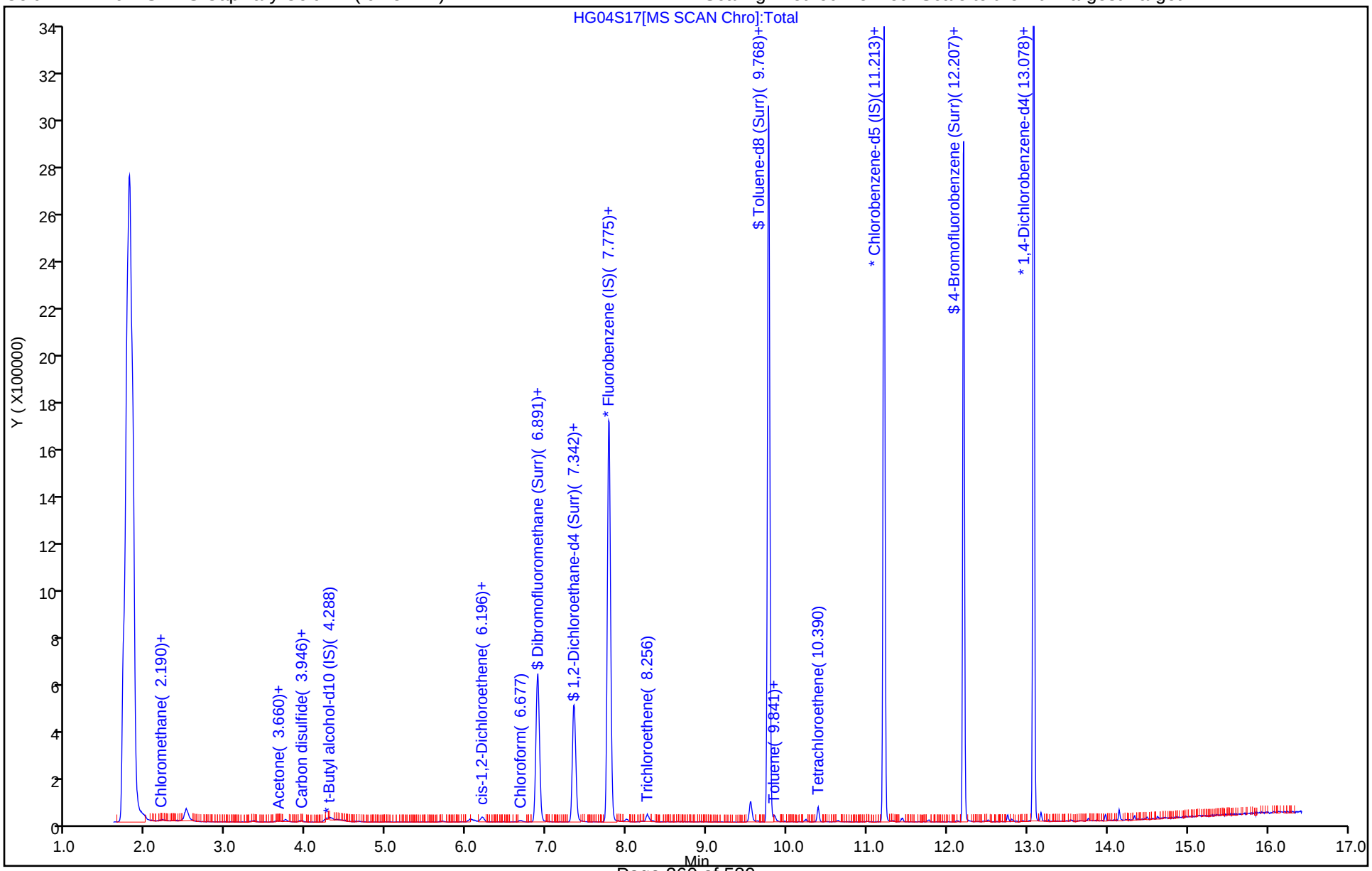
MSV_LLcentISS_00001 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 05-Aug-2021 13:04:16 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S17.D				
Injection Date:	05-Aug-2021 01:36:30	Instrument ID:	19094	Operator ID:	MEC29284
Lims ID:	410-49448-A-10	Lab Sample ID:	410-49448-10	Worklist Smp#:	23
Client ID:	HD-COD-SW-17-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S17.D				
Lims ID:	410-49448-A-10				
Client ID:	HD-COD-SW-17-0/1-0				
Sample Type:	Client				
Inject. Date:	05-Aug-2021 01:36:30	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0036053-023				
Operator ID:	MEC29284	Instrument ID:	19094		
Method:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	05-Aug-2021 13:04:15	Calib Date:	30-Jun-2021 20:52:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1672				

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 13:04:15

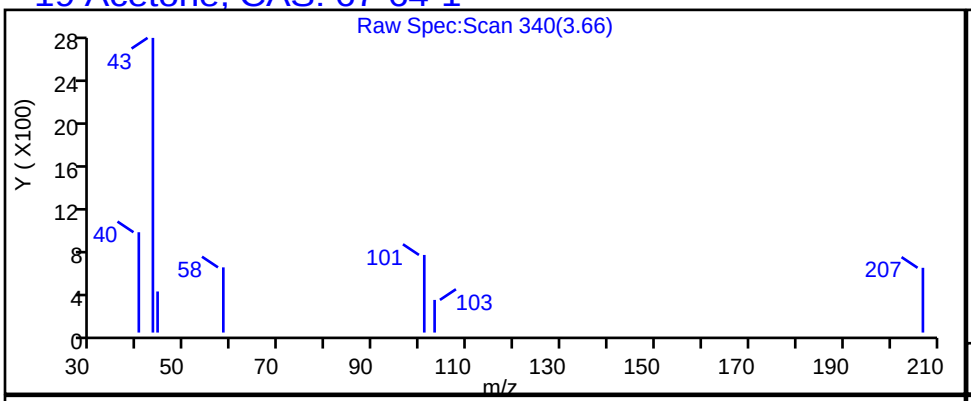
Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	10.0	10.6	106.43
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.27
$ 82 Toluene-d8 (Surr)	10.0	9.32	93.16
$ 108 4-Bromofluorobenzene (Surr)	10.0	9.65	96.48

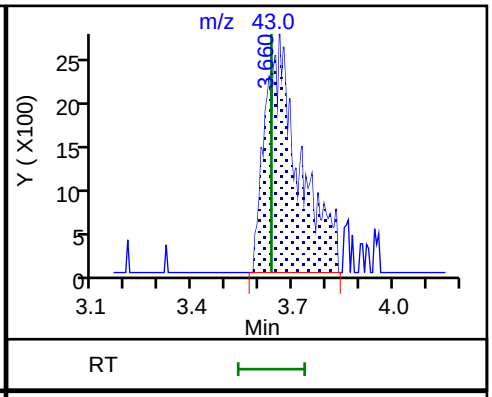
Report Date: 05-Aug-2021 13:04:16 Chrom Revision: 2.3 03-Aug-2021 10:08:16

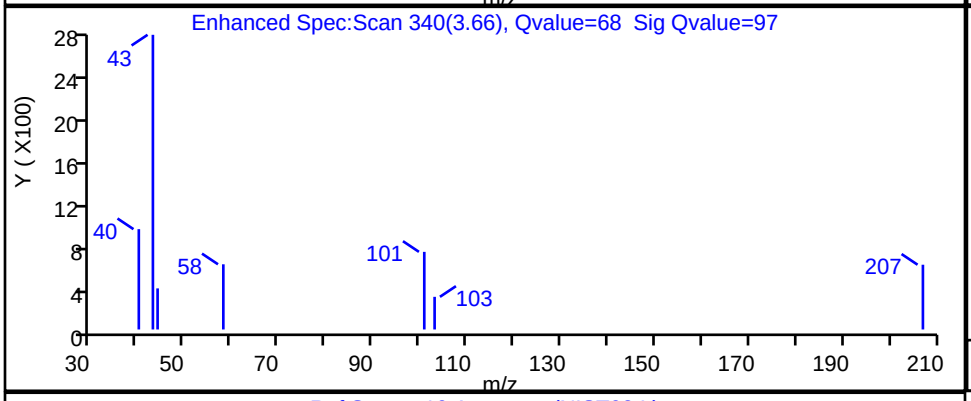
Eurofins Lancaster Laboratories Env, LLC

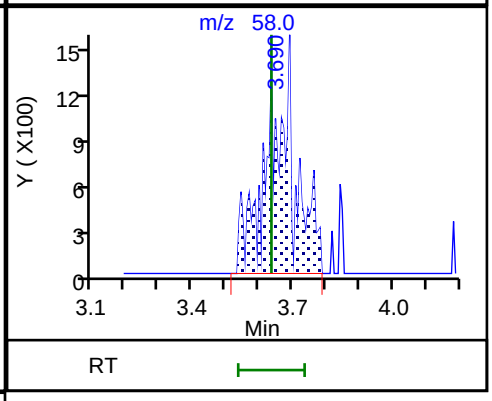
Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S17.D				
Injection Date:	05-Aug-2021 01:36:30	Instrument ID:	19094		
Lims ID:	410-49448-A-10	Lab Sample ID:	410-49448-10		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

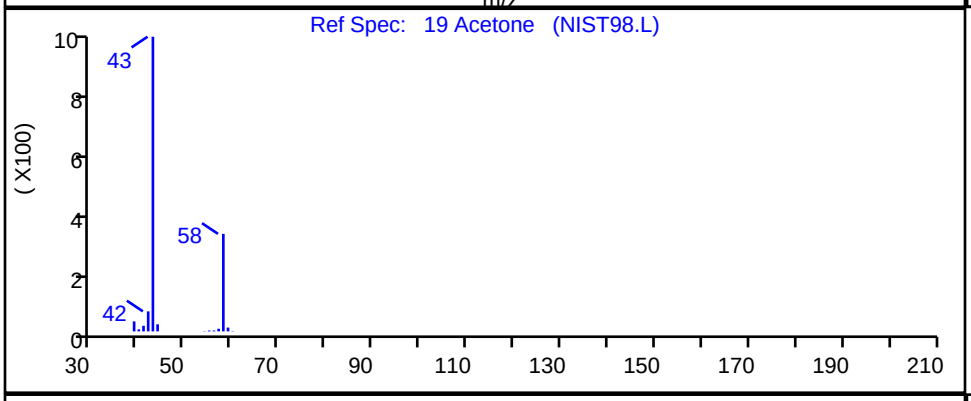
19 Acetone, CAS: 67-64-1

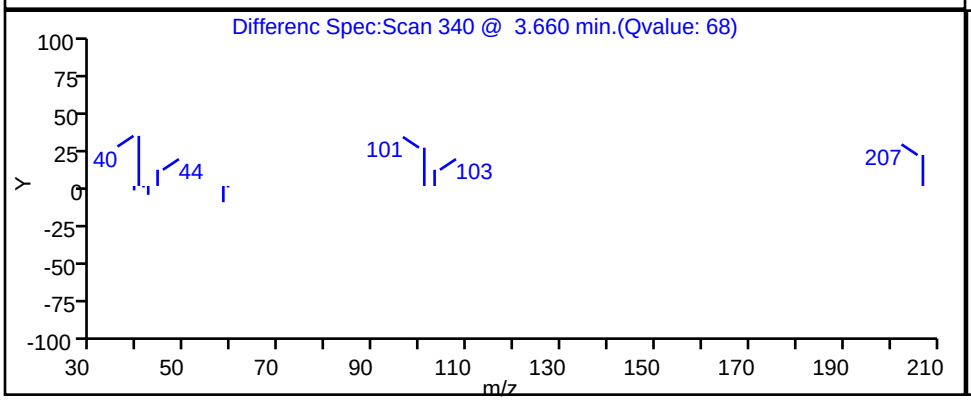


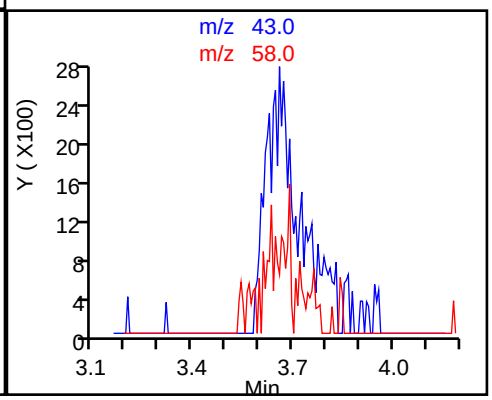










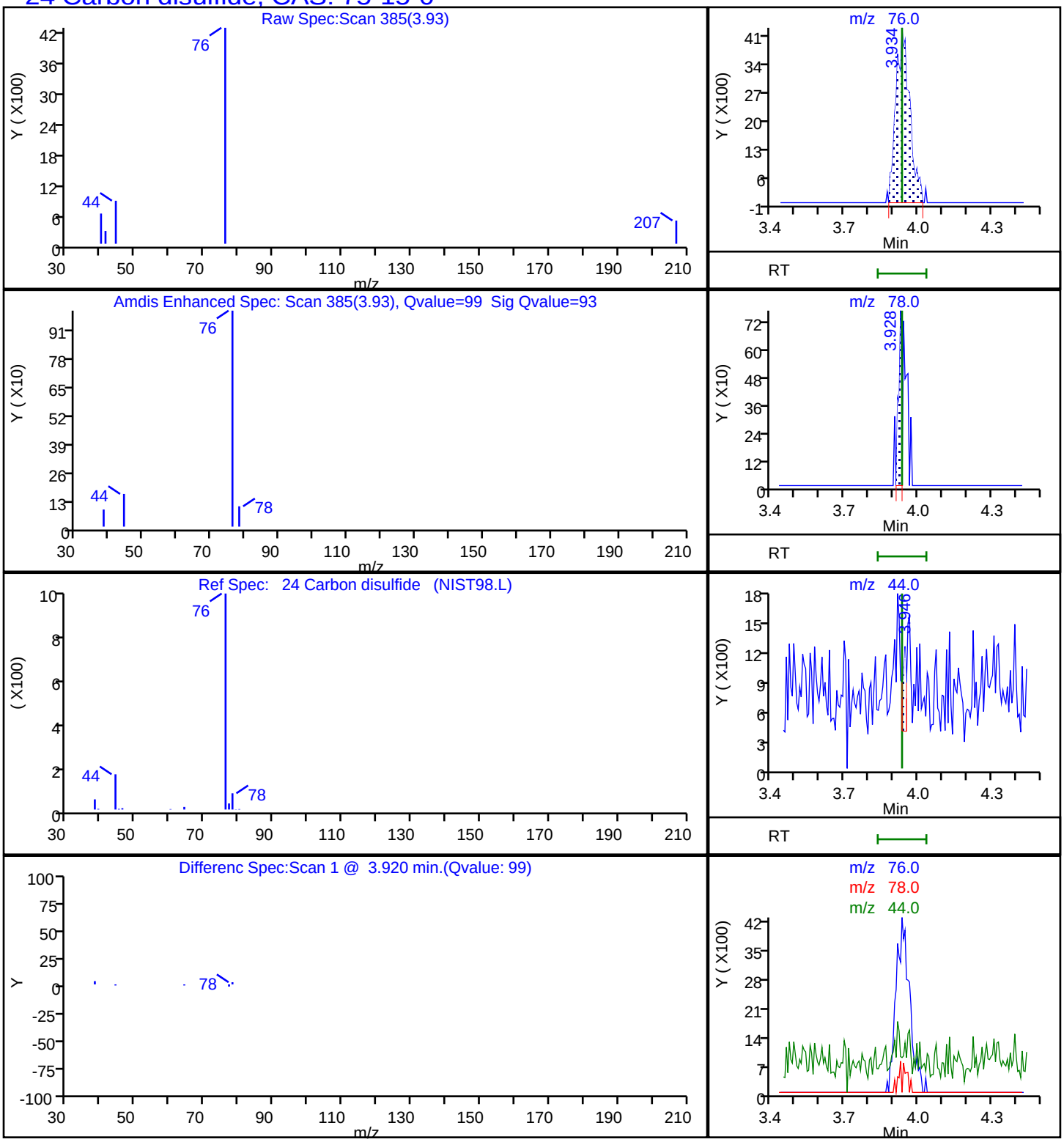


Report Date: 05-Aug-2021 13:04:16 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S17.D				
Injection Date:	05-Aug-2021 01:36:30	Instrument ID:	19094		
Lims ID:	410-49448-A-10	Lab Sample ID:	410-49448-10		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

24 Carbon disulfide, CAS: 75-15-0



Report Date: 05-Aug-2021 13:04:16 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S17.D

Injection Date: 05-Aug-2021 01:36:30 Instrument ID: 19094

Lims ID: 410-49448-A-10 Lab Sample ID: 410-49448-10

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

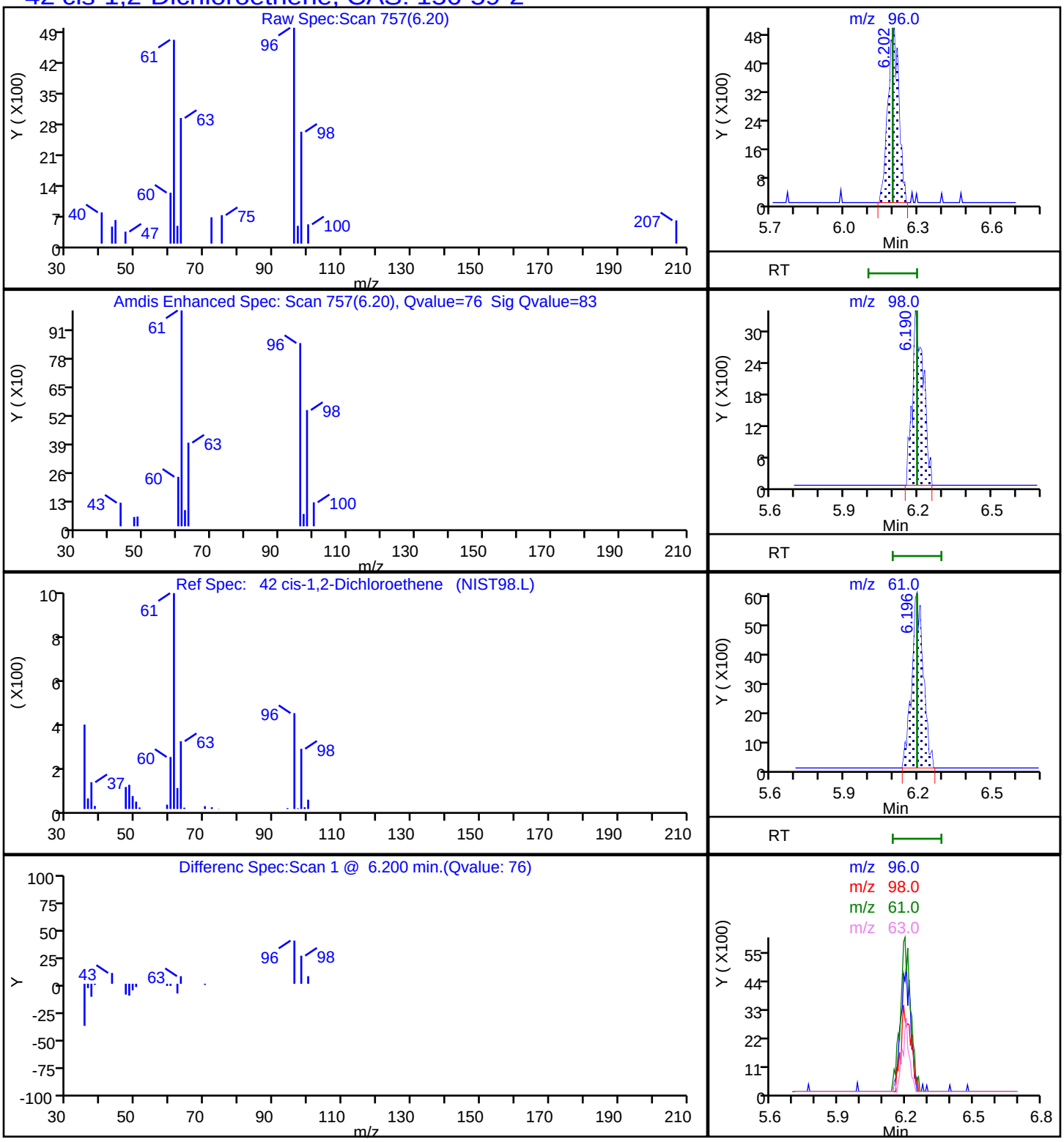
Operator ID: MEC29284 ALS Bottle#: 22 Worklist Smp#: 23

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_19094_25mL Limit Group: MSV - 8260C_D

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

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



Report Date: 05-Aug-2021 13:04:16 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S17.D

Injection Date: 05-Aug-2021 01:36:30 Instrument ID: 19094

Lims ID: 410-49448-A-10 Lab Sample ID: 410-49448-10

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

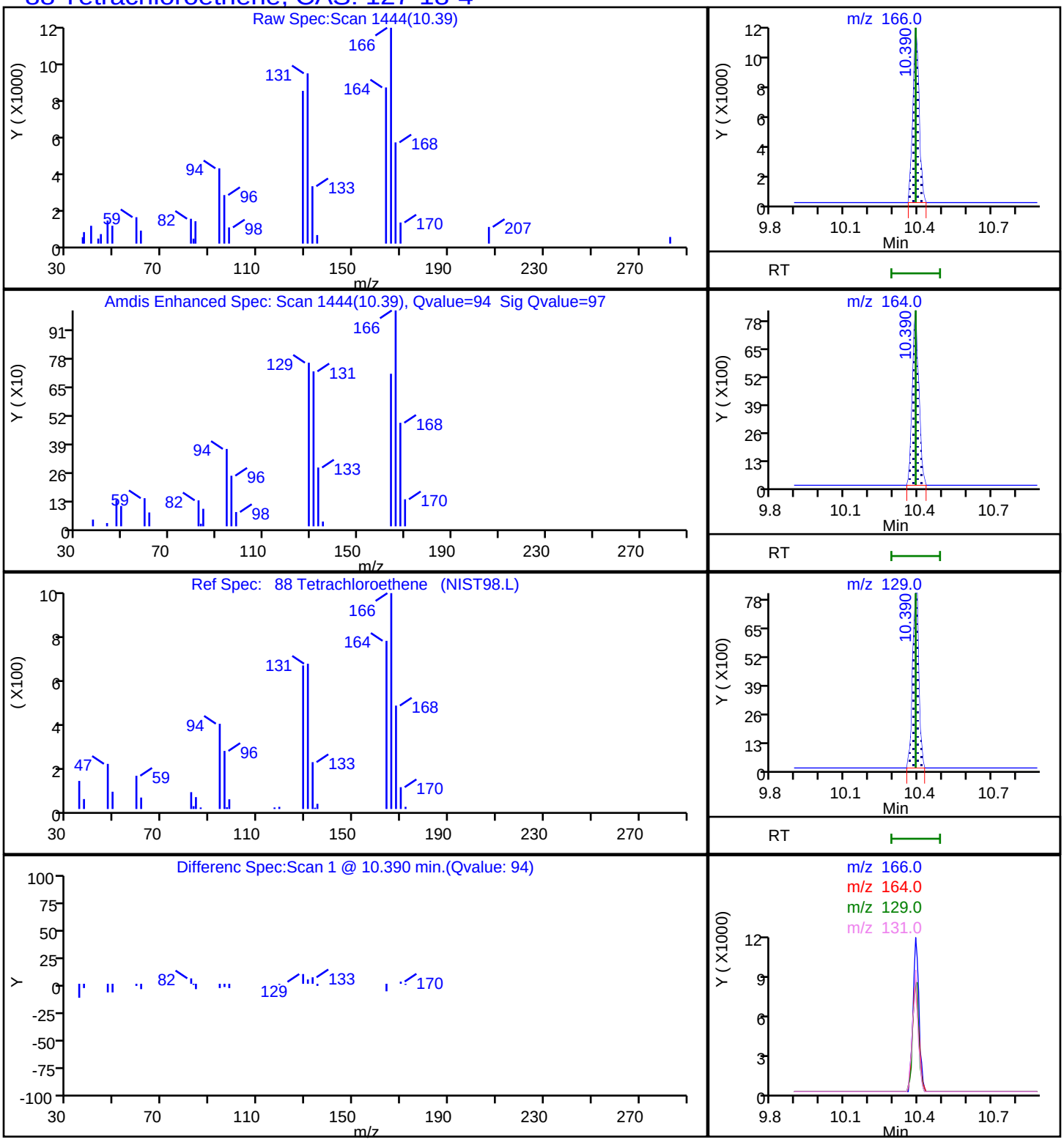
Operator ID: MEC29284 ALS Bottle#: 22 Worklist Smp#: 23

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_19094_25mL Limit Group: MSV - 8260C_D

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

88 Tetrachloroethene, CAS: 127-18-4

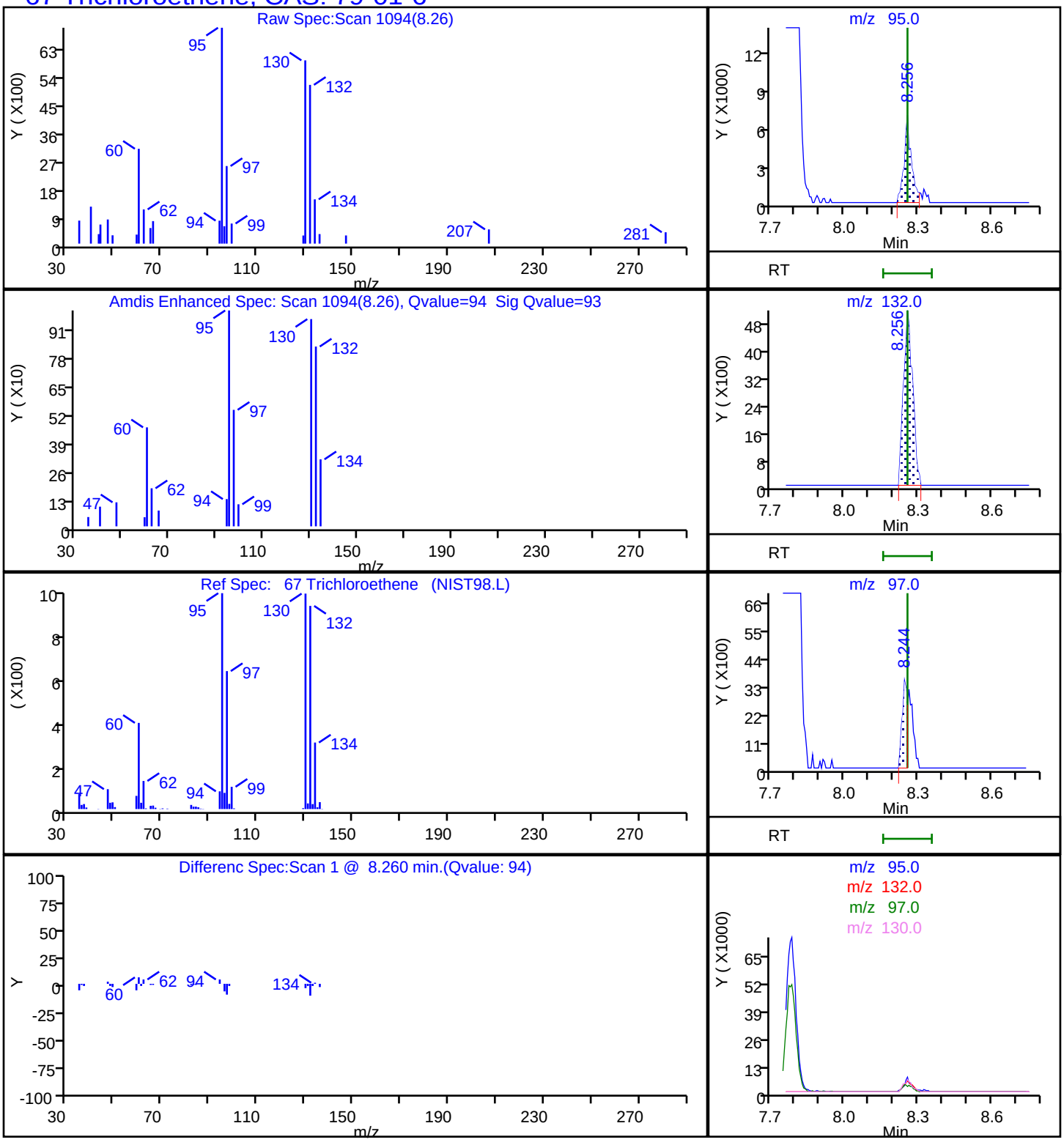


Report Date: 05-Aug-2021 13:04:16 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S17.D				
Injection Date:	05-Aug-2021 01:36:30	Instrument ID:	19094		
Lims ID:	410-49448-A-10	Lab Sample ID:	410-49448-10		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6



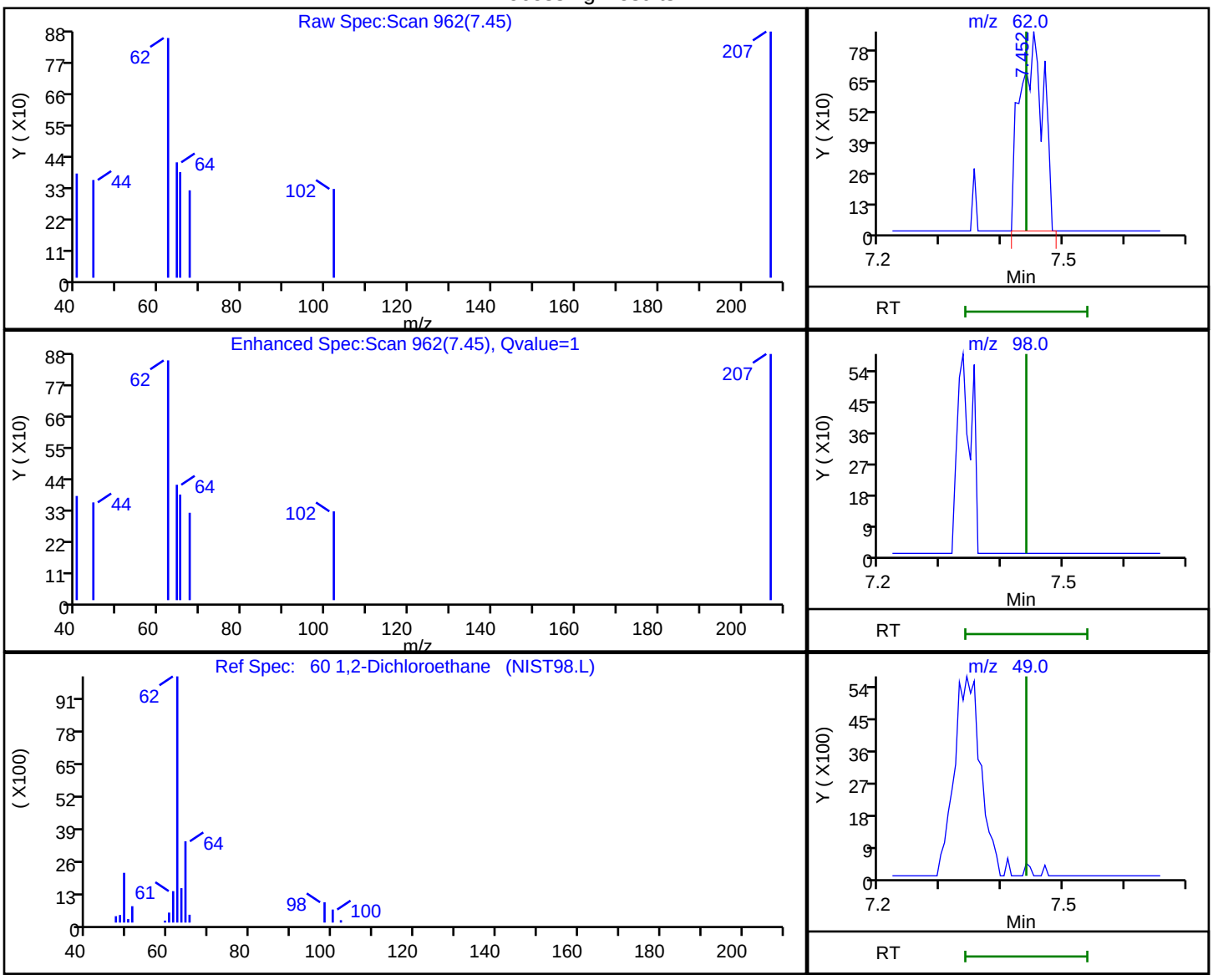
User Disabled Compound Report

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S17.D				
Injection Date:	05-Aug-2021 01:36:30	Instrument ID:	19094		
Lims ID:	410-49448-A-10	Lab Sample ID:	410-49448-10		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

60 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.45	62.00	2238	0.032793
7.44	98.00	0	
7.44	49.00	0	

Reviewer: kaewrungrueangp, 05-Aug-2021 13:03:52

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

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

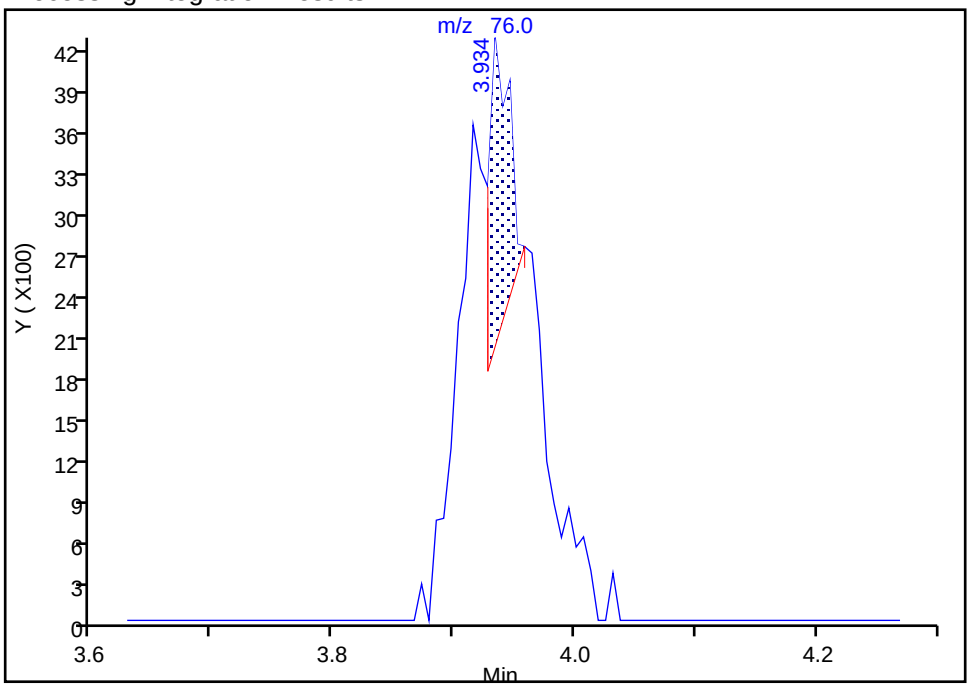
Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S17.D				
Injection Date:	05-Aug-2021 01:36:30	Instrument ID:	19094		
Lims ID:	410-49448-A-10	Lab Sample ID:	410-49448-10		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

24 Carbon disulfide, CAS: 75-15-0

Signal: 1

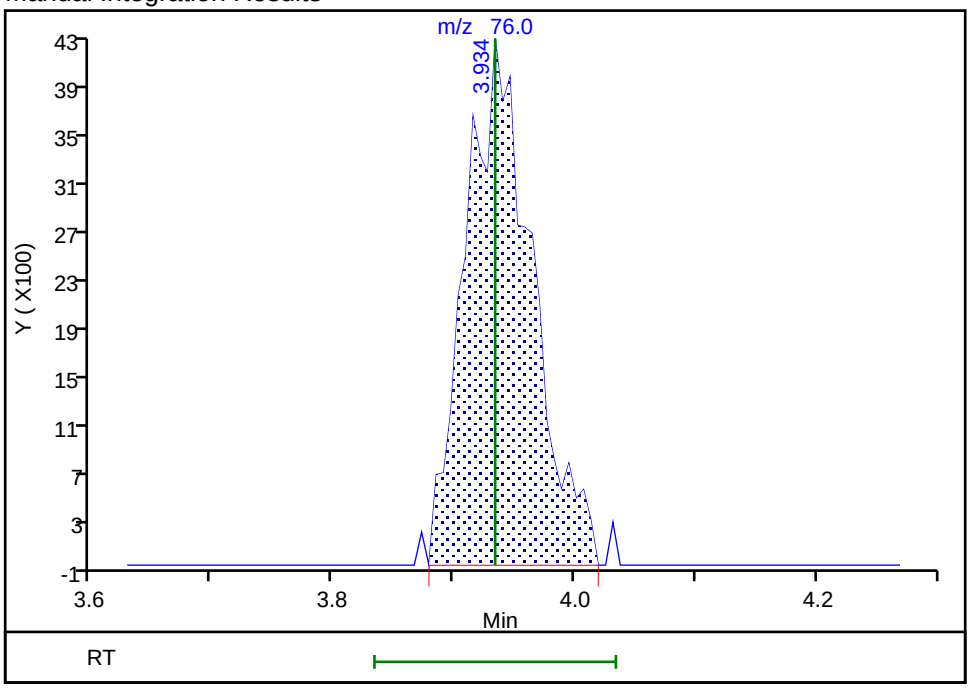
Processing Integration Results

RT: 3.93
Area: 2559
Amount: 0.013794
Amount Units: ug/l



Manual Integration Results

RT: 3.93
Area: 16511
Amount: 0.088999
Amount Units: ug/l



Reviewer: kaewrungrueangp, 05-Aug-2021 13:03:30

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.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 410-49448-11

Matrix: Water Lab File ID: HG04S18.D

Analysis Method: 8260D Date Collected: 07/29/2021 10:10

Sample wt/vol: 25(mL) Date Analyzed: 08/05/2021 01:56

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 156699 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	1.3	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	0.30	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.12	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	1.3		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.12	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 410-49448-11

Matrix: Water Lab File ID: HG04S18.D

Analysis Method: 8260D Date Collected: 07/29/2021 10:10

Sample wt/vol: 25(mL) Date Analyzed: 08/05/2021 01:56

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 156699 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	106		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\19094\20210804-36053.b\HG04S18.D
Lims ID: 410-49448-A-11
Client ID: HD-COD-SW-26-0/1-0
Sample Type: Client
Inject. Date: 05-Aug-2021 01:56:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-024
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 00:19:14 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 13:20:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Chloromethane	50		2.190				ND	7
7 Vinyl chloride	62		2.312				ND	7
9 Bromomethane	94		2.641				ND	
10 Chloroethane	64		2.727				ND	
18 1,1-Dichloroethene	96	3.605	3.611	-0.006	94	3031	0.0467	
19 Acetone	43	3.647	3.635	0.012	92	13103	1.33	
24 Carbon disulfide	76		3.934				ND	7
* 28 t-Butyl alcohol-d10 (IS)	65	4.263	4.281	-0.018	88	133898	50.0	
29 Methylene Chloride	84		4.281				ND	
32 Methyl tert-butyl ether	73		4.702				ND	7
33 trans-1,2-Dichloroethene	96		4.714				ND	
35 1,1-Dichloroethane	63		5.367				ND	7
41 2-Butanone (MEK)	43		6.147				ND	7
42 cis-1,2-Dichloroethene	96	6.208	6.196	0.012	74	8934	0.1155	
48 Chlorobromomethane	128		6.525				ND	
50 Chloroform	83	6.671	6.677	-0.006	92	35921	0.2970	
$ 51 Dibromofluoromethane (Surr)	113	6.885	6.891	-0.006	93	631283	10.6	
52 1,1,1-Trichloroethane	97		6.909				ND	7
56 Carbon tetrachloride	117		7.122				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.336	7.336	0.000	47	123584	10.3	
59 Benzene	78		7.378				ND	7
60 1,2-Dichloroethane	62	7.452	7.439	0.013	11	2378	0.0331	
* 65 Fluorobenzene (IS)	96	7.775	7.775	0.000	99	2453369	10.0	
67 Trichloroethene	95	8.262	8.256	0.006	93	9159	0.1211	
70 1,2-Dichloropropane	63		8.585				ND	
75 Dichlorobromomethane	83		8.927				ND	7
80 cis-1,3-Dichloropropene	75		9.463				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.628				ND	7
$ 82 Toluene-d8 (Surr)	98	9.768	9.768	0.000	93	2579030	9.49	
83 Toluene	92	9.847	9.847	0.000	95	7539	0.0364	
85 trans-1,3-Dichloropropene	75		10.097				ND	
87 1,1,2-Trichloroethane	97		10.299				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
88 Tetrachloroethene	166	10.390	10.390	0.000	97	113035	1.26	
91 2-Hexanone	43		10.506				ND	7
93 Chlorodibromomethane	129		10.670				ND	
94 Ethylene Dibromide	107		10.786				ND	
* 97 Chlorobenzene-d5 (IS)	117	11.213	11.213	0.000	85	2021815	10.0	
98 Chlorobenzene	112		11.237				ND	
S 95 Xylenes, Total	106		11.245				ND	7
99 1,1,1,2-Tetrachloroethane	131		11.317				ND	
100 Ethylbenzene	91		11.323				ND	7
101 m-Xylene & p-Xylene	106		11.439				ND	7
102 o-Xylene	106		11.762				ND	7
103 Styrene	104		11.780				ND	7
104 Bromoform	173		11.938				ND	
$ 108 4-Bromofluorobenzene (Surr)	95	12.207	12.201	0.006	92	962985	9.71	
109 1,1,2,2-Tetrachloroethane	83		12.298				ND	
* 124 1,4-Dichlorobenzene-d4	152	13.079	13.078	0.001	95	1114483	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

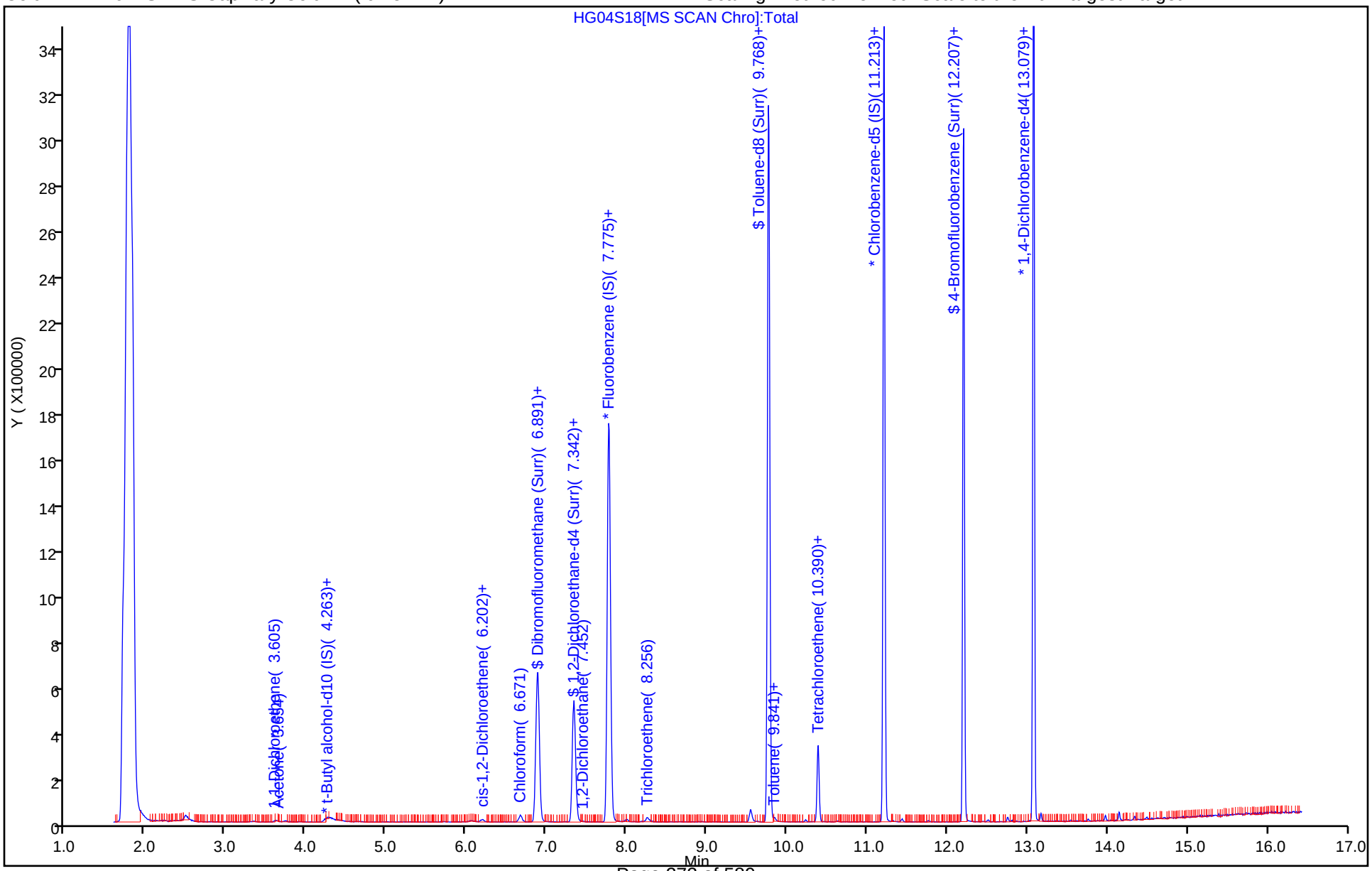
MSV_LLcentISS_00001 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 05-Aug-2021 13:20:35 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S18.D				
Injection Date:	05-Aug-2021 01:56:30	Instrument ID:	19094	Operator ID:	MEC29284
Lims ID:	410-49448-A-11	Lab Sample ID:	410-49448-11	Worklist Smp#:	24
Client ID:	HD-COD-SW-26-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S18.D
Lims ID: 410-49448-A-11
Client ID: HD-COD-SW-26-0/1-0
Sample Type: Client
Inject. Date: 05-Aug-2021 01:56:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-024
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 00:19:14 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

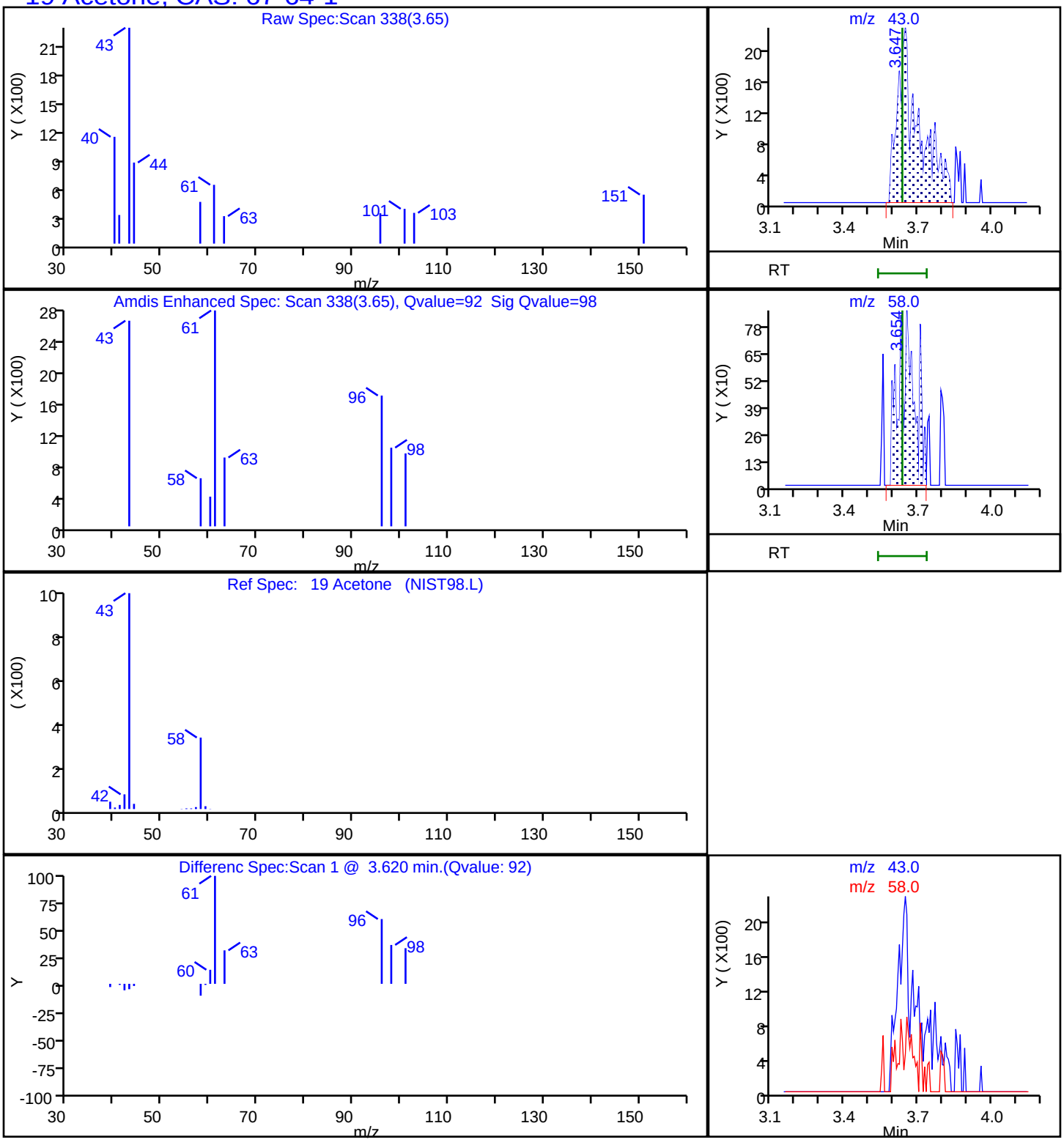
First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 13:20:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	10.0	10.6	106.36
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.12
$ 82 Toluene-d8 (Surr)	10.0	9.49	94.93
$ 108 4-Bromofluorobenzene (Surr)	10.0	9.71	97.13

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S18.D				
Injection Date:	05-Aug-2021 01:56:30	Instrument ID:	19094		
Lims ID:	410-49448-A-11	Lab Sample ID:	410-49448-11		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

19 Acetone, CAS: 67-64-1



Report Date: 05-Aug-2021 13:20:36 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S18.D

Injection Date: 05-Aug-2021 01:56:30 Instrument ID: 19094

Lims ID: 410-49448-A-11 Lab Sample ID: 410-49448-11

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

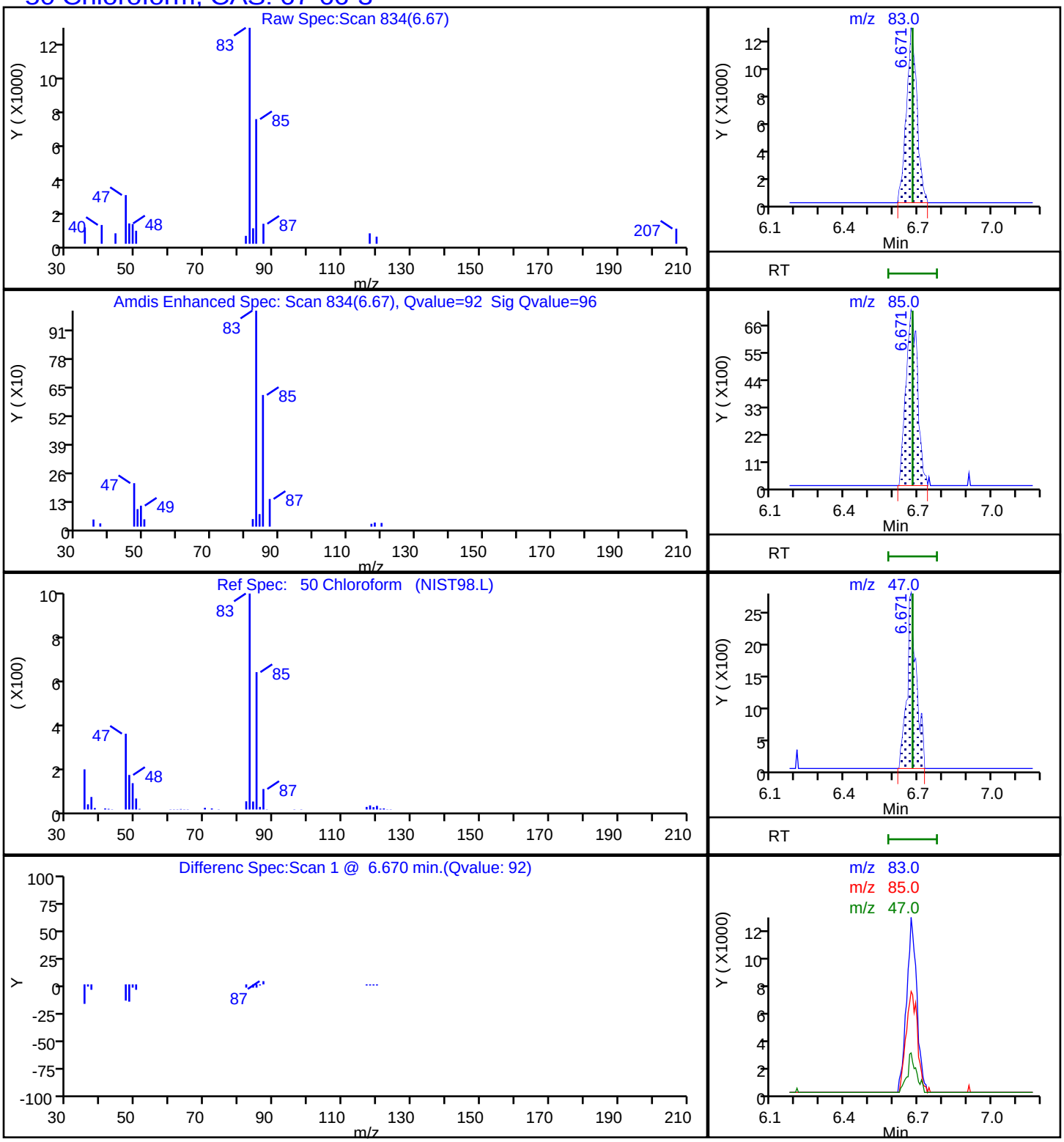
Operator ID: MEC29284 ALS Bottle#: 23 Worklist Smp#: 24

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_19094_25mL Limit Group: MSV - 8260C_D

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

50 Chloroform, CAS: 67-66-3

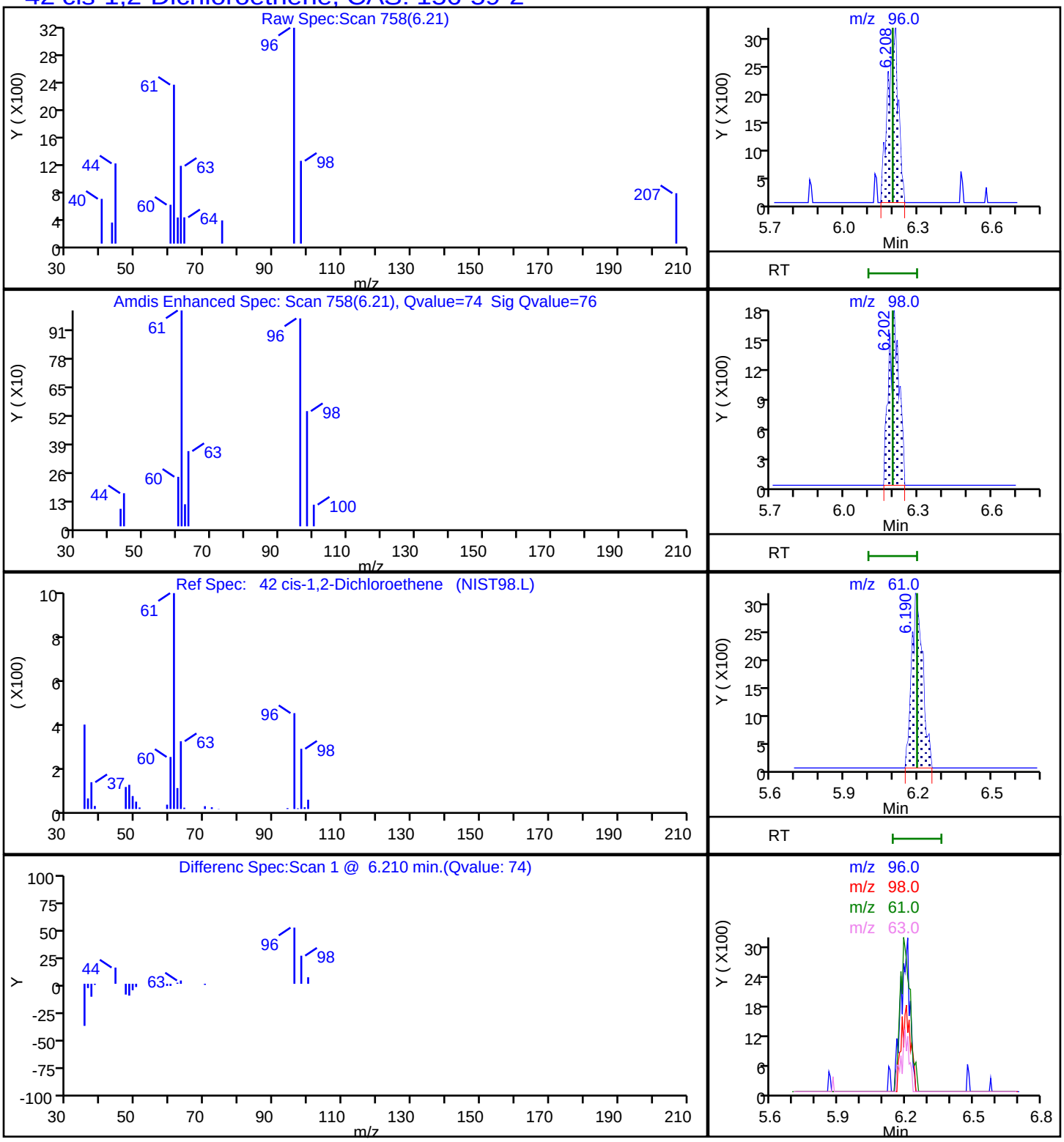


Report Date: 05-Aug-2021 13:20:36 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S18.D				
Injection Date:	05-Aug-2021 01:56:30	Instrument ID:	19094		
Lims ID:	410-49448-A-11	Lab Sample ID:	410-49448-11		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

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



Report Date: 05-Aug-2021 13:20:36 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S18.D

Injection Date: 05-Aug-2021 01:56:30 Instrument ID: 19094

Lims ID: 410-49448-A-11 Lab Sample ID: 410-49448-11

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

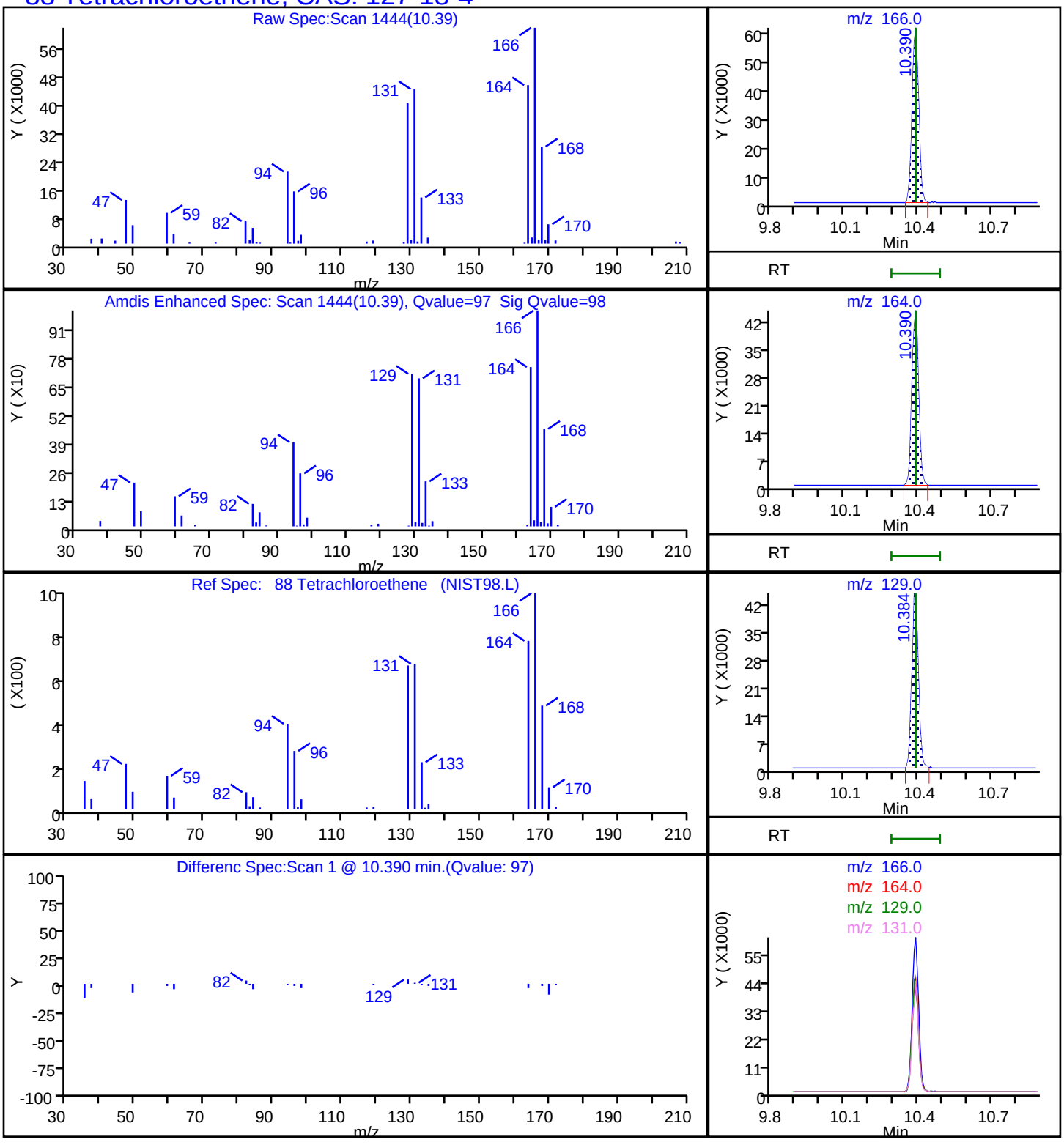
Operator ID: MEC29284 ALS Bottle#: 23 Worklist Smp#: 24

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_19094_25mL Limit Group: MSV - 8260C_D

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

88 Tetrachloroethene, CAS: 127-18-4

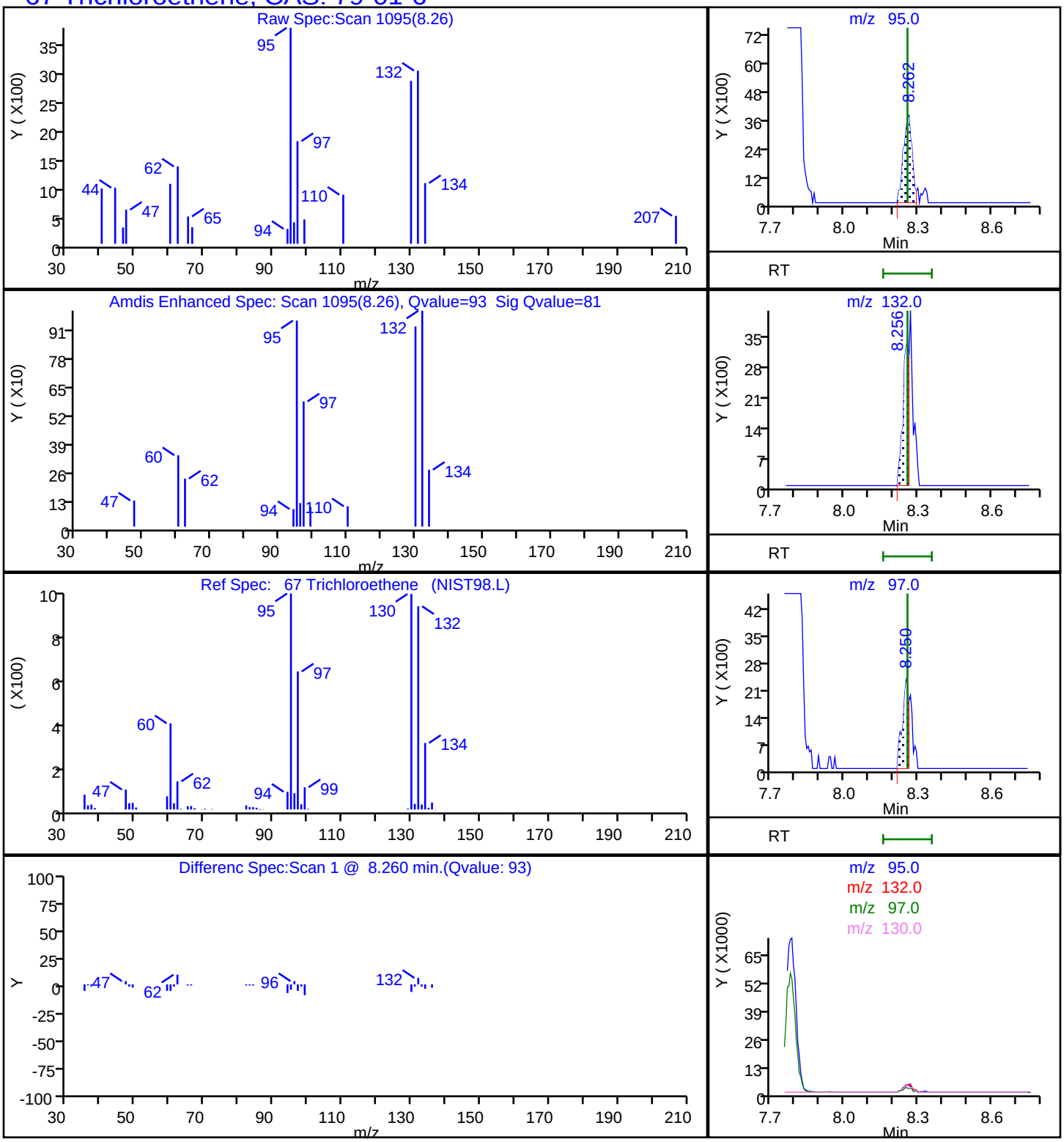


Report Date: 05-Aug-2021 13:20:36 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S18.D				
Injection Date:	05-Aug-2021 01:56:30	Instrument ID:	19094		
Lims ID:	410-49448-A-11	Lab Sample ID:	410-49448-11		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 410-49448-12

Matrix: Water Lab File ID: HG04S19.D

Analysis Method: 8260D Date Collected: 07/29/2021 10:50

Sample wt/vol: 25(mL) Date Analyzed: 08/05/2021 02:17

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 156699 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.5	J ^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	0.16	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.20	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	0.29	J	0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.24	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 410-49448-12

Matrix: Water Lab File ID: HG04S19.D

Analysis Method: 8260D Date Collected: 07/29/2021 10:50

Sample wt/vol: 25(mL) Date Analyzed: 08/05/2021 02:17

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 156699 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	107		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S19.D
Lims ID: 410-49448-A-12
Client ID: HD-COD-SW-27-0/1-0
Sample Type: Client
Inject. Date: 05-Aug-2021 02:17:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-025
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 13:44:41 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 13:44:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Chloromethane	50	2.190	2.190	0.000	13	2983	0.0372	
7 Vinyl chloride	62		2.312				ND	
9 Bromomethane	94		2.641				ND	
10 Chloroethane	64		2.727				ND	
18 1,1-Dichloroethene	96		3.611				ND	7
19 Acetone	43	3.653	3.635	0.018	69	13898	1.52	
24 Carbon disulfide	76		3.934				ND	7
* 28 t-Butyl alcohol-d10 (IS)	65	4.281	4.281	0.000	35	124275	50.0	
29 Methylene Chloride	84		4.281				ND	
32 Methyl tert-butyl ether	73		4.702				ND	7
33 trans-1,2-Dichloroethene	96		4.714				ND	
35 1,1-Dichloroethane	63		5.367				ND	7
41 2-Butanone (MEK)	43		6.147				ND	7
42 cis-1,2-Dichloroethene	96	6.208	6.196	0.012	77	15054	0.2047	
48 Chlorobromomethane	128		6.525				ND	
50 Chloroform	83	6.683	6.677	0.006	80	18941	0.1647	
$ 51 Dibromofluoromethane (Surr)	113	6.884	6.891	-0.007	93	601664	10.7	
52 1,1,1-Trichloroethane	97		6.909				ND	7
56 Carbon tetrachloride	117		7.122				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.342	7.336	0.006	47	117133	10.3	
59 Benzene	78		7.378				ND	7
60 1,2-Dichloroethane	62		7.439				ND	U
* 65 Fluorobenzene (IS)	96	7.775	7.775	0.000	99	2332684	10.0	
67 Trichloroethene	95	8.250	8.256	-0.006	96	17107	0.2379	M
70 1,2-Dichloropropane	63		8.585				ND	
75 Dichlorobromomethane	83		8.927				ND	
80 cis-1,3-Dichloropropene	75		9.463				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.628				ND	7
$ 82 Toluene-d8 (Surr)	98	9.768	9.768	0.000	94	2415225	9.40	
83 Toluene	92	9.847	9.847	0.000	98	9020	0.0460	
85 trans-1,3-Dichloropropene	75		10.097				ND	
87 1,1,2-Trichloroethane	97		10.299				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
88 Tetrachloroethene	166	10.390	10.390	0.000	97	24857	0.2924	
91 2-Hexanone	43		10.506				ND	7
93 Chlorodibromomethane	129		10.670				ND	
94 Ethylene Dibromide	107		10.786				ND	
* 97 Chlorobenzene-d5 (IS)	117	11.213	11.213	0.000	85	1912080	10.0	
98 Chlorobenzene	112		11.237				ND	
S 95 Xylenes, Total	106		11.245				ND	7
99 1,1,1,2-Tetrachloroethane	131		11.317				ND	
100 Ethylbenzene	91		11.323				ND	7
101 m-Xylene & p-Xylene	106	11.432	11.439	-0.007	96	7204	0.0509	
102 o-Xylene	106		11.762				ND	7
103 Styrene	104		11.780				ND	7
104 Bromoform	173		11.938				ND	
$ 108 4-Bromofluorobenzene (Surr)	95	12.200	12.201	-0.001	91	910124	9.71	
109 1,1,2,2-Tetrachloroethane	83		12.298				ND	
* 124 1,4-Dichlorobenzene-d4	152	13.078	13.078	0.000	95	1044685	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

MSV_LLcentISS_00001 Amount Added: 5.00 Units: uL Run Reagent

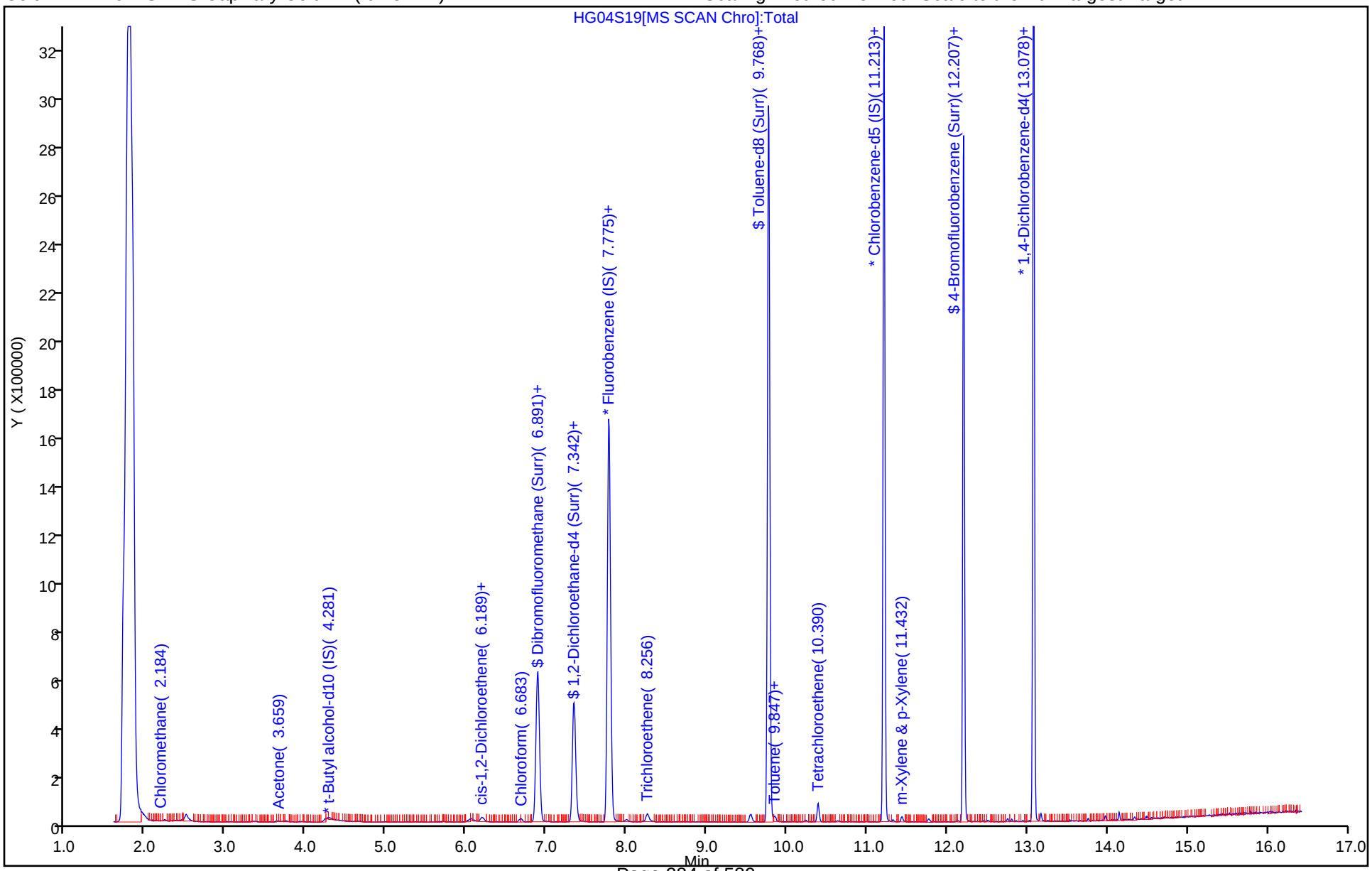
Report Date: 05-Aug-2021 13:44:41 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S19.D

Injection Date:	05-Aug-2021 02:17:30	Instrument ID:	19094	Operator ID:	MEC29284
Lims ID:	410-49448-A-12	Lab Sample ID:	410-49448-12	Worklist Smp#:	25
Client ID:	HD-COD-SW-27-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S19.D
Lims ID: 410-49448-A-12
Client ID: HD-COD-SW-27-0/1-0
Sample Type: Client
Inject. Date: 05-Aug-2021 02:17:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-025
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 13:44:41 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 13:44:41

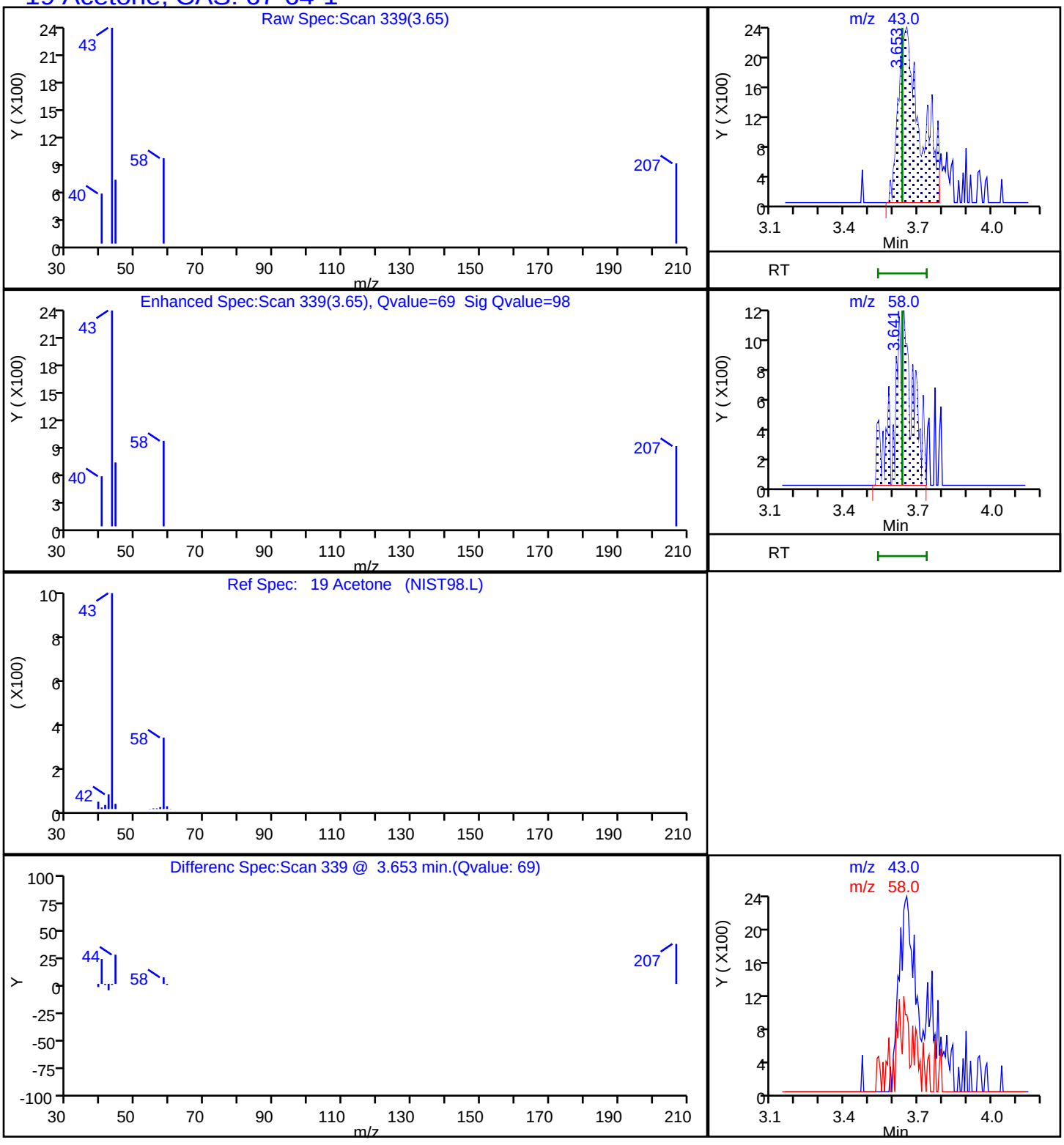
Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	10.0	10.7	106.61
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	102.79
$ 82 Toluene-d8 (Surr)	10.0	9.40	94.00
$ 108 4-Bromofluorobenzene (Surr)	10.0	9.71	97.07

Report Date: 05-Aug-2021 13:44:41 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S19.D				
Injection Date:	05-Aug-2021 02:17:30	Instrument ID:	19094		
Lims ID:	410-49448-A-12	Lab Sample ID:	410-49448-12		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

19 Acetone, CAS: 67-64-1



Report Date: 05-Aug-2021 13:44:41 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S19.D

Injection Date: 05-Aug-2021 02:17:30 Instrument ID: 19094

Lims ID: 410-49448-A-12 Lab Sample ID: 410-49448-12

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

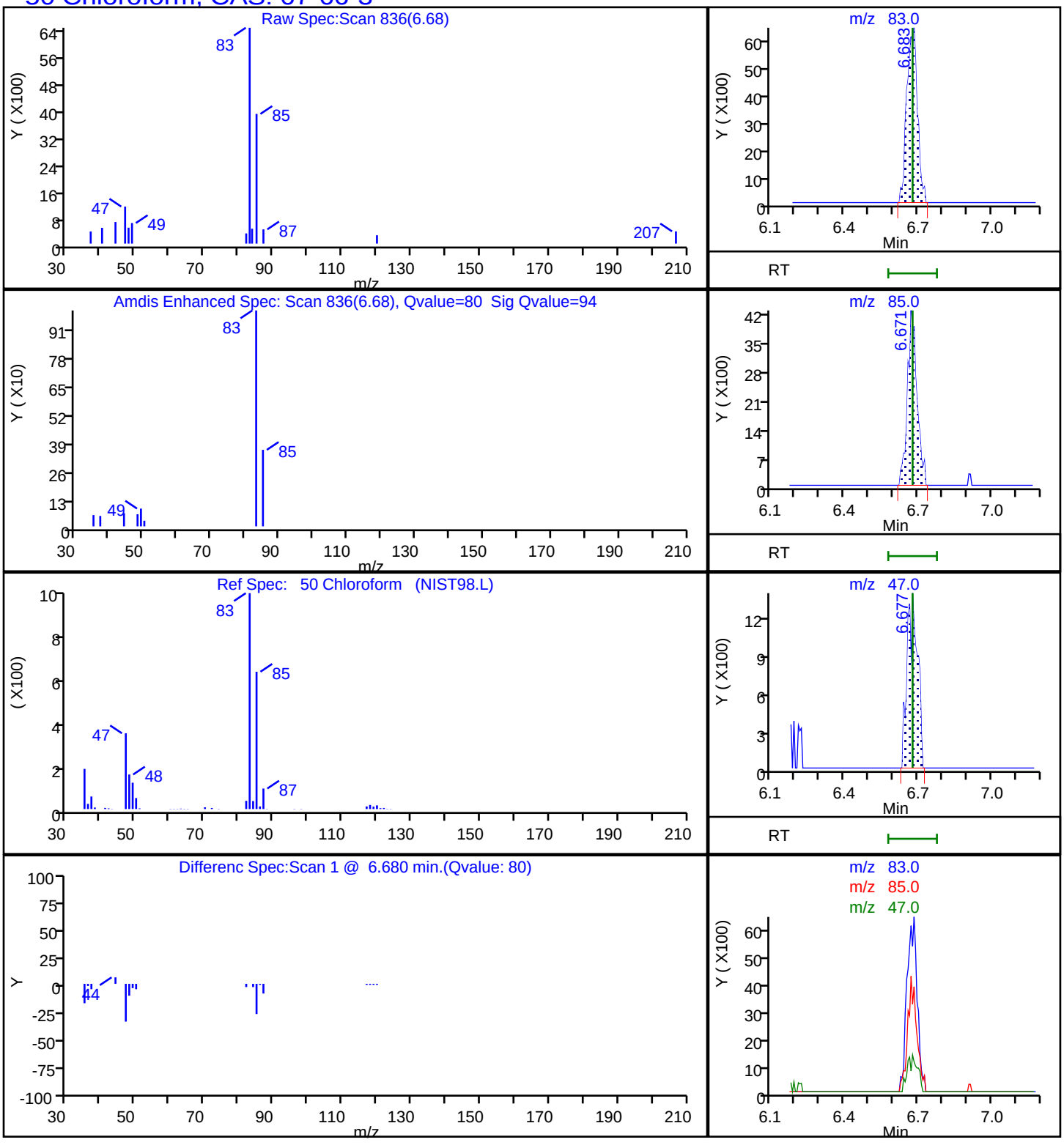
Operator ID: MEC29284 ALS Bottle#: 24 Worklist Smp#: 25

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_19094_25mL Limit Group: MSV - 8260C_D

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

50 Chloroform, CAS: 67-66-3



Report Date: 05-Aug-2021 13:44:41 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S19.D

Injection Date: 05-Aug-2021 02:17:30 Instrument ID: 19094

Lims ID: 410-49448-A-12 Lab Sample ID: 410-49448-12

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

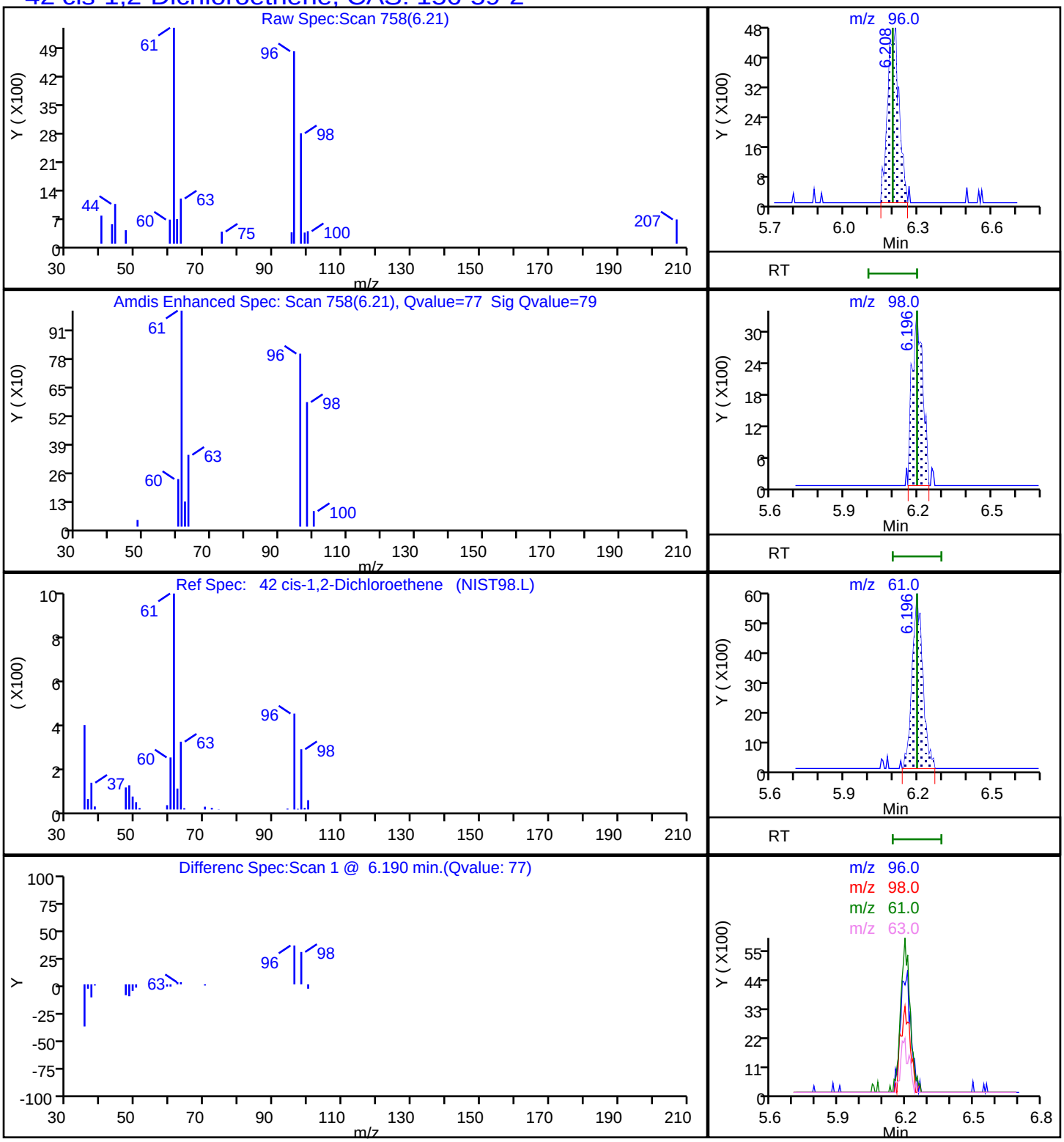
Operator ID: MEC29284 ALS Bottle#: 24 Worklist Smp#: 25

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_19094_25mL Limit Group: MSV - 8260C_D

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

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



Report Date: 05-Aug-2021 13:44:41 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S19.D

Injection Date: 05-Aug-2021 02:17:30 Instrument ID: 19094

Lims ID: 410-49448-A-12 Lab Sample ID: 410-49448-12

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

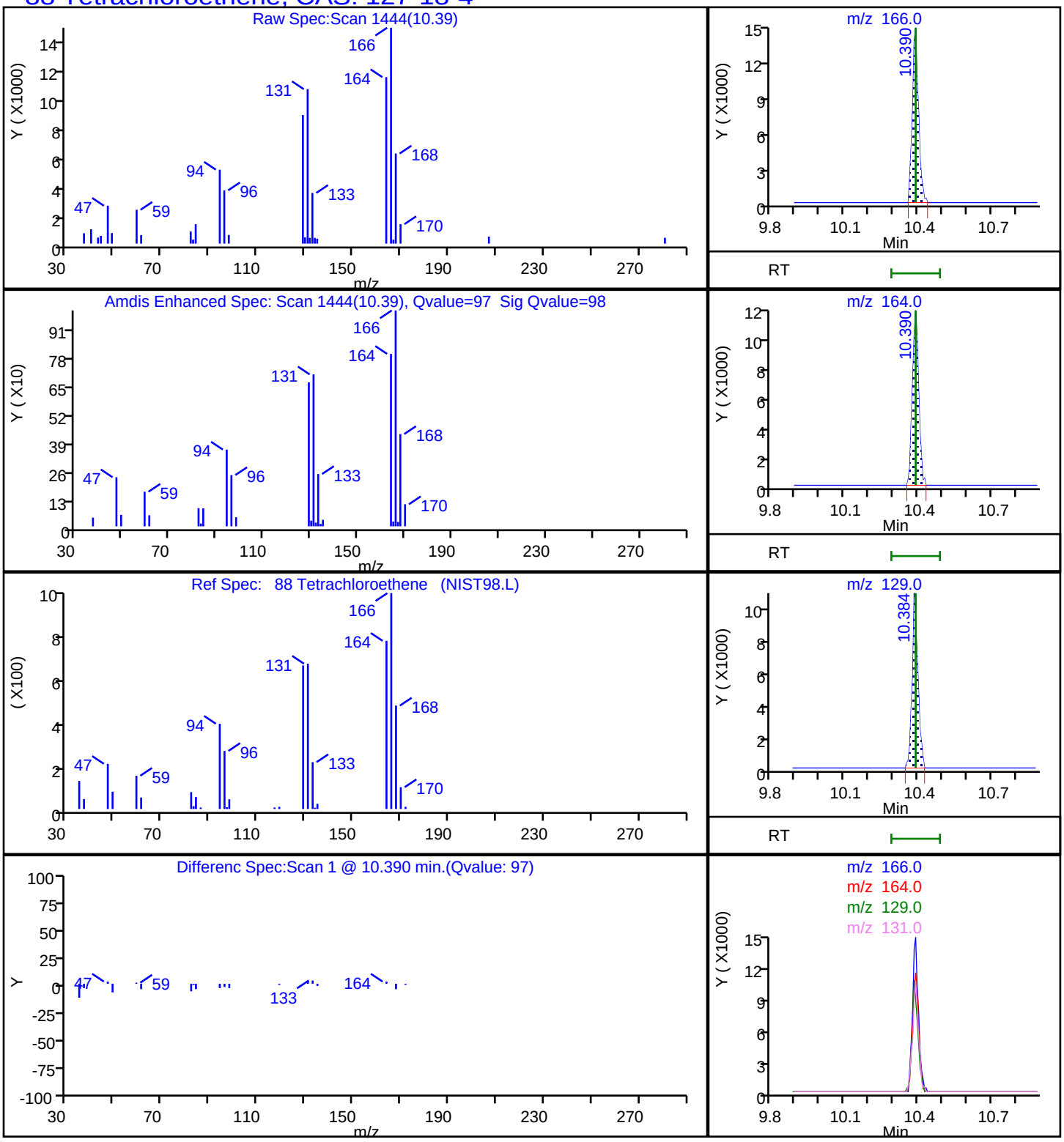
Operator ID: MEC29284 ALS Bottle#: 24 Worklist Smp#: 25

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_19094_25mL Limit Group: MSV - 8260C_D

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

88 Tetrachloroethene, CAS: 127-18-4

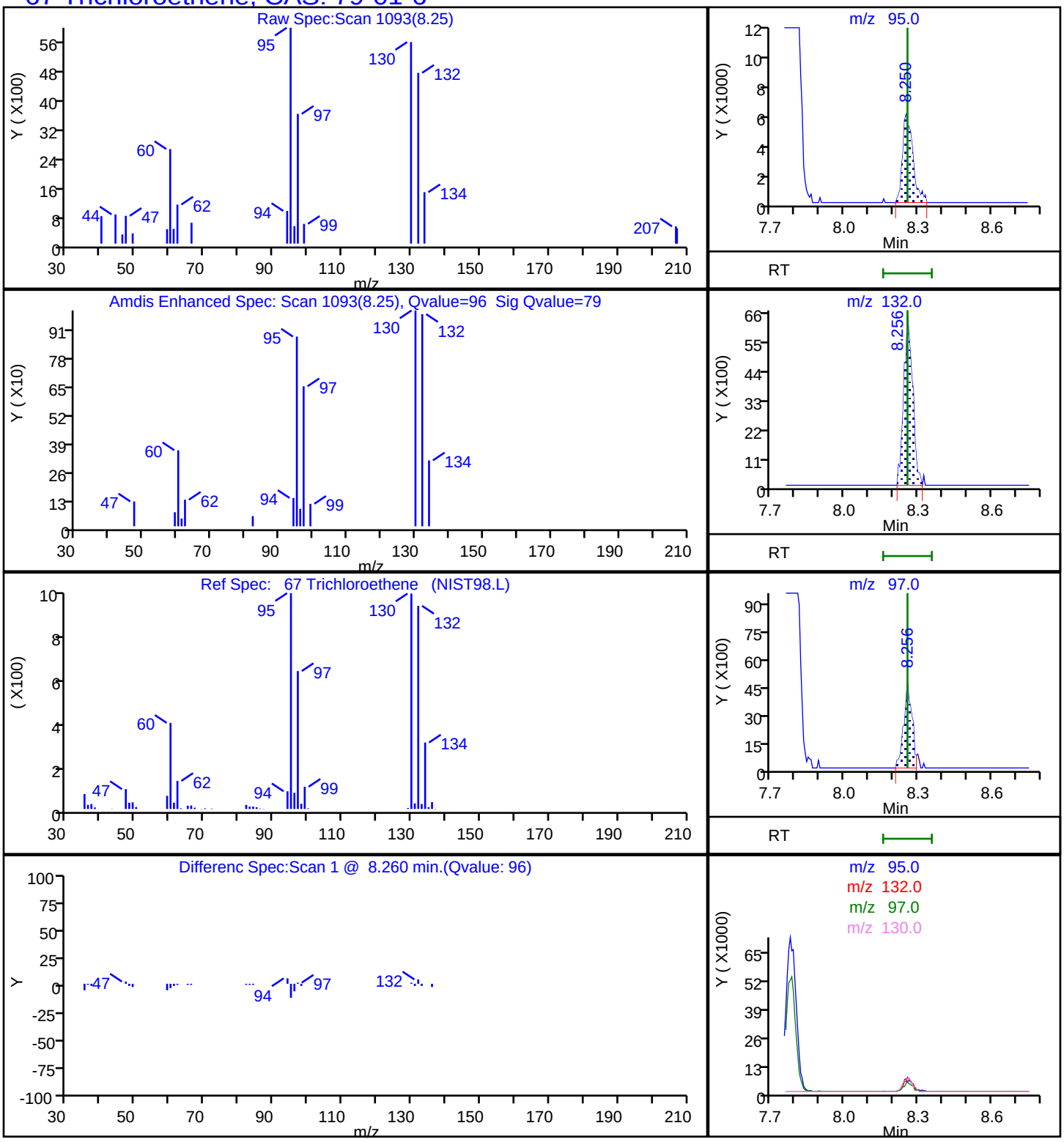


Report Date: 05-Aug-2021 13:44:41 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S19.D				
Injection Date:	05-Aug-2021 02:17:30	Instrument ID:	19094		
Lims ID:	410-49448-A-12	Lab Sample ID:	410-49448-12		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6



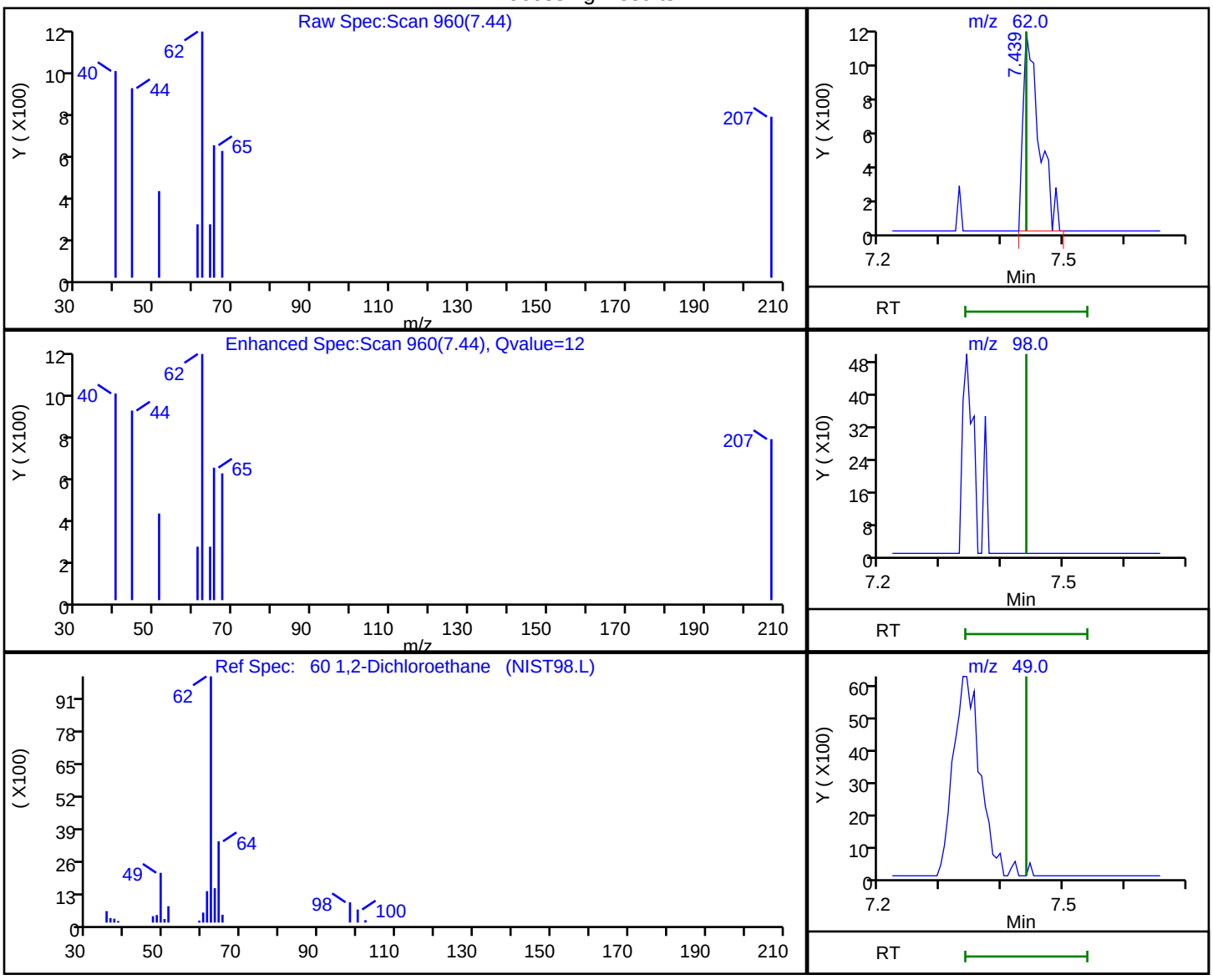
User Disabled Compound Report

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S19.D				
Injection Date:	05-Aug-2021 02:17:30	Instrument ID:	19094		
Lims ID:	410-49448-A-12	Lab Sample ID:	410-49448-12		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

60 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.44	62.00	2137	0.031319
7.44	98.00	0	
7.44	49.00	0	

Reviewer: kaewrungrueangp, 05-Aug-2021 13:43:34

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

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

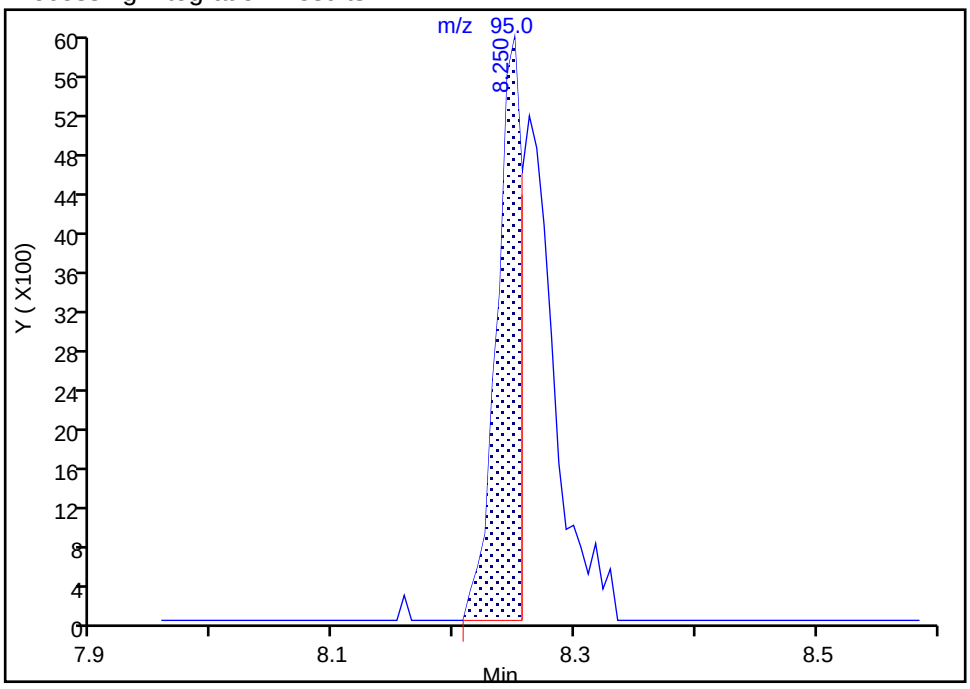
Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S19.D				
Injection Date:	05-Aug-2021 02:17:30	Instrument ID:	19094		
Lims ID:	410-49448-A-12	Lab Sample ID:	410-49448-12		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6

Signal: 1

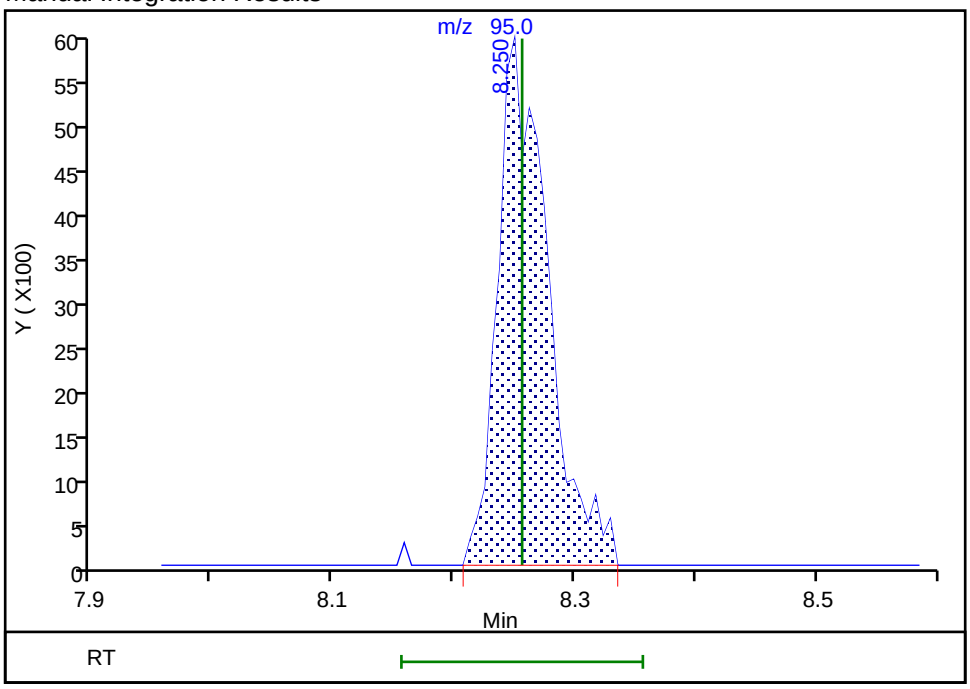
Processing Integration Results

RT: 8.25
Area: 8617
Amount: 0.119838
Amount Units: ug/l



Manual Integration Results

RT: 8.25
Area: 17107
Amount: 0.237910
Amount Units: ug/l



Reviewer: kaewrungrueangp, 05-Aug-2021 13:44:11

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.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 410-49448-13

Matrix: Water Lab File ID: HG04S20.D

Analysis Method: 8260D Date Collected: 07/29/2021 11:40

Sample wt/vol: 25(mL) Date Analyzed: 08/05/2021 02:38

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.: 156699 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	3.0	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	0.11	J	0.50	0.090
74-87-3	Chloromethane	0.063	J	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.14	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	0.10	J	0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.10	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 410-49448-13

Matrix: Water Lab File ID: HG04S20.D

Analysis Method: 8260D Date Collected: 07/29/2021 11:40

Sample wt/vol: 25(mL) Date Analyzed: 08/05/2021 02:38

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.: 156699 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)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	106		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S20.D
Lims ID: 410-49448-A-13
Client ID: HD-COD-SW-28-0/1-0
Sample Type: Client
Inject. Date: 05-Aug-2021 02:38:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-026
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 14:03:51 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 14:03:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Chloromethane	50	2.178	2.190	-0.012	26	5032	0.0632	
7 Vinyl chloride	62		2.312				ND	7
9 Bromomethane	94		2.641				ND	
10 Chloroethane	64		2.727				ND	
18 1,1-Dichloroethene	96		3.611				ND	
19 Acetone	43	3.629	3.635	-0.006	77	25520	2.96	
24 Carbon disulfide	76		3.934				ND	7
* 28 t-Butyl alcohol-d10 (IS)	65	4.263	4.281	-0.018	90	117332	50.0	
29 Methylene Chloride	84		4.281				ND	7
32 Methyl tert-butyl ether	73		4.702				ND	
33 trans-1,2-Dichloroethene	96		4.714				ND	
35 1,1-Dichloroethane	63		5.367				ND	
41 2-Butanone (MEK)	43		6.147				ND	7
42 cis-1,2-Dichloroethene	96	6.202	6.196	0.006	78	10326	0.1412	
48 Chlorobromomethane	128		6.525				ND	
50 Chloroform	83	6.659	6.677	-0.018	92	12430	0.1087	
$ 51 Dibromofluoromethane (Surr)	113	6.879	6.891	-0.012	93	597038	10.6	
52 1,1,1-Trichloroethane	97		6.909				ND	
56 Carbon tetrachloride	117		7.122				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.336	7.336	0.000	48	116104	10.2	
59 Benzene	78		7.378				ND	7
60 1,2-Dichloroethane	62		7.439				ND	U
* 65 Fluorobenzene (IS)	96	7.775	7.775	0.000	99	2320196	10.0	
67 Trichloroethene	95	8.250	8.256	-0.006	88	7406	0.1036	
70 1,2-Dichloropropane	63		8.585				ND	
75 Dichlorobromomethane	83		8.927				ND	
80 cis-1,3-Dichloropropene	75		9.463				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.628				ND	7
$ 82 Toluene-d8 (Surr)	98	9.768	9.768	0.000	93	2454470	9.43	
83 Toluene	92	9.841	9.847	-0.006	97	10696	0.0539	
85 trans-1,3-Dichloropropene	75		10.097				ND	
87 1,1,2-Trichloroethane	97		10.299				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
88 Tetrachloroethene	166	10.396	10.390	0.006	95	8699	0.1010	
91 2-Hexanone	43		10.506				ND	7
93 Chlorodibromomethane	129		10.670				ND	
94 Ethylene Dibromide	107		10.786				ND	
* 97 Chlorobenzene-d5 (IS)	117	11.213	11.213	0.000	85	1936936	10.0	
98 Chlorobenzene	112		11.237				ND	7
S 95 Xylenes, Total	106		11.245				ND	7
99 1,1,1,2-Tetrachloroethane	131		11.317				ND	
100 Ethylbenzene	91		11.323				ND	7
101 m-Xylene & p-Xylene	106		11.439				ND	7
102 o-Xylene	106		11.762				ND	7
103 Styrene	104		11.780				ND	7
104 Bromoform	173		11.938				ND	
$ 108 4-Bromofluorobenzene (Surr)	95	12.201	12.201	0.000	91	910970	9.59	
109 1,1,2,2-Tetrachloroethane	83		12.298				ND	
* 124 1,4-Dichlorobenzene-d4	152	13.079	13.078	0.001	95	1064382	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

MSV_LLcentISS_00001 Amount Added: 5.00 Units: uL Run Reagent

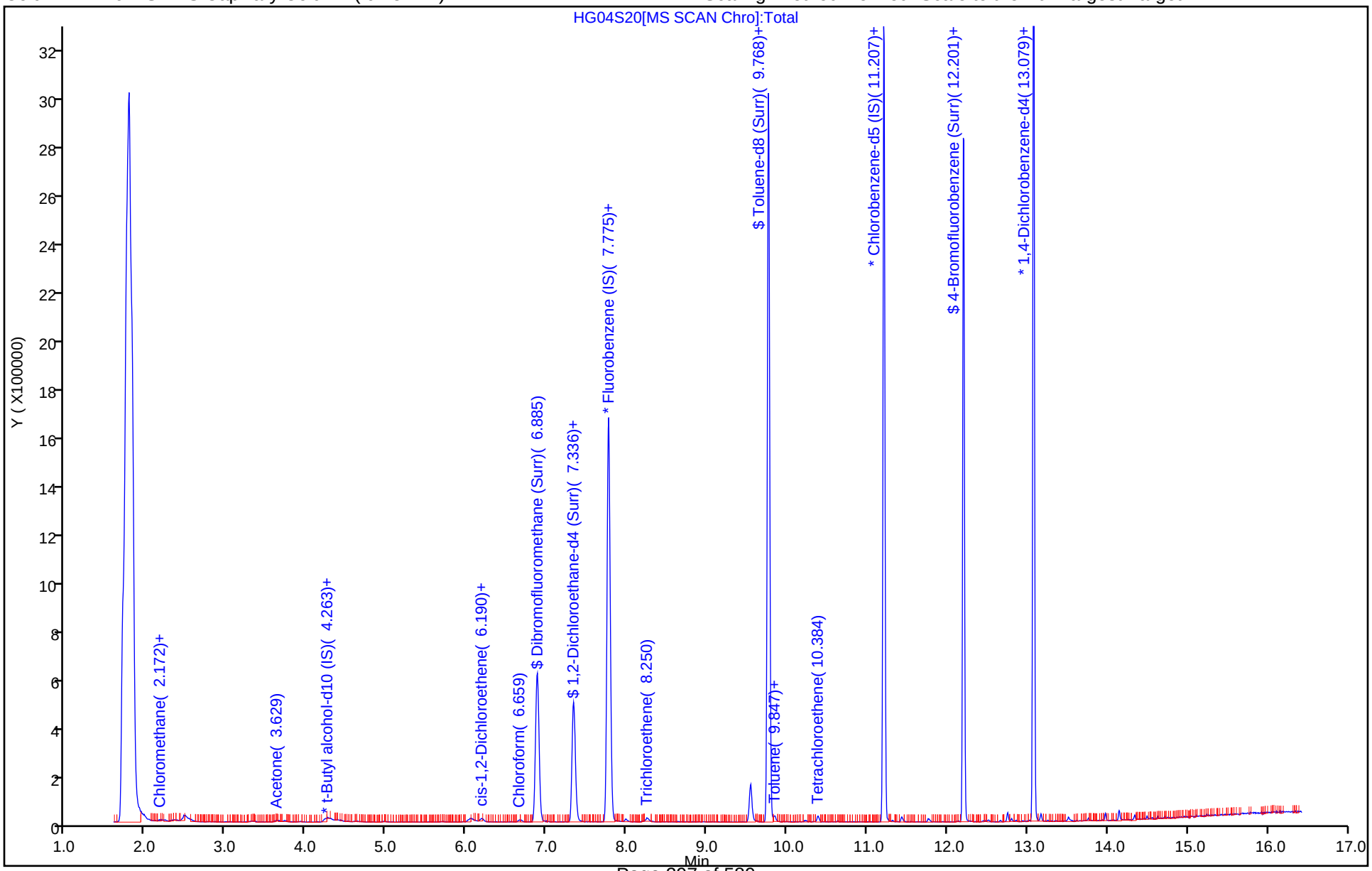
Report Date: 05-Aug-2021 14:03:51 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S20.D

Injection Date:	05-Aug-2021 02:38:30	Instrument ID:	19094	Operator ID:	MEC29284
Lims ID:	410-49448-A-13	Lab Sample ID:	410-49448-13	Worklist Smp#:	26
Client ID:	HD-COD-SW-28-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S20.D
Lims ID: 410-49448-A-13
Client ID: HD-COD-SW-28-0/1-0
Sample Type: Client
Inject. Date: 05-Aug-2021 02:38:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-026
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 14:03:51 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 14:03:51

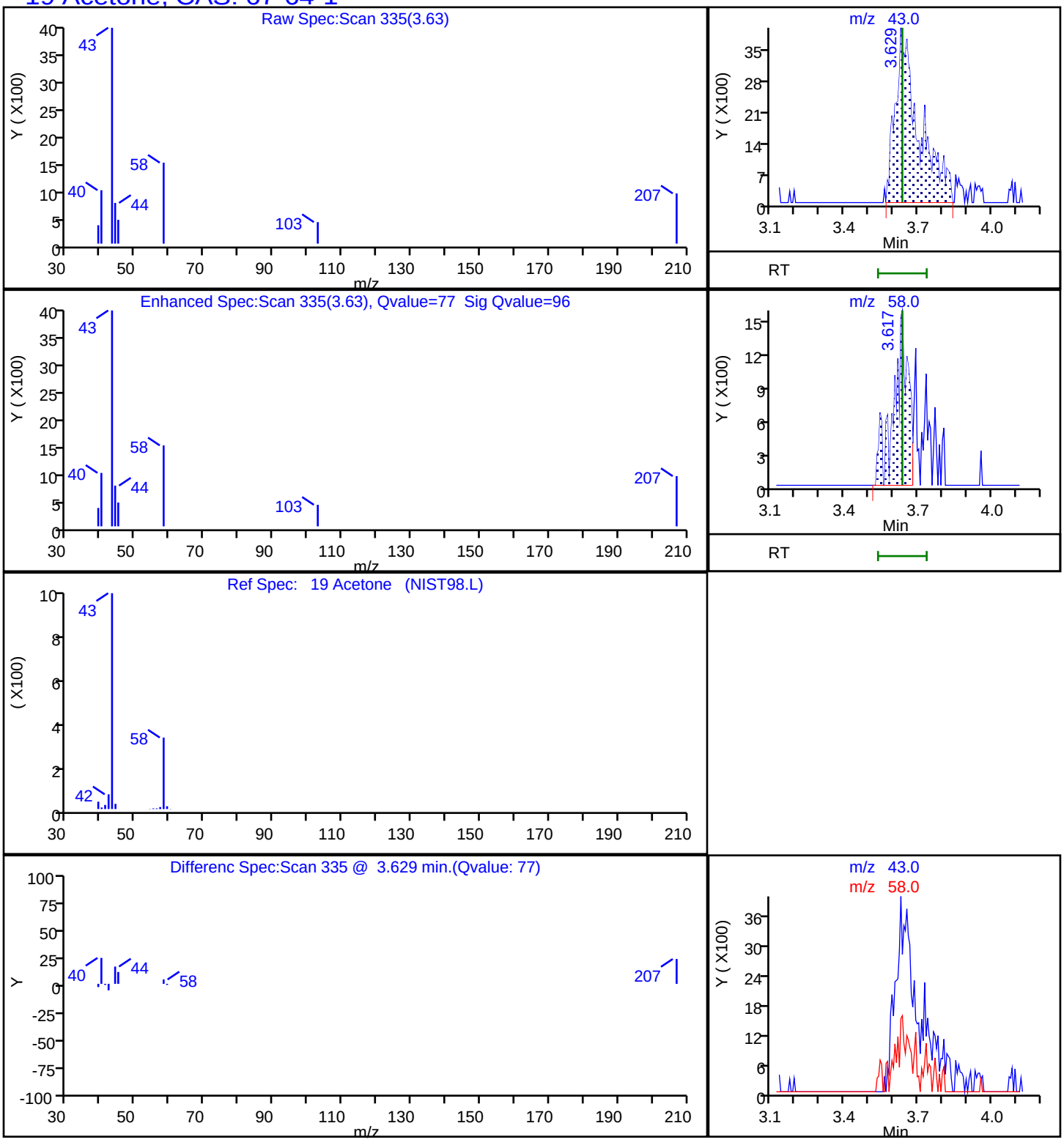
Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	10.0	10.6	106.36
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.44
$ 82 Toluene-d8 (Surr)	10.0	9.43	94.31
$ 108 4-Bromofluorobenzene (Surr)	10.0	9.59	95.91

Report Date: 05-Aug-2021 14:03:51 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S20.D				
Injection Date:	05-Aug-2021 02:38:30	Instrument ID:	19094		
Lims ID:	410-49448-A-13	Lab Sample ID:	410-49448-13		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

19 Acetone, CAS: 67-64-1

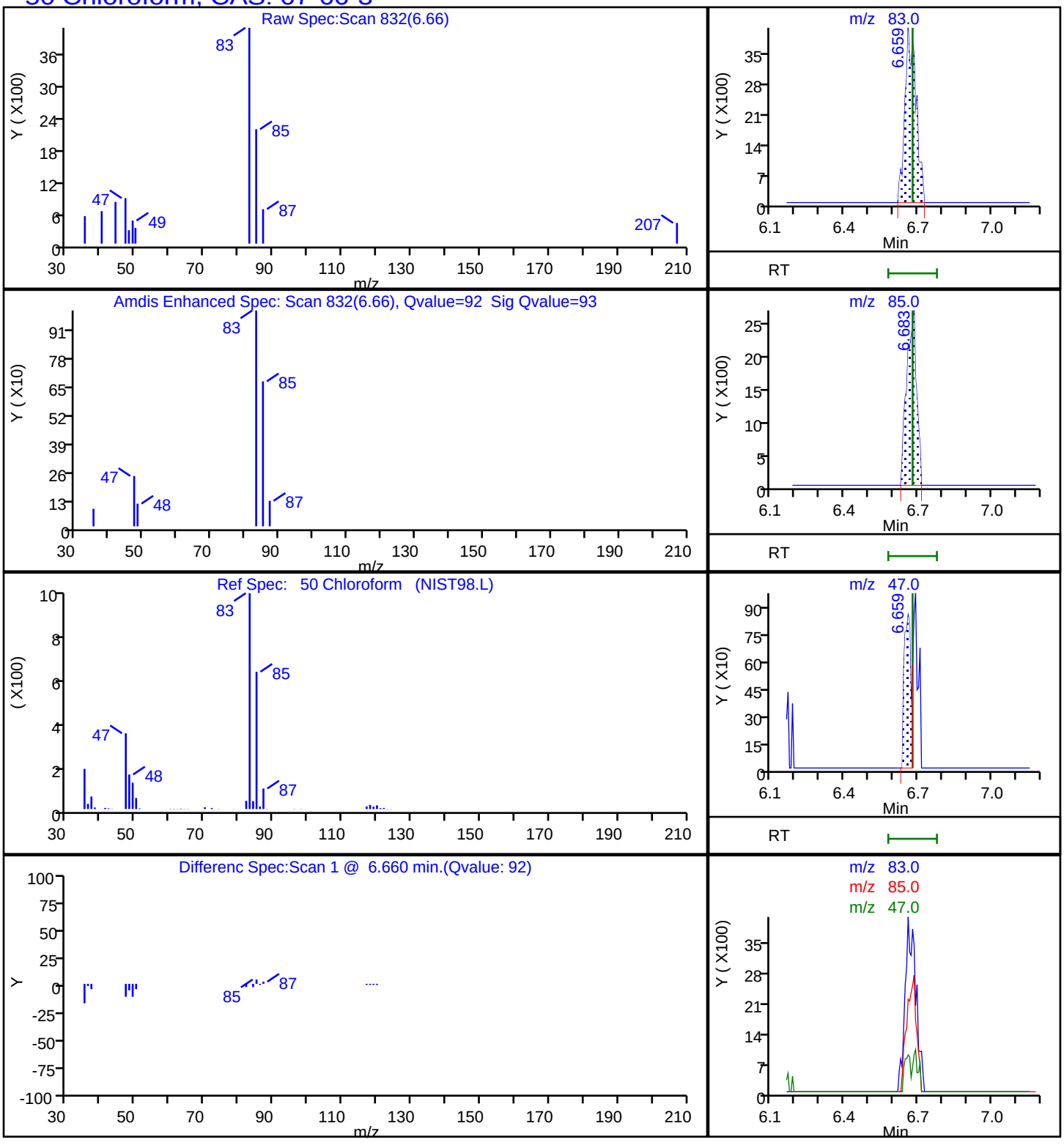


Report Date: 05-Aug-2021 14:03:51 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S20.D				
Injection Date:	05-Aug-2021 02:38:30	Instrument ID:	19094		
Lims ID:	410-49448-A-13	Lab Sample ID:	410-49448-13		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

50 Chloroform, CAS: 67-66-3

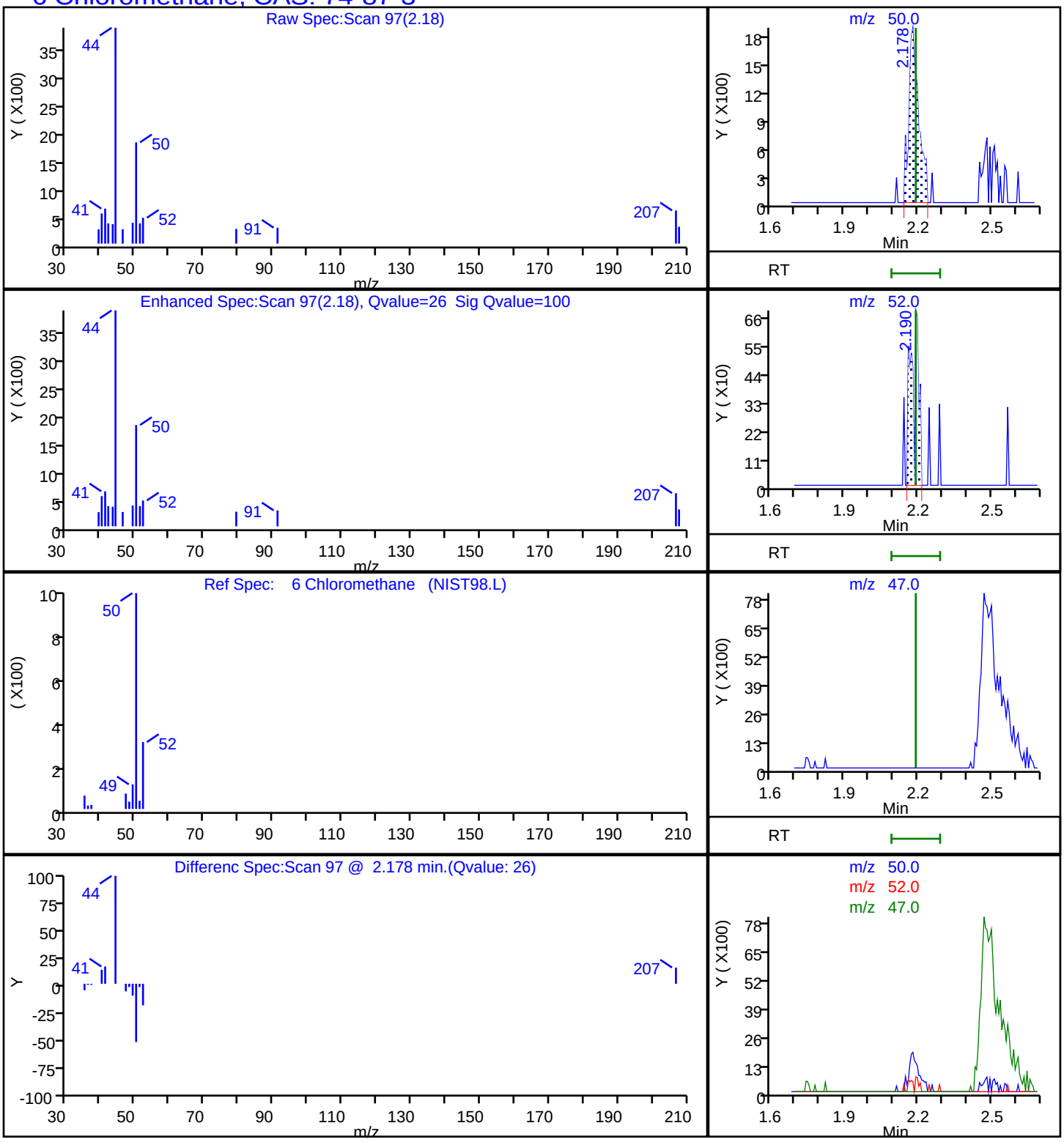


Report Date: 05-Aug-2021 14:03:51 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S20.D				
Injection Date:	05-Aug-2021 02:38:30	Instrument ID:	19094		
Lims ID:	410-49448-A-13	Lab Sample ID:	410-49448-13		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

6 Chloromethane, CAS: 74-87-3

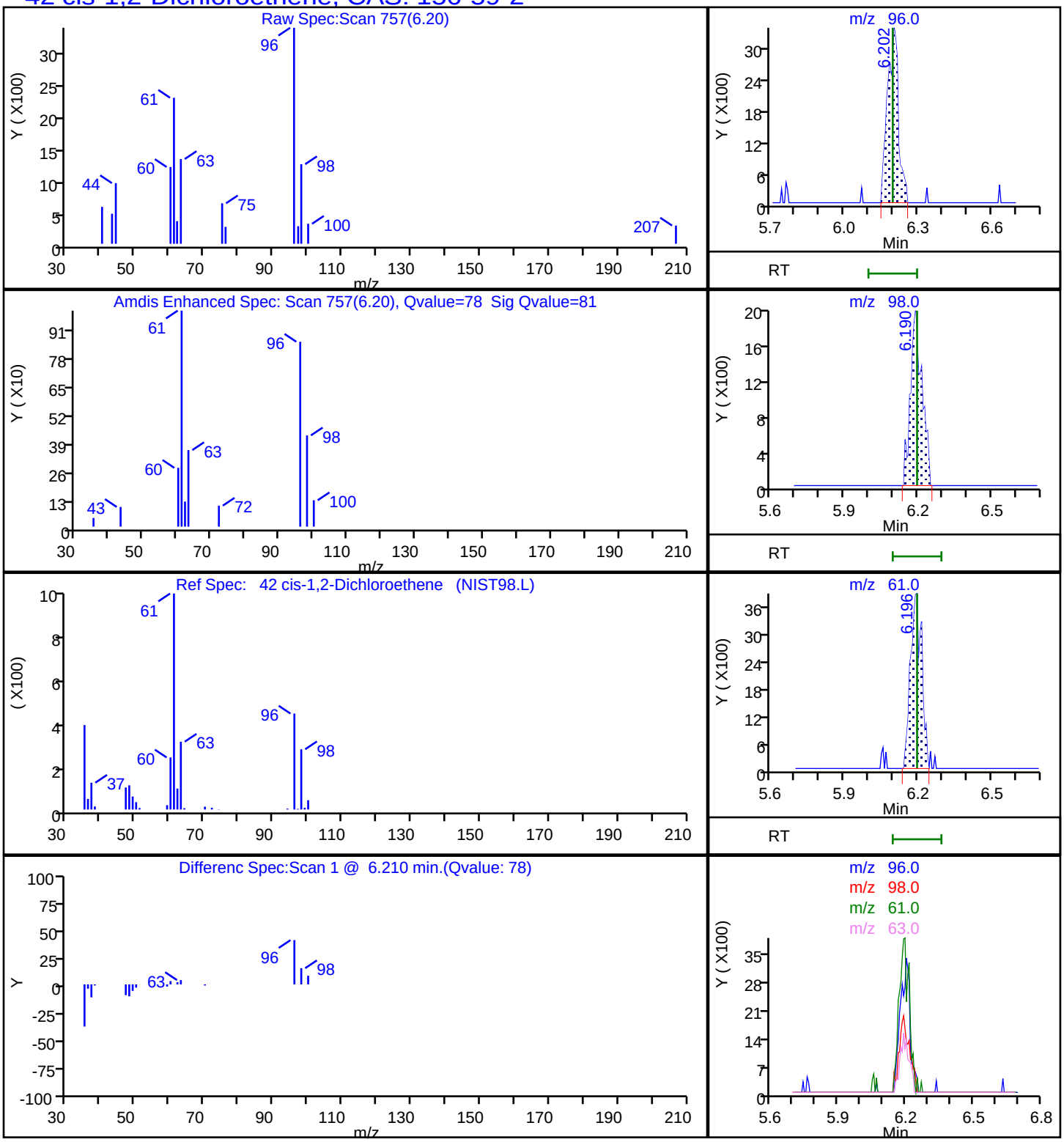


Report Date: 05-Aug-2021 14:03:51 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S20.D				
Injection Date:	05-Aug-2021 02:38:30	Instrument ID:	19094		
Lims ID:	410-49448-A-13	Lab Sample ID:	410-49448-13		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

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

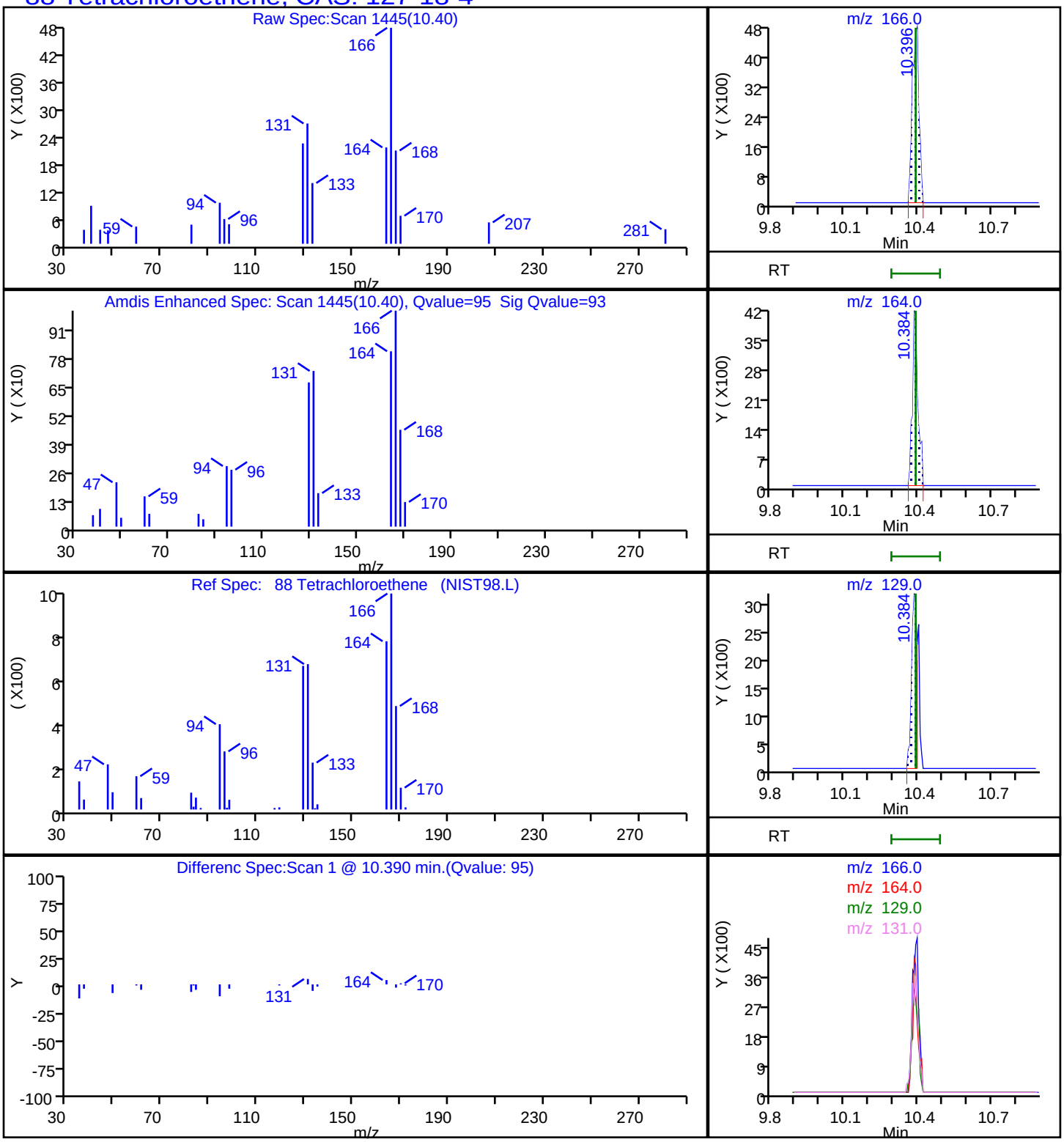


Report Date: 05-Aug-2021 14:03:52 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S20.D				
Injection Date:	05-Aug-2021 02:38:30	Instrument ID:	19094		
Lims ID:	410-49448-A-13	Lab Sample ID:	410-49448-13		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

88 Tetrachloroethene, CAS: 127-18-4



Report Date: 05-Aug-2021 14:03:51 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S20.D

Injection Date: 05-Aug-2021 02:38:30 Instrument ID: 19094

Lims ID: 410-49448-A-13 Lab Sample ID: 410-49448-13

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

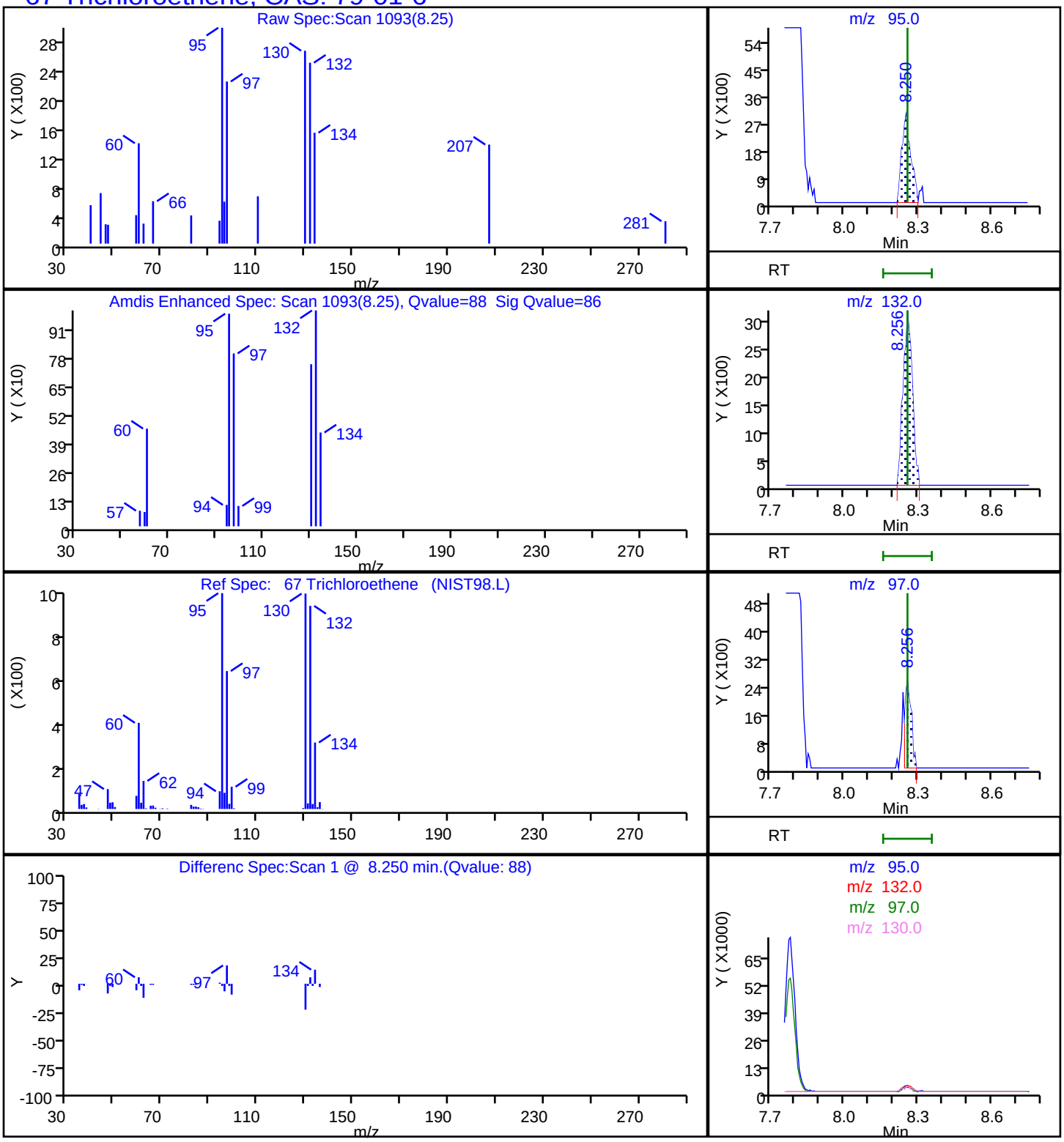
Operator ID: MEC29284 ALS Bottle#: 25 Worklist Smp#: 26

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_19094_25mL Limit Group: MSV - 8260C_D

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

67 Trichloroethene, CAS: 79-01-6



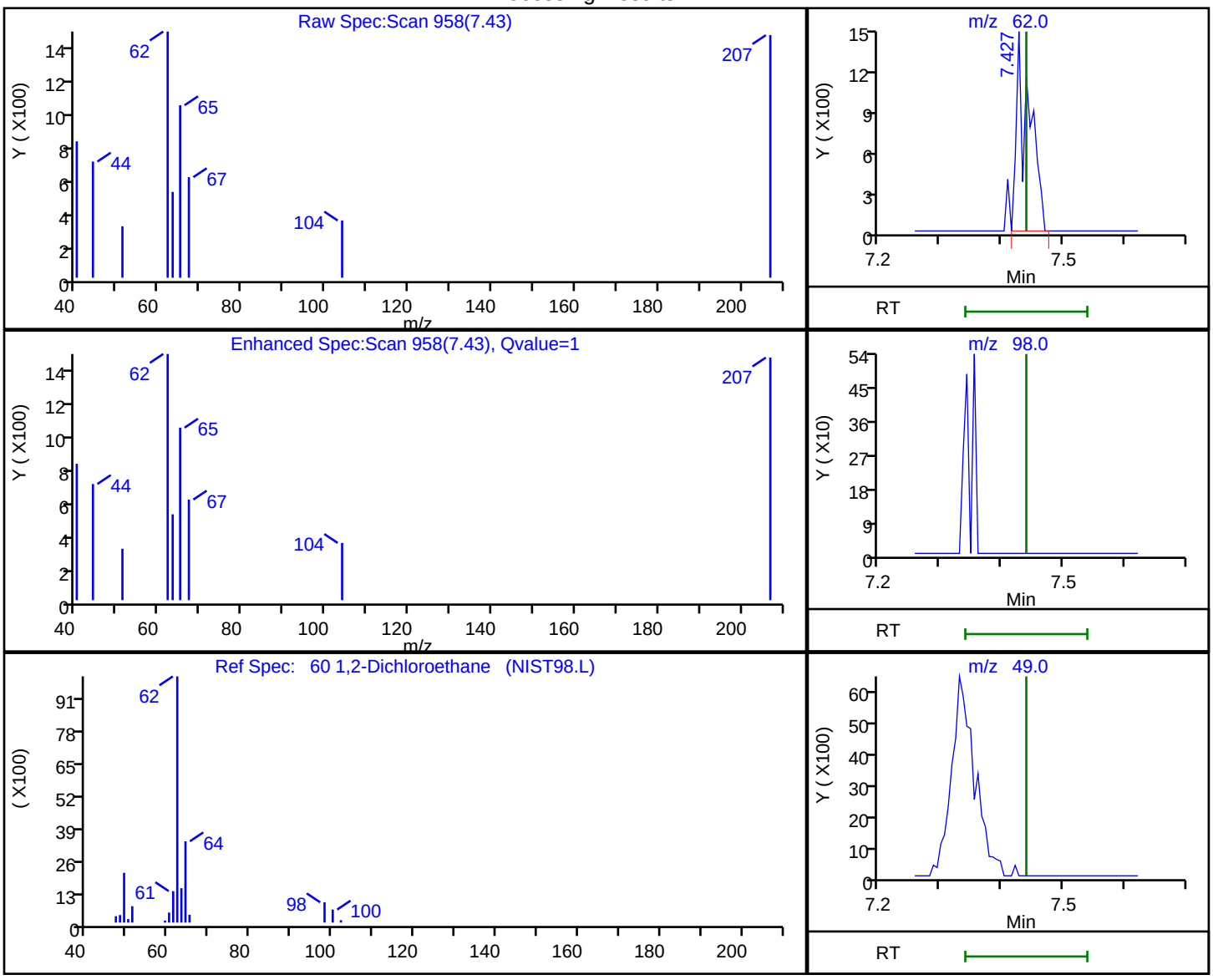
User Disabled Compound Report

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S20.D				
Injection Date:	05-Aug-2021 02:38:30	Instrument ID:	19094		
Lims ID:	410-49448-A-13	Lab Sample ID:	410-49448-13		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

60 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.43	62.00	2134	0.031443
7.44	98.00	0	
7.44	49.00	0	

Reviewer: kaewrungrueangp, 05-Aug-2021 14:03:29

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 410-49448-14

Matrix: Water Lab File ID: HG04S21.D

Analysis Method: 8260D Date Collected: 07/29/2021 08:15

Sample wt/vol: 25(mL) Date Analyzed: 08/05/2021 02:59

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 156699 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.8	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	0.13	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	0.064	J	0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.11	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 410-49448-14

Matrix: Water Lab File ID: HG04S21.D

Analysis Method: 8260D Date Collected: 07/29/2021 08:15

Sample wt/vol: 25(mL) Date Analyzed: 08/05/2021 02:59

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 156699 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)	107		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\19094\20210804-36053.b\HG04S21.D
Lims ID: 410-49448-A-14
Client ID: HD-COD-SW-29-0/1-0
Sample Type: Client
Inject. Date: 05-Aug-2021 02:59:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-027
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 14:25:18 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 14:25:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Chloromethane	50	2.184	2.190	-0.006	33	4642	0.0585	
7 Vinyl chloride	62		2.312				ND	7
9 Bromomethane	94		2.641				ND	
10 Chloroethane	64		2.727				ND	
18 1,1-Dichloroethene	96		3.611				ND	
19 Acetone	43	3.641	3.635	0.006	71	24484	2.76	
24 Carbon disulfide	76		3.934				ND	7
* 28 t-Butyl alcohol-d10 (IS)	65	4.282	4.281	0.001	86	120874	50.0	
29 Methylene Chloride	84		4.281				ND	
32 Methyl tert-butyl ether	73		4.702				ND	7
33 trans-1,2-Dichloroethene	96		4.714				ND	
35 1,1-Dichloroethane	63		5.367				ND	
41 2-Butanone (MEK)	43	6.202	6.147	0.055	41	6085	0.4099	
42 cis-1,2-Dichloroethene	96	6.196	6.196	0.000	75	9680	0.1328	
48 Chlorobromomethane	128		6.525				ND	
50 Chloroform	83	6.665	6.677	-0.012	90	9006	0.0790	
$ 51 Dibromofluoromethane (Surr)	113	6.885	6.891	-0.006	93	600218	10.7	
52 1,1,1-Trichloroethane	97		6.909				ND	
56 Carbon tetrachloride	117		7.122				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.342	7.336	0.006	47	114339	10.1	
59 Benzene	78		7.378				ND	7
60 1,2-Dichloroethane	62		7.439				ND	U
* 65 Fluorobenzene (IS)	96	7.775	7.775	0.000	99	2311899	10.0	
67 Trichloroethene	95	8.244	8.256	-0.012	93	7952	0.1116	M
70 1,2-Dichloropropane	63		8.585				ND	
75 Dichlorobromomethane	83		8.927				ND	7
80 cis-1,3-Dichloropropene	75		9.463				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.628				ND	7
$ 82 Toluene-d8 (Surr)	98	9.768	9.768	0.000	94	2434891	9.55	
83 Toluene	92	9.841	9.847	-0.006	96	12559	0.0645	
85 trans-1,3-Dichloropropene	75		10.097				ND	
87 1,1,2-Trichloroethane	97		10.299				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
88 Tetrachloroethene	166	10.390	10.390	0.000	92	5382	0.0638	
91 2-Hexanone	43		10.506				ND	7
93 Chlorodibromomethane	129		10.670				ND	
94 Ethylene Dibromide	107		10.786				ND	
* 97 Chlorobenzene-d5 (IS)	117	11.213	11.213	0.000	85	1898169	10.0	
98 Chlorobenzene	112		11.237				ND	7
S 95 Xylenes, Total	106		11.245				ND	7
99 1,1,1,2-Tetrachloroethane	131		11.317				ND	
100 Ethylbenzene	91		11.323				ND	7
101 m-Xylene & p-Xylene	106		11.439				ND	7
102 o-Xylene	106		11.762				ND	7
103 Styrene	104		11.780				ND	7
104 Bromoform	173		11.938				ND	
$ 108 4-Bromofluorobenzene (Surr)	95	12.201	12.201	0.000	91	911330	9.79	
109 1,1,2,2-Tetrachloroethane	83		12.298				ND	
* 124 1,4-Dichlorobenzene-d4	152	13.079	13.078	0.001	95	1060147	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

MSV_LLcentISS_00001 Amount Added: 5.00 Units: uL Run Reagent

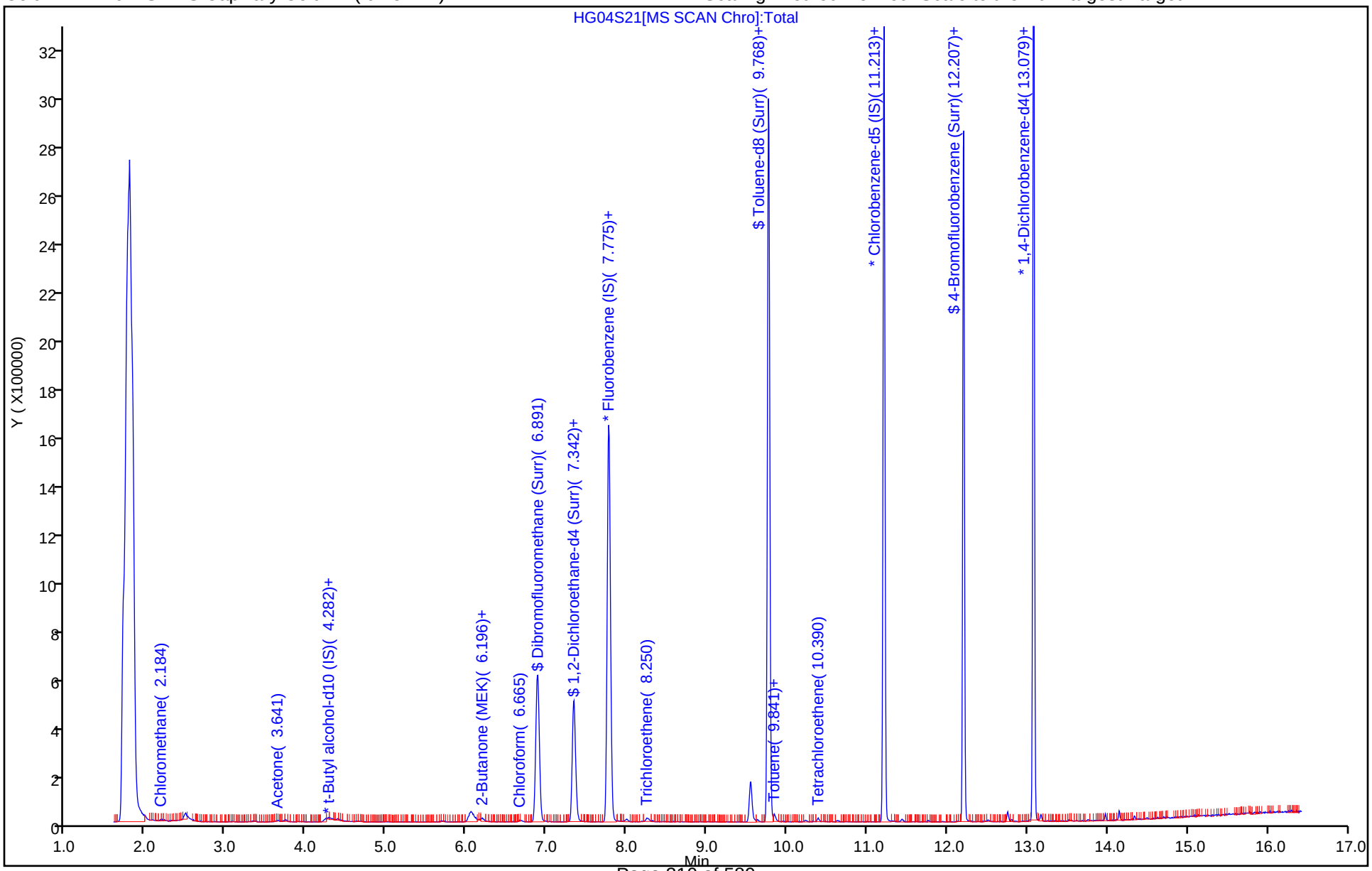
Report Date: 05-Aug-2021 14:25:33 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S21.D

Injection Date:	05-Aug-2021 02:59:30	Instrument ID:	19094	Operator ID:	MEC29284
Lims ID:	410-49448-A-14	Lab Sample ID:	410-49448-14	Worklist Smp#:	27
Client ID:	HD-COD-SW-29-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S21.D
Lims ID: 410-49448-A-14
Client ID: HD-COD-SW-29-0/1-0
Sample Type: Client
Inject. Date: 05-Aug-2021 02:59:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-027
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 14:25:18 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 14:25:32

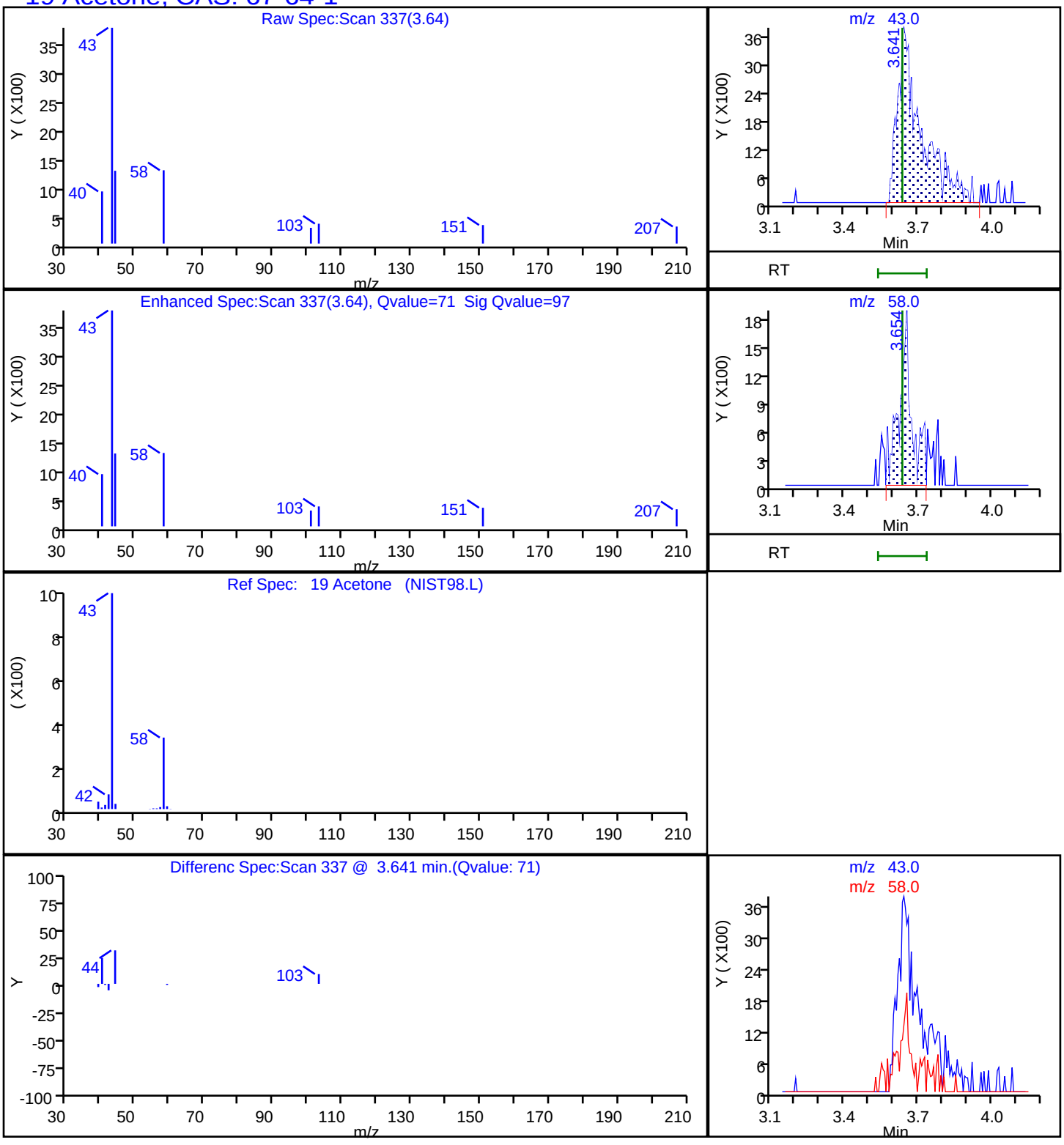
Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	10.0	10.7	107.31
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	101.24
$ 82 Toluene-d8 (Surr)	10.0	9.55	95.46
$ 108 4-Bromofluorobenzene (Surr)	10.0	9.79	97.91

Report Date: 05-Aug-2021 14:25:33 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S21.D				
Injection Date:	05-Aug-2021 02:59:30	Instrument ID:	19094		
Lims ID:	410-49448-A-14	Lab Sample ID:	410-49448-14		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

19 Acetone, CAS: 67-64-1



Report Date: 05-Aug-2021 14:25:33 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S21.D

Injection Date: 05-Aug-2021 02:59:30 Instrument ID: 19094

Lims ID: 410-49448-A-14 Lab Sample ID: 410-49448-14

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

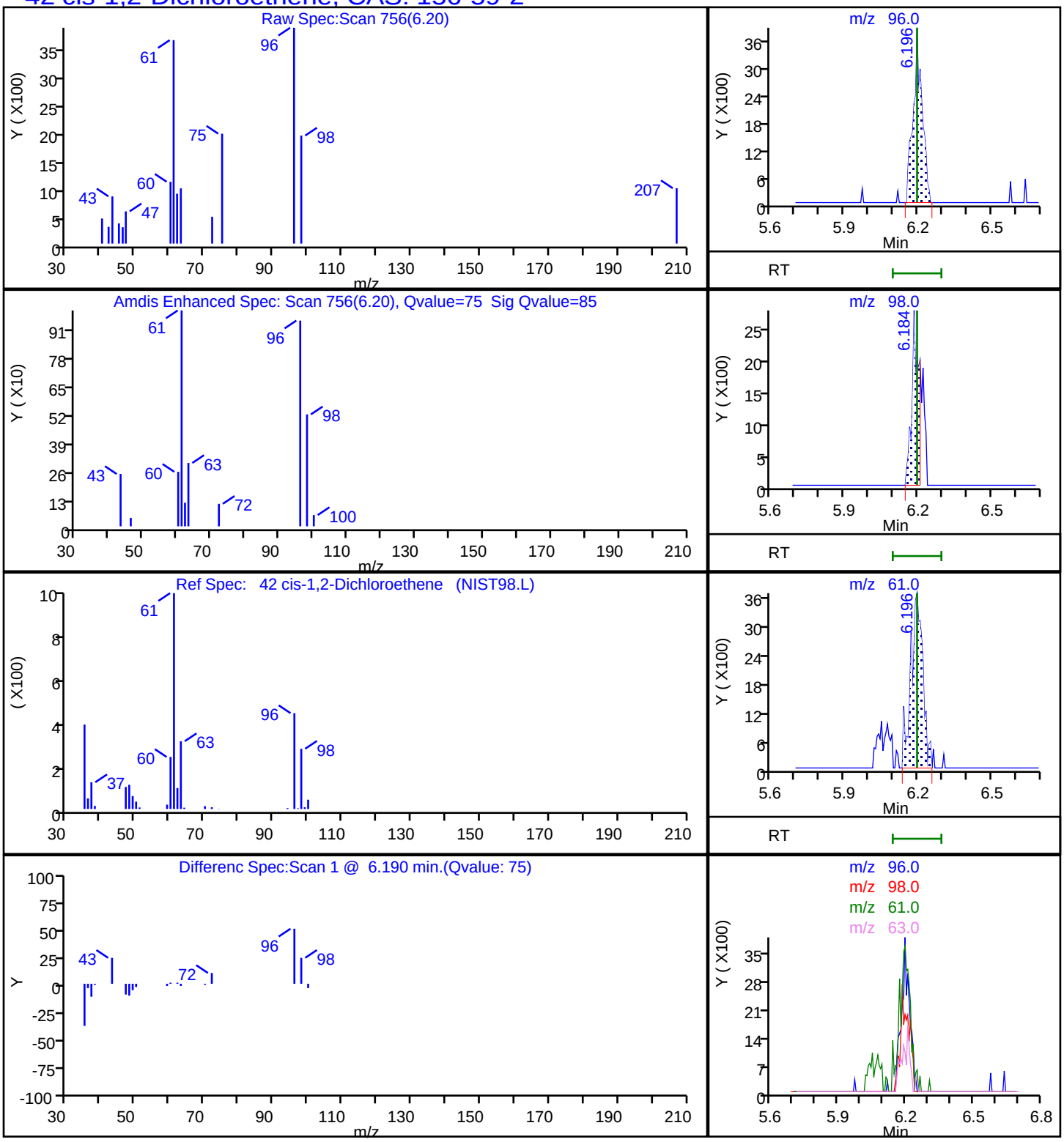
Operator ID: MEC29284 ALS Bottle#: 26 Worklist Smp#: 27

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_19094_25mL Limit Group: MSV - 8260C_D

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

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



Report Date: 05-Aug-2021 14:25:33 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S21.D

Injection Date: 05-Aug-2021 02:59:30 Instrument ID: 19094

Lims ID: 410-49448-A-14 Lab Sample ID: 410-49448-14

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

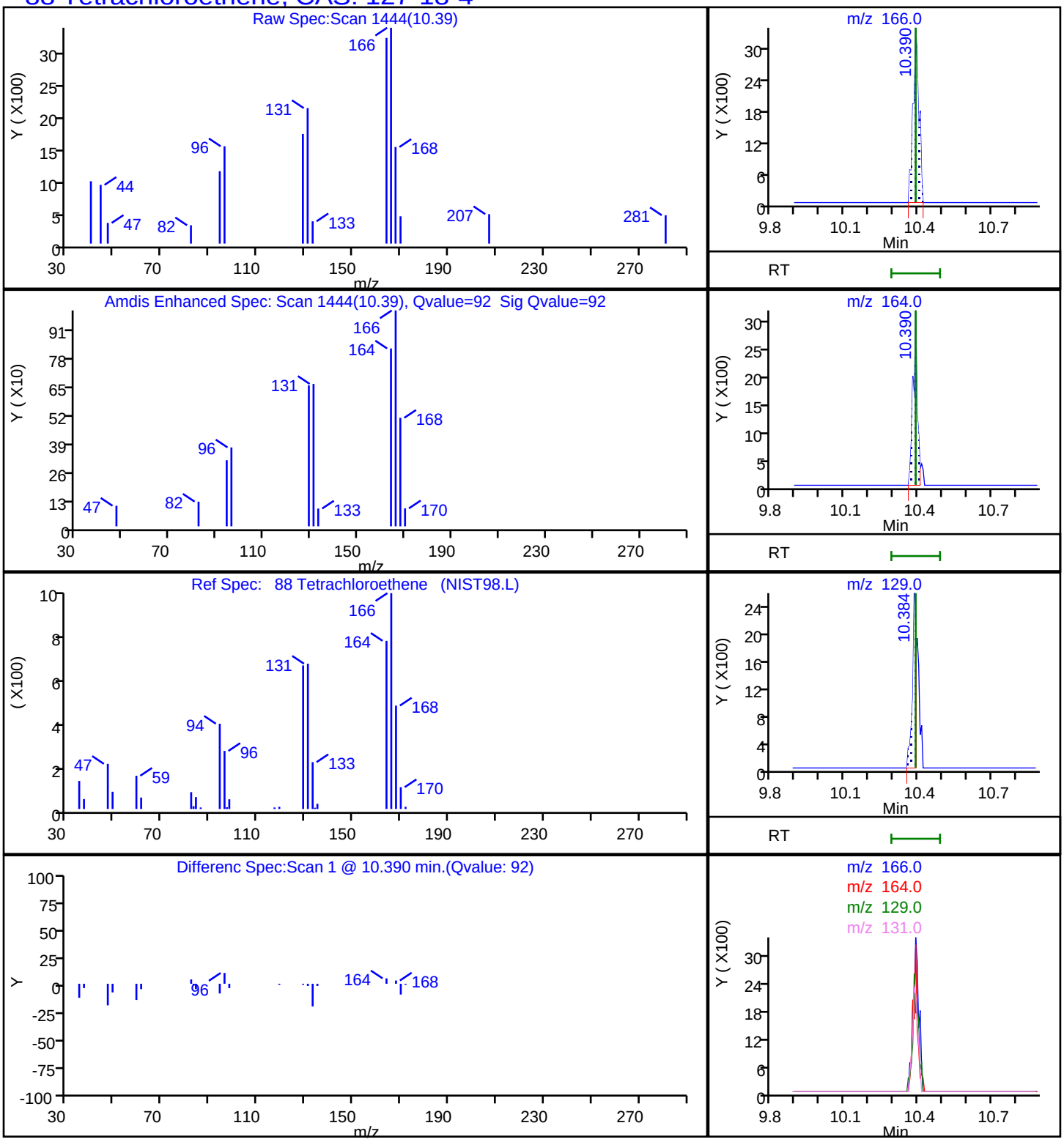
Operator ID: MEC29284 ALS Bottle#: 26 Worklist Smp#: 27

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_19094_25mL Limit Group: MSV - 8260C_D

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

88 Tetrachloroethene, CAS: 127-18-4

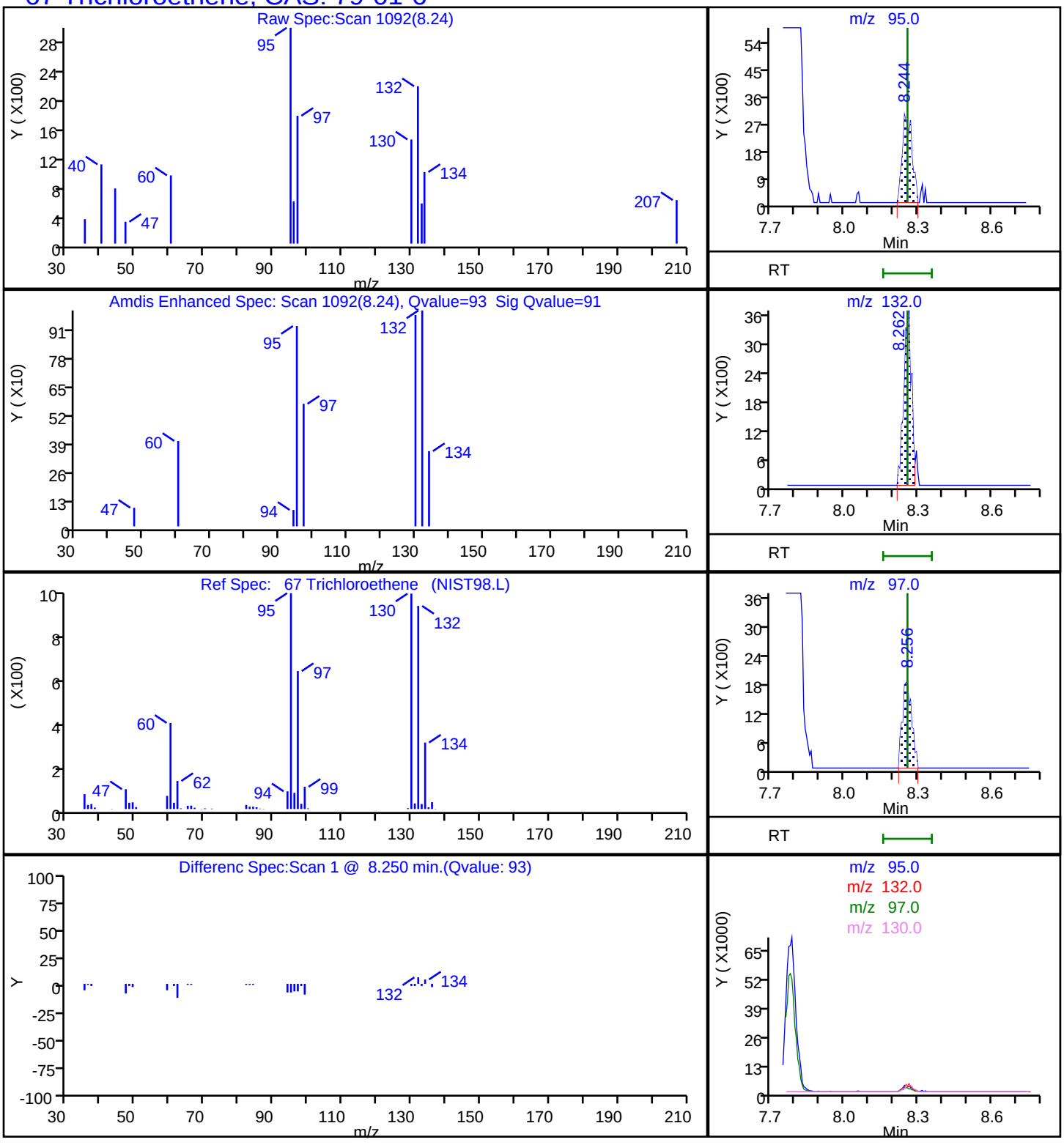


Report Date: 05-Aug-2021 14:25:33 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S21.D				
Injection Date:	05-Aug-2021 02:59:30	Instrument ID:	19094		
Lims ID:	410-49448-A-14	Lab Sample ID:	410-49448-14		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6



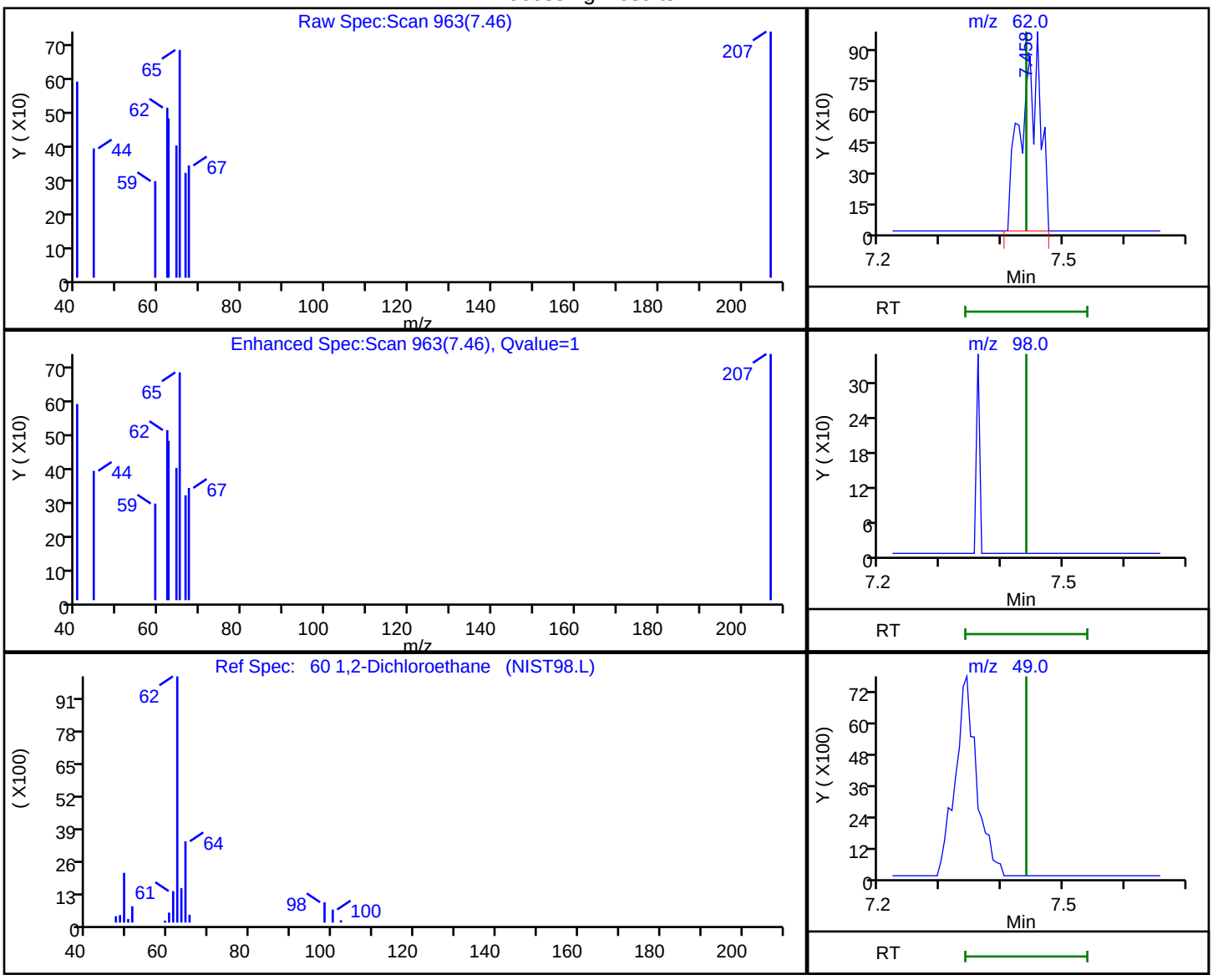
User Disabled Compound Report

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S21.D				
Injection Date:	05-Aug-2021 02:59:30	Instrument ID:	19094		
Lims ID:	410-49448-A-14	Lab Sample ID:	410-49448-14		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

60 1,2-Dichloroethane, CAS: 107-06-2

Processing Results



RT	Mass	Response	Amount
7.46	62.00	2104	0.031112
7.44	98.00	0	
7.44	49.00	0	

Reviewer: kaewrungrueangp, 05-Aug-2021 14:24:12

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

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

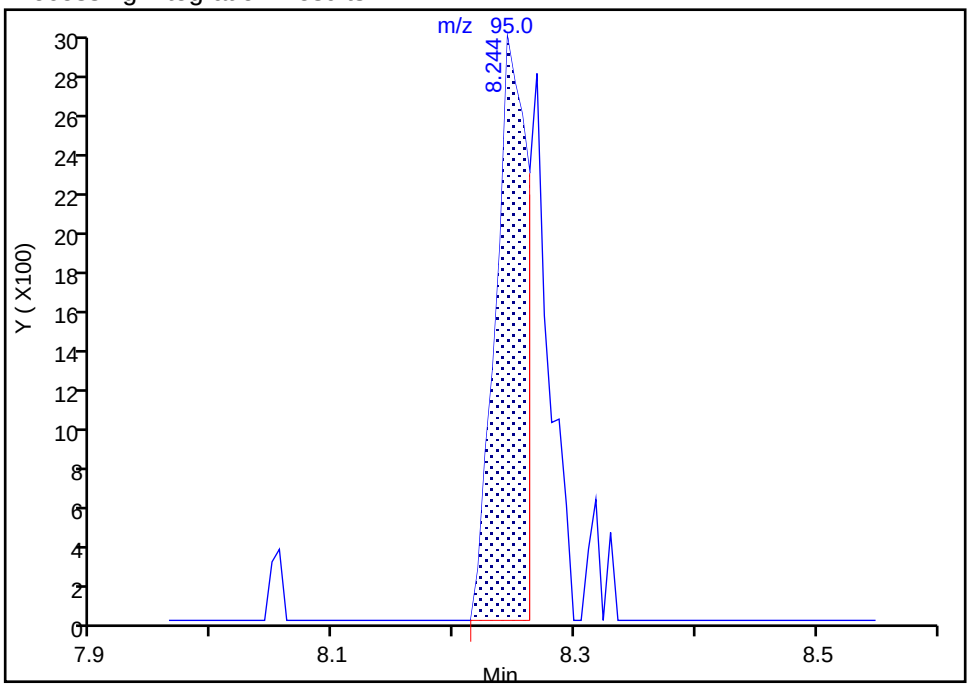
Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S21.D				
Injection Date:	05-Aug-2021 02:59:30	Instrument ID:	19094		
Lims ID:	410-49448-A-14	Lab Sample ID:	410-49448-14		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6

Signal: 1

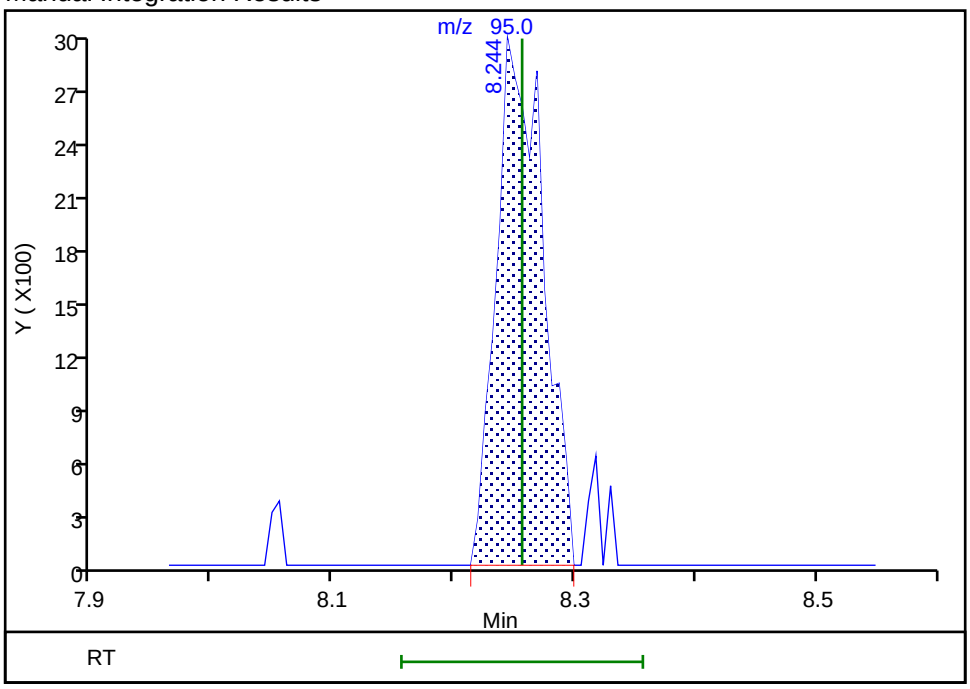
Processing Integration Results

RT: 8.24
Area: 5423
Amount: 0.076097
Amount Units: ug/l



Manual Integration Results

RT: 8.24
Area: 7952
Amount: 0.111584
Amount Units: ug/l



Reviewer: kaewrungrueangp, 05-Aug-2021 14:24:33

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.: 410-49448-1

SDG No.:

Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 410-49448-15

Matrix: Water Lab File ID: HG04S22.D

Analysis Method: 8260D Date Collected: 07/29/2021 12:00

Sample wt/vol: 25(mL) Date Analyzed: 08/05/2021 03:19

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.: 156699 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.6	J ^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	0.23	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	0.28	J	0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.20	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 410-49448-15

Matrix: Water Lab File ID: HG04S22.D

Analysis Method: 8260D Date Collected: 07/29/2021 12:00

Sample wt/vol: 25(mL) Date Analyzed: 08/05/2021 03:19

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.: 156699 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)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	107		80-120
2037-26-5	Toluene-d8 (Surr)	93		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S22.D
Lims ID: 410-49448-A-15
Client ID: HD-QC1-0/1-1
Sample Type: Client
Inject. Date: 05-Aug-2021 03:19:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-028
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 14:46:20 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 14:46:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Chloromethane	50		2.190				ND	7
7 Vinyl chloride	62		2.312				ND	7
9 Bromomethane	94		2.641				ND	
10 Chloroethane	64		2.727				ND	
18 1,1-Dichloroethene	96		3.611				ND	
19 Acetone	43	3.635	3.635	0.000	80	14979	1.57	
24 Carbon disulfide	76		3.934				ND	7
* 28 t-Butyl alcohol-d10 (IS)	65	4.269	4.281	-0.012	89	129712	50.0	
29 Methylene Chloride	84		4.281				ND	
32 Methyl tert-butyl ether	73		4.702				ND	7
33 trans-1,2-Dichloroethene	96		4.714				ND	7
35 1,1-Dichloroethane	63		5.367				ND	
41 2-Butanone (MEK)	43		6.147				ND	7
42 cis-1,2-Dichloroethene	96	6.196	6.196	0.000	80	16633	0.2279	
48 Chlorobromomethane	128		6.525				ND	
50 Chloroform	83	6.677	6.677	0.000	52	9227	0.0808	
$ 51 Dibromofluoromethane (Surr)	113	6.884	6.891	-0.007	93	598131	10.7	
52 1,1,1-Trichloroethane	97		6.909				ND	7
56 Carbon tetrachloride	117		7.122				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.342	7.336	0.006	47	115585	10.2	
59 Benzene	78		7.378				ND	7
60 1,2-Dichloroethane	62		7.439				ND	7
* 65 Fluorobenzene (IS)	96	7.775	7.775	0.000	99	2315022	10.0	
67 Trichloroethene	95	8.262	8.256	0.006	90	14429	0.2022	M
70 1,2-Dichloropropane	63		8.585				ND	
75 Dichlorobromomethane	83		8.927				ND	7
80 cis-1,3-Dichloropropene	75		9.463				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.628				ND	7
$ 82 Toluene-d8 (Surr)	98	9.768	9.768	0.000	93	2411641	9.34	
83 Toluene	92	9.847	9.847	0.000	95	9581	0.0486	
85 trans-1,3-Dichloropropene	75		10.097				ND	
87 1,1,2-Trichloroethane	97		10.299				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
88 Tetrachloroethene	166	10.390	10.390	0.000	95	23593	0.2761	
91 2-Hexanone	43		10.506				ND	7
93 Chlorodibromomethane	129		10.670				ND	
94 Ethylene Dibromide	107		10.786				ND	
* 97 Chlorobenzene-d5 (IS)	117	11.213	11.213	0.000	85	1922166	10.0	
98 Chlorobenzene	112		11.237				ND	
S 95 Xylenes, Total	106		11.245				ND	7
99 1,1,1,2-Tetrachloroethane	131		11.317				ND	
100 Ethylbenzene	91		11.323				ND	7
101 m-Xylene & p-Xylene	106	11.426	11.439	-0.013	92	6559	0.0461	
102 o-Xylene	106		11.762				ND	7
103 Styrene	104		11.780				ND	7
104 Bromoform	173		11.938				ND	
$ 108 4-Bromofluorobenzene (Surr)	95	12.200	12.201	-0.001	91	907722	9.63	
109 1,1,2,2-Tetrachloroethane	83		12.298				ND	
* 124 1,4-Dichlorobenzene-d4	152	13.078	13.078	0.000	95	1060563	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

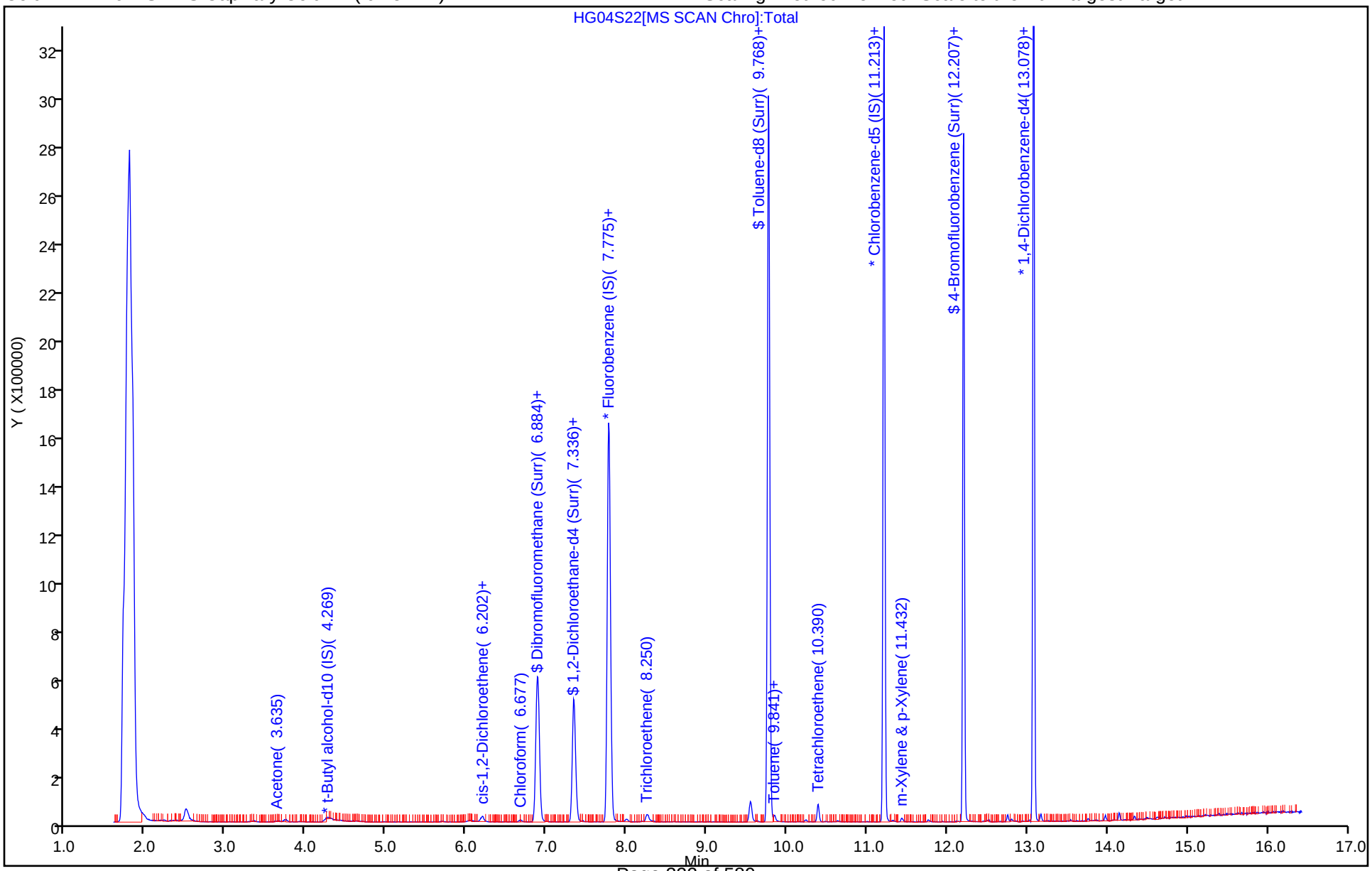
MSV_LLcentISS_00001 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 05-Aug-2021 14:46:21 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S22.D				
Injection Date:	05-Aug-2021 03:19:30	Instrument ID:	19094	Operator ID:	MEC29284
Lims ID:	410-49448-A-15	Lab Sample ID:	410-49448-15	Worklist Smp#:	28
Client ID:	HD-QC1-0/1-1				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S22.D
Lims ID: 410-49448-A-15
Client ID: HD-QC1-0/1-1
Sample Type: Client
Inject. Date: 05-Aug-2021 03:19:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-028
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 14:46:20 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 14:46:20

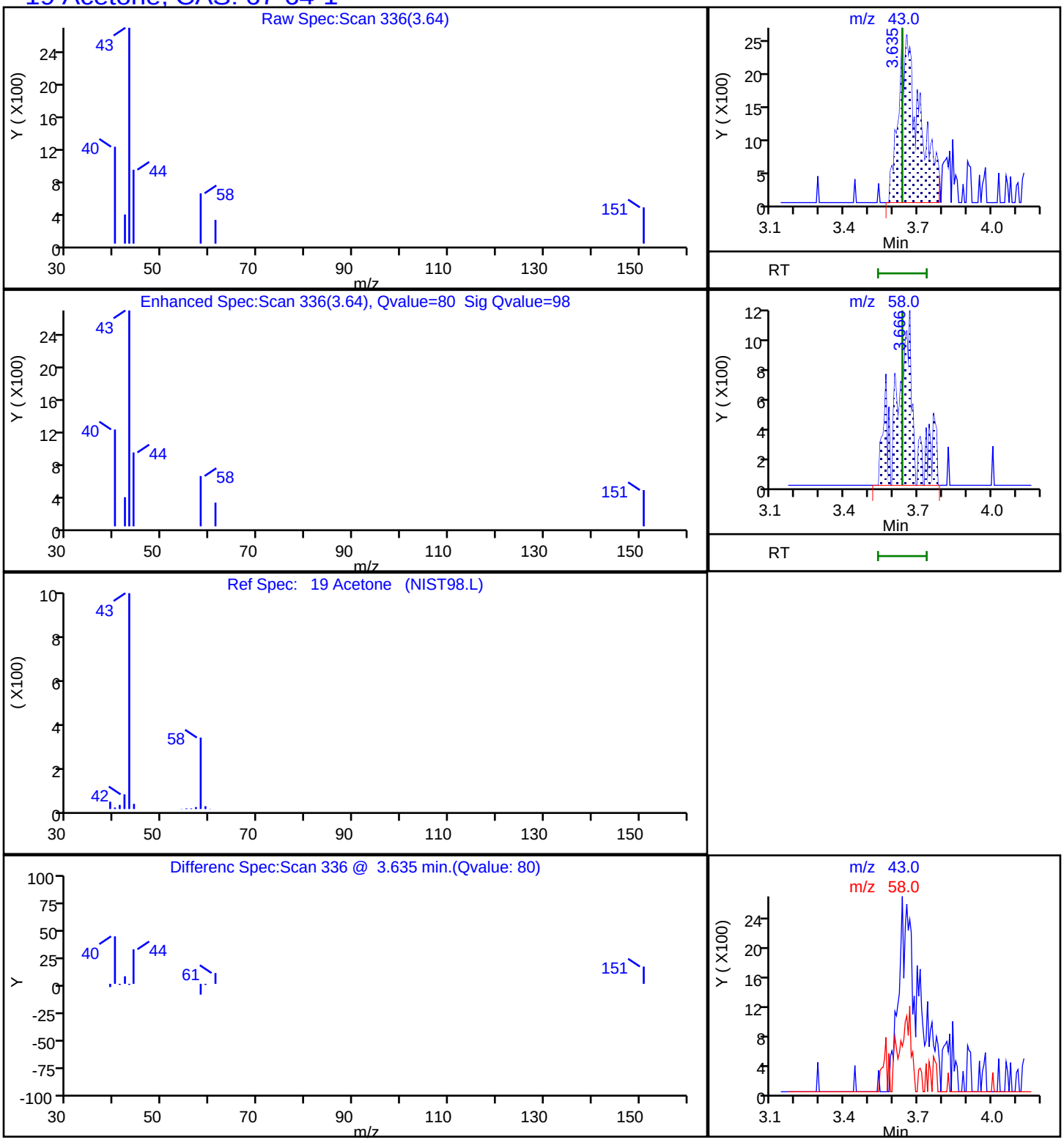
Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	10.0	10.7	106.79
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.21
$ 82 Toluene-d8 (Surr)	10.0	9.34	93.37
$ 108 4-Bromofluorobenzene (Surr)	10.0	9.63	96.31

Report Date: 05-Aug-2021 14:46:21 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S22.D				
Injection Date:	05-Aug-2021 03:19:30	Instrument ID:	19094		
Lims ID:	410-49448-A-15	Lab Sample ID:	410-49448-15		
Client ID:	HD-QC1-0/1-1				
Operator ID:	MEC29284	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

19 Acetone, CAS: 67-64-1



Report Date: 05-Aug-2021 14:46:21 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S22.D

Injection Date: 05-Aug-2021 03:19:30 Instrument ID: 19094

Lims ID: 410-49448-A-15 Lab Sample ID: 410-49448-15

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

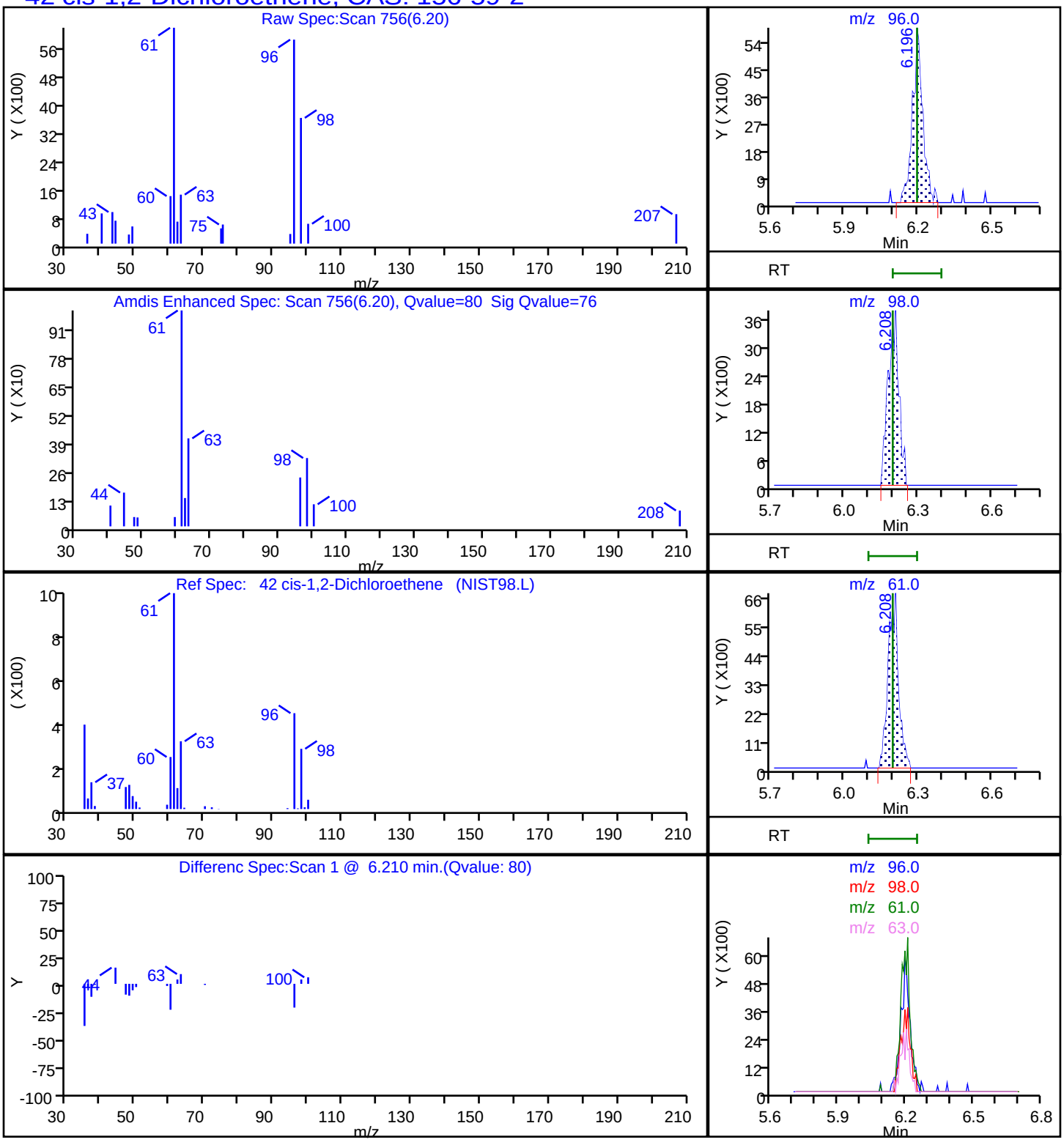
Operator ID: MEC29284 ALS Bottle#: 27 Worklist Smp#: 28

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_19094_25mL Limit Group: MSV - 8260C_D

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

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



Report Date: 05-Aug-2021 14:46:21 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S22.D

Injection Date: 05-Aug-2021 03:19:30 Instrument ID: 19094

Lims ID: 410-49448-A-15 Lab Sample ID: 410-49448-15

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

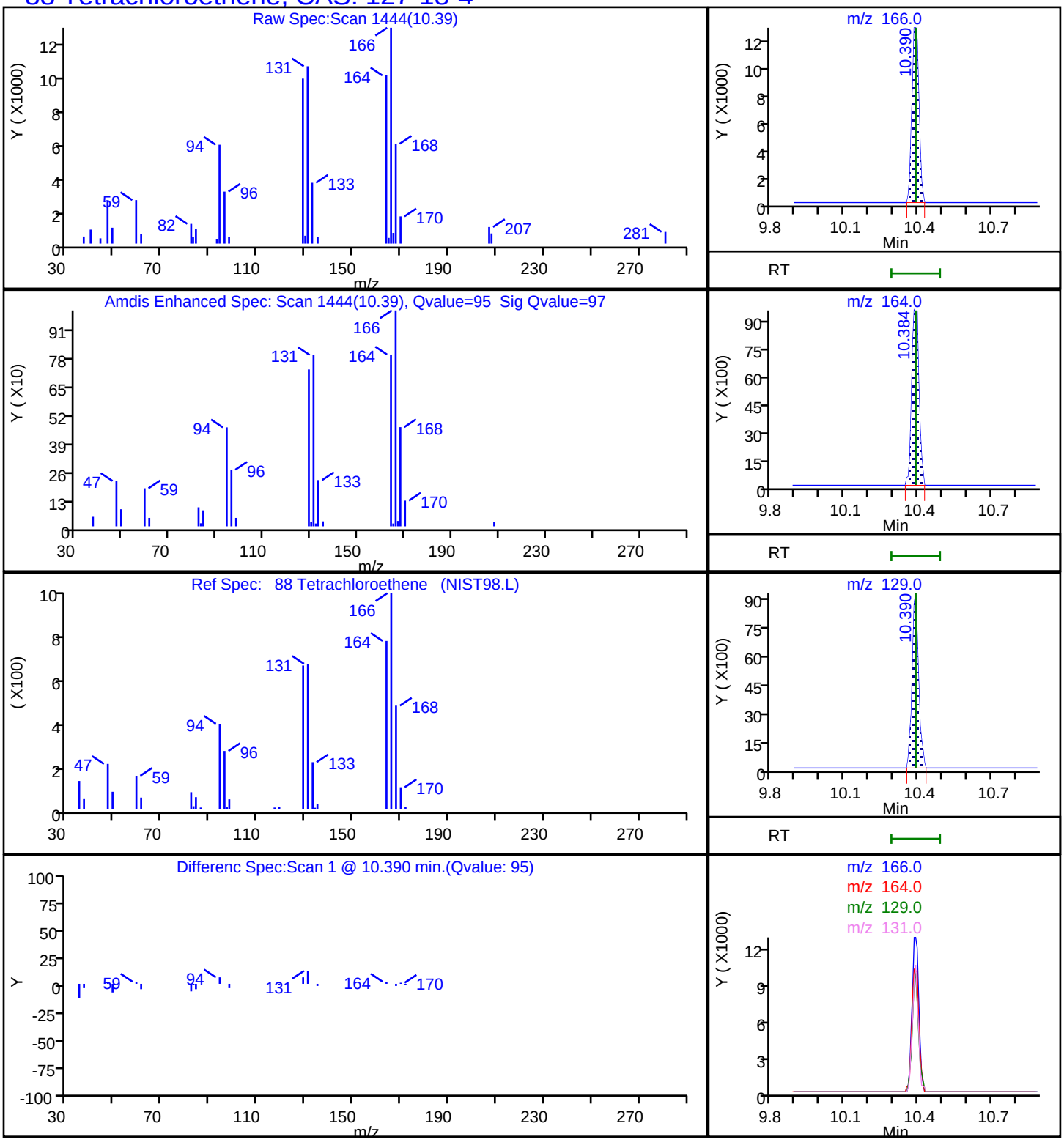
Operator ID: MEC29284 ALS Bottle#: 27 Worklist Smp#: 28

Purge Vol: 25.000 mL Dil. Factor: 1.0000

Method: MSV_19094_25mL Limit Group: MSV - 8260C_D

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

88 Tetrachloroethene, CAS: 127-18-4

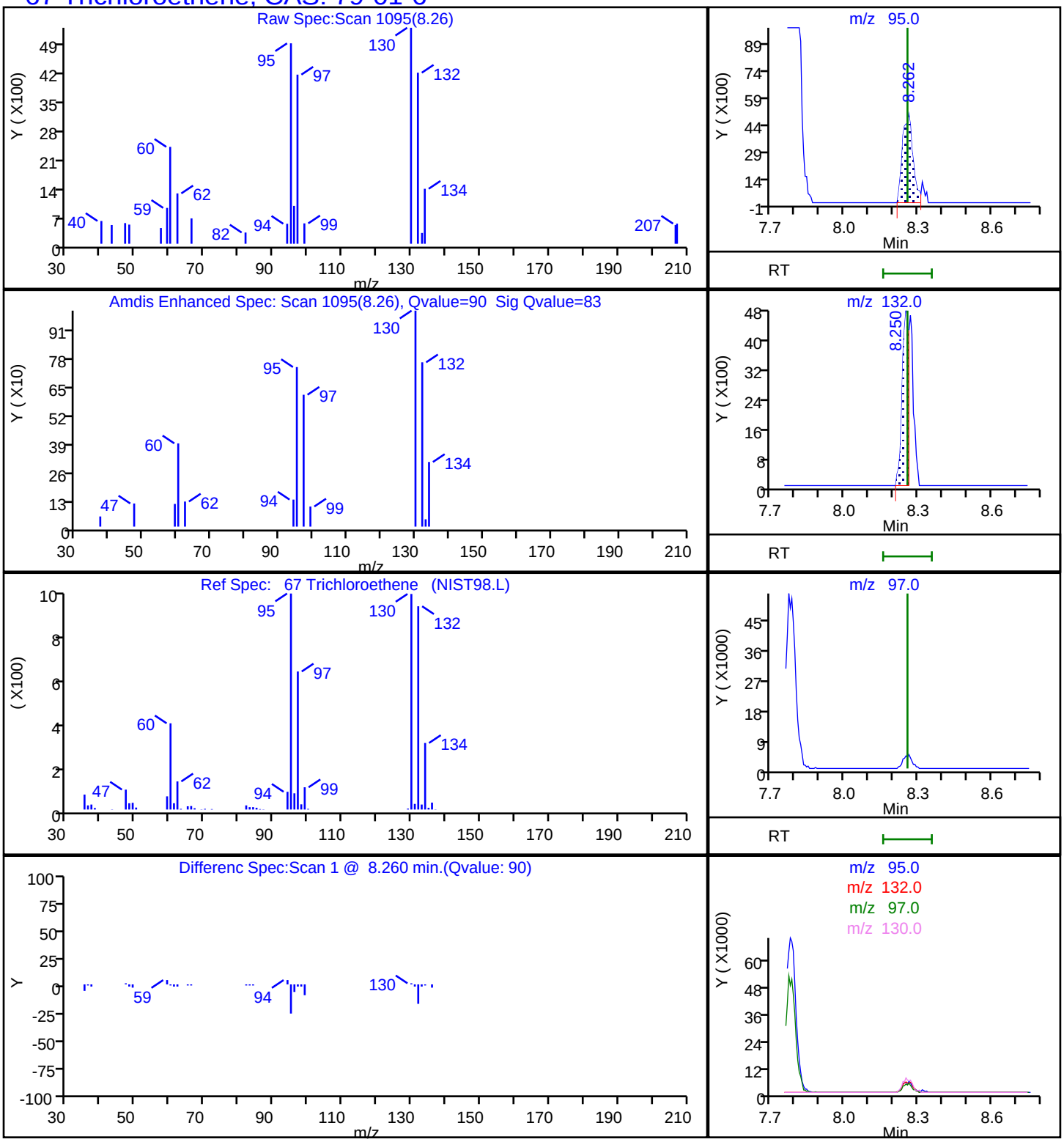


Report Date: 05-Aug-2021 14:46:21 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S22.D				
Injection Date:	05-Aug-2021 03:19:30	Instrument ID:	19094		
Lims ID:	410-49448-A-15	Lab Sample ID:	410-49448-15		
Client ID:	HD-QC1-0/1-1				
Operator ID:	MEC29284	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

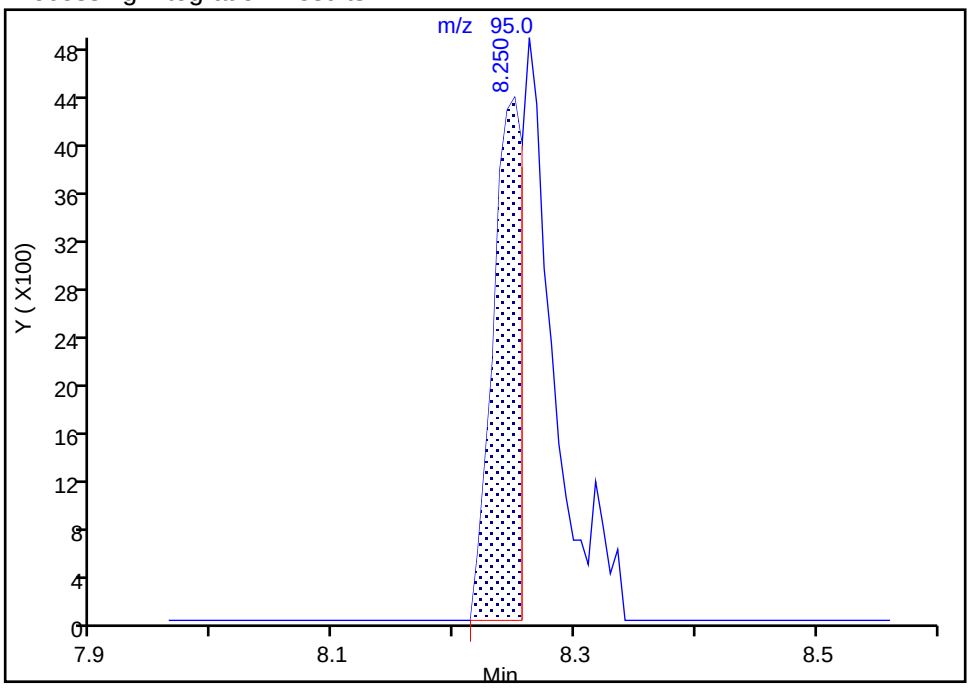
Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S22.D				
Injection Date:	05-Aug-2021 03:19:30	Instrument ID:	19094		
Lims ID:	410-49448-A-15	Lab Sample ID:	410-49448-15		
Client ID:	HD-QC1-0/1-1				
Operator ID:	MEC29284	ALS Bottle#:	27	Worklist Smp#:	28
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6

Signal: 1

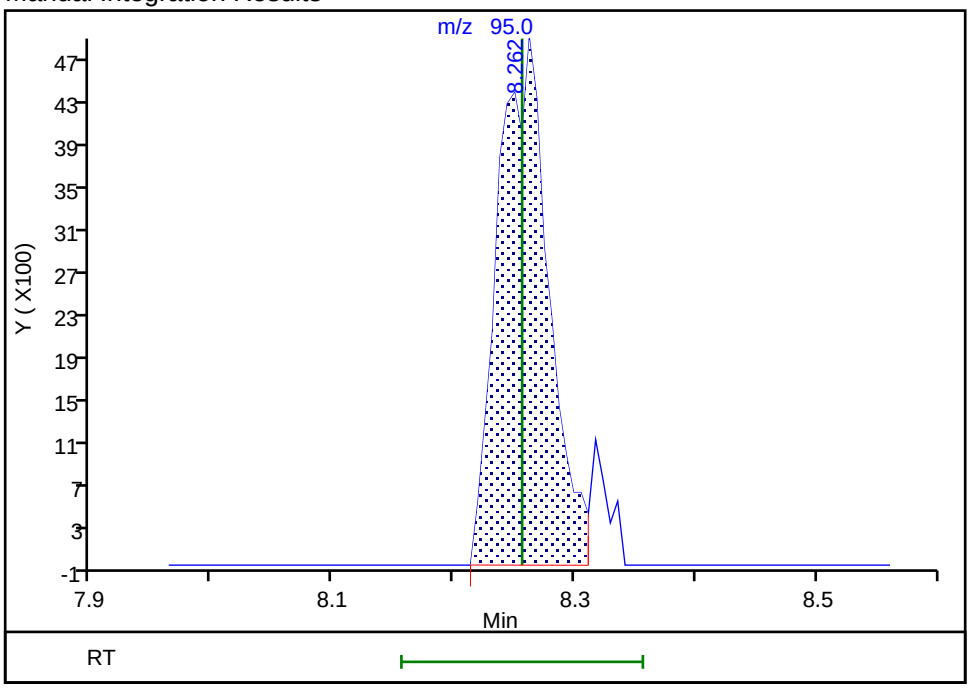
Processing Integration Results

RT: 8.25
Area: 7532
Amount: 0.105548
Amount Units: ug/l



Manual Integration Results

RT: 8.26
Area: 14429
Amount: 0.202198
Amount Units: ug/l



Reviewer: kaewrungrueangp, 05-Aug-2021 14:45:45

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.: 410-49448-1

SDG No.:

Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 410-49448-16

Matrix: Water Lab File ID: HG04S03.D

Analysis Method: 8260D Date Collected: 07/29/2021 00:00

Sample wt/vol: 25(mL) Date Analyzed: 08/04/2021 20:46

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.: 156699 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	^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.: 410-49448-1

SDG No.:

Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 410-49448-16

Matrix: Water Lab File ID: HG04S03.D

Analysis Method: 8260D Date Collected: 07/29/2021 00:00

Sample wt/vol: 25(mL) Date Analyzed: 08/04/2021 20:46

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.: 156699 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)	106		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\19094\20210804-36053.b\HG04S03.D
Lims ID: 410-49448-A-16
Client ID: HD-QC1-0/1-2
Sample Type: Client
Inject. Date: 04-Aug-2021 20:46:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-009
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 10:50:02 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 10:50:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
6 Chloromethane	50		2.190				ND	
7 Vinyl chloride	62		2.312				ND	
9 Bromomethane	94		2.641				ND	
10 Chloroethane	64		2.727				ND	
18 1,1-Dichloroethene	96		3.611				ND	
19 Acetone	43		3.635				ND	U
24 Carbon disulfide	76		3.934				ND	7
* 28 t-Butyl alcohol-d10 (IS)	65	4.275	4.281	-0.006	91	126043	50.0	
29 Methylene Chloride	84		4.281				ND	7
32 Methyl tert-butyl ether	73		4.702				ND	
33 trans-1,2-Dichloroethene	96		4.714				ND	
35 1,1-Dichloroethane	63		5.367				ND	
41 2-Butanone (MEK)	43		6.147				ND	
42 cis-1,2-Dichloroethene	96		6.196				ND	
48 Chlorobromomethane	128		6.525				ND	
50 Chloroform	83		6.677				ND	
$ 51 Dibromofluoromethane (Surr)	113	6.891	6.891	0.000	94	619030	10.6	
52 1,1,1-Trichloroethane	97		6.909				ND	
56 Carbon tetrachloride	117		7.122				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.336	7.336	0.000	47	115404	9.82	M
59 Benzene	78		7.378				ND	
60 1,2-Dichloroethane	62	7.446	7.439	0.007	1	2152	0.0306	
* 65 Fluorobenzene (IS)	96	7.775	7.775	0.000	99	2404935	10.0	
67 Trichloroethene	95		8.256				ND	
70 1,2-Dichloropropane	63		8.585				ND	
75 Dichlorobromomethane	83		8.927				ND	
80 cis-1,3-Dichloropropene	75		9.463				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.628				ND	7
$ 82 Toluene-d8 (Surr)	98	9.768	9.768	0.000	93	2487958	9.46	
83 Toluene	92		9.847				ND	7
85 trans-1,3-Dichloropropene	75		10.097				ND	
87 1,1,2-Trichloroethane	97		10.299				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
88 Tetrachloroethene	166		10.390				ND	
91 2-Hexanone	43		10.506				ND	
93 Chlorodibromomethane	129		10.670				ND	
94 Ethylene Dibromide	107		10.786				ND	
* 97 Chlorobenzene-d5 (IS)	117	11.213	11.213	0.000	85	1957056	10.0	
98 Chlorobenzene	112		11.237				ND	
S 95 Xylenes, Total	106		11.245				ND	7
99 1,1,1,2-Tetrachloroethane	131		11.317				ND	
100 Ethylbenzene	91		11.323				ND	7
101 m-Xylene & p-Xylene	106		11.439				ND	7
102 o-Xylene	106		11.762				ND	
103 Styrene	104		11.780				ND	
104 Bromoform	173		11.938				ND	
$ 108 4-Bromofluorobenzene (Surr)	95	12.201	12.201	0.000	90	935547	9.75	
109 1,1,2,2-Tetrachloroethane	83		12.298				ND	
* 124 1,4-Dichlorobenzene-d4	152	13.079	13.078	0.001	95	1085493	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

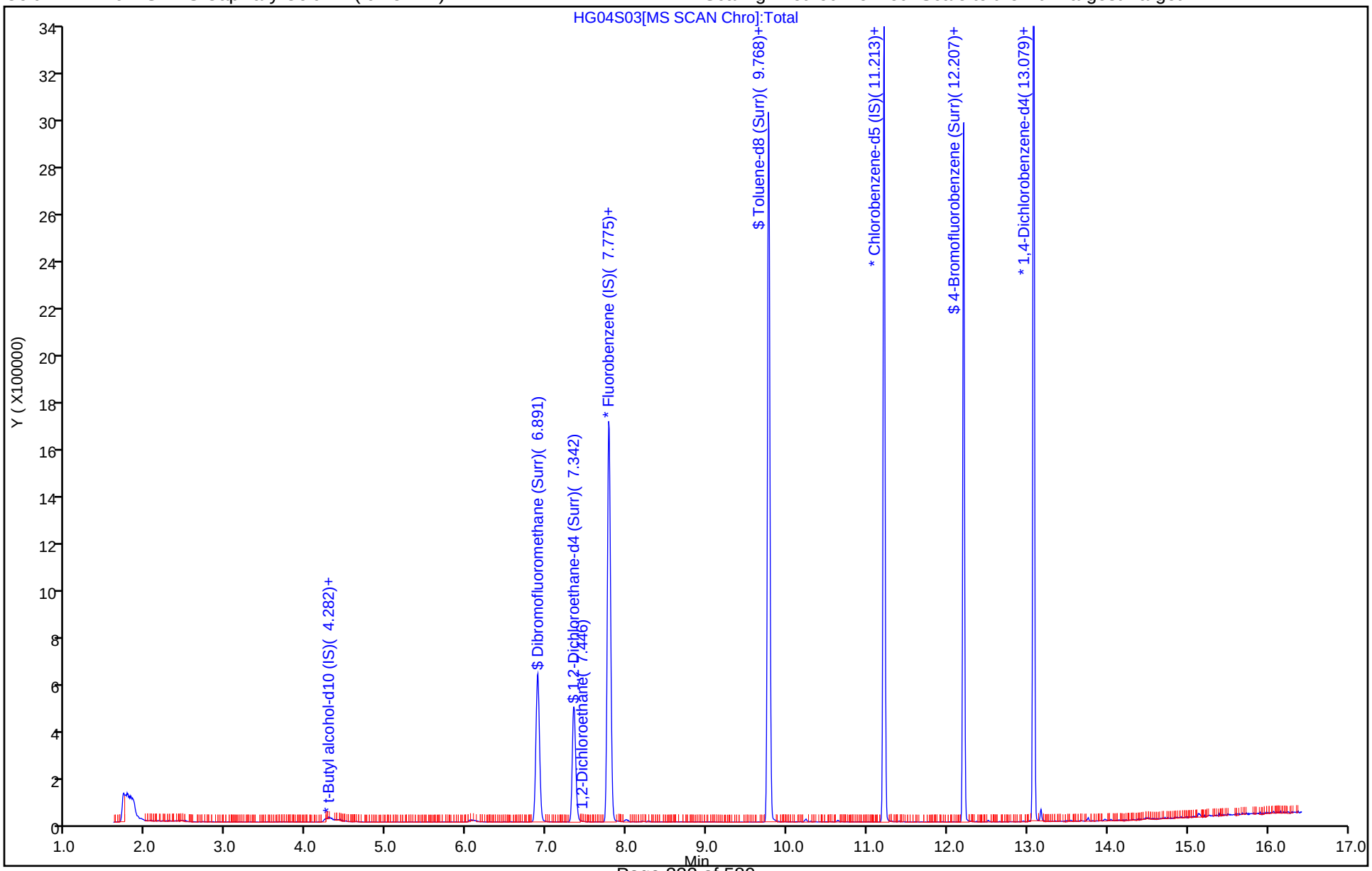
MSV_LLcentISS_00001 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 05-Aug-2021 10:50:03 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S03.D				
Injection Date:	04-Aug-2021 20:46:30	Instrument ID:	19094	Operator ID:	MEC29284
Lims ID:	410-49448-A-16	Lab Sample ID:	410-49448-16	Worklist Smp#:	9
Client ID:	HD-QC1-0/1-2				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S03.D
Lims ID: 410-49448-A-16
Client ID: HD-QC1-0/1-2
Sample Type: Client
Inject. Date: 04-Aug-2021 20:46:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-009
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 10:50:02 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 10:50:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	10.0	10.6	106.39
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	9.82	98.23
$ 82 Toluene-d8 (Surr)	10.0	9.46	94.61
$ 108 4-Bromofluorobenzene (Surr)	10.0	9.75	97.49

Eurofins Lancaster Laboratories Env, LLC

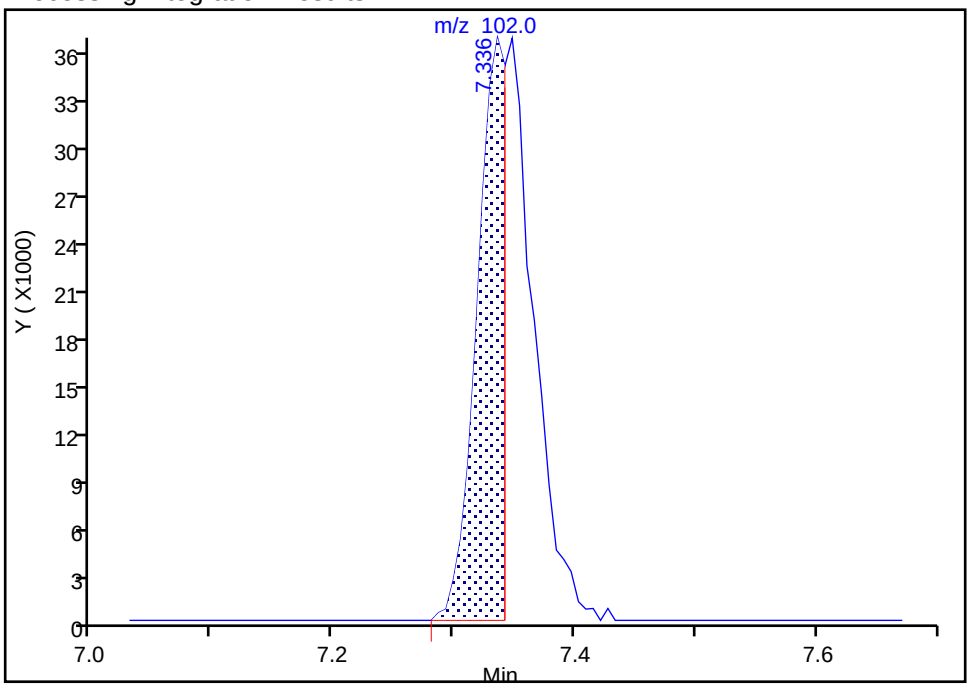
Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S03.D				
Injection Date:	04-Aug-2021 20:46:30	Instrument ID:	19094		
Lims ID:	410-49448-A-16	Lab Sample ID:	410-49448-16		
Client ID:	HD-QC1-0/1-2				
Operator ID:	MEC29284	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

$ 58 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

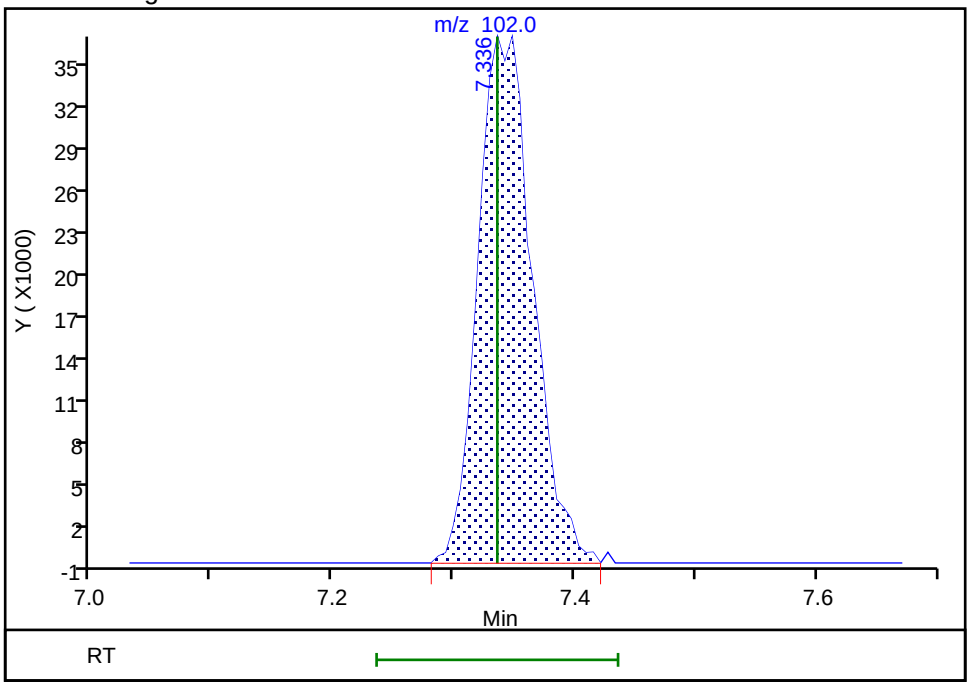
Processing Integration Results

RT: 7.34
Area: 61613
Amount: 5.244455
Amount Units: ug/l



Manual Integration Results

RT: 7.34
Area: 115404
Amount: 9.823108
Amount Units: ug/l



Reviewer: kaewrungrueangp, 05-Aug-2021 10:49:22
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

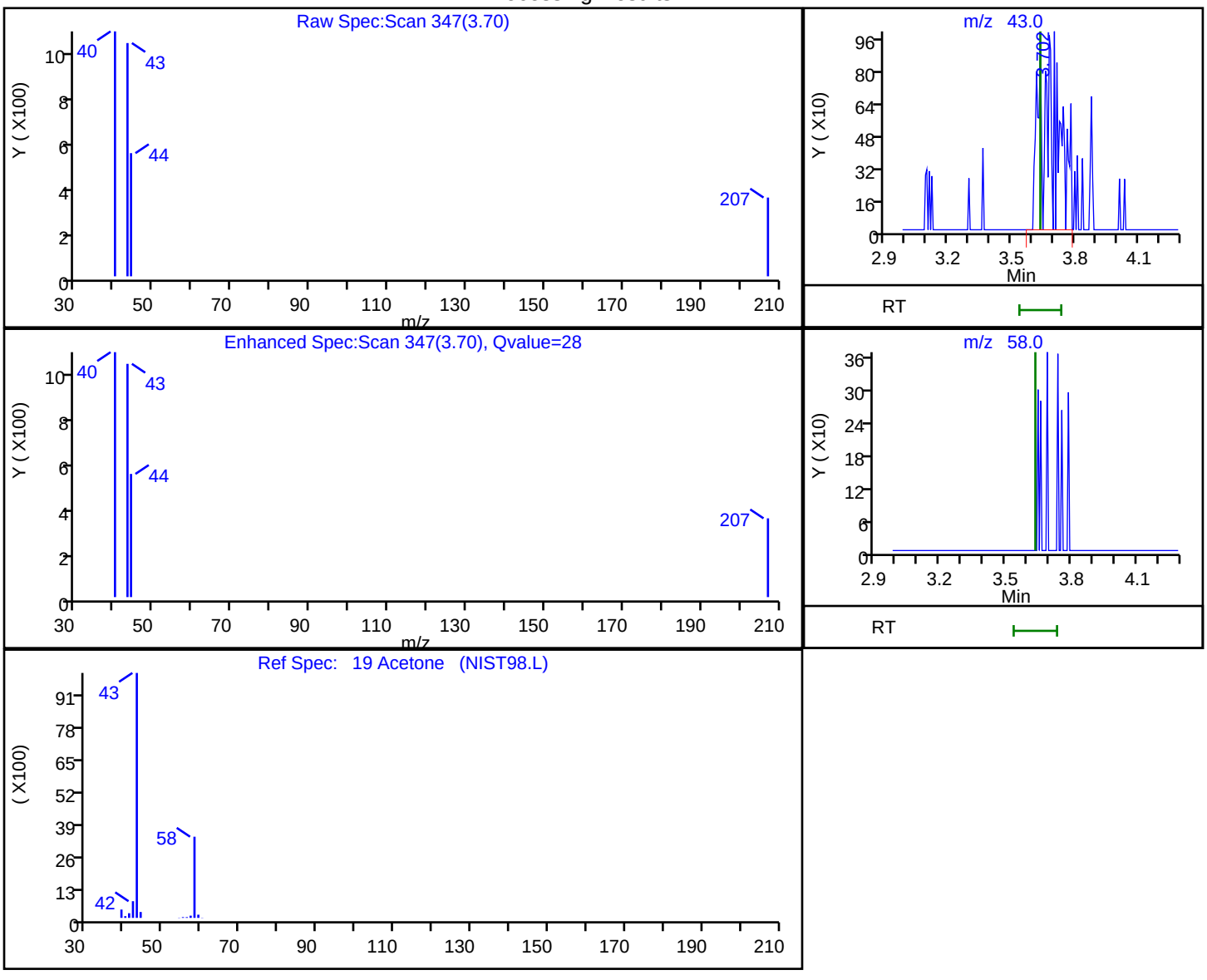
User Disabled Compound Report

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S03.D				
Injection Date:	04-Aug-2021 20:46:30	Instrument ID:	19094		
Lims ID:	410-49448-A-16	Lab Sample ID:	410-49448-16		
Client ID:	HD-QC1-0/1-2				
Operator ID:	MEC29284	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

19 Acetone, CAS: 67-64-1

Processing Results



RT	Mass	Response	Amount
3.70	43.00	5436	0.587402
3.64	58.00	0	

Reviewer: kaewrungrueangp, 05-Aug-2021 10:49:33

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

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1 Analy Batch No.: 143886

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2021 18:47 Calibration End Date: 06/30/2021 20:52 Calibration ID: 28257

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-143886/20	HU30I17.D
Level 2	IC 410-143886/19	HU30I16.D
Level 3	IC 410-143886/18	HU30I15.D
Level 4	IC 410-143886/17	HU30I14.D
Level 5	IC 410-143886/16	HU30I13.D
Level 6	ICIS 410-143886/15	HU30I12.D
Level 7	IC 410-143886/14	HU30I11.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	0.2801 0.2877	0.2803 0.2806	0.2794	0.2930	0.2846	Ave		0.2837			0.1000	1.8		20.0			
Chloromethane	0.3461 0.3372	0.3662 0.3405	0.3394	0.3405	0.3332	Ave		0.3433			0.1000	3.2		20.0			
1,3-Butadiene	0.2955 0.3178	0.3364 0.3067	0.3286	0.3303	0.3063	Ave		0.3174				4.8		20.0			
Vinyl chloride	0.3486 0.3520	0.3484 0.3515	0.3523	0.3367	0.3380	Ave		0.3468			0.1000	1.9		20.0			
Bromomethane	0.2608 0.2503	0.2690 0.2531	0.2530	0.2584	0.2517	Ave		0.2566			0.1000	2.6		20.0			
Chloroethane	0.2265 0.2161	0.2361 0.2212	0.2232	0.2290	0.2178	Ave		0.2243			0.1000	3.1		20.0			
Dichlorofluoromethane	0.5192 0.5082	0.5332 0.5116	0.5201	0.5237	0.5026	Ave		0.5169			0.1000	2.0		20.0			
Trichlorofluoromethane	0.4380 0.4583	0.4658 0.4549	0.4572	0.4707	0.4498	Ave		0.4564			0.1000	2.3		20.0			
Ethyl ether	0.1847 0.1984	0.2069 0.1978	0.1958	0.1981	0.1992	Ave		0.1973				3.3		20.0			
Freon 123a	0.3685 0.3610	0.3738 0.3614	0.3556	0.3720	0.3571	Ave		0.3642				2.0		20.0			
Acrolein	2.8510 3.0387	2.8034 2.8695	2.9679	2.9178	2.8719	Ave		2.9029				2.7		20.0			
1,1-Dichloroethene	0.2815 0.2548	0.2760 0.2598	0.2614	0.2638	0.2546	Ave		0.2646			0.1000	3.9		20.0			
Acetone	4.5008 3.2885	4.3061 3.1158	3.6229	3.4827	3.3808	Ave		3.6711			0.1000	14.4		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.: 410-49448-1 Analy Batch No.: 143886

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2021 18:47 Calibration End Date: 06/30/2021 20:52 Calibration ID: 28257

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Freon 113	0.2708 0.2768	0.2787 0.2801	0.2861	0.2928	0.2835	Ave		0.2813			0.1000	2.5		20.0			
Methyl iodide	0.4657 0.4556	0.4852 0.4678	0.4471	0.4684	0.4629	Ave		0.4647				2.5		20.0			
Carbon disulfide	0.8259 0.7707	0.8196 0.8012	0.7694	0.7997	0.7797	Ave		0.7952			0.1000	2.9		20.0			
Methyl acetate	12.785 10.406	13.272 10.828	8.9668	9.4124	10.748	Ave		10.917			0.1000	14.7		20.0			
Allyl chloride	0.4912 0.4487	0.4852 0.4646	0.4528	0.4730	0.4542	Ave		0.4671				3.6		20.0			
Methylene Chloride	0.2850 0.2685	0.2881 0.2755	0.2746	0.2793	0.2713	Ave		0.2775			0.1000	2.6		20.0			
t-Butyl alcohol	1.1424 1.0678	1.2932 1.0923	1.1097	1.1579	1.1360	Ave		1.1428				6.4		20.0			
Acrylonitrile	4.6120 4.9293	4.6248 4.8444	4.6356	4.8208	5.0692	Ave		4.7909				3.7		20.0			
Methyl tert-butyl ether	0.6292 0.6066	0.6672 0.6137	0.6249	0.6247	0.6232	Ave		0.6271			0.1000	3.1		20.0			
trans-1,2-Dichloroethene	0.2980 0.2761	0.3039 0.2818	0.2777	0.2835	0.2786	Ave		0.2856			0.1000	3.8		20.0			
n-Hexane	0.4362 0.4583	0.4537 0.4624	0.4561	0.4722	0.4627	Ave		0.4574				2.4		20.0			
1,1-Dichloroethane	0.5143 0.5158	0.5364 0.5321	0.5200	0.5271	0.5257	Ave		0.5245			0.2000	1.6		20.0			
di-Isopropyl ether	0.8928 0.9072	0.9321 0.9256	0.9115	0.9267	0.9217	Ave		0.9168				1.5		20.0			
2-Chloro-1,3-butadiene	0.4382 0.4430	0.4445 0.4554	0.4399	0.4426	0.4374	Ave		0.4430				1.4		20.0			
Ethyl t-butyl ether	0.8061 0.7786	0.8194 0.7909	0.7824	0.8076	0.7941	Ave		0.7970				1.8		20.0			
2-Butanone (MEK)	6.0251 6.3613	5.8765 6.2396	6.3030	6.0033	6.1798	Ave		6.1412			0.1000	2.9		20.0			
cis-1,2-Dichloroethene	0.3456 0.2990	0.3249 0.3090	0.3072	0.3140	0.3071	Ave		0.3153			0.1000	4.9		20.0			
2,2-Dichloropropane	0.4466 0.4243	0.4328 0.4313	0.4177	0.4241	0.4200	Ave		0.4281				2.3		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.: 410-49448-1 Analy Batch No.: 143886

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2021 18:47 Calibration End Date: 06/30/2021 20:52 Calibration ID: 28257

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	1.7016 1.7827	1.8351 1.6963	1.7354	1.7474	1.6927	Ave		1.7416				3.0		20.0			
Methacrylonitrile	6.0292 6.6147	6.4182 6.5437	6.4189	6.3691	6.4778	Ave		6.4102				2.9		20.0			
Bromochloromethane	0.1243 0.1227	0.1308 0.1283	0.1229	0.1289	0.1253	Ave		0.1262				2.5		20.0			
Tetrahydrofuran	1.6144 1.7388	1.7436 1.6476	1.7759	1.7005	1.6984	Ave		1.7027				3.3		20.0			
Chloroform	0.4886 0.4831	0.5069 0.5010	0.4878	0.4951	0.4888	Ave		0.4930			0.2000	1.7		20.0			
1,1,1-Trichloroethane	0.4780 0.4404	0.4619 0.4557	0.4399	0.4485	0.4457	Ave		0.4529			0.1000	3.0		20.0			
Cyclohexane	0.5539 0.5641	0.5644 0.5717	0.5673	0.5954	0.5713	Ave		0.5697			0.1000	2.2		20.0			
1,1-Dichloropropene	0.4197 0.4102	0.4206 0.4241	0.4081	0.4244	0.4099	Ave		0.4167				1.7		20.0			
Carbon tetrachloride	0.4044 0.3893	0.3870 0.3969	0.3779	0.3933	0.3891	Ave		0.3911			0.1000	2.1		20.0			
Isobutyl alcohol	0.4998 0.4158	0.4737 0.3953	0.4387	0.4077	0.4040	Ave		0.4336				9.1		20.0			
Benzene	1.2355 1.1654	1.2258 1.2010	1.1641	1.2109	1.1796	Ave		1.1975			0.5000	2.4		20.0			
1,2-Dichloroethane	0.3263 0.2753	0.3031 0.2886	0.2949	0.2736	0.2858	Ave		0.2925			0.1000	6.2		20.0			
t-Amyl methyl ether	0.7025 0.6816	0.7269 0.6971	0.6900	0.7100	0.7003	Ave		0.7012				2.1		20.0			
n-Heptane	0.5006 0.4912	0.5157 0.4854	0.4977	0.5147	0.4873	Ave		0.4989				2.5		20.0			
n-Butanol	0.3770 0.3920	0.3860 0.3742	0.3606	0.3814	0.3871	Ave		0.3797				2.7		20.0			
Trichloroethene	0.2983 0.3031	0.3145 0.3138	0.3054	0.3197	0.3029	Ave		0.3083			0.2000	2.5		20.0			
Methylcyclohexane	0.5789 0.5763	0.5764 0.5790	0.5743	0.6056	0.5888	Ave		0.5828			0.1000	1.9		20.0			
1,2-Dichloropropane	0.3015 0.3036	0.3178 0.3104	0.3110	0.3163	0.3073	Ave		0.3097			0.1000	2.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1 Analy Batch No.: 143886

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2021 18:47 Calibration End Date: 06/30/2021 20:52 Calibration ID: 28257

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	10.610 12.494	11.930 12.692	11.507	11.345	12.058	Ave		11.805				6.1		20.0			
1,4-Dioxane	0.0652 0.0818	0.0755 0.0712	0.0783	0.0885	0.0802	Ave		0.0773			0.0050	9.8		20.0			
Dibromomethane	0.1296 0.1317	0.1328 0.1352	0.1315	0.1374	0.1316	Ave		0.1328				2.0		20.0			
Bromodichloromethane	0.3456 0.3432	0.3316 0.3603	0.3388	0.3546	0.3504	Ave		0.3464			0.2000	2.8		20.0			
2-Nitropropane	3.3749 3.1775	2.8540 3.1895	3.0493	3.0341	3.1620	Ave		3.1202				5.2		20.0			
cis-1,3-Dichloropropene	0.4271 0.4521	0.4353 0.4708	0.4382	0.4614	0.4528	Ave		0.4483			0.2000	3.4		20.0			
4-Methyl-2-pentanone (MIBK)	13.760 16.023	15.433 15.813	15.443	15.400	15.731	Ave		15.372			0.1000	4.9		20.0			
Toluene	1.0740 1.0044	1.0031 1.0228	1.0305	1.0291	1.0119	Ave		1.0251			0.4000	2.4		20.0			
trans-1,3-Dichloropropene	0.4455 0.4904	0.4797 0.5007	0.4728	0.4894	0.4817	Ave		0.4800			0.1000	3.7		20.0			
Ethyl methacrylate	0.3279 0.3811	0.3507 0.3875	0.3609	0.3774	0.3843	Ave		0.3671				5.9		20.0			
1,1,2-Trichloroethane	0.2549 0.2608	0.2511 0.2635	0.2602	0.2684	0.2709	Ave		0.2614			0.1000	2.7		20.0			
Tetrachloroethene	0.4471 0.4409	0.4432 0.4552	0.4327	0.4530	0.4398	Ave		0.4446			0.2000	1.8		20.0			
1,3-Dichloropropane	0.4315 0.4563	0.4360 0.4656	0.4604	0.4725	0.4573	Ave		0.4542				3.3		20.0			
2-Hexanone	9.7068 10.989	10.197 10.997	10.548	10.379	10.783	Ave		10.514			0.1000	4.4		20.0			
Dibromochloromethane	0.3123 0.3260	0.3298 0.3388	0.3118	0.3262	0.3278	Ave		0.3246				3.0		20.0			
1,2-Dibromoethane (EDB)	0.2575 0.2492	0.2521 0.2538	0.2497	0.2492	0.2526	Ave		0.2520			0.1000	1.2		20.0			
1-Chlorohexane	0.6775 0.6035	0.6291 0.6151	0.6036	0.6235	0.6073	Ave		0.6228				4.2		20.0			
Chlorobenzene	1.0837 1.0746	1.0960 1.0994	1.0736	1.1022	1.0779	Ave		1.0868			0.5000	1.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1 Analy Batch No.: 143886

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2021 18:47 Calibration End Date: 06/30/2021 20:52 Calibration ID: 28257

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	0.3649 0.3693	0.3768 0.3793	0.3613	0.3771	0.3683	Ave		0.3710				1.8		20.0			
Ethylbenzene	1.9147 1.9179	1.9442 1.9737	1.8935	1.9633	1.9388	Ave		1.9351			0.1000	1.5		20.0			
m&p-Xylene	0.7127 0.7430	0.7206 0.7689	0.7296	0.7530	0.7496	Ave		0.7396			0.1000	2.7		20.0			
o-Xylene	0.7213 0.7315	0.7173 0.7546	0.7186	0.7468	0.7362	Ave		0.7323			0.3000	2.0		20.0			
Styrene	1.1258 1.1913	1.1381 1.2412	1.1354	1.1895	1.1869	Ave		1.1726			0.3000	3.5		20.0			
Bromoform	0.1683 0.1840	0.1742 0.1912	0.1723	0.1823	0.1839	Ave		0.1795			0.1000	4.5		20.0			
Isopropylbenzene	1.8045 1.9052	1.8377 1.9765	1.8679	1.9260	1.9065	Ave		1.8892			0.1000	3.0		20.0			
1,1,2,2-Tetrachloroethane	0.6104 0.5998	0.6303 0.5984	0.5848	0.6006	0.6162	Ave		0.6058			0.3000	2.4		20.0			
Bromobenzene	0.7224 0.7742	0.7632 0.8014	0.7712	0.7761	0.7731	Ave		0.7688				3.1		20.0			
trans-1,4-Dichloro-2-butene	4.8070 5.6261	5.0964 5.8227	5.5245	5.4125	5.4915	Ave		5.3972				6.3		20.0			
1,2,3-Trichloropropane	0.1391 0.1525	0.1671 0.1504	0.1585	0.1588	0.1567	Ave		0.1547				5.6		20.0			
N-Propylbenzene	4.0573 4.2448	4.1666 4.3983	4.1371	4.3509	4.3009	Ave		4.2365				2.9		20.0			
2-Chlorotoluene	0.7825 0.8257	0.8488 0.8553	0.8205	0.8276	0.8378	Ave		0.8283				2.9		20.0			
1,3,5-Trimethylbenzene	2.8244 2.9835	2.9570 3.1007	2.8763	3.0336	2.9792	Ave		2.9650				3.1		20.0			
4-Chlorotoluene	0.7779 0.8429	0.8360 0.8616	0.8182	0.8583	0.8563	Ave		0.8359				3.6		20.0			
tert-Butylbenzene	0.6663 0.6362	0.6595 0.6628	0.6247	0.6423	0.6252	Ave		0.6453				2.7		20.0			
Pentachloroethane	0.4550 0.4908	0.4780 0.5038	0.4593	0.4765	0.4882	Ave		0.4788				3.6		20.0			
1,2,4-Trimethylbenzene	2.8721 3.0495	2.9993 3.1534	2.9820	3.0316	3.0829	Ave		3.0244				2.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1 Analy Batch No.: 143886

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2021 18:47 Calibration End Date: 06/30/2021 20:52 Calibration ID: 28257

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	3.5372 3.8081	3.6032 3.9748	3.6568	3.8416	3.7949	Ave		3.7452				4.1		20.0			
1,3-Dichlorobenzene	1.5138 1.5785	1.6102 1.6487	1.5743	1.5836	1.5822	Ave		1.5845			0.6000	2.6		20.0			
p-Isopropyltoluene	2.9892 3.2174	3.0659 3.3633	3.0852	3.2532	3.2028	Ave		3.1681				4.0		20.0			
1,4-Dichlorobenzene	1.5146 1.5711	1.5193 1.6218	1.5384	1.5853	1.5827	Ave		1.5619			0.5000	2.5		20.0			
1,2,3-Trimethylbenzene	1.3450 1.3234	1.3601 1.3746	1.3247	1.3389	1.3517	Ave		1.3455				1.4		20.0			
Benzyl chloride	0.2240 0.2567	0.2481 0.2648	0.2374	0.2487	0.2591	Ave		0.2484				5.6		20.0			
n-Butylbenzene	1.4947 1.6354	1.5116 1.7122	1.5606	1.6251	1.6287	Ave		1.5955				4.8		20.0			
1,2-Dichlorobenzene	1.3718 1.4441	1.4448 1.4887	1.3860	1.4660	1.4511	Ave		1.4361			0.4000	2.9		20.0			
1,2-Dibromo-3-Chloropropane	0.0888 0.0850	0.0826 0.0865	0.0867	0.0918	0.0883	Ave		0.0871			0.0500	3.4		20.0			
1,3,5-Trichlorobenzene	1.0747 1.1419	1.1432 1.2133	1.1188	1.1664	1.1508	Ave		1.1442				3.7		20.0			
1,2,4-Trichlorobenzene	0.9089 0.9782	0.9298 1.0386	0.9376	0.9996	0.9884	Ave		0.9687			0.2000	4.7		20.0			
Hexachlorobutadiene	0.5483 0.4151	0.4378 0.4468	0.4276	0.4215	0.4102	Ave		0.4439				10.8		20.0			
Naphthalene	1.6870 1.8834	1.8684 1.9279	1.8929	1.8962	1.9372	Ave		1.8704				4.5		20.0			
1,2,3-Trichlorobenzene	0.8277 0.8346	0.8222 0.8789	0.8177	0.8668	0.8385	Ave		0.8409				2.8		20.0			
Dibromofluoromethane (Surr)	0.2415 0.2428	0.2423 0.2446	0.2399	0.2391	0.2432	Ave		0.2419				0.8		20.0			
1,2-Dichloroethane-d4 (Surr)	0.0489 0.0496	0.0478 0.0488	0.0495	0.0480	0.0494	Ave		0.0489				1.5		20.0			
Toluene-d8 (Surr)	1.3467 1.3557	1.3408 1.3324	1.3394	1.3448	1.3461	Ave		1.3437				0.5		20.0			
4-Bromofluorobenzene (Surr)	0.4882 0.4900	0.4872 0.4906	0.4933	0.4922	0.4910	Ave		0.4904				0.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1 Analy Batch No.: 143886

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2021 18:47 Calibration End Date: 06/30/2021 20:52 Calibration ID: 28257

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-143886/20	HU30I17.D
Level 2	IC 410-143886/19	HU30I16.D
Level 3	IC 410-143886/18	HU30I15.D
Level 4	IC 410-143886/17	HU30I14.D
Level 5	IC 410-143886/16	HU30I13.D
Level 6	ICIS 410-143886/15	HU30I12.D
Level 7	IC 410-143886/14	HU30I11.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	13019 681423	32672 1601690	66364	138915	338189	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloromethane	FB	Ave	16089 798647	42684 1943433	80619	161392	395924	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Butadiene	FB	Ave	13736 752797	39212 1750592	78040	156564	363910	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Vinyl chloride	FB	Ave	16206 833802	40611 2006367	83686	159630	401544	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromomethane	FB	Ave	12123 592976	31357 1444659	60093	122506	299014	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloroethane	FB	Ave	10530 511990	27515 1262397	53016	108575	258719	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dichlorofluoromethane	FB	Ave	24134 1203800	62144 2919773	123533	248263	597161	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Trichlorofluoromethane	FB	Ave	20361 1085631	54287 2596449	108599	223111	534454	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl ether	FB	Ave	8587 470003	24120 1128889	46497	93912	236665	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Freon 123a	FB	Ave	17132 855150	43574 2062910	84470	176353	424338	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acrolein	TBAd 10	Ave	72018 3764378	179558 8625987	377461	761837	1871143	10.0 500	25.0 1250	50.0	100	250
1,1-Dichloroethene	FB	Ave	13087 603570	32175 1482963	62094	125071	302484	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acetone	TBAd 10	Ave	22738	55161	92153	181864	440548	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.: 410-49448-1 Analy Batch No.: 143886

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2021 18:47 Calibration End Date: 06/30/2021 20:52 Calibration ID: 28257

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
			814769	1873303				100	250			
Freon 113	FB	Ave	12587 655709	32486 1598905	67947	138808	336832	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl iodide	FB	Ave	21648 1079294	56553 2669715	106201	222043	549957	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon disulfide	FB	Ave	38392 1825531	95530 4572744	182745	379081	926405	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl acetate	TBAd 10	Ave	6459 257817	17001 650971	22808	49151	140053	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Allyl chloride	FB	Ave	22835 1062825	56549 2651483	107556	224215	539661	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylene Chloride	FB	Ave	13248 636060	33585 1572369	65226	132393	322305	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Butyl alcohol	TBAd 10	Ave	11543 529129	33132 1313366	56455	120927	296069	4.00 200	10.0 500	20.0	40.0	100
Acrylonitrile	TBAd 10	Ave	5825 305323	14811 728138	29478	62935	165139	0.500 25.0	1.25 62.5	2.50	5.00	12.5
Methyl tert-butyl ether	FB	Ave	29252 1437005	77764 3502835	148415	296149	740461	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,2-Dichloroethene	FB	Ave	13853 653905	35425 1608114	65953	134377	331027	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Hexane	FB	Ave	20277 1085556	52878 2639188	108339	223862	549761	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloroethane	FB	Ave	23907 1221895	62520 3037061	123496	249883	624577	0.200 10.0	0.500 25.0	1.00	2.00	5.00
di-Isopropyl ether	FB	Ave	41506 2149011	108639 5282775	216486	439271	1095077	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chloro-1,3-butadiene	FB	Ave	20370 1049389	51812 2599089	104470	209804	519671	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl t-butyl ether	FB	Ave	37475 1844217	95509 4513870	185822	382829	943498	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Butanone (MEK)	TBAd 10	Ave	30439	75278	160322	313488	805274	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.: 410-49448-1 Analy Batch No.: 143886

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2021 18:47 Calibration End Date: 06/30/2021 20:52 Calibration ID: 28257

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
			1576072	3751385				100	250			
cis-1,2-Dichloroethene	FB	Ave	16068 708268	37869 1763529	72968	148841	364845	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2,2-Dichloropropane	FB	Ave	20763 1005080	50450 2461884	99215	201027	498977	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Propionitrile	TBAd 10	Ave	17193 883346	47015 2039729	88284	182497	441133	4.00 200	10.0 500	20.0	40.0	100
Methacrylonitrile	TBAd 10	Ave	30460 1638847	82218 3934230	163270	332590	844113	2.00 100	5.00 250	10.0	20.0	50.0
Bromochloromethane	FB	Ave	5780 290657	15243 732281	29194	61080	148844	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrahydrofuran	TBAd 10	Ave	4078 215405	11168 495275	22586	44399	110660	1.00 50.0	2.50 125	5.00	10.0	25.0
Chloroform	FB	Ave	22713 1144290	59078 2859455	115860	234689	580702	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1-Trichloroethane	FB	Ave	22220 1043111	53837 2600800	104482	212588	529529	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Cyclohexane	FB	Ave	25749 1336164	65783 3263229	134731	282228	678761	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloropropene	FB	Ave	19511 971750	49023 2420777	96932	201187	486976	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon tetrachloride	FB	Ave	18800 922051	45103 2265363	89759	186450	462265	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isobutyl alcohol	TBAd 10	Ave	12626 515052	30343 1188172	55793	106453	263232	10.0 500	25.0 1250	50.0	100	250
Benzene	FB	Ave	57437 2760550	142873 6854464	276493	574020	1401511	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloroethane	FB	Ave	15168 652043	35331 1647253	70042	129699	339565	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Amyl methyl ether	FB	Ave	32655 1614611	84725 3978983	163890	336551	832079	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Heptane	FB	Ave	23273	60114	118198	244002	578975	0.200	0.500	1.00	2.00	5.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1 Analy Batch No.: 143886

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2021 18:47 Calibration End Date: 06/30/2021 20:52 Calibration ID: 28257

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
			1163443	2770496				10.0	25.0			
n-Butanol	TBAd 10	Ave	16666 849724	43261 1968337	80263	174266	441342	17.5 875	43.8 2188	87.5	175	438
Trichloroethene	FB	Ave	13869 717979	36661 1790967	72534	151559	359861	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylcyclohexane	FB	Ave	26913 1365125	67186 3304385	136413	287061	699533	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloropropane	FB	Ave	14017 719136	37045 1771566	73856	149923	365053	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl methacrylate	TBAd 10	Ave	5360 309542	15282 763044	29268	59244	157123	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,4-Dioxane	TBAd 10	Ave	1646 101395	4839 214174	9956	23116	52279	10.0 500	25.0 1250	50.0	100	250
Dibromomethane	FB	Ave	6025 312009	15480 771631	31242	65152	156400	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromodichloromethane	FB	Ave	16067 812931	38647 2056360	80478	168091	416299	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Nitropropane	TBAd 10	Ave	8525 393627	18280 958802	38781	79219	206014	1.00 50.0	2.50 125	5.00	10.0	25.0
cis-1,3-Dichloropropene	FB	Ave	19856 1070830	50741 2687299	104079	218728	538018	0.200 10.0	0.500 25.0	1.00	2.00	5.00
4-Methyl-2-pentanone (MIBK)	TBAd 10	Ave	69516 3969771	197694 9506976	392816	804194	2049827	2.00 100	5.00 250	10.0	20.0	50.0
Toluene	CBZd 5	Ave	36703 1749612	85514 4372182	181542	358689	886869	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,3-Dichloropropene	CBZd 5	Ave	15224 854205	40897 2140328	83292	170576	422144	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl methacrylate	CBZd 5	Ave	11206	29902	63584	131550	336840	0.200	0.500	1.00	2.00	5.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1 Analy Batch No.: 143886

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2021 18:47 Calibration End Date: 06/30/2021 20:52 Calibration ID: 28257

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
			663882	1656748				10.0	25.0			
1,1,2-Trichloroethane	CBZd 5	Ave	8711 454387	21410 1126535	45845	93531	237393	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrachloroethene	CBZd 5	Ave	15278 768025	37787 1946076	76238	157898	385439	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichloropropane	CBZd 5	Ave	14747 794846	37169 1990239	81109	164681	400827	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Hexanone	TBAd 10	Ave	49039 2722733	130621 6611635	268297	542006	1405119	2.00 100	5.00 250	10.0	20.0	50.0
Dibromochloromethane	CBZd 5	Ave	10673 567821	28113 1448318	54928	113678	287250	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromoethane (EDB)	CBZd 5	Ave	8799 434104	21493 1084914	43997	86844	221375	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1-Chlorohexane	CBZd 5	Ave	23155 1051311	53627 2629535	106347	217321	532219	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chlorobenzene	CBZd 5	Ave	37034 1871985	93436 4699589	189144	384144	944659	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1,2-Tetrachloroethane	CBZd 5	Ave	12469 643329	32120 1621389	63655	131450	322791	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethylbenzene	CBZd 5	Ave	65435 3340961	165739 8437158	333584	684274	1699157	0.200 10.0	0.500 25.0	1.00	2.00	5.00
m&p-Xylene	CBZd 5	Ave	48715 2588741	122857 6573619	257064	524881	1313906	0.400 20.0	1.00 50.0	2.00	4.00	10.0
o-Xylene	CBZd 5	Ave	24649	61149	126601	260295	645238	0.200	0.500	1.00	2.00	5.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1 Analy Batch No.: 143886

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2021 18:47 Calibration End Date: 06/30/2021 20:52 Calibration ID: 28257

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
			1274345	3225628				10.0	25.0			
Styrene	CBZd 5	Ave	38473 2075266	97020 5306022	200036	414592	1040181	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromoform	CBZd 5	Ave	5750 320604	14848 817361	30349	63547	161178	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isopropylbenzene	CBZd 5	Ave	61669 3318903	156666 8449089	329083	671280	1670865	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	11094 555046	28190 1360580	54467	111158	286285	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromobenzene	DCBd 4	Ave	13130 716404	34134 1822102	71823	143640	359170	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,4-Dichloro-2-butene	TBAd 10	Ave	24285 1393924	65285 3500696	140522	282634	715589	2.00 100	5.00 250	10.0	20.0	50.0
1,2,3-Trichloropropane	DCBd 4	Ave	2529 141094	7472 341976	14760	29390	72812	0.200 10.0	0.500 25.0	1.00	2.00	5.00
N-Propylbenzene	DCBd 4	Ave	73743 3928173	186344 10000218	385296	805258	1998081	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chlorotoluene	DCBd 4	Ave	14222 764082	37963 1944611	76419	153173	389198	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3,5-Trimethylbenzene	DCBd 4	Ave	51335 2760970	132249 7050045	267877	561452	1384048	0.200 10.0	0.500 25.0	1.00	2.00	5.00
4-Chlorotoluene	DCBd 4	Ave	14139 779996	37390 1959054	76197	158846	397803	0.200 10.0	0.500 25.0	1.00	2.00	5.00
tert-Butylbenzene	DCBd 4	Ave	12110	29494	58182	118881	290450	0.200	0.500	1.00	2.00	5.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1 Analy Batch No.: 143886

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2021 18:47 Calibration End Date: 06/30/2021 20:52 Calibration ID: 28257

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
			588697	1506920				10.0	25.0			
Pentachloroethane	DCBd 4	Ave	8269 454145	21378 1145428	42777	88184	226799	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,4-Trimethylbenzene	DCBd 4	Ave	52202 2822044	134140 7169877	277722	561086	1432252	0.200 10.0	0.500 25.0	1.00	2.00	5.00
sec-Butylbenzene	DCBd 4	Ave	64290 3524005	161149 9037470	340566	710997	1763011	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichlorobenzene	DCBd 4	Ave	27515 1460720	72016 3748531	146613	293098	735031	0.200 10.0	0.500 25.0	1.00	2.00	5.00
p-Isopropyltoluene	DCBd 4	Ave	54331 2977390	137118 7646950	287327	602094	1487952	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,4-Dichlorobenzene	DCBd 4	Ave	27528 1453895	67950 3687456	143278	293408	735276	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,3-Trimethylbenzene	DCBd 4	Ave	24446 1224709	60830 3125399	123375	247797	627948	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Benzyl chloride	DCBd 4	Ave	4072 237586	11097 602066	22106	46025	120388	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Butylbenzene	DCBd 4	Ave	27167 1513367	67602 3893005	145342	300776	756654	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichlorobenzene	DCBd 4	Ave	24933 1336363	64617 3384925	129078	271331	674154	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1614 78686	3696 196674	8077	16991	41042	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3,5-Trichlorobenzene	DCBd 4	Ave	19533	51129	104194	215876	534628	0.200	0.500	1.00	2.00	5.00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1 Analy Batch No.: 143886

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2021 18:47 Calibration End Date: 06/30/2021 20:52 Calibration ID: 28257

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
			1056692	2758645				10.0	25.0			
1,2,4-Trichlorobenzene	DCBd 4	Ave	16520 905237	41586 2361522	87323	185008	459178	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Hexachlorobutadiene	DCBd 4	Ave	9966 384107	19579 1015791	39826	78006	190585	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Naphthalene	DCBd 4	Ave	30662 1742873	83563 4383338	176289	350947	899975	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,3-Trichlorobenzene	DCBd 4	Ave	15043 772332	36773 1998307	76158	160424	389563	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dibromofluoromethane (Surr)	FB	Ave	561388 575224	564931 558502	569771	566710	577949	10.0 10.0	10.0 10.0	10.0	10.0	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	113679 117405	111322 111500	117606	113733	117358	10.0 10.0	10.0 10.0	10.0	10.0	10.0
Toluene-d8 (Surr)	CBZd 5	Ave	2301167 2361675	2286008 2278266	2359714	2343496	2359527	10.0 10.0	10.0 10.0	10.0	10.0	10.0
4-Bromofluorobenzene (Surr)	CBZd 5	Ave	834134 853639	830728 838893	869052	857695	860567	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.: 410-49448-1 Analy Batch No.: 143886

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2021 18:47 Calibration End Date: 06/30/2021 20:52 Calibration ID: 28257

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-143886/20	HU30I17.D
Level 2	IC 410-143886/19	HU30I16.D
Level 3	IC 410-143886/18	HU30I15.D
Level 4	IC 410-143886/17	HU30I14.D
Level 5	IC 410-143886/16	HU30I13.D
Level 6	ICIS 410-143886/15	HU30I12.D
Level 7	IC 410-143886/14	HU30I11.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	-1.3 -1.1	-1.2	-1.5	3.3	0.3	1.4	50 30	30	30	30	30	30
Chloromethane	0.8 -0.8	6.7	-1.1	-0.8	-2.9	-1.8	50 30	30	30	30	30	30
1,3-Butadiene	-6.9 -3.4	6.0	3.5	4.1	-3.5	0.1	50 30	30	30	30	30	30
Vinyl chloride	0.5 1.4	0.5	1.6	-2.9	-2.5	1.5	50 30	30	30	30	30	30
Bromomethane	1.6 -1.4	4.8	-1.4	0.7	-1.9	-2.5	50 30	30	30	30	30	30
Chloroethane	1.0 -1.4	5.3	-0.5	2.1	-2.9	-3.6	50 30	30	30	30	30	30
Dichlorofluoromethane	0.4 -1.0	3.1	0.6	1.3	-2.8	-1.7	50 30	30	30	30	30	30
Trichlorofluoromethane	-4.0 -0.3	2.1	0.2	3.1	-1.4	0.4	50 30	30	30	30	30	30
Ethyl ether	-6.4 0.3	4.9	-0.8	0.4	1.0	0.6	50 30	30	30	30	30	30
Freon 123a	1.2 -0.8	2.6	-2.4	2.1	-1.9	-0.9	50 30	30	30	30	30	30
Acrolein	-1.8 -1.2	-3.4	2.2	0.5	-1.1	4.7	50 30	30	30	30	30	30
1,1-Dichloroethene	6.4 -1.8	4.3	-1.2	-0.3	-3.8	-3.7	50 30	30	30	30	30	30
Acetone	22.6 -15.1	17.3	-1.3	-5.1	-7.9	-10.4	50 30	30	30	30	30	30
Freon 113	-3.7 -0.4	-0.9	1.7	4.1	0.8	-1.6	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1 Analy Batch No.: 143886

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2021 18:47 Calibration End Date: 06/30/2021 20:52 Calibration ID: 28257

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Methyl iodide	0.2 0.7	4.4	-3.8	0.8	-0.4	-1.9	50 30	30	30	30	30	30
Carbon disulfide	3.9 0.8	3.1	-3.2	0.6	-1.9	-3.1	50 30	30	30	30	30	30
Methyl acetate	17.1 -0.8	21.6	-17.9	-13.8	-1.5	-4.7	50 30	30	30	30	30	30
Allyl chloride	5.2 -0.5	3.9	-3.1	1.3	-2.8	-3.9	50 30	30	30	30	30	30
Methylene Chloride	2.7 -0.7	3.8	-1.0	0.7	-2.2	-3.2	50 30	30	30	30	30	30
t-Butyl alcohol	0.0 -4.4	13.2	-2.9	1.3	-0.6	-6.6	50 30	30	30	30	30	30
Acrylonitrile	-3.7 1.1	-3.5	-3.2	0.6	5.8	2.9	50 30	30	30	30	30	30
Methyl tert-butyl ether	0.3 -2.1	6.4	-0.4	-0.4	-0.6	-3.3	50 30	30	30	30	30	30
trans-1,2-Dichloroethene	4.3 -1.4	6.4	-2.8	-0.8	-2.5	-3.4	50 30	30	30	30	30	30
n-Hexane	-4.6 1.1	-0.8	-0.3	3.3	1.2	0.2	50 30	30	30	30	30	30
1,1-Dichloroethane	-1.9 1.5	2.3	-0.9	0.5	0.2	-1.6	50 30	30	30	30	30	30
di-Isopropyl ether	-2.6 1.0	1.7	-0.6	1.1	0.5	-1.0	50 30	30	30	30	30	30
2-Chloro-1,3-butadiene	-1.1 2.8	0.3	-0.7	-0.1	-1.3	0.0	50 30	30	30	30	30	30
Ethyl t-butyl ether	1.1 -0.8	2.8	-1.8	1.3	-0.4	-2.3	50 30	30	30	30	30	30
2-Butanone (MEK)	-1.9 1.6	-4.3	2.6	-2.2	0.6	3.6	50 30	30	30	30	30	30
cis-1,2-Dichloroethene	9.6 -2.0	3.1	-2.6	-0.4	-2.6	-5.2	50 30	30	30	30	30	30
2,2-Dichloropropane	4.3 0.8	1.1	-2.4	-0.9	-1.9	-0.9	50 30	30	30	30	30	30
Propionitrile	-2.3 -2.6	5.4	-0.4	0.3	-2.8	2.4	50 30	30	30	30	30	30
Methacrylonitrile	-5.9 2.1	0.1	0.1	-0.6	1.1	3.2	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1 Analy Batch No.: 143886

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2021 18:47 Calibration End Date: 06/30/2021 20:52 Calibration ID: 28257

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	-1.5 1.7	3.7	-2.6	2.1	-0.7	-2.7	50 30	30	30	30	30	30
Tetrahydrofuran	-5.2 -3.2	2.4	4.3	-0.1	-0.3	2.1	50 30	30	30	30	30	30
Chloroform	-0.9 1.6	2.8	-1.1	0.4	-0.9	-2.0	50 30	30	30	30	30	30
1,1,1-Trichloroethane	5.5 0.6	2.0	-2.9	-1.0	-1.6	-2.8	50 30	30	30	30	30	30
Cyclohexane	-2.8 0.4	-0.9	-0.4	4.5	0.3	-1.0	50 30	30	30	30	30	30
1,1-Dichloropropene	0.7 1.8	0.9	-2.1	1.8	-1.6	-1.6	50 30	30	30	30	30	30
Carbon tetrachloride	3.4 1.5	-1.1	-3.4	0.6	-0.5	-0.5	50 30	30	30	30	30	30
Isobutyl alcohol	15.3 -8.8	9.3	1.2	-6.0	-6.8	-4.1	50 30	30	30	30	30	30
Benzene	3.2 0.3	2.4	-2.8	1.1	-1.5	-2.7	50 30	30	30	30	30	30
1,2-Dichloroethane	11.5 -1.3	3.6	0.8	-6.5	-2.3	-5.9	50 30	30	30	30	30	30
t-Amyl methyl ether	0.2 -0.6	3.7	-1.6	1.2	-0.1	-2.8	50 30	30	30	30	30	30
n-Heptane	0.3 -2.7	3.4	-0.3	3.2	-2.3	-1.6	50 30	30	30	30	30	30
n-Butanol	-0.7 -1.5	1.6	-5.0	0.4	1.9	3.2	50 30	30	30	30	30	30
Trichloroethene	-3.2 1.8	2.0	-0.9	3.7	-1.7	-1.7	50 30	30	30	30	30	30
Methylcyclohexane	-0.7 -0.7	-1.1	-1.4	3.9	1.0	-1.1	50 30	30	30	30	30	30
1,2-Dichloropropane	-2.6 0.2	2.6	0.4	2.1	-0.8	-2.0	50 30	30	30	30	30	30
Methyl methacrylate	-10.1 7.5	1.1	-2.5	-3.9	2.1	5.8	50 30	30	30	30	30	30
1,4-Dioxane	-15.7 -7.8	-2.2	1.3	14.6	3.8	5.9	50 30	30	30	30	30	30
Dibromomethane	-2.4 1.8	0.0	-1.0	3.5	-0.9	-0.9	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1 Analy Batch No.: 143886

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2021 18:47 Calibration End Date: 06/30/2021 20:52 Calibration ID: 28257

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	-0.2 4.0	-4.3	-2.2	2.4	1.2	-0.9	50 30	30	30	30	30	30
2-Nitropropane	8.2 2.2	-8.5	-2.3	-2.8	1.3	1.8	50 30	30	30	30	30	30
cis-1,3-Dichloropropene	-4.7 5.0	-2.9	-2.2	2.9	1.0	0.8	50 30	30	30	30	30	30
4-Methyl-2-pentanone (MIBK)	-10.5 2.9	0.4	0.5	0.2	2.3	4.2	50 30	30	30	30	30	30
Toluene	4.8 -0.2	-2.1	0.5	0.4	-1.3	-2.0	50 30	30	30	30	30	30
trans-1,3-Dichloropropene	-7.2 4.3	-0.1	-1.5	2.0	0.3	2.2	50 30	30	30	30	30	30
Ethyl methacrylate	-10.7 5.6	-4.5	-1.7	2.8	4.7	3.8	50 30	30	30	30	30	30
1,1,2-Trichloroethane	-2.5 0.8	-3.9	-0.5	2.7	3.6	-0.2	50 30	30	30	30	30	30
Tetrachloroethene	0.6 2.4	-0.3	-2.7	1.9	-1.1	-0.8	50 30	30	30	30	30	30
1,3-Dichloropropane	-5.0 2.5	-4.0	1.4	4.0	0.7	0.5	50 30	30	30	30	30	30
2-Hexanone	-7.7 4.6	-3.0	0.3	-1.3	2.6	4.5	50 30	30	30	30	30	30
Dibromochloromethane	-3.8 4.4	1.6	-4.0	0.5	1.0	0.4	50 30	30	30	30	30	30
1,2-Dibromoethane (EDB)	2.2 0.7	0.0	-0.9	-1.1	0.2	-1.1	50 30	30	30	30	30	30
1-Chlorohexane	8.8 -1.2	1.0	-3.1	0.1	-2.5	-3.1	50 30	30	30	30	30	30
Chlorobenzene	-0.3 1.2	0.9	-1.2	1.4	-0.8	-1.1	50 30	30	30	30	30	30
1,1,1,2-Tetrachloroethane	-1.7 2.2	1.6	-2.6	1.7	-0.7	-0.5	50 30	30	30	30	30	30
Ethylbenzene	-1.1 2.0	0.5	-2.2	1.5	0.2	-0.9	50 30	30	30	30	30	30
m&p-Xylene	-3.6 4.0	-2.6	-1.4	1.8	1.3	0.5	50 30	30	30	30	30	30
o-Xylene	-1.5 3.0	-2.1	-1.9	2.0	0.5	-0.1	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.: 410-49448-1 Analy Batch No.: 143886

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2021 18:47 Calibration End Date: 06/30/2021 20:52 Calibration ID: 28257

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Styrene	-4.0 5.9	-2.9	-3.2	1.4	1.2	1.6	50 30	30	30	30	30	30
Bromoform	-6.2 6.5	-2.9	-4.0	1.6	2.5	2.6	50 30	30	30	30	30	30
Isopropylbenzene	-4.5 4.6	-2.7	-1.1	1.9	0.9	0.8	50 30	30	30	30	30	30
1,1,2,2-Tetrachloroethane	0.8 -1.2	4.0	-3.5	-0.9	1.7	-1.0	50 30	30	30	30	30	30
Bromobenzene	-6.0 4.2	-0.7	0.3	0.9	0.6	0.7	50 30	30	30	30	30	30
trans-1,4-Dichloro-2-butene	-10.9 7.9	-5.6	2.4	0.3	1.7	4.2	50 30	30	30	30	30	30
1,2,3-Trichloropropane	-10.1 -2.8	8.0	2.4	2.6	1.3	-1.5	50 30	30	30	30	30	30
N-Propylbenzene	-4.2 3.8	-1.7	-2.3	2.7	1.5	0.2	50 30	30	30	30	30	30
2-Chlorotoluene	-5.5 3.3	2.5	-0.9	-0.1	1.1	-0.3	50 30	30	30	30	30	30
1,3,5-Trimethylbenzene	-4.7 4.6	-0.3	-3.0	2.3	0.5	0.6	50 30	30	30	30	30	30
4-Chlorotoluene	-6.9 3.1	0.0	-2.1	2.7	2.4	0.8	50 30	30	30	30	30	30
tert-Butylbenzene	3.3 2.7	2.2	-3.2	-0.5	-3.1	-1.4	50 30	30	30	30	30	30
Pentachloroethane	-5.0 5.2	-0.2	-4.1	-0.5	2.0	2.5	50 30	30	30	30	30	30
1,2,4-Trimethylbenzene	-5.0 4.3	-0.8	-1.4	0.2	1.9	0.8	50 30	30	30	30	30	30
sec-Butylbenzene	-5.6 6.1	-3.8	-2.4	2.6	1.3	1.7	50 30	30	30	30	30	30
1,3-Dichlorobenzene	-4.5 4.1	1.6	-0.6	-0.1	-0.1	-0.4	50 30	30	30	30	30	30
p-Isopropyltoluene	-5.6 6.2	-3.2	-2.6	2.7	1.1	1.6	50 30	30	30	30	30	30
1,4-Dichlorobenzene	-3.0 3.8	-2.7	-1.5	1.5	1.3	0.6	50 30	30	30	30	30	30
1,2,3-Trimethylbenzene	0.0 2.2	1.1	-1.5	-0.5	0.5	-1.6	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-49448-1 Analy Batch No.: 143886

SDG No.:

Instrument ID: 19094 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/30/2021 18:47 Calibration End Date: 06/30/2021 20:52 Calibration ID: 28257

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Benzyl chloride	-9.8 6.6	-0.1	-4.4	0.1	4.3	3.4	50 30	30	30	30	30	30
n-Butylbenzene	-6.3 7.3	-5.3	-2.2	1.9	2.1	2.5	50 30	30	30	30	30	30
1,2-Dichlorobenzene	-4.5 3.7	0.6	-3.5	2.1	1.0	0.6	50 30	30	30	30	30	30
1,2-Dibromo-3-Chloropropane	1.9 -0.7	-5.1	-0.5	5.4	1.4	-2.4	50 30	30	30	30	30	30
1,3,5-Trichlorobenzene	-6.1 6.0	-0.1	-2.2	1.9	0.6	-0.2	50 30	30	30	30	30	30
1,2,4-Trichlorobenzene	-6.2 7.2	-4.0	-3.2	3.2	2.0	1.0	50 30	30	30	30	30	30
Hexachlorobutadiene	23.5 0.6	-1.4	-3.7	-5.1	-7.6	-6.5	50 30	30	30	30	30	30
Naphthalene	-9.8 3.1	-0.1	1.2	1.4	3.6	0.7	50 30	30	30	30	30	30
1,2,3-Trichlorobenzene	-1.6 4.5	-2.2	-2.8	3.1	-0.3	-0.8	50 30	30	30	30	30	30
Dibromofluoromethane (Surr)	-0.2 1.1	0.2	-0.8	-1.2	0.5	0.4	50 30	30	30	30	30	30
1,2-Dichloroethane-d4 (Surr)	0.1 0.0	-2.2	1.4	-1.8	1.1	1.5	50 30	30	30	30	30	30
Toluene-d8 (Surr)	0.2 -0.8	-0.2	-0.3	0.1	0.2	0.9	50 30	30	30	30	30	30
4-Bromofluorobenzene (Surr)	-0.4 0.1	-0.6	0.6	0.4	0.1	-0.1	50 30	30	30	30	30	30

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I11.D
Lims ID: IC std7 25
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 30-Jun-2021 18:47:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0033290-014
Misc. Info.: IC STD7 25
Operator ID: jml01693 Instrument ID: 19094
Sublist: chrom-MSV_19094_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Jul-2021 16:18:08 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: campbellme Date: 01-Jul-2021 00:34:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.001	2.007	-0.006	99	1601690	25.0	24.7	
6 Chloromethane	50	2.196	2.196	0.000	99	1943433	25.0	24.8	
8 Butadiene	39	2.312	2.312	0.000	91	1750592	25.0	24.2	
7 Vinyl chloride	62	2.318	2.324	-0.006	98	2006367	25.0	25.3	
9 Bromomethane	94	2.635	2.635	0.000	90	1444659	25.0	24.7	
10 Chloroethane	64	2.727	2.721	0.006	100	1262397	25.0	24.7	
11 Dichlorofluoromethane	67	2.971	2.971	0.000	97	2919773	25.0	24.7	
13 Trichlorofluoromethane	101	3.038	3.044	-0.006	98	2596449	25.0	24.9	
15 Ethyl ether	59	3.275	3.282	-0.007	92	1128889	25.0	25.1	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.373	3.373	0.000	94	2062910	25.0	24.8	
17 Acrolein	56	3.446	3.458	-0.012	99	8625987	1250.0	1235.6	
18 1,1-Dichloroethene	96	3.598	3.605	-0.007	98	1482963	25.0	24.6	
19 Acetone	43	3.617	3.611	0.006	99	1873303	250.0	212.2	M
20 112TCTFE	101	3.641	3.635	0.006	94	1598905	25.0	24.9	
21 Isopropyl alcohol	45	3.769	3.769	0.000	99	762208	500.0	428.4	M
22 Iodomethane	142	3.806	3.806	0.000	98	2669715	25.0	25.2	
23 Ethyl bromide	108	3.824	3.824	0.000	98	1277842	25.0	25.1	
24 Carbon disulfide	76	3.928	3.916	0.012	99	4572744	25.0	25.2	
26 Methyl acetate	43	4.044	4.056	-0.012	97	650971	25.0	24.8	
27 3-Chloro-1-propene	41	4.074	4.080	-0.006	95	2651483	25.0	24.9	
* 28 t-Butyl alcohol-d10 (IS)	65	4.263	4.257	0.006	41	120244	50.0	50.0	
29 Methylene Chloride	84	4.263	4.263	0.000	93	1572369	25.0	24.8	
30 2-Methyl-2-propanol	59	4.385	4.385	0.000	100	1313366	500.0	477.9	
31 Acrylonitrile	53	4.592	4.617	-0.025	99	728138	62.5	63.2	
32 Methyl tert-butyl ether	73	4.678	4.665	0.013	94	3502835	25.0	24.5	
33 trans-1,2-Dichloroethene	96	4.684	4.696	-0.012	99	1608114	25.0	24.7	
34 Hexane	57	5.110	5.117	-0.007	91	2639188	25.0	25.3	
35 1,1-Dichloroethane	63	5.342	5.348	-0.006	96	3037061	25.0	25.4	
37 Isopropyl ether	45	5.397	5.397	0.000	96	5282775	25.0	25.2	
38 2-Chloro-1,3-butadiene	53	5.452	5.458	-0.006	89	2599089	25.0	25.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.940	5.934	0.006	98	4513870	25.0	24.8	
41 2-Butanone (MEK)	43	6.128	6.135	-0.007	100	3751385	250.0	254.0	
S 40 1,2-Dichloroethene, Total	100				0			49.2	
42 cis-1,2-Dichloroethene	96	6.177	6.183	-0.006	83	1763529	25.0	24.5	
43 2,2-Dichloropropane	77	6.196	6.190	0.006	88	2461884	25.0	25.2	
45 Propionitrile	54	6.214	6.214	0.000	99	2039729	500.0	487.0	
47 Methacrylonitrile	67	6.439	6.440	-0.001	92	3934230	250.0	255.2	
48 Chlorobromomethane	128	6.506	6.507	-0.001	96	732281	25.0	25.4	
49 Tetrahydrofuran	71	6.519	6.531	-0.012	84	495275	125.0	120.9	
50 Chloroform	83	6.659	6.659	0.000	93	2859455	25.0	25.4	
$ 51 Dibromofluoromethane (Surr)	113	6.872	6.872	0.000	93	558502	10.0	10.1	
52 1,1,1-Trichloroethane	97	6.891	6.891	0.000	98	2600800	25.0	25.2	
53 Cyclohexane	56	6.994	6.994	0.000	90	3263229	25.0	25.1	
55 1,1-Dichloropropene	75	7.104	7.104	0.000	98	2420777	25.0	25.4	
56 Carbon tetrachloride	117	7.110	7.110	0.000	95	2265363	25.0	25.4	
57 Isobutyl alcohol	41	7.232	7.232	0.000	95	1188172	1250.0	1139.5	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.336	7.330	0.006	89	111500	10.0	10.0	
59 Benzene	78	7.366	7.366	0.000	96	6854464	25.0	25.1	
60 1,2-Dichloroethane	62	7.439	7.439	0.000	97	1647253	25.0	24.7	
62 Tert-amyl methyl ether	73	7.555	7.555	0.000	99	3978983	25.0	24.9	
* 65 Fluorobenzene (IS)	96	7.768	7.768	0.000	99	2283002	10.0	10.0	
64 n-Heptane	43	7.781	7.781	0.000	92	2770496	25.0	24.3	
66 n-Butanol	56	8.116	8.122	-0.006	87	1968337	2187.5	2155.4	
67 Trichloroethene	95	8.250	8.250	0.000	99	1790967	25.0	25.4	
68 Methylcyclohexane	83	8.567	8.567	0.000	95	3304385	25.0	24.8	
70 1,2-Dichloropropane	63	8.585	8.585	0.000	96	1771566	25.0	25.1	
69 2-ethoxy-2-methyl butane	87	8.591	8.592	-0.001	92	2271045	25.0	25.4	
71 Methyl methacrylate	69	8.665	8.665	0.000	90	763044	25.0	26.9	
72 1,4-Dioxane	88	8.671	8.671	0.000	87	214174	1250.0	1152.6	M
73 Dibromomethane	93	8.695	8.689	0.006	97	771631	25.0	25.4	
75 Dichlorobromomethane	83	8.933	8.927	0.006	99	2056360	25.0	26.0	
76 2-Nitropropane	41	9.195	9.195	0.000	96	958802	125.0	127.8	
79 1-Bromo-2-chloroethane	63	9.323	9.323	0.000	98	1744495	25.0	25.4	
80 cis-1,3-Dichloropropene	75	9.475	9.476	-0.001	97	2687299	25.0	26.3	
81 4-Methyl-2-pentanone (MIBK)	43	9.640	9.640	0.000	96	9506976	250.0	257.2	
$ 82 Toluene-d8 (Surr)	98	9.780	9.780	0.000	93	2278266	10.0	9.92	
83 Toluene	92	9.859	9.860	-0.001	98	4372182	25.0	24.9	
S 84 1,3-Dichloropropene, Total	100				0			52.3	
85 trans-1,3-Dichloropropene	75	10.109	10.110	-0.001	91	2140328	25.0	26.1	
86 Ethyl methacrylate	69	10.170	10.170	0.000	89	1656748	25.0	26.4	
87 1,1,2-Trichloroethane	97	10.317	10.317	0.000	89	1126535	25.0	25.2	
88 Tetrachloroethene	166	10.408	10.408	0.000	97	1946076	25.0	25.6	
89 1,3-Dichloropropane	76	10.481	10.475	0.006	88	1990239	25.0	25.6	
91 2-Hexanone	43	10.524	10.524	0.000	97	6611635	250.0	261.5	
93 Chlorodibromomethane	129	10.695	10.695	0.000	90	1448318	25.0	26.1	
94 Ethylene Dibromide	107	10.804	10.805	0.000	99	1084914	25.0	25.2	
* 97 Chlorobenzene-d5 (IS)	117	11.237	11.237	0.000	86	1709928	10.0	10.0	
96 1-Chlorohexane	91	11.243	11.243	0.000	98	2629535	25.0	24.7	
S 95 Xylenes, Total	106				0			77.7	
98 Chlorobenzene	112	11.262	11.262	0.000	95	4699589	25.0	25.3	
100 Ethylbenzene	91	11.347	11.347	0.000	98	8437158	25.0	25.5	
99 1,1,1,2-Tetrachloroethane	131	11.347	11.347	0.000	97	1621389	25.0	25.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 m-Xylene & p-Xylene	106	11.463	11.463	0.000	98	6573619	50.0	52.0	
102 o-Xylene	106	11.792	11.792	0.000	96	3225628	25.0	25.8	
103 Styrene	104	11.804	11.804	0.000	95	5306022	25.0	26.5	
104 Bromoform	173	11.963	11.963	0.000	97	817361	25.0	26.6	
105 Isopropylbenzene	105	12.091	12.091	0.000	95	8449089	25.0	26.2	
$ 108 4-Bromofluorobenzene (Surr)	95	12.237	12.237	0.000	90	838893	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.335	12.335	0.000	92	1360580	25.0	24.7	
111 Bromobenzene	156	12.353	12.353	0.000	93	1822102	25.0	26.1	
110 trans-1,4-Dichloro-2-butene	53	12.359	12.359	0.000	90	3500696	250.0	269.7	
112 1,2,3-Trichloropropane	110	12.383	12.383	0.000	82	341976	25.0	24.3	
113 N-Propylbenzene	91	12.420	12.420	0.000	99	10000218	25.0	26.0	
114 2-Chlorotoluene	126	12.499	12.493	0.006	97	1944611	25.0	25.8	
115 1,3,5-Trimethylbenzene	105	12.554	12.554	0.000	94	7050045	25.0	26.1	
116 4-Chlorotoluene	126	12.591	12.585	0.006	97	1959054	25.0	25.8	
118 tert-Butylbenzene	134	12.798	12.798	0.000	93	1506920	25.0	25.7	
119 Pentachloroethane	167	12.828	12.829	0.000	91	1145428	25.0	26.3	
120 1,2,4-Trimethylbenzene	105	12.835	12.835	-0.001	97	7169877	25.0	26.1	
121 sec-Butylbenzene	105	12.963	12.957	0.006	94	9037470	25.0	26.5	
122 1,3-Dichlorobenzene	146	13.060	13.060	0.000	98	3748531	25.0	26.0	
123 4-Isopropyltoluene	119	13.066	13.066	0.000	97	7646950	25.0	26.5	
* 124 1,4-Dichlorobenzene-d4	152	13.115	13.115	0.000	94	909469	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.133	13.133	0.000	94	3687456	25.0	26.0	
126 1,2,3-Trimethylbenzene	120	13.145	13.139	0.006	98	3125399	25.0	25.5	
127 Benzyl chloride	126	13.206	13.206	0.000	98	602066	25.0	26.6	
130 n-Butylbenzene	92	13.359	13.359	0.000	97	3893005	25.0	26.8	
131 1,2-Dichlorobenzene	146	13.395	13.395	0.000	98	3384925	25.0	25.9	
129 p-Diethylbenzene	119	13.408	13.408	0.000	86	3808227	25.0	26.1	
134 1,2-Dibromo-3-Chloropropane	155	13.938	13.932	0.006	88	196674	25.0	24.8	
135 1,3,5-Trichlorobenzene	180	14.060	14.060	0.000	98	2758645	25.0	26.5	
136 1,2,4-Trichlorobenzene	180	14.481	14.481	0.000	94	2361522	25.0	26.8	
137 Hexachlorobutadiene	225	14.566	14.566	0.000	98	1015791	25.0	25.2	
138 Naphthalene	128	14.663	14.664	-0.001	97	4383338	25.0	25.8	
139 1,2,3-Trichlorobenzene	180	14.810	14.810	0.000	96	1998307	25.0	26.1	
140 2-Methylnaphthalene	142	15.444	15.444	0.000	93	2565290	25.0	26.0	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#2_826_00007	Amount Added: 25.00	Units: uL	
MSV_LL_#1_826_00006	Amount Added: 25.00	Units: uL	
MSV_LL_GAS826_00010	Amount Added: 25.00	Units: uL	
MSV_LLcentISS_00001	Amount Added: 5.00	Units: uL	Run Reagent

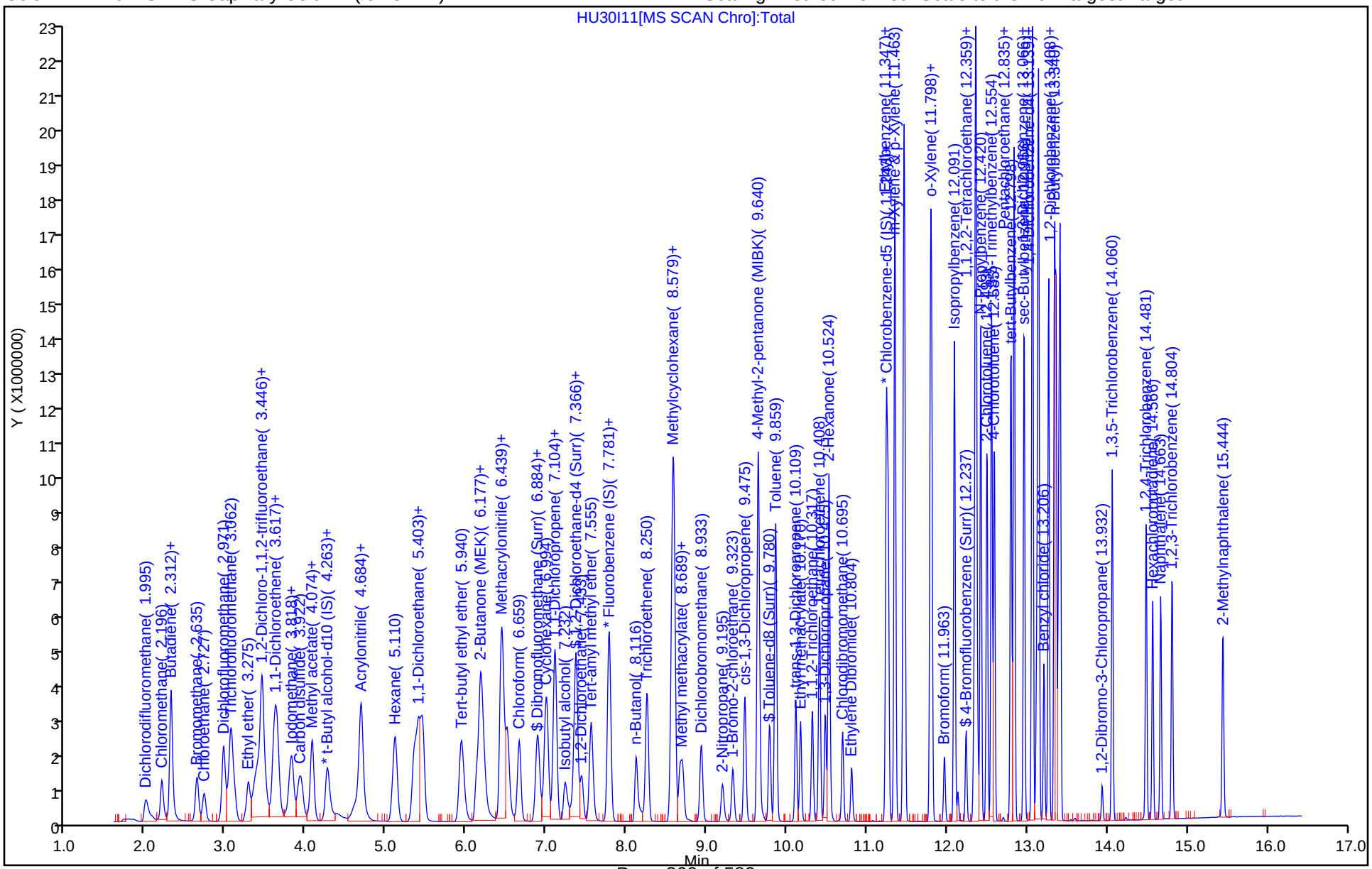
Report Date: 01-Jul-2021 16:18:09 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I11.D

Injection Date:	30-Jun-2021 18:47:30	Instrument ID:	19094	Operator ID:	jml01693
Lims ID:	IC std7 25			Worklist Smp#:	14
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

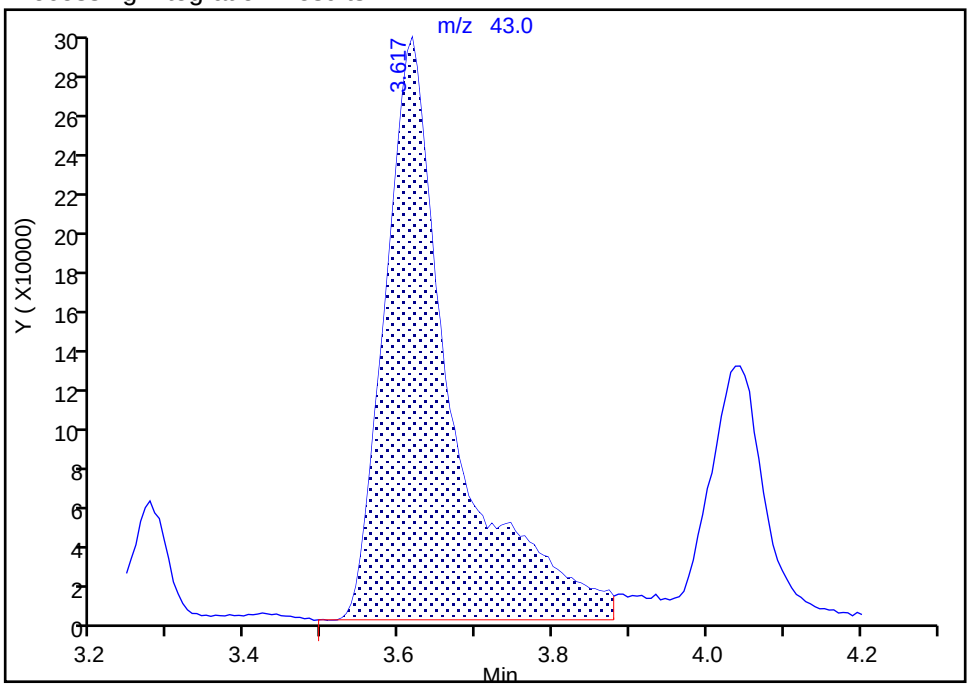
Data File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I11.D				
Injection Date:	30-Jun-2021 18:47:30	Instrument ID:	19094		
Lims ID:	IC std7 25				
Client ID:					
Operator ID:	jml01693	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

19 Acetone, CAS: 67-64-1

Signal: 1

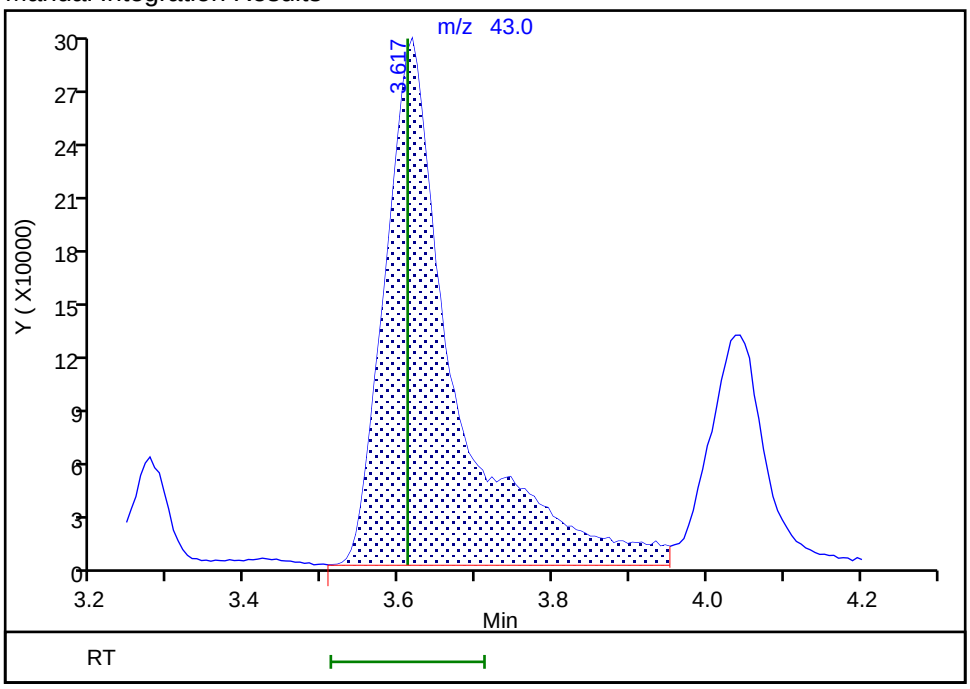
Processing Integration Results

RT: 3.62
Area: 1807729
Amount: 205.6325
Amount Units: ug/l



Manual Integration Results

RT: 3.62
Area: 1873303
Amount: 212.1872
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:52:55
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

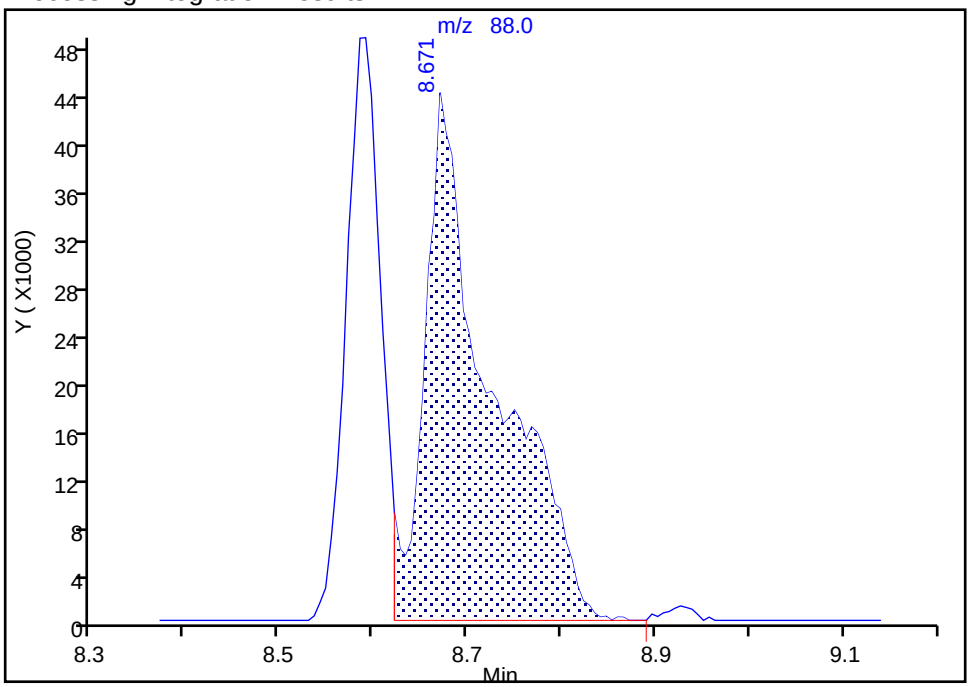
Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I11.D
Injection Date: 30-Jun-2021 18:47:30 Instrument ID: 19094
Lims ID: IC std7 25
Client ID:
Operator ID: jml01693 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

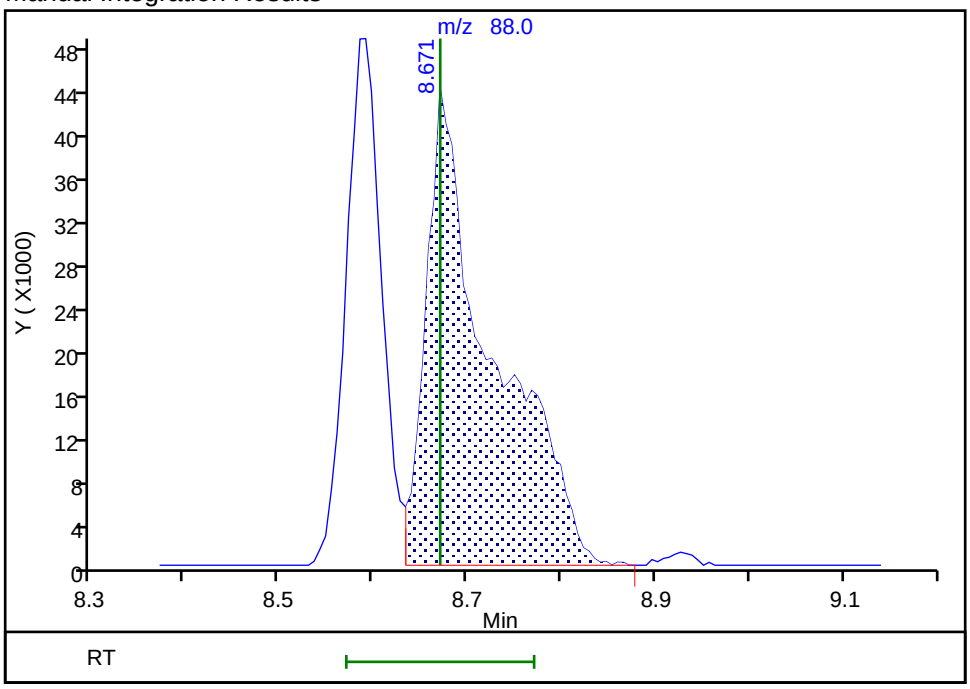
Processing Integration Results

RT: 8.67
Area: 219606
Amount: 1220.9704
Amount Units: ug/l



Manual Integration Results

RT: 8.67
Area: 214174
Amount: 1152.6130
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:42:08
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I12.D
Lims ID: ICIS 10
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 30-Jun-2021 19:08:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0033290-015
Misc. Info.: ICIS 10
Operator ID: jml01693 Instrument ID: 19094
Sublist: chrom-MSV_19094_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Jul-2021 16:18:15 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: campbellme Date: 01-Jul-2021 00:40:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	1.995	1.995	0.000	99	681423	10.0	10.1	
6 Chloromethane	50	2.190	2.190	0.000	99	798647	10.0	9.82	
8 Butadiene	39	2.306	2.306	0.000	92	752797	10.0	10.0	
7 Vinyl chloride	62	2.312	2.312	0.000	97	833802	10.0	10.1	
9 Bromomethane	94	2.635	2.635	0.000	90	592976	10.0	9.75	
10 Chloroethane	64	2.721	2.721	0.000	100	511990	10.0	9.64	
11 Dichlorofluoromethane	67	2.971	2.971	0.000	97	1203800	10.0	9.83	
13 Trichlorofluoromethane	101	3.038	3.038	0.000	98	1085631	10.0	10.0	
15 Ethyl ether	59	3.276	3.276	0.000	91	470003	10.0	10.1	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.367	3.367	0.000	93	855150	10.0	9.91	
17 Acrolein	56	3.446	3.446	0.000	98	3764378	500.0	523.4	
18 1,1-Dichloroethene	96	3.593	3.593	0.000	98	603570	10.0	9.63	
19 Acetone	43	3.605	3.605	0.000	100	814769	100.0	89.6	
20 112TCTFE	101	3.629	3.629	0.000	93	655709	10.0	9.84	
21 Isopropyl alcohol	45	3.751	3.751	0.000	100	345094	200.0	186.9	M
22 Iodomethane	142	3.794	3.794	0.000	98	1079294	10.0	9.81	
23 Ethyl bromide	108	3.818	3.818	0.000	98	522463	10.0	9.89	
24 Carbon disulfide	76	3.910	3.910	0.000	99	1825531	10.0	9.69	
26 Methyl acetate	43	4.031	4.031	0.000	97	257817	10.0	9.53	
27 3-Chloro-1-propene	41	4.068	4.068	0.000	95	1062825	10.0	9.61	
* 28 t-Butyl alcohol-d10 (IS)	65	4.257	4.257	0.000	87	123880	50.0	50.0	
29 Methylene Chloride	84	4.257	4.257	0.000	94	636060	10.0	9.68	
30 2-Methyl-2-propanol	59	4.367	4.367	0.000	100	529129	200.0	186.9	
31 Acrylonitrile	53	4.592	4.592	0.000	98	305323	25.0	25.7	
32 Methyl tert-butyl ether	73	4.659	4.659	0.000	95	1437005	10.0	9.67	
33 trans-1,2-Dichloroethene	96	4.684	4.684	0.000	99	653905	10.0	9.66	
34 Hexane	57	5.104	5.104	0.000	91	1085556	10.0	10.0	
35 1,1-Dichloroethane	63	5.342	5.342	0.000	96	1221895	10.0	9.84	
37 Isopropyl ether	45	5.397	5.397	0.000	96	2149011	10.0	9.90	
38 2-Chloro-1,3-butadiene	53	5.452	5.452	0.000	89	1049389	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
39 Tert-butyl ethyl ether	59	5.934	5.934	0.000	98	1844217	10.0	9.77	
41 2-Butanone (MEK)	43	6.129	6.129	0.000	100	1576072	100.0	103.6	
42 cis-1,2-Dichloroethene	96	6.171	6.171	0.000	82	708268	10.0	9.48	
43 2,2-Dichloropropane	77	6.196	6.196	0.000	88	1005080	10.0	9.91	
45 Propionitrile	54	6.214	6.214	0.000	99	883346	200.0	204.7	
47 Methacrylonitrile	67	6.433	6.433	0.000	91	1638847	100.0	103.2	
48 Chlorobromomethane	128	6.507	6.507	0.000	96	290657	10.0	9.73	
49 Tetrahydrofuran	71	6.519	6.519	0.000	76	215405	50.0	51.1	
50 Chloroform	83	6.653	6.653	0.000	93	1144290	10.0	9.80	
$ 51 Dibromofluoromethane (Surr)	113	6.866	6.866	0.000	93	575224	10.0	10.0	
52 1,1,1-Trichloroethane	97	6.891	6.891	0.000	98	1043111	10.0	9.72	
53 Cyclohexane	56	6.988	6.988	0.000	90	1336164	10.0	9.90	
55 1,1-Dichloropropene	75	7.098	7.098	0.000	98	971750	10.0	9.84	
56 Carbon tetrachloride	117	7.104	7.104	0.000	96	922051	10.0	9.95	
57 Isobutyl alcohol	41	7.226	7.226	0.000	95	515052	500.0	479.5	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.336	7.336	0.000	97	117405	10.0	10.1	
59 Benzene	78	7.366	7.366	0.000	96	2760550	10.0	9.73	
60 1,2-Dichloroethane	62	7.433	7.433	0.000	97	652043	10.0	9.41	M
62 Tert-amyl methyl ether	73	7.549	7.549	0.000	99	1614611	10.0	9.72	
* 65 Fluorobenzene (IS)	96	7.769	7.769	0.000	99	2368765	10.0	10.0	
64 n-Heptane	43	7.781	7.781	0.000	92	1163443	10.0	9.84	
66 n-Butanol	56	8.116	8.116	0.000	86	849724	875.0	903.1	
67 Trichloroethene	95	8.250	8.250	0.000	99	717979	10.0	9.83	
68 Methylcyclohexane	83	8.561	8.561	0.000	94	1365125	10.0	9.89	
70 1,2-Dichloropropane	63	8.585	8.585	0.000	86	719136	10.0	9.80	
69 2-ethoxy-2-methyl butane	87	8.585	8.585	0.000	92	920711	10.0	9.94	
71 Methyl methacrylate	69	8.659	8.659	0.000	92	309542	10.0	10.6	
72 1,4-Dioxane	88	8.671	8.671	0.000	36	101395	500.0	529.7	M
73 Dibromomethane	93	8.695	8.695	0.000	98	312009	10.0	9.91	
75 Dichlorobromomethane	83	8.927	8.927	0.000	100	812931	10.0	9.91	
76 2-Nitropropane	41	9.195	9.195	0.000	96	393627	50.0	50.9	
79 1-Bromo-2-chloroethane	63	9.323	9.323	0.000	98	718689	10.0	10.1	
80 cis-1,3-Dichloropropene	75	9.469	9.469	0.000	97	1070830	10.0	10.1	
81 4-Methyl-2-pentanone (MIBK)	43	9.640	9.640	0.000	96	3969771	100.0	104.2	
$ 82 Toluene-d8 (Surr)	98	9.780	9.780	0.000	93	2361675	10.0	10.1	
83 Toluene	92	9.860	9.860	0.000	98	1749612	10.0	9.80	
85 trans-1,3-Dichloropropene	75	10.110	10.110	0.000	91	854205	10.0	10.2	
86 Ethyl methacrylate	69	10.171	10.171	0.000	89	663882	10.0	10.4	
87 1,1,2-Trichloroethane	97	10.317	10.317	0.000	89	454387	10.0	9.98	
88 Tetrachloroethene	166	10.408	10.408	0.000	97	768025	10.0	9.92	
89 1,3-Dichloropropane	76	10.481	10.481	0.000	88	794846	10.0	10.0	
91 2-Hexanone	43	10.524	10.524	0.000	97	2722733	100.0	104.5	
93 Chlorodibromomethane	129	10.695	10.695	0.000	90	567821	10.0	10.0	
94 Ethylene Dibromide	107	10.805	10.805	0.000	98	434104	10.0	9.89	
* 97 Chlorobenzene-d5 (IS)	117	11.237	11.237	0.000	85	1741980	10.0	10.0	
96 1-Chlorohexane	91	11.243	11.243	0.000	97	1051311	10.0	9.69	
98 Chlorobenzene	112	11.262	11.262	0.000	95	1871985	10.0	9.89	
100 Ethylbenzene	91	11.347	11.347	0.000	98	3340961	10.0	9.91	
99 1,1,1,2-Tetrachloroethane	131	11.347	11.347	0.000	98	643329	10.0	9.95	
101 m-Xylene & p-Xylene	106	11.463	11.463	0.000	98	2588741	20.0	20.1	
102 o-Xylene	106	11.792	11.792	0.000	96	1274345	10.0	9.99	
103 Styrene	104	11.804	11.804	0.000	95	2075266	10.0	10.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 Bromoform	173	11.963	11.963	0.000	96	320604	10.0	10.3	
105 Isopropylbenzene	105	12.091	12.091	0.000	95	3318903	10.0	10.1	
$ 108 4-Bromofluorobenzene (Surr)	95	12.237	12.237	0.000	89	853639	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.335	12.335	0.000	91	555046	10.0	9.90	
111 Bromobenzene	156	12.353	12.353	0.000	94	716404	10.0	10.1	
110 trans-1,4-Dichloro-2-butene	53	12.359	12.359	0.000	90	1393924	100.0	104.2	
112 1,2,3-Trichloropropane	110	12.384	12.384	0.000	83	141094	10.0	9.85	
113 N-Propylbenzene	91	12.420	12.420	0.000	99	3928173	10.0	10.0	
114 2-Chlorotoluene	126	12.493	12.493	0.000	97	764082	10.0	9.97	
115 1,3,5-Trimethylbenzene	105	12.554	12.554	0.000	94	2760970	10.0	10.1	
116 4-Chlorotoluene	126	12.591	12.591	0.000	97	779996	10.0	10.1	
118 tert-Butylbenzene	134	12.798	12.798	0.000	93	588697	10.0	9.86	
119 Pentachloroethane	167	12.829	12.829	0.000	91	454145	10.0	10.3	
120 1,2,4-Trimethylbenzene	105	12.835	12.835	0.000	97	2822044	10.0	10.1	
121 sec-Butylbenzene	105	12.957	12.957	0.000	94	3524005	10.0	10.2	
122 1,3-Dichlorobenzene	146	13.060	13.060	0.000	98	1460720	10.0	9.96	
123 4-Isopropyltoluene	119	13.066	13.066	0.000	97	2977390	10.0	10.2	
* 124 1,4-Dichlorobenzene-d4	152	13.115	13.115	0.000	94	925399	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.133	13.133	0.000	93	1453895	10.0	10.1	
126 1,2,3-Trimethylbenzene	120	13.139	13.139	0.000	98	1224709	10.0	9.84	
127 Benzyl chloride	126	13.207	13.207	0.000	98	237586	10.0	10.3	
130 n-Butylbenzene	92	13.359	13.359	0.000	98	1513367	10.0	10.3	
131 1,2-Dichlorobenzene	146	13.396	13.396	0.000	98	1336363	10.0	10.1	
129 p-Diethylbenzene	119	13.408	13.408	0.000	87	1484318	10.0	10.0	
134 1,2-Dibromo-3-Chloropropane	155	13.932	13.932	0.000	87	78686	10.0	9.76	
135 1,3,5-Trichlorobenzene	180	14.060	14.060	0.000	97	1056692	10.0	9.98	
136 1,2,4-Trichlorobenzene	180	14.481	14.481	0.000	94	905237	10.0	10.1	
137 Hexachlorobutadiene	225	14.566	14.566	0.000	97	384107	10.0	9.35	
138 Naphthalene	128	14.664	14.664	0.000	97	1742873	10.0	10.1	
139 1,2,3-Trichlorobenzene	180	14.810	14.810	0.000	96	772332	10.0	9.92	
140 2-Methylnaphthalene	142	15.444	15.444	0.000	92	1010033	10.0	10.1	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00006	Amount Added: 10.00	Units: uL	
MSV_LL_#2_826_00007	Amount Added: 10.00	Units: uL	
MSV_LL_GAS826_00010	Amount Added: 10.00	Units: uL	
MSV_LLcentISS_00001	Amount Added: 5.00	Units: uL	Run Reagent

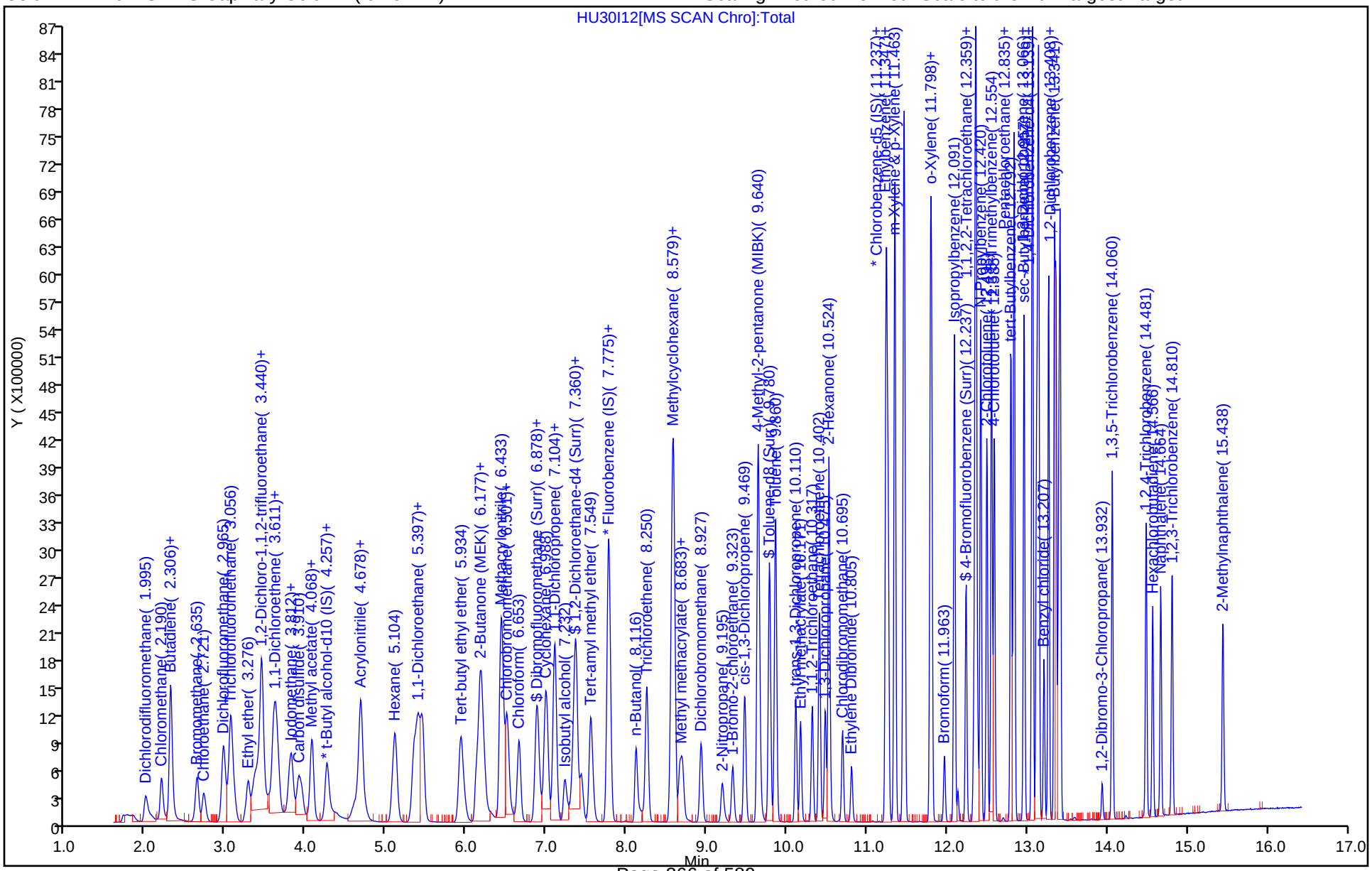
Report Date: 01-Jul-2021 16:18:16 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I12.D

Injection Date:	30-Jun-2021 19:08:30	Instrument ID:	19094	Operator ID:	jml01693
Lims ID:	ICIS 10			Worklist Smp#:	15
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

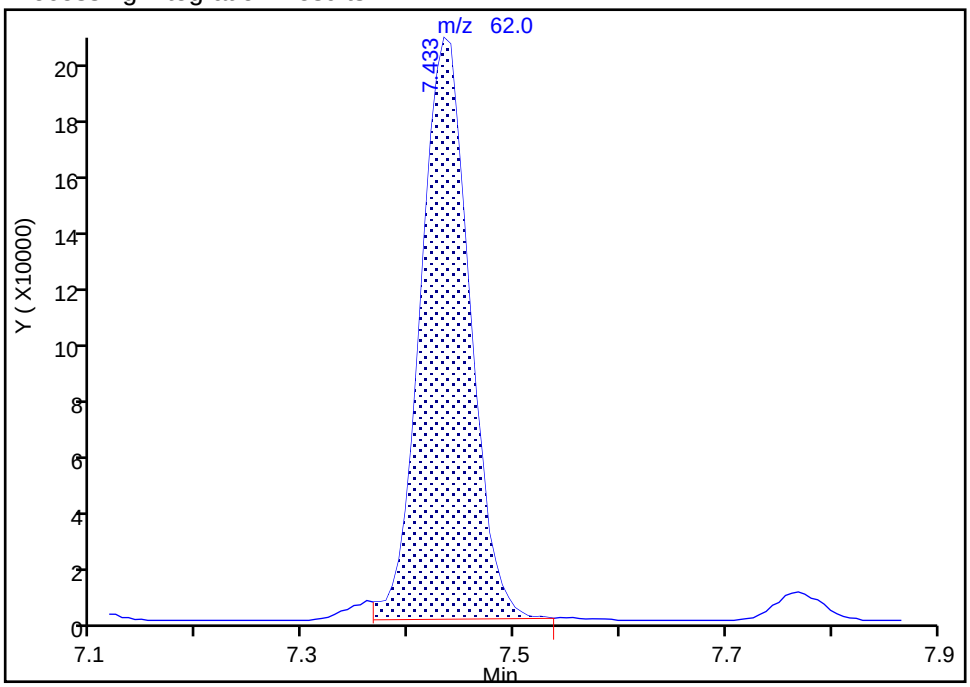
Data File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I12.D				
Injection Date:	30-Jun-2021 19:08:30	Instrument ID:	19094		
Lims ID:	ICIS 10				
Client ID:					
Operator ID:	jml01693	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

60 1,2-Dichloroethane, CAS: 107-06-2

Signal: 1

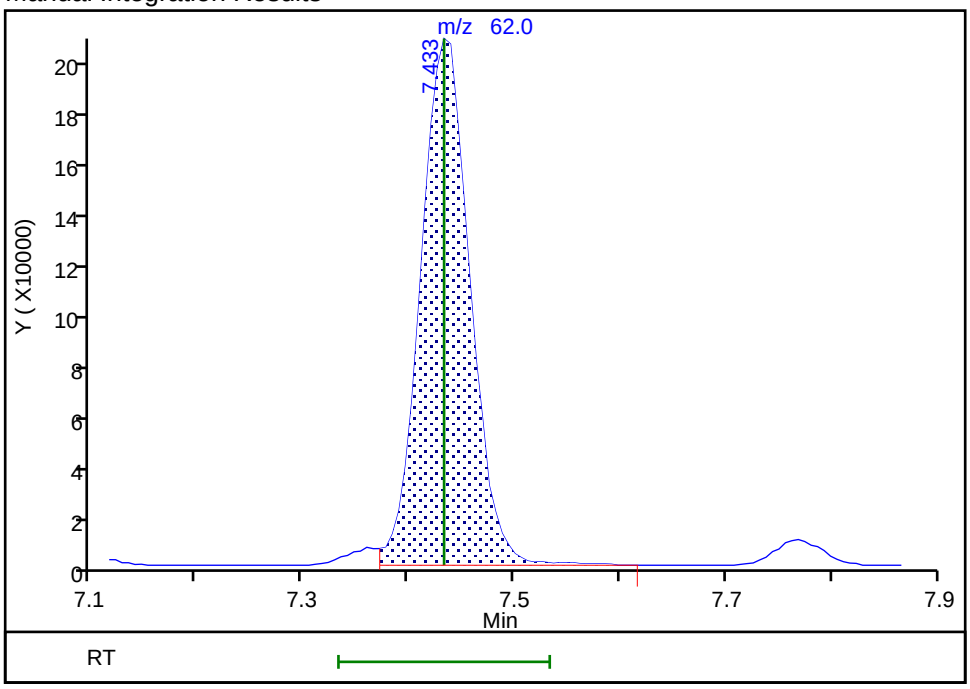
Processing Integration Results

RT: 7.43
Area: 647494
Amount: 9.353570
Amount Units: ug/l



Manual Integration Results

RT: 7.43
Area: 652043
Amount: 9.410450
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:40:19

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

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

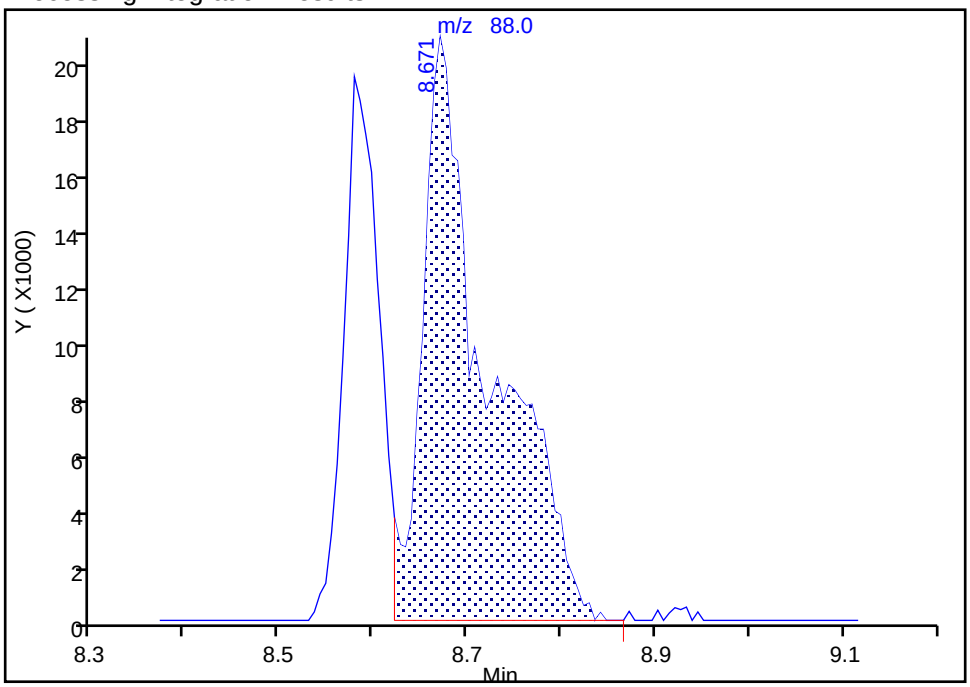
Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I12.D
Injection Date: 30-Jun-2021 19:08:30 Instrument ID: 19094
Lims ID: ICIS 10
Client ID:
Operator ID: jml01693 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

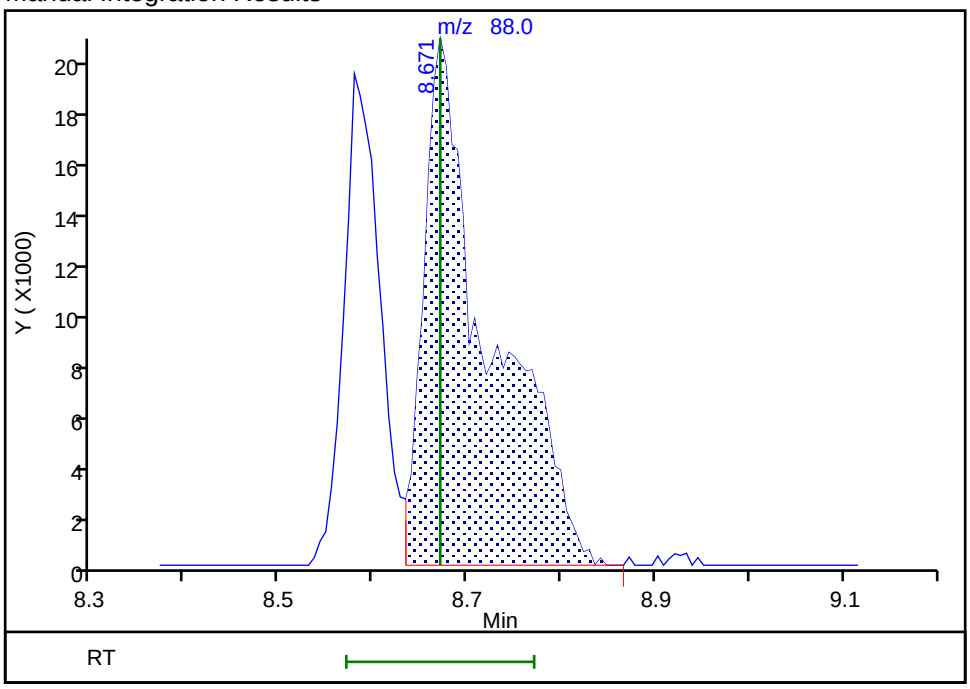
Processing Integration Results

RT: 8.67
Area: 103728
Amount: 557.7758
Amount Units: ug/l



Manual Integration Results

RT: 8.67
Area: 101395
Amount: 529.6580
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:40:32
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I13.D
Lims ID: IC std5 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 30-Jun-2021 19:29:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0033290-016
Misc. Info.: IC STD5 5
Operator ID: jml01693 Instrument ID: 19094
Sublist: chrom-MSV_19094_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Jul-2021 16:18:22 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: campbellme Date: 01-Jul-2021 00:43:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.001	1.995	0.006	99	338189	5.00	5.02	
6 Chloromethane	50	2.197	2.190	0.006	99	395924	5.00	4.85	
8 Butadiene	39	2.312	2.306	0.006	92	363910	5.00	4.83	
7 Vinyl chloride	62	2.325	2.312	0.013	98	401544	5.00	4.87	
9 Bromomethane	94	2.648	2.635	0.013	91	299014	5.00	4.90	
10 Chloroethane	64	2.733	2.721	0.012	100	258719	5.00	4.85	
11 Dichlorofluoromethane	67	2.977	2.971	0.006	97	597161	5.00	4.86	
13 Trichlorofluoromethane	101	3.044	3.038	0.006	96	534454	5.00	4.93	
15 Ethyl ether	59	3.282	3.276	0.006	91	236665	5.00	5.05	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.379	3.367	0.012	93	424338	5.00	4.90	
17 Acrolein	56	3.452	3.446	0.006	98	1871143	250.0	247.3	
18 1,1-Dichloroethene	96	3.599	3.593	0.006	98	302484	5.00	4.81	
19 Acetone	43	3.623	3.605	0.018	100	440548	50.0	46.0	M
20 112TCTFE	101	3.635	3.629	0.006	94	336832	5.00	5.04	
21 Isopropyl alcohol	45	3.769	3.751	0.018	99	183012	100.0	98.8	M
22 Iodomethane	142	3.800	3.794	0.006	98	549957	5.00	4.98	
23 Ethyl bromide	108	3.830	3.818	0.012	98	260103	5.00	4.91	
24 Carbon disulfide	76	3.928	3.910	0.018	98	926405	5.00	4.90	
26 Methyl acetate	43	4.056	4.031	0.025	97	140053	5.00	4.92	
27 3-Chloro-1-propene	41	4.080	4.068	0.012	95	539661	5.00	4.86	
* 28 t-Butyl alcohol-d10 (IS)	65	4.263	4.257	0.006	40	130308	50.0	50.0	
29 Methylene Chloride	84	4.269	4.257	0.012	92	322305	5.00	4.89	
30 2-Methyl-2-propanol	59	4.379	4.367	0.012	100	296069	100.0	99.4	
31 Acrylonitrile	53	4.598	4.592	0.006	97	165139	12.5	13.2	
32 Methyl tert-butyl ether	73	4.672	4.659	0.013	95	740461	5.00	4.97	
33 trans-1,2-Dichloroethene	96	4.690	4.684	0.006	99	331027	5.00	4.88	
34 Hexane	57	5.111	5.104	0.007	91	549761	5.00	5.06	
35 1,1-Dichloroethane	63	5.348	5.342	0.006	96	624577	5.00	5.01	
37 Isopropyl ether	45	5.397	5.397	0.000	96	1095077	5.00	5.03	
38 2-Chloro-1,3-butadiene	53	5.458	5.452	0.006	89	519671	5.00	4.94	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.940	5.934	0.006	98	943498	5.00	4.98	
41 2-Butanone (MEK)	43	6.135	6.129	0.006	100	805274	50.0	50.3	
S 40 1,2-Dichloroethene, Total	100				0			9.75	
42 cis-1,2-Dichloroethene	96	6.177	6.171	0.006	82	364845	5.00	4.87	
43 2,2-Dichloropropane	77	6.196	6.196	0.000	86	498977	5.00	4.90	
45 Propionitrile	54	6.220	6.214	0.006	99	441133	100.0	97.2	
47 Methacrylonitrile	67	6.440	6.433	0.007	91	844113	50.0	50.5	
48 Chlorobromomethane	128	6.507	6.507	0.000	95	148844	5.00	4.96	
49 Tetrahydrofuran	71	6.525	6.519	0.006	77	110660	25.0	24.9	
50 Chloroform	83	6.665	6.653	0.012	93	580702	5.00	4.96	
$ 51 Dibromofluoromethane (Surr)	113	6.879	6.866	0.013	93	577949	10.0	10.1	
52 1,1,1-Trichloroethane	97	6.891	6.891	0.000	98	529529	5.00	4.92	
53 Cyclohexane	56	7.000	6.988	0.012	90	678761	5.00	5.01	
55 1,1-Dichloropropene	75	7.104	7.098	0.006	97	486976	5.00	4.92	
56 Carbon tetrachloride	117	7.104	7.104	0.000	85	462265	5.00	4.97	
57 Isobutyl alcohol	41	7.232	7.226	0.006	94	263232	250.0	233.0	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.336	7.336	0.000	98	117358	10.0	10.1	
59 Benzene	78	7.366	7.366	0.000	97	1401511	5.00	4.93	
60 1,2-Dichloroethane	62	7.439	7.433	0.006	97	339565	5.00	4.89	
62 Tert-amyl methyl ether	73	7.555	7.549	0.006	99	832079	5.00	4.99	
* 65 Fluorobenzene (IS)	96	7.769	7.769	0.000	99	2376252	10.0	10.0	
64 n-Heptane	43	7.787	7.781	0.006	92	578975	5.00	4.88	
66 n-Butanol	56	8.116	8.116	0.000	86	441342	437.5	446.0	
67 Trichloroethene	95	8.256	8.250	0.006	99	359861	5.00	4.91	
68 Methylcyclohexane	83	8.567	8.561	0.006	93	699533	5.00	5.05	
70 1,2-Dichloropropane	63	8.586	8.585	0.001	73	365053	5.00	4.96	
69 2-ethoxy-2-methyl butane	87	8.586	8.585	0.001	92	467874	5.00	5.03	
71 Methyl methacrylate	69	8.665	8.659	0.006	92	157123	5.00	5.11	
72 1,4-Dioxane	88	8.677	8.671	0.006	41	52279	250.0	259.6	M
73 Dibromomethane	93	8.695	8.695	0.000	98	156400	5.00	4.95	
75 Dichlorobromomethane	83	8.927	8.927	0.000	99	416299	5.00	5.06	
76 2-Nitropropane	41	9.195	9.195	0.000	97	206014	25.0	25.3	
79 1-Bromo-2-chloroethane	63	9.323	9.323	0.000	98	360723	5.00	5.04	
80 cis-1,3-Dichloropropene	75	9.476	9.469	0.007	97	538018	5.00	5.05	
81 4-Methyl-2-pentanone (MIBK)	43	9.640	9.640	0.000	96	2049827	50.0	51.2	
$ 82 Toluene-d8 (Surr)	98	9.780	9.780	0.000	93	2359527	10.0	10.0	
83 Toluene	92	9.860	9.860	0.000	98	886869	5.00	4.94	
S 84 1,3-Dichloropropene, Total	100				0			10.1	
85 trans-1,3-Dichloropropene	75	10.110	10.110	0.000	91	422144	5.00	5.02	
86 Ethyl methacrylate	69	10.171	10.171	0.000	89	336840	5.00	5.23	
87 1,1,2-Trichloroethane	97	10.317	10.317	0.000	89	237393	5.00	5.18	
88 Tetrachloroethene	166	10.408	10.408	0.000	97	385439	5.00	4.95	
89 1,3-Dichloropropane	76	10.481	10.481	0.000	88	400827	5.00	5.03	
91 2-Hexanone	43	10.524	10.524	0.000	97	1405119	50.0	51.3	
93 Chlorodibromomethane	129	10.695	10.695	0.000	90	287250	5.00	5.05	
94 Ethylene Dibromide	107	10.805	10.805	0.000	99	221375	5.00	5.01	
* 97 Chlorobenzene-d5 (IS)	117	11.237	11.237	0.000	86	1752836	10.0	10.0	
96 1-Chlorohexane	91	11.244	11.243	0.001	98	532219	5.00	4.88	
S 95 Xylenes, Total	106				0			15.2	
98 Chlorobenzene	112	11.262	11.262	0.000	95	944659	5.00	4.96	
100 Ethylbenzene	91	11.347	11.347	0.000	98	1699157	5.00	5.01	
99 1,1,1,2-Tetrachloroethane	131	11.341	11.347	-0.006	96	322791	5.00	4.96	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 m-Xylene & p-Xylene	106	11.463	11.463	0.000	99	1313906	10.0	10.1	
102 o-Xylene	106	11.792	11.792	0.000	96	645238	5.00	5.03	
103 Styrene	104	11.804	11.804	0.000	94	1040181	5.00	5.06	
104 Bromoform	173	11.963	11.963	0.000	96	161178	5.00	5.12	
105 Isopropylbenzene	105	12.091	12.091	0.000	96	1670865	5.00	5.05	
$ 108 4-Bromofluorobenzene (Surr)	95	12.237	12.237	0.000	89	860567	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.335	12.335	0.000	92	286285	5.00	5.09	
111 Bromobenzene	156	12.353	12.353	0.000	94	359170	5.00	5.03	
110 trans-1,4-Dichloro-2-butene	53	12.359	12.359	0.000	90	715589	50.0	50.9	
112 1,2,3-Trichloropropane	110	12.384	12.384	0.000	82	72812	5.00	5.06	
113 N-Propylbenzene	91	12.420	12.420	0.000	99	1998081	5.00	5.08	
114 2-Chlorotoluene	126	12.493	12.493	0.000	97	389198	5.00	5.06	
115 1,3,5-Trimethylbenzene	105	12.554	12.554	0.000	94	1384048	5.00	5.02	
116 4-Chlorotoluene	126	12.591	12.591	0.000	97	397803	5.00	5.12	
118 tert-Butylbenzene	134	12.792	12.798	-0.006	93	290450	5.00	4.84	
119 Pentachloroethane	167	12.829	12.829	0.000	89	226799	5.00	5.10	
120 1,2,4-Trimethylbenzene	105	12.835	12.835	0.000	97	1432252	5.00	5.10	
121 sec-Butylbenzene	105	12.957	12.957	0.000	94	1763011	5.00	5.07	
122 1,3-Dichlorobenzene	146	13.060	13.060	0.000	97	735031	5.00	4.99	
123 4-Isopropyltoluene	119	13.066	13.066	0.000	97	1487952	5.00	5.05	
* 124 1,4-Dichlorobenzene-d4	152	13.115	13.115	0.000	95	929147	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.133	13.133	0.000	95	735276	5.00	5.07	
126 1,2,3-Trimethylbenzene	120	13.139	13.139	0.000	98	627948	5.00	5.02	
127 Benzyl chloride	126	13.207	13.207	0.001	98	120388	5.00	5.22	
130 n-Butylbenzene	92	13.359	13.359	0.000	98	756654	5.00	5.10	
131 1,2-Dichlorobenzene	146	13.396	13.396	0.000	98	674154	5.00	5.05	
129 p-Diethylbenzene	119	13.408	13.408	0.000	87	749096	5.00	5.03	
134 1,2-Dibromo-3-Chloropropane	155	13.938	13.932	0.006	86	41042	5.00	5.07	
135 1,3,5-Trichlorobenzene	180	14.060	14.060	0.000	98	534628	5.00	5.03	
136 1,2,4-Trichlorobenzene	180	14.481	14.481	0.000	94	459178	5.00	5.10	
137 Hexachlorobutadiene	225	14.566	14.566	0.000	97	190585	5.00	4.62	
138 Naphthalene	128	14.664	14.664	0.000	97	899975	5.00	5.18	
139 1,2,3-Trichlorobenzene	180	14.810	14.810	0.000	95	389563	5.00	4.99	
140 2-Methylnaphthalene	142	15.444	15.444	0.000	92	517378	5.00	5.14	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00006	Amount Added:	5.00	Units: uL	
MSV_LL_#2_826_00007	Amount Added:	5.00	Units: uL	
MSV_LL_GAS826_00010	Amount Added:	5.00	Units: uL	
MSV_LLcentISS_00001	Amount Added:	5.00	Units: uL	Run Reagent

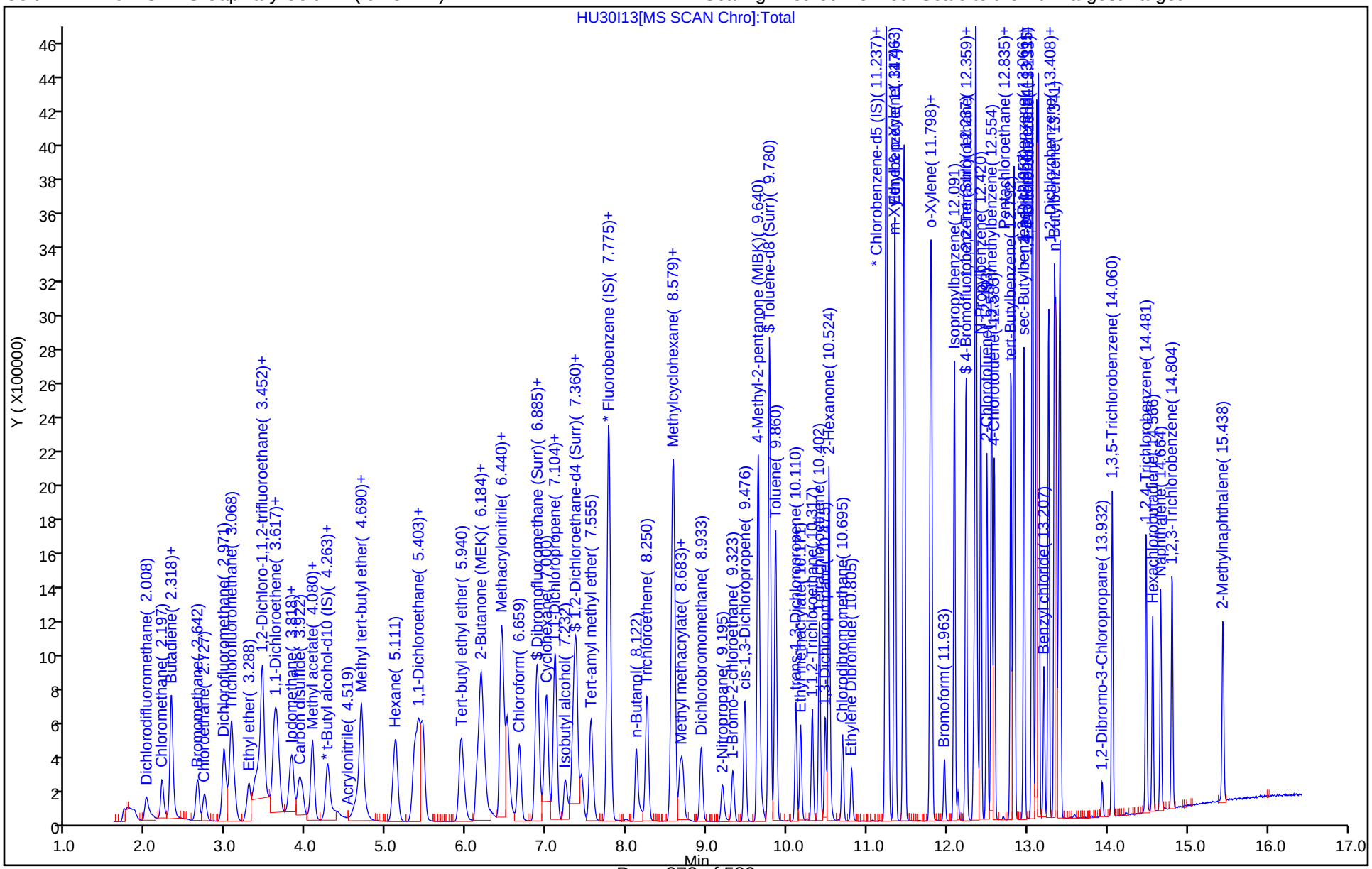
Report Date: 01-Jul-2021 16:18:23 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I13.D

Injection Date:	30-Jun-2021 19:29:30	Instrument ID:	19094	Operator ID:	jml01693
Lims ID:	IC std5 5			Worklist Smp#:	16
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

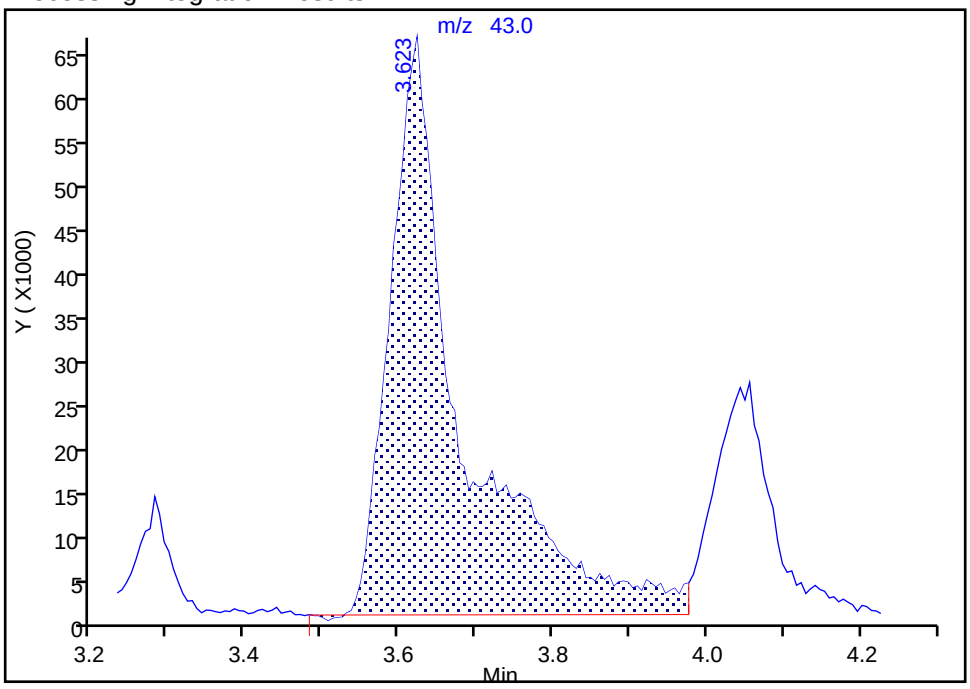
Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I13.D
Injection Date: 30-Jun-2021 19:29:30 Instrument ID: 19094
Lims ID: IC std5 5
Client ID:
Operator ID: jml01693 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

19 Acetone, CAS: 67-64-1

Signal: 1

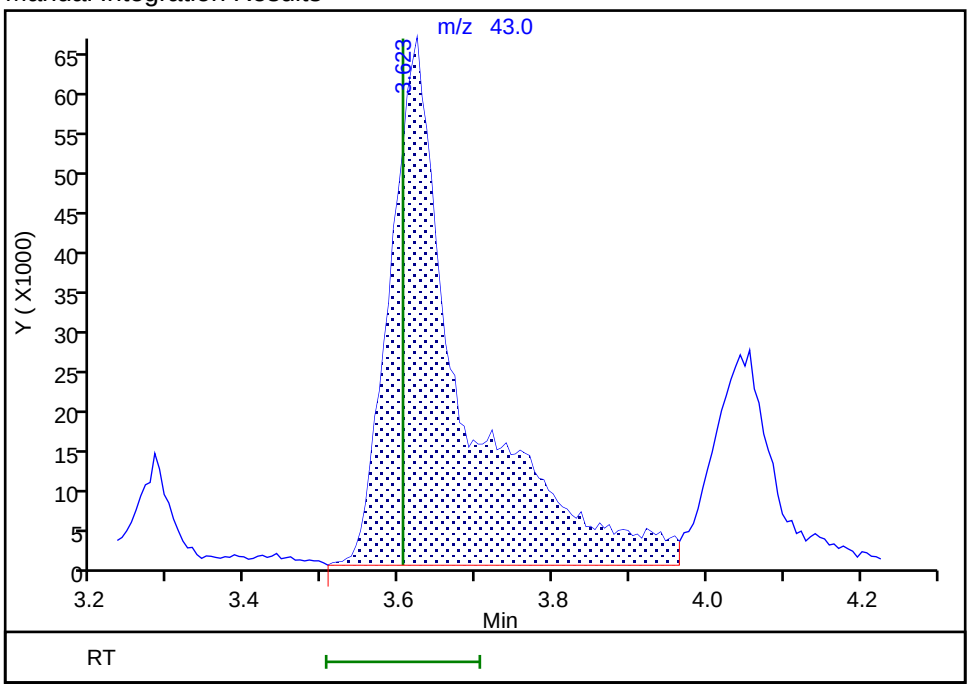
Processing Integration Results

RT: 3.62
Area: 425370
Amount: 44.853776
Amount Units: ug/l



Manual Integration Results

RT: 3.62
Area: 440548
Amount: 46.046518
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:52:12
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

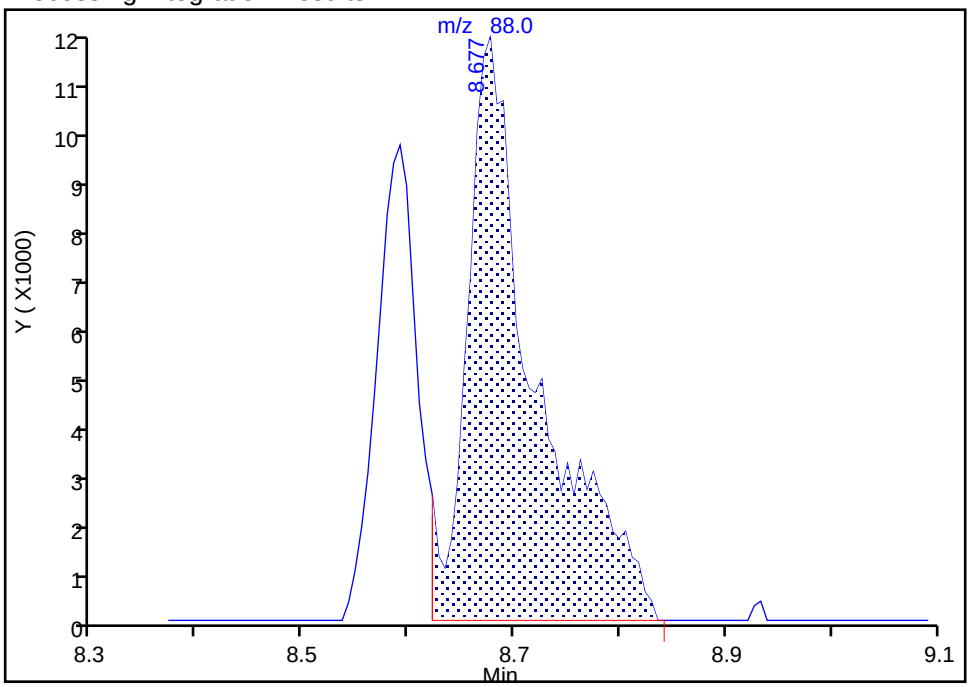
Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I13.D
Injection Date: 30-Jun-2021 19:29:30 Instrument ID: 19094
Lims ID: IC std5 5
Client ID:
Operator ID: jml01693 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

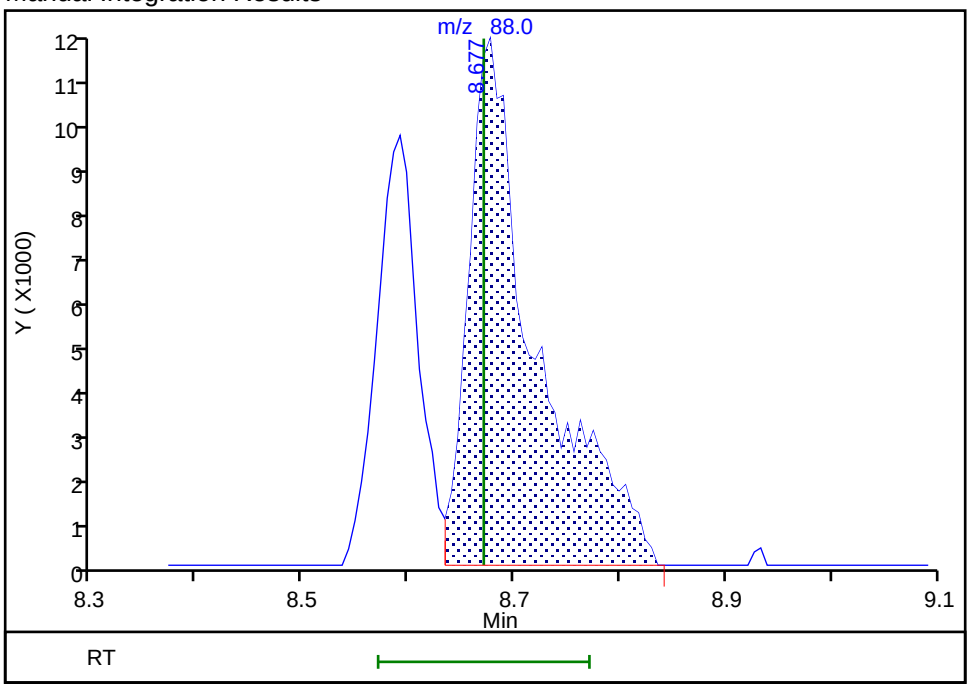
Processing Integration Results

RT: 8.68
Area: 53678
Amount: 276.3447
Amount Units: ug/l



Manual Integration Results

RT: 8.68
Area: 52279
Amount: 259.6189
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:43:25
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I14.D
Lims ID: IC std4 2
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 30-Jun-2021 19:49:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0033290-017
Misc. Info.: IC STD4 2
Operator ID: jml01693 Instrument ID: 19094
Sublist: chrom-MSV_19094_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Jul-2021 16:18:28 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: campbellme Date: 01-Jul-2021 00:45:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.007	2.007	0.000	99	138915	2.00	2.07	M
6 Chloromethane	50	2.196	2.196	0.000	99	161392	2.00	1.98	
8 Butadiene	39	2.312	2.312	0.000	92	156564	2.00	2.08	
7 Vinyl chloride	62	2.324	2.324	0.000	83	159630	2.00	1.94	
9 Bromomethane	94	2.635	2.635	0.000	90	122506	2.00	2.01	
10 Chloroethane	64	2.721	2.721	0.000	100	108575	2.00	2.04	
11 Dichlorofluoromethane	67	2.971	2.971	0.000	97	248263	2.00	2.03	
13 Trichlorofluoromethane	101	3.044	3.044	0.000	97	223111	2.00	2.06	
15 Ethyl ether	59	3.282	3.282	0.000	91	93912	2.00	2.01	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.373	3.373	0.000	94	176353	2.00	2.04	
17 Acrolein	56	3.458	3.458	0.000	99	761837	100.0	100.5	
18 1,1-Dichloroethene	96	3.605	3.605	0.000	98	125071	2.00	1.99	
19 Acetone	43	3.611	3.611	0.000	82	181864	20.0	19.0	M
20 112TCTFE	101	3.635	3.635	0.000	93	138808	2.00	2.08	
21 Isopropyl alcohol	45	3.769	3.769	0.000	30	77336	40.0	41.9	M
22 Iodomethane	142	3.806	3.806	0.000	98	222043	2.00	2.02	
23 Ethyl bromide	108	3.824	3.824	0.000	96	107556	2.00	2.04	
24 Carbon disulfide	76	3.916	3.916	0.000	99	379081	2.00	2.01	
26 Methyl acetate	43	4.056	4.056	0.000	39	49151	2.00	1.72	
27 3-Chloro-1-propene	41	4.080	4.080	0.000	94	224215	2.00	2.03	
* 28 t-Butyl alcohol-d10 (IS)	65	4.269	4.269	0.000	89	130548	50.0	50.0	
29 Methylene Chloride	84	4.263	4.263	0.000	93	132393	2.00	2.01	
30 2-Methyl-2-propanol	59	4.385	4.385	0.000	98	120927	40.0	40.5	
31 Acrylonitrile	53	4.617	4.617	0.000	96	62935	5.00	5.03	M
32 Methyl tert-butyl ether	73	4.665	4.665	0.000	95	296149	2.00	1.99	
33 trans-1,2-Dichloroethene	96	4.696	4.696	0.000	99	134377	2.00	1.98	
34 Hexane	57	5.117	5.117	0.000	92	223862	2.00	2.07	
35 1,1-Dichloroethane	63	5.348	5.348	0.000	95	249883	2.00	2.01	
37 Isopropyl ether	45	5.397	5.397	0.000	97	439271	2.00	2.02	
38 2-Chloro-1,3-butadiene	53	5.458	5.458	0.000	89	209804	2.00	2.00	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.934	5.934	0.000	98	382829	2.00	2.03	
41 2-Butanone (MEK)	43	6.135	6.135	0.000	100	313488	20.0	19.6	
S 40 1,2-Dichloroethene, Total	100				0			3.98	
42 cis-1,2-Dichloroethene	96	6.183	6.183	0.000	81	148841	2.00	1.99	
43 2,2-Dichloropropane	77	6.190	6.190	0.000	73	201027	2.00	1.98	
45 Propionitrile	54	6.214	6.214	0.000	98	182497	40.0	40.1	
47 Methacrylonitrile	67	6.440	6.440	0.000	91	332590	20.0	19.9	
48 Chlorobromomethane	128	6.507	6.507	0.000	97	61080	2.00	2.04	
49 Tetrahydrofuran	71	6.531	6.531	0.000	78	44399	10.0	9.99	
50 Chloroform	83	6.659	6.659	0.000	93	234689	2.00	2.01	
$ 51 Dibromofluoromethane (Surr)	113	6.872	6.872	0.000	94	566710	10.0	9.88	
52 1,1,1-Trichloroethane	97	6.891	6.891	0.000	98	212588	2.00	1.98	
53 Cyclohexane	56	6.994	6.994	0.000	90	282228	2.00	2.09	
55 1,1-Dichloropropene	75	7.104	7.104	0.000	97	201187	2.00	2.04	
56 Carbon tetrachloride	117	7.110	7.110	0.000	83	186450	2.00	2.01	
57 Isobutyl alcohol	41	7.232	7.232	0.000	95	106453	100.0	94.0	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.330	7.330	0.000	80	113733	10.0	9.82	
59 Benzene	78	7.366	7.366	0.000	96	574020	2.00	2.02	
60 1,2-Dichloroethane	62	7.439	7.439	0.000	96	129699	2.00	1.87	
62 Tert-amyl methyl ether	73	7.555	7.555	0.000	99	336551	2.00	2.02	
* 65 Fluorobenzene (IS)	96	7.769	7.769	0.000	98	2370175	10.0	10.0	
64 n-Heptane	43	7.781	7.781	0.000	93	244002	2.00	2.06	
66 n-Butanol	56	8.122	8.122	0.000	86	174266	175.0	175.8	
67 Trichloroethene	95	8.250	8.250	0.000	98	151559	2.00	2.07	
68 Methylcyclohexane	83	8.567	8.567	0.000	94	287061	2.00	2.08	
70 1,2-Dichloropropane	63	8.585	8.585	0.000	73	149923	2.00	2.04	
69 2-ethoxy-2-methyl butane	87	8.592	8.592	0.000	89	187955	2.00	2.03	
71 Methyl methacrylate	69	8.665	8.665	0.000	93	59244	2.00	1.92	
72 1,4-Dioxane	88	8.671	8.671	0.000	38	23116	100.0	114.6	M
73 Dibromomethane	93	8.689	8.689	0.000	96	65152	2.00	2.07	
75 Dichlorobromomethane	83	8.927	8.927	0.000	99	168091	2.00	2.05	
76 2-Nitropropane	41	9.195	9.195	0.000	98	79219	10.0	9.72	
79 1-Bromo-2-chloroethane	63	9.323	9.323	0.000	98	143708	2.00	2.01	
80 cis-1,3-Dichloropropene	75	9.476	9.476	0.000	97	218728	2.00	2.06	
81 4-Methyl-2-pentanone (MIBK)	43	9.640	9.640	0.000	96	804194	20.0	20.0	
$ 82 Toluene-d8 (Surr)	98	9.780	9.780	0.000	93	2343496	10.0	10.0	
83 Toluene	92	9.860	9.860	0.000	98	358689	2.00	2.01	
S 84 1,3-Dichloropropene, Total	100				0			4.10	
85 trans-1,3-Dichloropropene	75	10.110	10.110	0.000	91	170576	2.00	2.04	
86 Ethyl methacrylate	69	10.170	10.170	0.000	89	131550	2.00	2.06	
87 1,1,2-Trichloroethane	97	10.317	10.317	0.000	89	93531	2.00	2.05	
88 Tetrachloroethene	166	10.408	10.408	0.000	97	157898	2.00	2.04	
89 1,3-Dichloropropane	76	10.475	10.475	0.000	89	164681	2.00	2.08	
91 2-Hexanone	43	10.524	10.524	0.000	96	542006	20.0	19.7	
93 Chlorodibromomethane	129	10.695	10.695	0.000	89	113678	2.00	2.01	
94 Ethylene Dibromide	107	10.805	10.805	0.000	98	86844	2.00	1.98	
* 97 Chlorobenzene-d5 (IS)	117	11.237	11.237	0.000	86	1742684	10.0	10.0	
96 1-Chlorohexane	91	11.243	11.243	0.000	97	217321	2.00	2.00	
S 95 Xylenes, Total	106				0			6.11	
98 Chlorobenzene	112	11.262	11.262	0.000	96	384144	2.00	2.03	
100 Ethylbenzene	91	11.347	11.347	0.000	98	684274	2.00	2.03	
99 1,1,1,2-Tetrachloroethane	131	11.347	11.347	0.000	97	131450	2.00	2.03	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 m-Xylene & p-Xylene	106	11.463	11.463	0.000	98	524881	4.00	4.07	
102 o-Xylene	106	11.792	11.792	0.000	95	260295	2.00	2.04	
103 Styrene	104	11.804	11.804	0.000	94	414592	2.00	2.03	
104 Bromoform	173	11.963	11.963	0.000	96	63547	2.00	2.03	
105 Isopropylbenzene	105	12.091	12.091	0.000	95	671280	2.00	2.04	
$ 108 4-Bromofluorobenzene (Surr)	95	12.237	12.237	0.000	89	857695	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.335	12.335	0.000	93	111158	2.00	1.98	
111 Bromobenzene	156	12.353	12.353	0.000	94	143640	2.00	2.02	
110 trans-1,4-Dichloro-2-butene	53	12.359	12.359	0.000	90	282634	20.0	20.1	
112 1,2,3-Trichloropropane	110	12.383	12.383	0.000	83	29390	2.00	2.05	
113 N-Propylbenzene	91	12.420	12.420	0.000	99	805258	2.00	2.05	
114 2-Chlorotoluene	126	12.493	12.493	0.000	97	153173	2.00	2.00	
115 1,3,5-Trimethylbenzene	105	12.554	12.554	0.000	94	561452	2.00	2.05	
116 4-Chlorotoluene	126	12.585	12.585	0.000	97	158846	2.00	2.05	
118 tert-Butylbenzene	134	12.798	12.798	0.000	93	118881	2.00	1.99	
119 Pentachloroethane	167	12.829	12.829	0.000	82	88184	2.00	1.99	
120 1,2,4-Trimethylbenzene	105	12.835	12.835	0.000	96	561086	2.00	2.00	
121 sec-Butylbenzene	105	12.957	12.957	0.000	94	710997	2.00	2.05	
122 1,3-Dichlorobenzene	146	13.060	13.060	0.000	97	293098	2.00	2.00	
123 4-Isopropyltoluene	119	13.066	13.066	0.000	97	602094	2.00	2.05	
* 124 1,4-Dichlorobenzene-d4	152	13.115	13.115	0.000	95	925401	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.133	13.133	0.000	95	293408	2.00	2.03	
126 1,2,3-Trimethylbenzene	120	13.139	13.139	0.000	99	247797	2.00	1.99	
127 Benzyl chloride	126	13.206	13.206	0.000	98	46025	2.00	2.00	
130 n-Butylbenzene	92	13.359	13.359	0.000	98	300776	2.00	2.04	
131 1,2-Dichlorobenzene	146	13.395	13.395	0.000	98	271331	2.00	2.04	
129 p-Diethylbenzene	119	13.408	13.408	0.000	87	302527	2.00	2.04	
134 1,2-Dibromo-3-Chloropropane	155	13.932	13.932	0.000	81	16991	2.00	2.11	
135 1,3,5-Trichlorobenzene	180	14.060	14.060	0.000	97	215876	2.00	2.04	
136 1,2,4-Trichlorobenzene	180	14.481	14.481	0.000	94	185008	2.00	2.06	
137 Hexachlorobutadiene	225	14.566	14.566	0.000	97	78006	2.00	1.90	
138 Naphthalene	128	14.664	14.664	0.000	97	350947	2.00	2.03	
139 1,2,3-Trichlorobenzene	180	14.810	14.810	0.000	96	160424	2.00	2.06	
140 2-Methylnaphthalene	142	15.444	15.444	0.000	92	207460	2.00	2.07	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00006	Amount Added:	2.00	Units: uL	
MSV_LL_#2_826_00007	Amount Added:	2.00	Units: uL	
MSV_LL_GAS826_00010	Amount Added:	2.00	Units: uL	
MSV_LLcentISS_00001	Amount Added:	5.00	Units: uL	Run Reagent

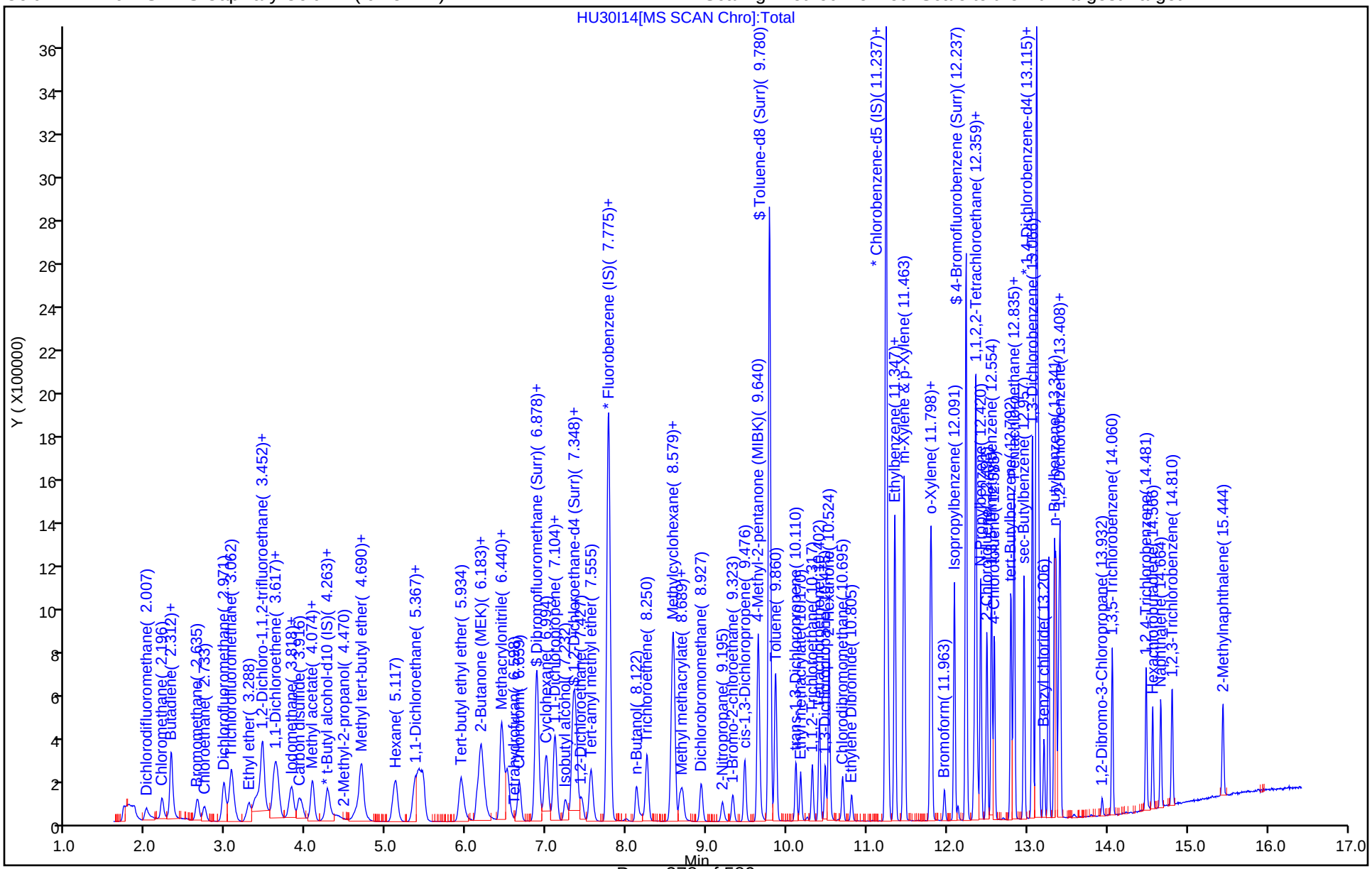
Report Date: 01-Jul-2021 16:18:30 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I14.D

Injection Date:	30-Jun-2021 19:49:30	Instrument ID:	19094	Operator ID:	jml01693
Lims ID:	IC std4 2			Worklist Smp#:	17
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

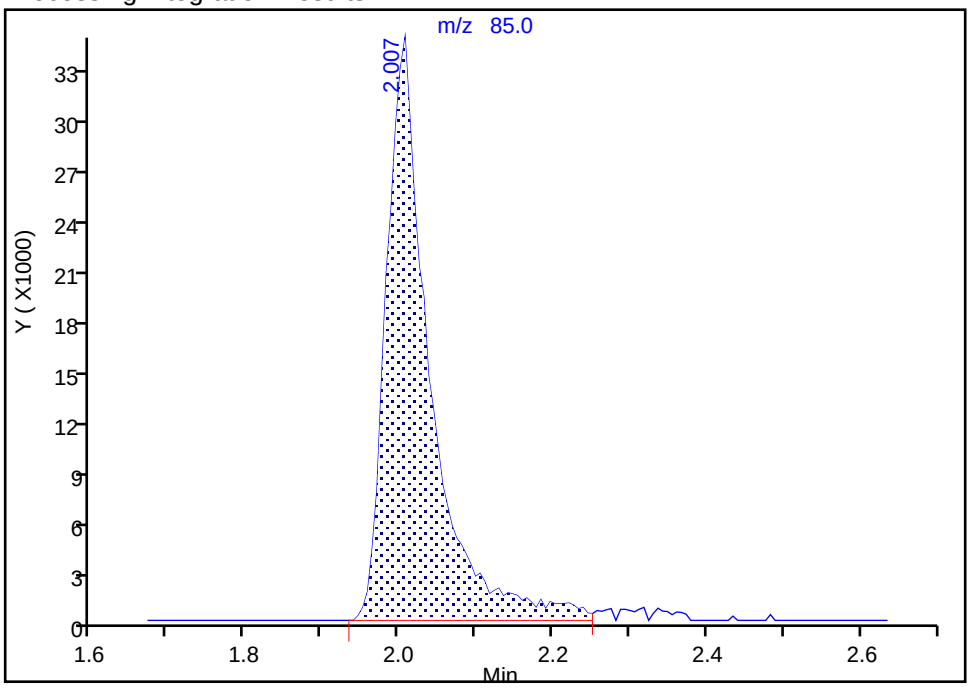
Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I14.D
Injection Date: 30-Jun-2021 19:49:30 Instrument ID: 19094
Lims ID: IC std4 2
Client ID:
Operator ID: jml01693 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

3 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

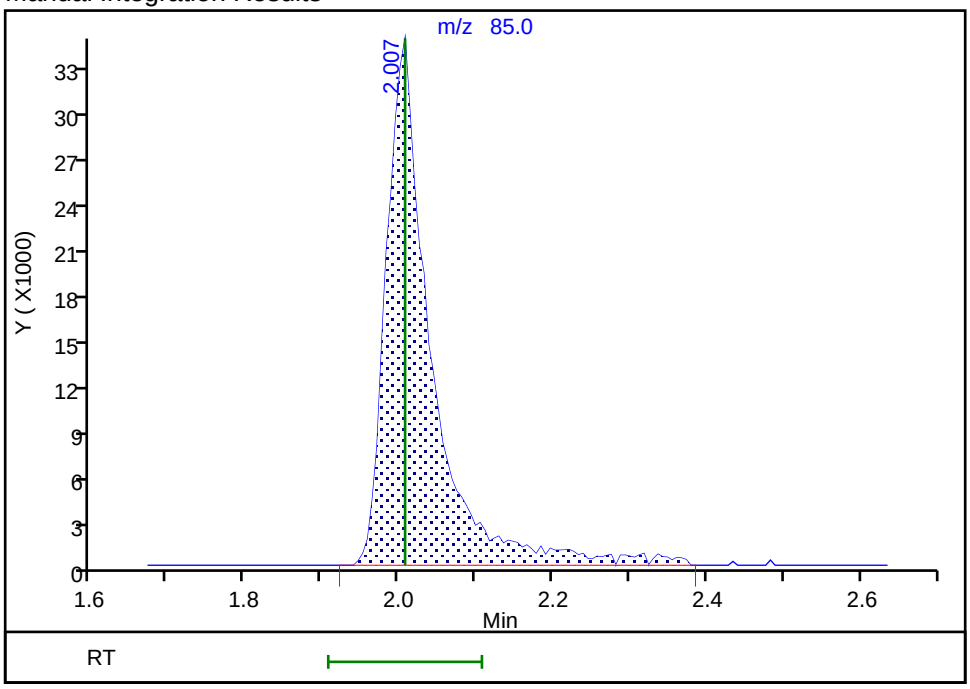
Processing Integration Results

RT: 2.01
Area: 135234
Amount: 2.052814
Amount Units: ug/l



Manual Integration Results

RT: 2.01
Area: 138915
Amount: 2.066044
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:44:01
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

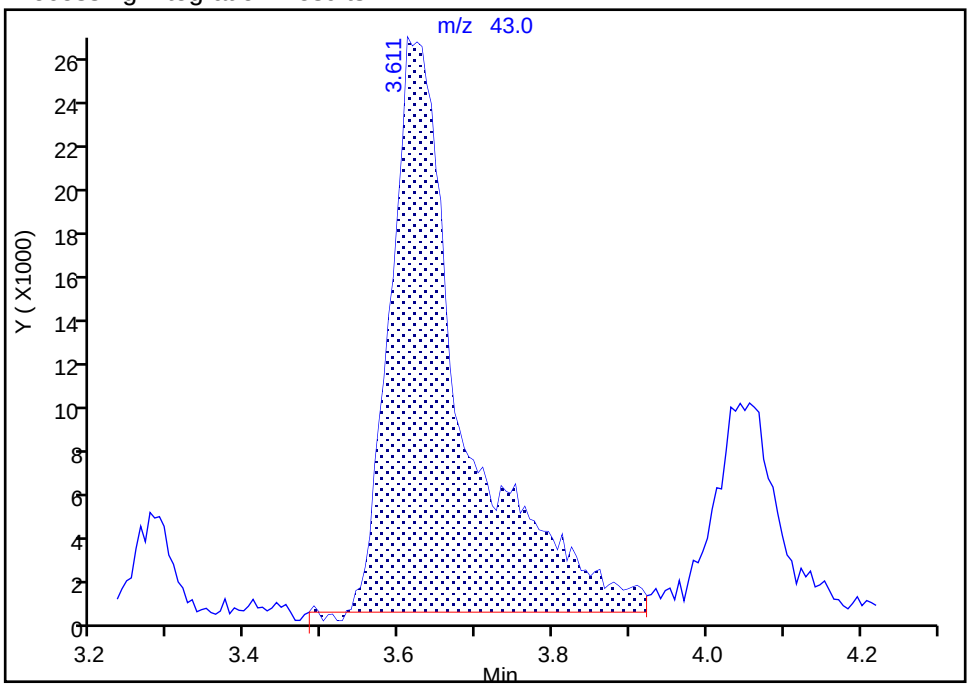
Data File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I14.D				
Injection Date:	30-Jun-2021 19:49:30	Instrument ID:	19094		
Lims ID:	IC std4 2				
Client ID:					
Operator ID:	jml01693	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

19 Acetone, CAS: 67-64-1

Signal: 1

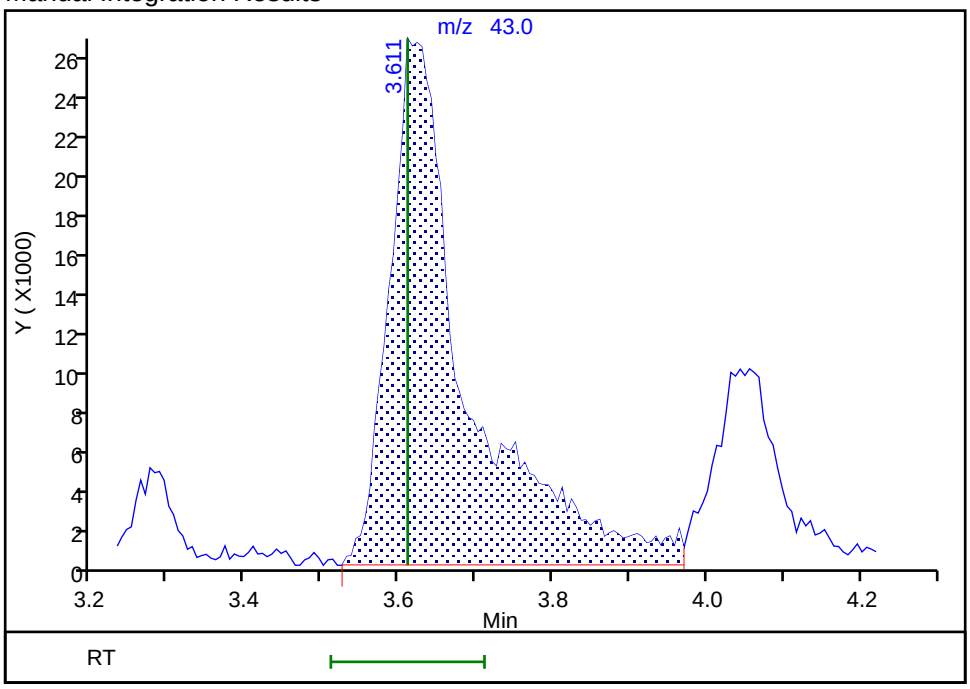
Processing Integration Results

RT: 3.61
Area: 169613
Amount: 18.018170
Amount Units: ug/l



Manual Integration Results

RT: 3.61
Area: 181864
Amount: 18.973662
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:51:46
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

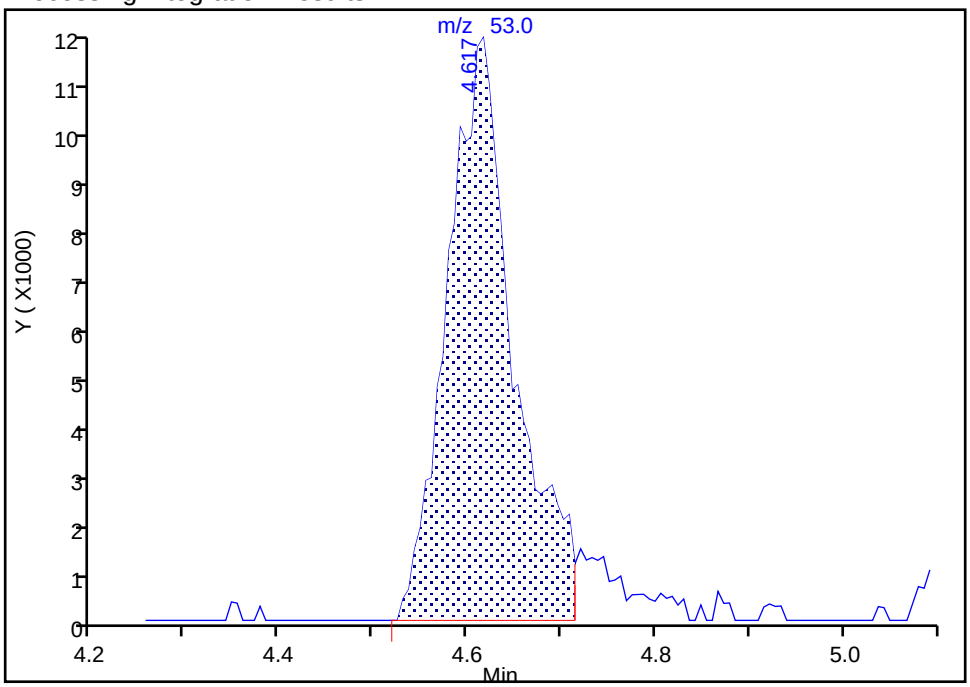
Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I14.D
Injection Date: 30-Jun-2021 19:49:30 Instrument ID: 19094
Lims ID: IC std4 2
Client ID:
Operator ID: jml01693 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

31 Acrylonitrile, CAS: 107-13-1

Signal: 1

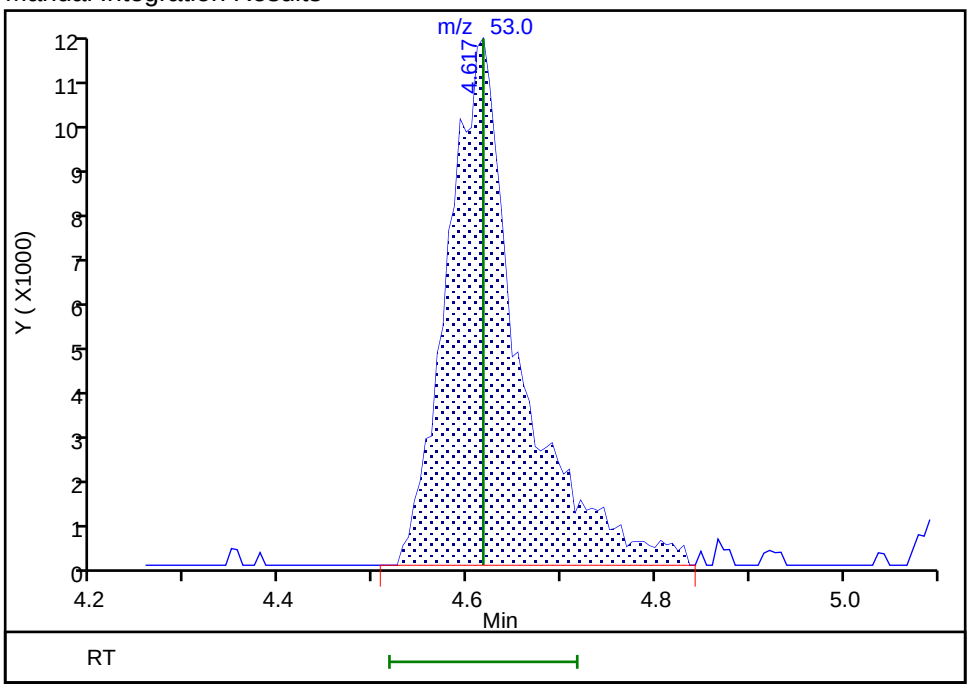
Processing Integration Results

RT: 4.62
Area: 57847
Amount: 4.886987
Amount Units: ug/l



Manual Integration Results

RT: 4.62
Area: 62935
Amount: 5.031256
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:44:25
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

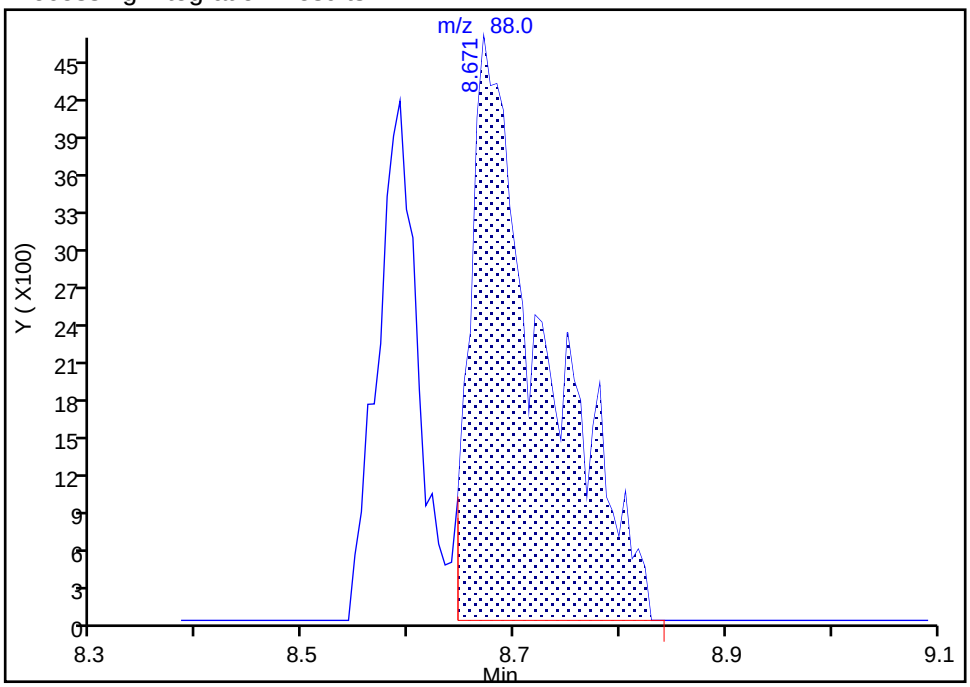
Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I14.D
Injection Date: 30-Jun-2021 19:49:30 Instrument ID: 19094
Lims ID: IC std4 2
Client ID:
Operator ID: jml01693 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

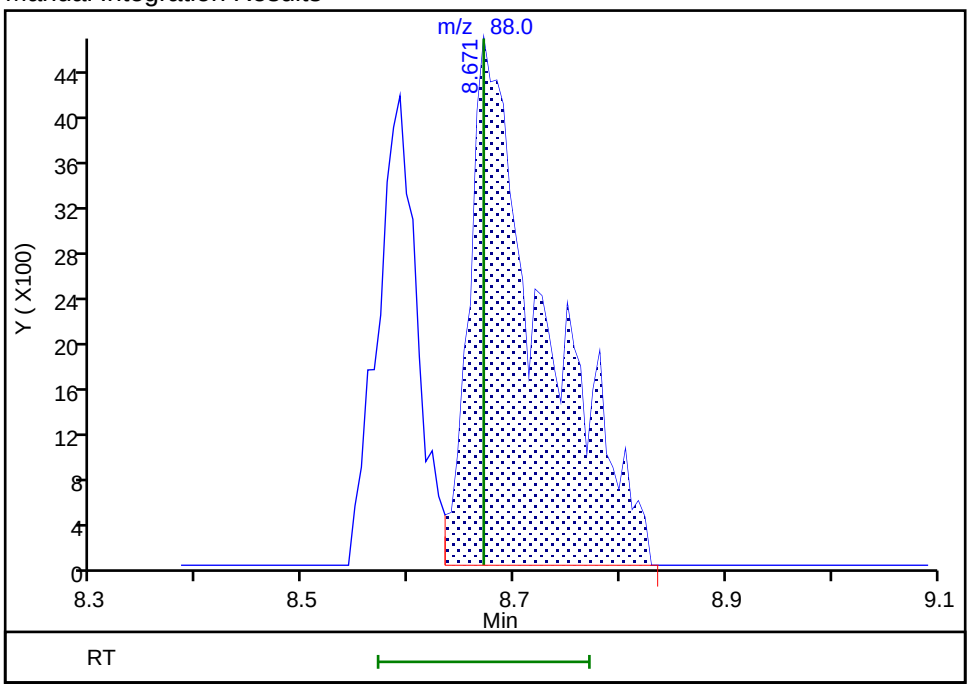
Processing Integration Results

RT: 8.67
Area: 22783
Amount: 117.5595
Amount Units: ug/l



Manual Integration Results

RT: 8.67
Area: 23116
Amount: 114.5836
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:44:46
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I15.D
Lims ID: IC std3 1
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 30-Jun-2021 20:10:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0033290-018
Misc. Info.: IC STD3 1
Operator ID: jml01693 Instrument ID: 19094
Sublist: chrom-MSV_19094_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Jul-2021 16:18:36 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: campbellme Date: 01-Jul-2021 00:46:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.001	2.007	-0.006	99	66364	1.00	0.9850	
6 Chloromethane	50	2.184	2.196	-0.012	99	80619	1.00	0.9887	
8 Butadiene	39	2.306	2.312	-0.006	92	78040	1.00	1.04	
7 Vinyl chloride	62	2.312	2.324	-0.012	77	83686	1.00	1.02	M
9 Bromomethane	94	2.629	2.635	-0.006	90	60093	1.00	0.9859	
10 Chloroethane	64	2.721	2.721	0.000	100	53016	1.00	1.00	
11 Dichlorofluoromethane	67	2.959	2.971	-0.012	97	123533	1.00	1.01	
13 Trichlorofluoromethane	101	3.038	3.044	-0.006	98	108599	1.00	1.00	
15 Ethyl ether	59	3.276	3.282	-0.006	92	46497	1.00	0.99	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.367	3.373	-0.006	93	84470	1.00	0.9764	
17 Acrolein	56	3.446	3.458	-0.012	99	377461	50.0	51.1	M
18 1,1-Dichloroethene	96	3.593	3.605	-0.012	97	62094	1.00	0.9881	
19 Acetone	43	3.617	3.611	0.006	75	92153	10.0	9.87	M
20 112TCTFE	101	3.623	3.635	-0.012	95	67947	1.00	1.02	
21 Isopropyl alcohol	45	3.751	3.769	-0.018	96	40988	20.0	22.1	M
22 Iodomethane	142	3.788	3.806	-0.018	100	106201	1.00	0.9623	
23 Ethyl bromide	108	3.812	3.824	-0.012	99	50430	1.00	0.9524	
24 Carbon disulfide	76	3.910	3.916	-0.006	98	182745	1.00	0.9676	
26 Methyl acetate	43	4.056	4.056	0.000	94	22808	1.00	0.8214	
27 3-Chloro-1-propene	41	4.062	4.080	-0.018	95	107556	1.00	0.9695	
29 Methylene Chloride	84	4.257	4.263	-0.006	93	65226	1.00	0.9897	
* 28 t-Butyl alcohol-d10 (IS)	65	4.233	4.269	-0.036	88	127180	50.0	50.0	
30 2-Methyl-2-propanol	59	4.373	4.385	-0.012	98	56455	20.0	19.4	M
31 Acrylonitrile	53	4.611	4.617	-0.006	62	29478	2.50	2.42	
32 Methyl tert-butyl ether	73	4.684	4.665	0.019	80	148415	1.00	1.00	
33 trans-1,2-Dichloroethene	96	4.678	4.696	-0.018	98	65953	1.00	0.9721	
34 Hexane	57	5.105	5.117	-0.013	91	108339	1.00	1.00	
35 1,1-Dichloroethane	63	5.342	5.348	-0.006	95	123496	1.00	0.99	
37 Isopropyl ether	45	5.385	5.397	-0.012	96	216486	1.00	0.99	
38 2-Chloro-1,3-butadiene	53	5.446	5.458	-0.012	89	104470	1.00	0.99	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.921	5.934	-0.013	99	185822	1.00	0.9816	
41 2-Butanone (MEK)	43	6.135	6.135	0.000	100	160322	10.0	10.3	
S 40 1,2-Dichloroethene, Total	100				0			1.95	
42 cis-1,2-Dichloroethene	96	6.171	6.183	-0.012	82	72968	1.00	0.9745	
43 2,2-Dichloropropane	77	6.196	6.190	0.006	85	99215	1.00	0.9757	
45 Propionitrile	54	6.226	6.214	0.012	96	88284	20.0	19.9	
47 Methacrylonitrile	67	6.434	6.440	-0.006	91	163270	10.0	10.0	
48 Chlorobromomethane	128	6.513	6.507	0.006	97	29194	1.00	0.9742	
49 Tetrahydrofuran	71	6.513	6.531	-0.018	76	22586	5.00	5.21	
50 Chloroform	83	6.653	6.659	-0.006	93	115860	1.00	0.9894	
$ 51 Dibromofluoromethane (Surr)	113	6.872	6.872	0.000	93	569771	10.0	9.92	
52 1,1,1-Trichloroethane	97	6.885	6.891	-0.006	98	104482	1.00	0.9714	
53 Cyclohexane	56	6.988	6.994	-0.006	89	134731	1.00	1.00	
55 1,1-Dichloropropene	75	7.098	7.104	-0.006	98	96932	1.00	0.9793	
56 Carbon tetrachloride	117	7.104	7.110	-0.006	86	89759	1.00	0.9662	
57 Isobutyl alcohol	41	7.226	7.232	-0.006	96	55793	50.0	50.6	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.330	7.330	0.000	80	117606	10.0	10.1	
59 Benzene	78	7.360	7.366	-0.006	95	276493	1.00	0.9721	
60 1,2-Dichloroethane	62	7.427	7.439	-0.012	97	70042	1.00	1.01	
62 Tert-amyl methyl ether	73	7.549	7.555	-0.006	99	163890	1.00	0.9841	
* 65 Fluorobenzene (IS)	96	7.769	7.769	0.000	99	2375123	10.0	10.0	
64 n-Heptane	43	7.781	7.781	0.000	88	118198	1.00	1.00	
66 n-Butanol	56	8.122	8.122	0.000	88	80263	87.5	83.1	
67 Trichloroethene	95	8.250	8.250	0.000	98	72534	1.00	0.99	
68 Methylcyclohexane	83	8.567	8.567	0.000	92	136413	1.00	0.9856	
70 1,2-Dichloropropane	63	8.579	8.585	-0.006	75	73856	1.00	1.00	
69 2-ethoxy-2-methyl butane	87	8.586	8.592	-0.006	91	88935	1.00	0.9575	
71 Methyl methacrylate	69	8.659	8.665	-0.006	92	29268	1.00	0.9747	
72 1,4-Dioxane	88	8.671	8.671	0.000	38	9956	50.0	50.7	
73 Dibromomethane	93	8.695	8.689	0.006	97	31242	1.00	0.99	
75 Dichlorobromomethane	83	8.927	8.927	0.000	99	80478	1.00	0.9783	
76 2-Nitropropane	41	9.195	9.195	0.000	98	38781	5.00	4.89	
79 1-Bromo-2-chloroethane	63	9.323	9.323	0.000	98	69109	1.00	0.9667	
80 cis-1,3-Dichloropropene	75	9.470	9.476	-0.006	96	104079	1.00	0.9776	
81 4-Methyl-2-pentanone (MIBK)	43	9.640	9.640	0.000	96	392816	10.0	10.0	
$ 82 Toluene-d8 (Surr)	98	9.780	9.780	0.000	93	2359714	10.0	9.97	
83 Toluene	92	9.854	9.860	-0.006	99	181542	1.00	1.01	
S 84 1,3-Dichloropropene, Total	100				0			1.96	
85 trans-1,3-Dichloropropene	75	10.110	10.110	0.000	91	83292	1.00	0.9849	
86 Ethyl methacrylate	69	10.171	10.170	0.001	88	63584	1.00	0.9831	
87 1,1,2-Trichloroethane	97	10.317	10.317	0.000	89	45845	1.00	1.00	
88 Tetrachloroethene	166	10.402	10.408	-0.006	97	76238	1.00	0.9734	
89 1,3-Dichloropropane	76	10.475	10.475	0.000	87	81109	1.00	1.01	
91 2-Hexanone	43	10.524	10.524	0.000	97	268297	10.0	10.0	
93 Chlorodibromomethane	129	10.695	10.695	0.000	90	54928	1.00	0.9604	
94 Ethylene Dibromide	107	10.805	10.805	0.001	99	43997	1.00	0.99	
* 97 Chlorobenzene-d5 (IS)	117	11.237	11.237	0.000	86	1761735	10.0	10.0	
96 1-Chlorohexane	91	11.244	11.243	0.001	95	106347	1.00	0.9692	
S 95 Xylenes, Total	106				0			2.95	
98 Chlorobenzene	112	11.262	11.262	0.000	95	189144	1.00	0.9879	
100 Ethylbenzene	91	11.347	11.347	0.000	98	333584	1.00	0.9785	
99 1,1,1,2-Tetrachloroethane	131	11.347	11.347	0.000	96	63655	1.00	0.9739	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 m-Xylene & p-Xylene	106	11.463	11.463	0.000	98	257064	2.00	1.97	
102 o-Xylene	106	11.792	11.792	0.000	96	126601	1.00	0.9813	
103 Styrene	104	11.804	11.804	0.000	94	200036	1.00	0.9683	
104 Bromoform	173	11.963	11.963	0.000	96	30349	1.00	0.9600	
105 Isopropylbenzene	105	12.091	12.091	0.000	95	329083	1.00	0.9888	
$ 108 4-Bromofluorobenzene (Surr)	95	12.237	12.237	0.000	89	869052	10.0	10.1	
109 1,1,2,2-Tetrachloroethane	83	12.329	12.335	-0.006	94	54467	1.00	0.9654	
111 Bromobenzene	156	12.353	12.353	0.000	94	71823	1.00	1.00	
110 trans-1,4-Dichloro-2-butene	53	12.359	12.359	0.000	92	140522	10.0	10.2	
112 1,2,3-Trichloropropane	110	12.384	12.383	0.001	82	14760	1.00	1.02	
113 N-Propylbenzene	91	12.420	12.420	0.000	99	385296	1.00	0.9765	
114 2-Chlorotoluene	126	12.499	12.493	0.006	97	76419	1.00	0.99	
115 1,3,5-Trimethylbenzene	105	12.554	12.554	0.000	94	267877	1.00	0.9701	
116 4-Chlorotoluene	126	12.585	12.585	0.000	98	76197	1.00	0.9788	
118 tert-Butylbenzene	134	12.792	12.798	-0.006	93	58182	1.00	0.9682	
119 Pentachloroethane	167	12.829	12.829	0.001	83	42777	1.00	0.9594	
120 1,2,4-Trimethylbenzene	105	12.835	12.835	0.000	97	277722	1.00	0.9860	
121 sec-Butylbenzene	105	12.957	12.957	0.000	94	340566	1.00	0.9764	
122 1,3-Dichlorobenzene	146	13.060	13.060	0.000	97	146613	1.00	0.99	
123 4-Isopropyltoluene	119	13.066	13.066	0.000	97	287327	1.00	0.9738	
* 124 1,4-Dichlorobenzene-d4	152	13.115	13.115	0.000	95	931316	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.133	13.133	0.000	94	143278	1.00	0.9850	
126 1,2,3-Trimethylbenzene	120	13.140	13.139	0.001	98	123375	1.00	0.9846	
127 Benzyl chloride	126	13.213	13.206	0.007	98	22106	1.00	0.9555	
130 n-Butylbenzene	92	13.359	13.359	0.000	98	145342	1.00	0.9782	
131 1,2-Dichlorobenzene	146	13.396	13.395	0.001	97	129078	1.00	0.9651	
129 p-Diethylbenzene	119	13.408	13.408	0.000	87	146902	1.00	0.9835	
134 1,2-Dibromo-3-Chloropropane	155	13.938	13.932	0.006	87	8077	1.00	1.00	
135 1,3,5-Trichlorobenzene	180	14.060	14.060	0.000	98	104194	1.00	0.9778	
136 1,2,4-Trichlorobenzene	180	14.481	14.481	0.000	94	87323	1.00	0.9679	
137 Hexachlorobutadiene	225	14.566	14.566	0.000	95	39826	1.00	0.9634	
138 Naphthalene	128	14.664	14.664	0.000	97	176289	1.00	1.01	
139 1,2,3-Trichlorobenzene	180	14.810	14.810	0.000	96	76158	1.00	0.9724	
140 2-Methylnaphthalene	142	15.438	15.444	-0.006	92	99787	1.00	0.9885	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00006	Amount Added:	2.00	Units: uL	
MSV_LL_#2_826_00007	Amount Added:	2.00	Units: uL	
MSV_LL_GAS826_00010	Amount Added:	2.00	Units: uL	
MSV_LLcentISS_00001	Amount Added:	5.00	Units: uL	Run Reagent

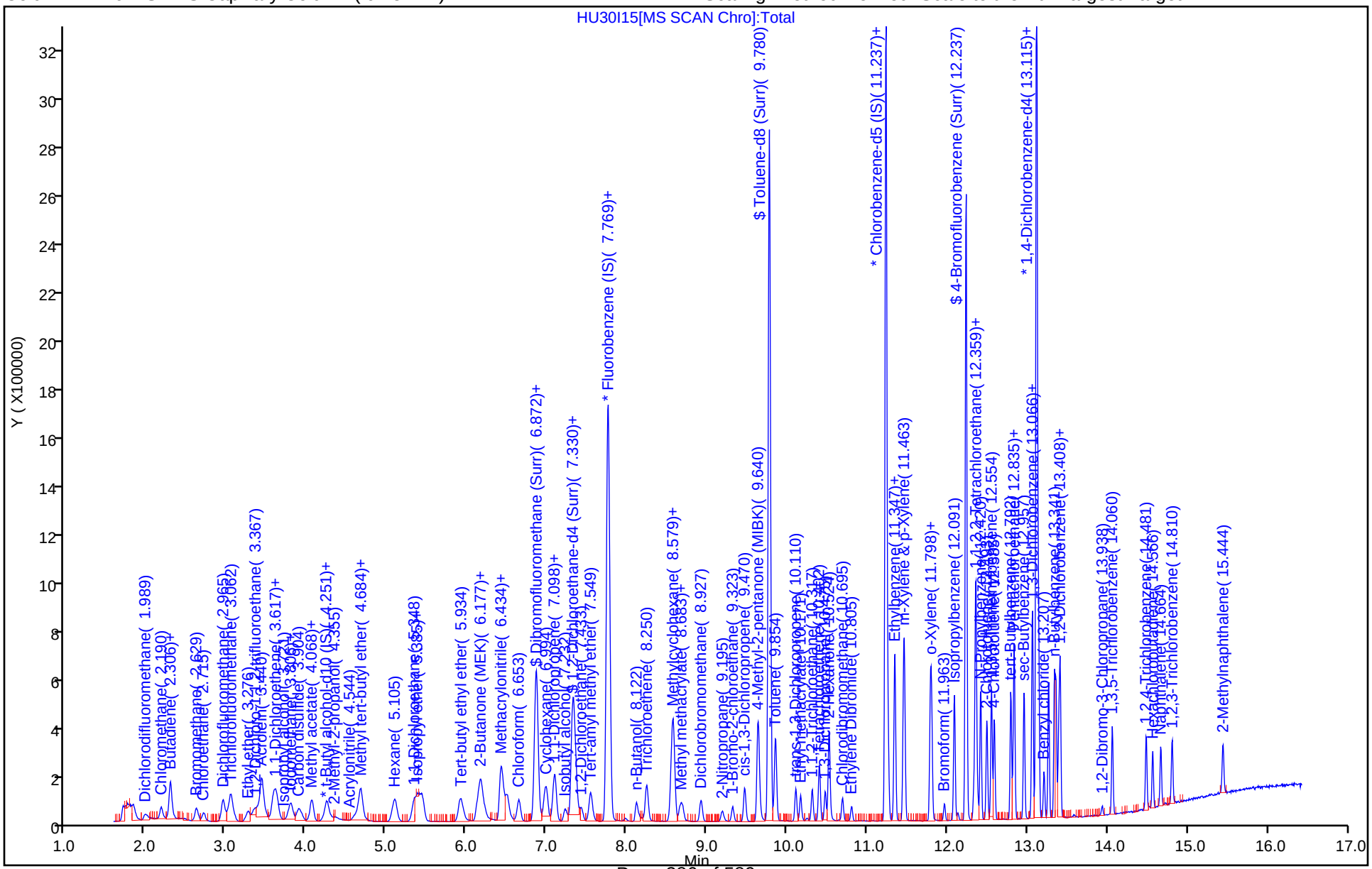
Report Date: 01-Jul-2021 16:18:37 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I15.D

Injection Date:	30-Jun-2021 20:10:30	Instrument ID:	19094	Operator ID:	jml01693
Lims ID:	IC std3 1			Worklist Smp#:	18
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

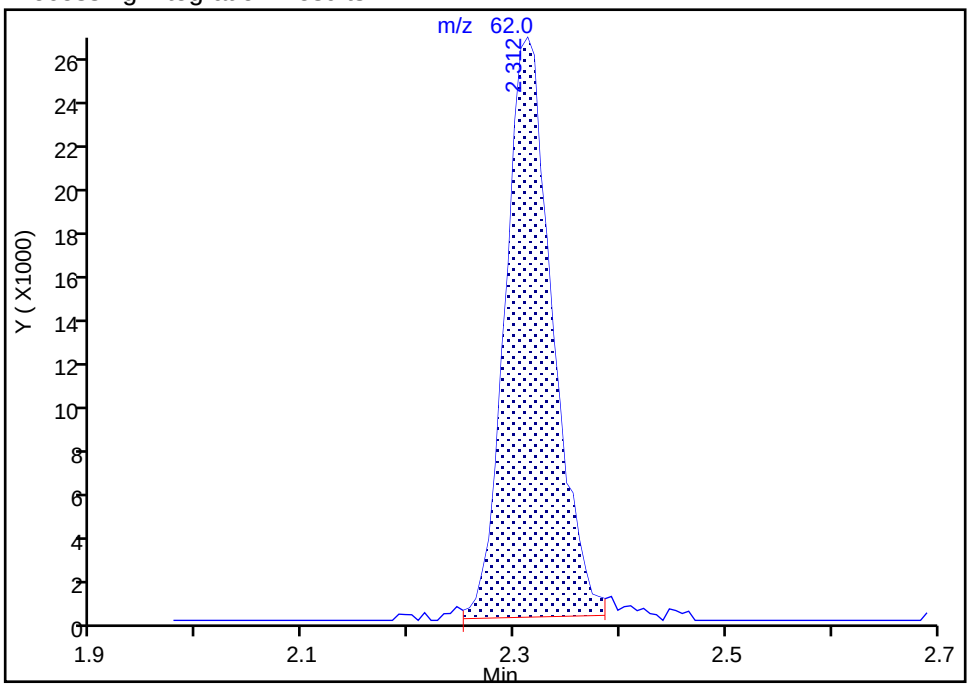
Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I15.D
Injection Date: 30-Jun-2021 20:10:30 Instrument ID: 19094
Lims ID: IC std3 1
Client ID:
Operator ID: jml01693 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

7 Vinyl chloride, CAS: 75-01-4

Signal: 1

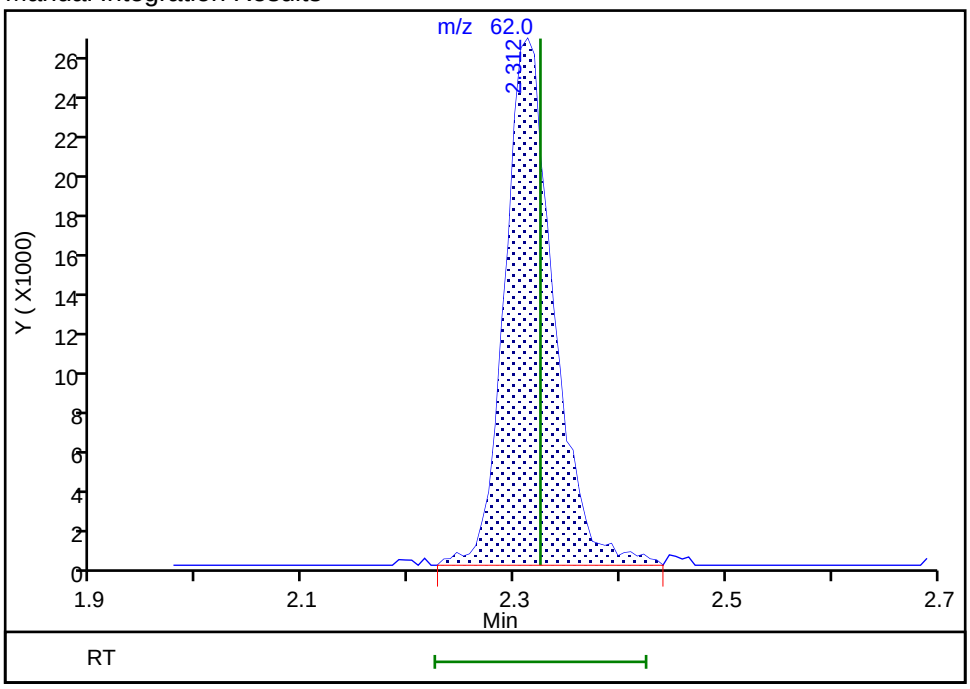
Processing Integration Results

RT: 2.31
Area: 80381
Amount: 0.993409
Amount Units: ug/l



Manual Integration Results

RT: 2.31
Area: 83686
Amount: 1.015979
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:45:20
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

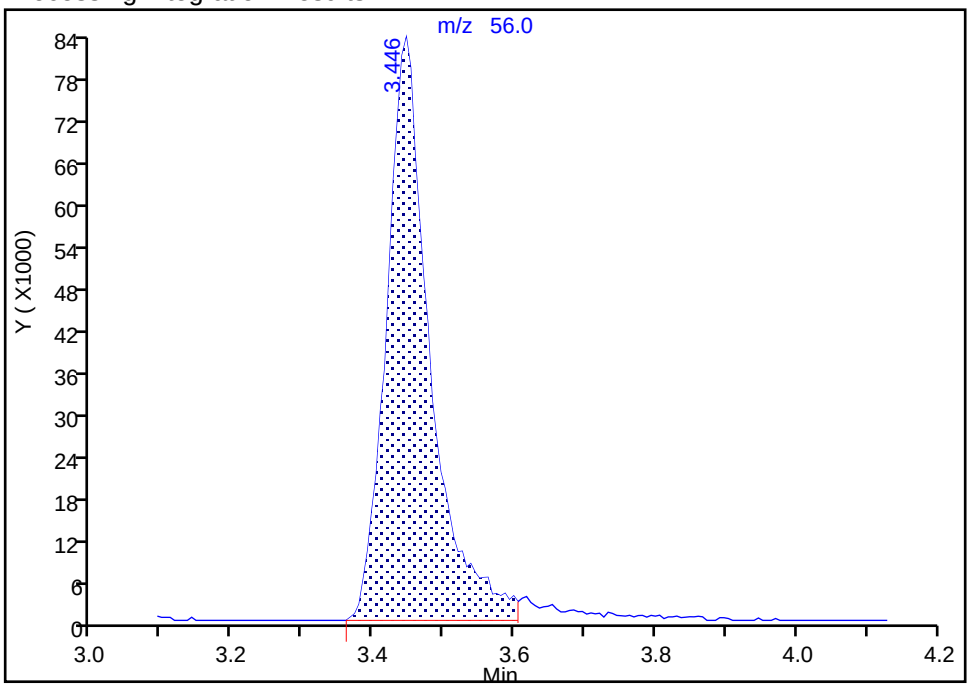
Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I15.D
Injection Date: 30-Jun-2021 20:10:30 Instrument ID: 19094
Lims ID: IC std3 1
Client ID:
Operator ID: jml01693 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

17 Acrolein, CAS: 107-02-8

Signal: 1

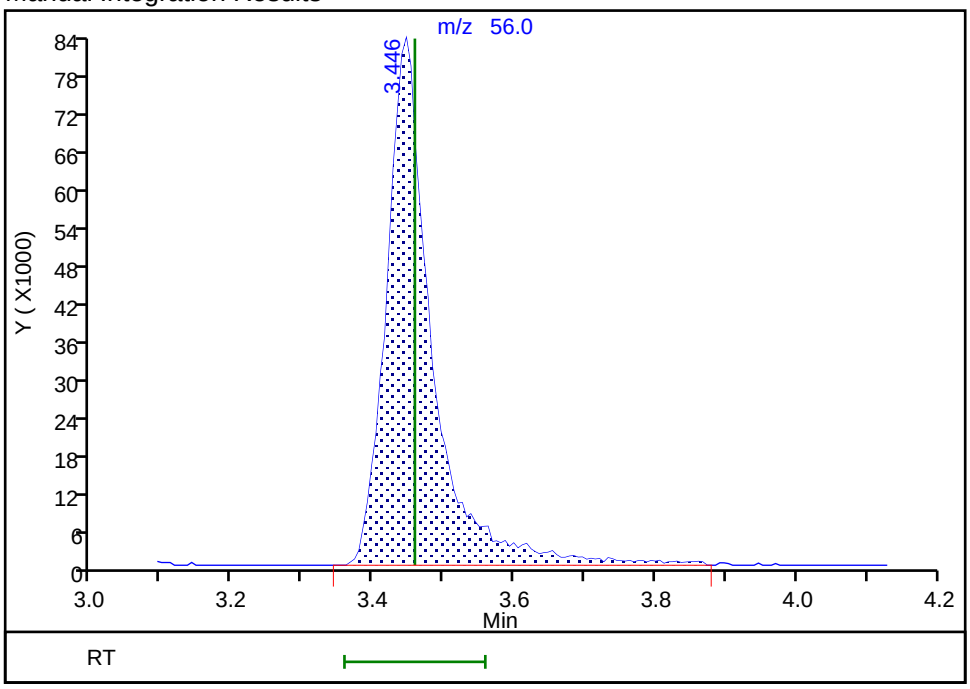
Processing Integration Results

RT: 3.45
Area: 360044
Amount: 49.980304
Amount Units: ug/l



Manual Integration Results

RT: 3.45
Area: 377461
Amount: 51.120496
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:45:30
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

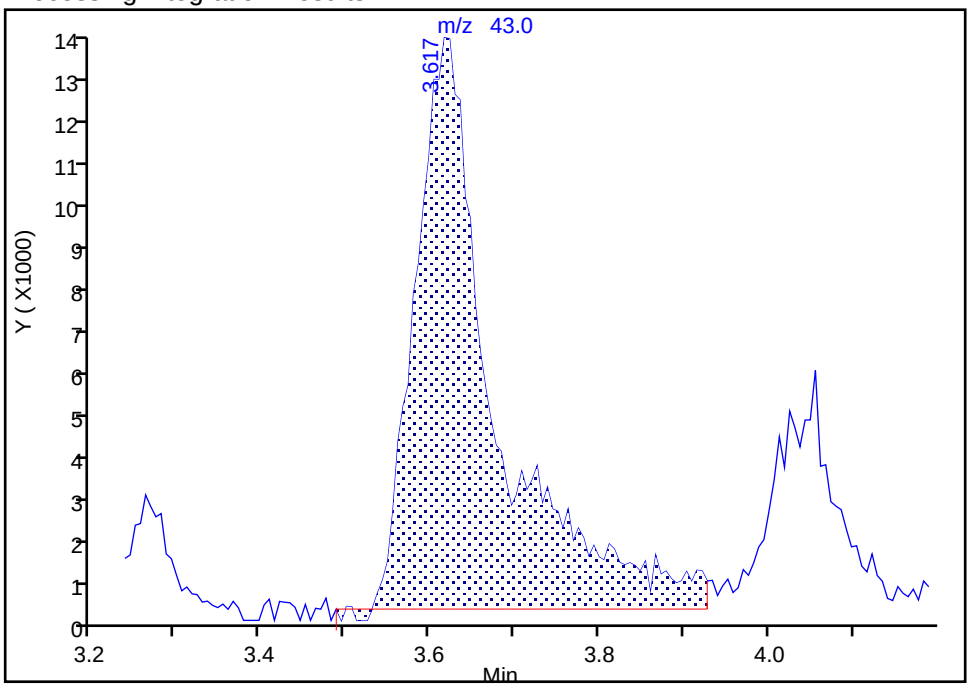
Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I15.D
Injection Date: 30-Jun-2021 20:10:30 Instrument ID: 19094
Lims ID: IC std3 1
Client ID:
Operator ID: jml01693 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

19 Acetone, CAS: 67-64-1

Signal: 1

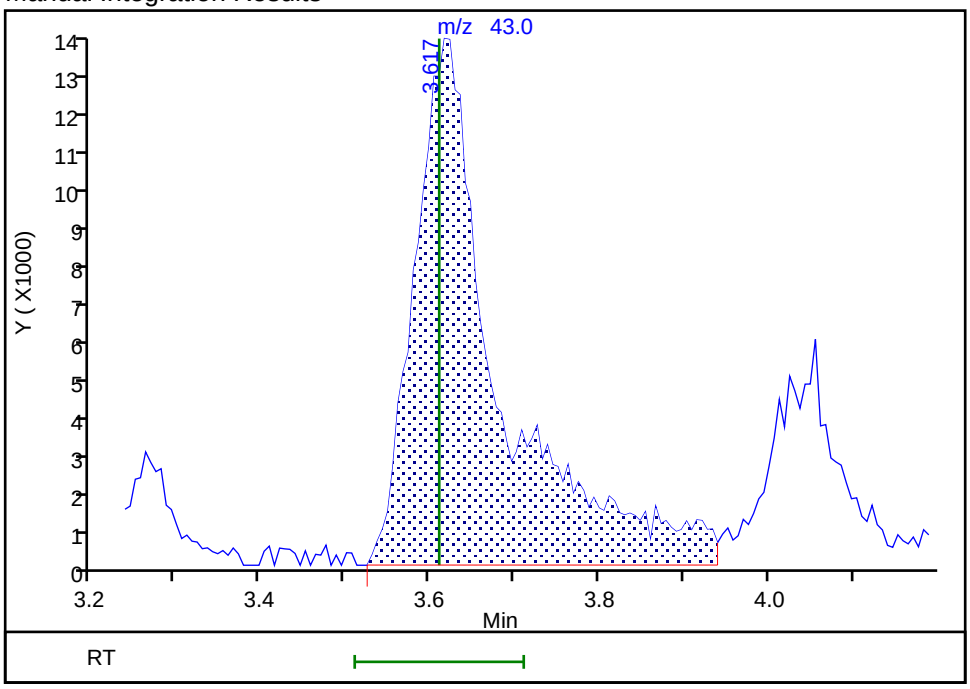
Processing Integration Results

RT: 3.62
Area: 85229
Amount: 9.584204
Amount Units: ug/l



Manual Integration Results

RT: 3.62
Area: 92153
Amount: 9.868822
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:45:45
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

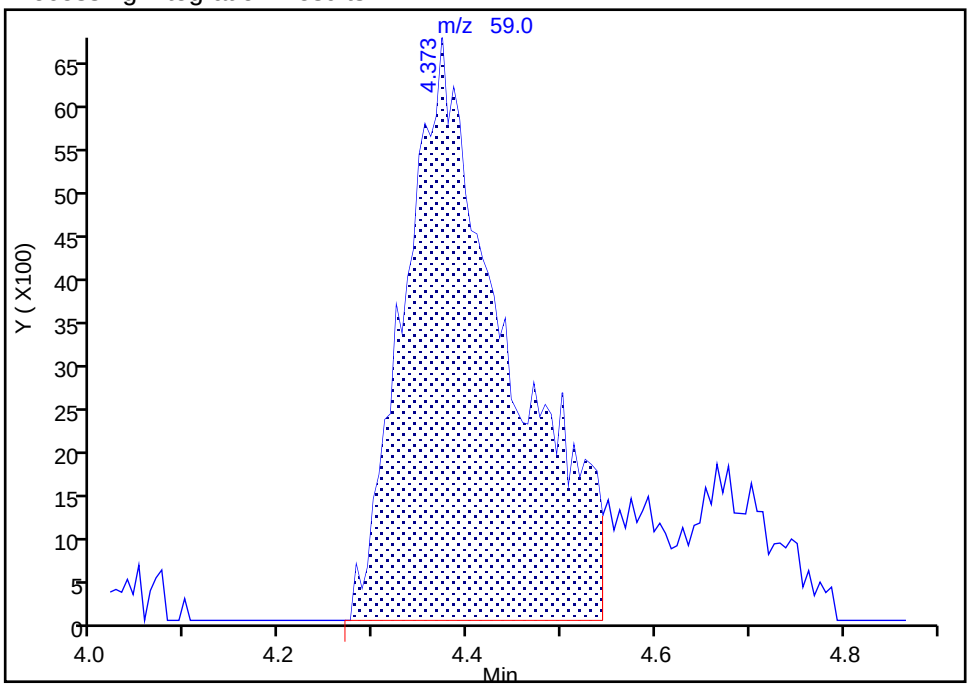
Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I15.D
Injection Date: 30-Jun-2021 20:10:30 Instrument ID: 19094
Lims ID: IC std3 1
Client ID:
Operator ID: jml01693 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

30 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

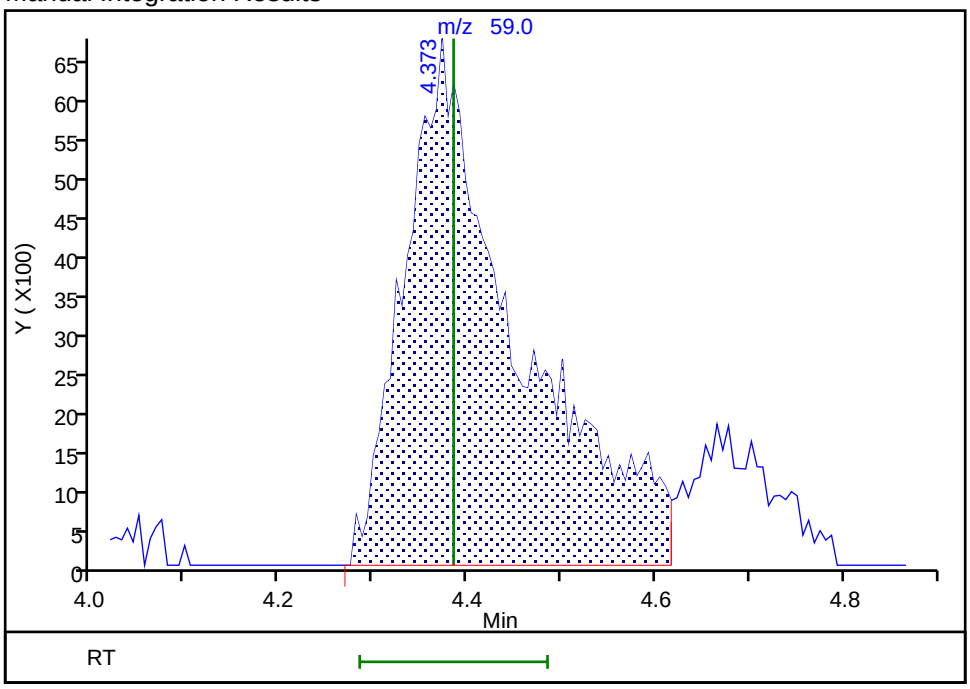
Processing Integration Results

RT: 4.37
Area: 51317
Amount: 18.729362
Amount Units: ug/l



Manual Integration Results

RT: 4.37
Area: 56455
Amount: 19.422146
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:46:18
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I16.D
Lims ID: IC std2 0.5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 30-Jun-2021 20:31:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0033290-019
Misc. Info.: IC STD2 0.5
Operator ID: jml01693 Instrument ID: 19094
Sublist: chrom-MSV_19094_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Jul-2021 16:18:43 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: campbellme Date: 01-Jul-2021 00:48:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.001	2.007	-0.006	98	32672	0.5000	0.4941	
6 Chloromethane	50	2.202	2.196	0.006	99	42684	0.5000	0.5334	
8 Butadiene	39	2.318	2.312	0.006	93	39212	0.5000	0.5300	
7 Vinyl chloride	62	2.324	2.324	0.000	75	40611	0.5000	0.5023	M
9 Bromomethane	94	2.641	2.635	0.006	91	31357	0.5000	0.5242	
10 Chloroethane	64	2.727	2.721	0.006	100	27515	0.5000	0.5263	
11 Dichlorofluoromethane	67	2.971	2.971	0.000	97	62144	0.5000	0.5157	
13 Trichlorofluoromethane	101	3.038	3.044	-0.006	97	54287	0.5000	0.5103	
15 Ethyl ether	59	3.275	3.282	-0.007	93	24120	0.5000	0.5245	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.367	3.373	-0.006	93	43574	0.5000	0.5132	
17 Acrolein	56	3.458	3.458	0.000	98	179558	25.0	24.1	
18 1,1-Dichloroethene	96	3.605	3.605	0.000	98	32175	0.5000	0.5217	
19 Acetone	43	3.623	3.611	0.012	84	55161	5.00	5.86	M
20 112TCTFE	101	3.641	3.635	0.006	91	32486	0.5000	0.4955	
21 Isopropyl alcohol	45	3.800	3.769	0.031	30	19779	10.0	10.9	M
22 Iodomethane	142	3.806	3.806	0.000	98	56553	0.5000	0.5221	
23 Ethyl bromide	108	3.824	3.824	0.000	98	26977	0.4997	0.5191	
24 Carbon disulfide	76	3.922	3.916	0.006	98	95530	0.5000	0.5154	
26 Methyl acetate	43	4.050	4.056	-0.006	43	17001	0.5000	0.6079	
27 3-Chloro-1-propene	41	4.068	4.080	-0.012	95	56549	0.5000	0.5193	
29 Methylene Chloride	84	4.269	4.263	0.006	97	33585	0.5000	0.5192	
* 28 t-Butyl alcohol-d10 (IS)	65	4.251	4.269	-0.018	89	128101	50.0	50.0	
30 2-Methyl-2-propanol	59	4.391	4.385	0.006	36	33132	10.0	11.3	M
31 Acrylonitrile	53	4.617	4.617	0.000	96	14811	1.25	1.21	M
32 Methyl tert-butyl ether	73	4.678	4.665	0.013	92	77764	0.5000	0.5320	
33 trans-1,2-Dichloroethene	96	4.690	4.696	-0.006	99	35425	0.5000	0.5320	
34 Hexane	57	5.104	5.117	-0.013	93	52878	0.5000	0.4959	
35 1,1-Dichloroethane	63	5.342	5.348	-0.006	95	62520	0.5000	0.5113	
37 Isopropyl ether	45	5.391	5.397	-0.006	95	108639	0.5000	0.5083	
38 2-Chloro-1,3-butadiene	53	5.452	5.458	-0.006	90	51812	0.5000	0.5017	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.933	5.934	-0.001	99	95509	0.5000	0.5141	
41 2-Butanone (MEK)	43	6.141	6.135	0.006	99	75278	5.00	4.78	
S 40 1,2-Dichloroethene, Total	100				0			1.05	
42 cis-1,2-Dichloroethene	96	6.177	6.183	-0.006	83	37869	0.5000	0.5153	
43 2,2-Dichloropropane	77	6.202	6.190	0.012	82	50450	0.5000	0.5055	
45 Propionitrile	54	6.226	6.214	0.012	98	47015	10.0	10.5	M
47 Methacrylonitrile	67	6.439	6.440	-0.001	92	82218	5.00	5.01	
48 Chlorobromomethane	128	6.507	6.507	-0.001	88	15243	0.5000	0.5183	
49 Tetrahydrofuran	71	6.525	6.531	-0.006	82	11168	2.50	2.56	
50 Chloroform	83	6.659	6.659	0.000	93	59078	0.5000	0.5140	
$ 51 Dibromofluoromethane (Surr)	113	6.872	6.872	0.000	93	564931	10.0	10.0	
52 1,1,1-Trichloroethane	97	6.891	6.891	0.000	38	53837	0.5000	0.5100	
53 Cyclohexane	56	6.994	6.994	0.000	89	65783	0.5000	0.4953	
55 1,1-Dichloropropene	75	7.104	7.104	0.000	96	49023	0.5000	0.5046	
56 Carbon tetrachloride	117	7.098	7.110	-0.012	90	45103	0.5000	0.4947	
57 Isobutyl alcohol	41	7.244	7.232	0.012	95	30343	25.0	27.3	M
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.330	7.330	0.000	77	111322	10.0	9.78	
59 Benzene	78	7.366	7.366	0.000	92	142873	0.5000	0.5118	
60 1,2-Dichloroethane	62	7.433	7.439	-0.006	95	35331	0.5000	0.5181	
62 Tert-amyl methyl ether	73	7.555	7.555	0.000	98	84725	0.5000	0.5183	
* 65 Fluorobenzene (IS)	96	7.768	7.769	-0.001	99	2331162	10.0	10.0	
64 n-Heptane	43	7.775	7.781	-0.006	38	60114	0.5000	0.5168	
66 n-Butanol	56	8.128	8.122	0.006	84	43261	43.8	44.5	
67 Trichloroethene	95	8.244	8.250	-0.006	98	36661	0.5000	0.5102	
68 Methylcyclohexane	83	8.567	8.567	0.000	93	67186	0.5000	0.4946	
70 1,2-Dichloropropane	63	8.591	8.585	0.006	73	37045	0.5000	0.5131	
69 2-ethoxy-2-methyl butane	87	8.585	8.592	-0.007	91	45893	0.5000	0.5034	
71 Methyl methacrylate	69	8.665	8.665	0.000	88	15282	0.5000	0.5053	
72 1,4-Dioxane	88	8.677	8.671	0.006	38	4839	25.0	24.4	M
73 Dibromomethane	93	8.695	8.689	0.006	96	15480	0.5000	0.4998	
75 Dichlorobromomethane	83	8.933	8.927	0.006	98	38647	0.5000	0.4787	
76 2-Nitropropane	41	9.189	9.195	-0.006	99	18280	2.50	2.29	
79 1-Bromo-2-chloroethane	63	9.323	9.323	0.000	98	35852	0.5000	0.5110	
80 cis-1,3-Dichloropropene	75	9.469	9.476	-0.007	97	50741	0.5000	0.4856	
81 4-Methyl-2-pentanone (MIBK)	43	9.646	9.640	0.006	97	197694	5.00	5.02	
$ 82 Toluene-d8 (Surr)	98	9.780	9.780	0.000	93	2286008	10.0	9.98	
83 Toluene	92	9.860	9.860	0.000	98	85514	0.5000	0.4893	
S 84 1,3-Dichloropropene, Total	100				0			0.9853	
85 trans-1,3-Dichloropropene	75	10.109	10.110	-0.001	91	40897	0.5000	0.4997	
86 Ethyl methacrylate	69	10.170	10.170	0.000	91	29902	0.5000	0.4777	
87 1,1,2-Trichloroethane	97	10.317	10.317	0.000	88	21410	0.5000	0.4804	
88 Tetrachloroethene	166	10.408	10.408	0.000	96	37787	0.5000	0.4985	
89 1,3-Dichloropropane	76	10.481	10.475	0.006	88	37169	0.5000	0.4799	
91 2-Hexanone	43	10.524	10.524	0.000	97	130621	5.00	4.85	
93 Chlorodibromomethane	129	10.695	10.695	0.000	88	28113	0.5000	0.5079	
94 Ethylene Dibromide	107	10.811	10.805	0.007	100	21493	0.5000	0.5002	
* 97 Chlorobenzene-d5 (IS)	117	11.237	11.237	0.000	86	1704998	10.0	10.0	
96 1-Chlorohexane	91	11.243	11.243	0.000	96	53627	0.5000	0.5050	
S 95 Xylenes, Total	106				0			1.46	
98 Chlorobenzene	112	11.262	11.262	0.000	95	93436	0.5000	0.5043	
100 Ethylbenzene	91	11.347	11.347	0.000	99	165739	0.5000	0.5023	
99 1,1,1,2-Tetrachloroethane	131	11.341	11.347	-0.006	96	32120	0.5000	0.5078	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 m-Xylene & p-Xylene	106	11.463	11.463	0.000	99	122857	1.00	0.9742	
102 o-Xylene	106	11.792	11.792	0.000	97	61149	0.5000	0.4897	
103 Styrene	104	11.804	11.804	0.000	94	97020	0.5000	0.4853	
104 Bromoform	173	11.963	11.963	0.000	96	14848	0.5000	0.4853	
105 Isopropylbenzene	105	12.091	12.091	0.000	96	156666	0.5000	0.4864	
$ 108 4-Bromofluorobenzene (Surr)	95	12.237	12.237	0.000	90	830728	10.0	9.94	
109 1,1,2,2-Tetrachloroethane	83	12.335	12.335	0.000	92	28190	0.5000	0.5202	
111 Bromobenzene	156	12.353	12.353	0.000	93	34134	0.5000	0.4964	
110 trans-1,4-Dichloro-2-butene	53	12.359	12.359	0.000	91	65285	5.00	4.72	
112 1,2,3-Trichloropropane	110	12.377	12.383	-0.006	80	7472	0.5000	0.5399	
113 N-Propylbenzene	91	12.420	12.420	0.000	99	186344	0.5000	0.4917	
114 2-Chlorotoluene	126	12.493	12.493	0.000	97	37963	0.5000	0.5124	
115 1,3,5-Trimethylbenzene	105	12.554	12.554	0.000	94	132249	0.5000	0.4987	
116 4-Chlorotoluene	126	12.591	12.585	0.006	96	37390	0.5000	0.5001	
118 tert-Butylbenzene	134	12.792	12.798	-0.006	93	29494	0.5000	0.5110	
119 Pentachloroethane	167	12.828	12.829	0.000	87	21378	0.5000	0.4992	
120 1,2,4-Trimethylbenzene	105	12.835	12.835	0.000	97	134140	0.5000	0.4958	
121 sec-Butylbenzene	105	12.956	12.957	-0.001	94	161149	0.5000	0.4810	
122 1,3-Dichlorobenzene	146	13.060	13.060	0.000	97	72016	0.5000	0.5081	
123 4-Isopropyltoluene	119	13.066	13.066	0.000	98	137118	0.5000	0.4839	
* 124 1,4-Dichlorobenzene-d4	152	13.115	13.115	0.000	95	894470	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.133	13.133	0.000	94	67950	0.5000	0.4864	
126 1,2,3-Trimethylbenzene	120	13.139	13.139	0.000	96	60830	0.5000	0.5054	
127 Benzyl chloride	126	13.206	13.206	0.000	98	11097	0.5000	0.4994	
130 n-Butylbenzene	92	13.359	13.359	0.000	98	67602	0.5000	0.4737	
131 1,2-Dichlorobenzene	146	13.395	13.395	0.000	96	64617	0.5000	0.5030	
129 p-Diethylbenzene	119	13.408	13.408	0.000	87	70008	0.5000	0.4880	
134 1,2-Dibromo-3-Chloropropane	155	13.938	13.932	0.006	82	3696	0.5000	0.4743	
135 1,3,5-Trichlorobenzene	180	14.060	14.060	0.000	97	51129	0.5000	0.4996	
136 1,2,4-Trichlorobenzene	180	14.487	14.481	0.006	93	41586	0.5000	0.4799	
137 Hexachlorobutadiene	225	14.566	14.566	0.000	95	19579	0.5000	0.4931	
138 Naphthalene	128	14.670	14.664	0.006	97	83563	0.5000	0.4995	
139 1,2,3-Trichlorobenzene	180	14.810	14.810	0.000	95	36773	0.5000	0.4889	
140 2-Methylnaphthalene	142	15.444	15.444	0.000	94	47725	0.5000	0.4922	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00006	Amount Added:	2.00	Units: uL	
MSV_LL_#2_826_00007	Amount Added:	2.00	Units: uL	
MSV_LL_GAS826_00010	Amount Added:	2.00	Units: uL	
MSV_LLcentISS_00001	Amount Added:	5.00	Units: uL	Run Reagent

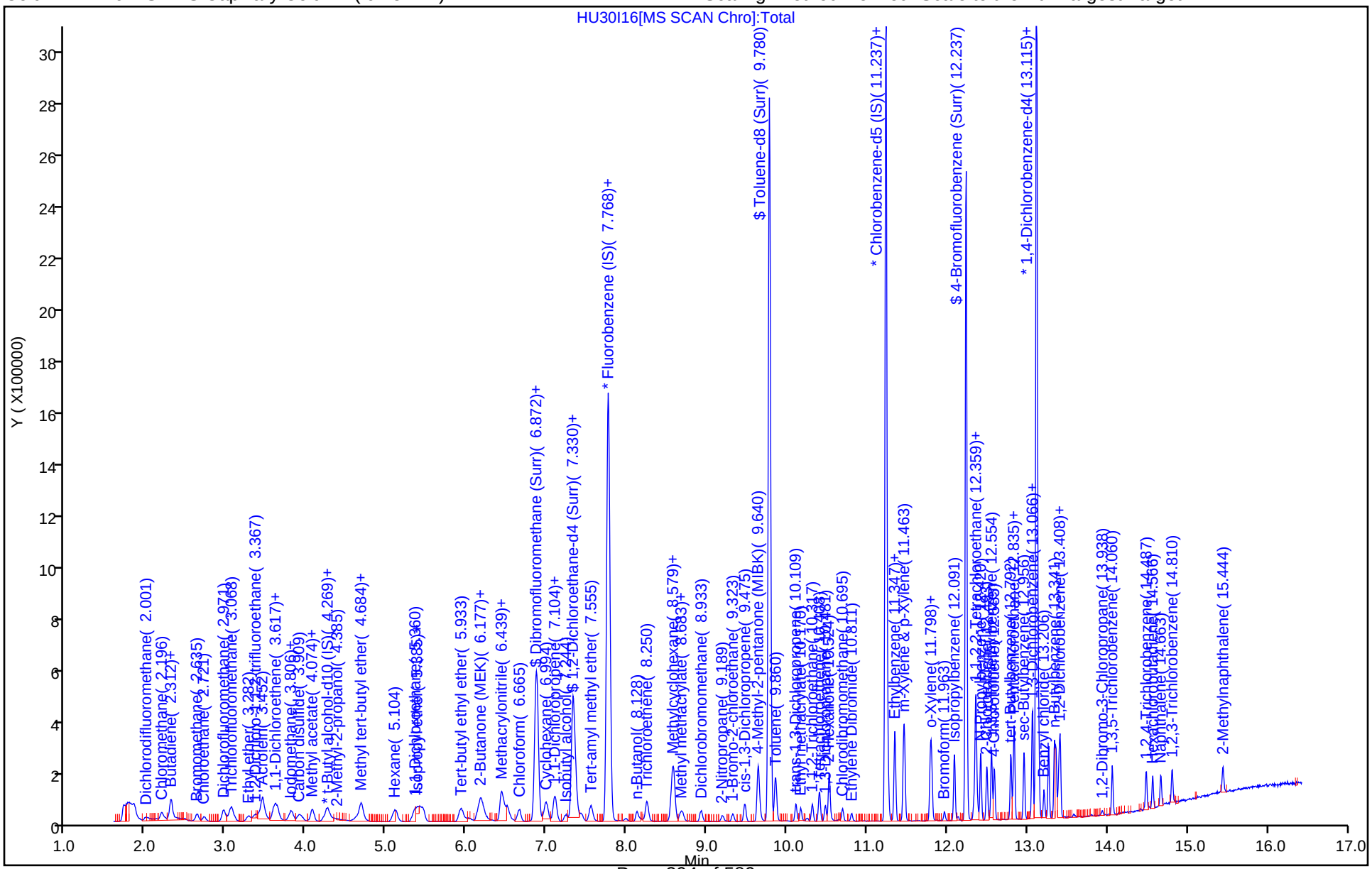
Report Date: 01-Jul-2021 16:18:44 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I16.D

Injection Date:	30-Jun-2021 20:31:30	Instrument ID:	19094	Operator ID:	jml01693
Lims ID:	IC std2 0.5			Worklist Smp#:	19
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

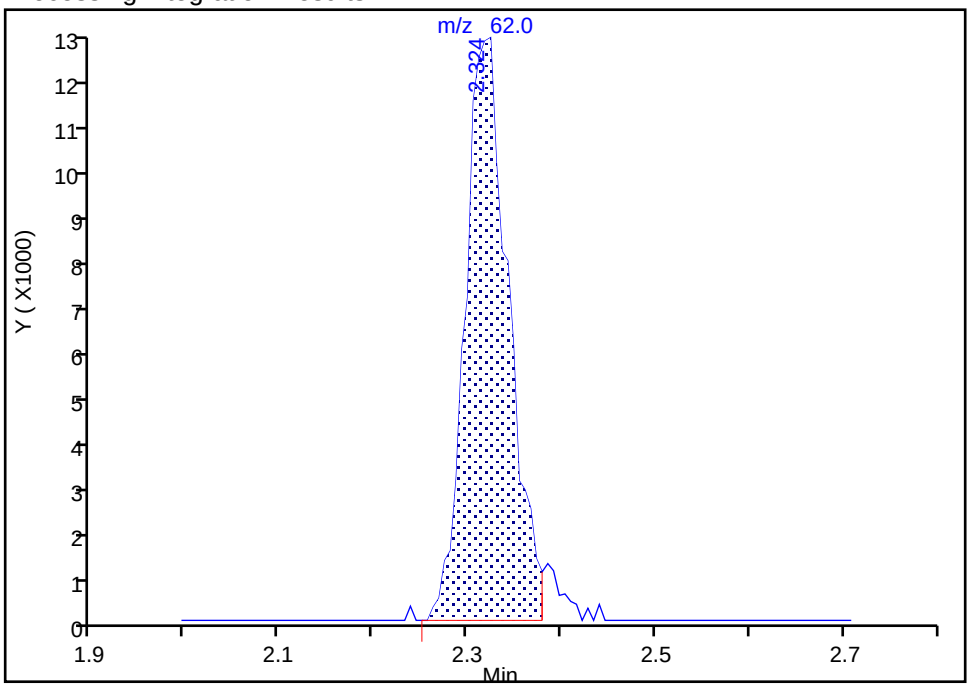
Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I16.D
Injection Date: 30-Jun-2021 20:31:30 Instrument ID: 19094
Lims ID: IC std2 0.5
Client ID:
Operator ID: jml01693 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

7 Vinyl chloride, CAS: 75-01-4

Signal: 1

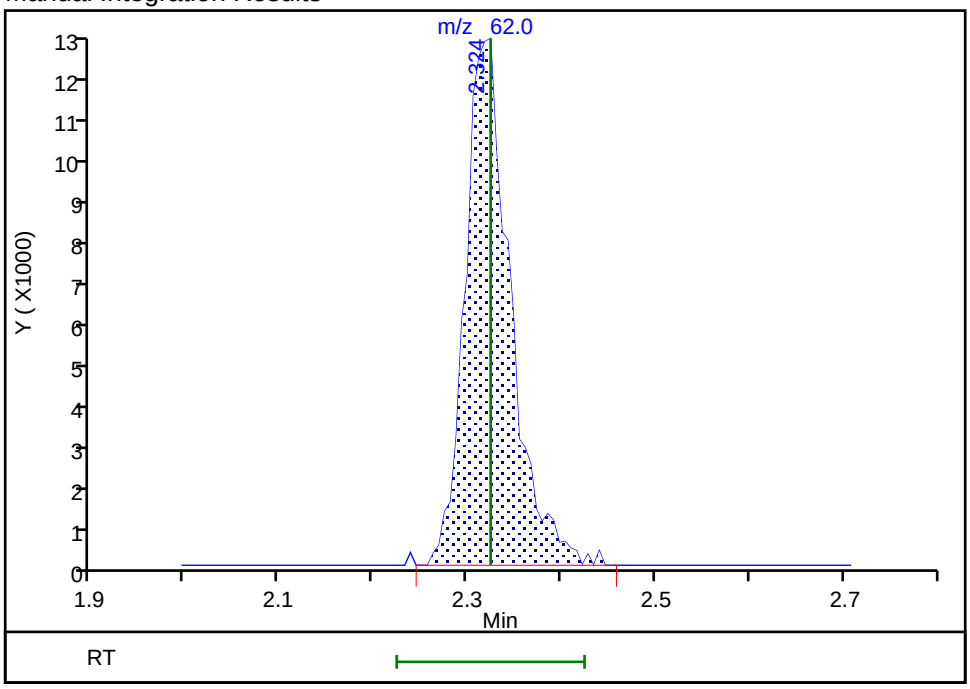
Processing Integration Results

RT: 2.32
Area: 38923
Amount: 0.487268
Amount Units: ug/l



Manual Integration Results

RT: 2.32
Area: 40611
Amount: 0.502330
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:47:05
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

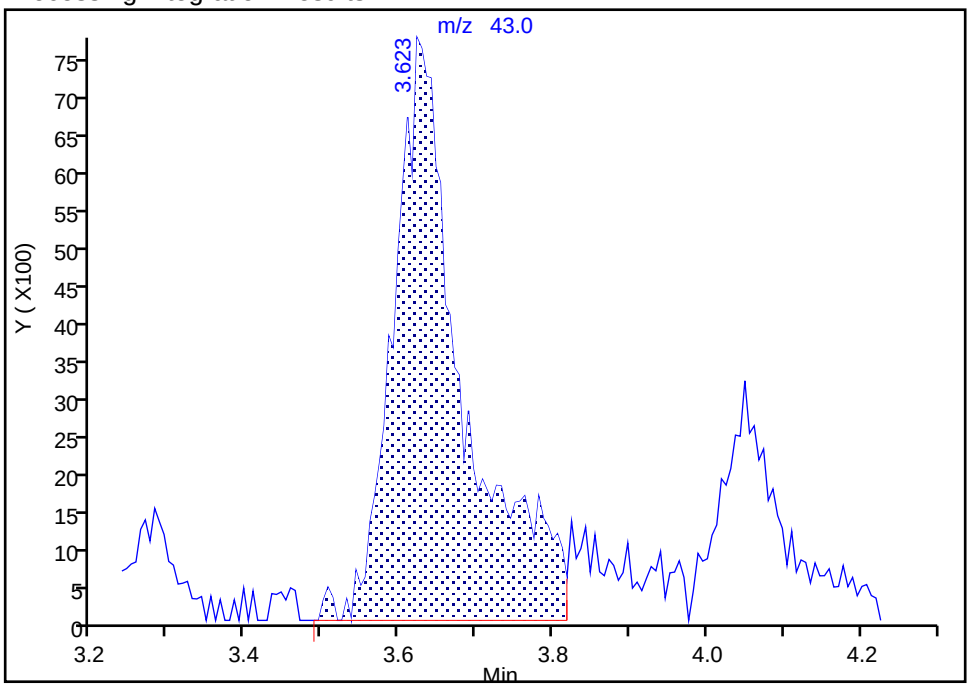
Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I16.D
Injection Date: 30-Jun-2021 20:31:30 Instrument ID: 19094
Lims ID: IC std2 0.5
Client ID:
Operator ID: jml01693 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

19 Acetone, CAS: 67-64-1

Signal: 1

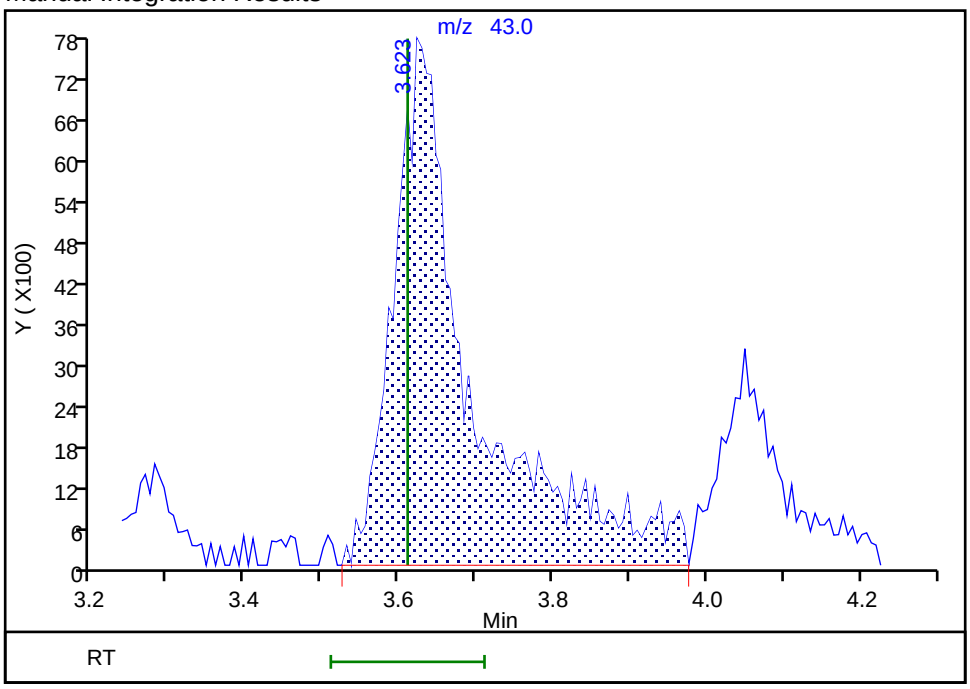
Processing Integration Results

RT: 3.62
Area: 48850
Amount: 5.393808
Amount Units: ug/l



Manual Integration Results

RT: 3.62
Area: 55161
Amount: 5.864814
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:47:13
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

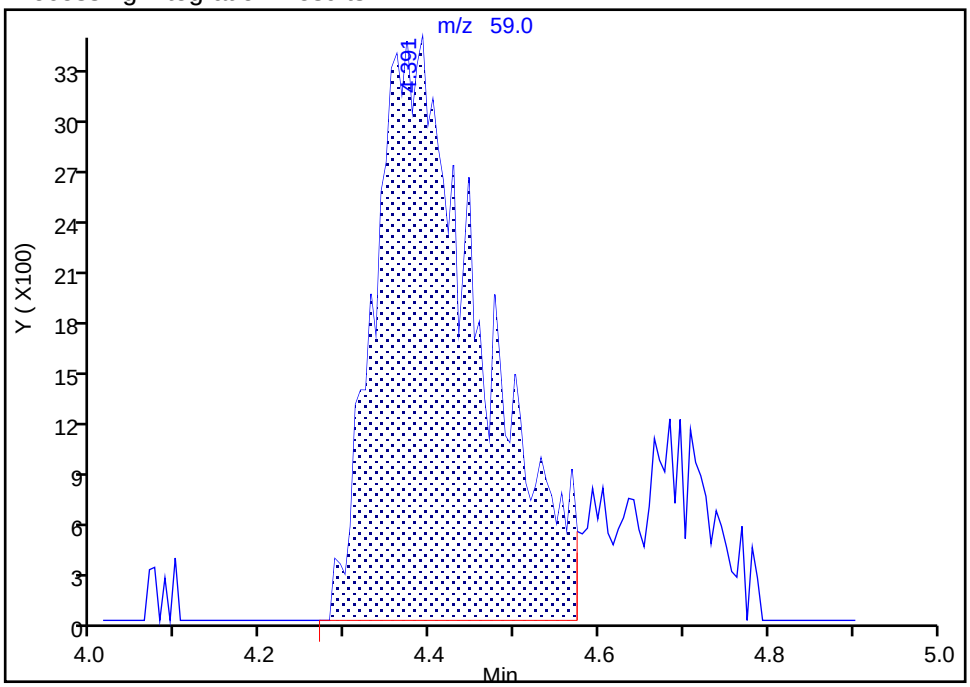
Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I16.D
Injection Date: 30-Jun-2021 20:31:30 Instrument ID: 19094
Lims ID: IC std2 0.5
Client ID:
Operator ID: jml01693 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

30 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

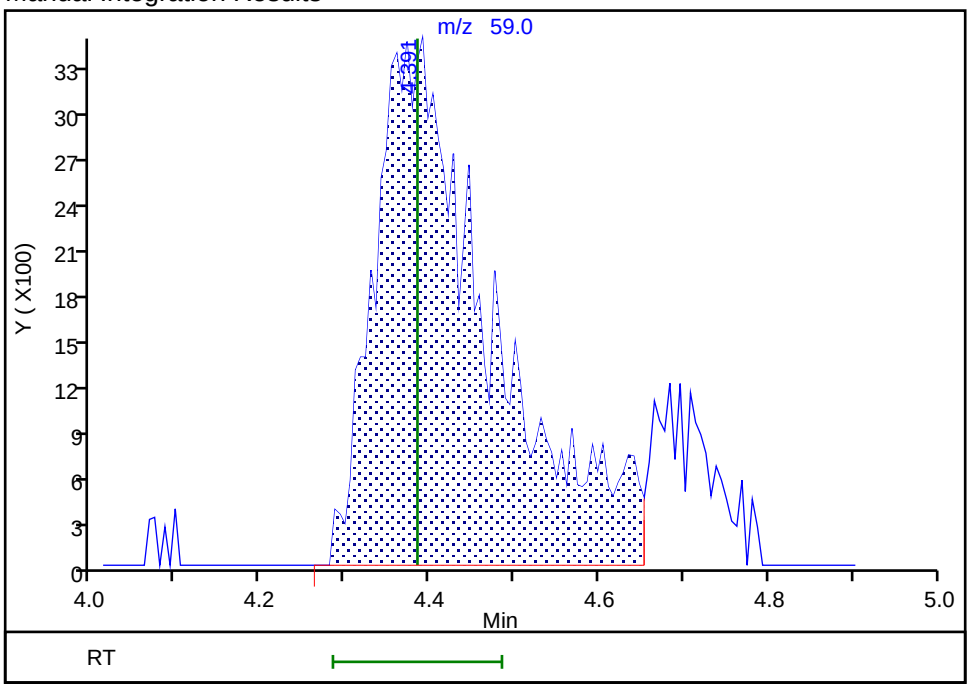
Processing Integration Results

RT: 4.39
Area: 30272
Amount: 10.824070
Amount Units: ug/l



Manual Integration Results

RT: 4.39
Area: 33132
Amount: 11.316412
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:47:33
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

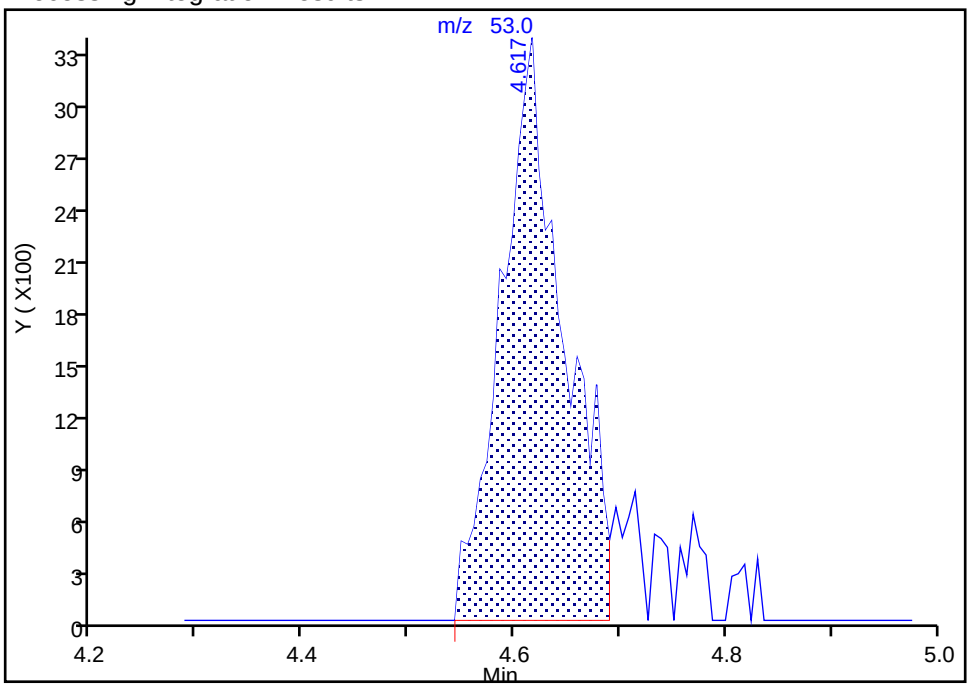
Data File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I16.D				
Injection Date:	30-Jun-2021 20:31:30	Instrument ID:	19094		
Lims ID:	IC std2 0.5				
Client ID:					
Operator ID:	jml01693	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

31 Acrylonitrile, CAS: 107-13-1

Signal: 1

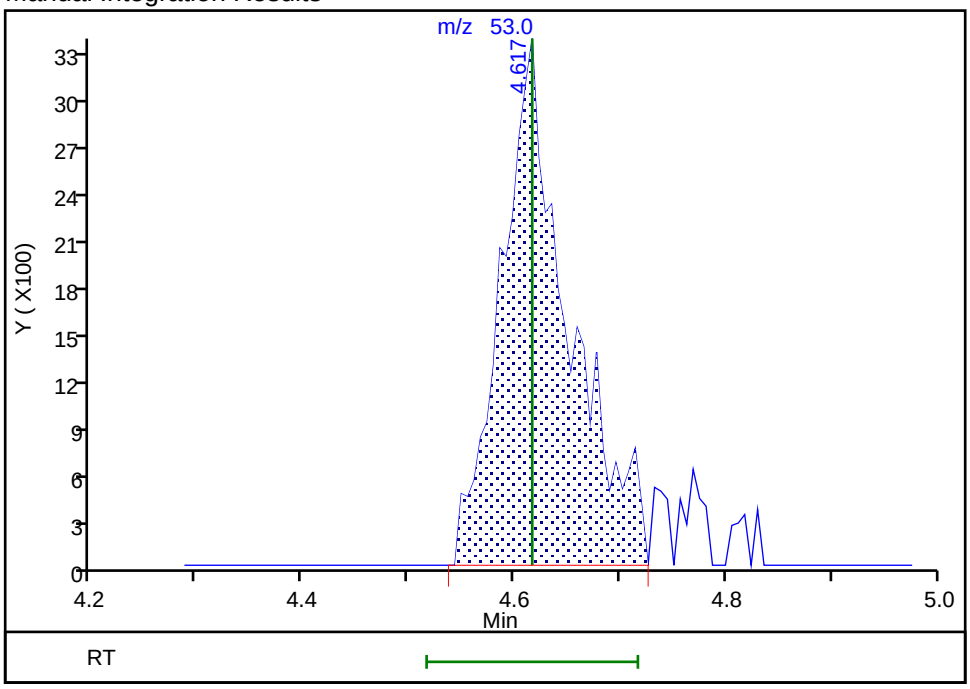
Processing Integration Results

RT: 4.62
Area: 13772
Amount: 1.171316
Amount Units: ug/l



Manual Integration Results

RT: 4.62
Area: 14811
Amount: 1.206664
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:47:39

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

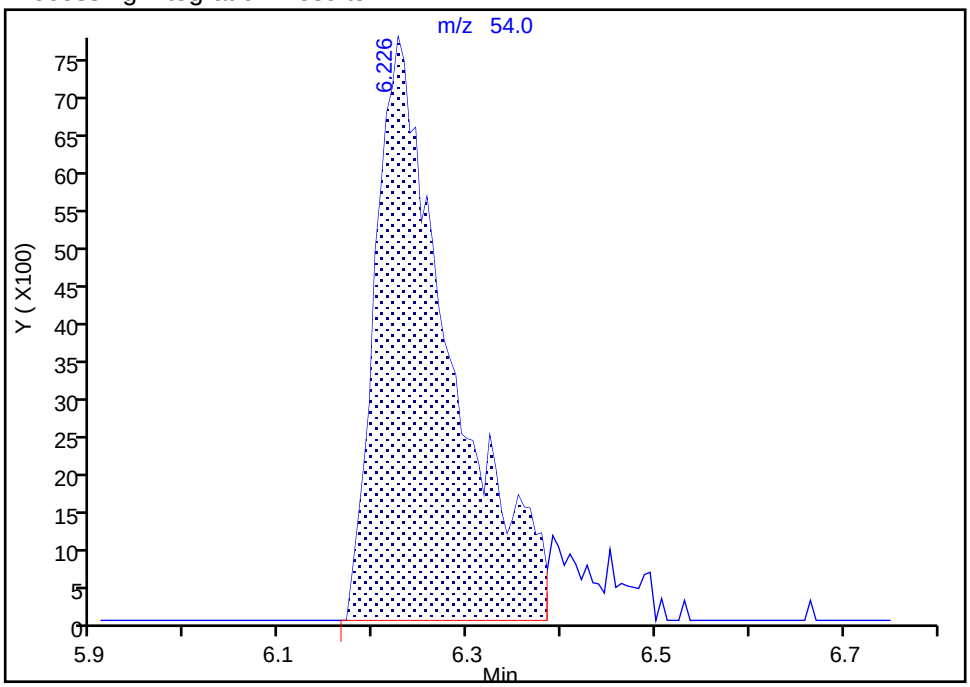
Data File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I16.D				
Injection Date:	30-Jun-2021 20:31:30	Instrument ID:	19094		
Lims ID:	IC std2 0.5				
Client ID:					
Operator ID:	jml01693	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

45 Propionitrile, CAS: 107-12-0

Signal: 1

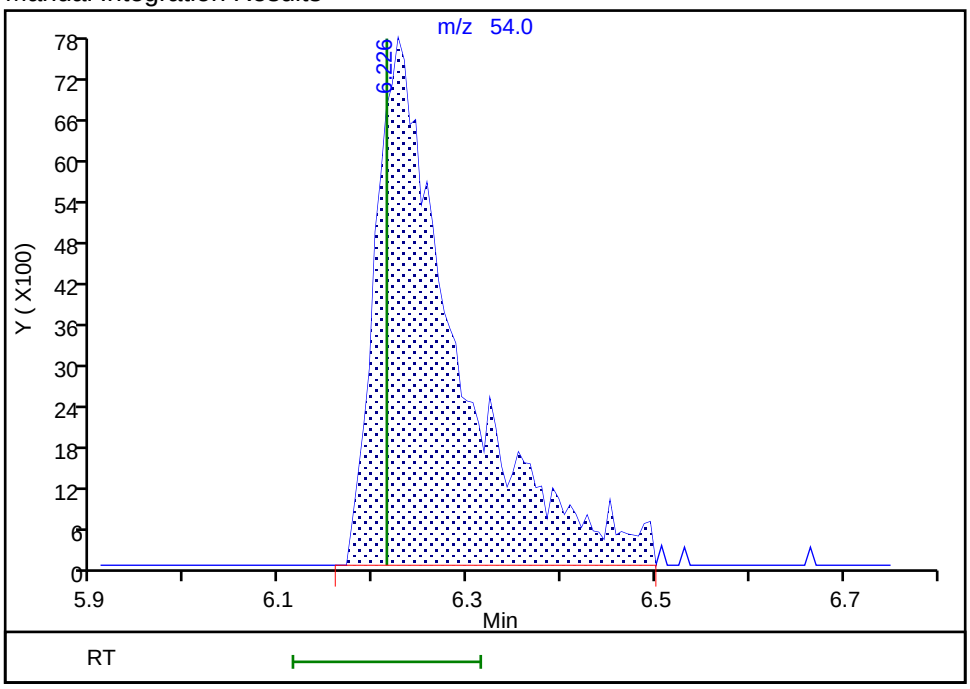
Processing Integration Results

RT: 6.23
Area: 42797
Amount: 9.967020
Amount Units: ug/l



Manual Integration Results

RT: 6.23
Area: 47015
Amount: 10.536776
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:47:49

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

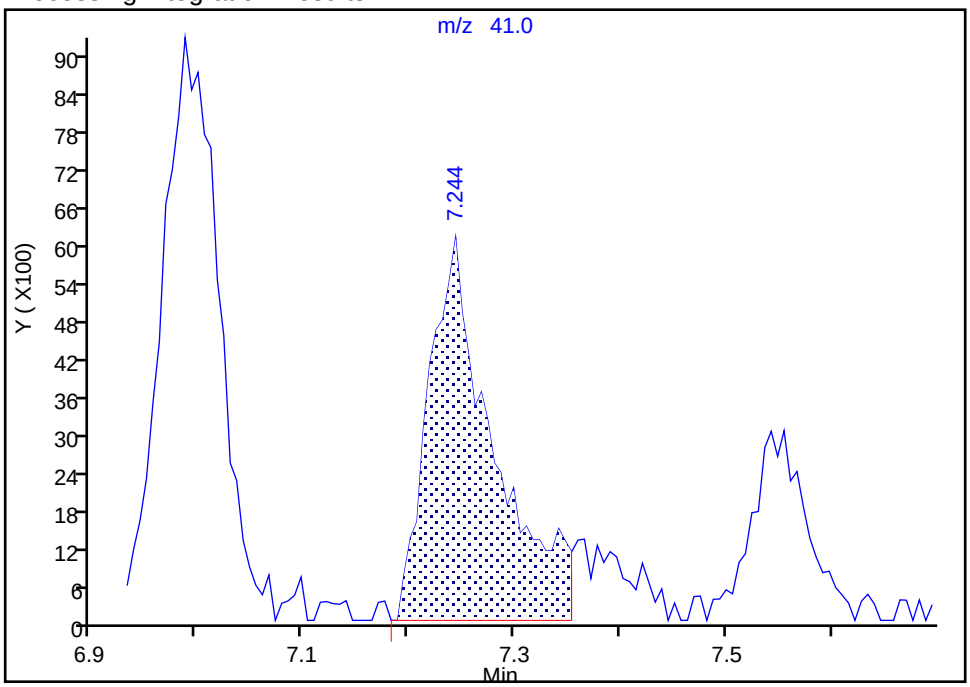
Data File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I16.D				
Injection Date:	30-Jun-2021 20:31:30	Instrument ID:	19094		
Lims ID:	IC std2 0.5				
Client ID:					
Operator ID:	jml01693	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

57 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

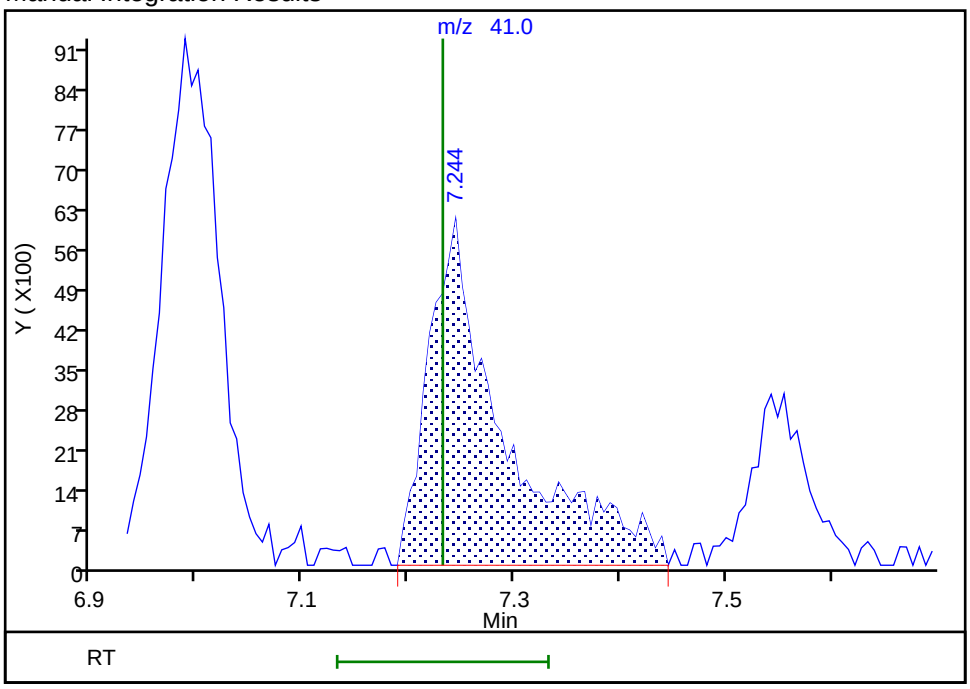
Processing Integration Results

RT: 7.24
Area: 26117
Amount: 24.033827
Amount Units: ug/l



Manual Integration Results

RT: 7.24
Area: 30343
Amount: 27.315727
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:48:00

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

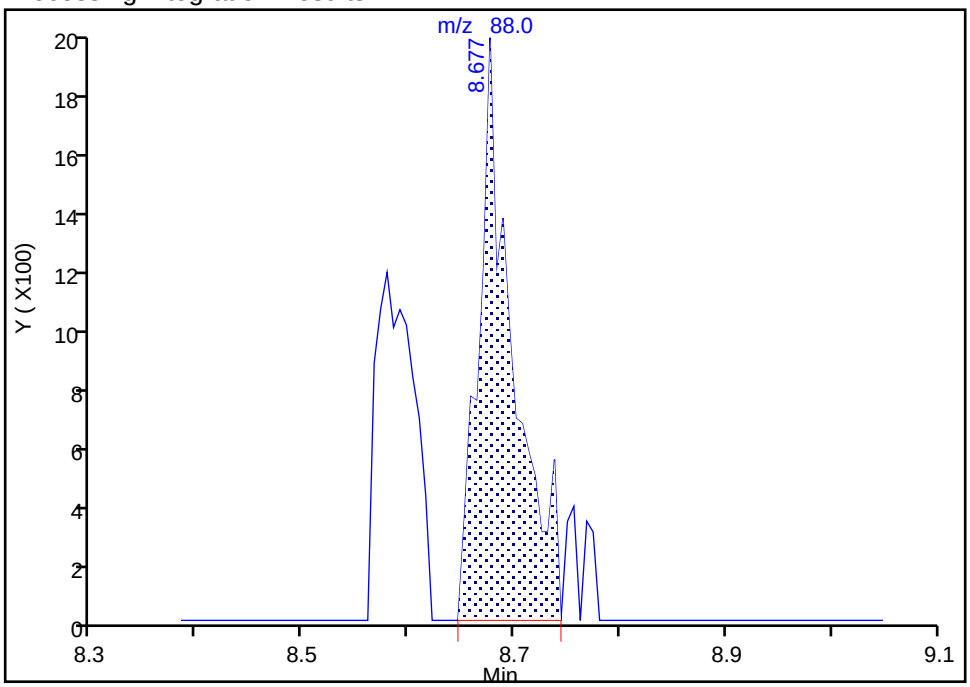
Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I16.D
Injection Date: 30-Jun-2021 20:31:30 Instrument ID: 19094
Lims ID: IC std2 0.5
Client ID:
Operator ID: jml01693 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

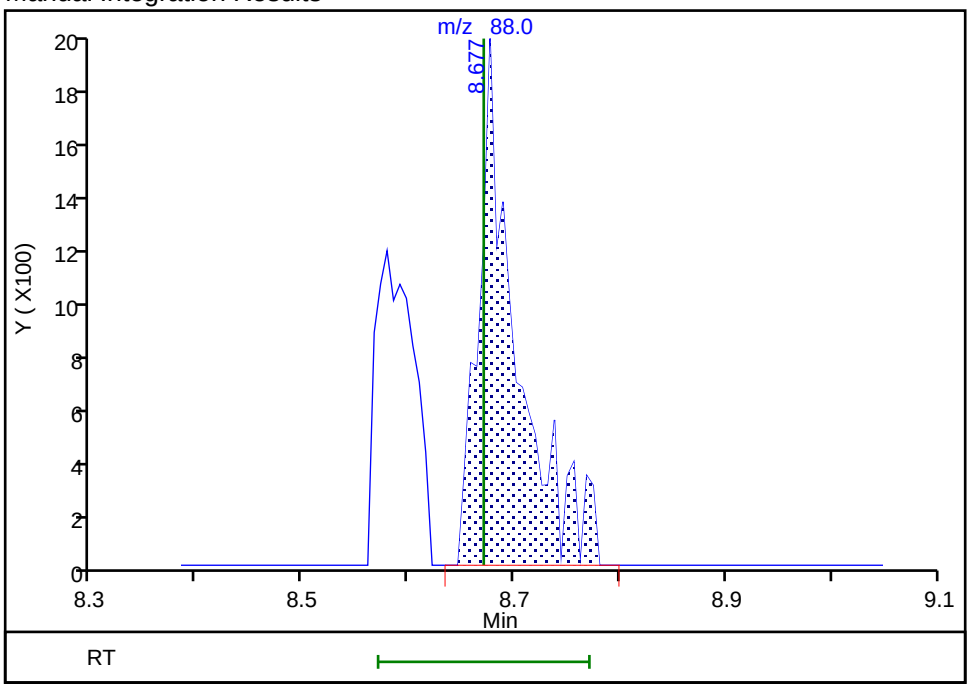
Processing Integration Results

RT: 8.68
Area: 4351
Amount: 22.823846
Amount Units: ug/l



Manual Integration Results

RT: 8.68
Area: 4839
Amount: 24.444619
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:48:08
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D
Lims ID: IC std1 0.2
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 30-Jun-2021 20:52:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0033290-020
Misc. Info.: IC STD1 0.2
Operator ID: jml01693 Instrument ID: 19094
Sublist: chrom-MSV_19094_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Jul-2021 16:18:51 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: campbellme Date: 01-Jul-2021 00:51:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.014	2.007	0.007	96	13019	0.2000	0.1974	M
6 Chloromethane	50	2.197	2.196	0.000	96	16089	0.2000	0.2016	M
8 Butadiene	39	2.312	2.312	0.000	95	13736	0.2000	0.1862	
7 Vinyl chloride	62	2.318	2.324	-0.006	88	16206	0.2000	0.2010	M
9 Bromomethane	94	2.654	2.635	0.019	90	12123	0.2000	0.2032	
10 Chloroethane	64	2.739	2.721	0.018	42	10530	0.2000	0.2020	
11 Dichlorofluoromethane	67	2.989	2.971	0.018	97	24134	0.2000	0.2009	
13 Trichlorofluoromethane	101	3.050	3.044	0.006	95	20361	0.2000	0.1919	
15 Ethyl ether	59	3.288	3.282	0.006	76	8587	0.2000	0.1873	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.373	3.373	0.000	87	17132	0.2000	0.2024	
17 Acrolein	56	3.458	3.458	0.000	99	72018	10.0	9.82	M
18 1,1-Dichloroethene	96	3.605	3.605	0.000	96	13087	0.2000	0.2128	
19 Acetone	43	3.629	3.611	0.018	99	22738	2.00	2.45	
20 112TCTFE	101	3.654	3.635	0.019	83	12587	0.2000	0.1925	
21 Isopropyl alcohol	45	3.782	3.769	0.013	51	7089	4.00	3.91	M
22 Iodomethane	142	3.800	3.806	-0.006	98	21648	0.2000	0.2004	
23 Ethyl bromide	108	3.830	3.824	0.006	87	10494	0.1999	0.2025	
24 Carbon disulfide	76	3.928	3.916	0.012	99	38392	0.2000	0.2077	M
26 Methyl acetate	43	4.092	4.056	0.036	28	6459	0.2000	0.2342	
27 3-Chloro-1-propene	41	4.080	4.080	0.000	93	22835	0.2000	0.2103	
29 Methylene Chloride	84	4.269	4.263	0.006	92	13248	0.2000	0.2054	
* 28 t-Butyl alcohol-d10 (IS)	65	4.257	4.269	-0.012	95	126301	50.0	50.0	
30 2-Methyl-2-propanol	59	4.385	4.385	0.000	18	11543	4.00	4.00	M
31 Acrylonitrile	53	4.641	4.617	0.024	26	5825	0.5000	0.4813	M
32 Methyl tert-butyl ether	73	4.666	4.665	0.001	96	29252	0.2000	0.2007	
33 trans-1,2-Dichloroethene	96	4.696	4.696	0.000	95	13853	0.2000	0.2086	
34 Hexane	57	5.111	5.117	-0.006	86	20277	0.2000	0.1907	
35 1,1-Dichloroethane	63	5.342	5.348	-0.006	94	23907	0.2000	0.1961	
37 Isopropyl ether	45	5.409	5.397	0.012	95	41506	0.2000	0.1948	
38 2-Chloro-1,3-butadiene	53	5.458	5.458	0.000	90	20370	0.2000	0.1978	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.940	5.934	0.006	97	37475	0.2000	0.2023	
41 2-Butanone (MEK)	43	6.147	6.135	0.012	92	30439	2.00	1.96	
S 40 1,2-Dichloroethene, Total	100				0			0.4279	
42 cis-1,2-Dichloroethene	96	6.177	6.183	-0.006	81	16068	0.2000	0.2193	
43 2,2-Dichloropropane	77	6.208	6.190	0.018	62	20763	0.2000	0.2086	
45 Propionitrile	54	6.238	6.214	0.024	33	17193	4.00	3.91	M
47 Methacrylonitrile	67	6.440	6.440	0.000	90	30460	2.00	1.88	
48 Chlorobromomethane	128	6.501	6.507	-0.006	91	5780	0.2000	0.1971	
49 Tetrahydrofuran	71	6.531	6.531	0.000	66	4078	1.00	0.9481	
50 Chloroform	83	6.659	6.659	0.000	91	22713	0.2000	0.1982	
$ 51 Dibromofluoromethane (Surr)	113	6.879	6.872	0.007	94	561388	10.0	9.98	
52 1,1,1-Trichloroethane	97	6.903	6.891	0.012	96	22220	0.2000	0.2111	
53 Cyclohexane	56	6.994	6.994	0.000	92	25749	0.2000	0.1944	
55 1,1-Dichloropropene	75	7.104	7.104	0.000	94	19511	0.2000	0.2014	
56 Carbon tetrachloride	117	7.104	7.110	-0.006	90	18800	0.2000	0.2068	
57 Isobutyl alcohol	41	7.244	7.232	0.012	92	12626	10.0	11.5	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.336	7.330	0.006	80	113679	10.0	10.0	
59 Benzene	78	7.372	7.366	0.006	94	57437	0.2000	0.2064	
60 1,2-Dichloroethane	62	7.433	7.439	-0.006	93	15168	0.2000	0.2231	
62 Tert-amyl methyl ether	73	7.555	7.555	0.000	98	32655	0.2000	0.2004	
* 65 Fluorobenzene (IS)	96	7.769	7.769	0.000	99	2324361	10.0	10.0	
64 n-Heptane	43	7.787	7.781	0.006	36	23273	0.2000	0.2007	
66 n-Butanol	56	8.140	8.122	0.018	87	16666	17.5	17.4	
67 Trichloroethene	95	8.256	8.250	0.006	97	13869	0.2000	0.1936	
68 Methylcyclohexane	83	8.561	8.567	-0.006	86	26913	0.2000	0.1987	
70 1,2-Dichloropropane	63	8.586	8.585	0.001	75	14017	0.2000	0.1947	
69 2-ethoxy-2-methyl butane	87	8.592	8.592	0.000	89	18238	0.2000	0.2006	
71 Methyl methacrylate	69	8.677	8.665	0.012	71	5360	0.2000	0.1797	
72 1,4-Dioxane	88	8.671	8.671	0.000	38	1646	10.0	8.43	M
73 Dibromomethane	93	8.707	8.689	0.018	96	6025	0.2000	0.1951	
75 Dichlorobromomethane	83	8.927	8.927	0.000	97	16067	0.2000	0.1996	
76 2-Nitropropane	41	9.201	9.195	0.006	95	8525	1.00	1.08	M
79 1-Bromo-2-chloroethane	63	9.323	9.323	0.000	95	13596	0.2000	0.1943	
80 cis-1,3-Dichloropropene	75	9.482	9.476	0.006	96	19856	0.2000	0.1906	
81 4-Methyl-2-pentanone (MIBK)	43	9.640	9.640	0.000	96	69516	2.00	1.79	
$ 82 Toluene-d8 (Surr)	98	9.780	9.780	0.000	93	2301167	10.0	10.0	
83 Toluene	92	9.866	9.860	0.006	98	36703	0.2000	0.2095	
S 84 1,3-Dichloropropene, Total	100				0			0.3762	
85 trans-1,3-Dichloropropene	75	10.110	10.110	0.000	92	15224	0.2000	0.1856	
86 Ethyl methacrylate	69	10.177	10.170	0.007	89	11206	0.2000	0.1786	
87 1,1,2-Trichloroethane	97	10.323	10.317	0.006	88	8711	0.2000	0.1950	
88 Tetrachloroethene	166	10.408	10.408	0.000	97	15278	0.2000	0.2011	
89 1,3-Dichloropropane	76	10.481	10.475	0.006	89	14747	0.2000	0.1900	
91 2-Hexanone	43	10.530	10.524	0.006	95	49039	2.00	1.85	
93 Chlorodibromomethane	129	10.695	10.695	0.000	88	10673	0.2000	0.1924	
94 Ethylene Dibromide	107	10.805	10.805	0.001	93	8799	0.2000	0.2043	
* 97 Chlorobenzene-d5 (IS)	117	11.237	11.237	0.000	86	1708734	10.0	10.0	
96 1-Chlorohexane	91	11.244	11.243	0.001	40	23155	0.2000	0.2176	
S 95 Xylenes, Total	106				0			0.5824	
98 Chlorobenzene	112	11.262	11.262	0.000	97	37034	0.2000	0.1994	
100 Ethylbenzene	91	11.347	11.347	0.000	98	65435	0.2000	0.1979	
99 1,1,1,2-Tetrachloroethane	131	11.341	11.347	-0.006	43	12469	0.2000	0.1967	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 m-Xylene & p-Xylene	106	11.463	11.463	0.000	98	48715	0.4000	0.3855	
102 o-Xylene	106	11.792	11.792	0.000	96	24649	0.2000	0.1970	
103 Styrene	104	11.810	11.804	0.006	95	38473	0.2000	0.1920	
104 Bromoform	173	11.963	11.963	0.000	94	5750	0.2000	0.1875	
105 Isopropylbenzene	105	12.091	12.091	0.000	95	61669	0.2000	0.1910	
$ 108 4-Bromofluorobenzene (Surr)	95	12.237	12.237	0.000	89	834134	10.0	9.96	
109 1,1,2,2-Tetrachloroethane	83	12.329	12.335	-0.006	92	11094	0.2000	0.2015	
111 Bromobenzene	156	12.353	12.353	0.000	79	13130	0.2000	0.1879	
110 trans-1,4-Dichloro-2-butene	53	12.359	12.359	0.000	92	24285	2.00	1.78	
112 1,2,3-Trichloropropane	110	12.377	12.383	-0.006	73	2529	0.2000	0.1799	
113 N-Propylbenzene	91	12.420	12.420	0.000	99	73743	0.2000	0.1915	
114 2-Chlorotoluene	126	12.499	12.493	0.006	96	14222	0.2000	0.1889	
115 1,3,5-Trimethylbenzene	105	12.554	12.554	0.000	94	51335	0.2000	0.1905	
116 4-Chlorotoluene	126	12.591	12.585	0.006	97	14139	0.2000	0.1861	
118 tert-Butylbenzene	134	12.798	12.798	0.000	92	12110	0.2000	0.2065	
119 Pentachloroethane	167	12.829	12.829	0.001	82	8269	0.2000	0.1900	
120 1,2,4-Trimethylbenzene	105	12.835	12.835	0.000	96	52202	0.2000	0.1899	
121 sec-Butylbenzene	105	12.957	12.957	0.000	94	64290	0.2000	0.1889	
122 1,3-Dichlorobenzene	146	13.060	13.060	0.000	95	27515	0.2000	0.1911	
123 4-Isopropyltoluene	119	13.066	13.066	0.000	97	54331	0.2000	0.1887	
* 124 1,4-Dichlorobenzene-d4	152	13.115	13.115	0.000	95	908776	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.133	13.133	0.000	94	27528	0.2000	0.1939	
126 1,2,3-Trimethylbenzene	120	13.146	13.139	0.007	97	24446	0.2000	0.1999	
127 Benzyl chloride	126	13.213	13.206	0.007	98	4072	0.2000	0.1804	
130 n-Butylbenzene	92	13.359	13.359	0.000	97	27167	0.2000	0.1874	
131 1,2-Dichlorobenzene	146	13.396	13.395	0.001	97	24933	0.2000	0.1910	
129 p-Diethylbenzene	119	13.408	13.408	0.000	87	28310	0.2000	0.1942	
134 1,2-Dibromo-3-Chloropropane	155	13.932	13.932	0.000	74	1614	0.2000	0.2039	
135 1,3,5-Trichlorobenzene	180	14.060	14.060	0.000	96	19533	0.2000	0.1879	
136 1,2,4-Trichlorobenzene	180	14.487	14.481	0.006	94	16520	0.2000	0.1876	
137 Hexachlorobutadiene	225	14.566	14.566	0.000	94	9966	0.2000	0.2470	
138 Naphthalene	128	14.664	14.664	0.000	96	30662	0.2000	0.1804	
139 1,2,3-Trichlorobenzene	180	14.810	14.810	0.000	95	15043	0.2000	0.1968	
140 2-Methylnaphthalene	142	15.444	15.444	0.000	94	18077	0.2000	0.1835	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00006	Amount Added:	2.00	Units: uL	
MSV_LL_#2_826_00007	Amount Added:	2.00	Units: uL	
MSV_LL_GAS826_00010	Amount Added:	2.00	Units: uL	
MSV_LLcentISS_00001	Amount Added:	5.00	Units: uL	Run Reagent

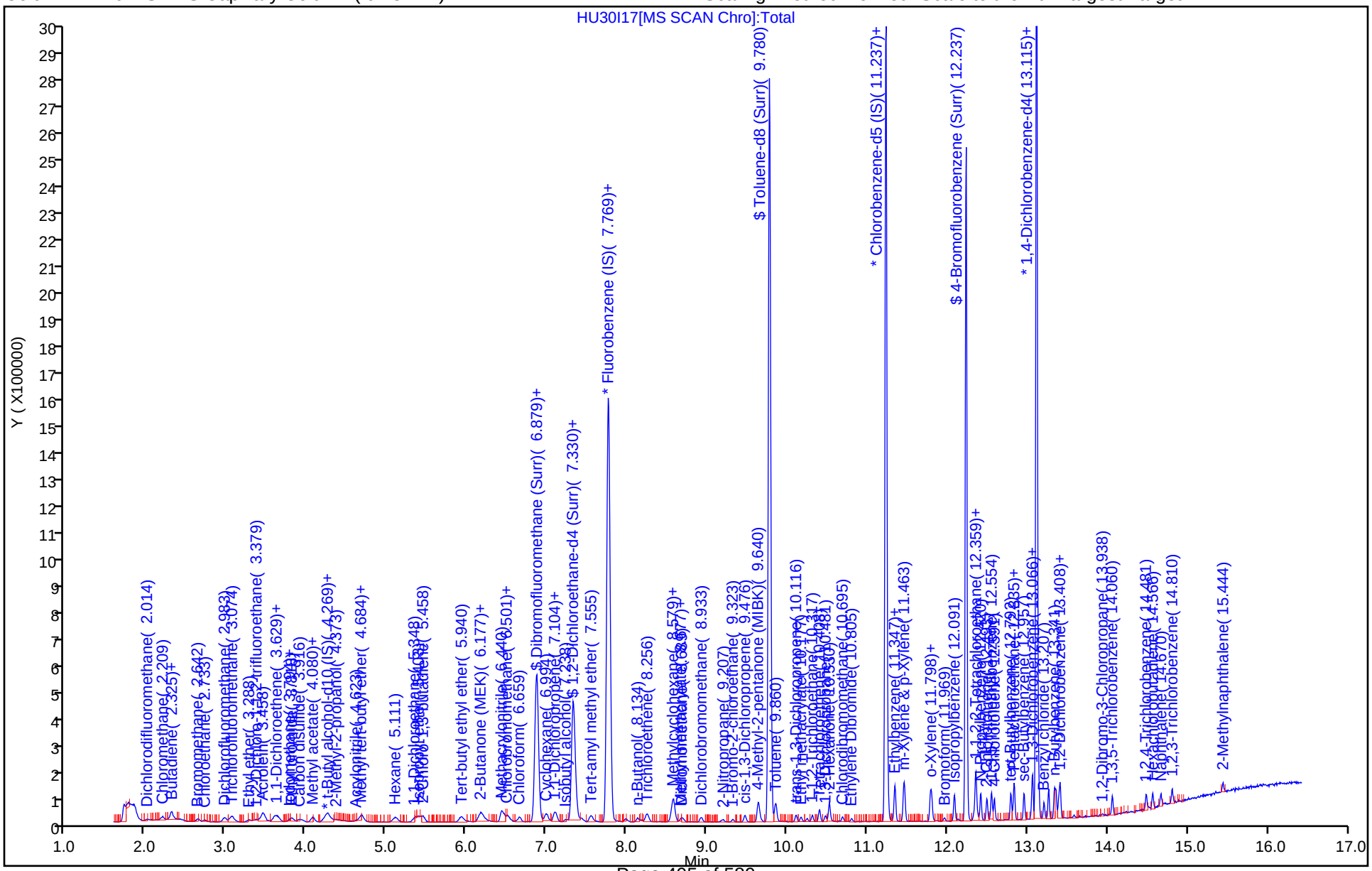
Report Date: 01-Jul-2021 16:18:52 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Injection Date:	30-Jun-2021 20:52:30	Instrument ID:	19094	Operator ID:	jml01693
Lims ID:	IC std1 0.2			Worklist Smp#:	20
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

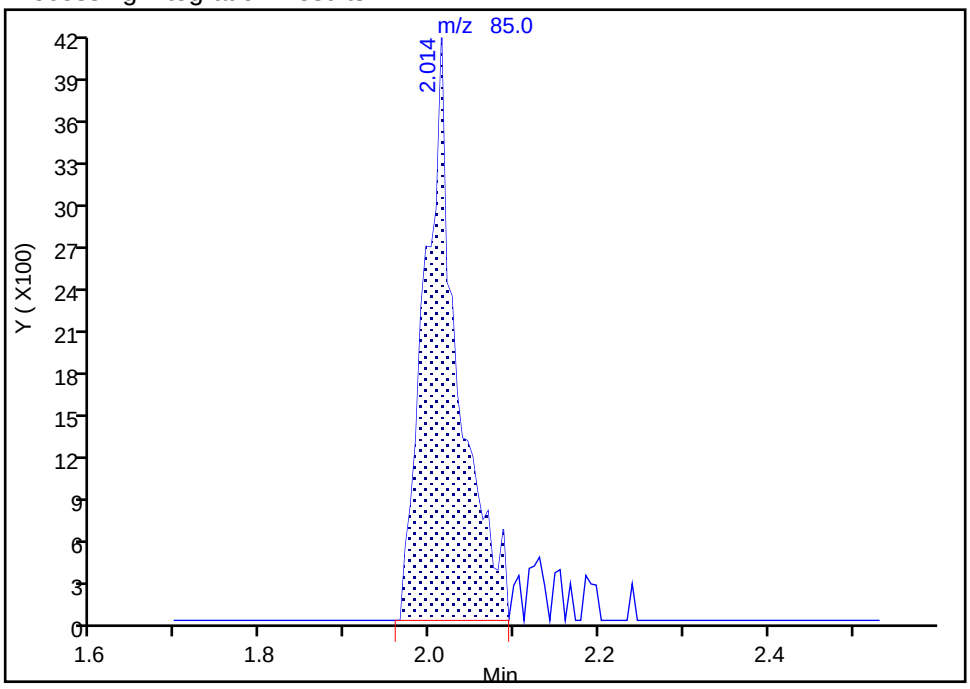
Data File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D				
Injection Date:	30-Jun-2021 20:52:30	Instrument ID:	19094		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	jml01693	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

3 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

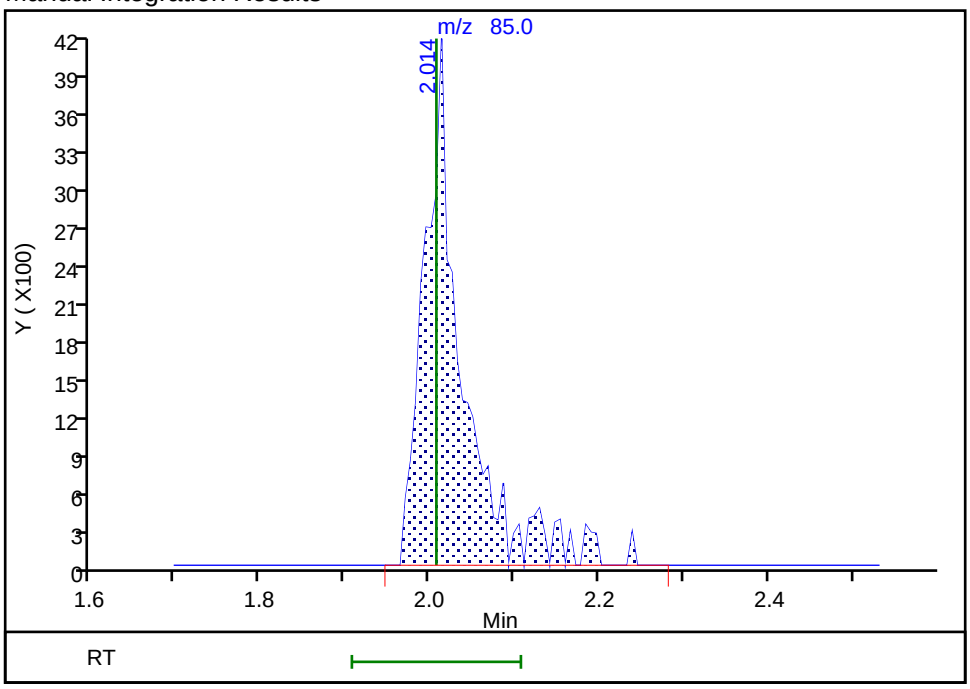
Processing Integration Results

RT: 2.01
Area: 11513
Amount: 0.177500
Amount Units: ug/l



Manual Integration Results

RT: 2.01
Area: 13019
Amount: 0.197444
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:48:38

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

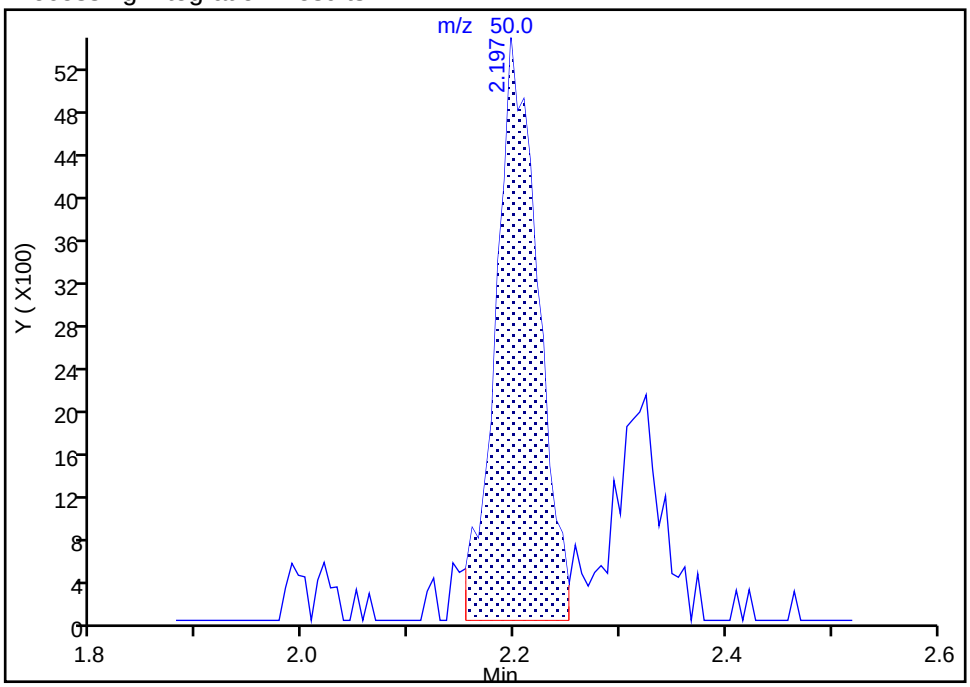
Data File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D				
Injection Date:	30-Jun-2021 20:52:30	Instrument ID:	19094		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	jml01693	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

6 Chloromethane, CAS: 74-87-3

Signal: 1

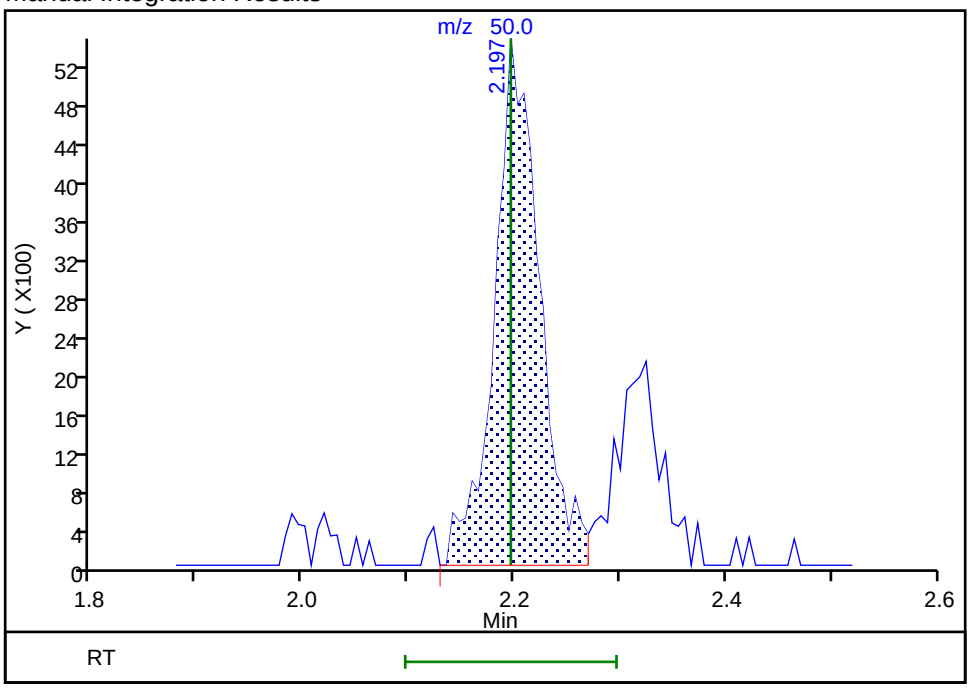
Processing Integration Results

RT: 2.20
Area: 15194
Amount: 0.191951
Amount Units: ug/l



Manual Integration Results

RT: 2.20
Area: 16089
Amount: 0.201629
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:48:48
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

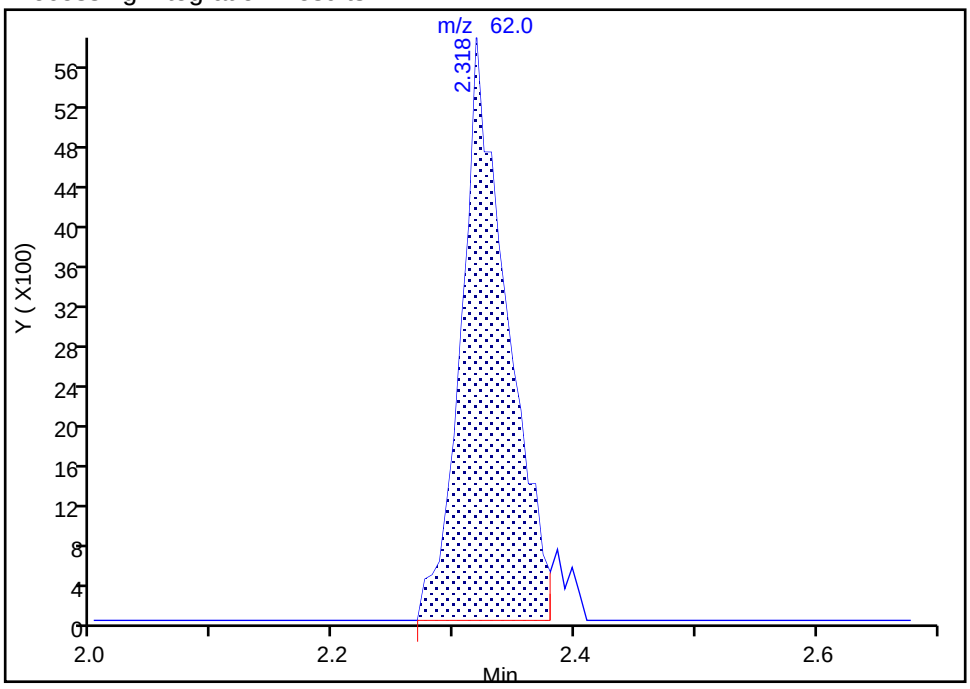
Data File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D				
Injection Date:	30-Jun-2021 20:52:30	Instrument ID:	19094		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	jml01693	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

7 Vinyl chloride, CAS: 75-01-4

Signal: 1

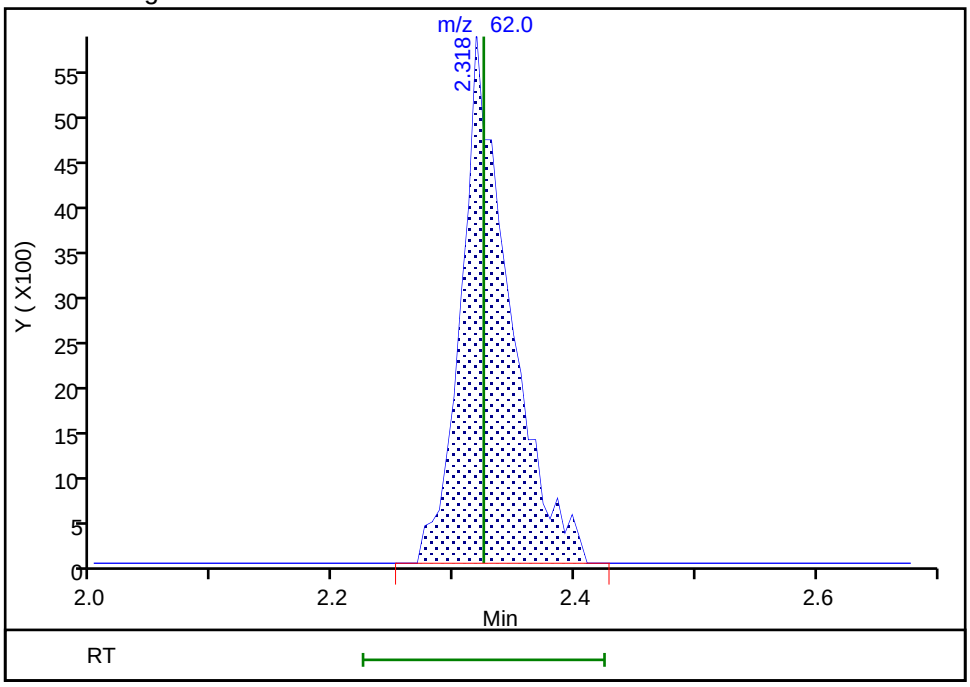
Processing Integration Results

RT: 2.32
Area: 15532
Amount: 0.193840
Amount Units: ug/l



Manual Integration Results

RT: 2.32
Area: 16206
Amount: 0.201044
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:48:55
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

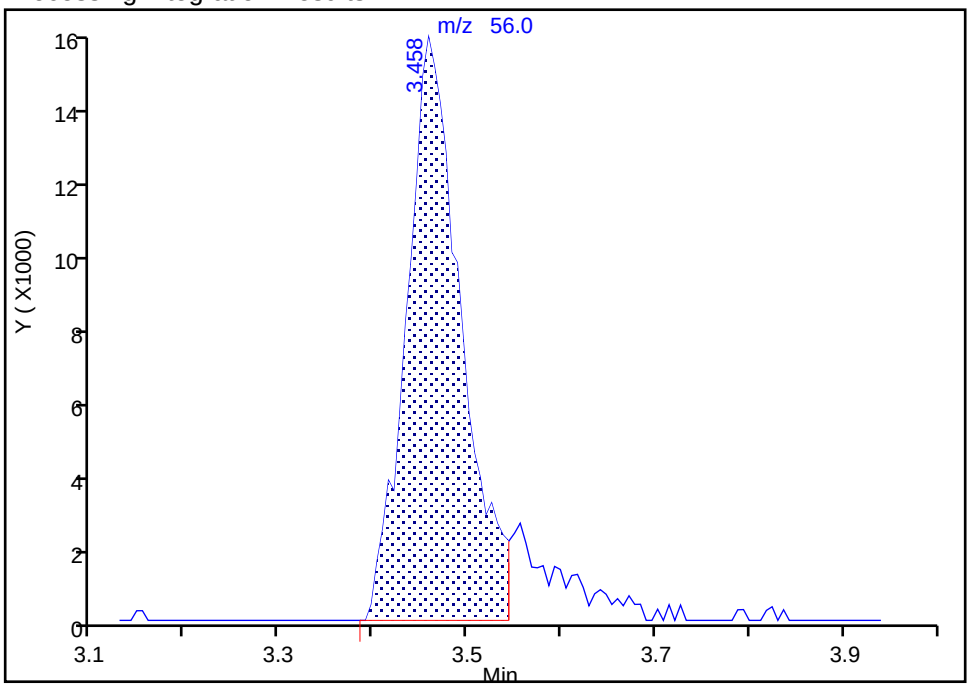
Data File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D				
Injection Date:	30-Jun-2021 20:52:30	Instrument ID:	19094		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	jml01693	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

17 Acrolein, CAS: 107-02-8

Signal: 1

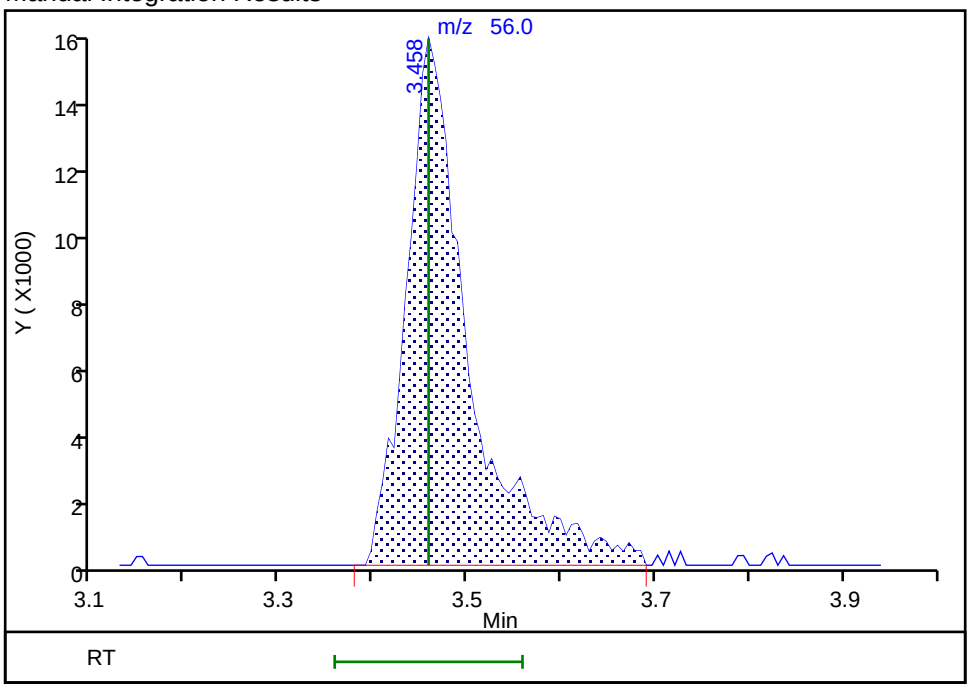
Processing Integration Results

RT: 3.46
Area: 62962
Amount: 8.740658
Amount Units: ug/l



Manual Integration Results

RT: 3.46
Area: 72018
Amount: 9.821460
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:49:02

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

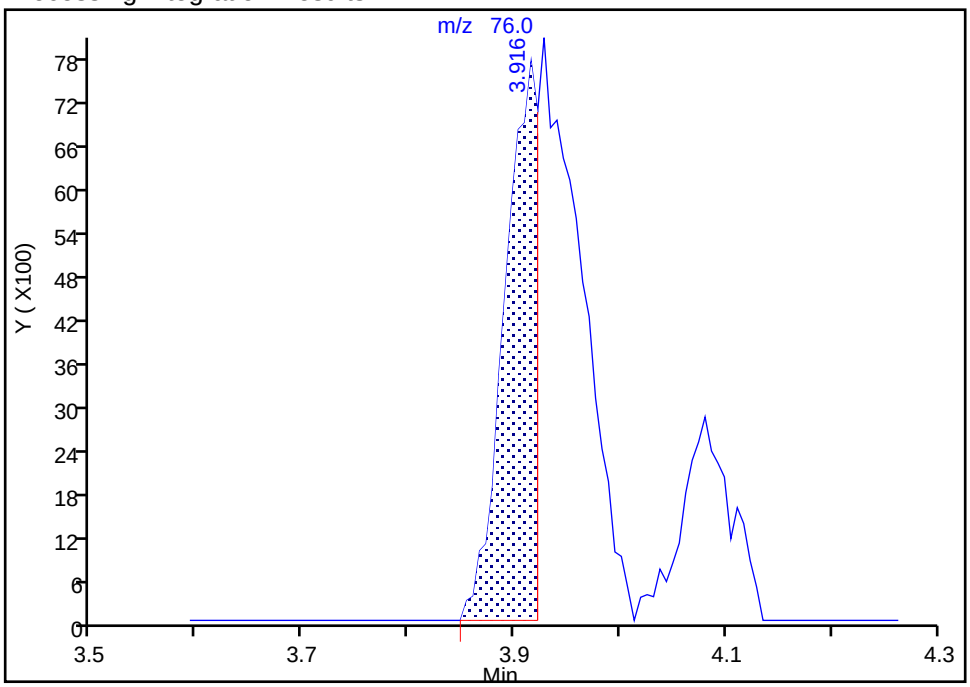
Data File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D				
Injection Date:	30-Jun-2021 20:52:30	Instrument ID:	19094		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	jml01693	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

24 Carbon disulfide, CAS: 75-15-0

Signal: 1

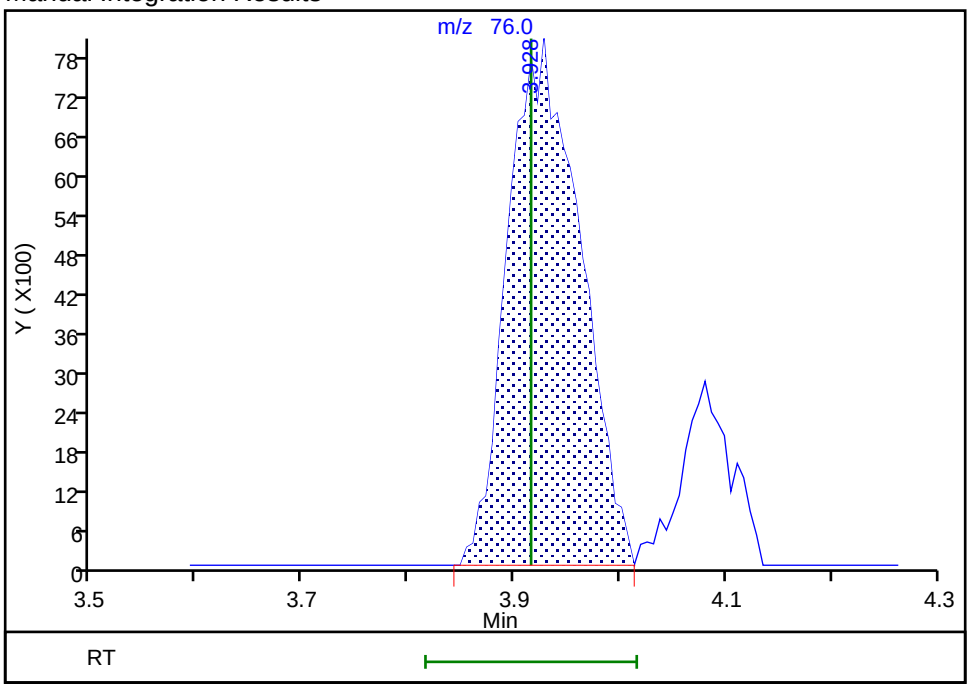
Processing Integration Results

RT: 3.92
Area: 17075
Amount: 0.179576
Amount Units: ug/l



Manual Integration Results

RT: 3.93
Area: 38392
Amount: 0.207722
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:49:17

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

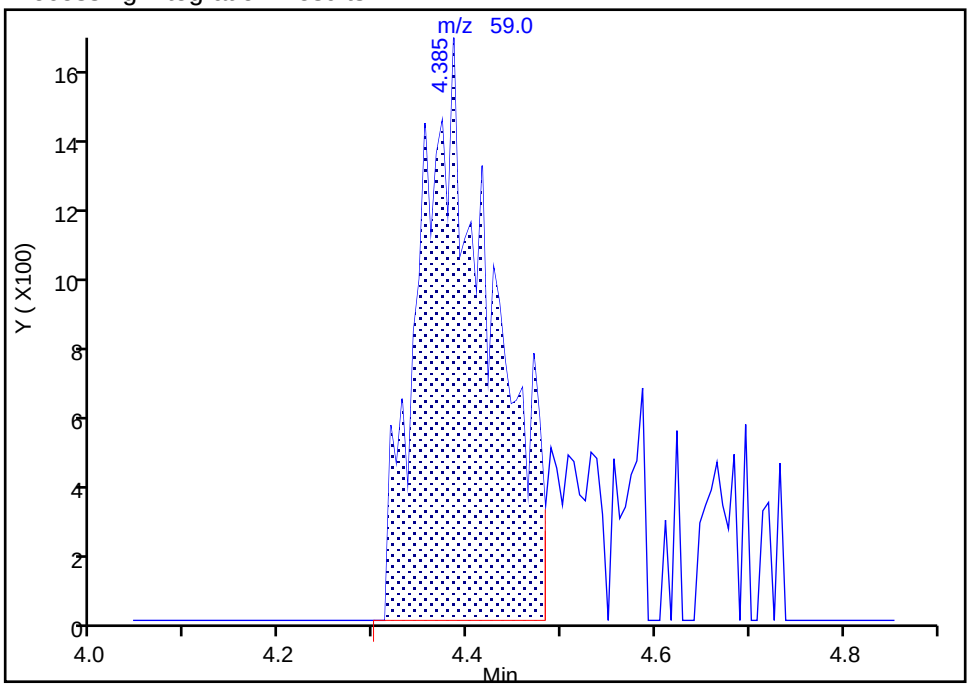
Data File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D				
Injection Date:	30-Jun-2021 20:52:30	Instrument ID:	19094		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	jml01693	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

30 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

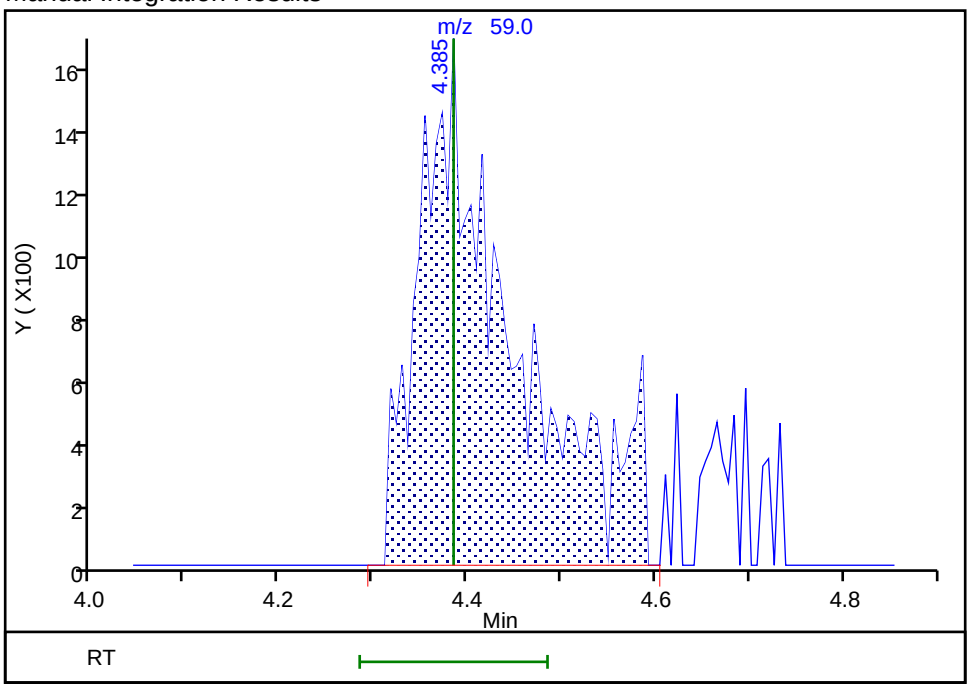
Processing Integration Results

RT: 4.39
Area: 9053
Amount: 3.235855
Amount Units: ug/l



Manual Integration Results

RT: 4.39
Area: 11543
Amount: 3.998762
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:49:23

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

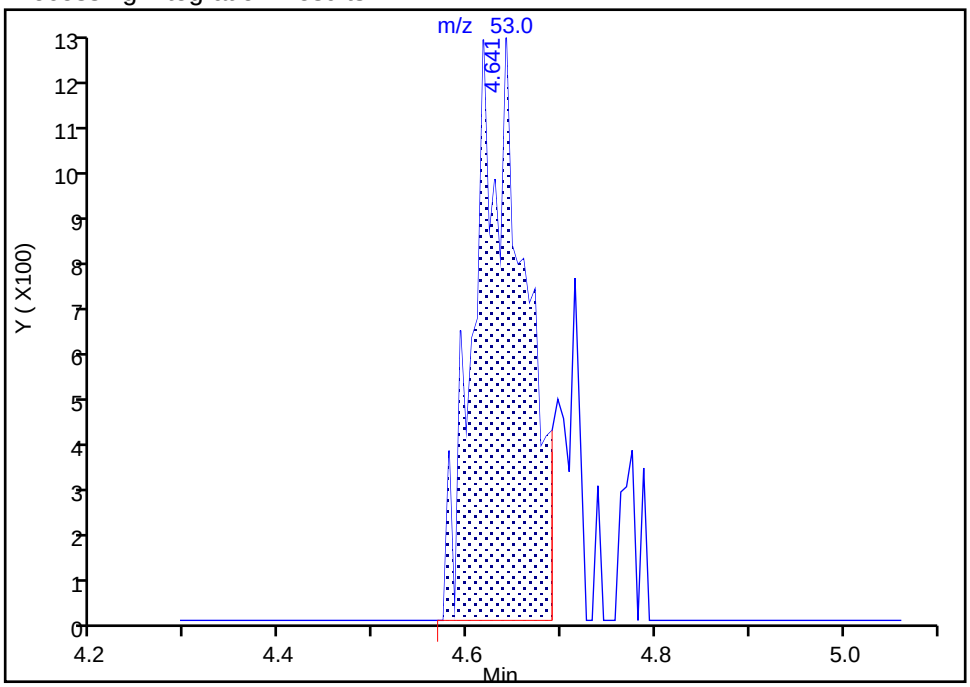
Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D
Injection Date: 30-Jun-2021 20:52:30 Instrument ID: 19094
Lims ID: IC std1 0.2
Client ID:
Operator ID: jml01693 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

31 Acrylonitrile, CAS: 107-13-1

Signal: 1

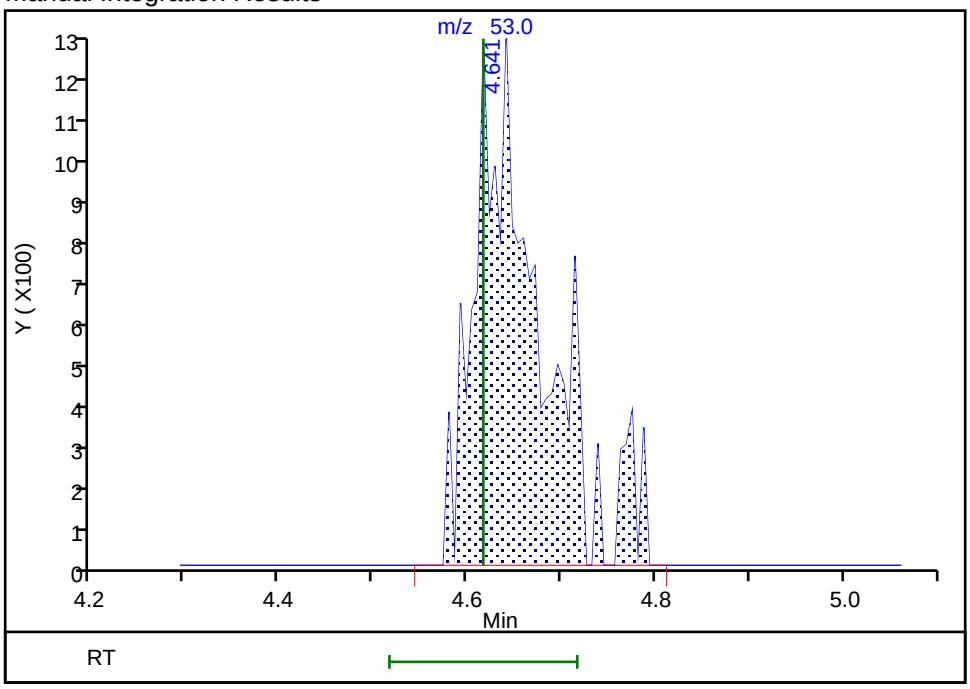
Processing Integration Results

RT: 4.64
Area: 4452
Amount: 0.380201
Amount Units: ug/l



Manual Integration Results

RT: 4.64
Area: 5825
Amount: 0.481331
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:49:42
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

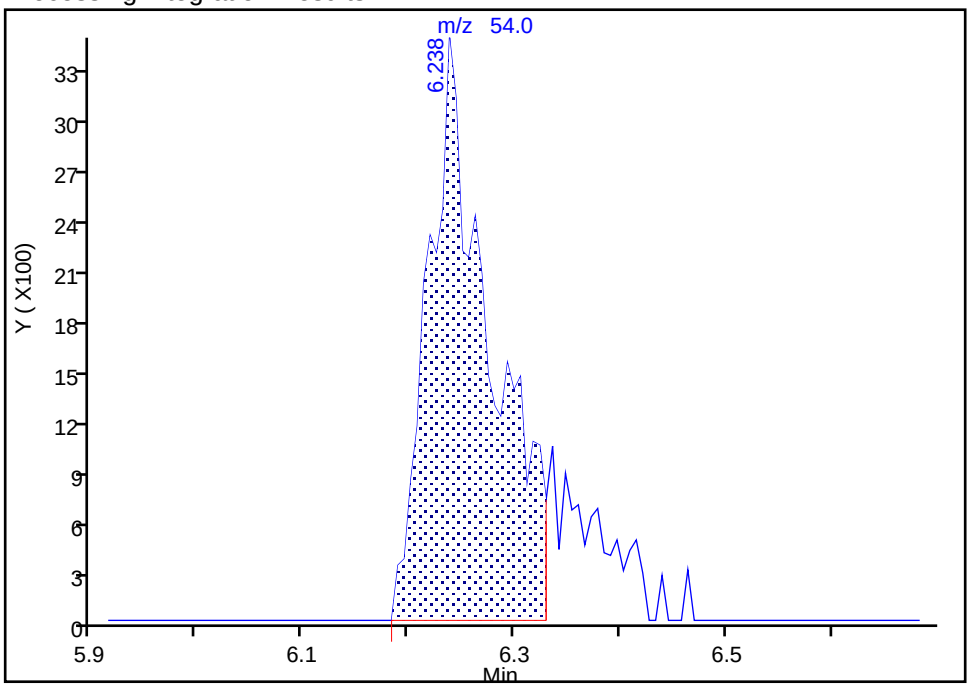
Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D
Injection Date: 30-Jun-2021 20:52:30 Instrument ID: 19094
Lims ID: IC std1 0.2
Client ID:
Operator ID: jml01693 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

45 Propionitrile, CAS: 107-12-0

Signal: 1

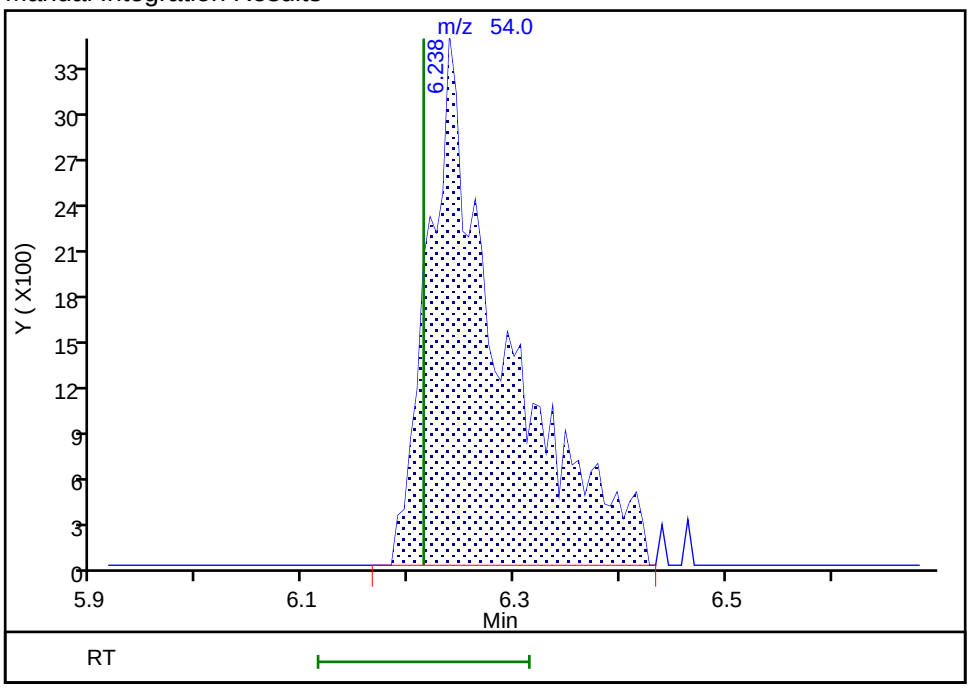
Processing Integration Results

RT: 6.24
Area: 14215
Amount: 3.311253
Amount Units: ug/l



Manual Integration Results

RT: 6.24
Area: 17193
Amount: 3.908127
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:49:51
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

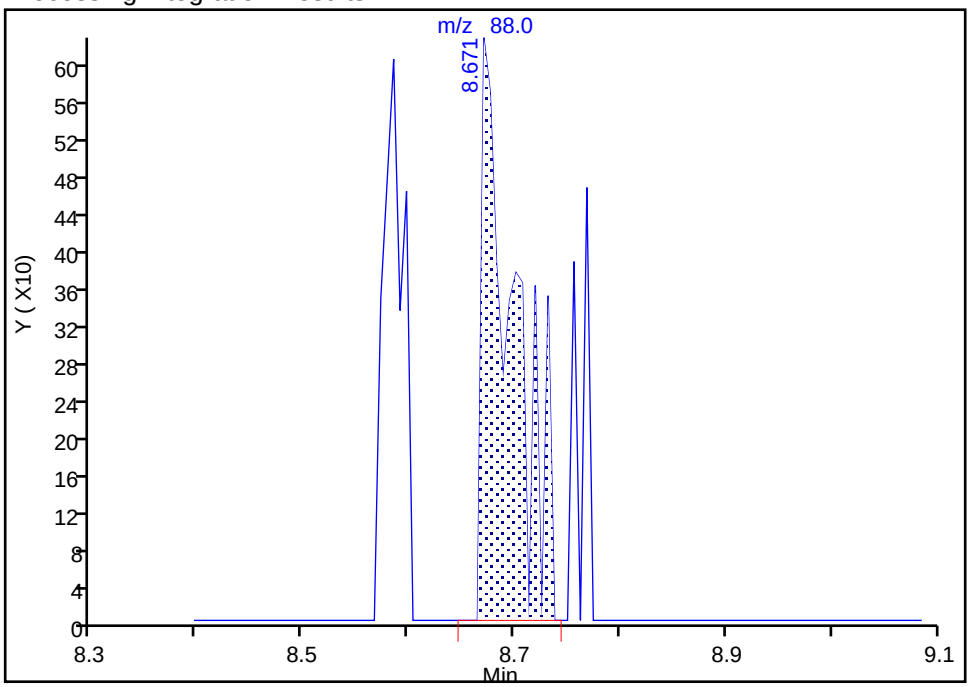
Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D
Injection Date: 30-Jun-2021 20:52:30 Instrument ID: 19094
Lims ID: IC std1 0.2
Client ID:
Operator ID: jml01693 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

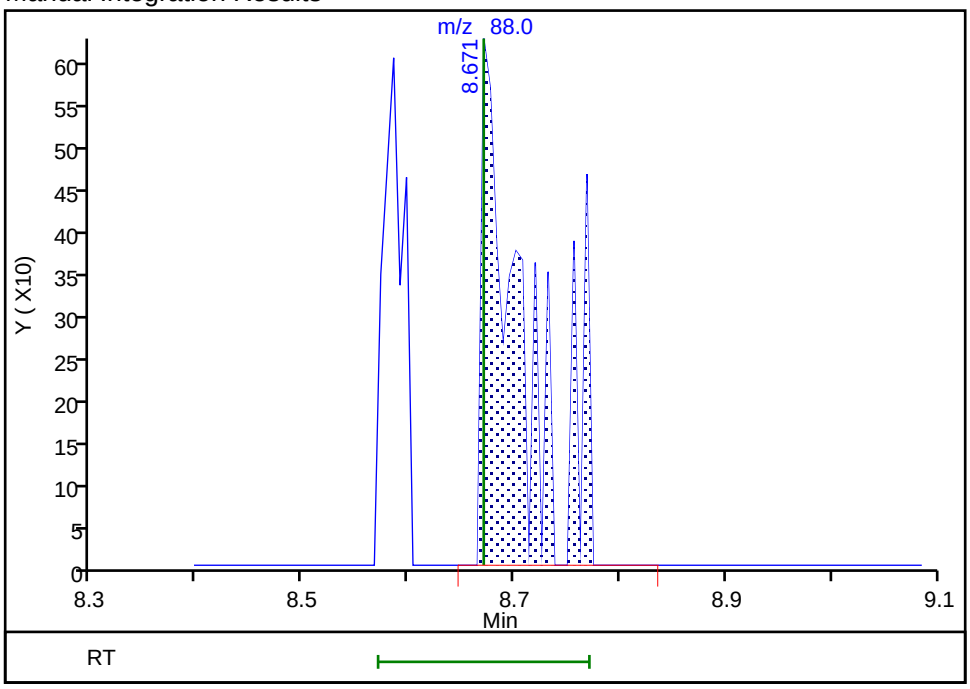
Processing Integration Results

RT: 8.67
Area: 1333
Amount: 6.989866
Amount Units: ug/l



Manual Integration Results

RT: 8.67
Area: 1646
Amount: 8.433410
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:49:59
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

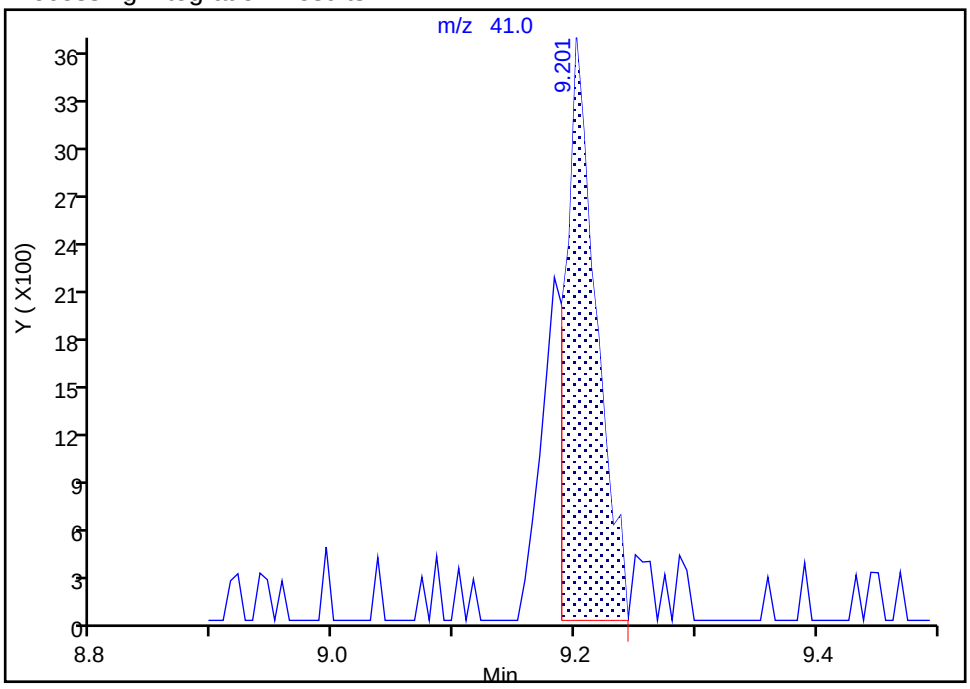
Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D
Injection Date: 30-Jun-2021 20:52:30 Instrument ID: 19094
Lims ID: IC std1 0.2
Client ID:
Operator ID: jml01693 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

76 2-Nitropropane, CAS: 79-46-9

Signal: 1

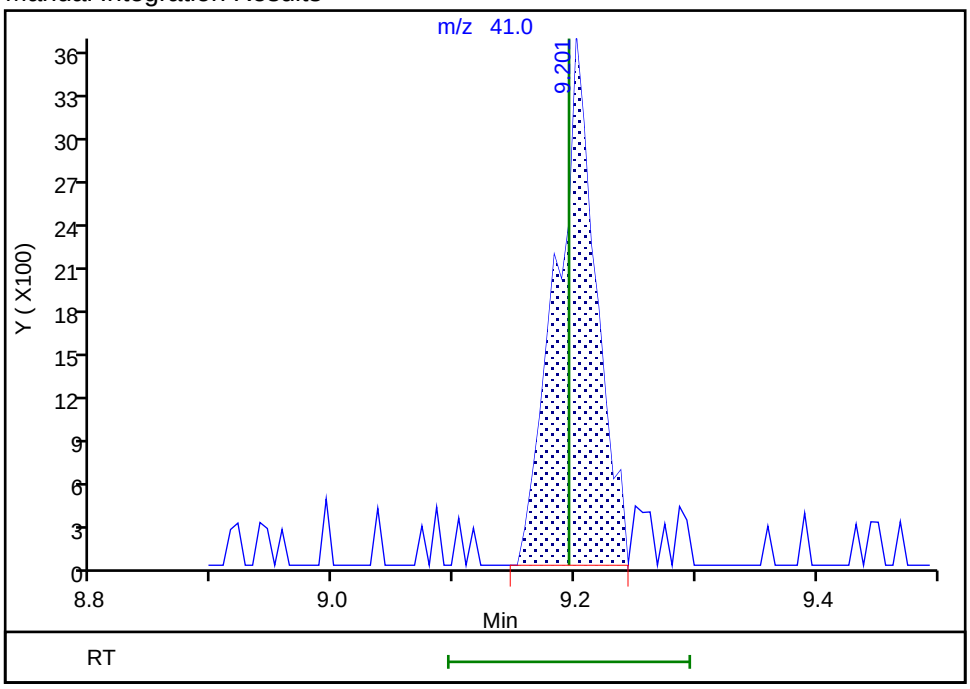
Processing Integration Results

RT: 9.20
Area: 6452
Amount: 0.850572
Amount Units: ug/l



Manual Integration Results

RT: 9.20
Area: 8525
Amount: 1.081630
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 00:50:10
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

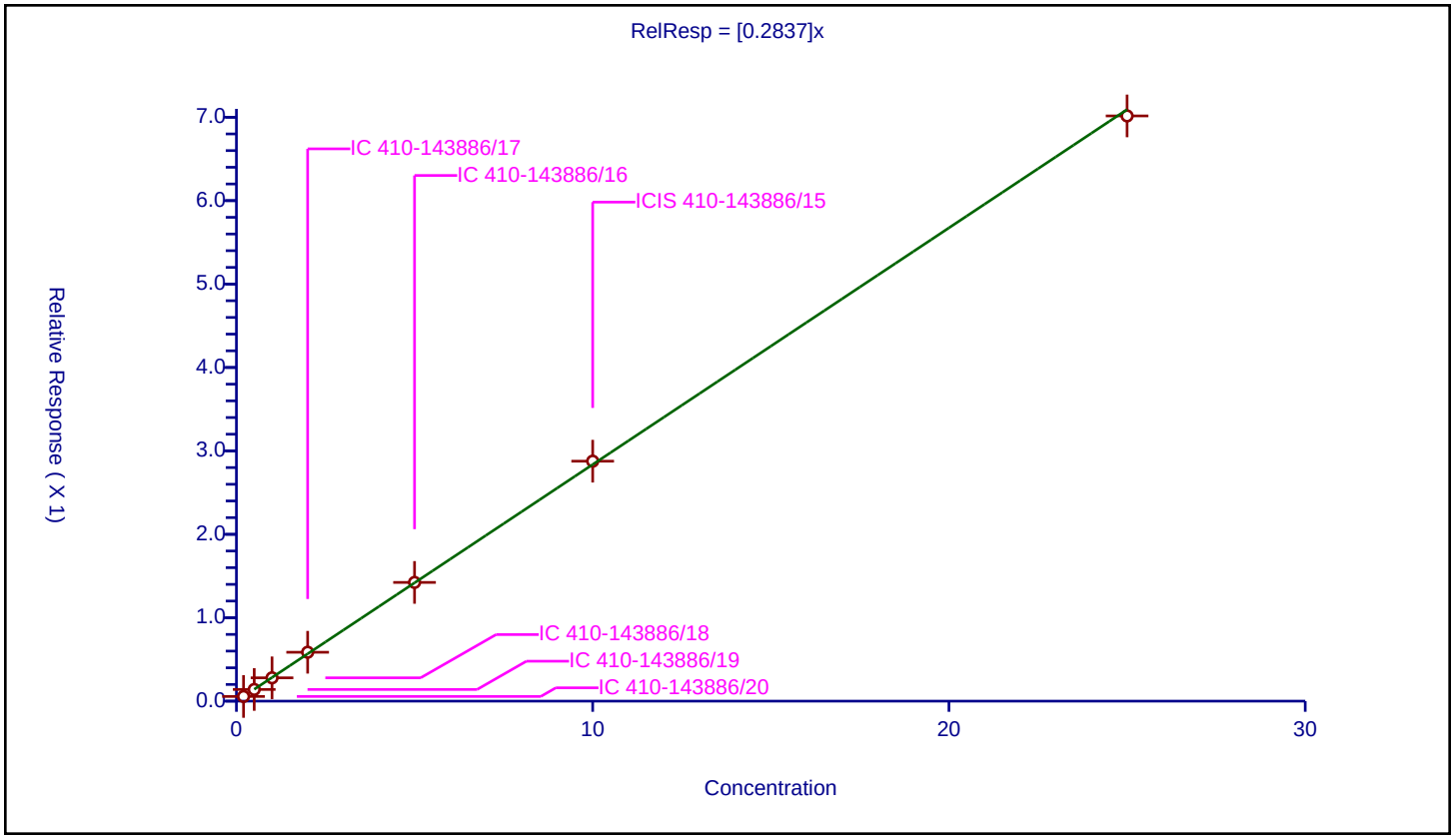
Curve Coefficients

Intercept:	0
Slope:	0.2837

Error Coefficients

Standard Error:	727000
Relative Standard Error:	1.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.056011	10.0	2324361.0	0.280055	Y
2	IC 410-143886/19	0.5	0.140153	10.0	2331162.0	0.280307	Y
3	IC 410-143886/18	1.0	0.279413	10.0	2375123.0	0.279413	Y
4	IC 410-143886/17	2.0	0.586096	10.0	2370175.0	0.293048	Y
5	IC 410-143886/16	5.0	1.423203	10.0	2376252.0	0.284641	Y
6	ICIS 410-143886/15	10.0	2.876702	10.0	2368765.0	0.28767	Y
7	IC 410-143886/14	25.0	7.015719	10.0	2283002.0	0.280629	Y



Calibration / Chloromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

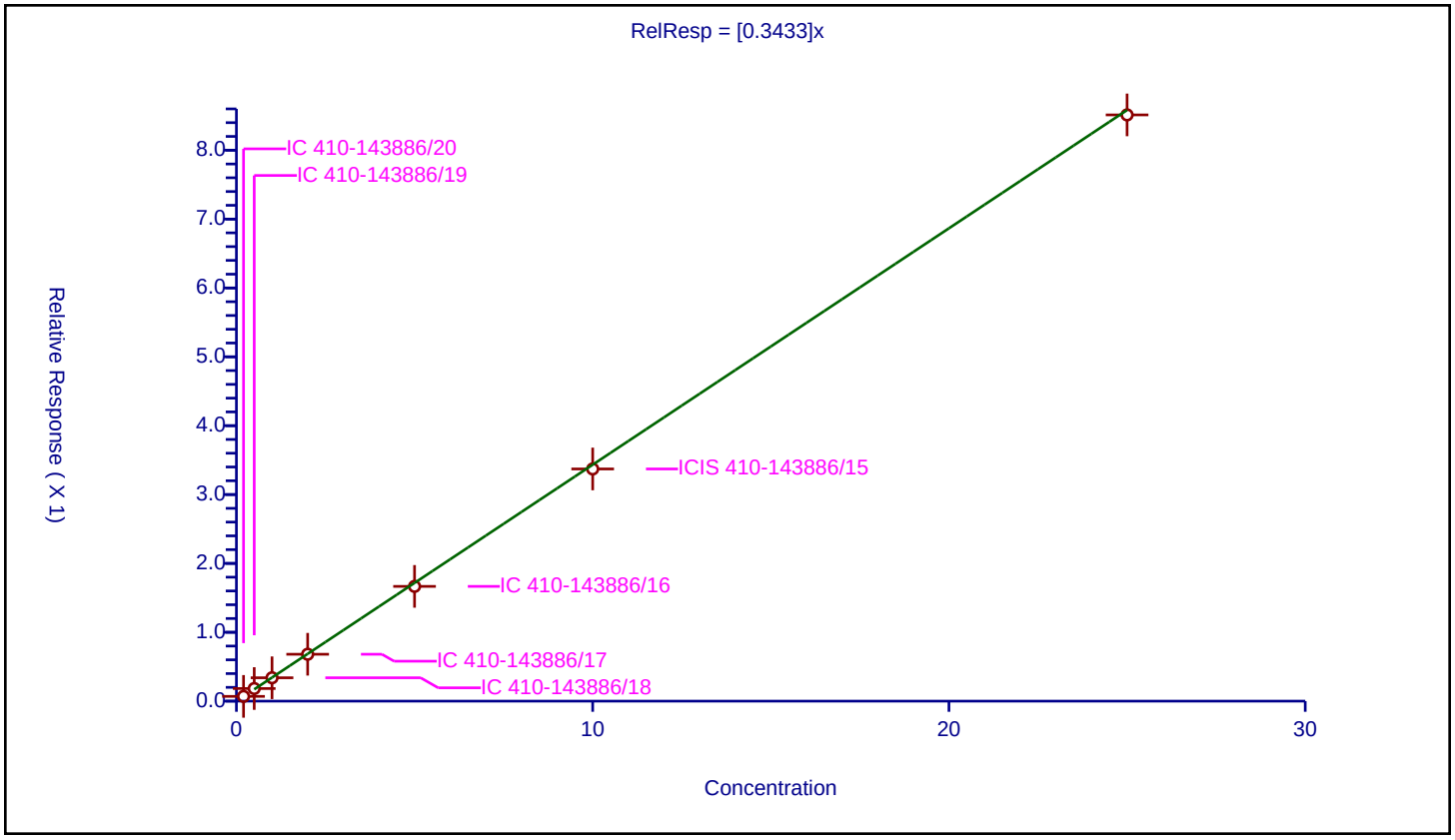
Curve Coefficients

Intercept:	0
Slope:	0.3433

Error Coefficients

Standard Error:	876000
Relative Standard Error:	3.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.069219	10.0	2324361.0	0.346095	Y
2	IC 410-143886/19	0.5	0.183102	10.0	2331162.0	0.366204	Y
3	IC 410-143886/18	1.0	0.339431	10.0	2375123.0	0.339431	Y
4	IC 410-143886/17	2.0	0.680929	10.0	2370175.0	0.340464	Y
5	IC 410-143886/16	5.0	1.66617	10.0	2376252.0	0.333234	Y
6	ICIS 410-143886/15	10.0	3.371575	10.0	2368765.0	0.337158	Y
7	IC 410-143886/14	25.0	8.512621	10.0	2283002.0	0.340505	Y



Calibration / Butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

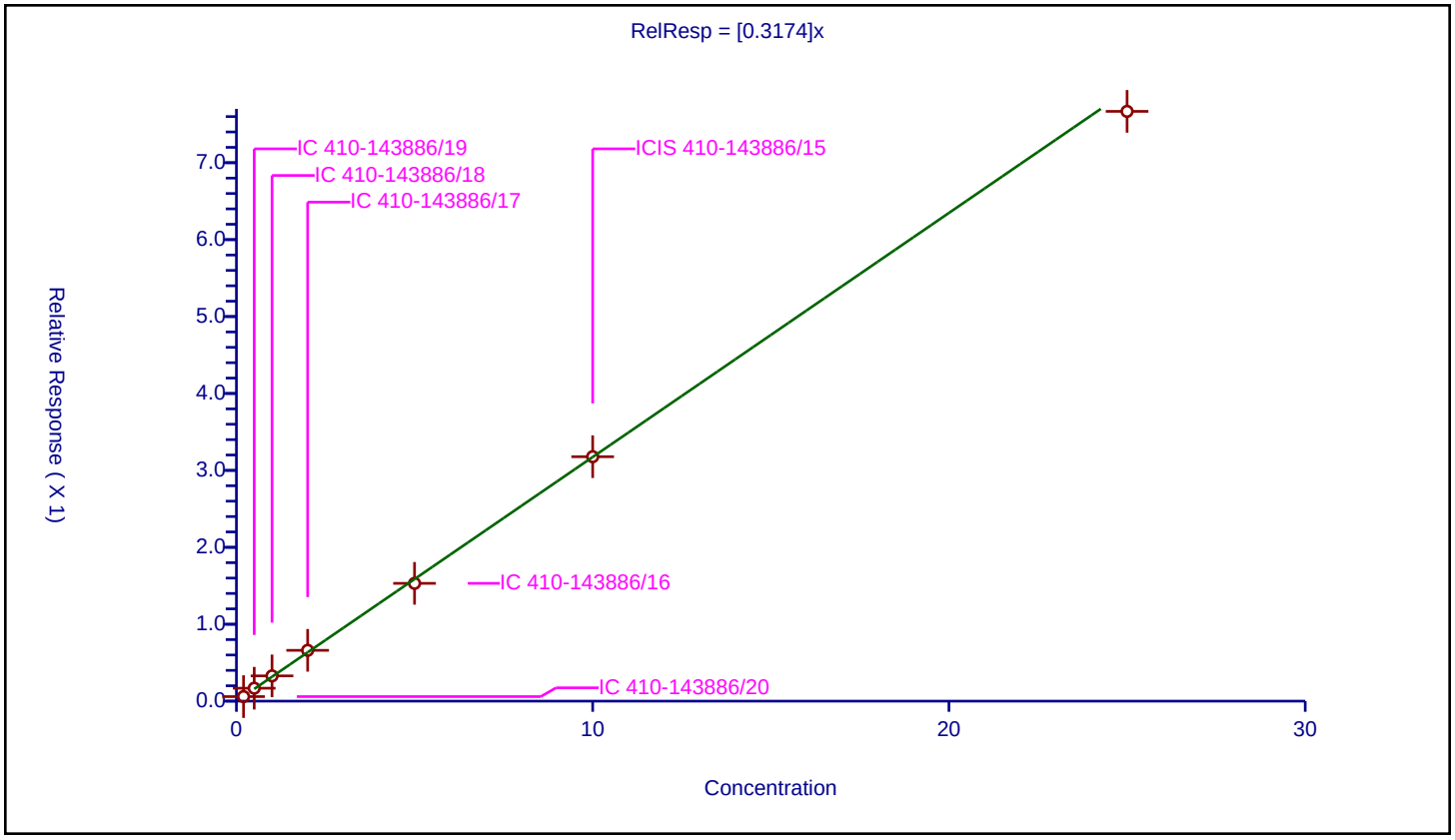
Curve Coefficients

Intercept:	0
Slope:	0.3174

Error Coefficients

Standard Error:	795000
Relative Standard Error:	4.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.059096	10.0	2324361.0	0.295479	Y
2	IC 410-143886/19	0.5	0.168208	10.0	2331162.0	0.336416	Y
3	IC 410-143886/18	1.0	0.328572	10.0	2375123.0	0.328572	Y
4	IC 410-143886/17	2.0	0.660559	10.0	2370175.0	0.330279	Y
5	IC 410-143886/16	5.0	1.531445	10.0	2376252.0	0.306289	Y
6	ICIS 410-143886/15	10.0	3.178015	10.0	2368765.0	0.317801	Y
7	IC 410-143886/14	25.0	7.667939	10.0	2283002.0	0.306718	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

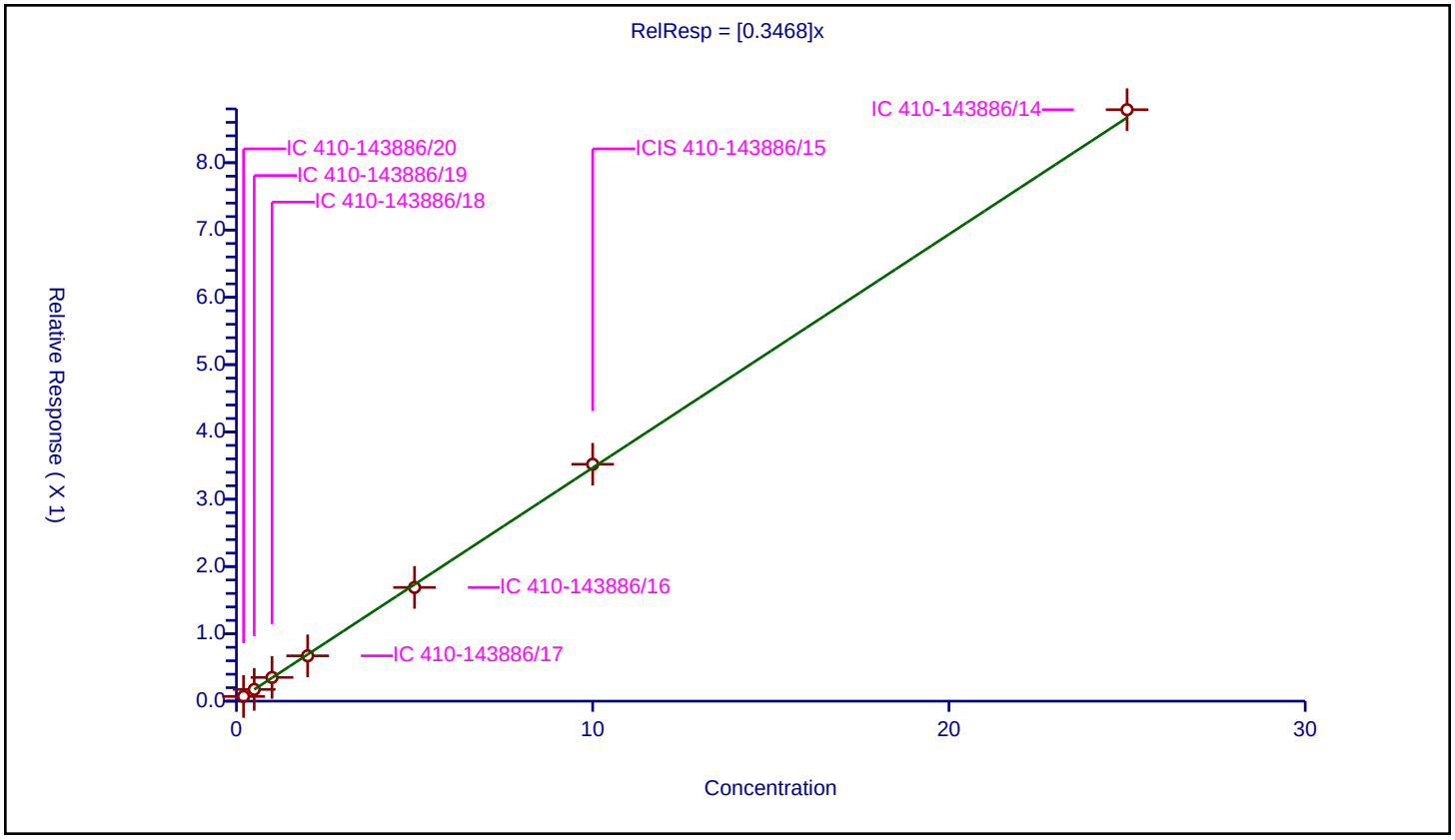
Curve Coefficients

Intercept:	0
Slope:	0.3468

Error Coefficients

Standard Error:	905000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.069722	10.0	2324361.0	0.348612	Y
2	IC 410-143886/19	0.5	0.174209	10.0	2331162.0	0.348419	Y
3	IC 410-143886/18	1.0	0.352344	10.0	2375123.0	0.352344	Y
4	IC 410-143886/17	2.0	0.673495	10.0	2370175.0	0.336747	Y
5	IC 410-143886/16	5.0	1.689821	10.0	2376252.0	0.337964	Y
6	ICIS 410-143886/15	10.0	3.519986	10.0	2368765.0	0.351999	Y
7	IC 410-143886/14	25.0	8.788284	10.0	2283002.0	0.351531	Y



Calibration / Bromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

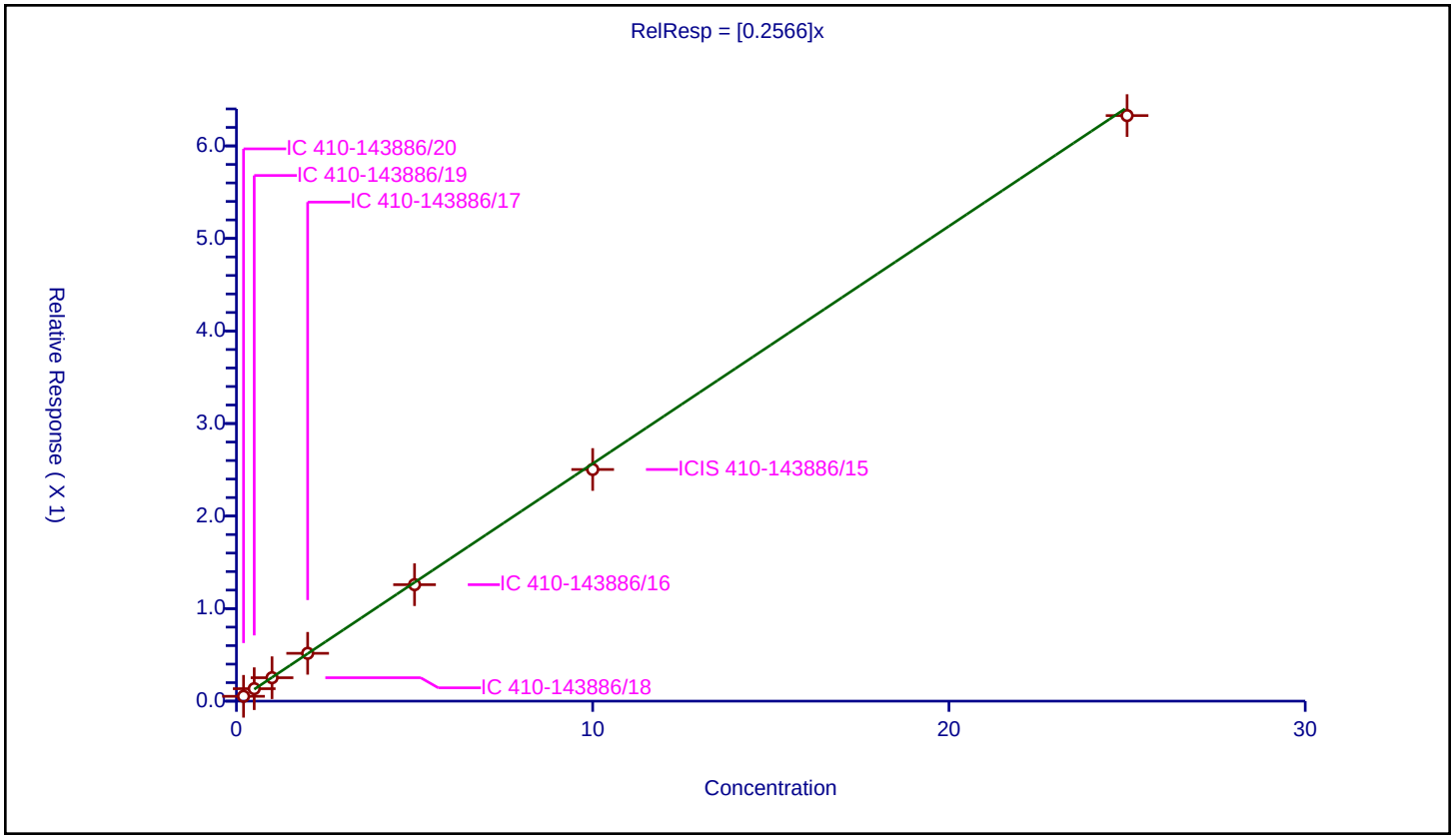
Curve Coefficients

Intercept:	0
Slope:	0.2566

Error Coefficients

Standard Error:	652000
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 410-143886/20	0.2	0.052156	10.0	2324361.0	0.260781	Y
2	IC 410-143886/19	0.5	0.134512	10.0	2331162.0	0.269025	Y
3	IC 410-143886/18	1.0	0.25301	10.0	2375123.0	0.25301	Y
4	IC 410-143886/17	2.0	0.516865	10.0	2370175.0	0.258432	Y
5	IC 410-143886/16	5.0	1.258343	10.0	2376252.0	0.251669	Y
6	ICIS 410-143886/15	10.0	2.503313	10.0	2368765.0	0.250331	Y
7	IC 410-143886/14	25.0	6.327892	10.0	2283002.0	0.253116	Y



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

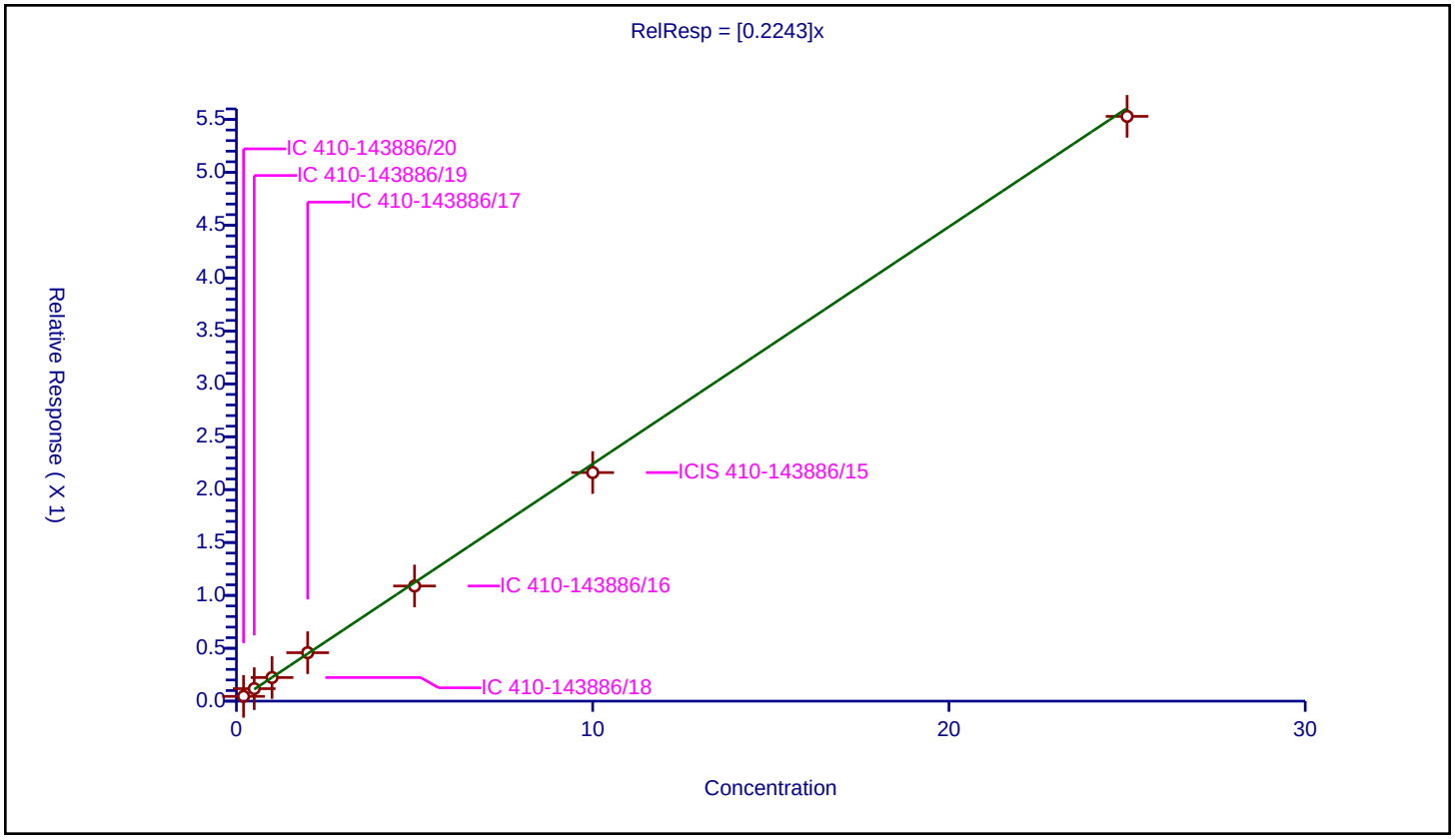
Curve Coefficients

Intercept:	0
Slope:	0.2243

Error Coefficients

Standard Error:	568000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.045303	10.0	2324361.0	0.226514	Y
2	IC 410-143886/19	0.5	0.118031	10.0	2331162.0	0.236063	Y
3	IC 410-143886/18	1.0	0.223214	10.0	2375123.0	0.223214	Y
4	IC 410-143886/17	2.0	0.458089	10.0	2370175.0	0.229044	Y
5	IC 410-143886/16	5.0	1.088769	10.0	2376252.0	0.217754	Y
6	ICIS 410-143886/15	10.0	2.161422	10.0	2368765.0	0.216142	Y
7	IC 410-143886/14	25.0	5.529548	10.0	2283002.0	0.221182	Y



Calibration / Dichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

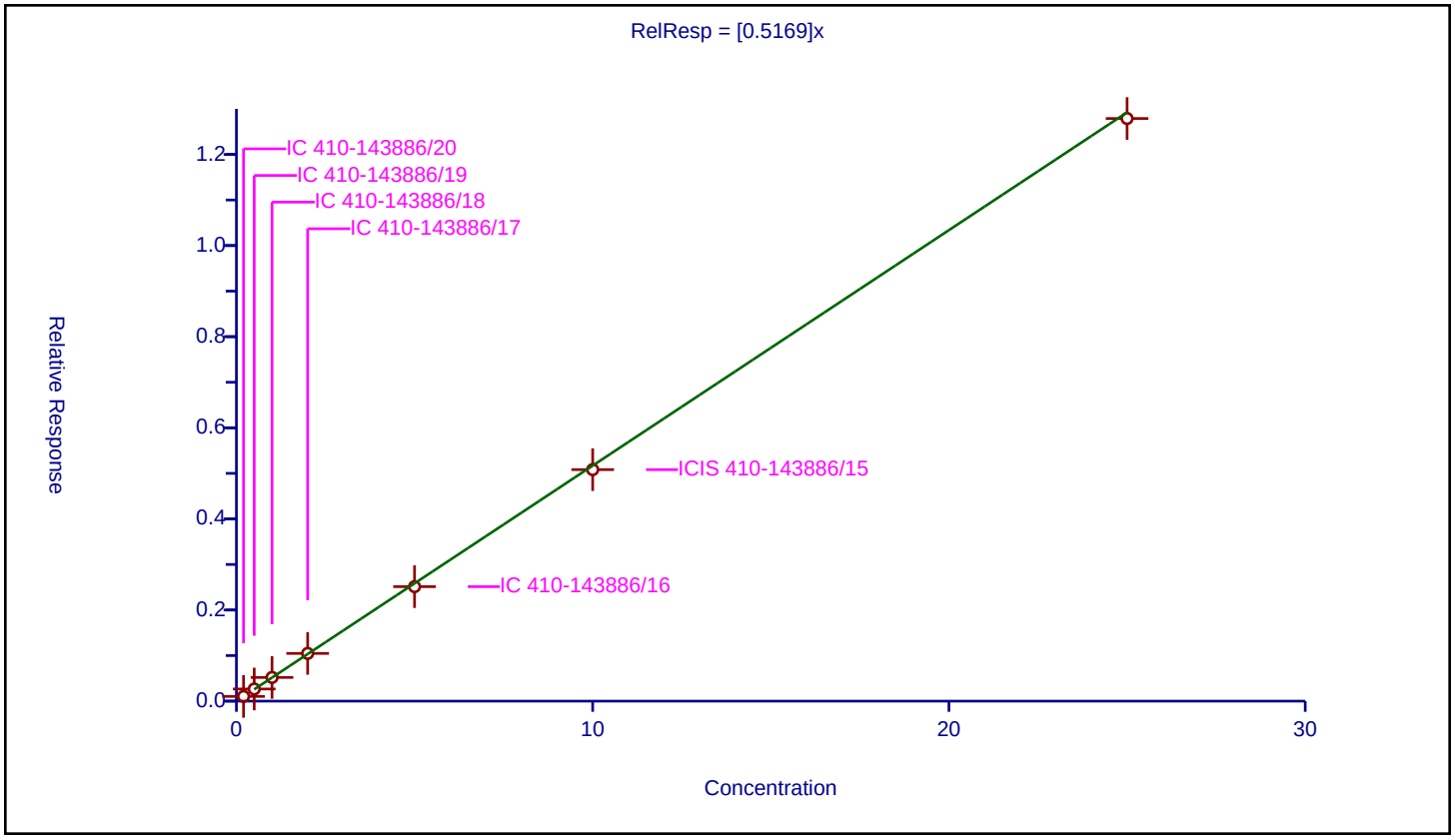
Curve Coefficients

Intercept:	0
Slope:	0.5169

Error Coefficients

Standard Error:	1320000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.103831	10.0	2324361.0	0.519153	Y
2	IC 410-143886/19	0.5	0.266579	10.0	2331162.0	0.533159	Y
3	IC 410-143886/18	1.0	0.520112	10.0	2375123.0	0.520112	Y
4	IC 410-143886/17	2.0	1.047446	10.0	2370175.0	0.523723	Y
5	IC 410-143886/16	5.0	2.513037	10.0	2376252.0	0.502607	Y
6	ICIS 410-143886/15	10.0	5.081973	10.0	2368765.0	0.508197	Y
7	IC 410-143886/14	25.0	12.789183	10.0	2283002.0	0.511567	Y



Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

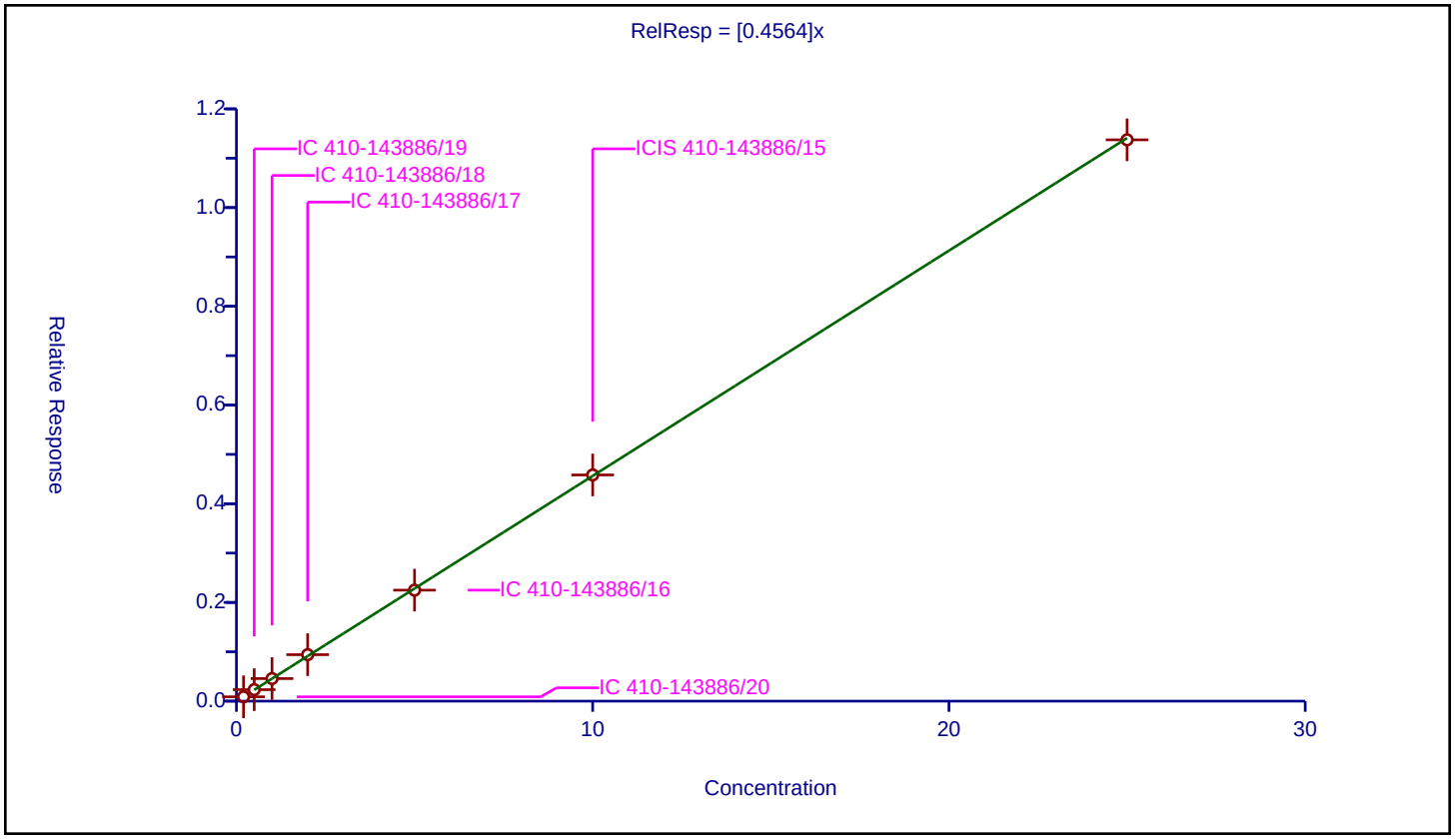
Curve Coefficients

Intercept:	0
Slope:	0.4564

Error Coefficients

Standard Error:	1170000
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.087598	10.0	2324361.0	0.437991	Y
2	IC 410-143886/19	0.5	0.232875	10.0	2331162.0	0.465751	Y
3	IC 410-143886/18	1.0	0.457235	10.0	2375123.0	0.457235	Y
4	IC 410-143886/17	2.0	0.941327	10.0	2370175.0	0.470664	Y
5	IC 410-143886/16	5.0	2.249147	10.0	2376252.0	0.449829	Y
6	ICIS 410-143886/15	10.0	4.58311	10.0	2368765.0	0.458311	Y
7	IC 410-143886/14	25.0	11.37296	10.0	2283002.0	0.454918	Y



Calibration / Ethyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

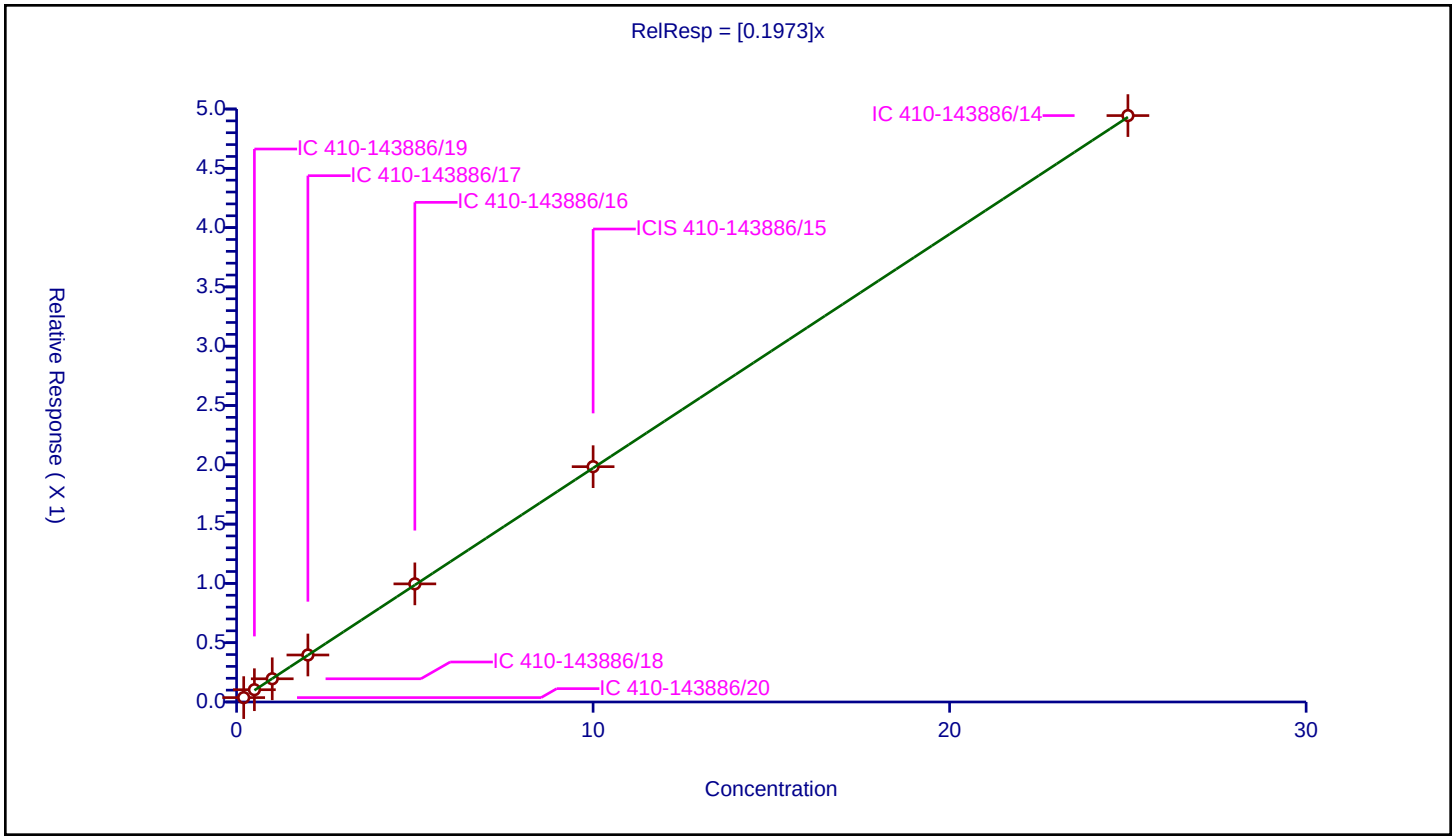
Curve Coefficients

Intercept:	0
Slope:	0.1973

Error Coefficients

Standard Error:	510000
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 410-143886/20	0.200014	0.036943	10.0	2324361.0	0.184705	Y
2	IC 410-143886/19	0.500035	0.103468	10.0	2331162.0	0.206921	Y
3	IC 410-143886/18	1.000069	0.195767	10.0	2375123.0	0.195753	Y
4	IC 410-143886/17	2.000138	0.396224	10.0	2370175.0	0.198098	Y
5	IC 410-143886/16	5.000346	0.995959	10.0	2376252.0	0.199178	Y
6	ICIS 410-143886/15	10.000692	1.984169	10.0	2368765.0	0.198403	Y
7	IC 410-143886/14	25.00173	4.944757	10.0	2283002.0	0.197777	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

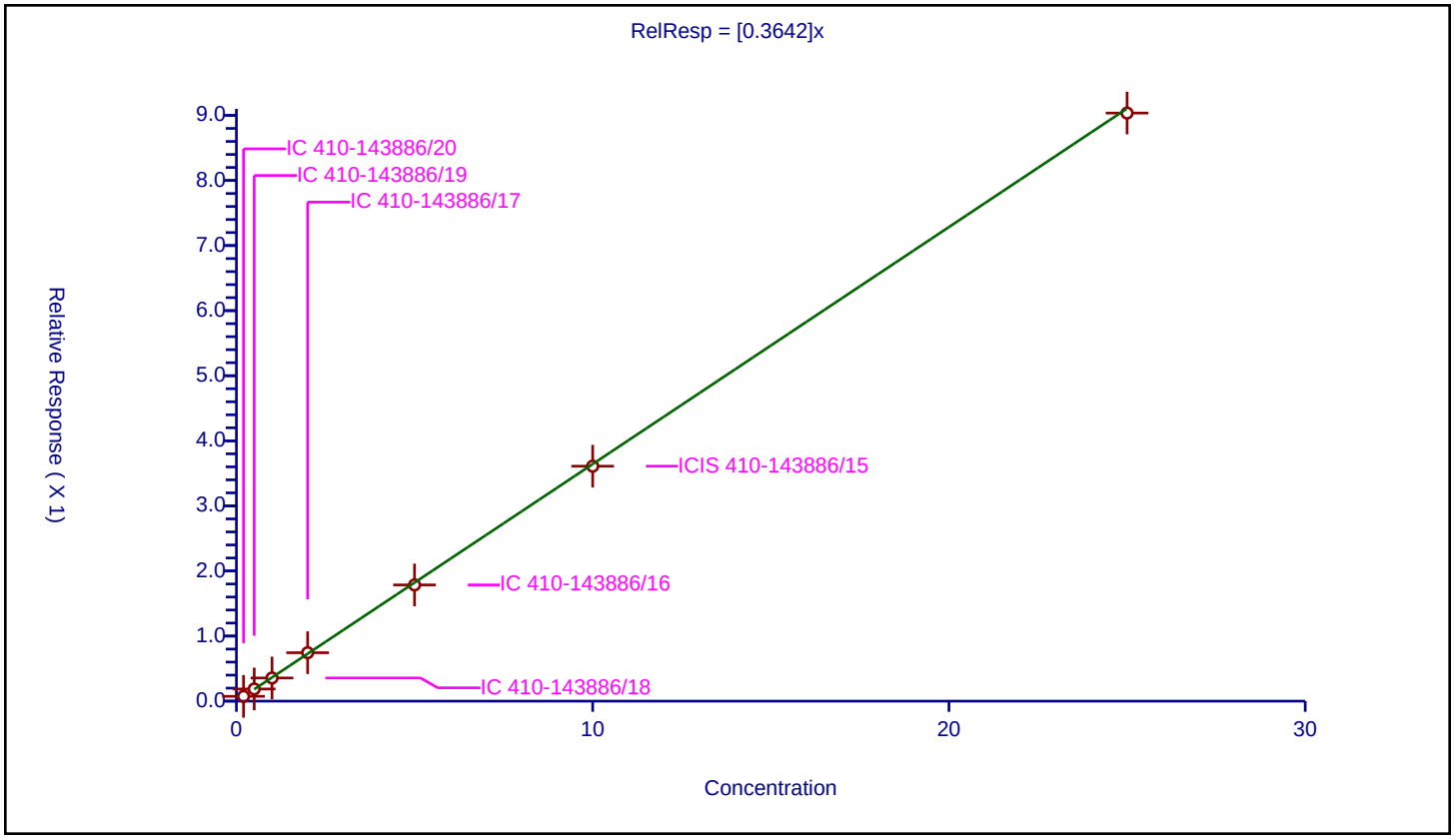
Curve Coefficients

Intercept:	0
Slope:	0.3642

Error Coefficients

Standard Error:	932000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.073706	10.0	2324361.0	0.368531	Y
2	IC 410-143886/19	0.5	0.18692	10.0	2331162.0	0.373839	Y
3	IC 410-143886/18	1.0	0.355645	10.0	2375123.0	0.355645	Y
4	IC 410-143886/17	2.0	0.744051	10.0	2370175.0	0.372025	Y
5	IC 410-143886/16	5.0	1.785745	10.0	2376252.0	0.357149	Y
6	ICIS 410-143886/15	10.0	3.610109	10.0	2368765.0	0.361011	Y
7	IC 410-143886/14	25.0	9.035954	10.0	2283002.0	0.361438	Y



Calibration / Acrolein

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

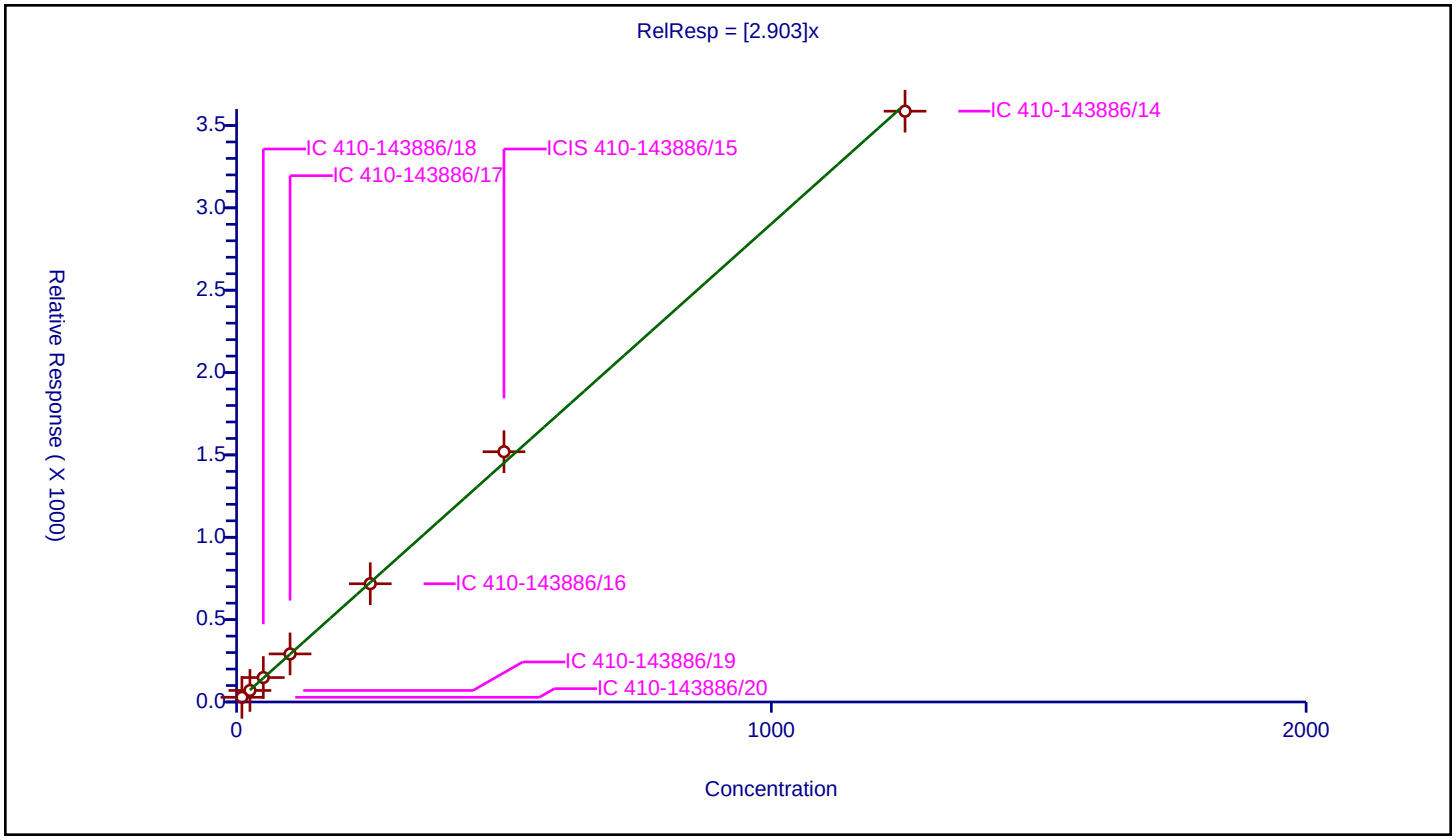
Curve Coefficients

Intercept:	0
Slope:	2.903

Error Coefficients

Standard Error:	3930000
Relative Standard Error:	2.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	10.000089	28.510463	50.0	126301.0	2.851021	Y
2	IC 410-143886/19	25.000221	70.084543	50.0	128101.0	2.803357	Y
3	IC 410-143886/18	50.000443	148.396367	50.0	127180.0	2.967901	Y
4	IC 410-143886/17	100.000886	291.784248	50.0	130548.0	2.917817	Y
5	IC 410-143886/16	250.002214	717.96935	50.0	130308.0	2.871852	Y
6	ICIS 410-143886/15	500.004429	1519.364708	50.0	123880.0	3.038703	Y
7	IC 410-143886/14	1250.011072	3586.867952	50.0	120244.0	2.869469	Y



Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

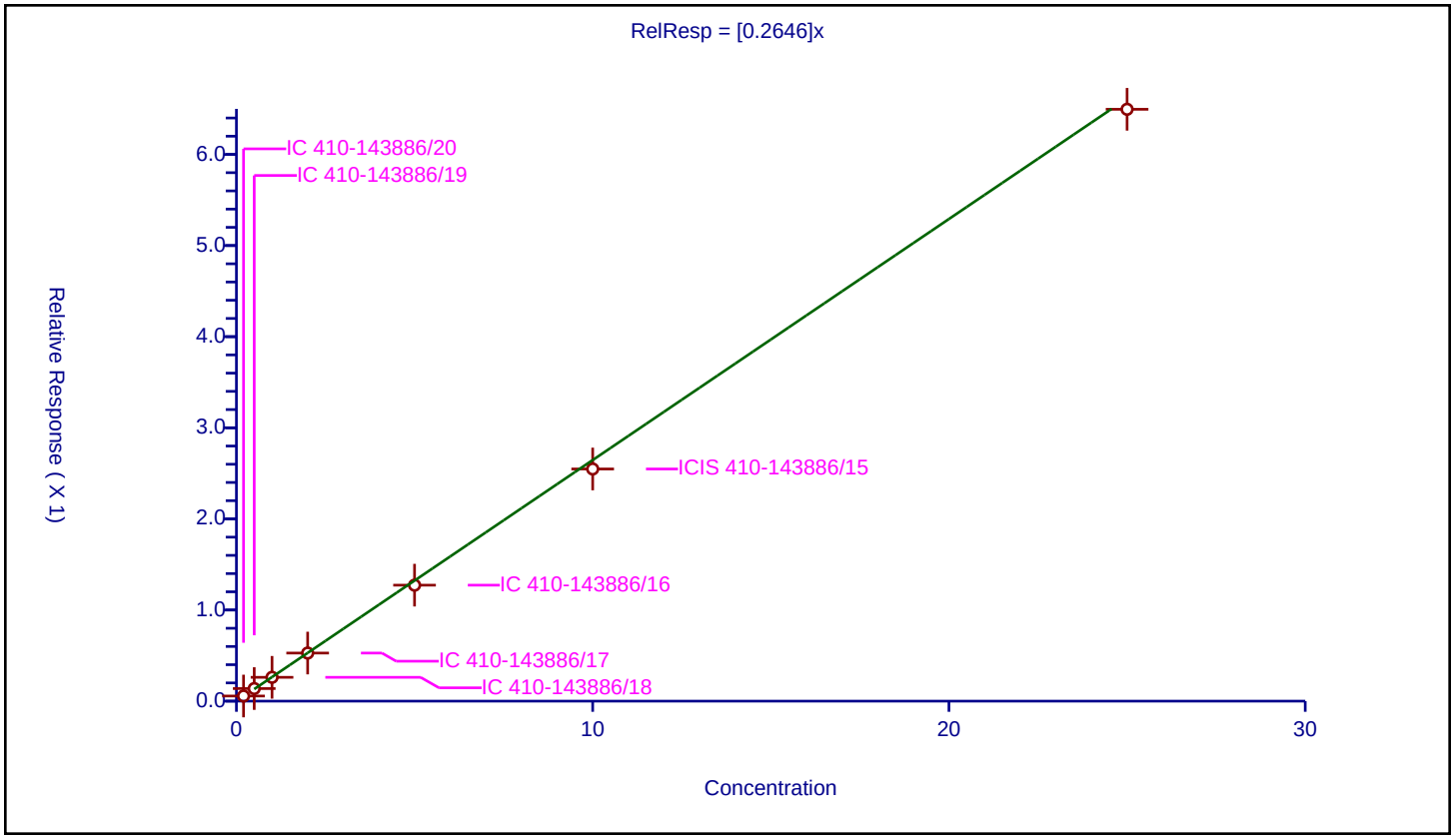
Curve Coefficients

Intercept:	0
Slope:	0.2646

Error Coefficients

Standard Error:	668000
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 410-143886/20	0.2	0.056304	10.0	2324361.0	0.281518	Y
2	IC 410-143886/19	0.5	0.138021	10.0	2331162.0	0.276043	Y
3	IC 410-143886/18	1.0	0.261435	10.0	2375123.0	0.261435	Y
4	IC 410-143886/17	2.0	0.527687	10.0	2370175.0	0.263843	Y
5	IC 410-143886/16	5.0	1.272946	10.0	2376252.0	0.254589	Y
6	ICIS 410-143886/15	10.0	2.548037	10.0	2368765.0	0.254804	Y
7	IC 410-143886/14	25.0	6.495671	10.0	2283002.0	0.259827	Y



Calibration / Acetone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

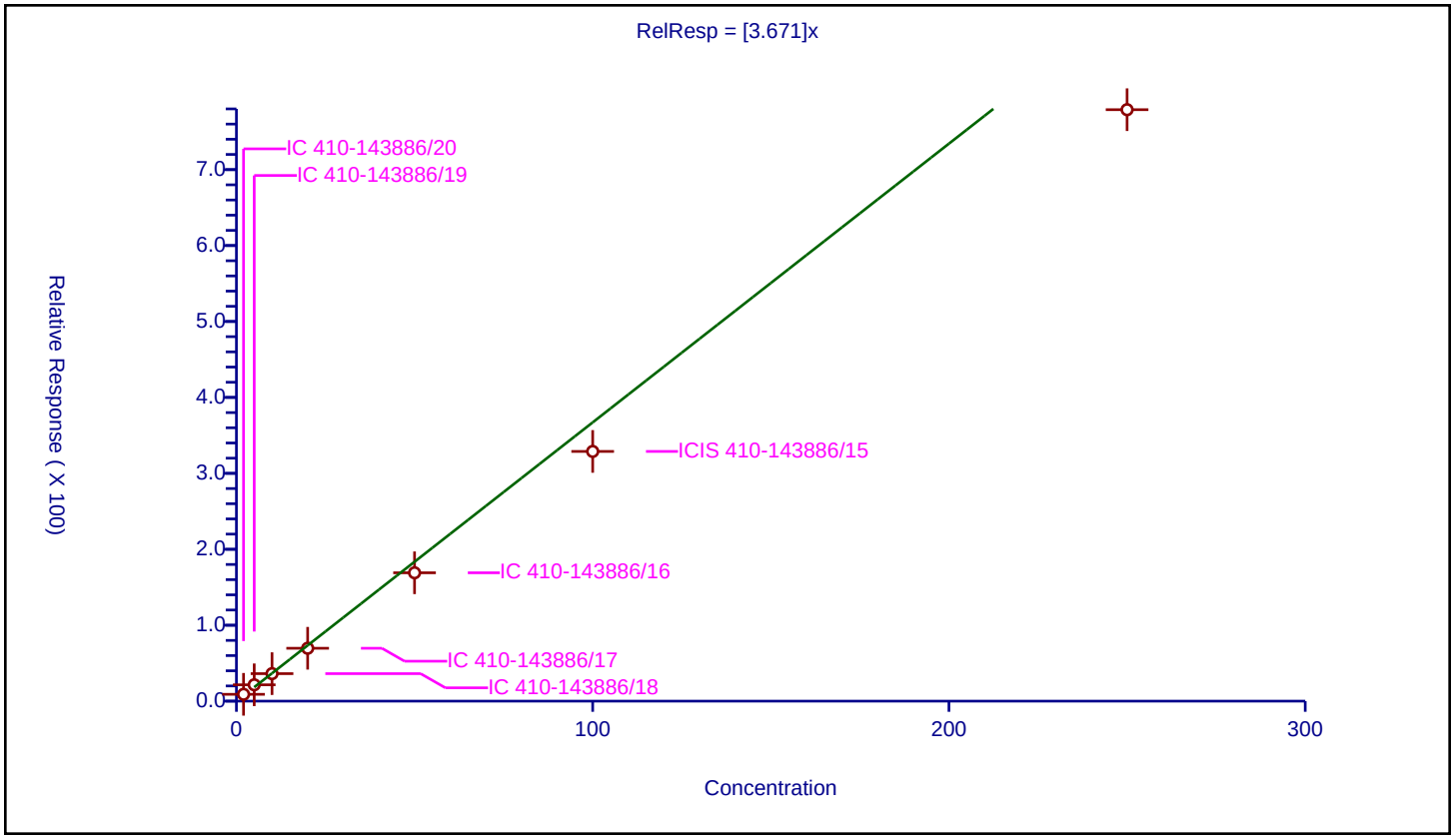
Curve Coefficients

Intercept:	0
Slope:	3.671

Error Coefficients

Standard Error:	857000
Relative Standard Error:	14.4
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.966

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	2.0	9.001512	50.0	126301.0	4.500756	Y
2	IC 410-143886/19	5.0	21.530277	50.0	128101.0	4.306055	Y
3	IC 410-143886/18	10.0	36.22936	50.0	127180.0	3.622936	Y
4	IC 410-143886/17	20.0	69.654074	50.0	130548.0	3.482704	Y
5	IC 410-143886/16	50.0	169.041041	50.0	130308.0	3.380821	Y
6	ICIS 410-143886/15	100.0	328.854133	50.0	123880.0	3.288541	Y
7	IC 410-143886/14	250.0	778.959033	50.0	120244.0	3.115836	Y



Calibration / 1,1,2-Trichloro-1,2,2-trifluoroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

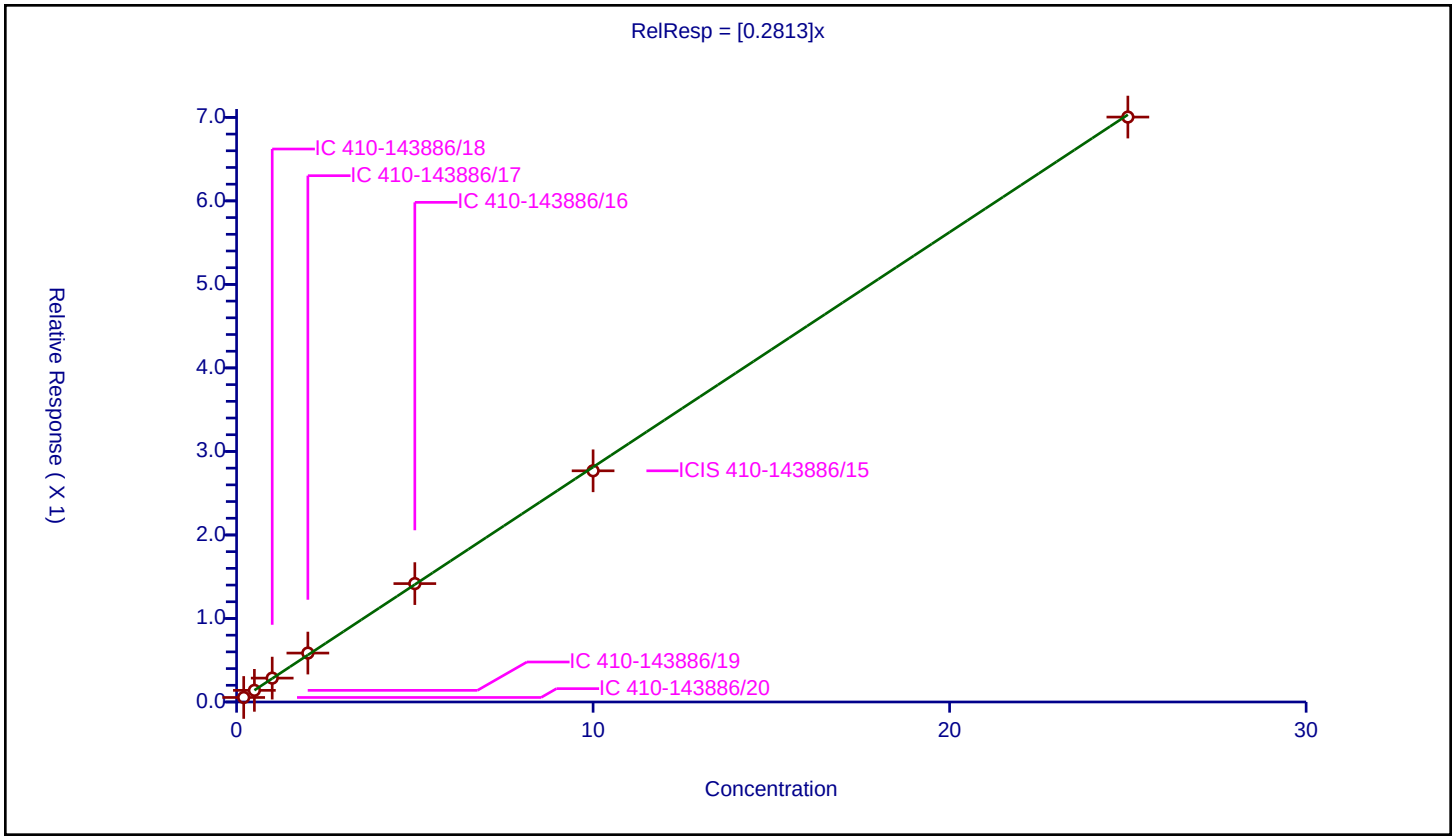
Curve Coefficients

Intercept:	0
Slope:	0.2813

Error Coefficients

Standard Error:	722000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.054153	10.0	2324361.0	0.270763	Y
2	IC 410-143886/19	0.5	0.139355	10.0	2331162.0	0.278711	Y
3	IC 410-143886/18	1.0	0.286078	10.0	2375123.0	0.286078	Y
4	IC 410-143886/17	2.0	0.585645	10.0	2370175.0	0.292822	Y
5	IC 410-143886/16	5.0	1.417493	10.0	2376252.0	0.283499	Y
6	ICIS 410-143886/15	10.0	2.768147	10.0	2368765.0	0.276815	Y
7	IC 410-143886/14	25.0	7.00352	10.0	2283002.0	0.280141	Y



Calibration / Iodomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

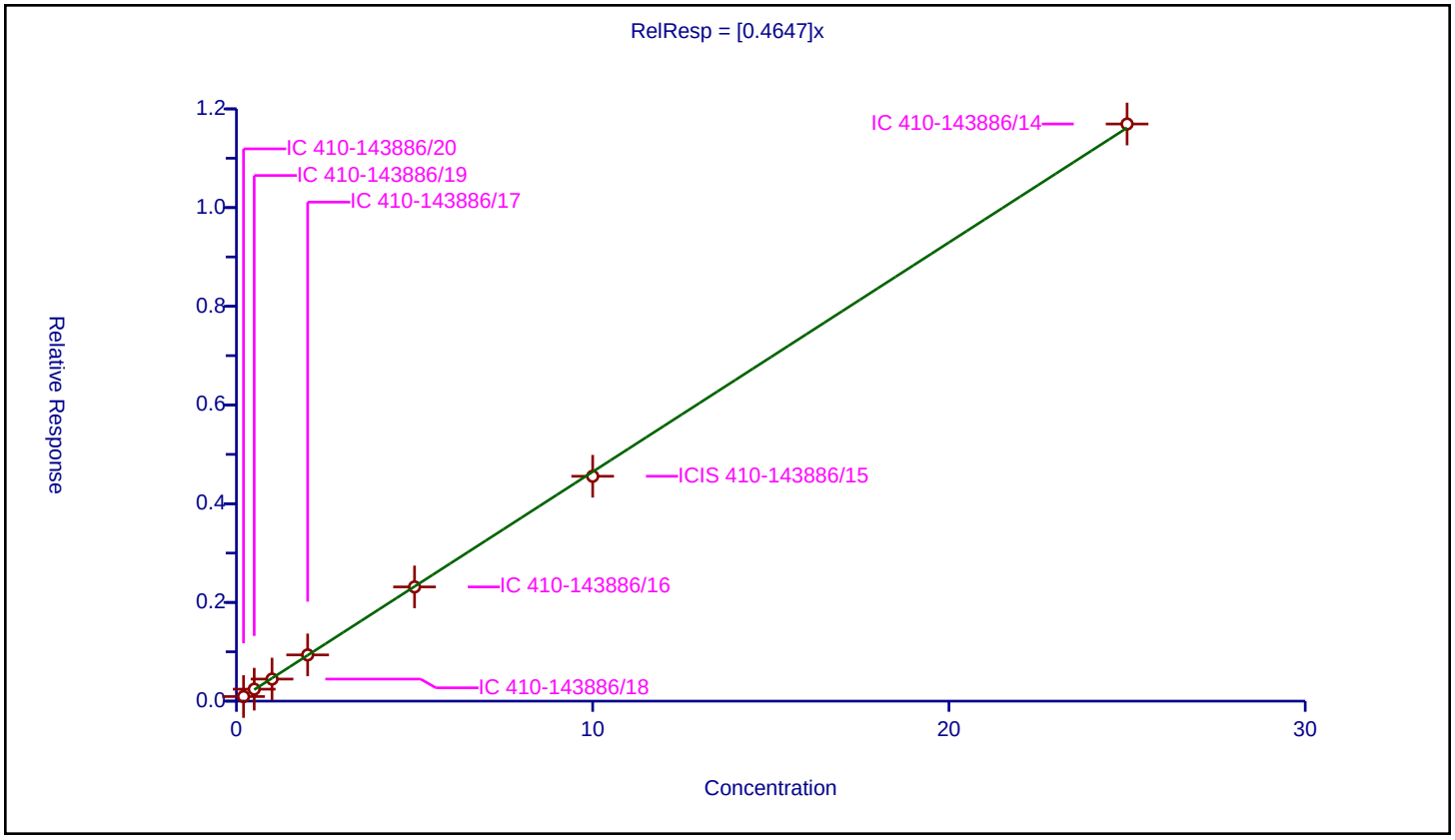
Curve Coefficients

Intercept:	0
Slope:	0.4647

Error Coefficients

Standard Error:	1200000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.093135	10.0	2324361.0	0.465676	Y
2	IC 410-143886/19	0.5	0.242596	10.0	2331162.0	0.485192	Y
3	IC 410-143886/18	1.0	0.447139	10.0	2375123.0	0.447139	Y
4	IC 410-143886/17	2.0	0.936821	10.0	2370175.0	0.468411	Y
5	IC 410-143886/16	5.0	2.314388	10.0	2376252.0	0.462878	Y
6	ICIS 410-143886/15	10.0	4.556357	10.0	2368765.0	0.455636	Y
7	IC 410-143886/14	25.0	11.693879	10.0	2283002.0	0.467755	Y



Calibration / Carbon disulfide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

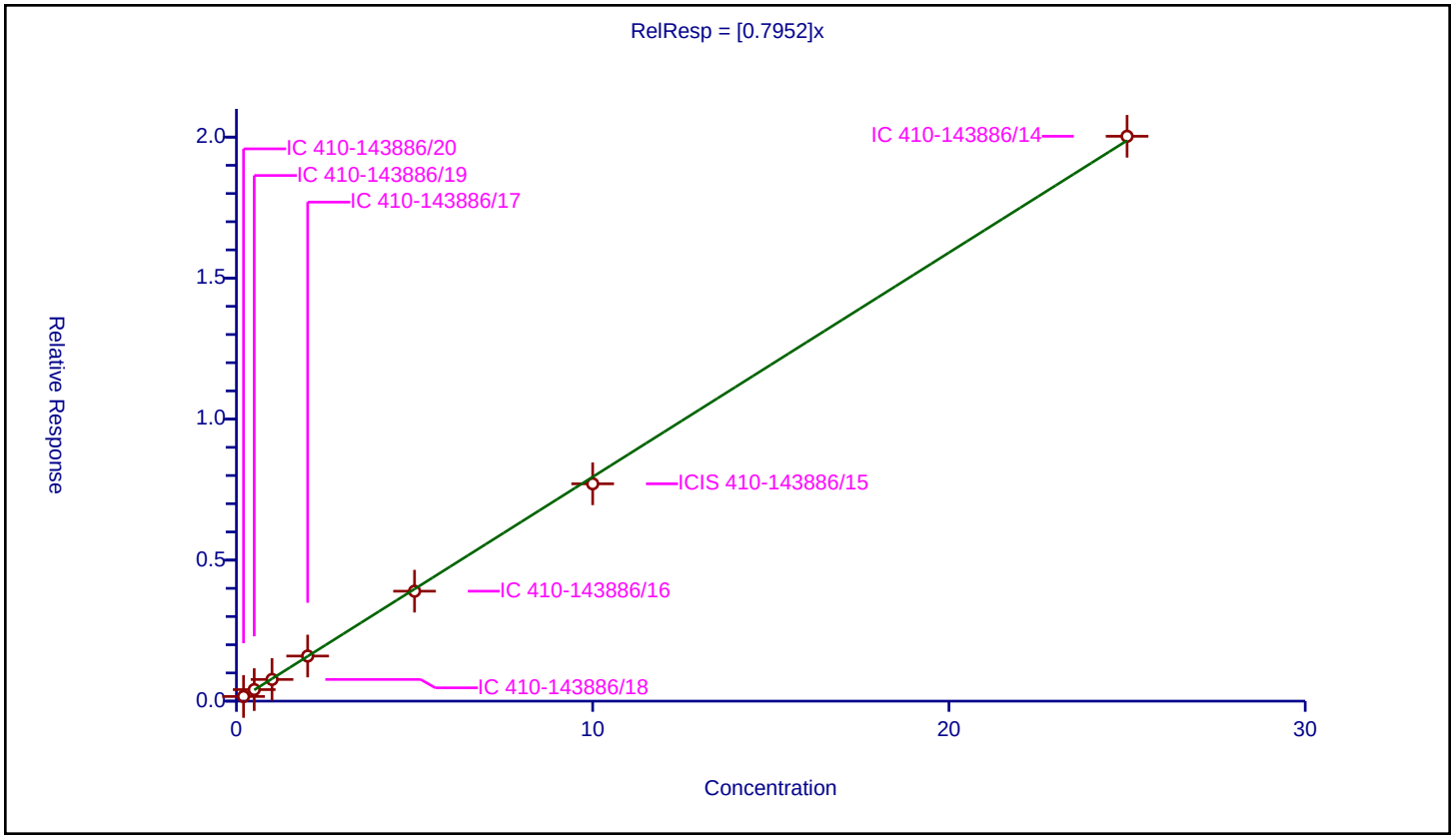
Curve Coefficients

Intercept:	0
Slope:	0.7952

Error Coefficients

Standard Error:	2050000
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 410-143886/20	0.2	0.165172	10.0	2324361.0	0.825861	Y
2	IC 410-143886/19	0.5	0.409796	10.0	2331162.0	0.819591	Y
3	IC 410-143886/18	1.0	0.769413	10.0	2375123.0	0.769413	Y
4	IC 410-143886/17	2.0	1.59938	10.0	2370175.0	0.79969	Y
5	IC 410-143886/16	5.0	3.898597	10.0	2376252.0	0.779719	Y
6	ICIS 410-143886/15	10.0	7.706678	10.0	2368765.0	0.770668	Y
7	IC 410-143886/14	25.0	20.029523	10.0	2283002.0	0.801181	Y



Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

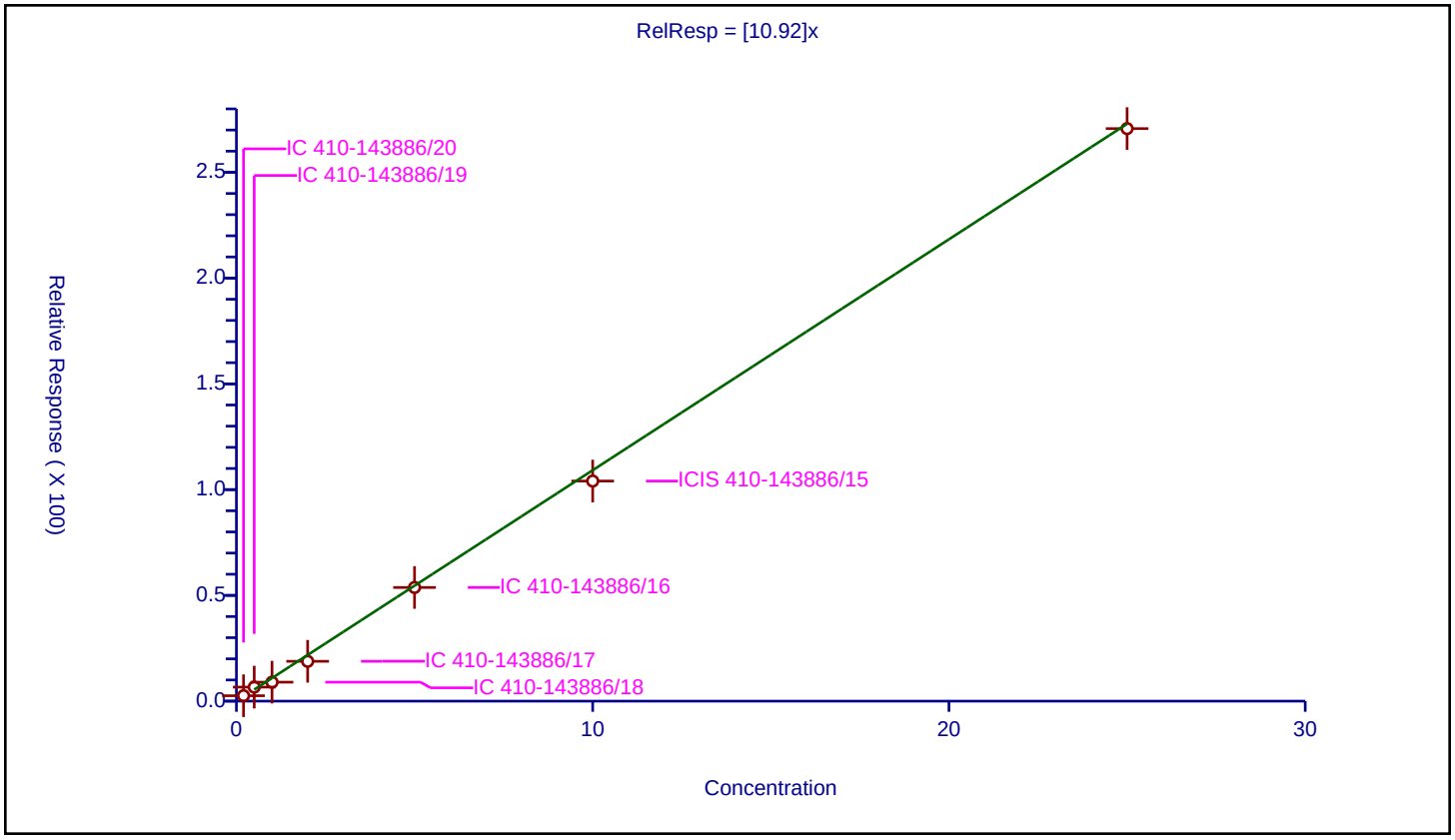
Curve Coefficients

Intercept:	0
Slope:	10.92

Error Coefficients

Standard Error:	292000
Relative Standard Error:	14.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.967

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	2.556987	50.0	126301.0	12.784934	Y
2	IC 410-143886/19	0.5	6.63578	50.0	128101.0	13.271559	Y
3	IC 410-143886/18	1.0	8.966819	50.0	127180.0	8.966819	Y
4	IC 410-143886/17	2.0	18.824877	50.0	130548.0	9.412438	Y
5	IC 410-143886/16	5.0	53.739218	50.0	130308.0	10.747844	Y
6	ICIS 410-143886/15	10.0	104.05917	50.0	123880.0	10.405917	Y
7	IC 410-143886/14	25.0	270.687519	50.0	120244.0	10.827501	Y



Calibration / 3-Chloro-1-propene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

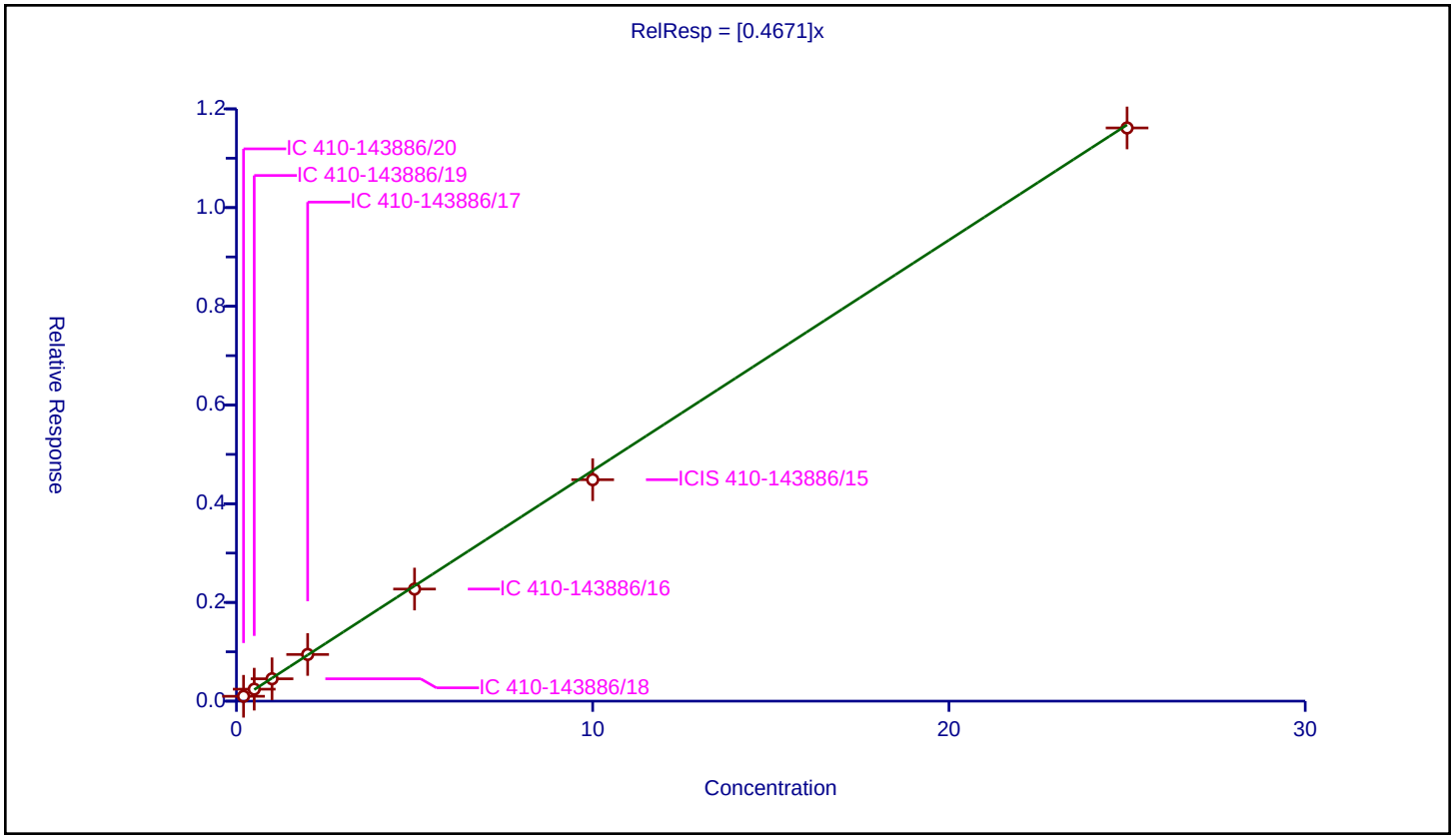
Curve Coefficients

Intercept:	0
Slope:	0.4671

Error Coefficients

Standard Error:	1190000
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.098242	10.0	2324361.0	0.49121	Y
2	IC 410-143886/19	0.5	0.242579	10.0	2331162.0	0.485157	Y
3	IC 410-143886/18	1.0	0.452844	10.0	2375123.0	0.452844	Y
4	IC 410-143886/17	2.0	0.945985	10.0	2370175.0	0.472993	Y
5	IC 410-143886/16	5.0	2.27106	10.0	2376252.0	0.454212	Y
6	ICIS 410-143886/15	10.0	4.486832	10.0	2368765.0	0.448683	Y
7	IC 410-143886/14	25.0	11.61402	10.0	2283002.0	0.464561	Y



Calibration / Methylene Chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

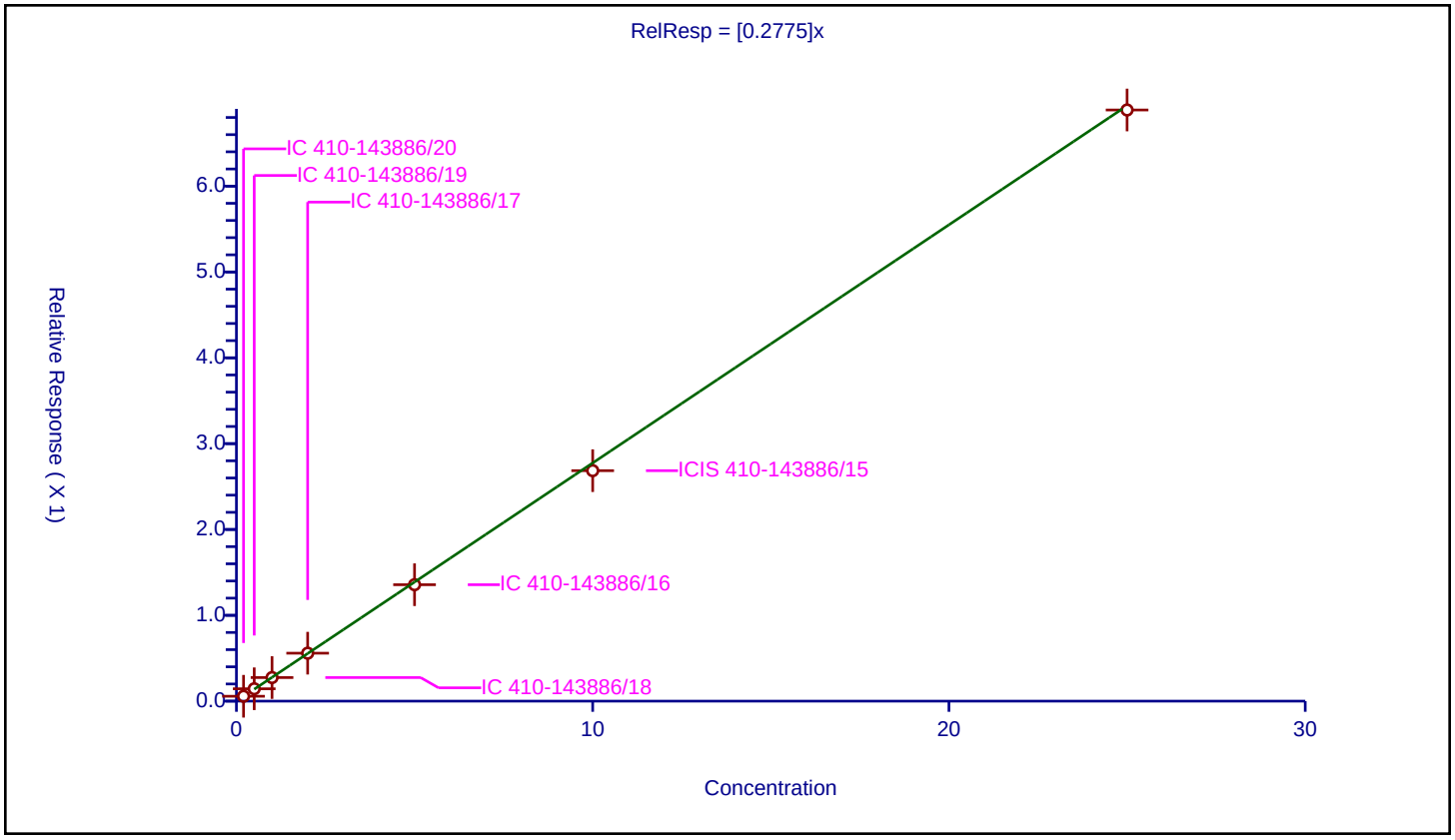
Curve Coefficients

Intercept:	0
Slope:	0.2775

Error Coefficients

Standard Error:	708000
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 410-143886/20	0.2	0.056996	10.0	2324361.0	0.284982	Y
2	IC 410-143886/19	0.5	0.14407	10.0	2331162.0	0.28814	Y
3	IC 410-143886/18	1.0	0.274622	10.0	2375123.0	0.274622	Y
4	IC 410-143886/17	2.0	0.558579	10.0	2370175.0	0.27929	Y
5	IC 410-143886/16	5.0	1.356359	10.0	2376252.0	0.271272	Y
6	ICIS 410-143886/15	10.0	2.685197	10.0	2368765.0	0.26852	Y
7	IC 410-143886/14	25.0	6.887287	10.0	2283002.0	0.275491	Y



Calibration / 2-Methyl-2-propanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

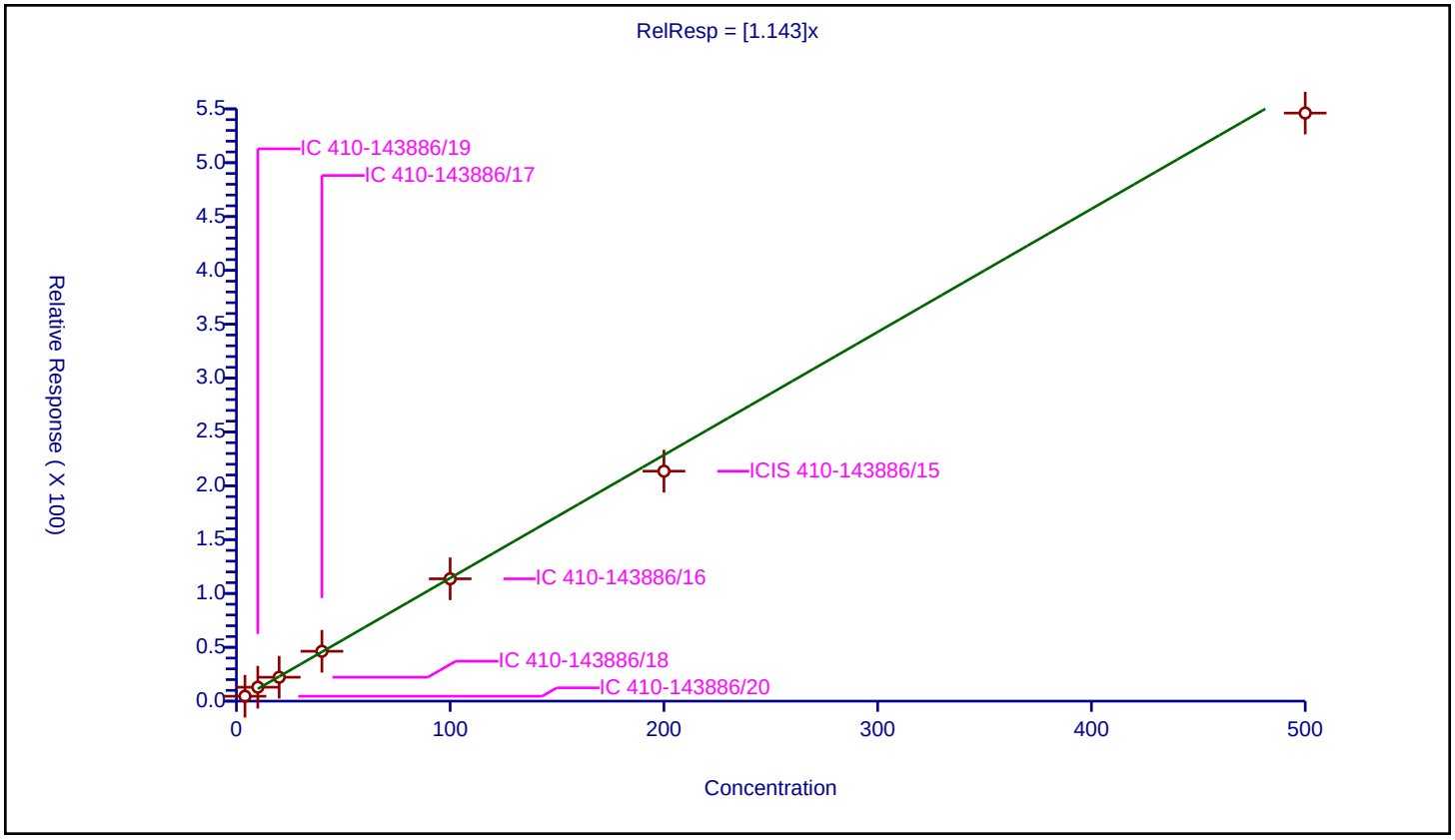
Curve Coefficients

Intercept:	0
Slope:	1.143

Error Coefficients

Standard Error:	593000
Relative Standard Error:	6.4
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	4.0	4.569639	50.0	126301.0	1.14241	Y
2	IC 410-143886/19	10.0	12.931983	50.0	128101.0	1.293198	Y
3	IC 410-143886/18	20.0	22.194921	50.0	127180.0	1.109746	Y
4	IC 410-143886/17	40.0	46.315148	50.0	130548.0	1.157879	Y
5	IC 410-143886/16	100.0	113.603539	50.0	130308.0	1.136035	Y
6	ICIS 410-143886/15	200.0	213.565144	50.0	123880.0	1.067826	Y
7	IC 410-143886/14	500.0	546.125378	50.0	120244.0	1.092251	Y



Calibration / Acrylonitrile

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

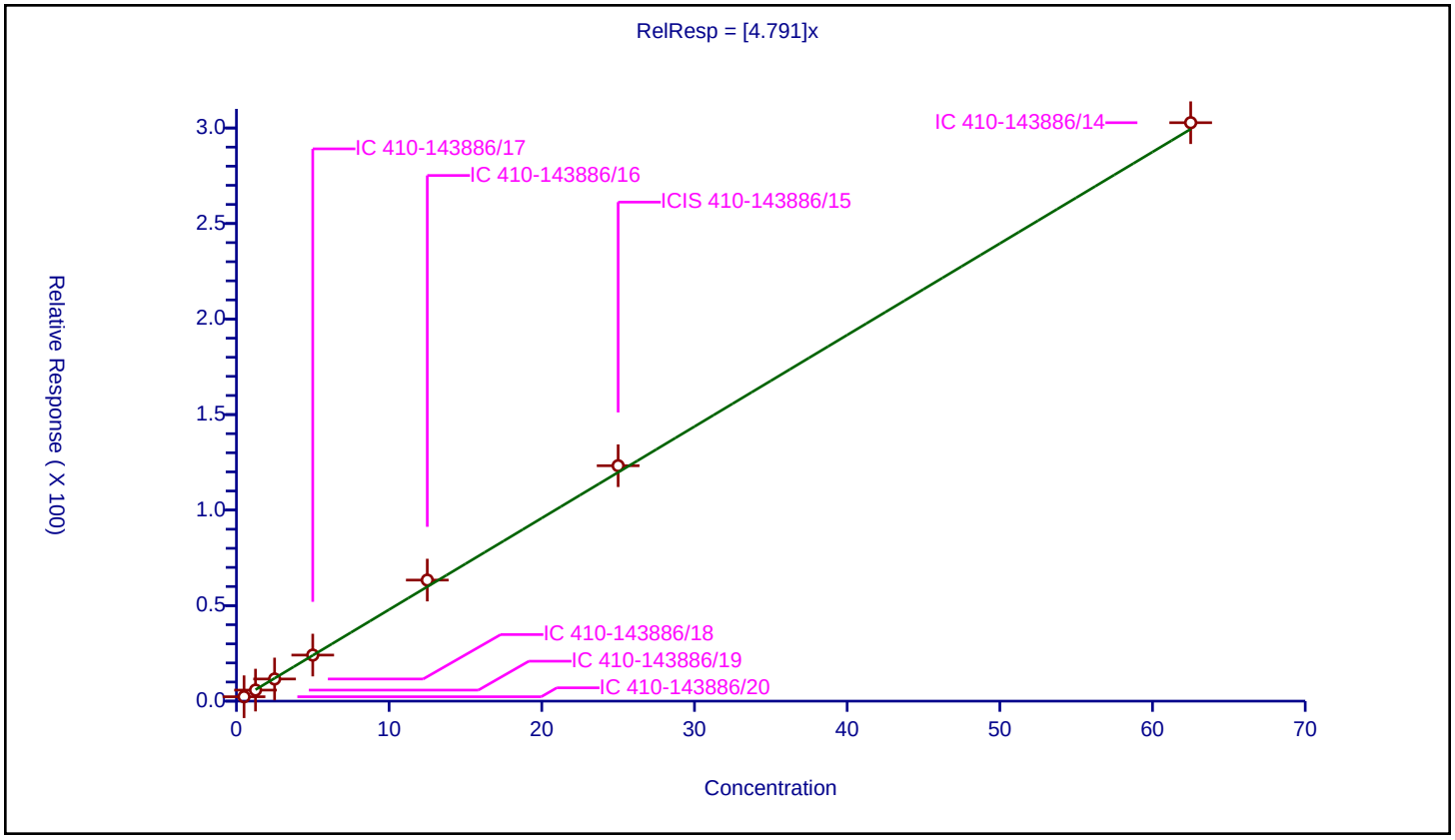
Curve Coefficients

Intercept:	0
Slope:	4.791

Error Coefficients

Standard Error:	330000
Relative Standard Error:	3.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.5	2.305999	50.0	126301.0	4.611998	Y
2	IC 410-143886/19	1.25	5.780985	50.0	128101.0	4.624788	Y
3	IC 410-143886/18	2.5	11.589086	50.0	127180.0	4.635635	Y
4	IC 410-143886/17	5.0	24.104161	50.0	130548.0	4.820832	Y
5	IC 410-143886/16	12.5	63.364874	50.0	130308.0	5.06919	Y
6	ICIS 410-143886/15	25.0	123.233371	50.0	123880.0	4.929335	Y
7	IC 410-143886/14	62.5	302.77519	50.0	120244.0	4.844403	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

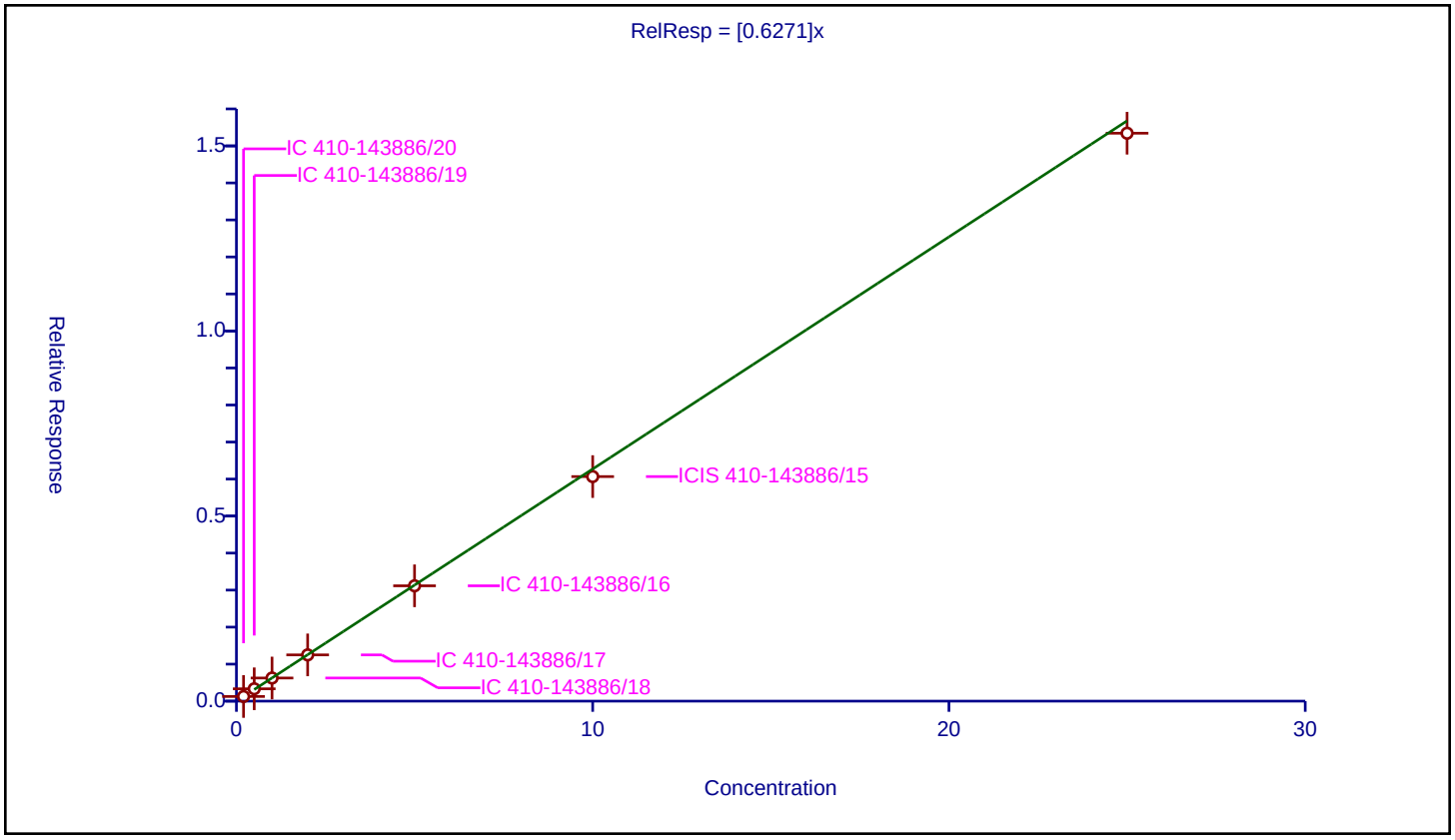
Curve Coefficients

Intercept:	0
Slope:	0.6271

Error Coefficients

Standard Error:	1580000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.12585	10.0	2324361.0	0.629248	Y
2	IC 410-143886/19	0.5	0.333585	10.0	2331162.0	0.667169	Y
3	IC 410-143886/18	1.0	0.624873	10.0	2375123.0	0.624873	Y
4	IC 410-143886/17	2.0	1.249482	10.0	2370175.0	0.624741	Y
5	IC 410-143886/16	5.0	3.116088	10.0	2376252.0	0.623218	Y
6	ICIS 410-143886/15	10.0	6.066473	10.0	2368765.0	0.606647	Y
7	IC 410-143886/14	25.0	15.34311	10.0	2283002.0	0.613724	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

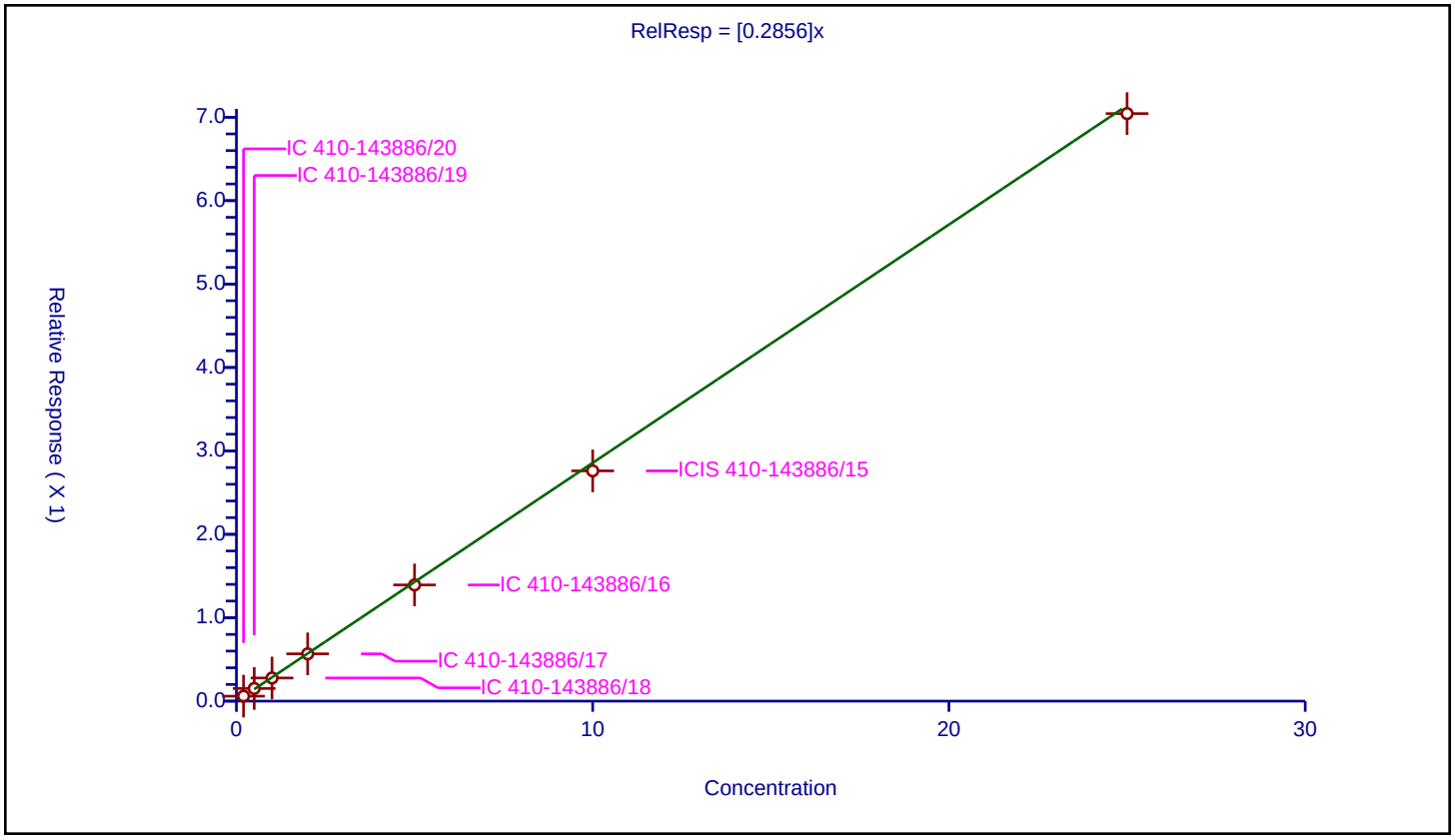
Curve Coefficients

Intercept:	0
Slope:	0.2856

Error Coefficients

Standard Error:	724000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.059599	10.0	2324361.0	0.297996	Y
2	IC 410-143886/19	0.5	0.151963	10.0	2331162.0	0.303926	Y
3	IC 410-143886/18	1.0	0.277682	10.0	2375123.0	0.277682	Y
4	IC 410-143886/17	2.0	0.56695	10.0	2370175.0	0.283475	Y
5	IC 410-143886/16	5.0	1.393064	10.0	2376252.0	0.278613	Y
6	ICIS 410-143886/15	10.0	2.760531	10.0	2368765.0	0.276053	Y
7	IC 410-143886/14	25.0	7.043857	10.0	2283002.0	0.281754	Y



Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

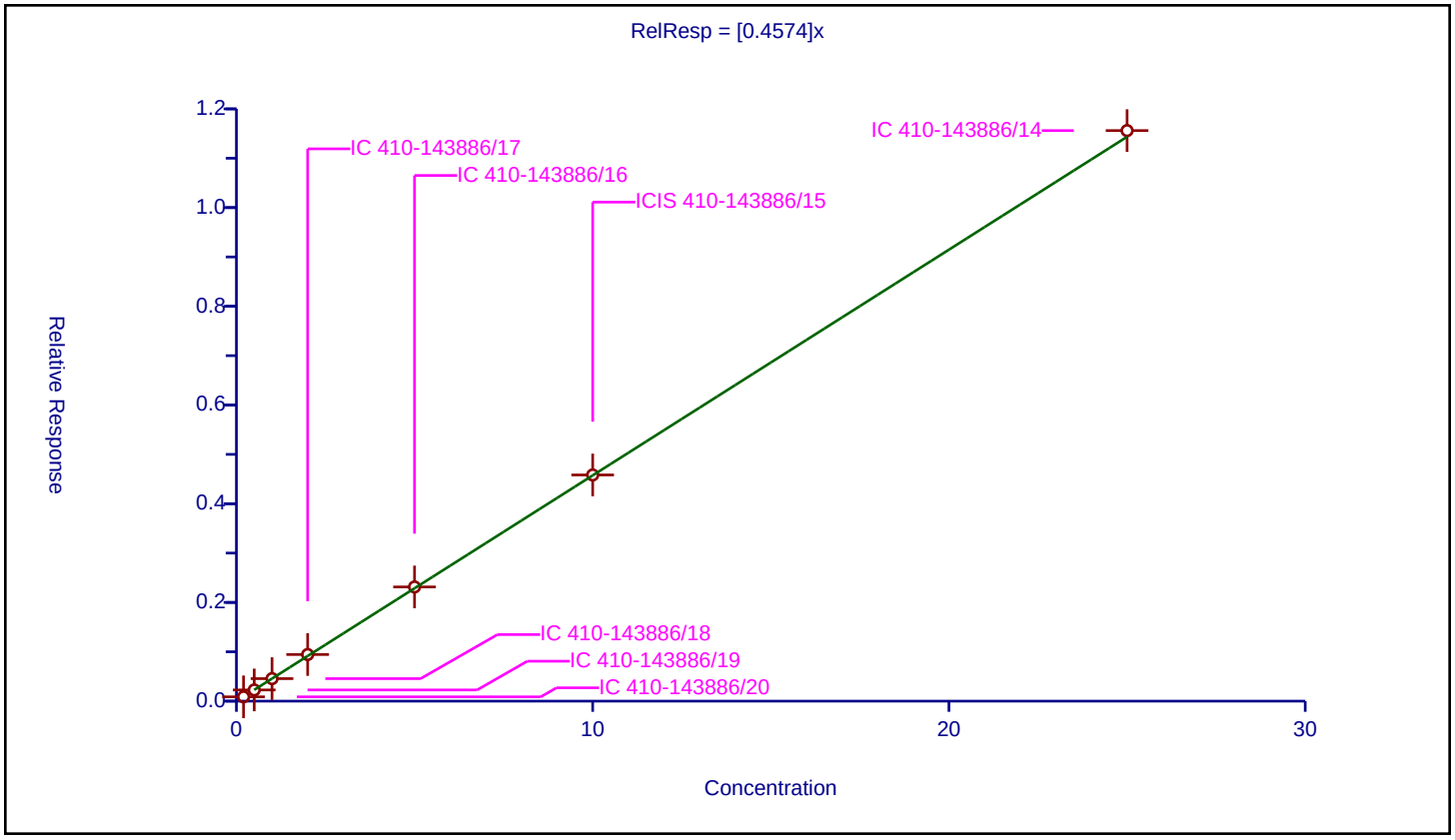
Curve Coefficients

Intercept:	0
Slope:	0.4574

Error Coefficients

Standard Error:	1190000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.087237	10.0	2324361.0	0.436184	Y
2	IC 410-143886/19	0.5	0.226831	10.0	2331162.0	0.453662	Y
3	IC 410-143886/18	1.0	0.456141	10.0	2375123.0	0.456141	Y
4	IC 410-143886/17	2.0	0.944496	10.0	2370175.0	0.472248	Y
5	IC 410-143886/16	5.0	2.313564	10.0	2376252.0	0.462713	Y
6	ICIS 410-143886/15	10.0	4.582793	10.0	2368765.0	0.458279	Y
7	IC 410-143886/14	25.0	11.560165	10.0	2283002.0	0.462407	Y



Calibration / 1,1-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

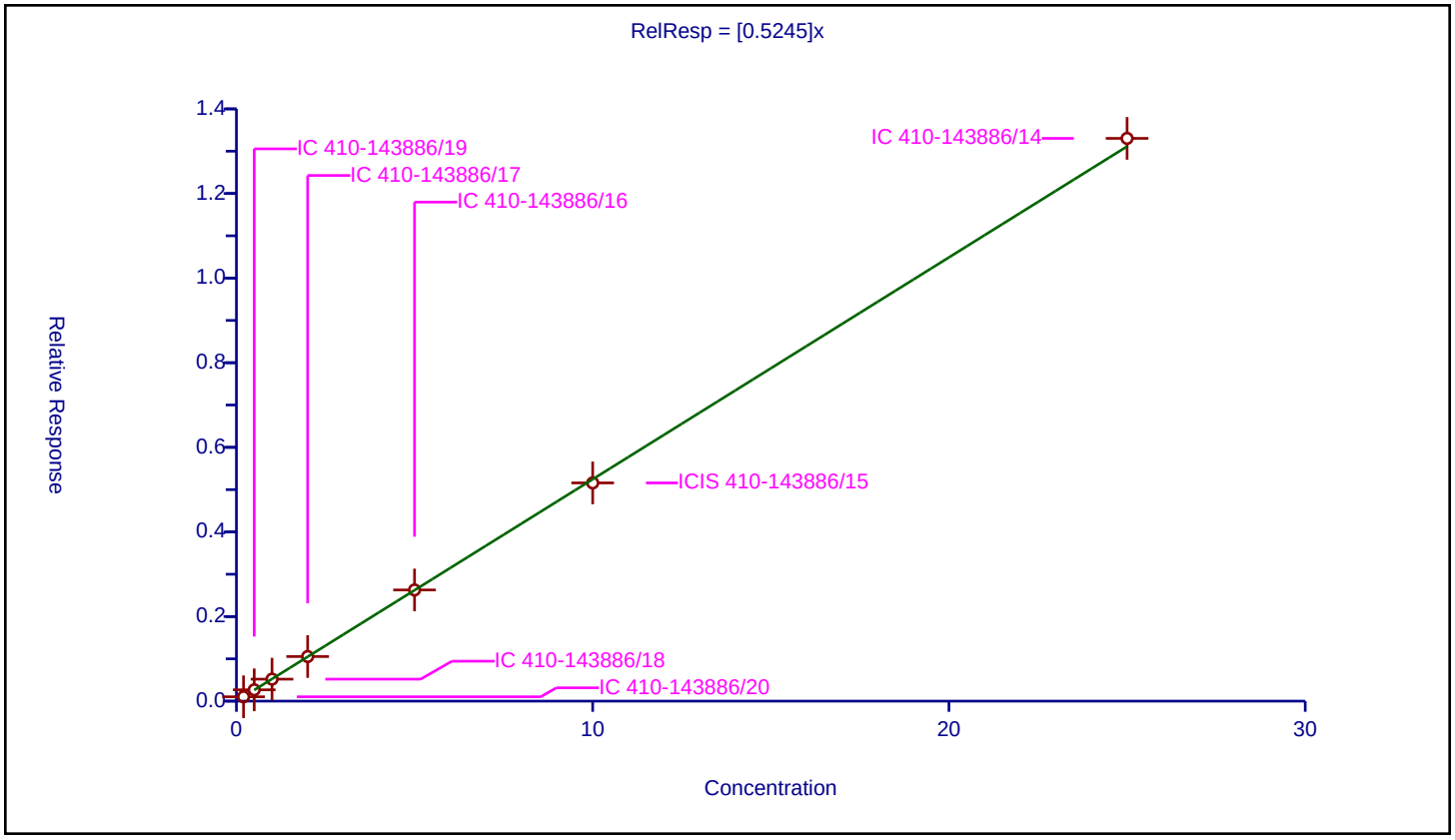
Curve Coefficients

Intercept:	0
Slope:	0.5245

Error Coefficients

Standard Error:	1370000
Relative Standard Error:	1.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.102854	10.0	2324361.0	0.51427	Y
2	IC 410-143886/19	0.5	0.268192	10.0	2331162.0	0.536385	Y
3	IC 410-143886/18	1.0	0.519956	10.0	2375123.0	0.519956	Y
4	IC 410-143886/17	2.0	1.054281	10.0	2370175.0	0.52714	Y
5	IC 410-143886/16	5.0	2.628412	10.0	2376252.0	0.525682	Y
6	ICIS 410-143886/15	10.0	5.158363	10.0	2368765.0	0.515836	Y
7	IC 410-143886/14	25.0	13.302927	10.0	2283002.0	0.532117	Y



Calibration / Isopropyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

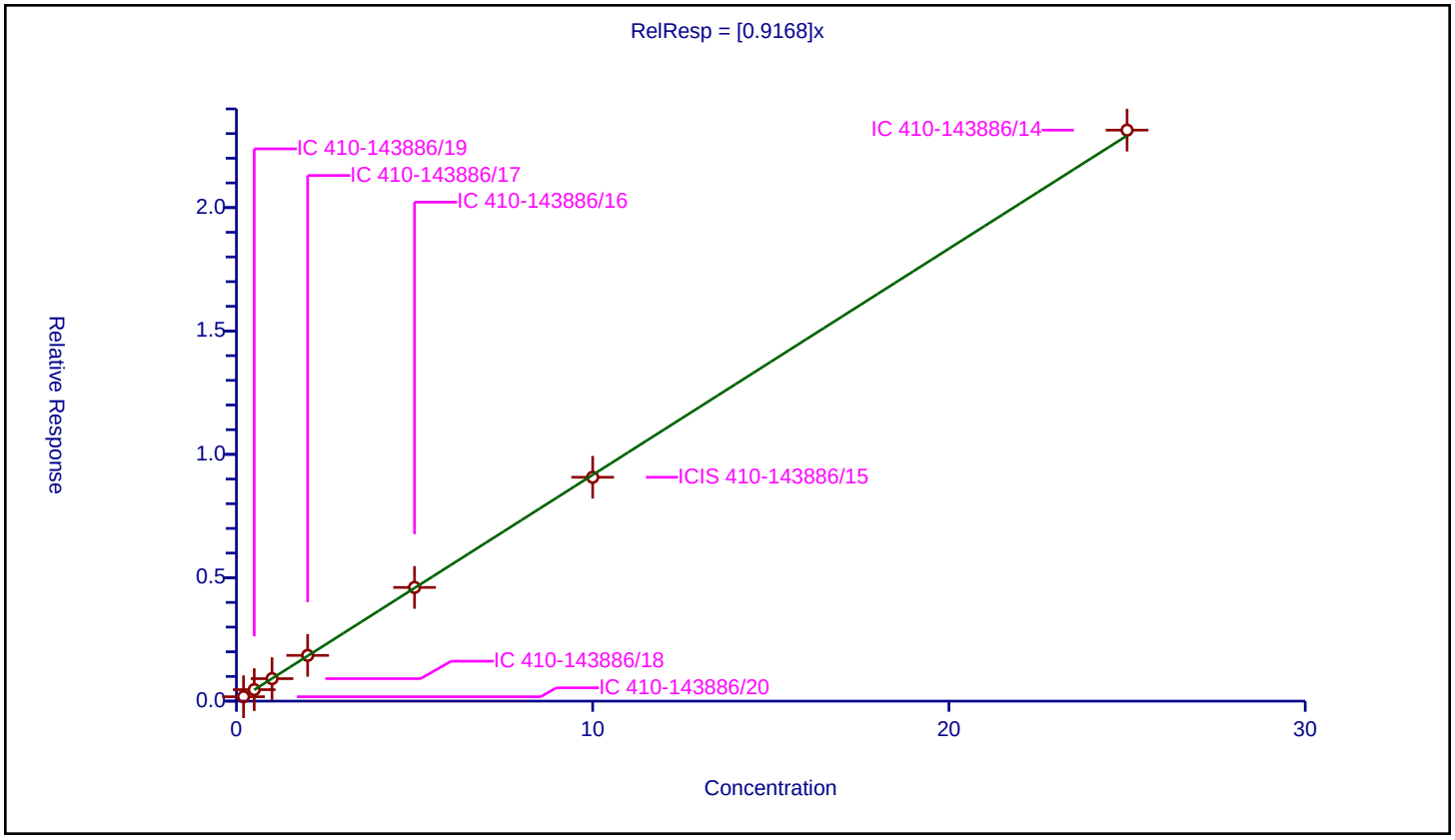
Curve Coefficients

Intercept:	0
Slope:	0.9168

Error Coefficients

Standard Error:	2380000
Relative Standard Error:	1.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.17857	10.0	2324361.0	0.892848	Y
2	IC 410-143886/19	0.5	0.466029	10.0	2331162.0	0.932059	Y
3	IC 410-143886/18	1.0	0.911473	10.0	2375123.0	0.911473	Y
4	IC 410-143886/17	2.0	1.853327	10.0	2370175.0	0.926664	Y
5	IC 410-143886/16	5.0	4.608421	10.0	2376252.0	0.921684	Y
6	ICIS 410-143886/15	10.0	9.072285	10.0	2368765.0	0.907228	Y
7	IC 410-143886/14	25.0	23.139599	10.0	2283002.0	0.925584	Y



Calibration / 2-Chloro-1,3-butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

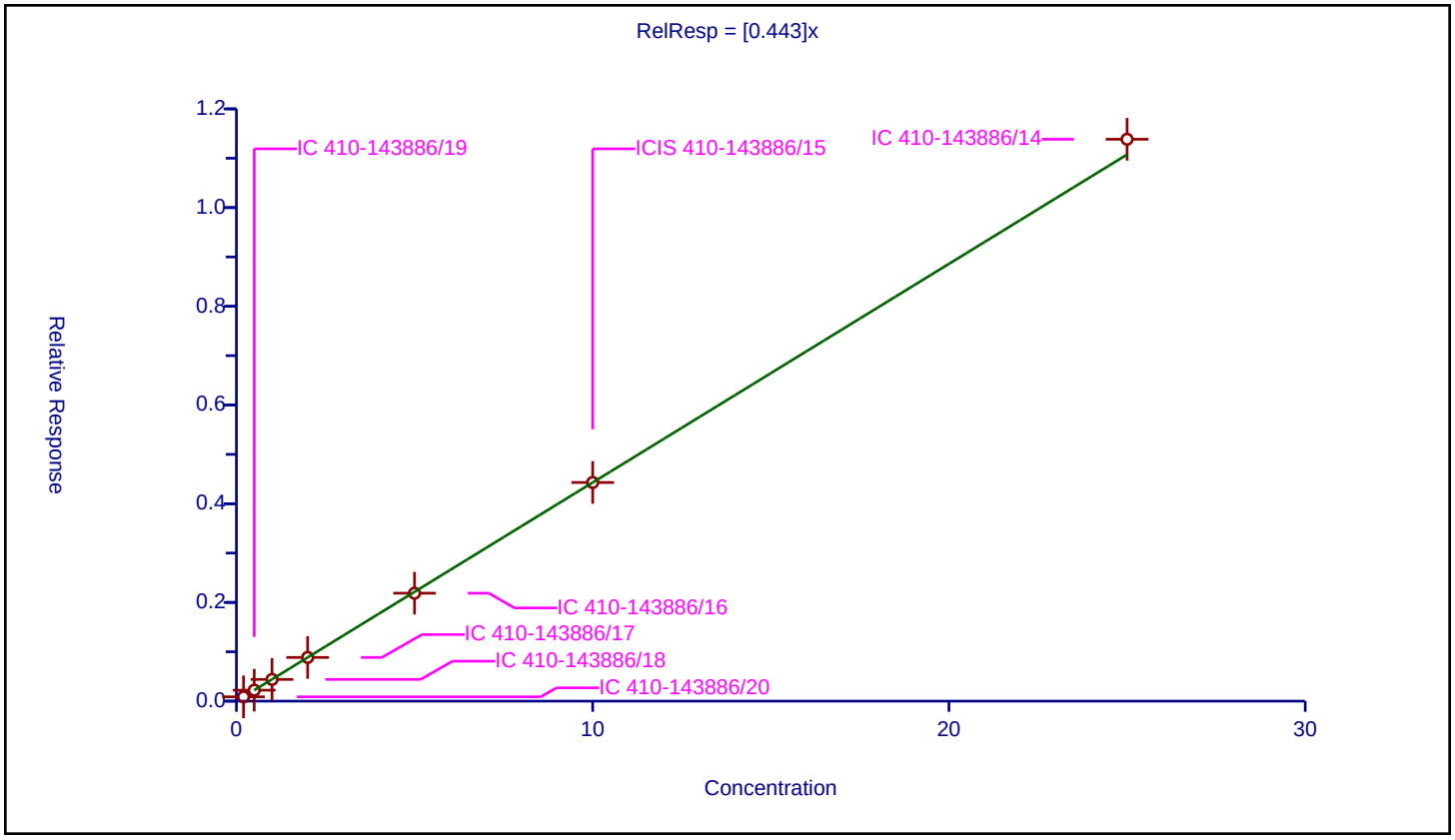
Curve Coefficients

Intercept:	0
Slope:	0.443

Error Coefficients

Standard Error:	1170000
Relative Standard Error:	1.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.087637	10.0	2324361.0	0.438185	Y
2	IC 410-143886/19	0.5	0.222258	10.0	2331162.0	0.444517	Y
3	IC 410-143886/18	1.0	0.439851	10.0	2375123.0	0.439851	Y
4	IC 410-143886/17	2.0	0.885184	10.0	2370175.0	0.442592	Y
5	IC 410-143886/16	5.0	2.186936	10.0	2376252.0	0.437387	Y
6	ICIS 410-143886/15	10.0	4.43011	10.0	2368765.0	0.443011	Y
7	IC 410-143886/14	25.0	11.384524	10.0	2283002.0	0.455381	Y



Calibration / Tert-butyl ethyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

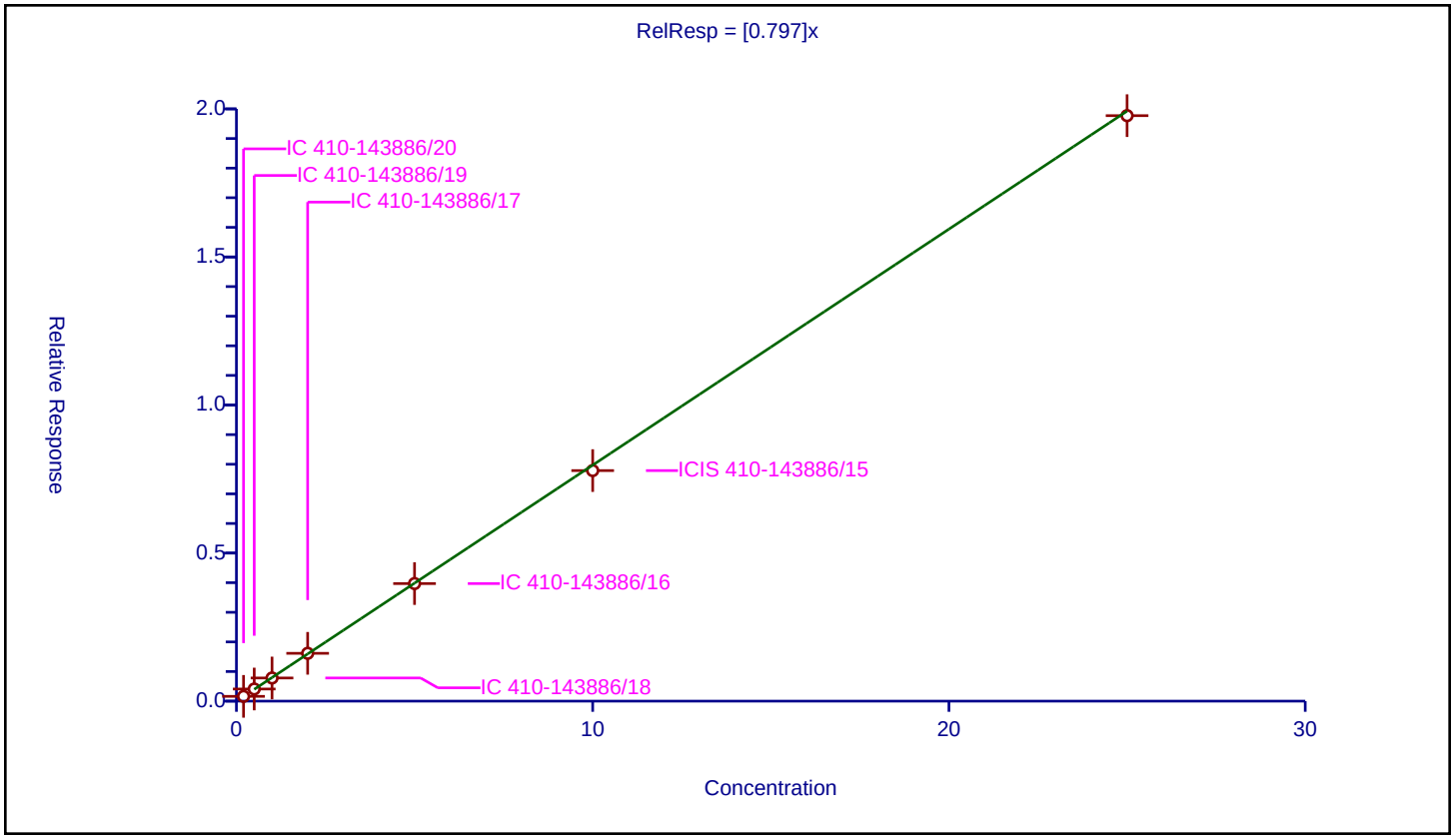
Curve Coefficients

Intercept:	0
Slope:	0.797

Error Coefficients

Standard Error:	2040000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.161227	10.0	2324361.0	0.806136	Y
2	IC 410-143886/19	0.5	0.409706	10.0	2331162.0	0.819411	Y
3	IC 410-143886/18	1.0	0.782368	10.0	2375123.0	0.782368	Y
4	IC 410-143886/17	2.0	1.615193	10.0	2370175.0	0.807596	Y
5	IC 410-143886/16	5.0	3.97053	10.0	2376252.0	0.794106	Y
6	ICIS 410-143886/15	10.0	7.785563	10.0	2368765.0	0.778556	Y
7	IC 410-143886/14	25.0	19.771643	10.0	2283002.0	0.790866	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

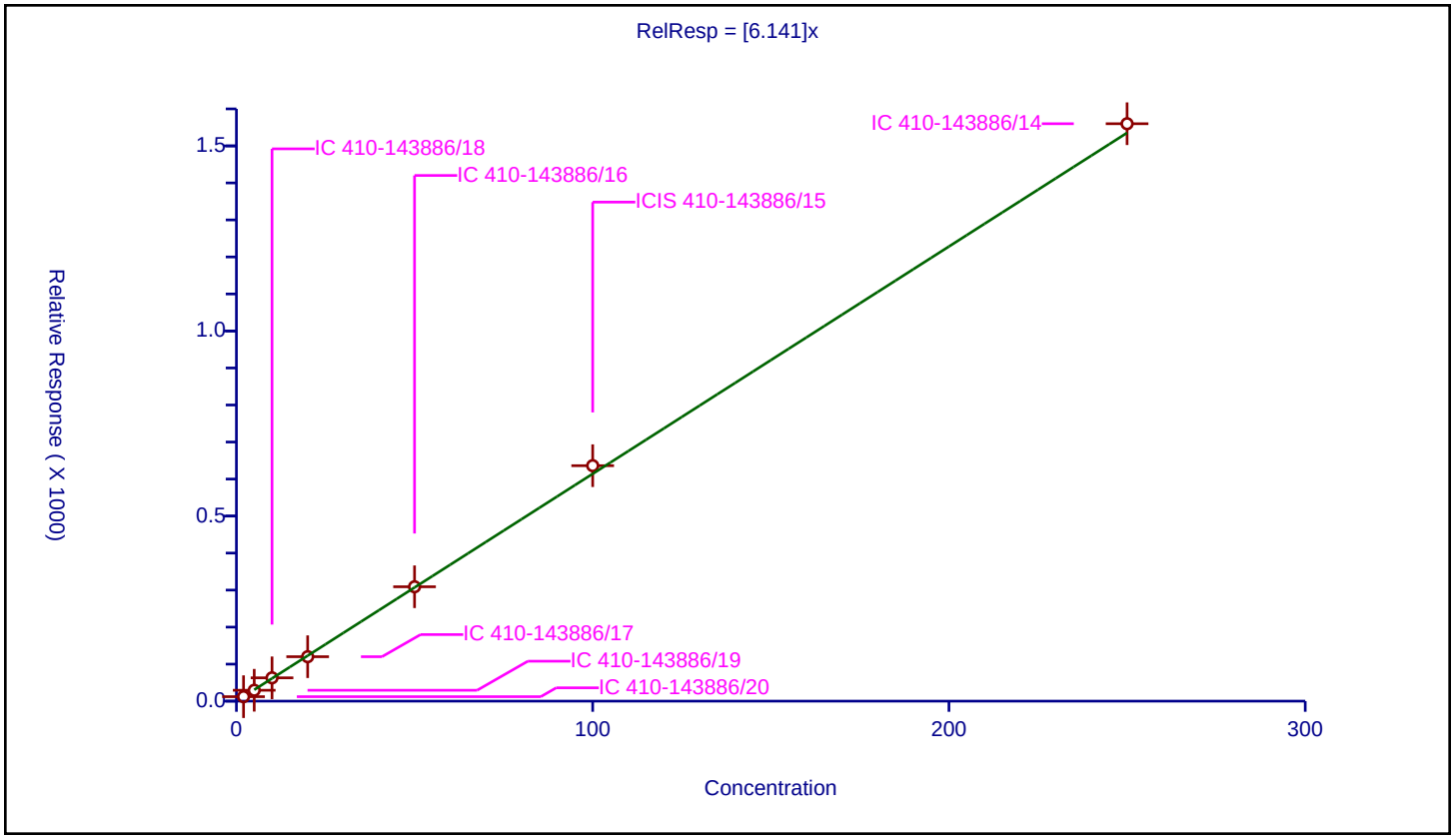
Curve Coefficients

Intercept:	0
Slope:	6.141

Error Coefficients

Standard Error:	1700000
Relative Standard Error:	2.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	2.0	12.050182	50.0	126301.0	6.025091	Y
2	IC 410-143886/19	5.0	29.382284	50.0	128101.0	5.876457	Y
3	IC 410-143886/18	10.0	63.029564	50.0	127180.0	6.302956	Y
4	IC 410-143886/17	20.0	120.066183	50.0	130548.0	6.003309	Y
5	IC 410-143886/16	50.0	308.988704	50.0	130308.0	6.179774	Y
6	ICIS 410-143886/15	100.0	636.128511	50.0	123880.0	6.361285	Y
7	IC 410-143886/14	250.0	1559.905276	50.0	120244.0	6.239621	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

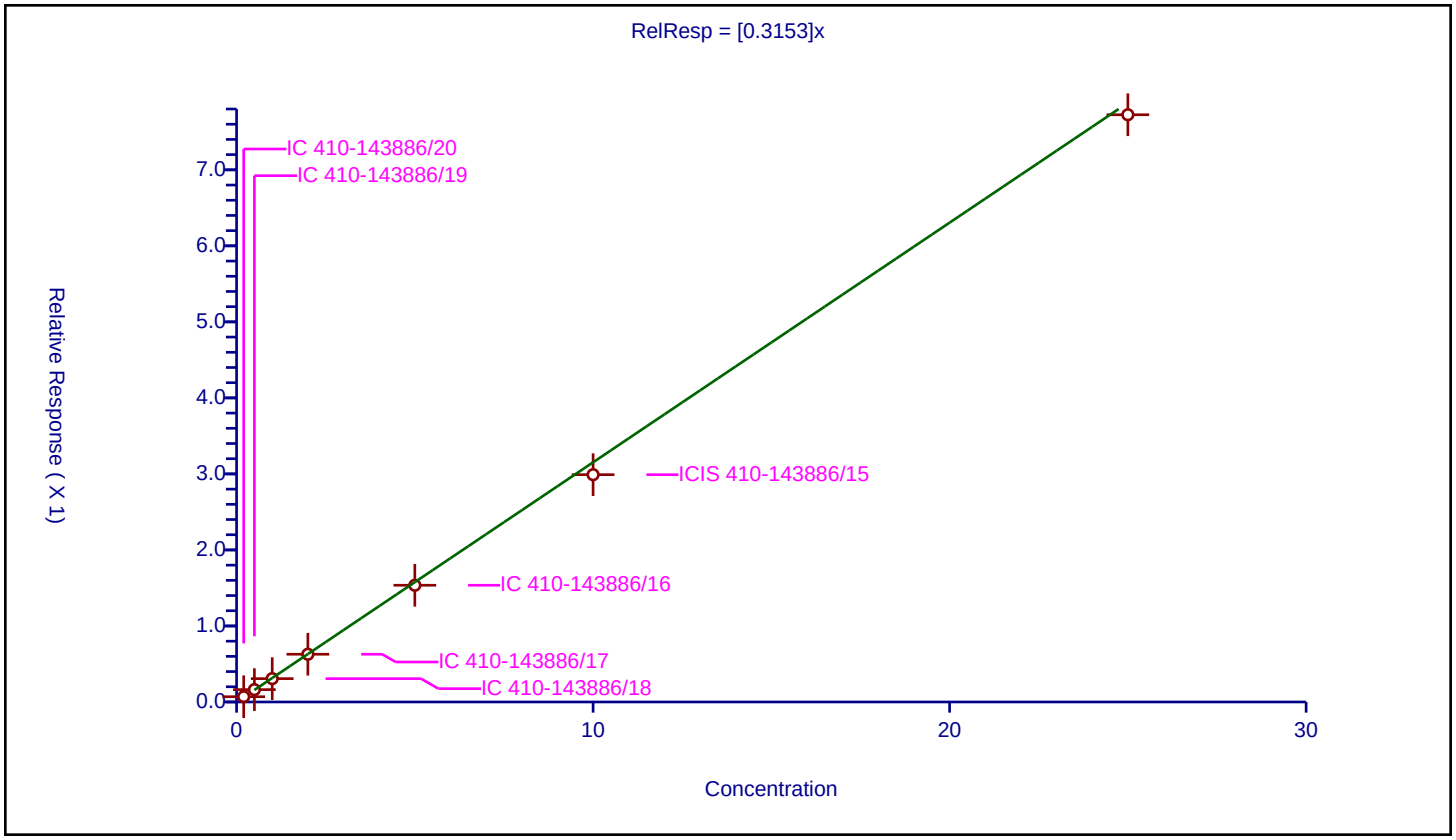
Curve Coefficients

Intercept:	0
Slope:	0.3153

Error Coefficients

Standard Error:	793000
Relative Standard Error:	4.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.069129	10.0	2324361.0	0.345643	Y
2	IC 410-143886/19	0.5	0.162447	10.0	2331162.0	0.324894	Y
3	IC 410-143886/18	1.0	0.307218	10.0	2375123.0	0.307218	Y
4	IC 410-143886/17	2.0	0.627975	10.0	2370175.0	0.313987	Y
5	IC 410-143886/16	5.0	1.53538	10.0	2376252.0	0.307076	Y
6	ICIS 410-143886/15	10.0	2.990031	10.0	2368765.0	0.299003	Y
7	IC 410-143886/14	25.0	7.724606	10.0	2283002.0	0.308984	Y



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

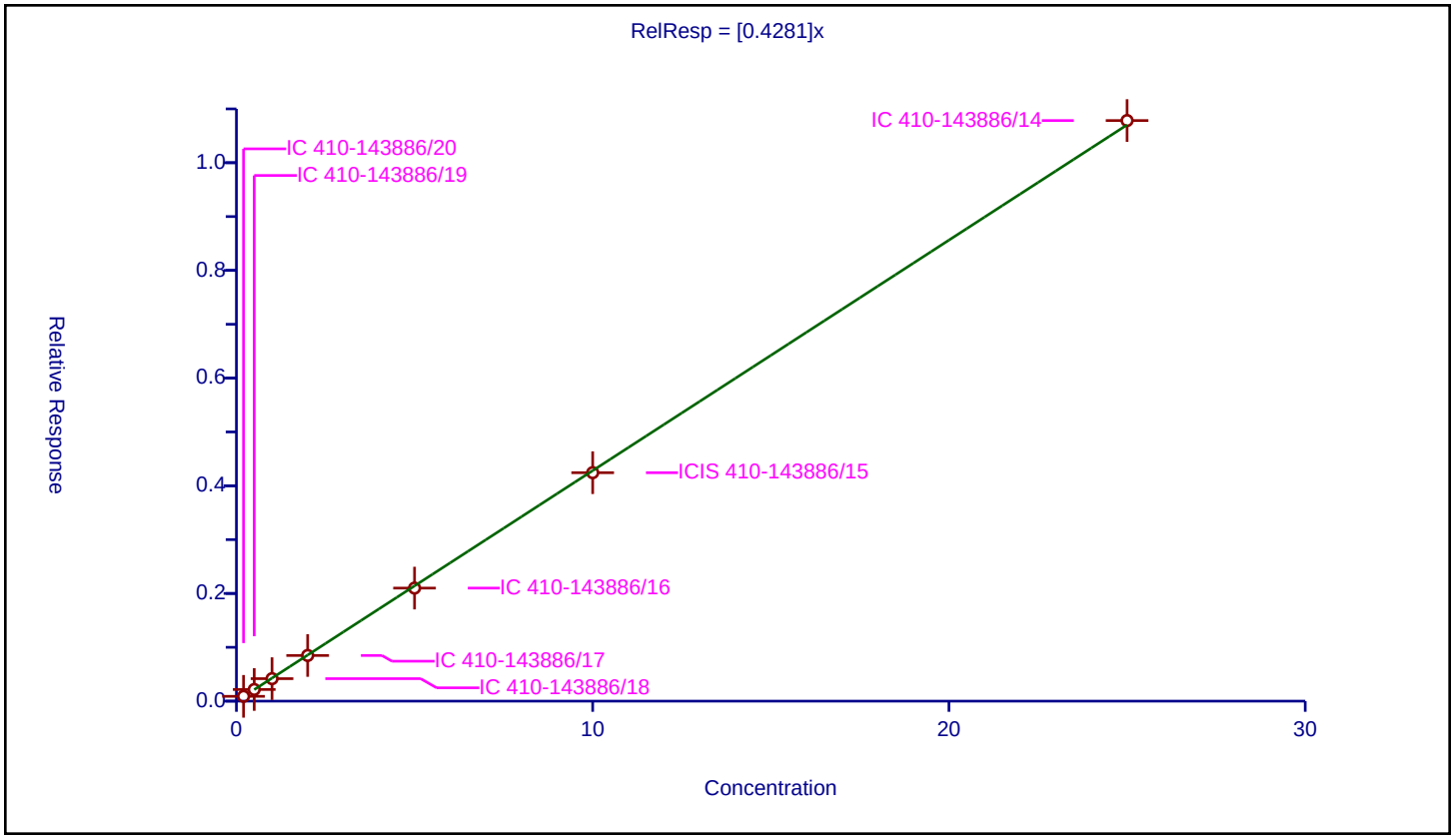
Curve Coefficients

Intercept:	0
Slope:	0.4281

Error Coefficients

Standard Error:	1110000
Relative Standard Error:	2.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.089328	10.0	2324361.0	0.446639	Y
2	IC 410-143886/19	0.5	0.216416	10.0	2331162.0	0.432831	Y
3	IC 410-143886/18	1.0	0.417726	10.0	2375123.0	0.417726	Y
4	IC 410-143886/17	2.0	0.848153	10.0	2370175.0	0.424076	Y
5	IC 410-143886/16	5.0	2.099849	10.0	2376252.0	0.41997	Y
6	ICIS 410-143886/15	10.0	4.243055	10.0	2368765.0	0.424305	Y
7	IC 410-143886/14	25.0	10.783539	10.0	2283002.0	0.431342	Y



Calibration / Propionitrile

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

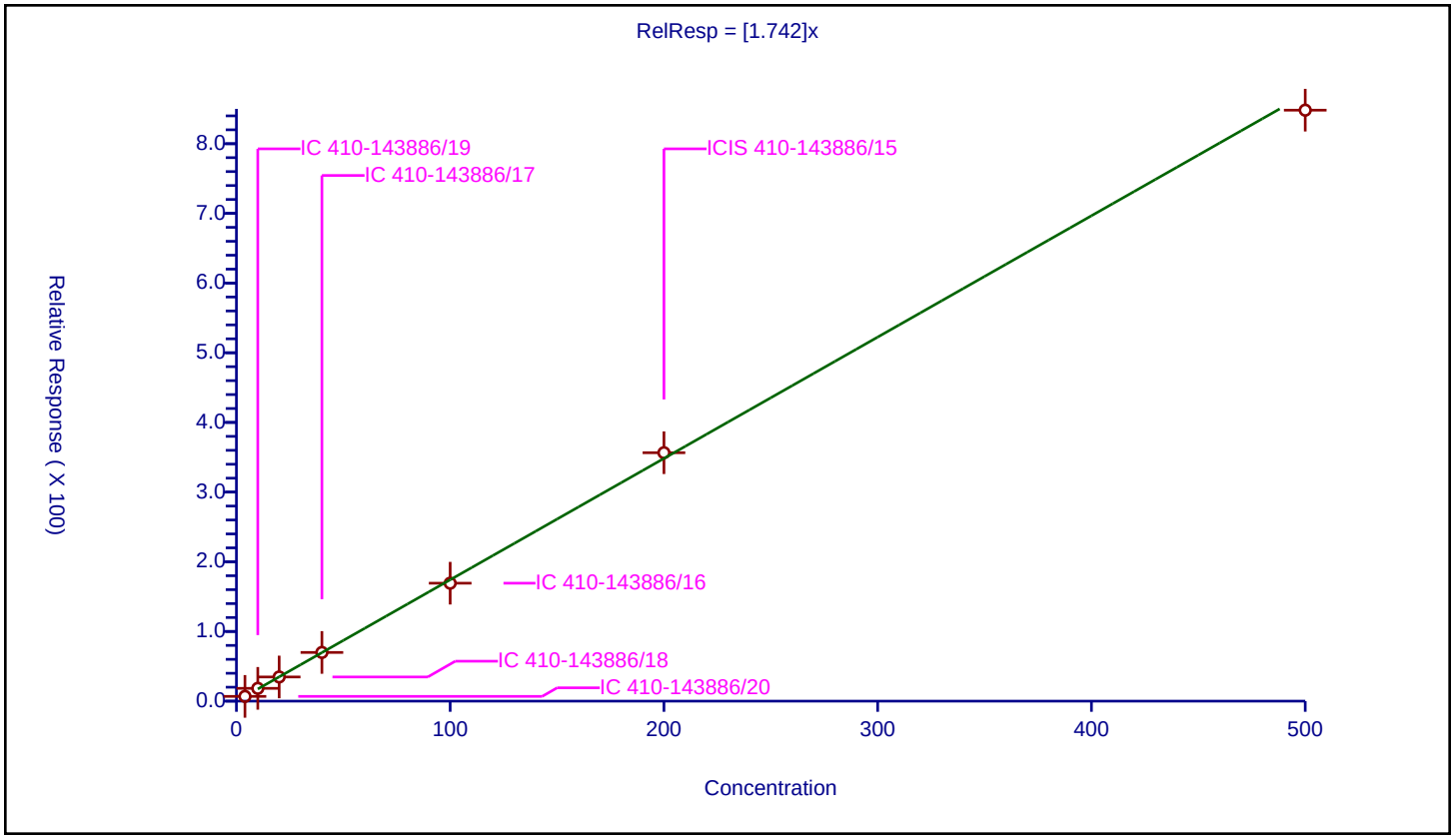
Curve Coefficients

Intercept:	0
Slope:	1.742

Error Coefficients

Standard Error:	929000
Relative Standard Error:	3.0
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	4.0	6.806359	50.0	126301.0	1.70159	Y
2	IC 410-143886/19	10.0	18.350754	50.0	128101.0	1.835075	Y
3	IC 410-143886/18	20.0	34.708287	50.0	127180.0	1.735414	Y
4	IC 410-143886/17	40.0	69.896513	50.0	130548.0	1.747413	Y
5	IC 410-143886/16	100.0	169.265509	50.0	130308.0	1.692655	Y
6	ICIS 410-143886/15	200.0	356.532935	50.0	123880.0	1.782665	Y
7	IC 410-143886/14	500.0	848.162486	50.0	120244.0	1.696325	Y



Calibration / Methacrylonitrile

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

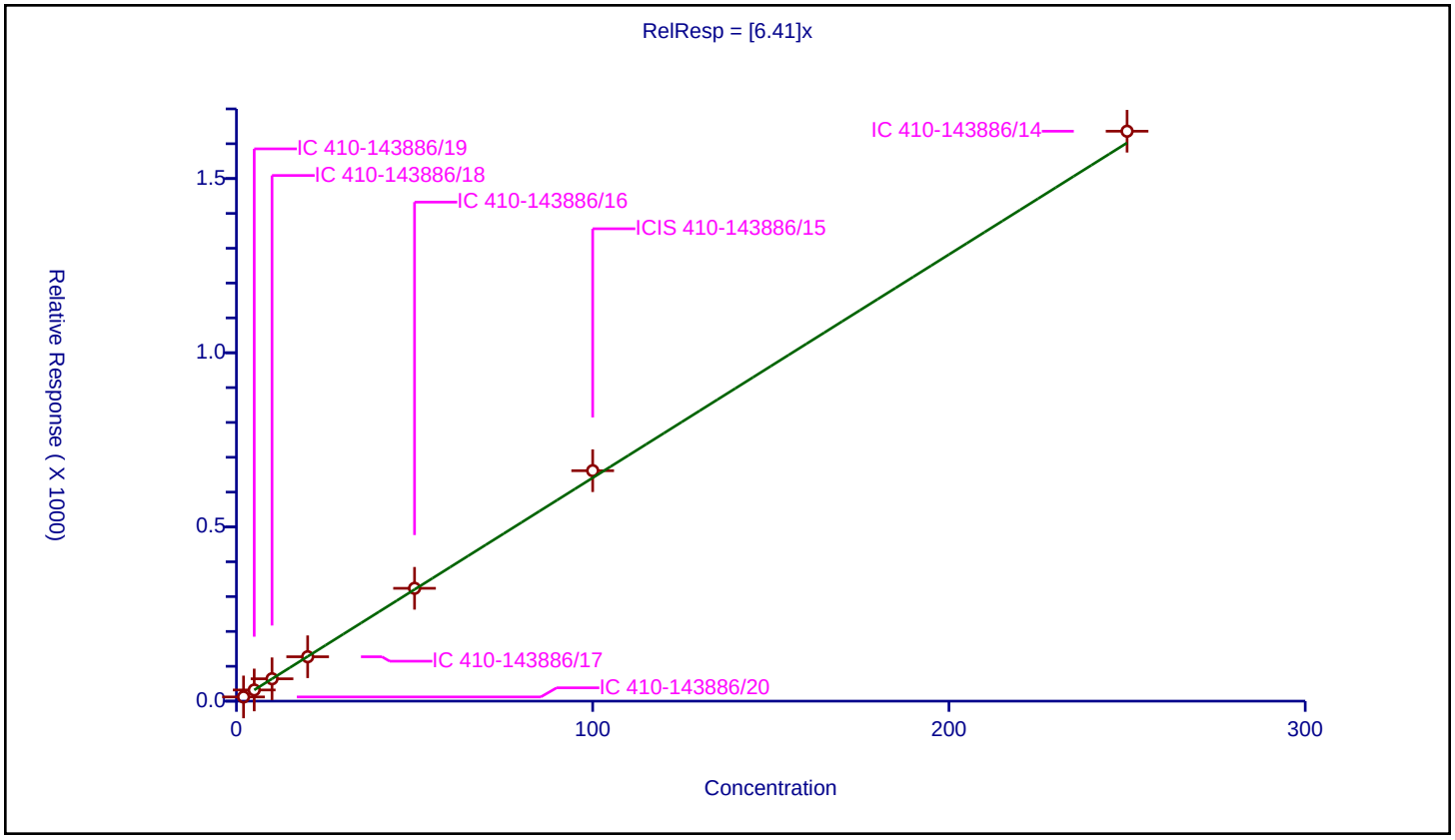
Curve Coefficients

Intercept:	0
Slope:	6.41

Error Coefficients

Standard Error:	1780000
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 410-143886/20	2.0	12.058495	50.0	126301.0	6.029248	Y
2	IC 410-143886/19	5.0	32.091084	50.0	128101.0	6.418217	Y
3	IC 410-143886/18	10.0	64.188552	50.0	127180.0	6.418855	Y
4	IC 410-143886/17	20.0	127.382266	50.0	130548.0	6.369113	Y
5	IC 410-143886/16	50.0	323.891473	50.0	130308.0	6.477829	Y
6	ICIS 410-143886/15	100.0	661.465531	50.0	123880.0	6.614655	Y
7	IC 410-143886/14	250.0	1635.936097	50.0	120244.0	6.543744	Y



Calibration / Chlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

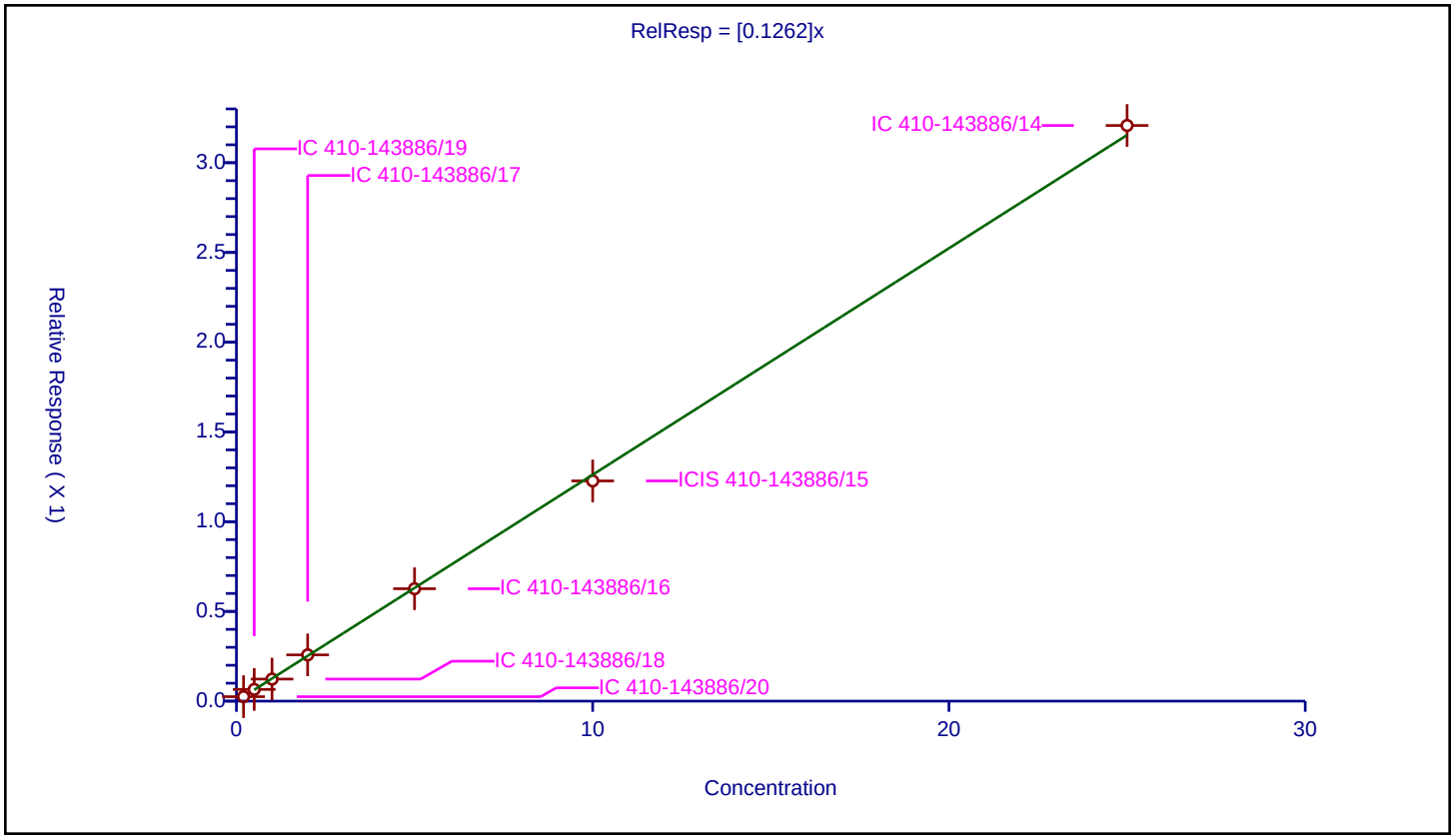
Curve Coefficients

Intercept:	0
Slope:	0.1262

Error Coefficients

Standard Error:	329000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.024867	10.0	2324361.0	0.124335	Y
2	IC 410-143886/19	0.5	0.065388	10.0	2331162.0	0.130776	Y
3	IC 410-143886/18	1.0	0.122916	10.0	2375123.0	0.122916	Y
4	IC 410-143886/17	2.0	0.257702	10.0	2370175.0	0.128851	Y
5	IC 410-143886/16	5.0	0.626381	10.0	2376252.0	0.125276	Y
6	ICIS 410-143886/15	10.0	1.22704	10.0	2368765.0	0.122704	Y
7	IC 410-143886/14	25.0	3.207536	10.0	2283002.0	0.128301	Y



Calibration / Tetrahydrofuran

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

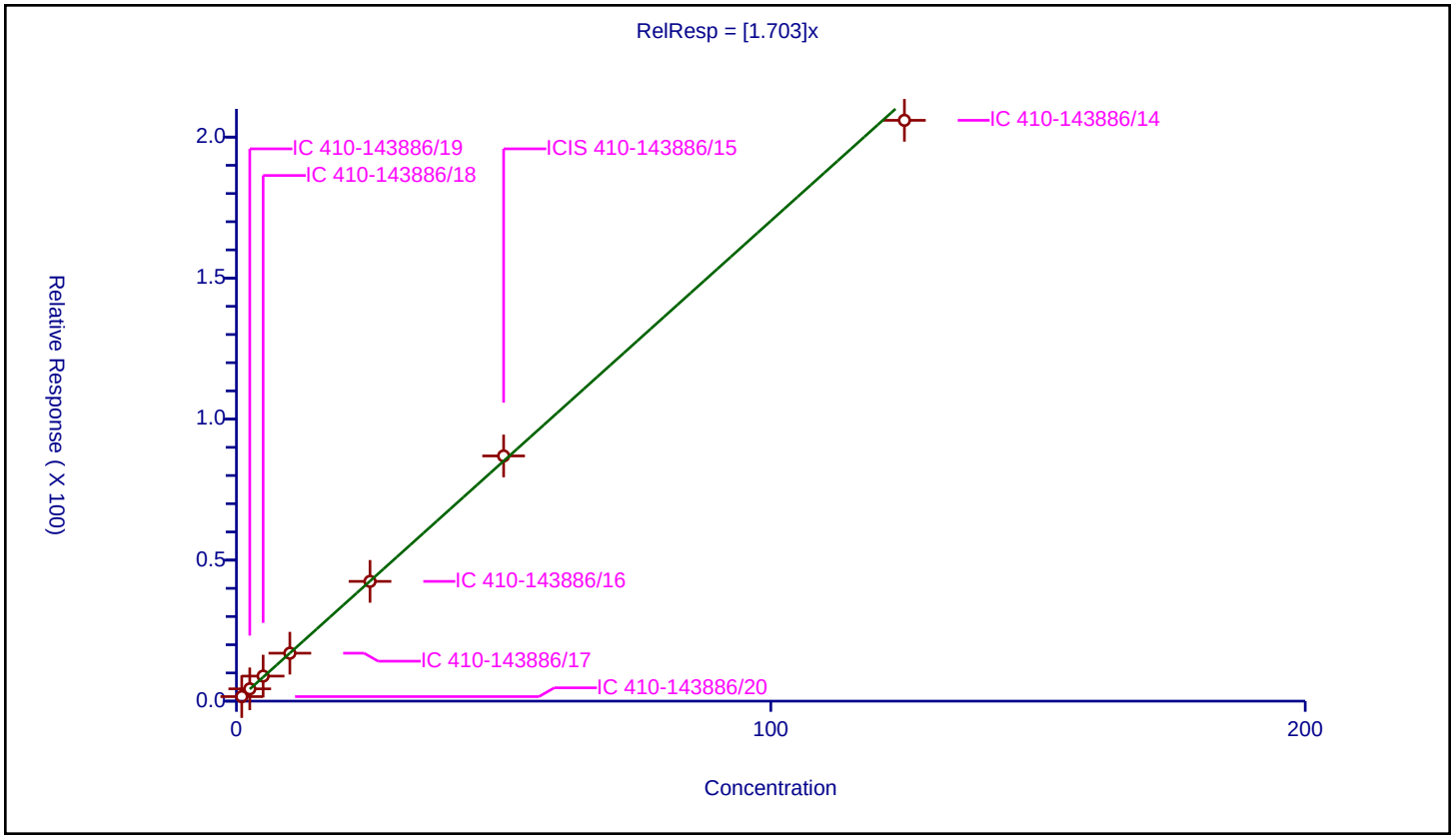
Curve Coefficients

Intercept:	0
Slope:	1.703

Error Coefficients

Standard Error:	226000
Relative Standard Error:	3.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	1.0	1.614397	50.0	126301.0	1.614397	Y
2	IC 410-143886/19	2.5	4.35906	50.0	128101.0	1.743624	Y
3	IC 410-143886/18	5.0	8.879541	50.0	127180.0	1.775908	Y
4	IC 410-143886/17	10.0	17.004856	50.0	130548.0	1.700486	Y
5	IC 410-143886/16	25.0	42.460939	50.0	130308.0	1.698438	Y
6	ICIS 410-143886/15	50.0	86.940991	50.0	123880.0	1.73882	Y
7	IC 410-143886/14	125.0	205.945827	50.0	120244.0	1.647567	Y



Calibration / Chloroform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

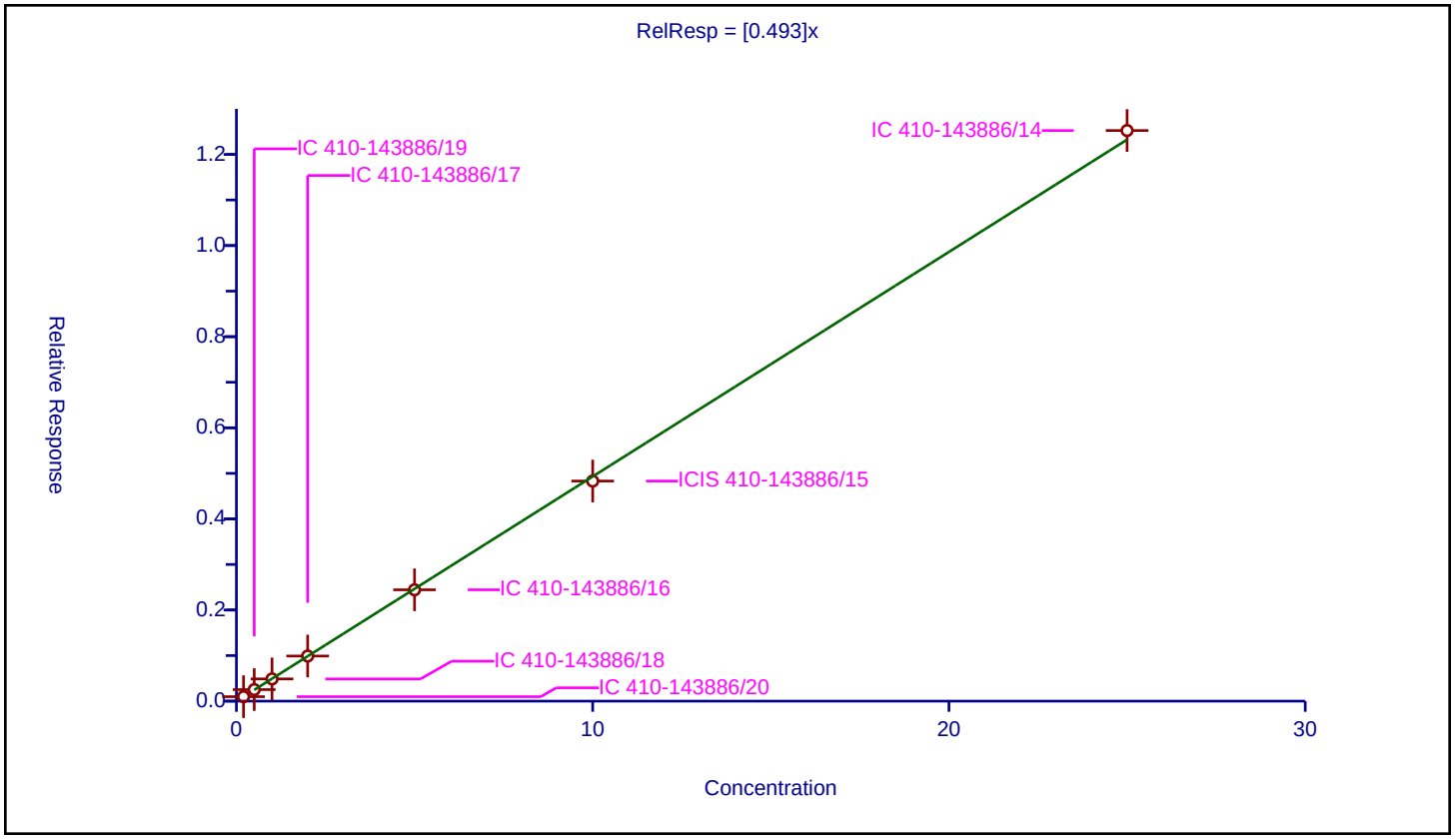
Curve Coefficients

Intercept:	0
Slope:	0.493

Error Coefficients

Standard Error:	1280000
Relative Standard Error:	1.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.097717	10.0	2324361.0	0.488586	Y
2	IC 410-143886/19	0.5	0.253427	10.0	2331162.0	0.506855	Y
3	IC 410-143886/18	1.0	0.487806	10.0	2375123.0	0.487806	Y
4	IC 410-143886/17	2.0	0.990176	10.0	2370175.0	0.495088	Y
5	IC 410-143886/16	5.0	2.443773	10.0	2376252.0	0.488755	Y
6	ICIS 410-143886/15	10.0	4.830745	10.0	2368765.0	0.483075	Y
7	IC 410-143886/14	25.0	12.524978	10.0	2283002.0	0.500999	Y



Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

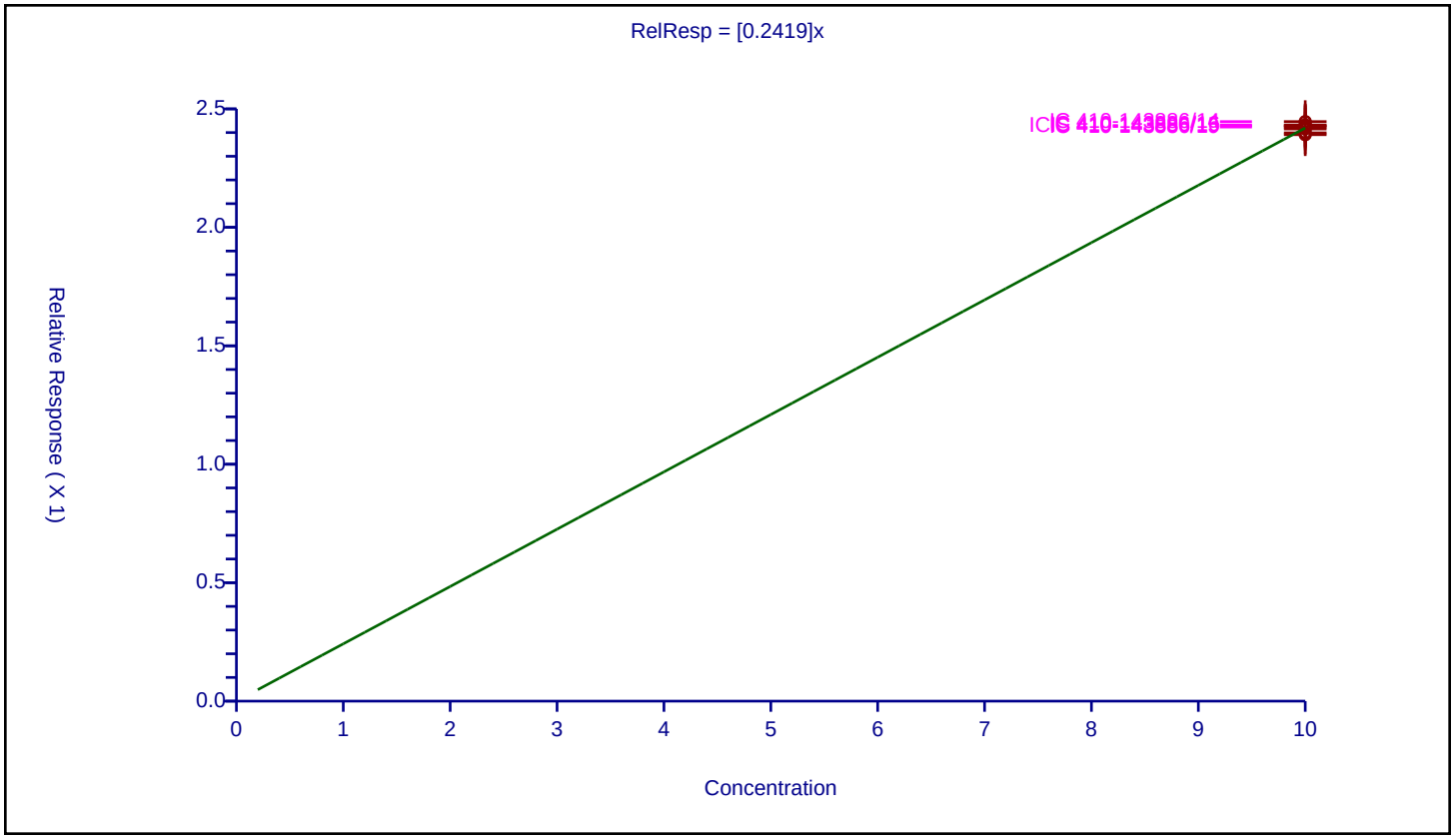
Curve Coefficients

Intercept:	0
Slope:	0.2419

Error Coefficients

Standard Error:	613000
Relative Standard Error:	0.8
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0.000000000000000111

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/14	10.0	2.446349	10.0	2283002.0	0.244635	Y
2	ICIS 410-143886/15	10.0	2.428371	10.0	2368765.0	0.242837	Y
3	IC 410-143886/16	10.0	2.432187	10.0	2376252.0	0.243219	Y
4	IC 410-143886/17	10.0	2.391005	10.0	2370175.0	0.2391	Y
5	IC 410-143886/18	10.0	2.398912	10.0	2375123.0	0.239891	Y
6	IC 410-143886/19	10.0	2.423388	10.0	2331162.0	0.242339	Y
7	IC 410-143886/20	10.0	2.415236	10.0	2324361.0	0.241524	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

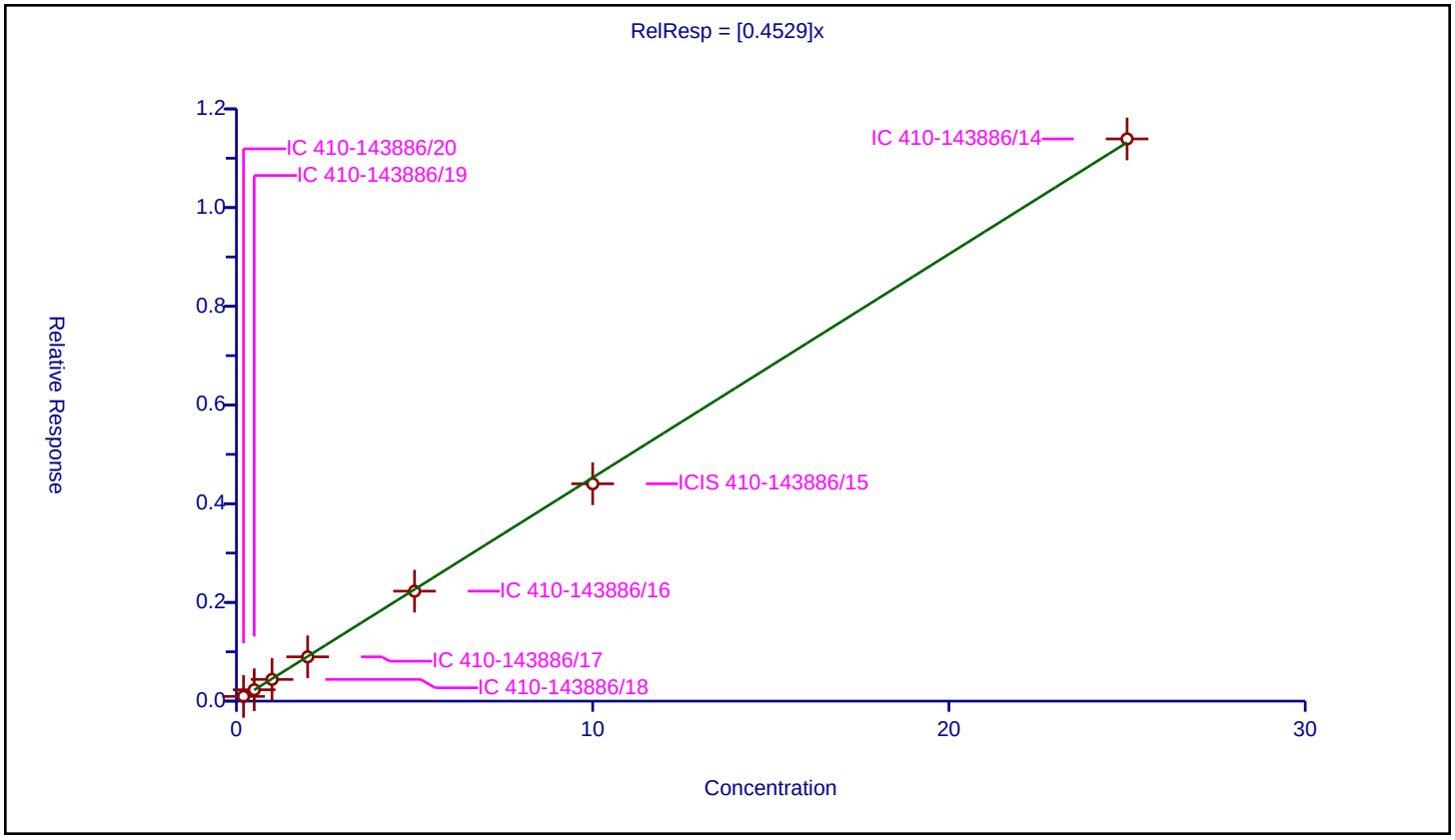
Curve Coefficients

Intercept:	0
Slope:	0.4529

Error Coefficients

Standard Error:	1170000
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.095596	10.0	2324361.0	0.477981	Y
2	IC 410-143886/19	0.5	0.230945	10.0	2331162.0	0.46189	Y
3	IC 410-143886/18	1.0	0.439901	10.0	2375123.0	0.439901	Y
4	IC 410-143886/17	2.0	0.89693	10.0	2370175.0	0.448465	Y
5	IC 410-143886/16	5.0	2.228421	10.0	2376252.0	0.445684	Y
6	ICIS 410-143886/15	10.0	4.403607	10.0	2368765.0	0.440361	Y
7	IC 410-143886/14	25.0	11.392018	10.0	2283002.0	0.455681	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

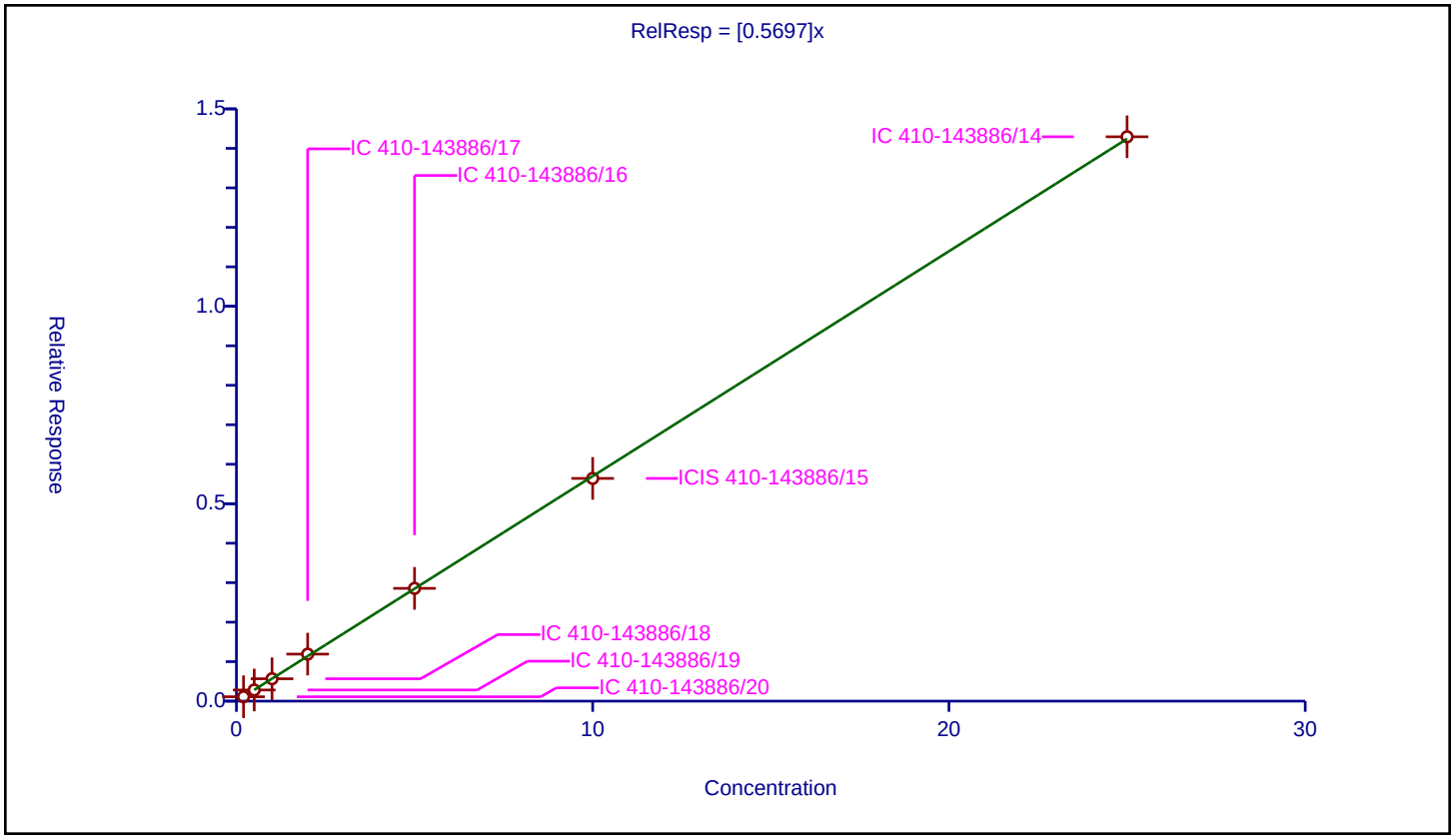
Curve Coefficients

Intercept:	0
Slope:	0.5697

Error Coefficients

Standard Error:	1470000
Relative Standard Error:	2.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.110779	10.0	2324361.0	0.553894	Y
2	IC 410-143886/19	0.5	0.28219	10.0	2331162.0	0.564379	Y
3	IC 410-143886/18	1.0	0.567259	10.0	2375123.0	0.567259	Y
4	IC 410-143886/17	2.0	1.190748	10.0	2370175.0	0.595374	Y
5	IC 410-143886/16	5.0	2.856435	10.0	2376252.0	0.571287	Y
6	ICIS 410-143886/15	10.0	5.640762	10.0	2368765.0	0.564076	Y
7	IC 410-143886/14	25.0	14.293588	10.0	2283002.0	0.571744	Y



Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

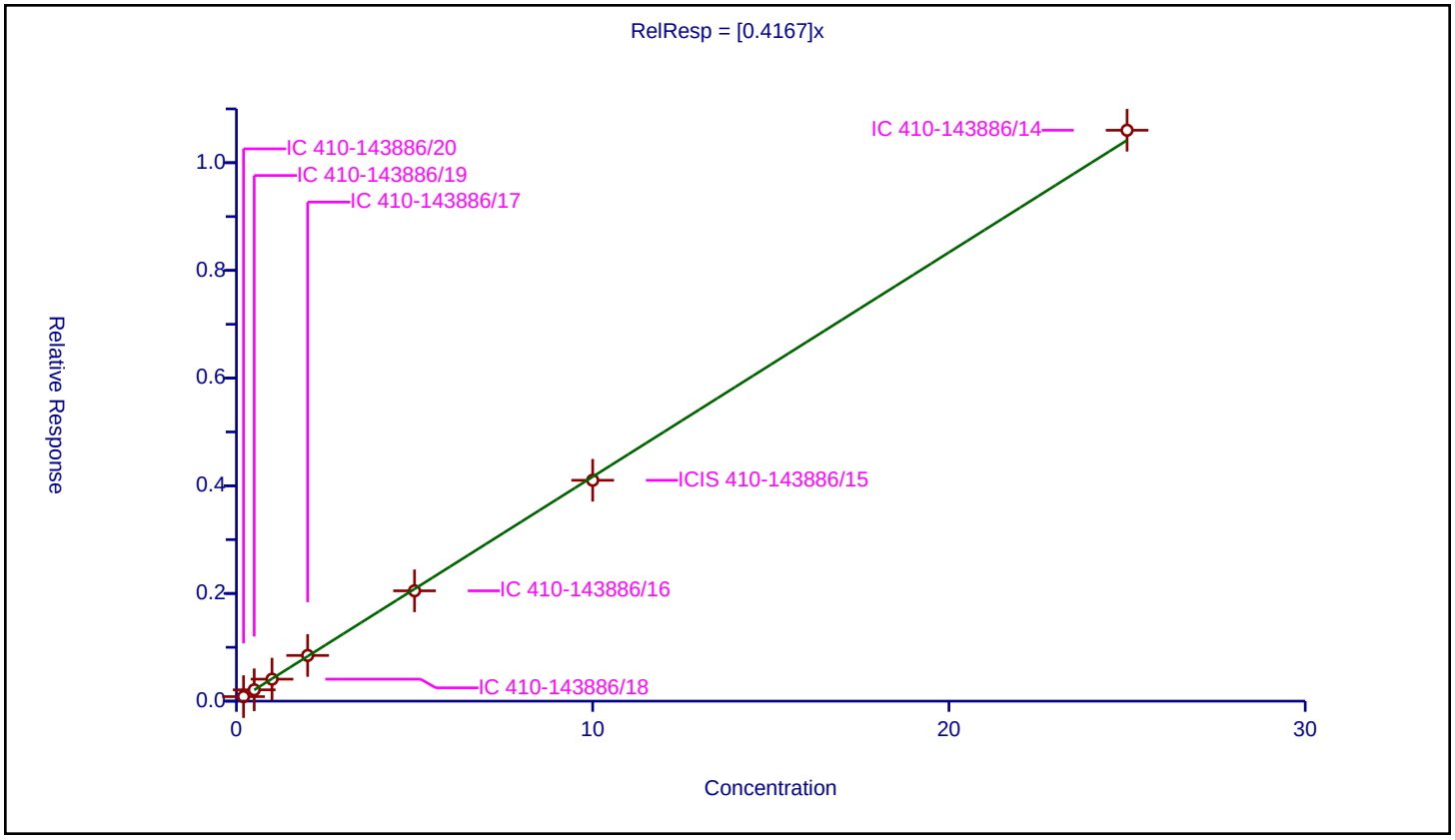
Curve Coefficients

Intercept:	0
Slope:	0.4167

Error Coefficients

Standard Error:	1090000
Relative Standard Error:	1.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.083941	10.0	2324361.0	0.419707	Y
2	IC 410-143886/19	0.5	0.210294	10.0	2331162.0	0.420589	Y
3	IC 410-143886/18	1.0	0.408114	10.0	2375123.0	0.408114	Y
4	IC 410-143886/17	2.0	0.848828	10.0	2370175.0	0.424414	Y
5	IC 410-143886/16	5.0	2.049345	10.0	2376252.0	0.409869	Y
6	ICIS 410-143886/15	10.0	4.102349	10.0	2368765.0	0.410235	Y
7	IC 410-143886/14	25.0	10.603482	10.0	2283002.0	0.424139	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

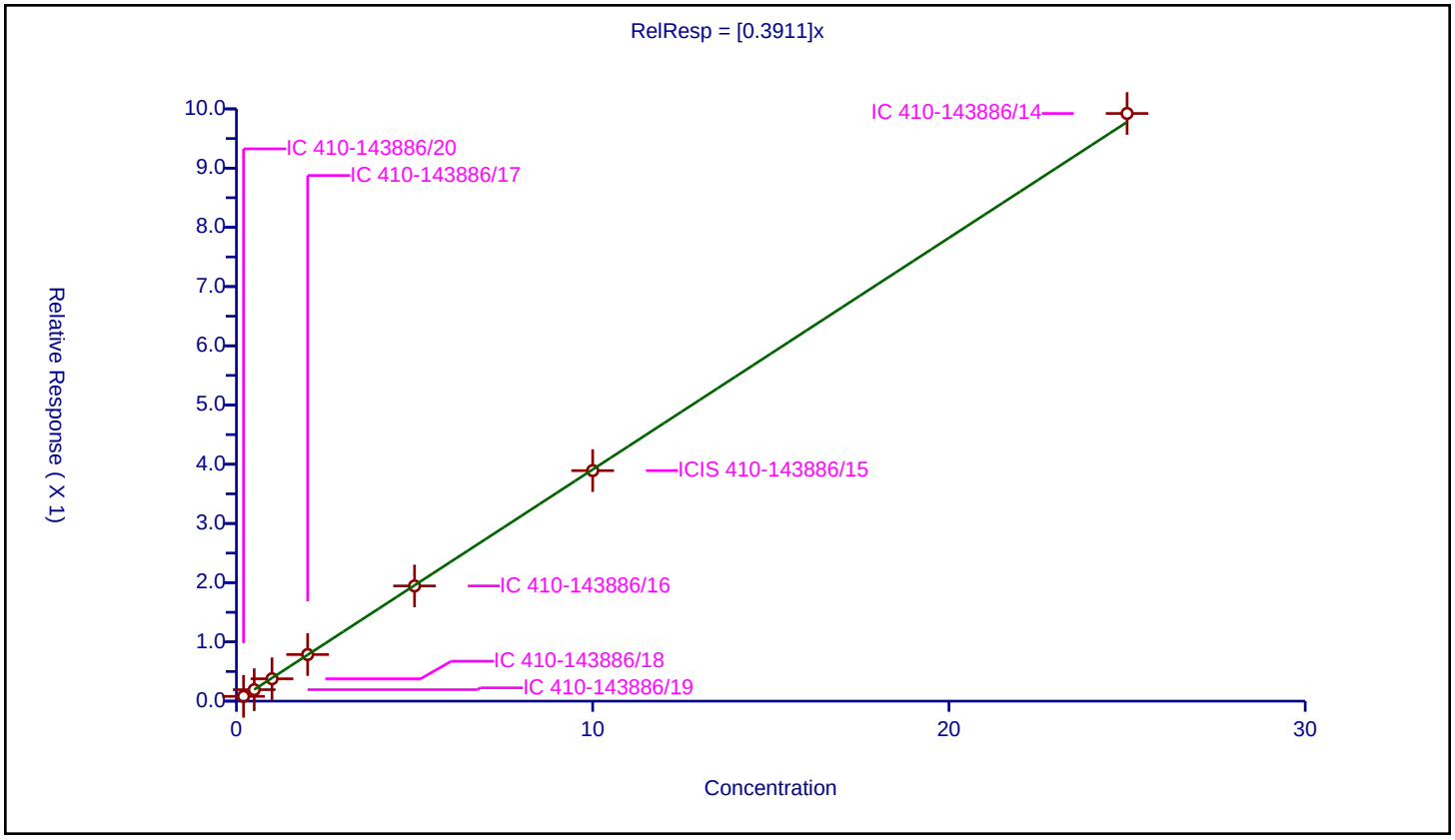
Curve Coefficients

Intercept:	0
Slope:	0.3911

Error Coefficients

Standard Error:	1020000
Relative Standard Error:	2.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.080882	10.0	2324361.0	0.404412	Y
2	IC 410-143886/19	0.5	0.193479	10.0	2331162.0	0.386957	Y
3	IC 410-143886/18	1.0	0.377913	10.0	2375123.0	0.377913	Y
4	IC 410-143886/17	2.0	0.786651	10.0	2370175.0	0.393325	Y
5	IC 410-143886/16	5.0	1.945353	10.0	2376252.0	0.389071	Y
6	ICIS 410-143886/15	10.0	3.892539	10.0	2368765.0	0.389254	Y
7	IC 410-143886/14	25.0	9.922738	10.0	2283002.0	0.39691	Y



Calibration / Isobutyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

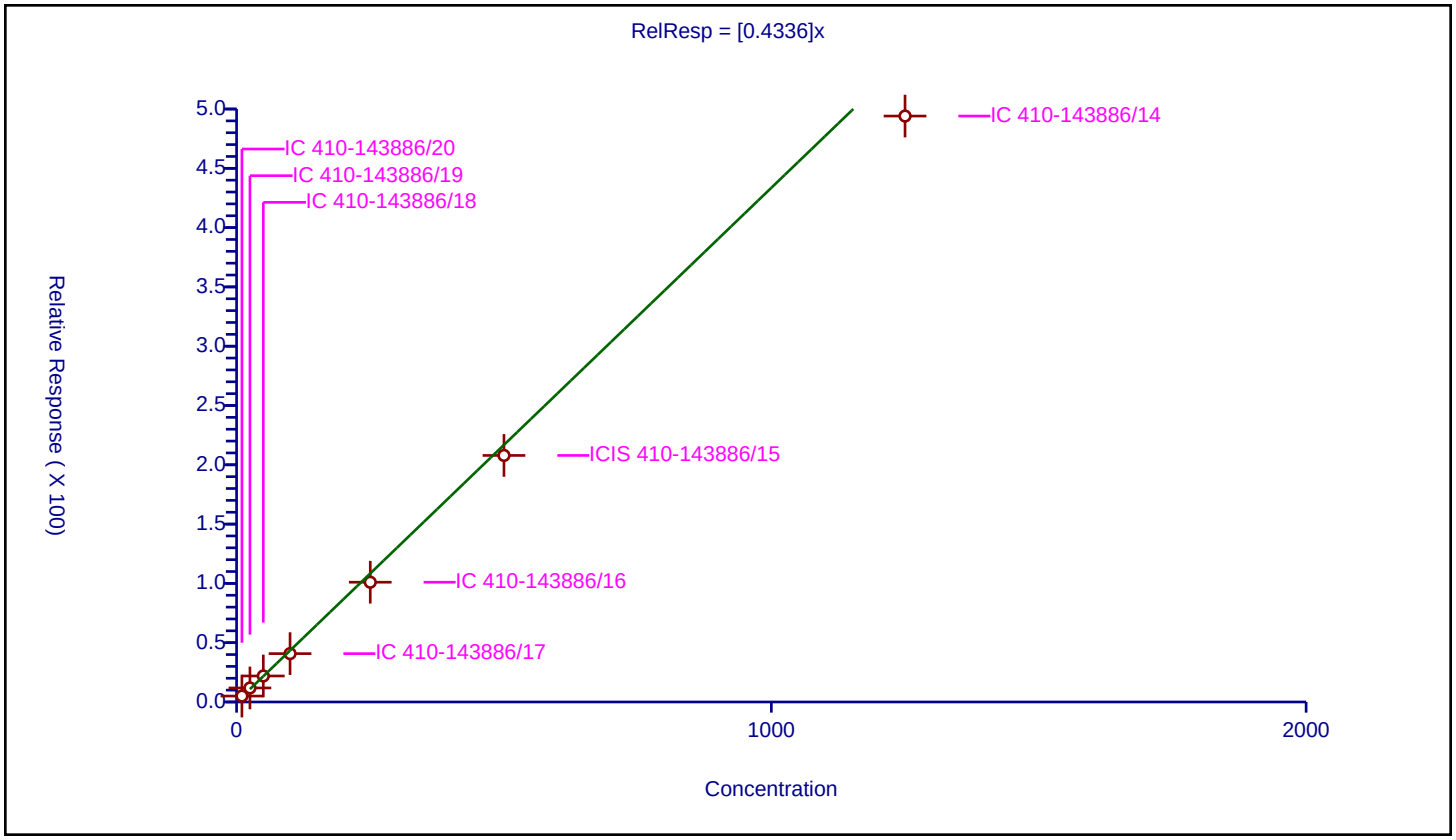
Curve Coefficients

Intercept:	0
Slope:	0.4336

Error Coefficients

Standard Error:	542000
Relative Standard Error:	9.1
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	10.0	4.998377	50.0	126301.0	0.499838	Y
2	IC 410-143886/19	25.0	11.843389	50.0	128101.0	0.473736	Y
3	IC 410-143886/18	50.0	21.93466	50.0	127180.0	0.438693	Y
4	IC 410-143886/17	100.0	40.771594	50.0	130548.0	0.407716	Y
5	IC 410-143886/16	250.0	101.003776	50.0	130308.0	0.404015	Y
6	ICIS 410-143886/15	500.0	207.883436	50.0	123880.0	0.415767	Y
7	IC 410-143886/14	1250.0	494.067064	50.0	120244.0	0.395254	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

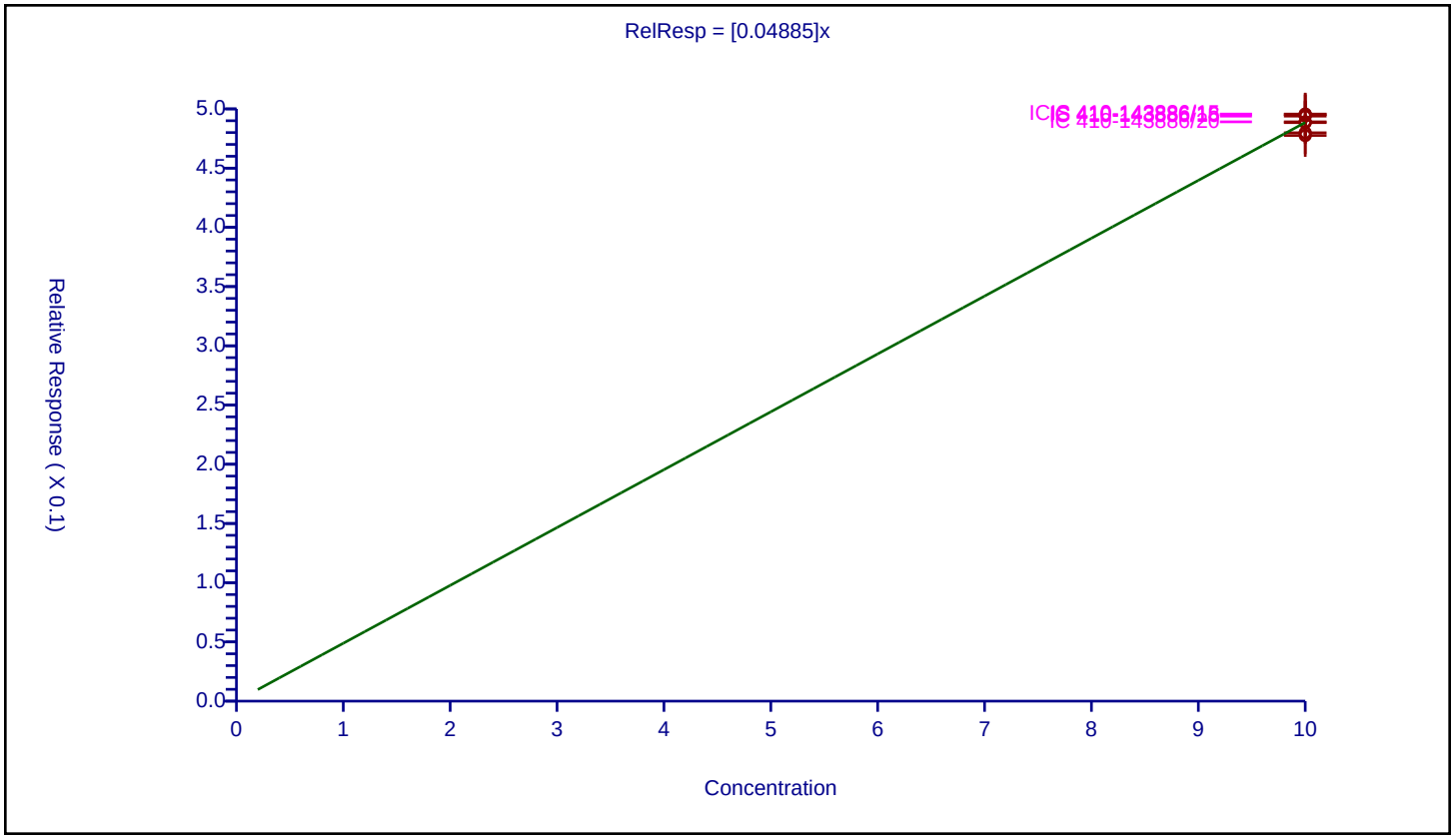
Curve Coefficients

Intercept:	0
Slope:	0.04885

Error Coefficients

Standard Error:	124000
Relative Standard Error:	1.5
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/14	10.0	0.488392	10.0	2283002.0	0.048839	Y
2	ICIS 410-143886/15	10.0	0.495638	10.0	2368765.0	0.049564	Y
3	IC 410-143886/16	10.0	0.493879	10.0	2376252.0	0.049388	Y
4	IC 410-143886/17	10.0	0.479851	10.0	2370175.0	0.047985	Y
5	IC 410-143886/18	10.0	0.495158	10.0	2375123.0	0.049516	Y
6	IC 410-143886/19	10.0	0.477539	10.0	2331162.0	0.047754	Y
7	IC 410-143886/20	10.0	0.489076	10.0	2324361.0	0.048908	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

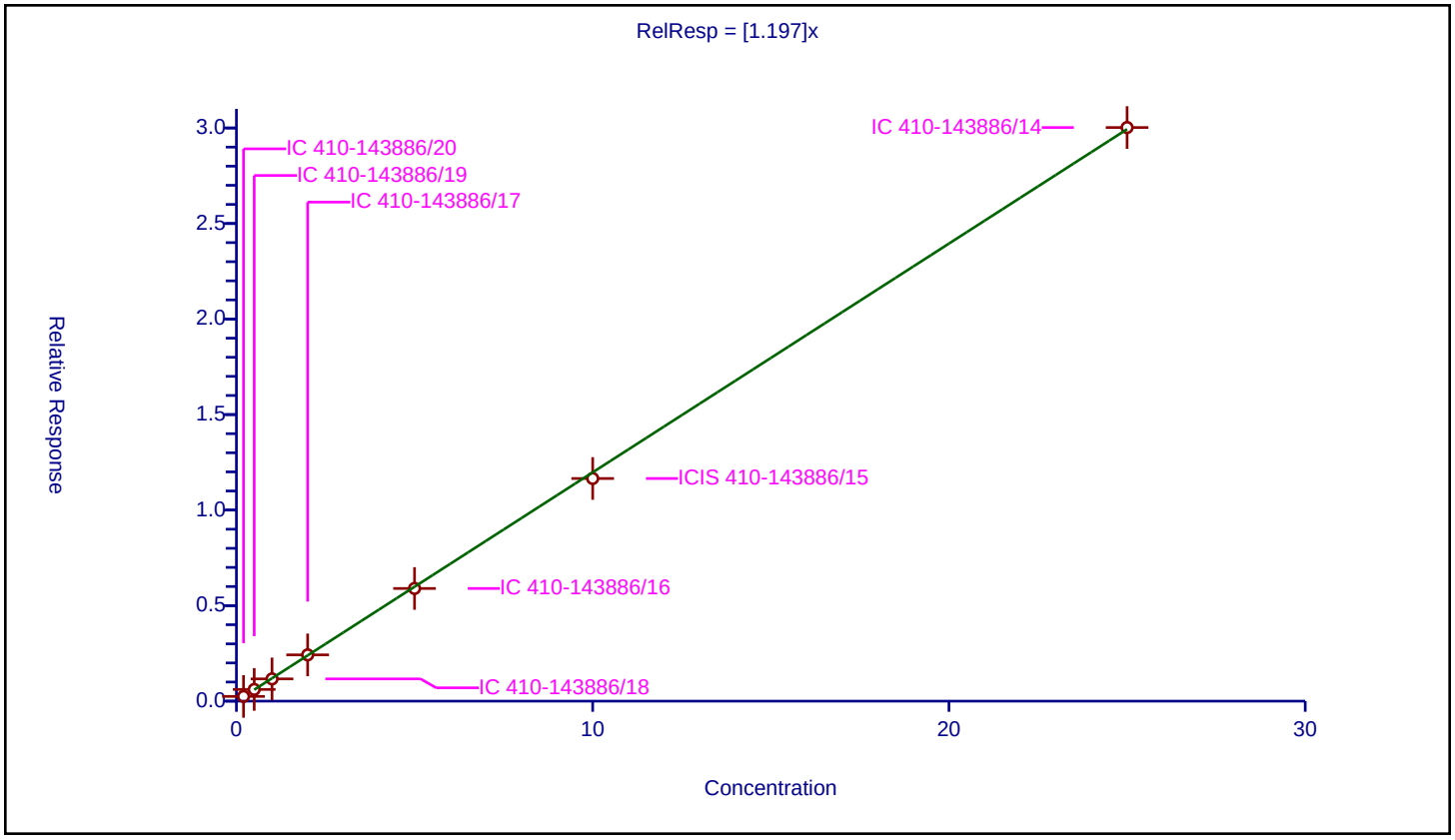
Curve Coefficients

Intercept:	0
Slope:	1.197

Error Coefficients

Standard Error:	3080000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.247109	10.0	2324361.0	1.235544	Y
2	IC 410-143886/19	0.5	0.612883	10.0	2331162.0	1.225766	Y
3	IC 410-143886/18	1.0	1.164121	10.0	2375123.0	1.164121	Y
4	IC 410-143886/17	2.0	2.421846	10.0	2370175.0	1.210923	Y
5	IC 410-143886/16	5.0	5.89799	10.0	2376252.0	1.179598	Y
6	ICIS 410-143886/15	10.0	11.653963	10.0	2368765.0	1.165396	Y
7	IC 410-143886/14	25.0	30.023907	10.0	2283002.0	1.200956	Y



Calibration / 1,2-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

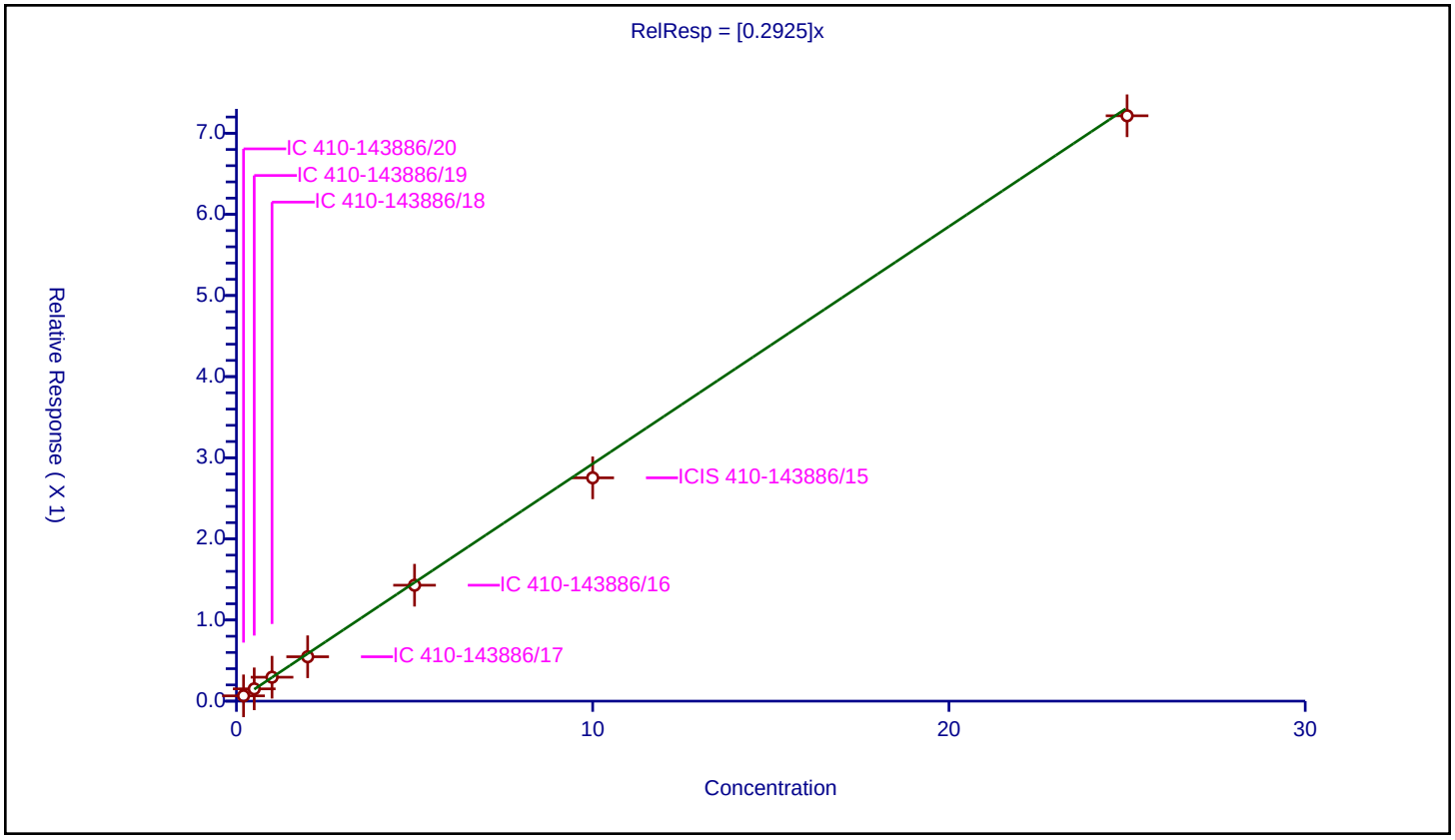
Curve Coefficients

Intercept:	0
Slope:	0.2925

Error Coefficients

Standard Error:	739000
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.065257	10.0	2324361.0	0.326283	Y
2	IC 410-143886/19	0.5	0.15156	10.0	2331162.0	0.303119	Y
3	IC 410-143886/18	1.0	0.294898	10.0	2375123.0	0.294898	Y
4	IC 410-143886/17	2.0	0.547213	10.0	2370175.0	0.273606	Y
5	IC 410-143886/16	5.0	1.428994	10.0	2376252.0	0.285799	Y
6	ICIS 410-143886/15	10.0	2.752671	10.0	2368765.0	0.275267	Y
7	IC 410-143886/14	25.0	7.215294	10.0	2283002.0	0.288612	Y



Calibration / Tert-amyl methyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

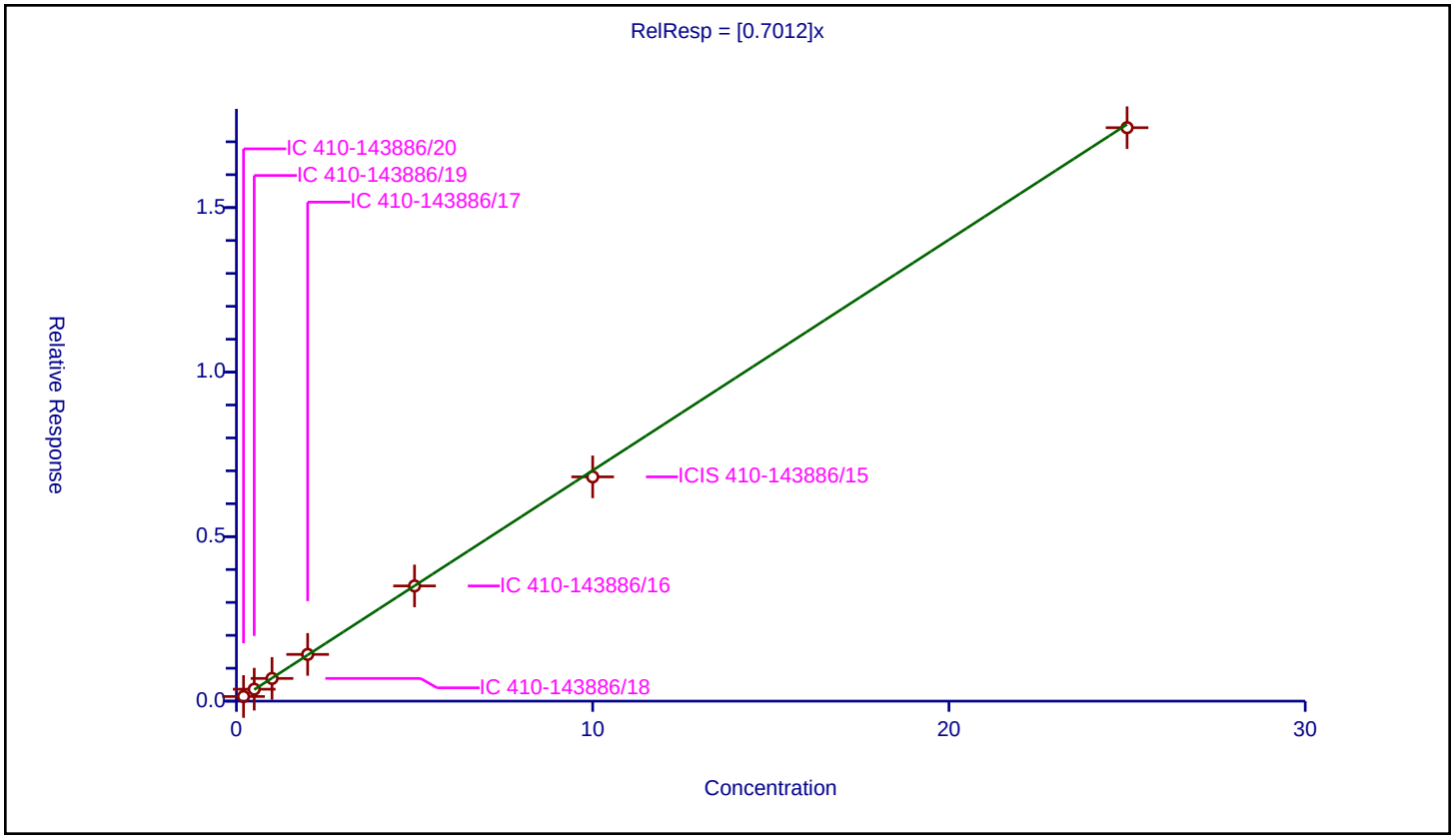
Curve Coefficients

Intercept:	0
Slope:	0.7012

Error Coefficients

Standard Error:	1790000
Relative Standard Error:	2.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.14049	10.0	2324361.0	0.702451	Y
2	IC 410-143886/19	0.5	0.363445	10.0	2331162.0	0.726891	Y
3	IC 410-143886/18	1.0	0.690027	10.0	2375123.0	0.690027	Y
4	IC 410-143886/17	2.0	1.419942	10.0	2370175.0	0.709971	Y
5	IC 410-143886/16	5.0	3.501645	10.0	2376252.0	0.700329	Y
6	ICIS 410-143886/15	10.0	6.816257	10.0	2368765.0	0.681626	Y
7	IC 410-143886/14	25.0	17.428732	10.0	2283002.0	0.697149	Y



Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

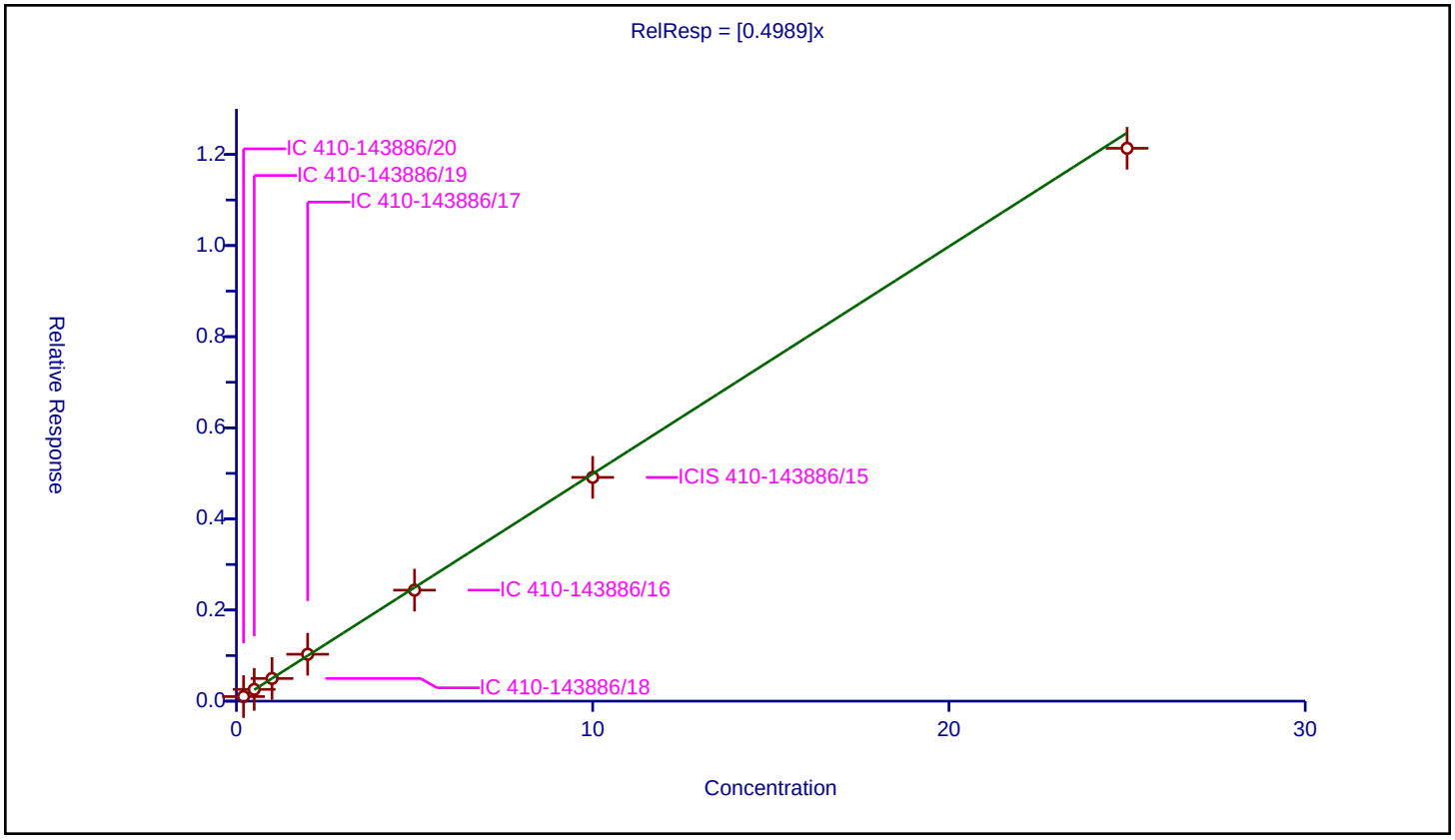
Curve Coefficients

Intercept:	0
Slope:	0.4989

Error Coefficients

Standard Error:	1250000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.100126	10.0	2324361.0	0.500632	Y
2	IC 410-143886/19	0.5	0.257871	10.0	2331162.0	0.515743	Y
3	IC 410-143886/18	1.0	0.49765	10.0	2375123.0	0.49765	Y
4	IC 410-143886/17	2.0	1.029468	10.0	2370175.0	0.514734	Y
5	IC 410-143886/16	5.0	2.436505	10.0	2376252.0	0.487301	Y
6	ICIS 410-143886/15	10.0	4.911602	10.0	2368765.0	0.49116	Y
7	IC 410-143886/14	25.0	12.13532	10.0	2283002.0	0.485413	Y



Calibration / n-Butanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

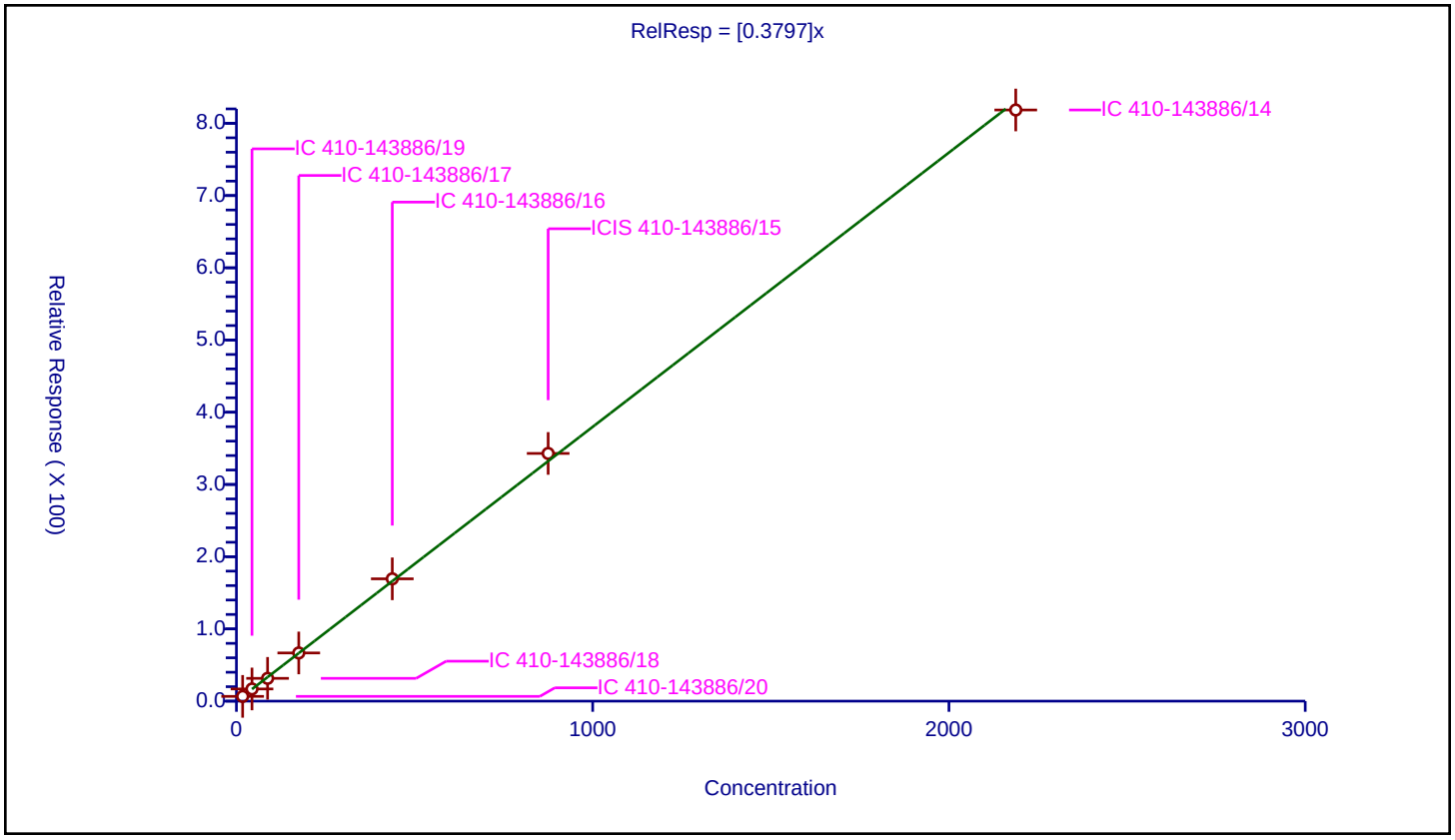
Curve Coefficients

Intercept:	0
Slope:	0.3797

Error Coefficients

Standard Error:	897000
Relative Standard Error:	2.7
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	17.5	6.597731	50.0	126301.0	0.377013	Y
2	IC 410-143886/19	43.75	16.885504	50.0	128101.0	0.385954	Y
3	IC 410-143886/18	87.5	31.554883	50.0	127180.0	0.360627	Y
4	IC 410-143886/17	175.0	66.744033	50.0	130548.0	0.381394	Y
5	IC 410-143886/16	437.5	169.345704	50.0	130308.0	0.387076	Y
6	ICIS 410-143886/15	875.0	342.962544	50.0	123880.0	0.391957	Y
7	IC 410-143886/14	2187.5	818.476182	50.0	120244.0	0.374161	Y



Calibration / Trichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

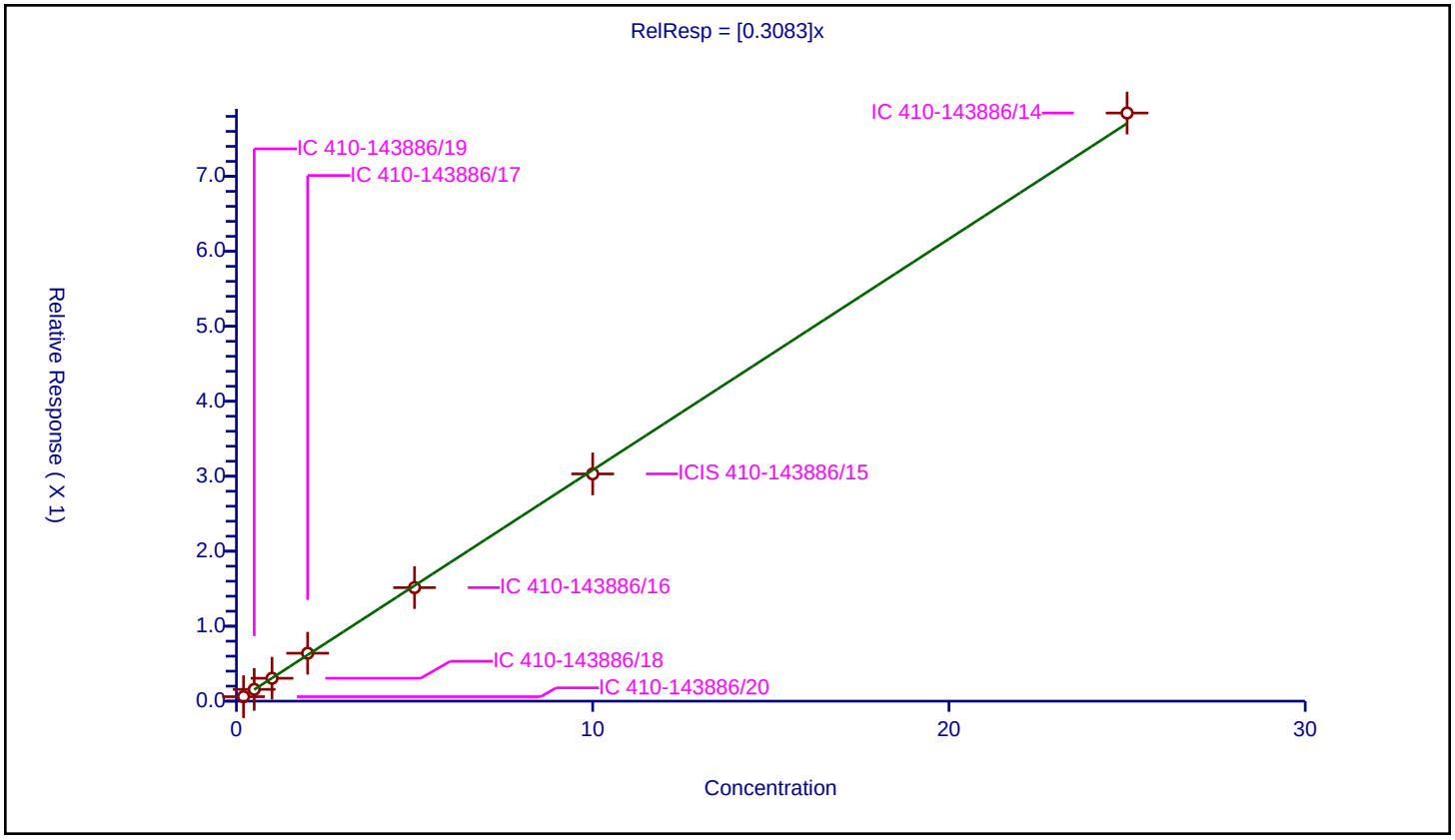
Curve Coefficients

Intercept:	0
Slope:	0.3083

Error Coefficients

Standard Error:	804000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.059668	10.0	2324361.0	0.29834	Y
2	IC 410-143886/19	0.5	0.157265	10.0	2331162.0	0.31453	Y
3	IC 410-143886/18	1.0	0.30539	10.0	2375123.0	0.30539	Y
4	IC 410-143886/17	2.0	0.639442	10.0	2370175.0	0.319721	Y
5	IC 410-143886/16	5.0	1.514406	10.0	2376252.0	0.302881	Y
6	ICIS 410-143886/15	10.0	3.031027	10.0	2368765.0	0.303103	Y
7	IC 410-143886/14	25.0	7.844789	10.0	2283002.0	0.313792	Y



Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

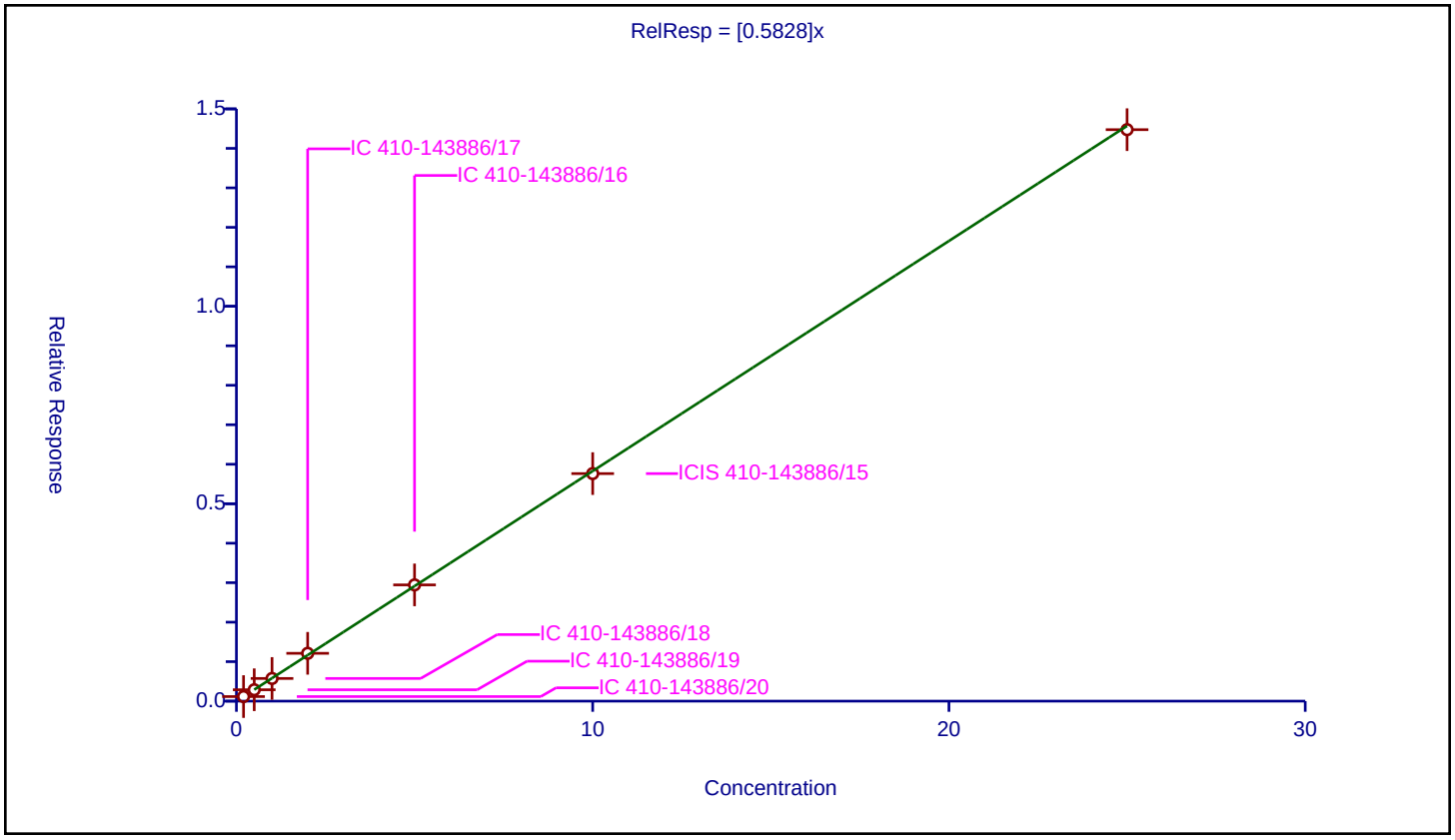
Curve Coefficients

Intercept:	0
Slope:	0.5828

Error Coefficients

Standard Error:	1490000
Relative Standard Error:	1.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.115787	10.0	2324361.0	0.578933	Y
2	IC 410-143886/19	0.5	0.288208	10.0	2331162.0	0.576416	Y
3	IC 410-143886/18	1.0	0.574341	10.0	2375123.0	0.574341	Y
4	IC 410-143886/17	2.0	1.211138	10.0	2370175.0	0.605569	Y
5	IC 410-143886/16	5.0	2.94385	10.0	2376252.0	0.58877	Y
6	ICIS 410-143886/15	10.0	5.763024	10.0	2368765.0	0.576302	Y
7	IC 410-143886/14	25.0	14.473859	10.0	2283002.0	0.578954	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

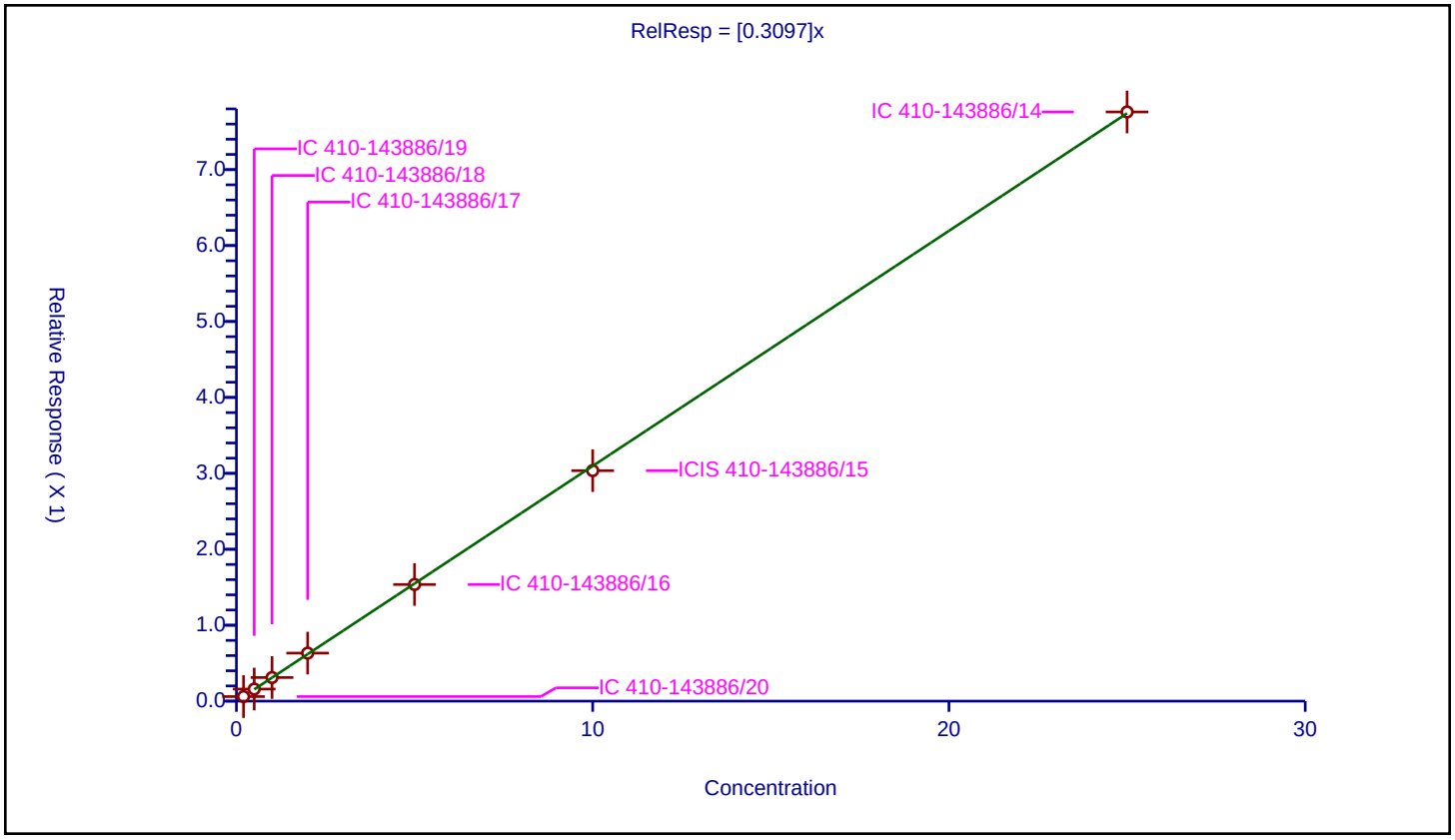
Curve Coefficients

Intercept:	0
Slope:	0.3097

Error Coefficients

Standard Error:	798000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.060305	10.0	2324361.0	0.301524	Y
2	IC 410-143886/19	0.5	0.158912	10.0	2331162.0	0.317824	Y
3	IC 410-143886/18	1.0	0.310957	10.0	2375123.0	0.310957	Y
4	IC 410-143886/17	2.0	0.63254	10.0	2370175.0	0.31627	Y
5	IC 410-143886/16	5.0	1.536255	10.0	2376252.0	0.307251	Y
6	ICIS 410-143886/15	10.0	3.035911	10.0	2368765.0	0.303591	Y
7	IC 410-143886/14	25.0	7.759809	10.0	2283002.0	0.310392	Y



Calibration / Methyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

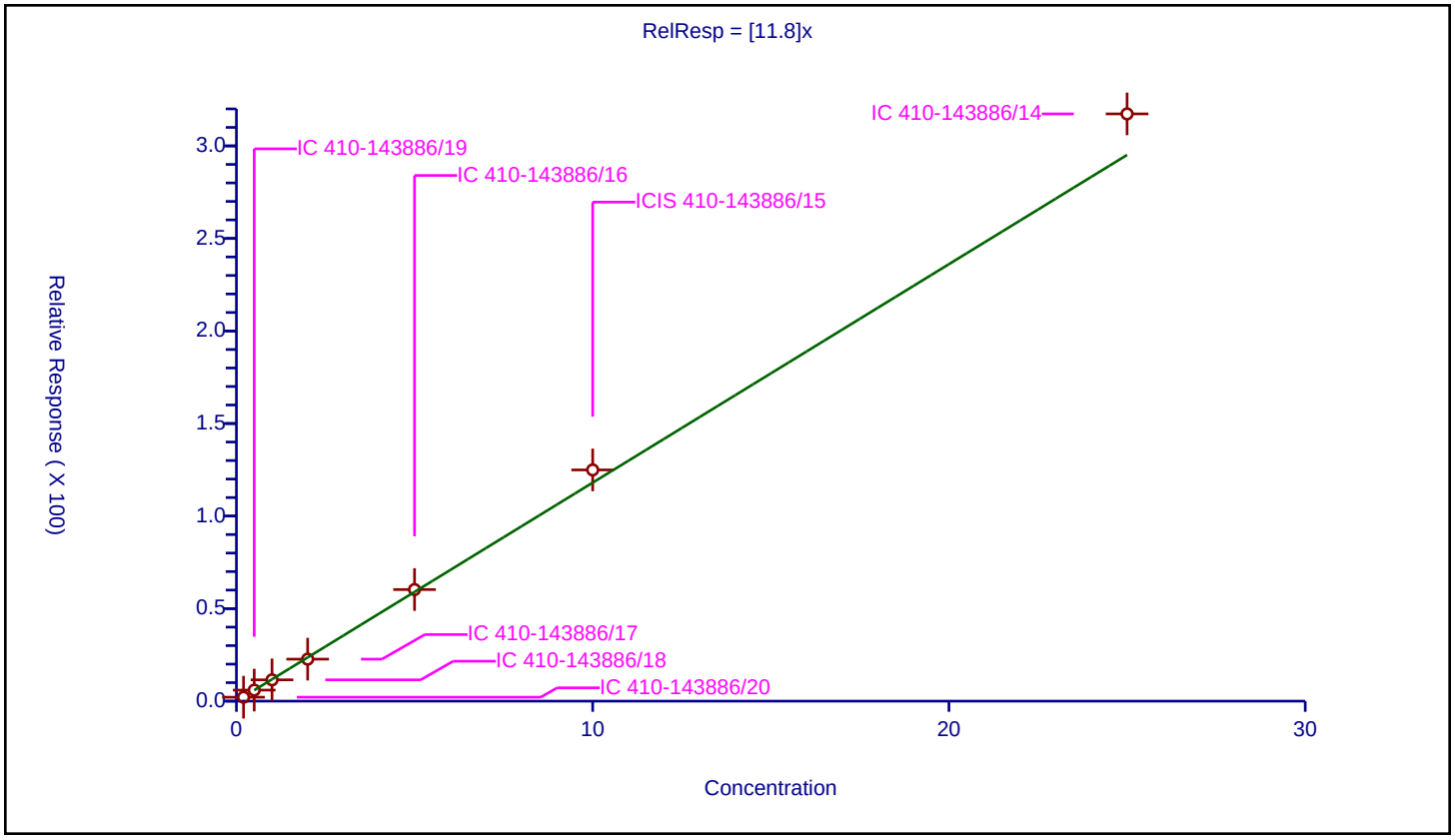
Curve Coefficients

Intercept:	0
Slope:	11.8

Error Coefficients

Standard Error:	343000
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 410-143886/20	0.2	2.121915	50.0	126301.0	10.609576	Y
2	IC 410-143886/19	0.5	5.964825	50.0	128101.0	11.929649	Y
3	IC 410-143886/18	1.0	11.506526	50.0	127180.0	11.506526	Y
4	IC 410-143886/17	2.0	22.690505	50.0	130548.0	11.345252	Y
5	IC 410-143886/16	5.0	60.289084	50.0	130308.0	12.057817	Y
6	ICIS 410-143886/15	10.0	124.936229	50.0	123880.0	12.493623	Y
7	IC 410-143886/14	25.0	317.289844	50.0	120244.0	12.691594	Y



Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

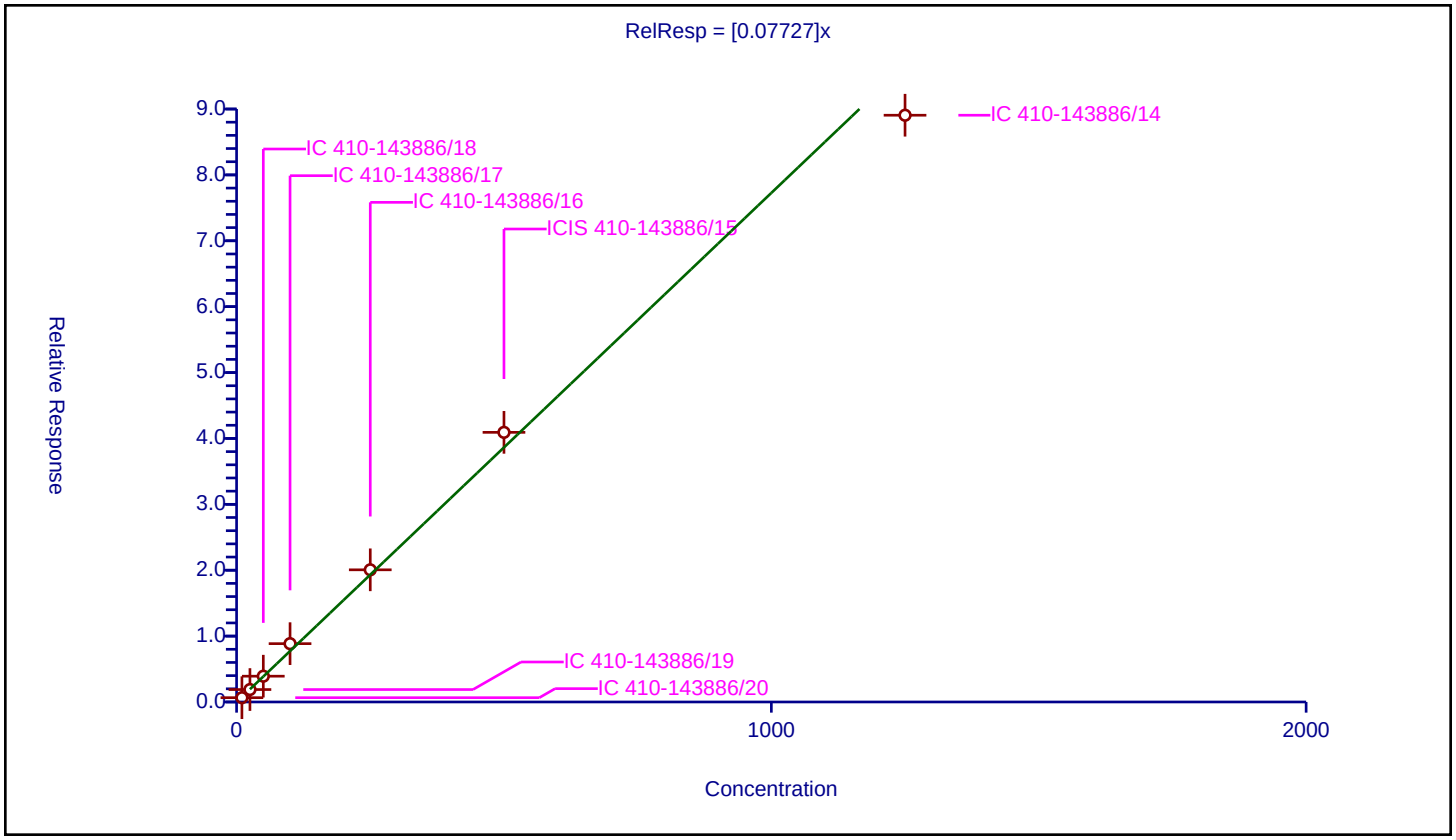
Curve Coefficients

Intercept:	0
Slope:	0.07727

Error Coefficients

Standard Error:	99600
Relative Standard Error:	9.8
Correlation Coefficient:	0.994
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	10.0	0.651618	50.0	126301.0	0.065162	Y
2	IC 410-143886/19	25.0	1.888744	50.0	128101.0	0.07555	Y
3	IC 410-143886/18	50.0	3.914137	50.0	127180.0	0.078283	Y
4	IC 410-143886/17	100.0	8.853449	50.0	130548.0	0.088534	Y
5	IC 410-143886/16	250.0	20.059781	50.0	130308.0	0.080239	Y
6	ICIS 410-143886/15	500.0	40.924685	50.0	123880.0	0.081849	Y
7	IC 410-143886/14	1250.0	89.058082	50.0	120244.0	0.071246	Y



Calibration / Dibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

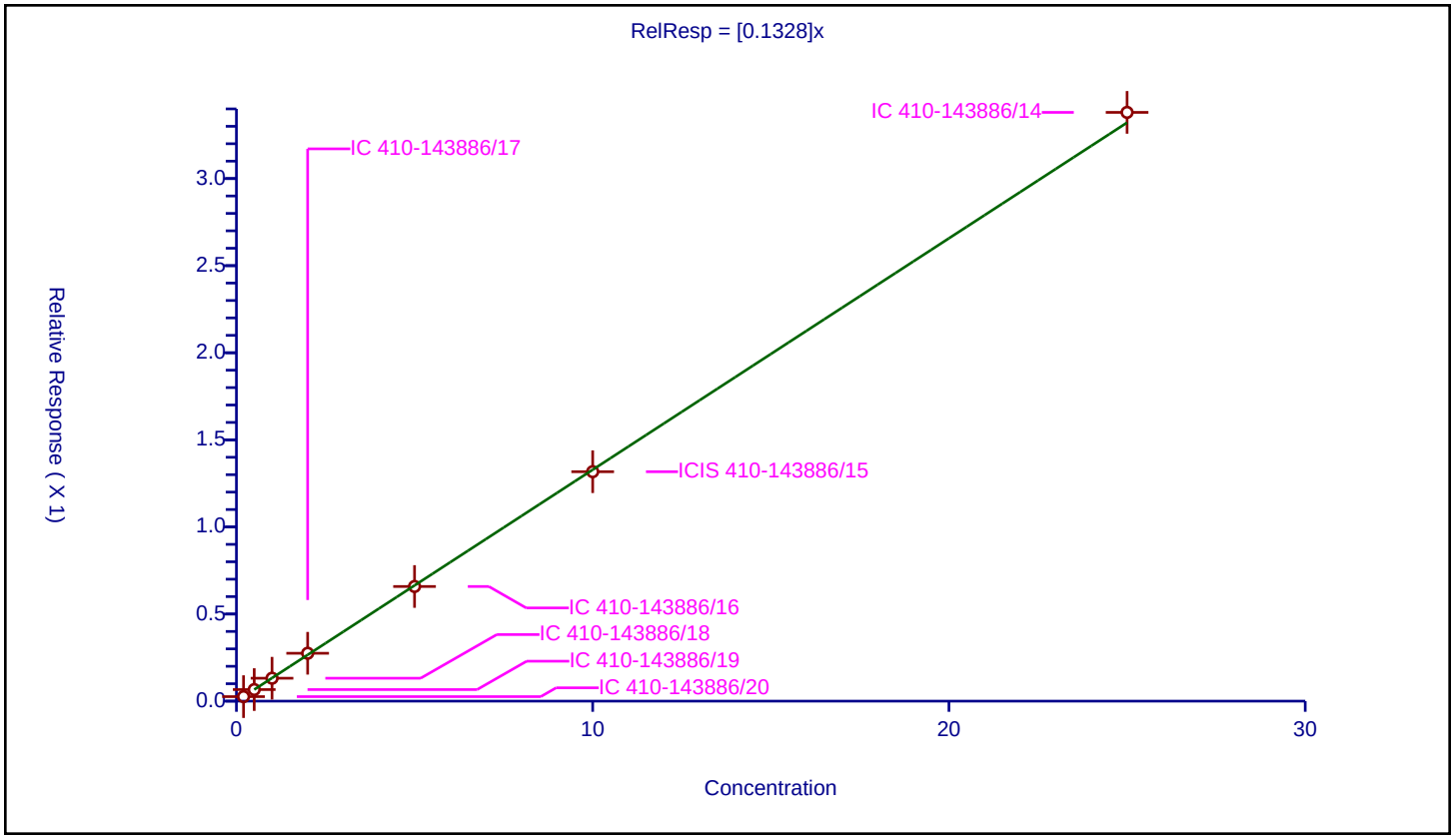
Curve Coefficients

Intercept:	0
Slope:	0.1328

Error Coefficients

Standard Error:	347000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.025921	10.0	2324361.0	0.129606	Y
2	IC 410-143886/19	0.5	0.066405	10.0	2331162.0	0.132809	Y
3	IC 410-143886/18	1.0	0.131538	10.0	2375123.0	0.131538	Y
4	IC 410-143886/17	2.0	0.274883	10.0	2370175.0	0.137441	Y
5	IC 410-143886/16	5.0	0.658179	10.0	2376252.0	0.131636	Y
6	ICIS 410-143886/15	10.0	1.31718	10.0	2368765.0	0.131718	Y
7	IC 410-143886/14	25.0	3.379896	10.0	2283002.0	0.135196	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

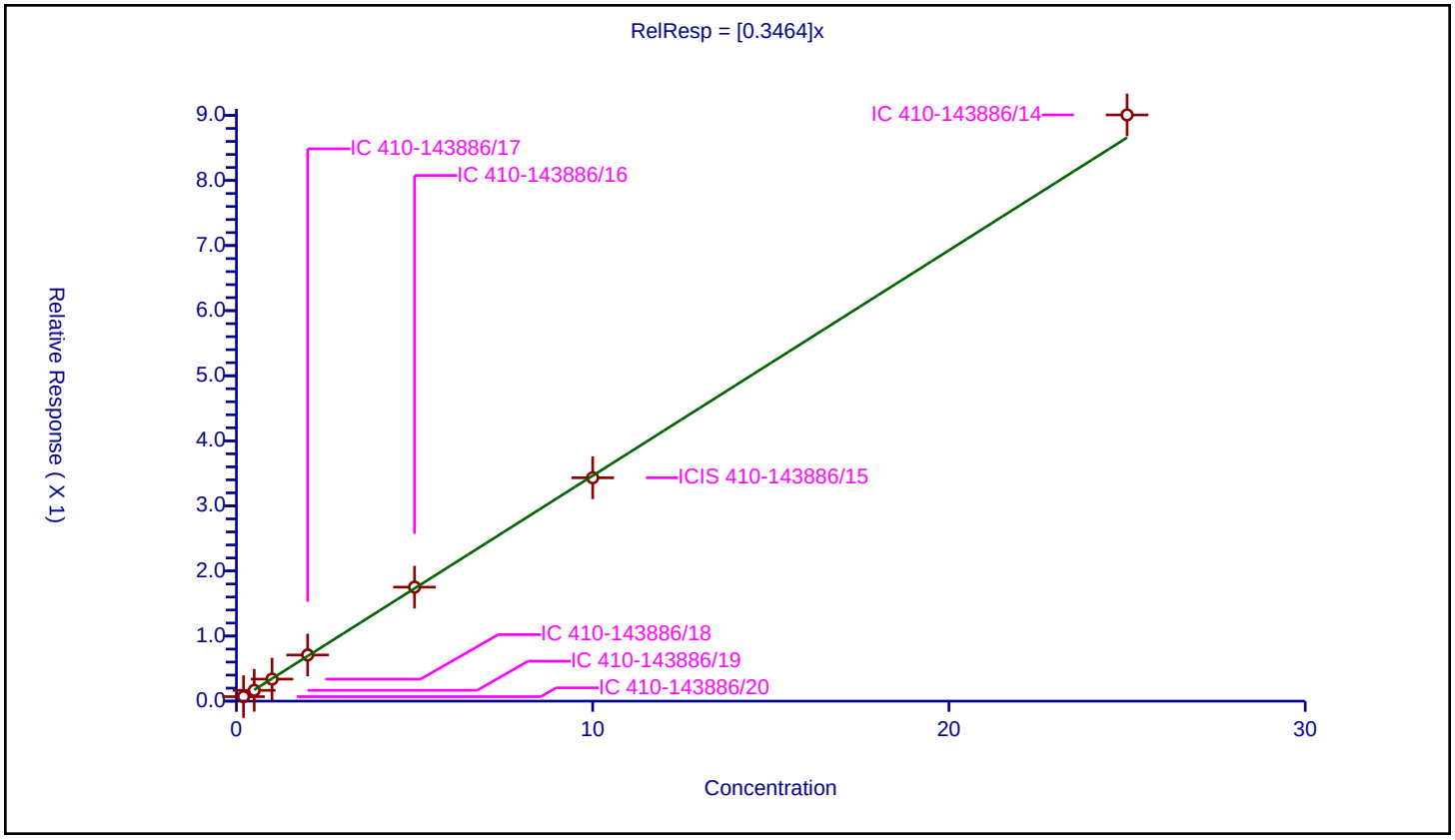
Curve Coefficients

Intercept:	0
Slope:	0.3464

Error Coefficients

Standard Error:	922000
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 410-143886/20	0.2	0.069124	10.0	2324361.0	0.345622	Y
2	IC 410-143886/19	0.5	0.165784	10.0	2331162.0	0.331569	Y
3	IC 410-143886/18	1.0	0.338837	10.0	2375123.0	0.338837	Y
4	IC 410-143886/17	2.0	0.709192	10.0	2370175.0	0.354596	Y
5	IC 410-143886/16	5.0	1.751914	10.0	2376252.0	0.350383	Y
6	ICIS 410-143886/15	10.0	3.431877	10.0	2368765.0	0.343188	Y
7	IC 410-143886/14	25.0	9.007263	10.0	2283002.0	0.360291	Y



Calibration / 2-Nitropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

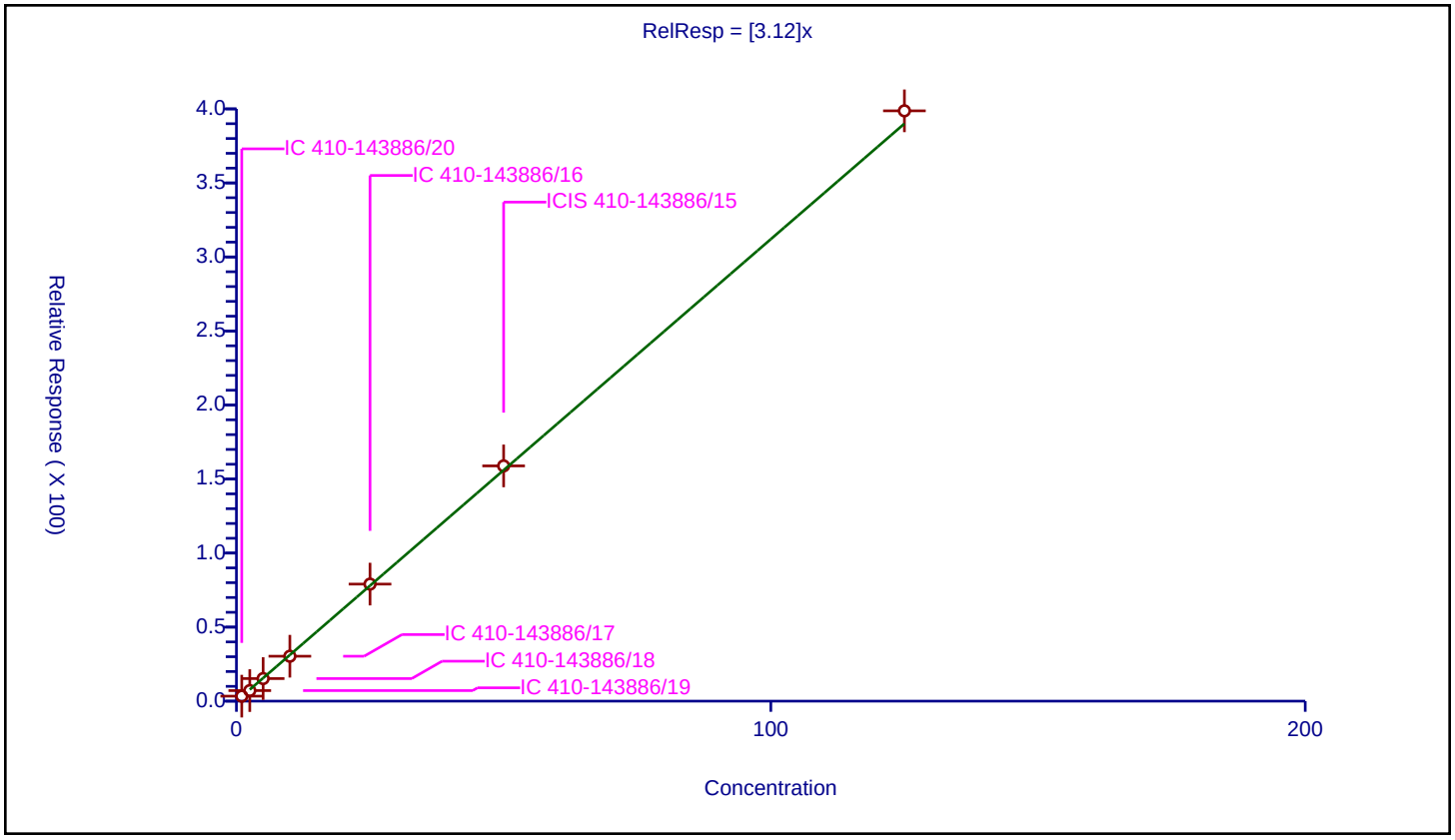
Curve Coefficients

Intercept:	0
Slope:	3.12

Error Coefficients

Standard Error:	433000
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 410-143886/20	1.0	3.374874	50.0	126301.0	3.374874	Y
2	IC 410-143886/19	2.5	7.134995	50.0	128101.0	2.853998	Y
3	IC 410-143886/18	5.0	15.246501	50.0	127180.0	3.0493	Y
4	IC 410-143886/17	10.0	30.340947	50.0	130548.0	3.034095	Y
5	IC 410-143886/16	25.0	79.048869	50.0	130308.0	3.161955	Y
6	ICIS 410-143886/15	50.0	158.874314	50.0	123880.0	3.177486	Y
7	IC 410-143886/14	125.0	398.690163	50.0	120244.0	3.189521	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

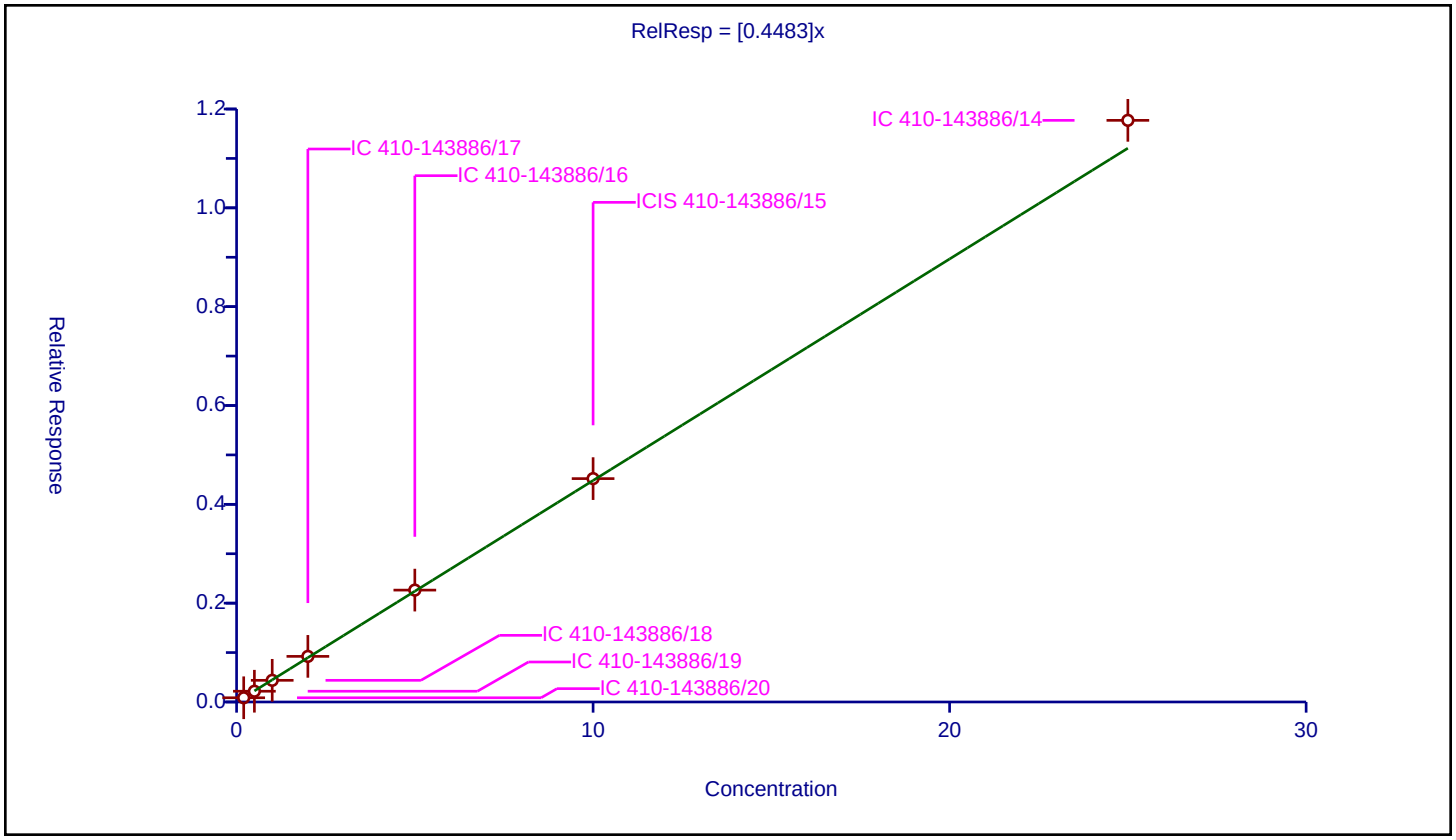
Curve Coefficients

Intercept:	0
Slope:	0.4483

Error Coefficients

Standard Error:	1210000
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 410-143886/20	0.2	0.085426	10.0	2324361.0	0.427128	Y
2	IC 410-143886/19	0.5	0.217664	10.0	2331162.0	0.435328	Y
3	IC 410-143886/18	1.0	0.438205	10.0	2375123.0	0.438205	Y
4	IC 410-143886/17	2.0	0.922835	10.0	2370175.0	0.461417	Y
5	IC 410-143886/16	5.0	2.264145	10.0	2376252.0	0.452829	Y
6	ICIS 410-143886/15	10.0	4.520626	10.0	2368765.0	0.452063	Y
7	IC 410-143886/14	25.0	11.770901	10.0	2283002.0	0.470836	Y



Calibration / 4-Methyl-2-pentanone (MIBK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

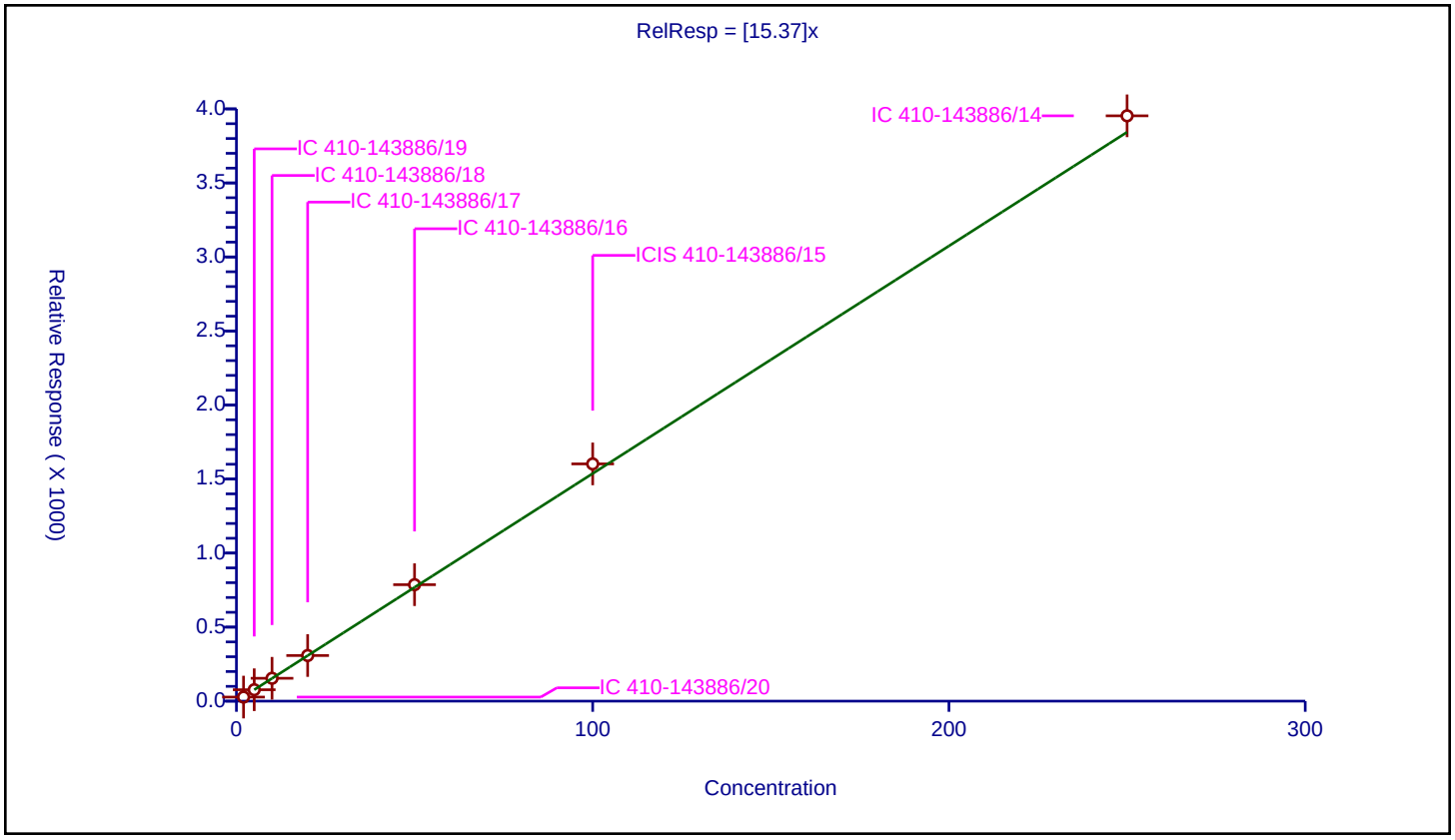
Curve Coefficients

Intercept:	0
Slope:	15.37

Error Coefficients

Standard Error:	4300000
Relative Standard Error:	4.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	2.0	27.519972	50.0	126301.0	13.759986	Y
2	IC 410-143886/19	5.0	77.163332	50.0	128101.0	15.432666	Y
3	IC 410-143886/18	10.0	154.433087	50.0	127180.0	15.443309	Y
4	IC 410-143886/17	20.0	308.007017	50.0	130548.0	15.400351	Y
5	IC 410-143886/16	50.0	786.531525	50.0	130308.0	15.730631	Y
6	ICIS 410-143886/15	100.0	1602.264692	50.0	123880.0	16.022647	Y
7	IC 410-143886/14	250.0	3953.201823	50.0	120244.0	15.812807	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

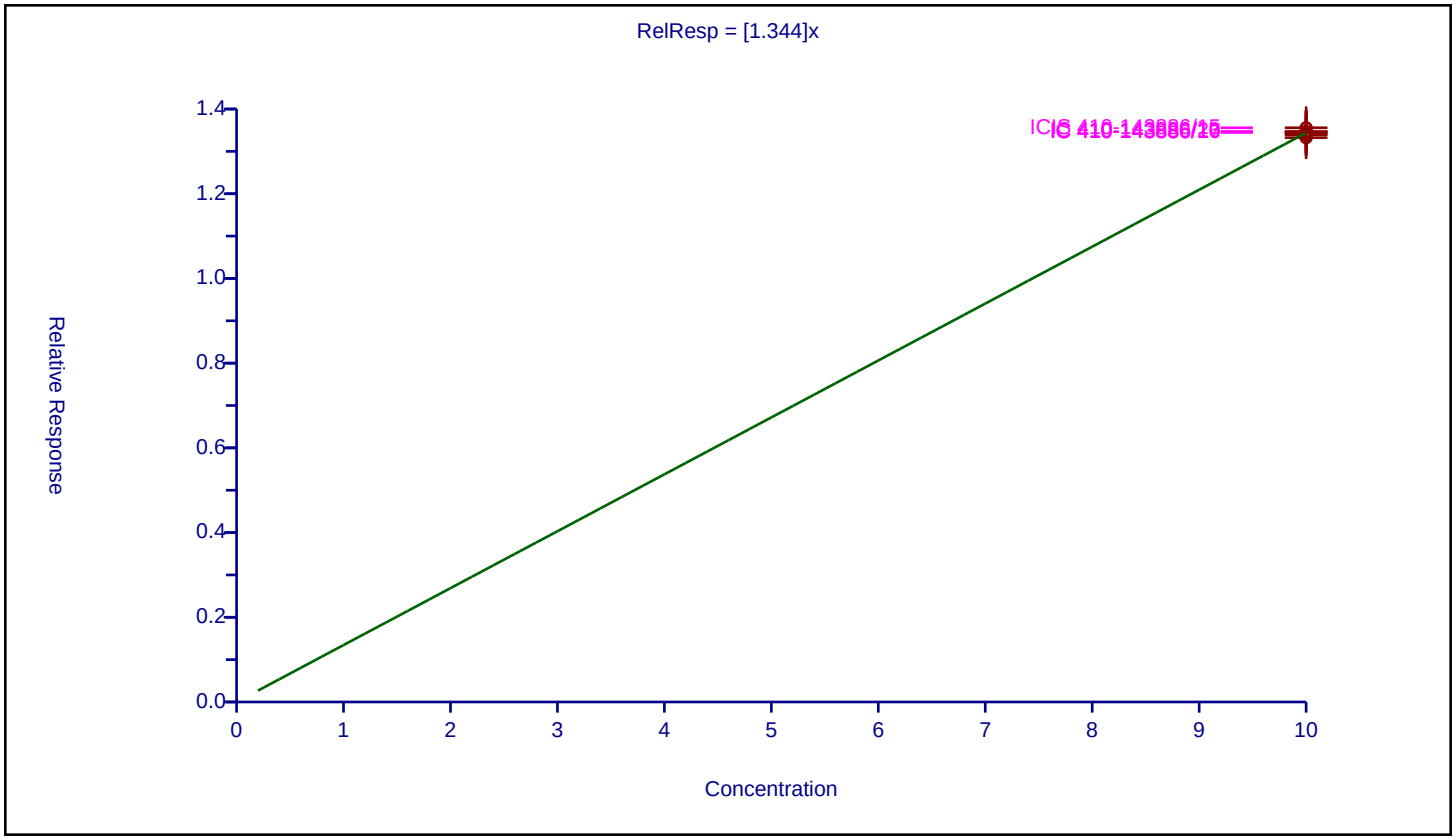
Curve Coefficients

Intercept:	0
Slope:	1.344

Error Coefficients

Standard Error:	2510000
Relative Standard Error:	0.5
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/14	10.0	13.323754	10.0	1709928.0	1.332375	Y
2	ICIS 410-143886/15	10.0	13.557417	10.0	1741980.0	1.355742	Y
3	IC 410-143886/16	10.0	13.461197	10.0	1752836.0	1.34612	Y
4	IC 410-143886/17	10.0	13.447624	10.0	1742684.0	1.344762	Y
5	IC 410-143886/18	10.0	13.394262	10.0	1761735.0	1.339426	Y
6	IC 410-143886/19	10.0	13.407687	10.0	1704998.0	1.340769	Y
7	IC 410-143886/20	10.0	13.467087	10.0	1708734.0	1.346709	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

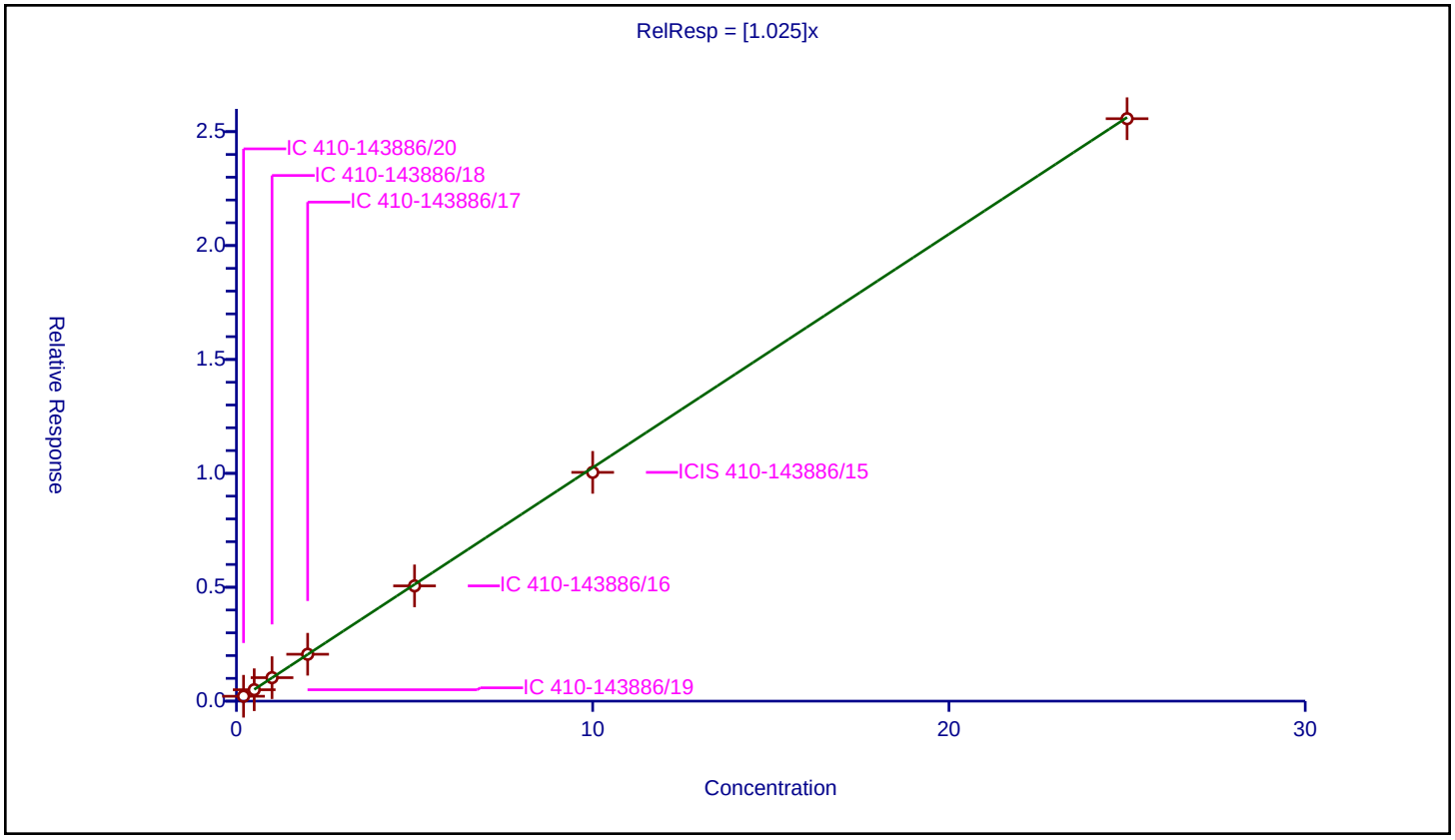
Curve Coefficients

Intercept:	0
Slope:	1.025

Error Coefficients

Standard Error:	1960000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.214796	10.0	1708734.0	1.073982	Y
2	IC 410-143886/19	0.5	0.501549	10.0	1704998.0	1.003098	Y
3	IC 410-143886/18	1.0	1.030473	10.0	1761735.0	1.030473	Y
4	IC 410-143886/17	2.0	2.058256	10.0	1742684.0	1.029128	Y
5	IC 410-143886/16	5.0	5.059623	10.0	1752836.0	1.011925	Y
6	ICIS 410-143886/15	10.0	10.043812	10.0	1741980.0	1.004381	Y
7	IC 410-143886/14	25.0	25.569392	10.0	1709928.0	1.022776	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

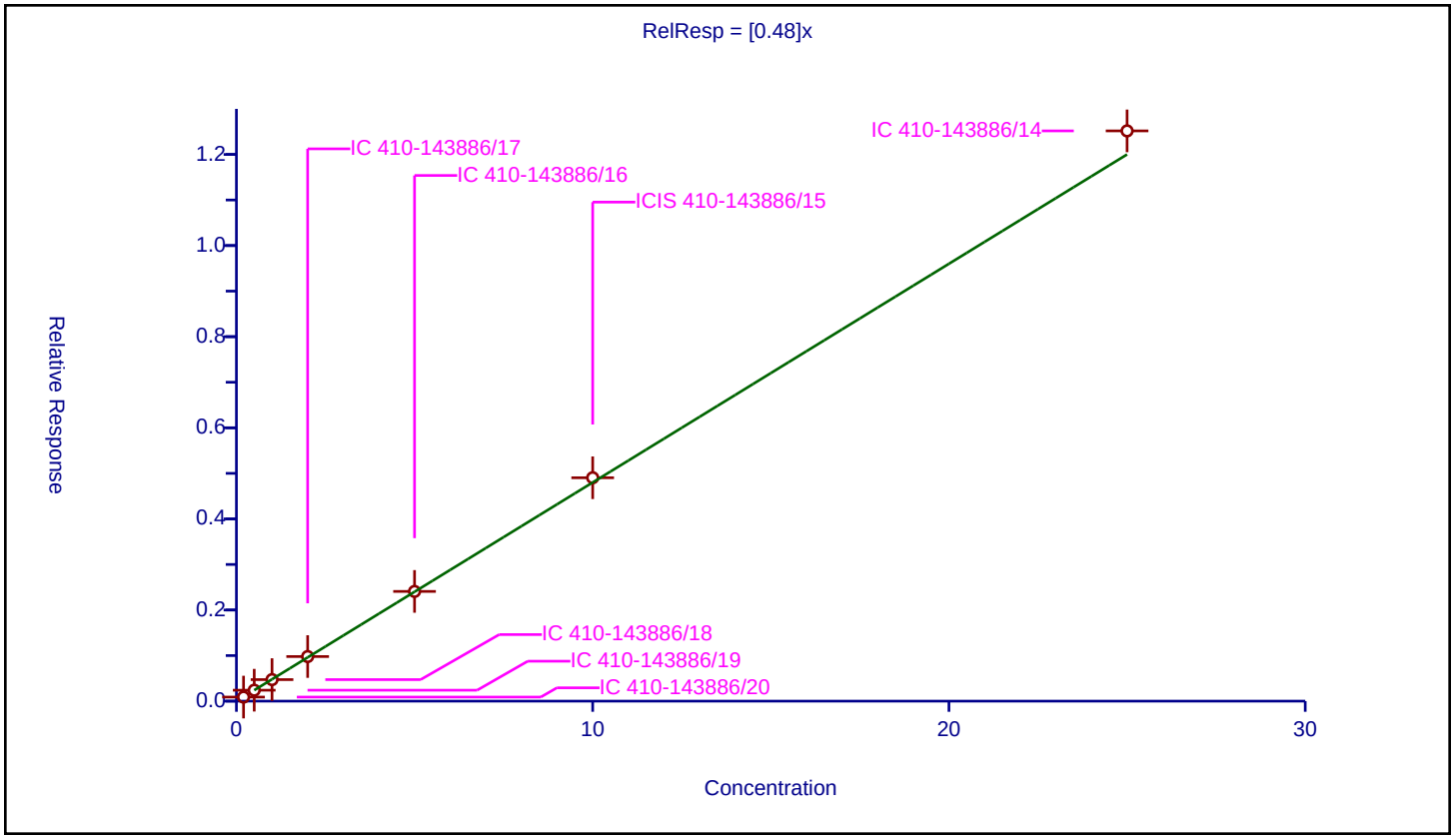
Curve Coefficients

Intercept:	0
Slope:	0.48

Error Coefficients

Standard Error:	960000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.089095	10.0	1708734.0	0.445476	Y
2	IC 410-143886/19	0.5	0.239865	10.0	1704998.0	0.479731	Y
3	IC 410-143886/18	1.0	0.472784	10.0	1761735.0	0.472784	Y
4	IC 410-143886/17	2.0	0.978812	10.0	1742684.0	0.489406	Y
5	IC 410-143886/16	5.0	2.408349	10.0	1752836.0	0.48167	Y
6	ICIS 410-143886/15	10.0	4.903644	10.0	1741980.0	0.490364	Y
7	IC 410-143886/14	25.0	12.517065	10.0	1709928.0	0.500683	Y



Calibration / Ethyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

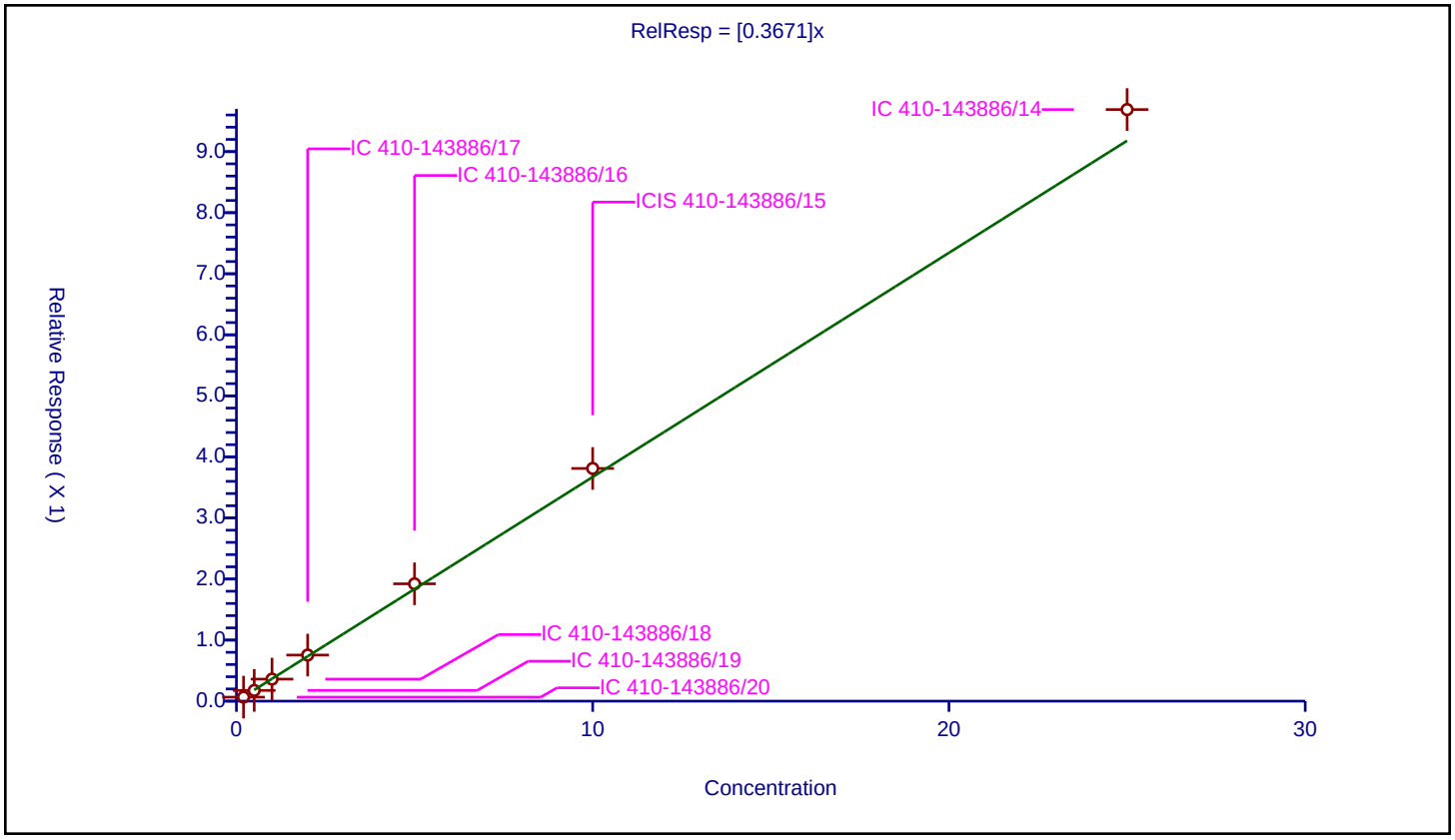
Curve Coefficients

Intercept:	0
Slope:	0.3671

Error Coefficients

Standard Error:	744000
Relative Standard Error:	5.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.200009	0.065581	10.0	1708734.0	0.327889	Y
2	IC 410-143886/19	0.500022	0.175379	10.0	1704998.0	0.350742	Y
3	IC 410-143886/18	1.000044	0.360917	10.0	1761735.0	0.360901	Y
4	IC 410-143886/17	2.000088	0.75487	10.0	1742684.0	0.377419	Y
5	IC 410-143886/16	5.000219	1.921686	10.0	1752836.0	0.38432	Y
6	ICIS 410-143886/15	10.000438	3.811077	10.0	1741980.0	0.381091	Y
7	IC 410-143886/14	25.001094	9.688993	10.0	1709928.0	0.387543	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

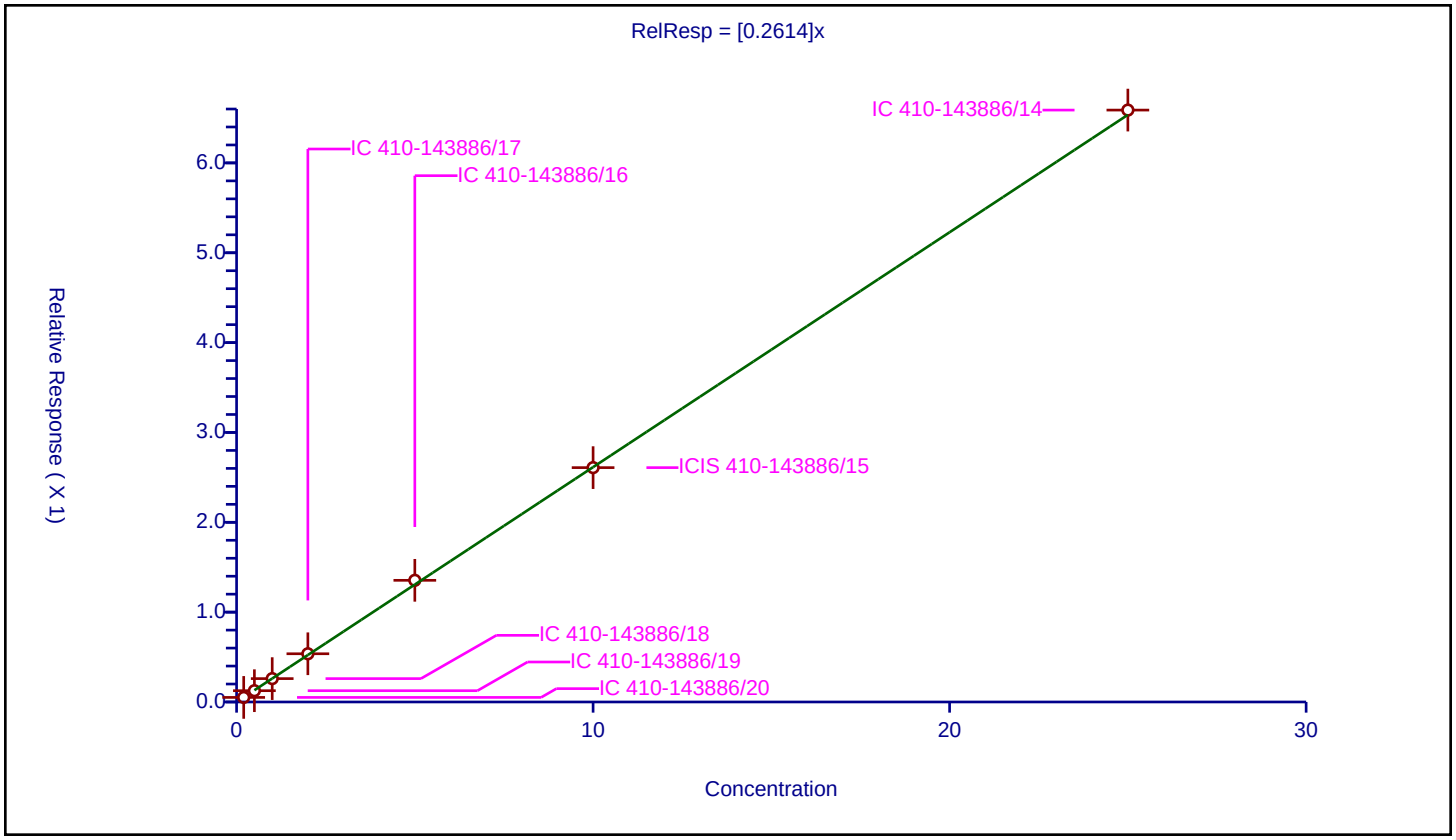
Curve Coefficients

Intercept:	0
Slope:	0.2614

Error Coefficients

Standard Error:	507000
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.050979	10.0	1708734.0	0.254896	Y
2	IC 410-143886/19	0.5	0.125572	10.0	1704998.0	0.251144	Y
3	IC 410-143886/18	1.0	0.260226	10.0	1761735.0	0.260226	Y
4	IC 410-143886/17	2.0	0.536707	10.0	1742684.0	0.268353	Y
5	IC 410-143886/16	5.0	1.354337	10.0	1752836.0	0.270867	Y
6	ICIS 410-143886/15	10.0	2.608451	10.0	1741980.0	0.260845	Y
7	IC 410-143886/14	25.0	6.588201	10.0	1709928.0	0.263528	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

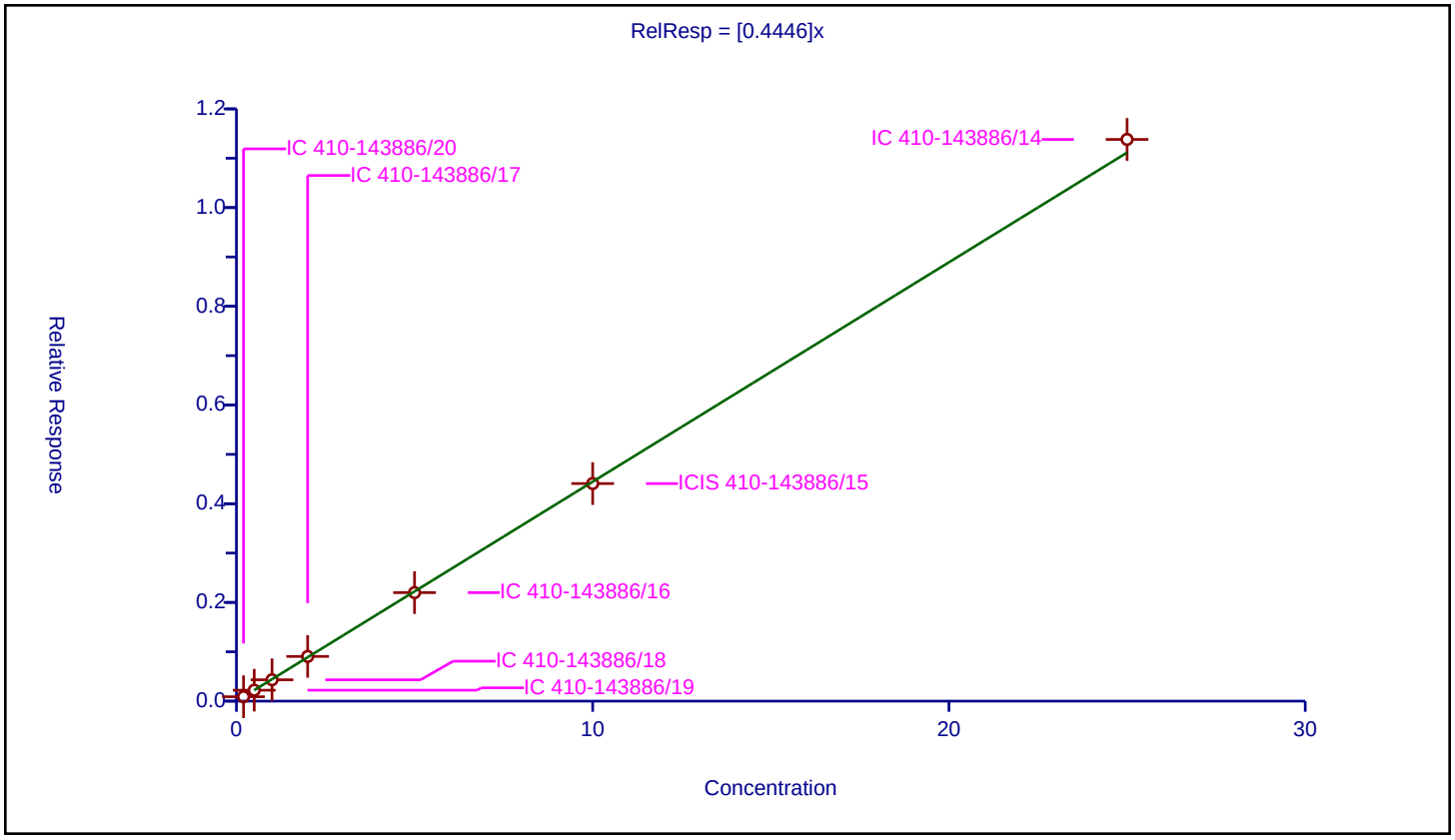
Curve Coefficients

Intercept:	0
Slope:	0.4446

Error Coefficients

Standard Error:	872000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.089411	10.0	1708734.0	0.447056	Y
2	IC 410-143886/19	0.5	0.221625	10.0	1704998.0	0.44325	Y
3	IC 410-143886/18	1.0	0.432744	10.0	1761735.0	0.432744	Y
4	IC 410-143886/17	2.0	0.906062	10.0	1742684.0	0.453031	Y
5	IC 410-143886/16	5.0	2.198945	10.0	1752836.0	0.439789	Y
6	ICIS 410-143886/15	10.0	4.40892	10.0	1741980.0	0.440892	Y
7	IC 410-143886/14	25.0	11.381041	10.0	1709928.0	0.455242	Y



Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

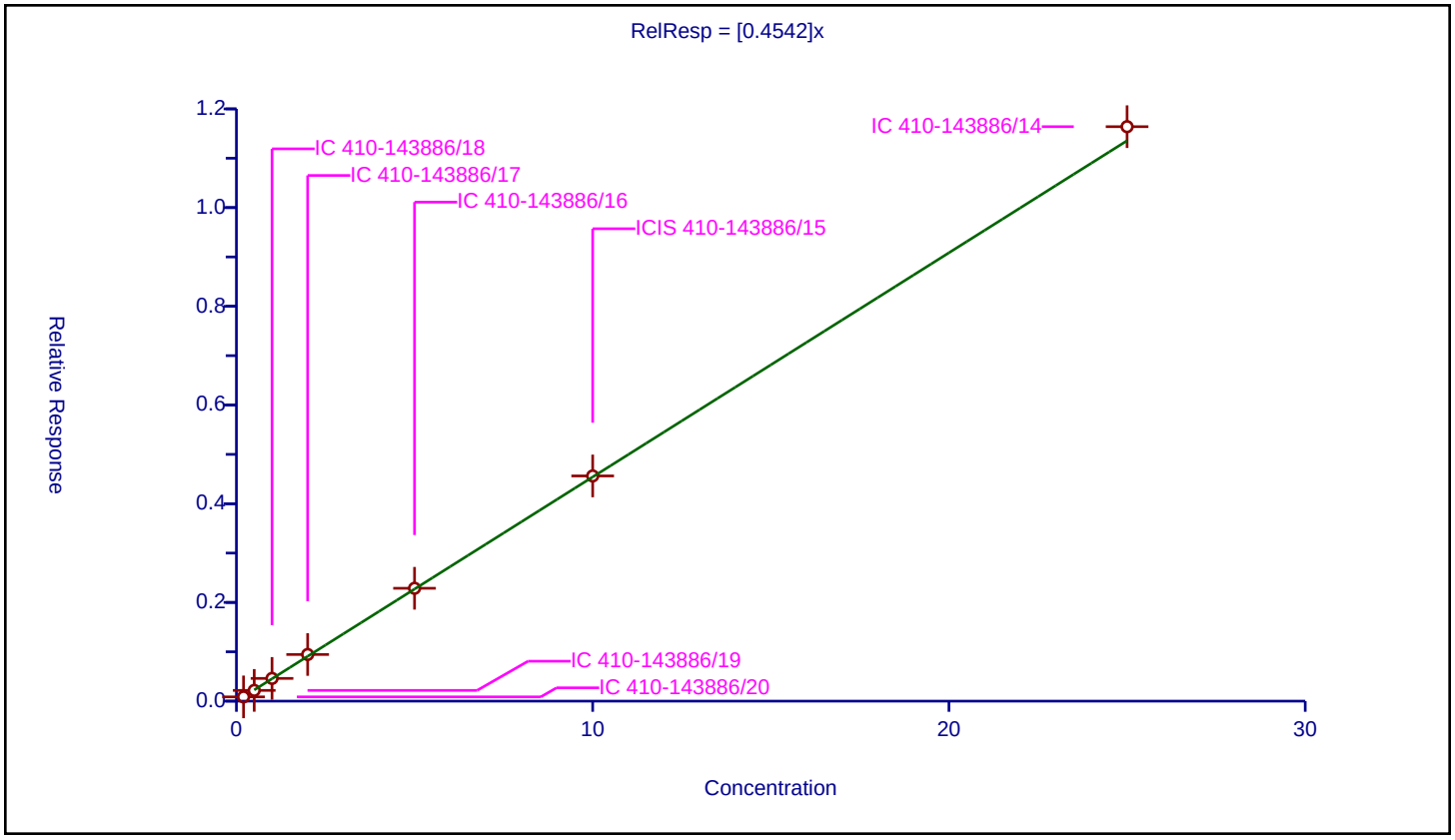
Curve Coefficients

Intercept:	0
Slope:	0.4542

Error Coefficients

Standard Error:	893000
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 410-143886/20	0.2	0.086304	10.0	1708734.0	0.431518	Y
2	IC 410-143886/19	0.5	0.218	10.0	1704998.0	0.436001	Y
3	IC 410-143886/18	1.0	0.460393	10.0	1761735.0	0.460393	Y
4	IC 410-143886/17	2.0	0.944985	10.0	1742684.0	0.472492	Y
5	IC 410-143886/16	5.0	2.286734	10.0	1752836.0	0.457347	Y
6	ICIS 410-143886/15	10.0	4.562888	10.0	1741980.0	0.456289	Y
7	IC 410-143886/14	25.0	11.639315	10.0	1709928.0	0.465573	Y



Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

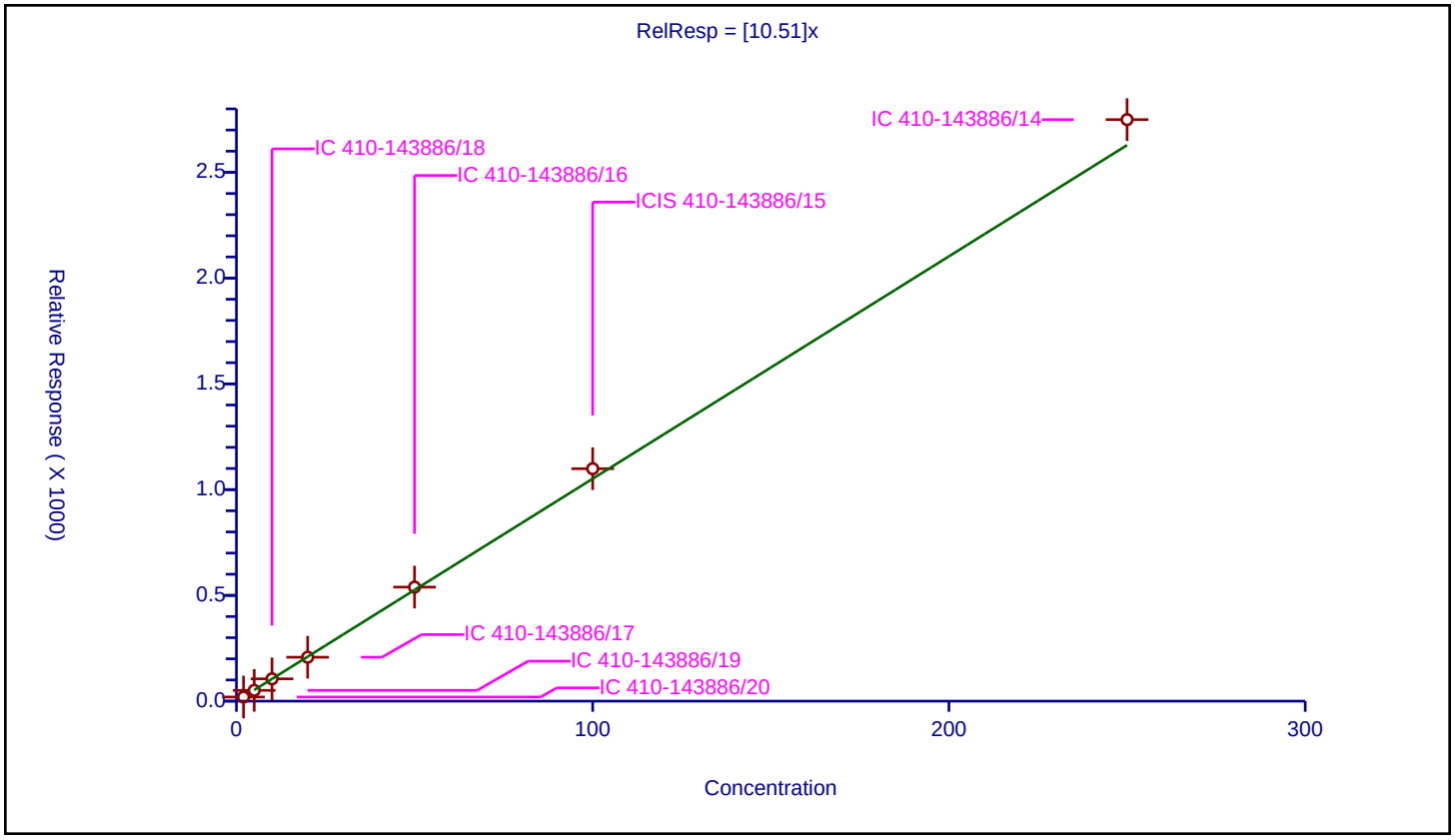
Curve Coefficients

Intercept:	0
Slope:	10.51

Error Coefficients

Standard Error:	2980000
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	2.0	19.413544	50.0	126301.0	9.706772	Y
2	IC 410-143886/19	5.0	50.983599	50.0	128101.0	10.19672	Y
3	IC 410-143886/18	10.0	105.479242	50.0	127180.0	10.547924	Y
4	IC 410-143886/17	20.0	207.58878	50.0	130548.0	10.379439	Y
5	IC 410-143886/16	50.0	539.153007	50.0	130308.0	10.78306	Y
6	ICIS 410-143886/15	100.0	1098.9397	50.0	123880.0	10.989397	Y
7	IC 410-143886/14	250.0	2749.257759	50.0	120244.0	10.997031	Y



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

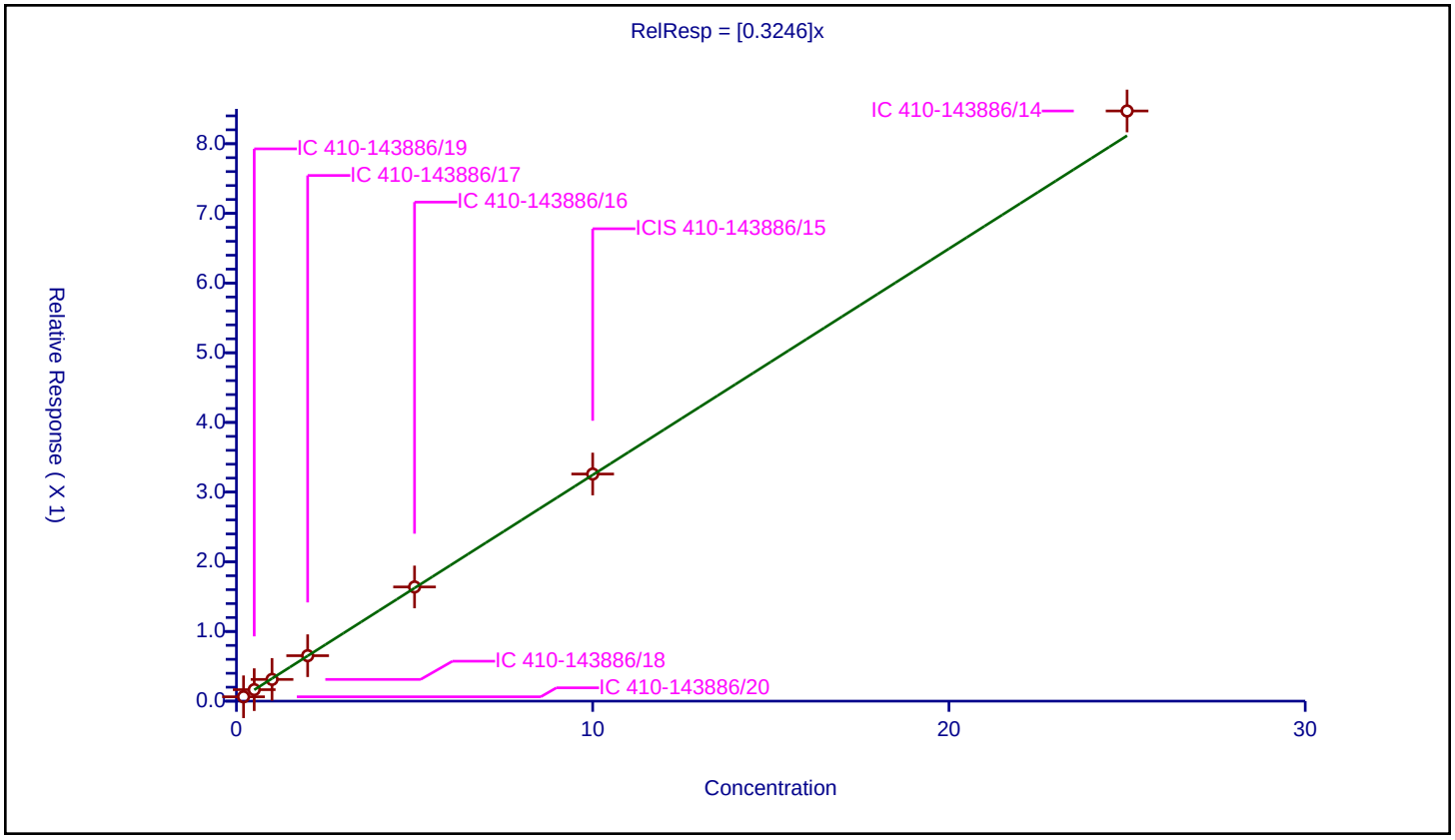
Curve Coefficients

Intercept:	0
Slope:	0.3246

Error Coefficients

Standard Error:	648000
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.062461	10.0	1708734.0	0.312307	Y
2	IC 410-143886/19	0.5	0.164886	10.0	1704998.0	0.329772	Y
3	IC 410-143886/18	1.0	0.311784	10.0	1761735.0	0.311784	Y
4	IC 410-143886/17	2.0	0.652316	10.0	1742684.0	0.326158	Y
5	IC 410-143886/16	5.0	1.638773	10.0	1752836.0	0.327755	Y
6	ICIS 410-143886/15	10.0	3.25963	10.0	1741980.0	0.325963	Y
7	IC 410-143886/14	25.0	8.470053	10.0	1709928.0	0.338802	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

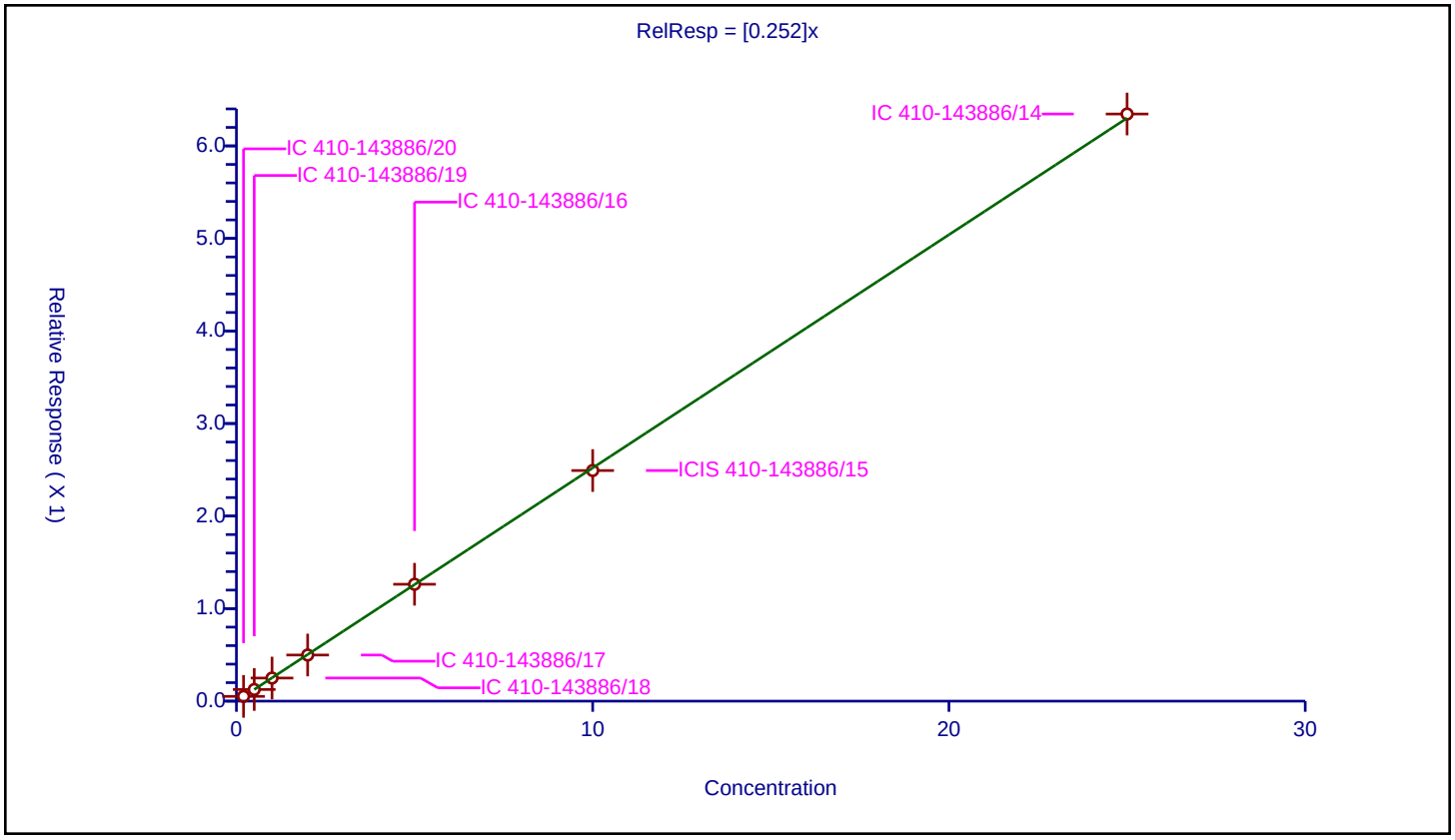
Curve Coefficients

Intercept:	0
Slope:	0.252

Error Coefficients

Standard Error:	487000
Relative Standard Error:	1.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.051494	10.0	1708734.0	0.257471	Y
2	IC 410-143886/19	0.5	0.126059	10.0	1704998.0	0.252118	Y
3	IC 410-143886/18	1.0	0.249737	10.0	1761735.0	0.249737	Y
4	IC 410-143886/17	2.0	0.498335	10.0	1742684.0	0.249167	Y
5	IC 410-143886/16	5.0	1.262953	10.0	1752836.0	0.252591	Y
6	ICIS 410-143886/15	10.0	2.492015	10.0	1741980.0	0.249201	Y
7	IC 410-143886/14	25.0	6.344793	10.0	1709928.0	0.253792	Y



Calibration / 1-Chlorohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

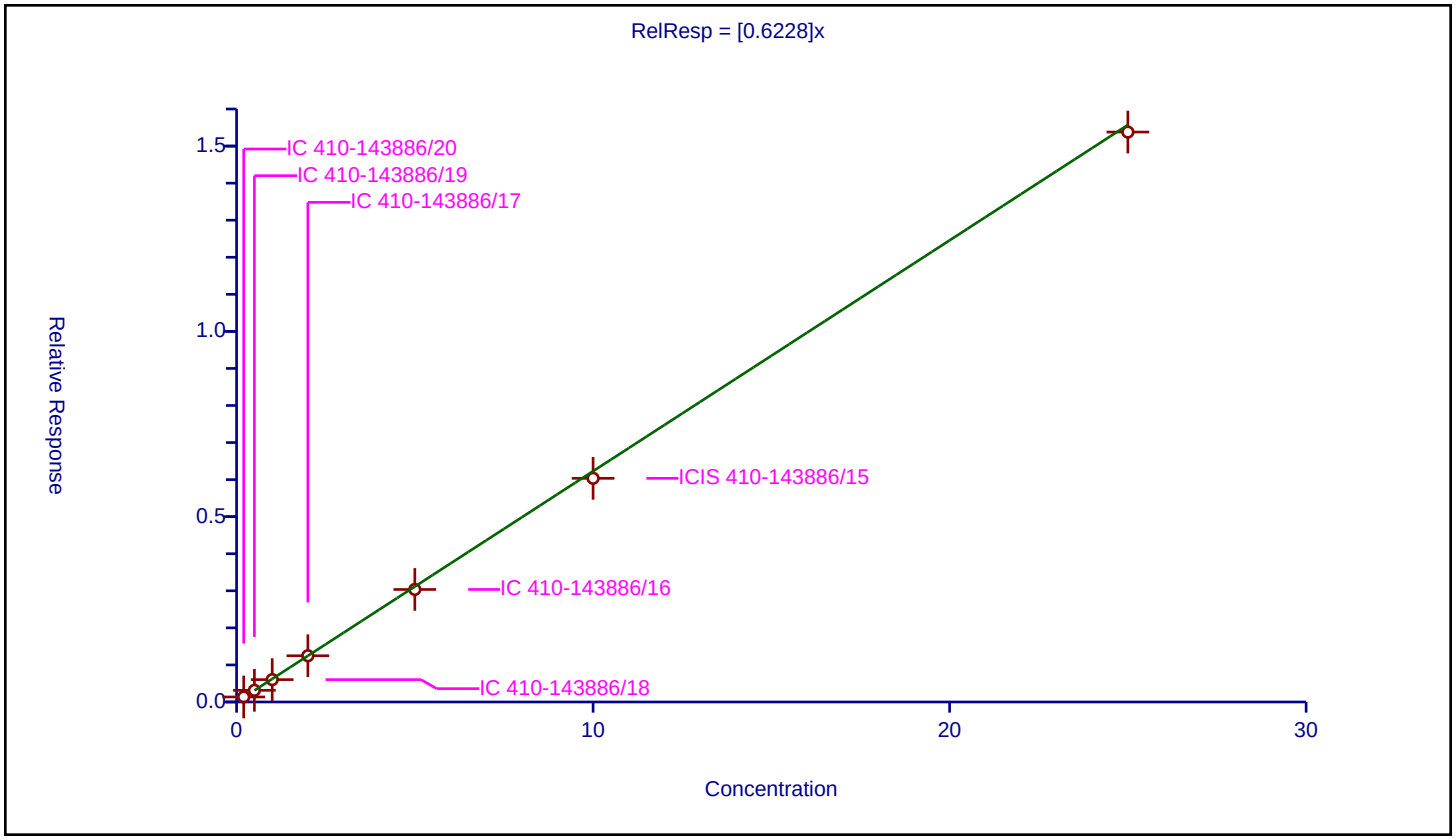
Curve Coefficients

Intercept:	0
Slope:	0.6228

Error Coefficients

Standard Error:	1180000
Relative Standard Error:	4.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.13551	10.0	1708734.0	0.677548	Y
2	IC 410-143886/19	0.5	0.314528	10.0	1704998.0	0.629056	Y
3	IC 410-143886/18	1.0	0.603649	10.0	1761735.0	0.603649	Y
4	IC 410-143886/17	2.0	1.247048	10.0	1742684.0	0.623524	Y
5	IC 410-143886/16	5.0	3.036331	10.0	1752836.0	0.607266	Y
6	ICIS 410-143886/15	10.0	6.03515	10.0	1741980.0	0.603515	Y
7	IC 410-143886/14	25.0	15.378045	10.0	1709928.0	0.615122	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

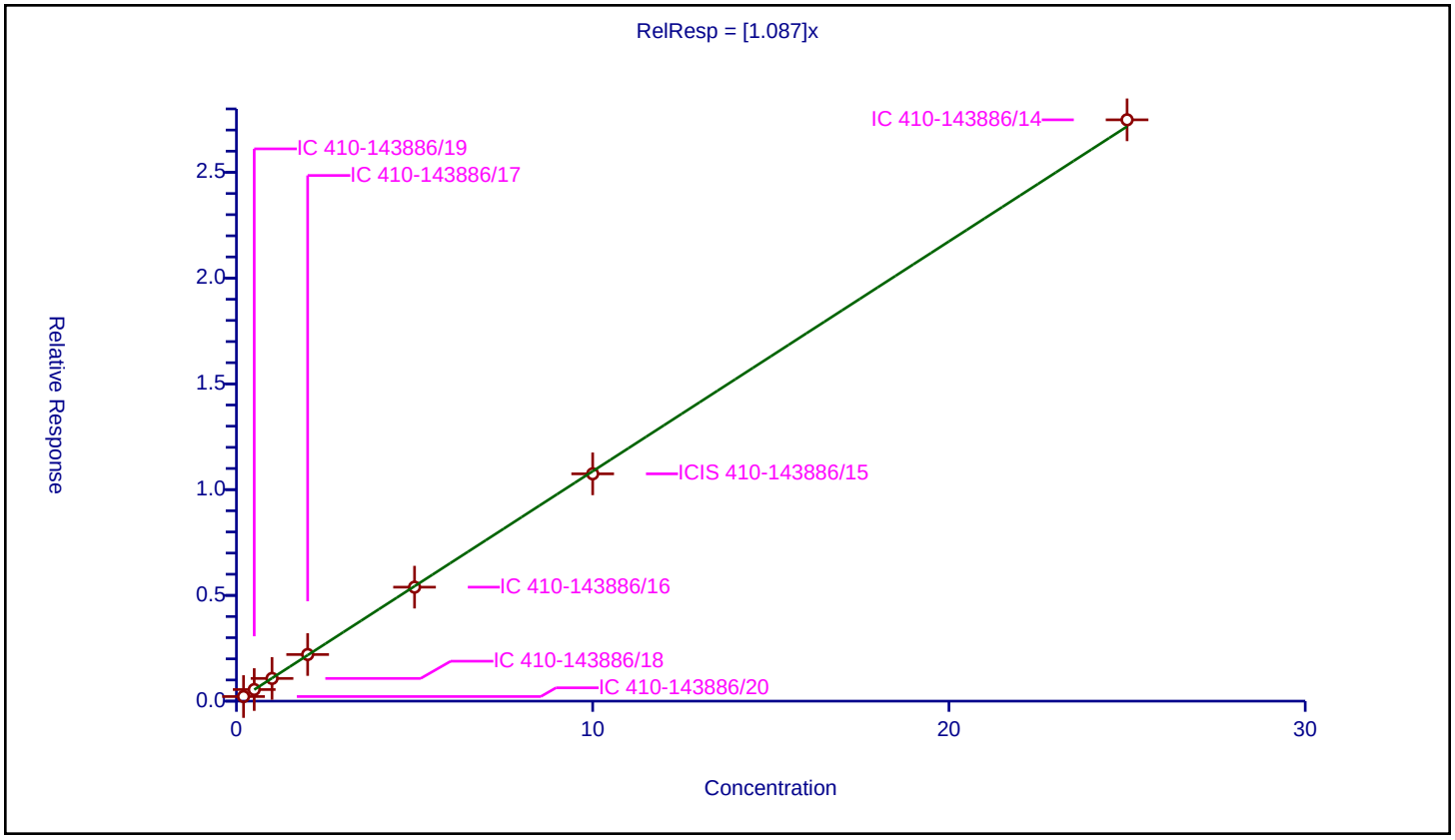
Curve Coefficients

Intercept:	0
Slope:	1.087

Error Coefficients

Standard Error:	2110000
Relative Standard Error:	1.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.216734	10.0	1708734.0	1.083668	Y
2	IC 410-143886/19	0.5	0.548012	10.0	1704998.0	1.096025	Y
3	IC 410-143886/18	1.0	1.073623	10.0	1761735.0	1.073623	Y
4	IC 410-143886/17	2.0	2.204324	10.0	1742684.0	1.102162	Y
5	IC 410-143886/16	5.0	5.389318	10.0	1752836.0	1.077864	Y
6	ICIS 410-143886/15	10.0	10.746306	10.0	1741980.0	1.074631	Y
7	IC 410-143886/14	25.0	27.484134	10.0	1709928.0	1.099365	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

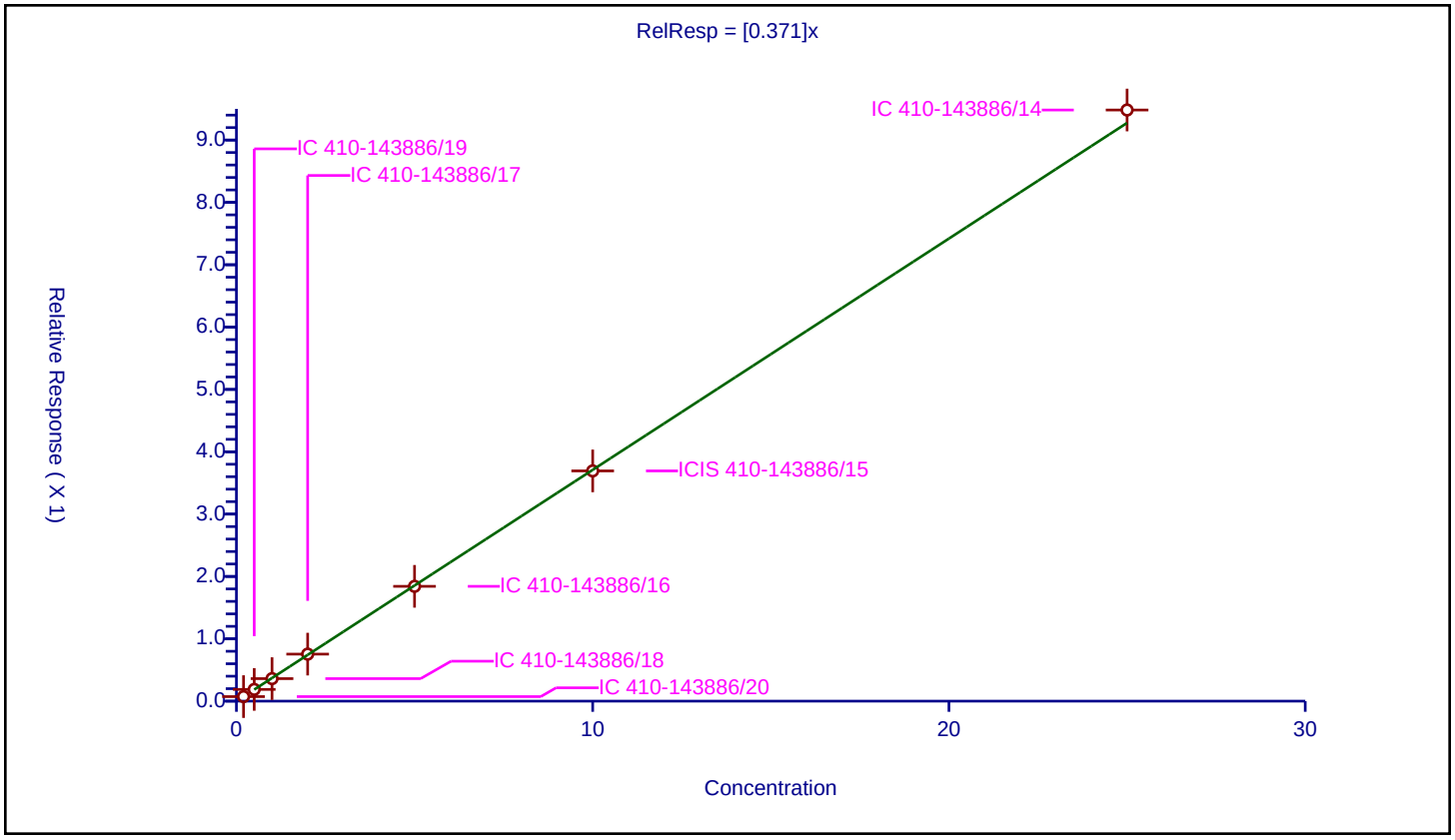
Curve Coefficients

Intercept:	0
Slope:	0.371

Error Coefficients

Standard Error:	727000
Relative Standard Error:	1.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.072972	10.0	1708734.0	0.364861	Y
2	IC 410-143886/19	0.5	0.188387	10.0	1704998.0	0.376775	Y
3	IC 410-143886/18	1.0	0.36132	10.0	1761735.0	0.36132	Y
4	IC 410-143886/17	2.0	0.754296	10.0	1742684.0	0.377148	Y
5	IC 410-143886/16	5.0	1.841536	10.0	1752836.0	0.368307	Y
6	ICIS 410-143886/15	10.0	3.693091	10.0	1741980.0	0.369309	Y
7	IC 410-143886/14	25.0	9.482206	10.0	1709928.0	0.379288	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

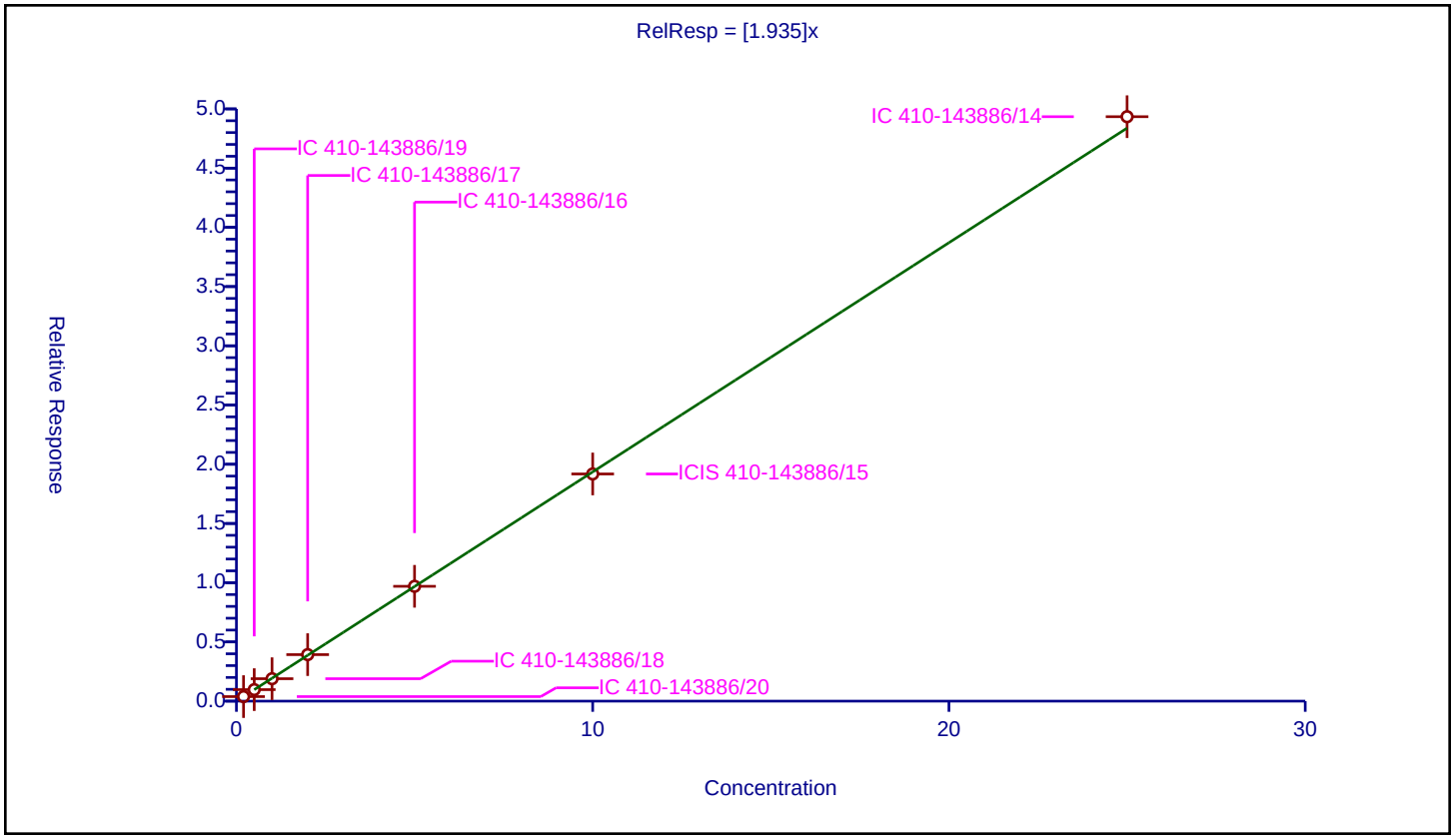
Curve Coefficients

Intercept:	0
Slope:	1.935

Error Coefficients

Standard Error:	3780000
Relative Standard Error:	1.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.382944	10.0	1708734.0	1.914722	Y
2	IC 410-143886/19	0.5	0.972077	10.0	1704998.0	1.944155	Y
3	IC 410-143886/18	1.0	1.893497	10.0	1761735.0	1.893497	Y
4	IC 410-143886/17	2.0	3.926552	10.0	1742684.0	1.963276	Y
5	IC 410-143886/16	5.0	9.693759	10.0	1752836.0	1.938752	Y
6	ICIS 410-143886/15	10.0	19.179101	10.0	1741980.0	1.91791	Y
7	IC 410-143886/14	25.0	49.342183	10.0	1709928.0	1.973687	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

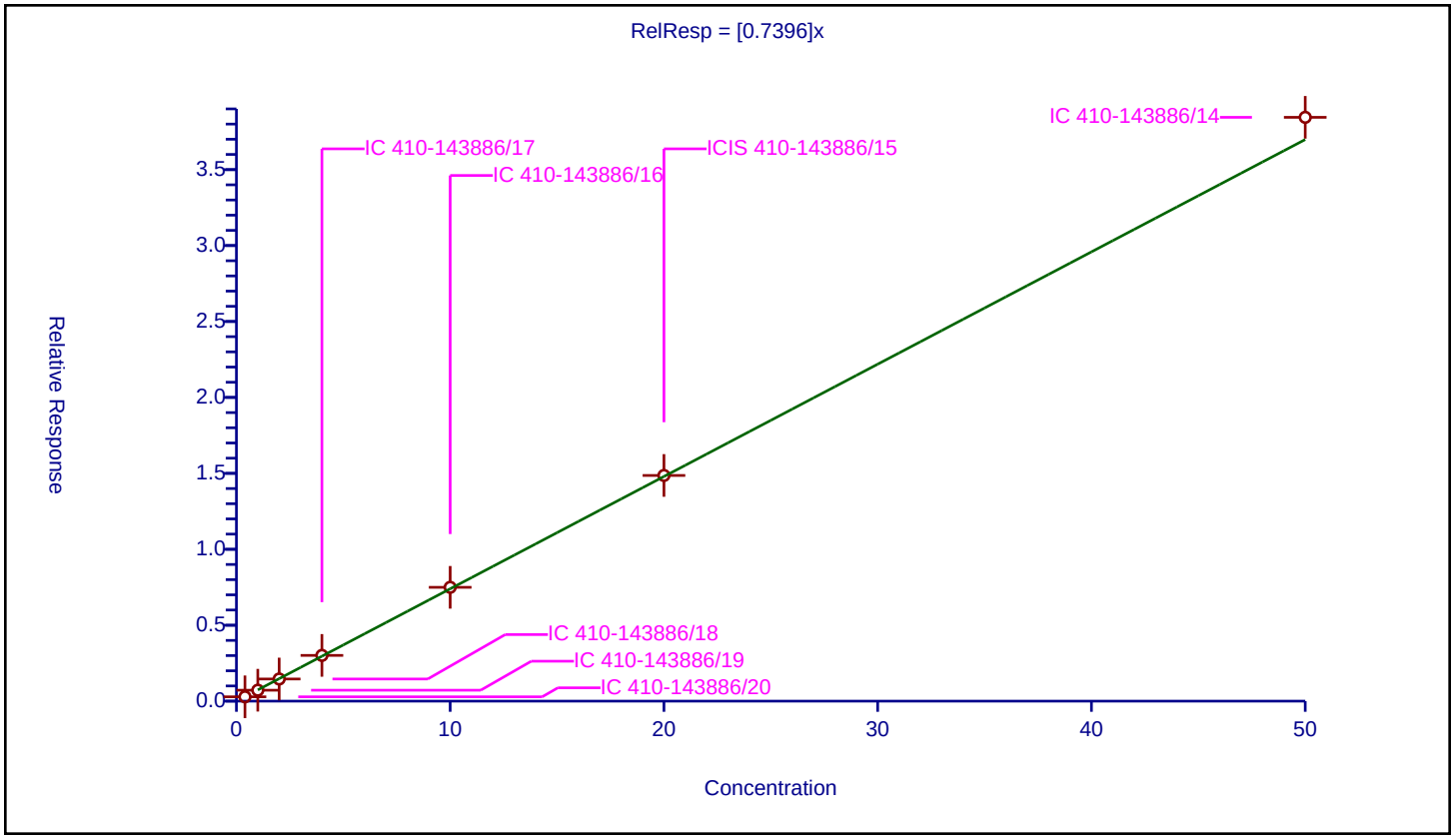
Curve Coefficients

Intercept:	0
Slope:	0.7396

Error Coefficients

Standard Error:	2940000
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.4	0.285094	10.0	1708734.0	0.712735	Y
2	IC 410-143886/19	1.0	0.72057	10.0	1704998.0	0.72057	Y
3	IC 410-143886/18	2.0	1.459152	10.0	1761735.0	0.729576	Y
4	IC 410-143886/17	4.0	3.011912	10.0	1742684.0	0.752978	Y
5	IC 410-143886/16	10.0	7.495887	10.0	1752836.0	0.749589	Y
6	ICIS 410-143886/15	20.0	14.860911	10.0	1741980.0	0.743046	Y
7	IC 410-143886/14	50.0	38.443835	10.0	1709928.0	0.768877	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

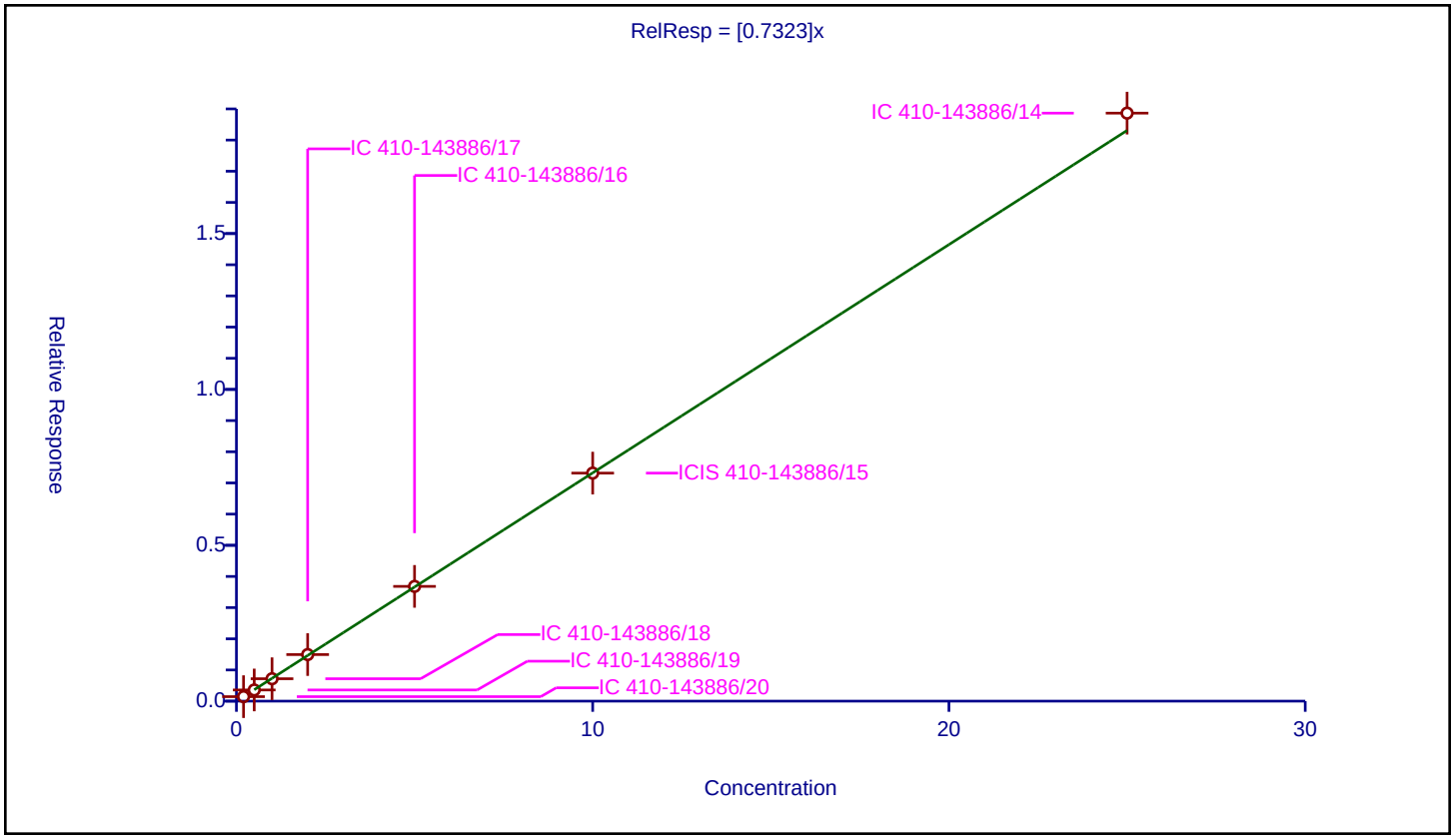
Curve Coefficients

Intercept:	0
Slope:	0.7323

Error Coefficients

Standard Error:	1450000
Relative Standard Error:	2.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.144253	10.0	1708734.0	0.721265	Y
2	IC 410-143886/19	0.5	0.358646	10.0	1704998.0	0.717291	Y
3	IC 410-143886/18	1.0	0.718615	10.0	1761735.0	0.718615	Y
4	IC 410-143886/17	2.0	1.493644	10.0	1742684.0	0.746822	Y
5	IC 410-143886/16	5.0	3.681109	10.0	1752836.0	0.736222	Y
6	ICIS 410-143886/15	10.0	7.315497	10.0	1741980.0	0.73155	Y
7	IC 410-143886/14	25.0	18.864116	10.0	1709928.0	0.754565	Y



Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

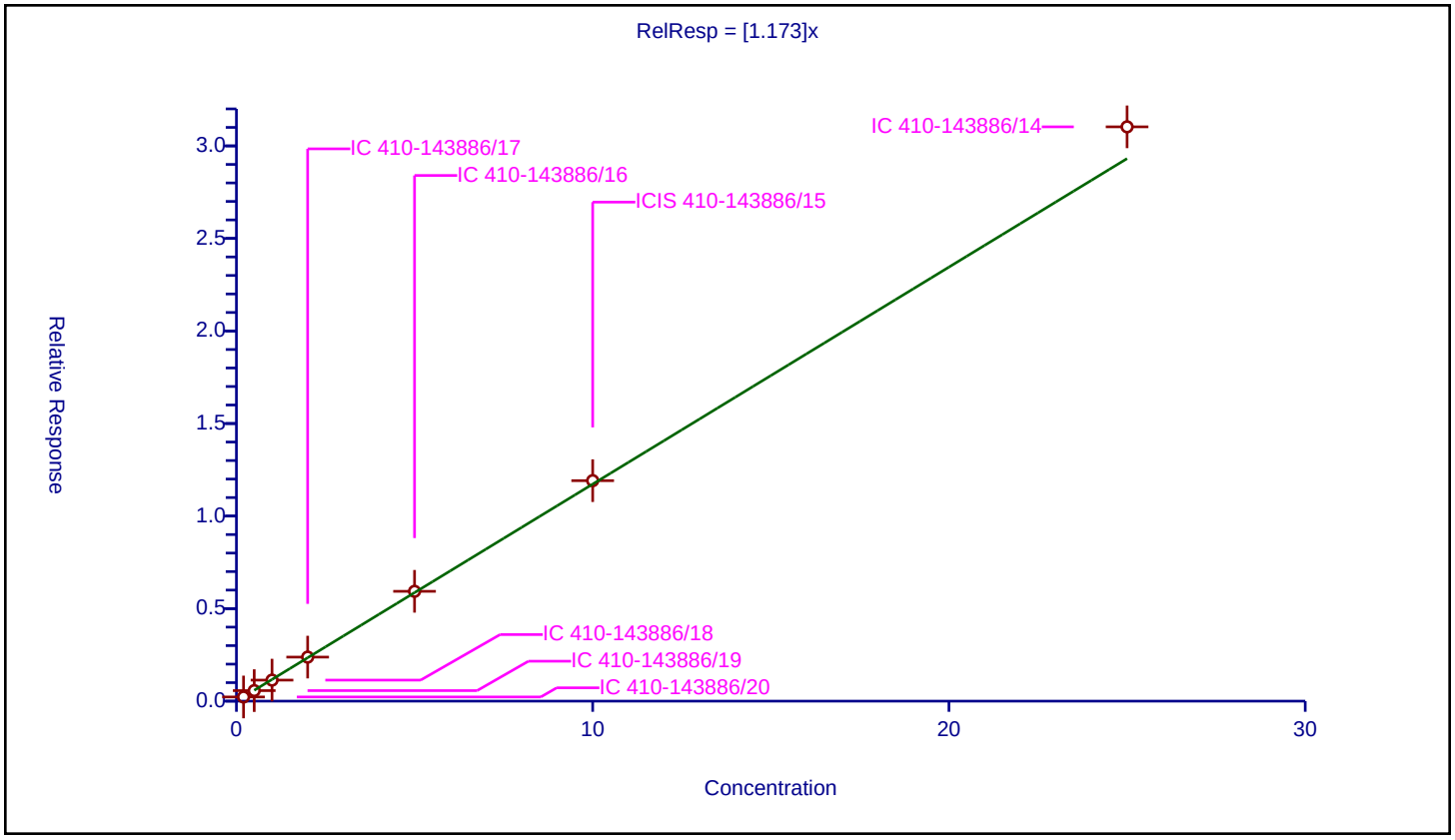
Curve Coefficients

Intercept:	0
Slope:	1.173

Error Coefficients

Standard Error:	2370000
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 410-143886/20	0.2	0.225155	10.0	1708734.0	1.125775	Y
2	IC 410-143886/19	0.5	0.569033	10.0	1704998.0	1.138066	Y
3	IC 410-143886/18	1.0	1.135449	10.0	1761735.0	1.135449	Y
4	IC 410-143886/17	2.0	2.379043	10.0	1742684.0	1.189521	Y
5	IC 410-143886/16	5.0	5.934275	10.0	1752836.0	1.186855	Y
6	ICIS 410-143886/15	10.0	11.91326	10.0	1741980.0	1.191326	Y
7	IC 410-143886/14	25.0	31.030675	10.0	1709928.0	1.241227	Y



Calibration / Bromoform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

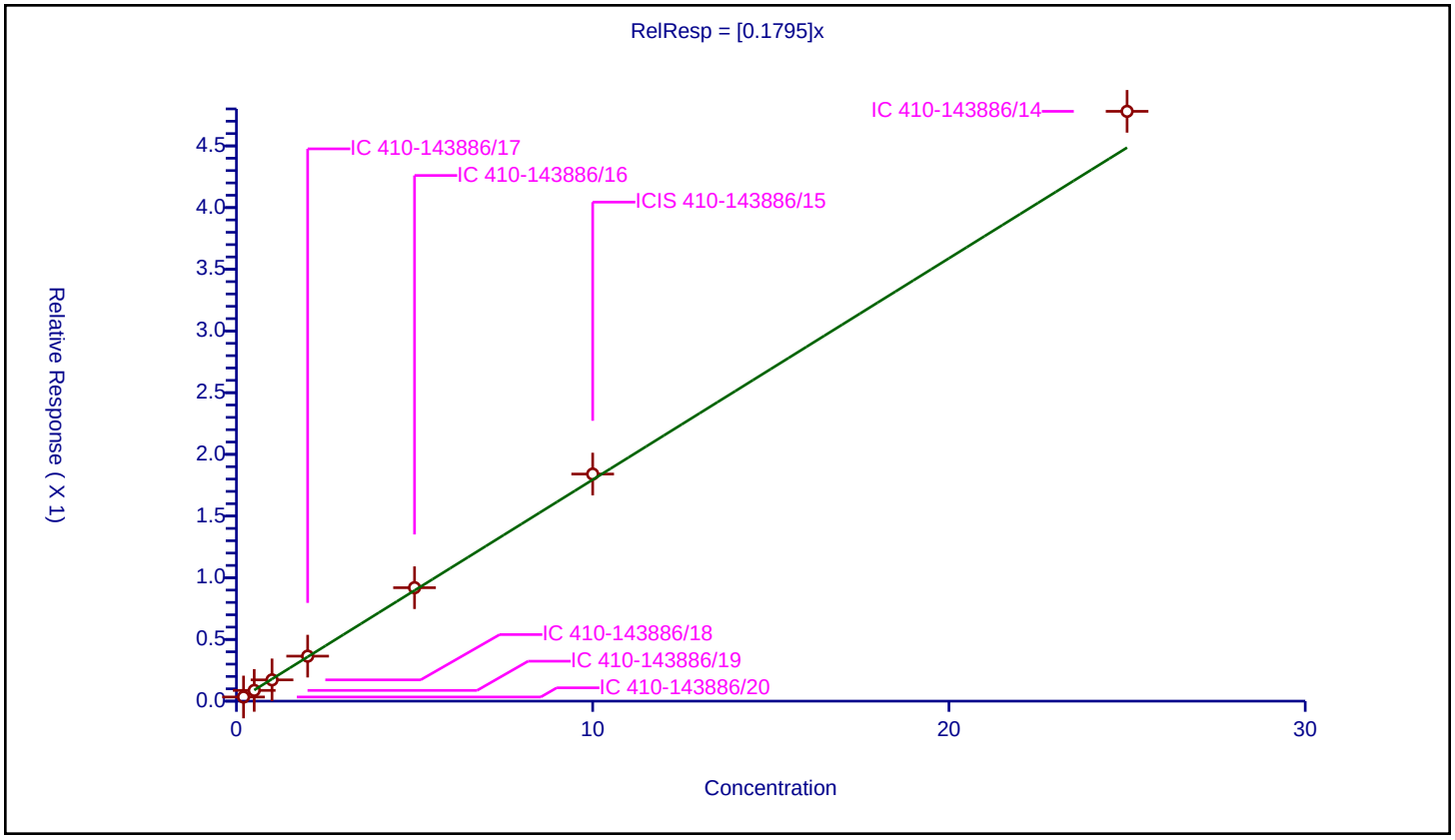
Curve Coefficients

Intercept:	0
Slope:	0.1795

Error Coefficients

Standard Error:	366000
Relative Standard Error:	4.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.033651	10.0	1708734.0	0.168253	Y
2	IC 410-143886/19	0.5	0.087085	10.0	1704998.0	0.17417	Y
3	IC 410-143886/18	1.0	0.172268	10.0	1761735.0	0.172268	Y
4	IC 410-143886/17	2.0	0.36465	10.0	1742684.0	0.182325	Y
5	IC 410-143886/16	5.0	0.919527	10.0	1752836.0	0.183905	Y
6	ICIS 410-143886/15	10.0	1.840457	10.0	1741980.0	0.184046	Y
7	IC 410-143886/14	25.0	4.78009	10.0	1709928.0	0.191204	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

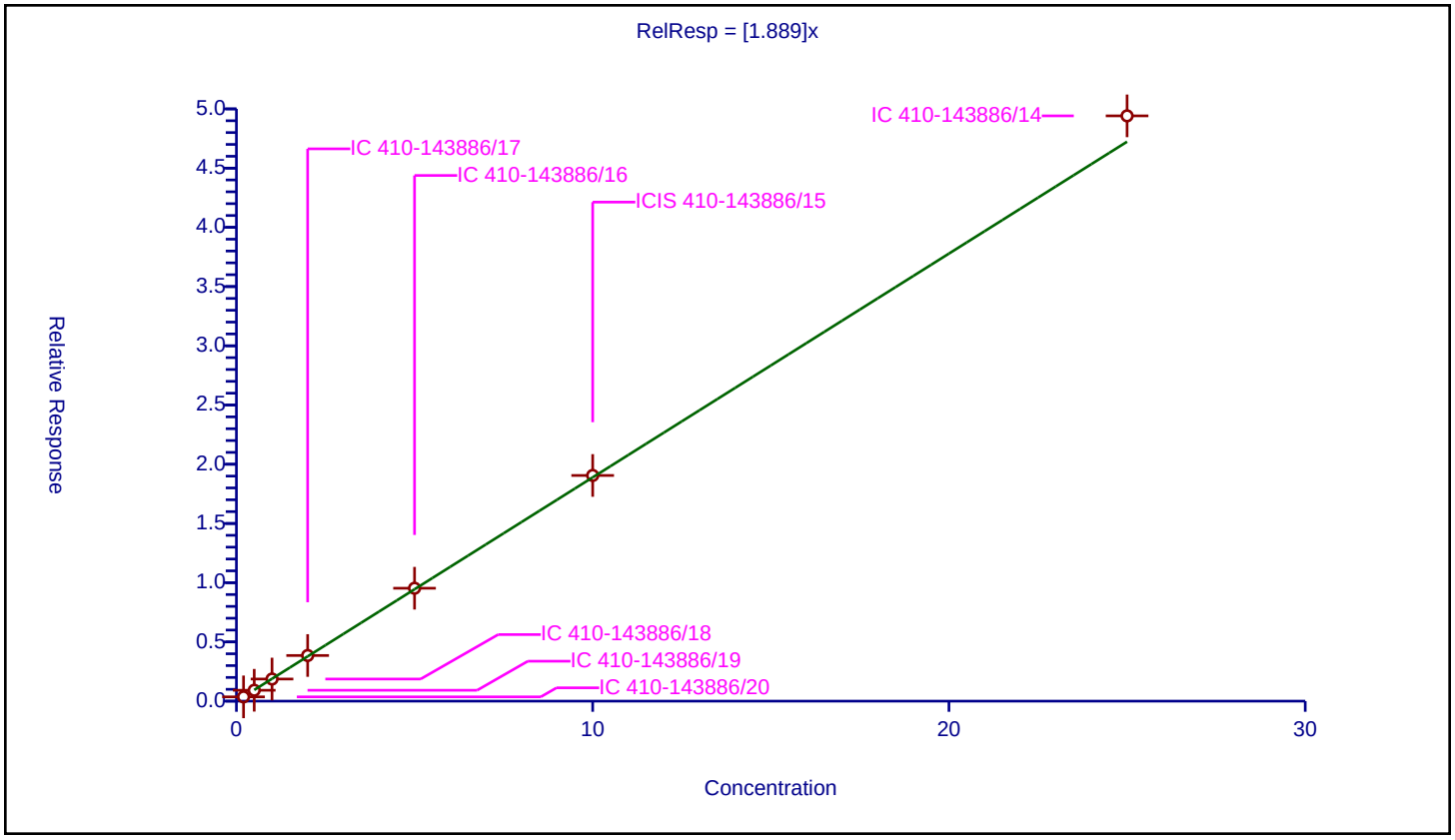
Curve Coefficients

Intercept:	0
Slope:	1.889

Error Coefficients

Standard Error:	3780000
Relative Standard Error:	3.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.360905	10.0	1708734.0	1.804523	Y
2	IC 410-143886/19	0.5	0.918863	10.0	1704998.0	1.837726	Y
3	IC 410-143886/18	1.0	1.867948	10.0	1761735.0	1.867948	Y
4	IC 410-143886/17	2.0	3.851989	10.0	1742684.0	1.925995	Y
5	IC 410-143886/16	5.0	9.532352	10.0	1752836.0	1.90647	Y
6	ICIS 410-143886/15	10.0	19.052475	10.0	1741980.0	1.905247	Y
7	IC 410-143886/14	25.0	49.411958	10.0	1709928.0	1.976478	Y



Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

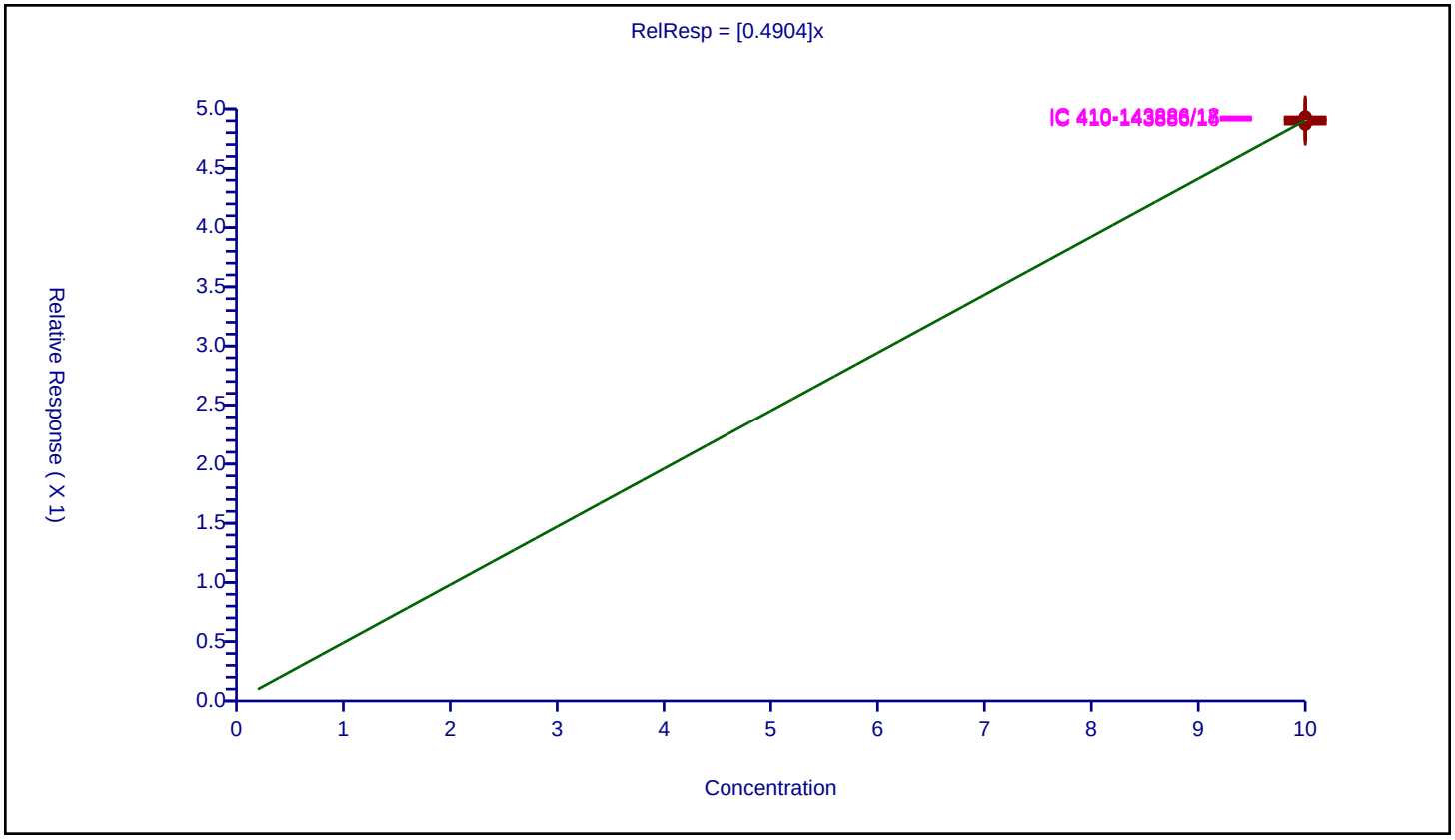
Curve Coefficients

Intercept:	0
Slope:	0.4904

Error Coefficients

Standard Error:	917000
Relative Standard Error:	0.4
Correlation Coefficient:	0
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/14	10.0	4.906014	10.0	1709928.0	0.490601	Y
2	ICIS 410-143886/15	10.0	4.900395	10.0	1741980.0	0.490039	Y
3	IC 410-143886/16	10.0	4.909569	10.0	1752836.0	0.490957	Y
4	IC 410-143886/17	10.0	4.92169	10.0	1742684.0	0.492169	Y
5	IC 410-143886/18	10.0	4.932933	10.0	1761735.0	0.493293	Y
6	IC 410-143886/19	10.0	4.872311	10.0	1704998.0	0.487231	Y
7	IC 410-143886/20	10.0	4.881591	10.0	1708734.0	0.488159	Y



Calibration / 1,1,2,2-Tetrachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

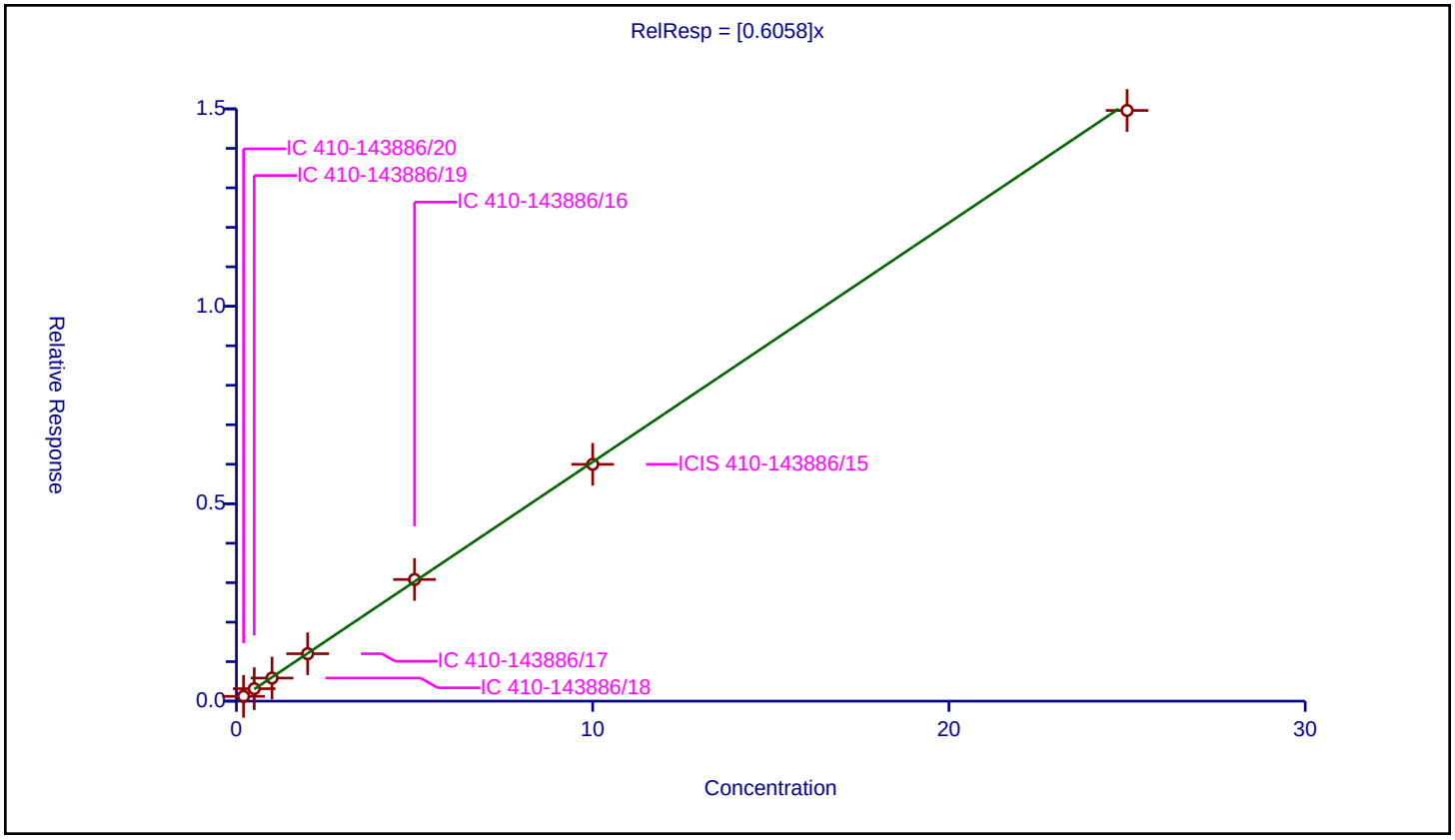
Curve Coefficients

Intercept:	0
Slope:	0.6058

Error Coefficients

Standard Error:	613000
Relative Standard Error:	2.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.122076	10.0	908776.0	0.610381	Y
2	IC 410-143886/19	0.5	0.315159	10.0	894470.0	0.630317	Y
3	IC 410-143886/18	1.0	0.584839	10.0	931316.0	0.584839	Y
4	IC 410-143886/17	2.0	1.201187	10.0	925401.0	0.600594	Y
5	IC 410-143886/16	5.0	3.081159	10.0	929147.0	0.616232	Y
6	ICIS 410-143886/15	10.0	5.99791	10.0	925399.0	0.599791	Y
7	IC 410-143886/14	25.0	14.960158	10.0	909469.0	0.598406	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

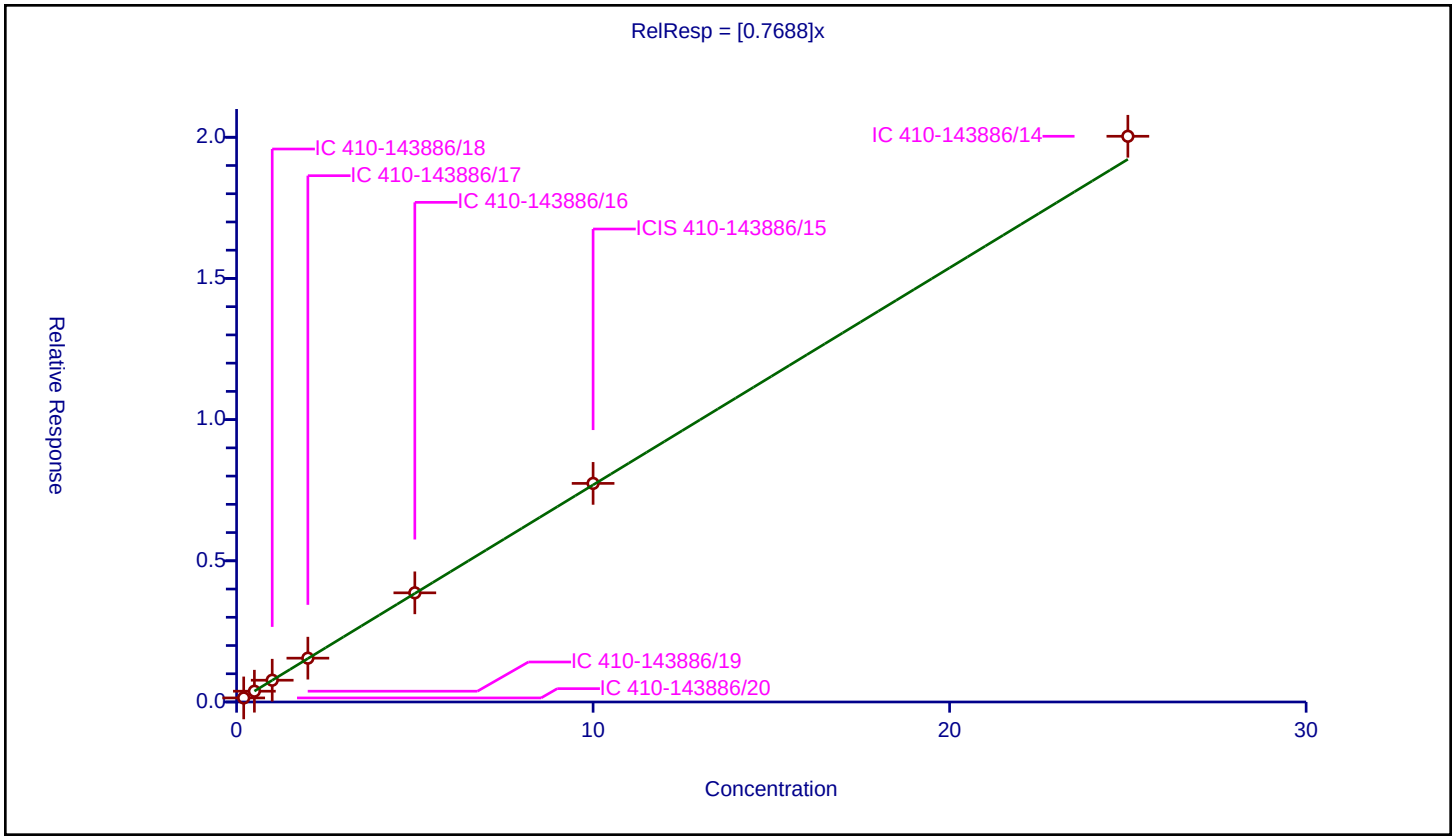
Curve Coefficients

Intercept:	0
Slope:	0.7688

Error Coefficients

Standard Error:	815000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.14448	10.0	908776.0	0.7224	Y
2	IC 410-143886/19	0.5	0.381611	10.0	894470.0	0.763223	Y
3	IC 410-143886/18	1.0	0.771199	10.0	931316.0	0.771199	Y
4	IC 410-143886/17	2.0	1.552192	10.0	925401.0	0.776096	Y
5	IC 410-143886/16	5.0	3.865589	10.0	929147.0	0.773118	Y
6	ICIS 410-143886/15	10.0	7.741569	10.0	925399.0	0.774157	Y
7	IC 410-143886/14	25.0	20.03479	10.0	909469.0	0.801392	Y



Calibration / trans-1,4-Dichloro-2-butene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

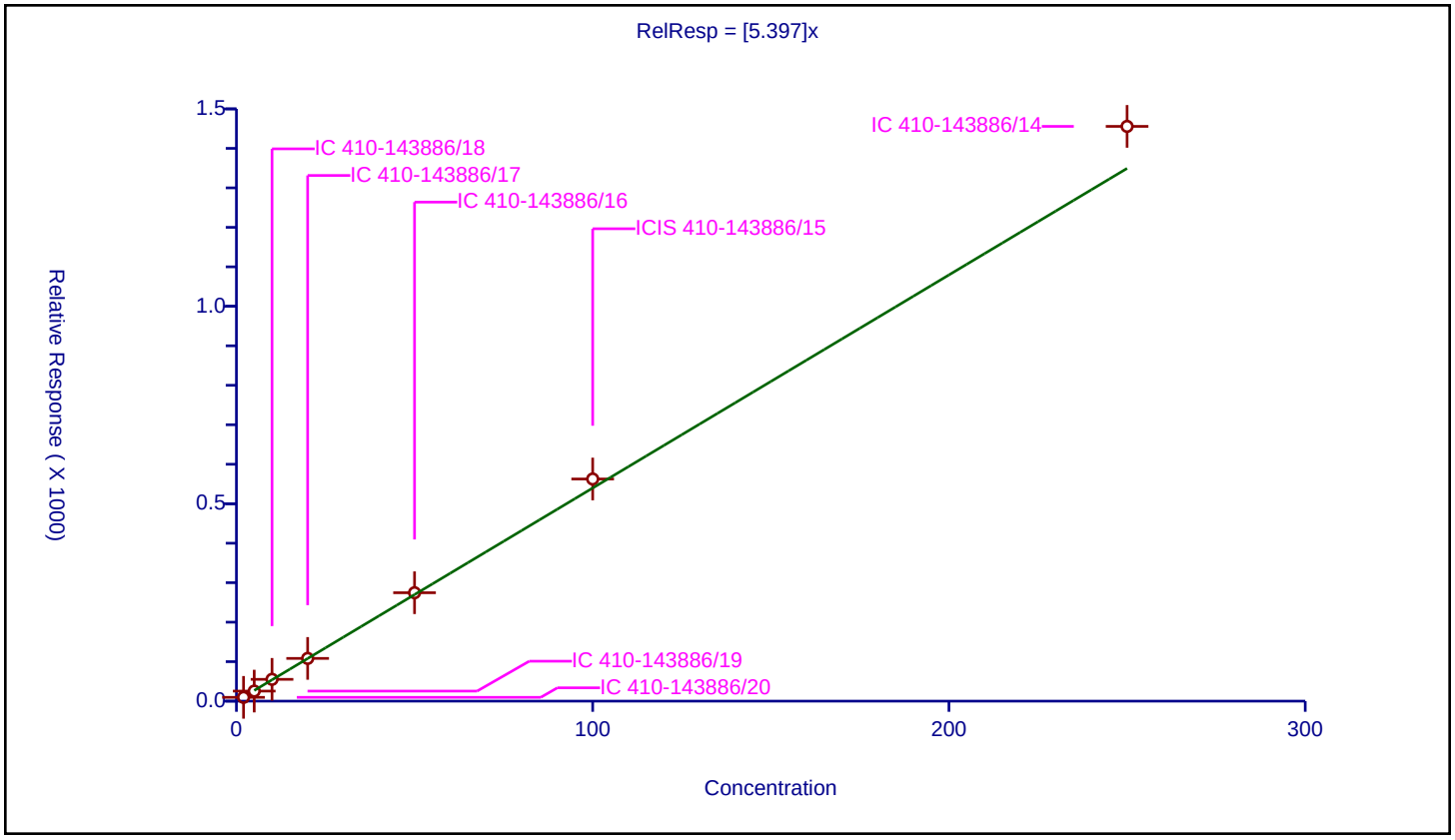
Curve Coefficients

Intercept:	0
Slope:	5.397

Error Coefficients

Standard Error:	1570000
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 410-143886/20	2.0	9.613938	50.0	126301.0	4.806969	Y
2	IC 410-143886/19	5.0	25.481846	50.0	128101.0	5.096369	Y
3	IC 410-143886/18	10.0	55.245322	50.0	127180.0	5.524532	Y
4	IC 410-143886/17	20.0	108.249073	50.0	130548.0	5.412454	Y
5	IC 410-143886/16	50.0	274.576005	50.0	130308.0	5.49152	Y
6	ICIS 410-143886/15	100.0	562.610591	50.0	123880.0	5.626106	Y
7	IC 410-143886/14	250.0	1455.663484	50.0	120244.0	5.822654	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

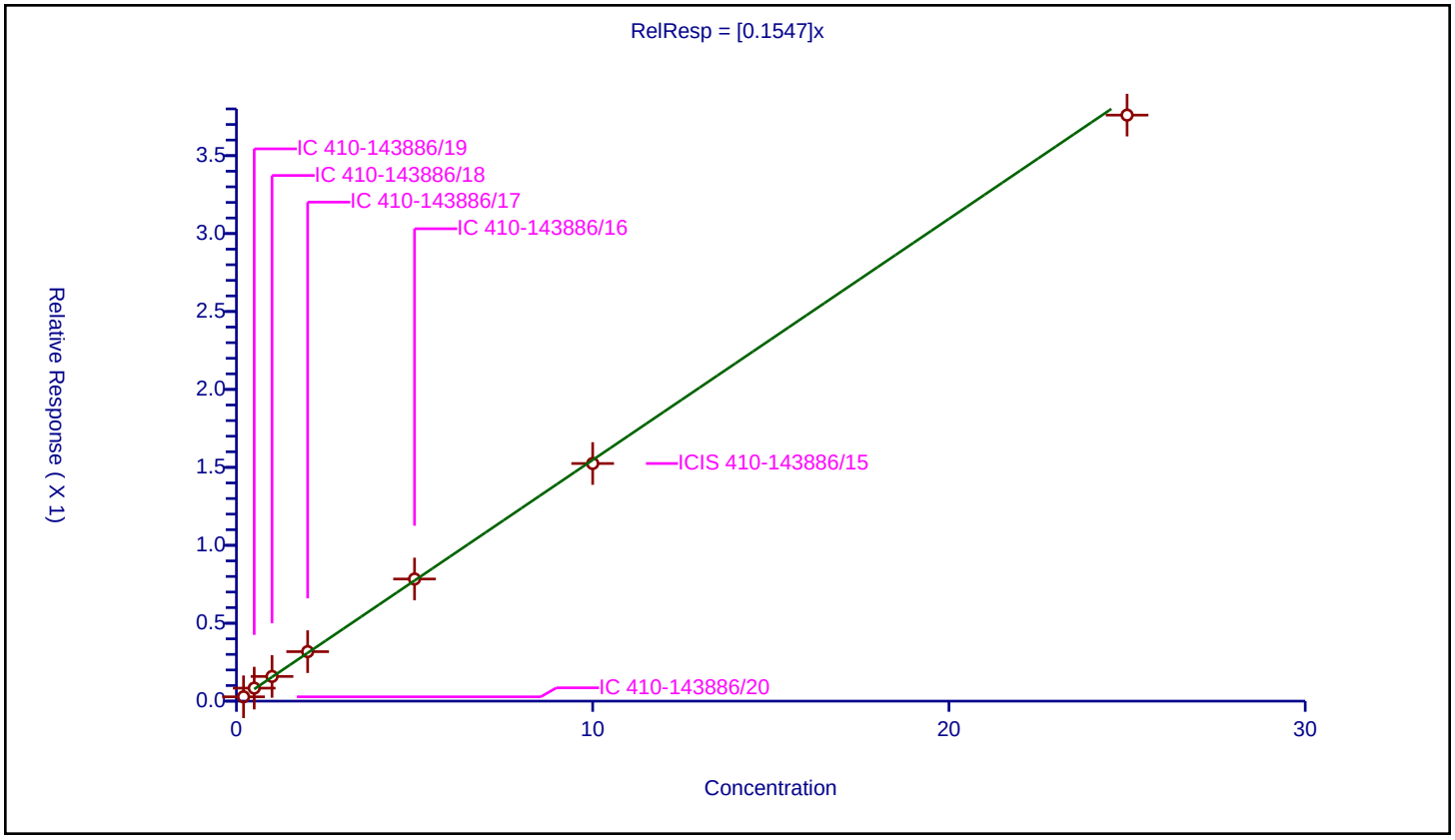
Curve Coefficients

Intercept:	0
Slope:	0.1547

Error Coefficients

Standard Error:	155000
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 410-143886/20	0.2	0.027829	10.0	908776.0	0.139143	Y
2	IC 410-143886/19	0.5	0.083536	10.0	894470.0	0.167071	Y
3	IC 410-143886/18	1.0	0.158485	10.0	931316.0	0.158485	Y
4	IC 410-143886/17	2.0	0.317592	10.0	925401.0	0.158796	Y
5	IC 410-143886/16	5.0	0.783643	10.0	929147.0	0.156729	Y
6	ICIS 410-143886/15	10.0	1.524683	10.0	925399.0	0.152468	Y
7	IC 410-143886/14	25.0	3.760172	10.0	909469.0	0.150407	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

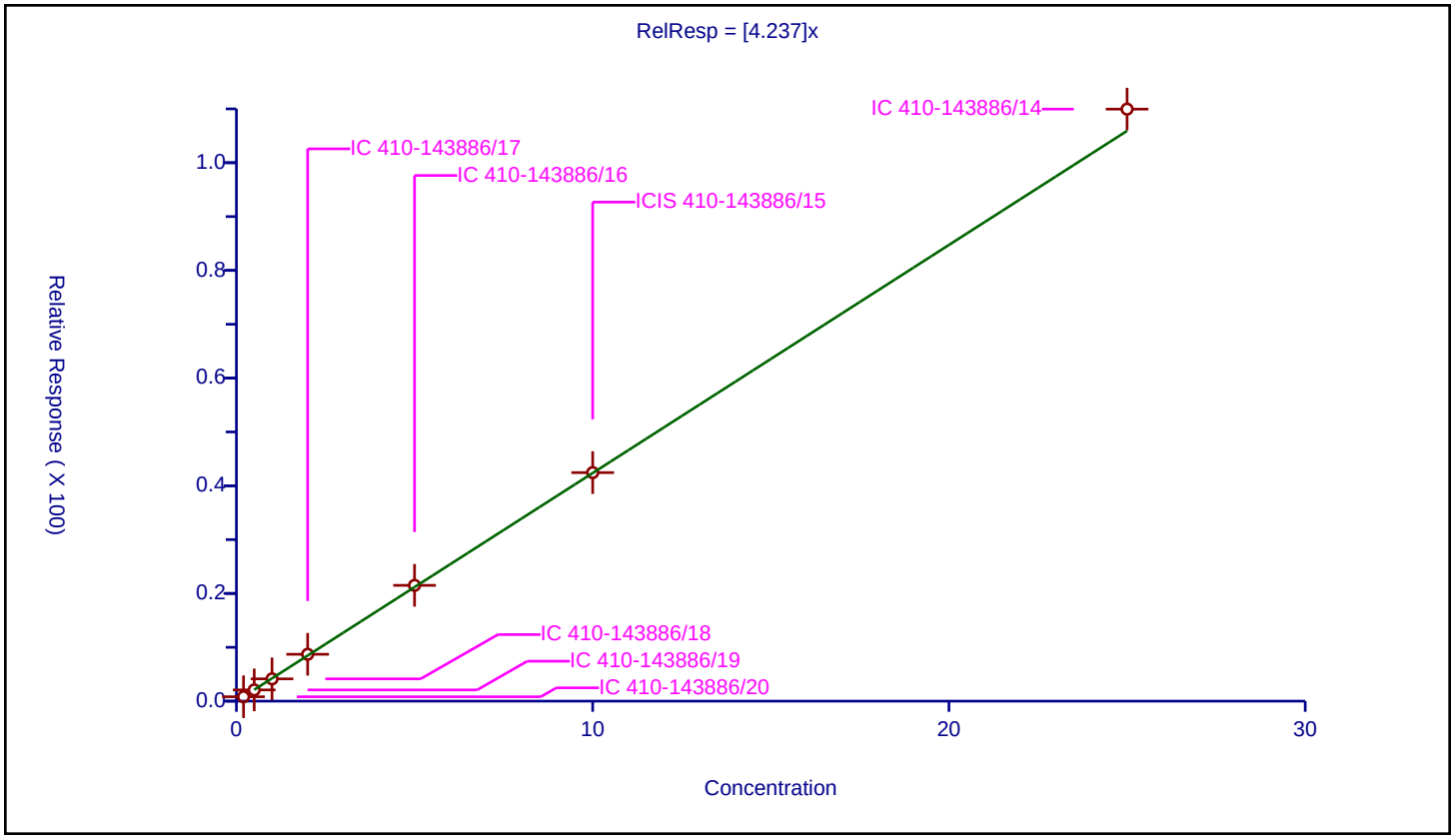
Curve Coefficients

Intercept:	0
Slope:	4.237

Error Coefficients

Standard Error:	4480000
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 410-143886/20	0.2	0.811454	10.0	908776.0	4.05727	Y
2	IC 410-143886/19	0.5	2.08329	10.0	894470.0	4.166579	Y
3	IC 410-143886/18	1.0	4.137114	10.0	931316.0	4.137114	Y
4	IC 410-143886/17	2.0	8.70172	10.0	925401.0	4.35086	Y
5	IC 410-143886/16	5.0	21.504466	10.0	929147.0	4.300893	Y
6	ICIS 410-143886/15	10.0	42.448425	10.0	925399.0	4.244842	Y
7	IC 410-143886/14	25.0	109.956667	10.0	909469.0	4.398267	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

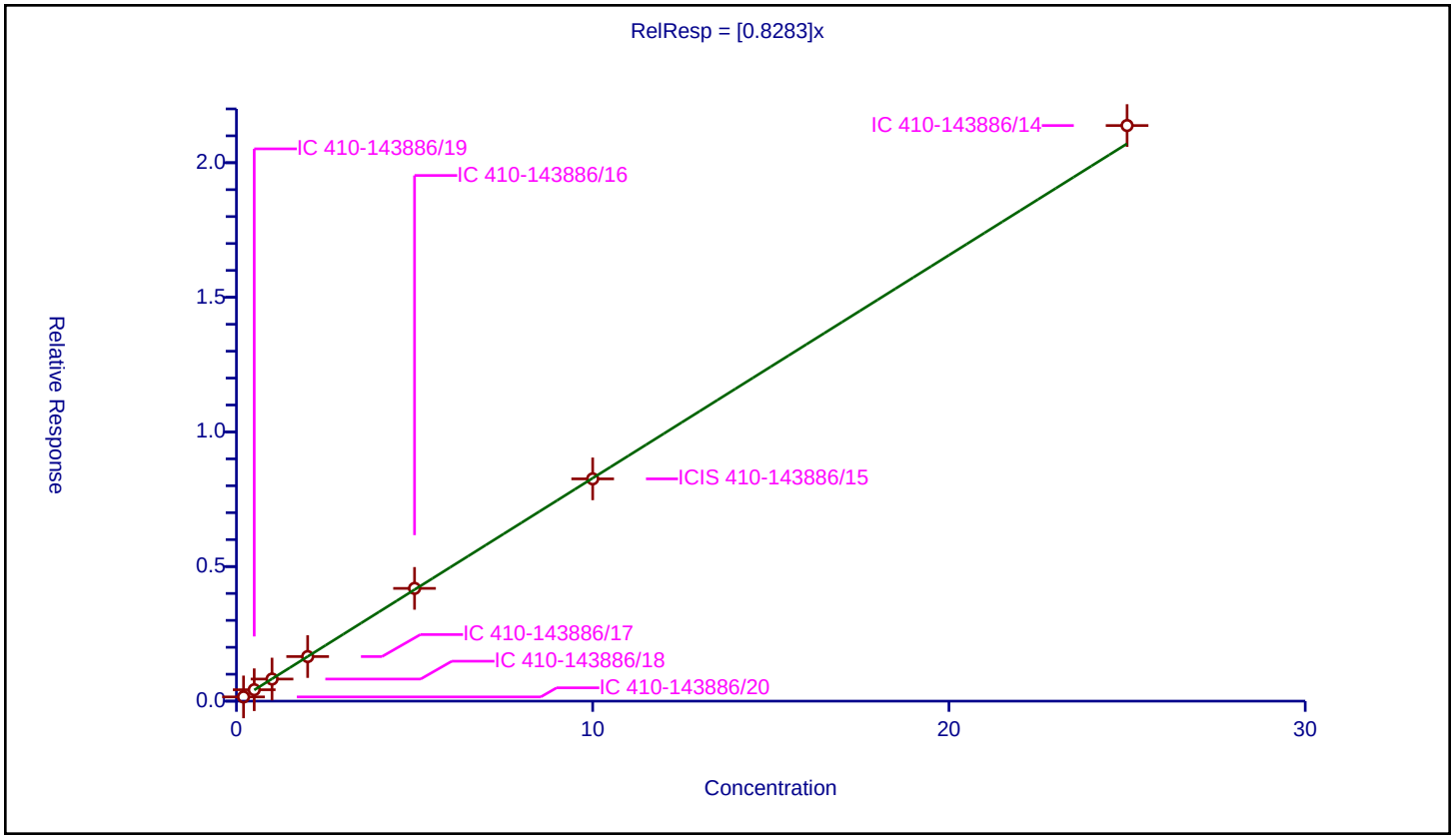
Curve Coefficients

Intercept:	0
Slope:	0.8283

Error Coefficients

Standard Error:	871000
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 410-143886/20	0.2	0.156496	10.0	908776.0	0.782481	Y
2	IC 410-143886/19	0.5	0.424419	10.0	894470.0	0.848838	Y
3	IC 410-143886/18	1.0	0.820549	10.0	931316.0	0.820549	Y
4	IC 410-143886/17	2.0	1.655207	10.0	925401.0	0.827603	Y
5	IC 410-143886/16	5.0	4.188767	10.0	929147.0	0.837753	Y
6	ICIS 410-143886/15	10.0	8.256784	10.0	925399.0	0.825678	Y
7	IC 410-143886/14	25.0	21.381828	10.0	909469.0	0.855273	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

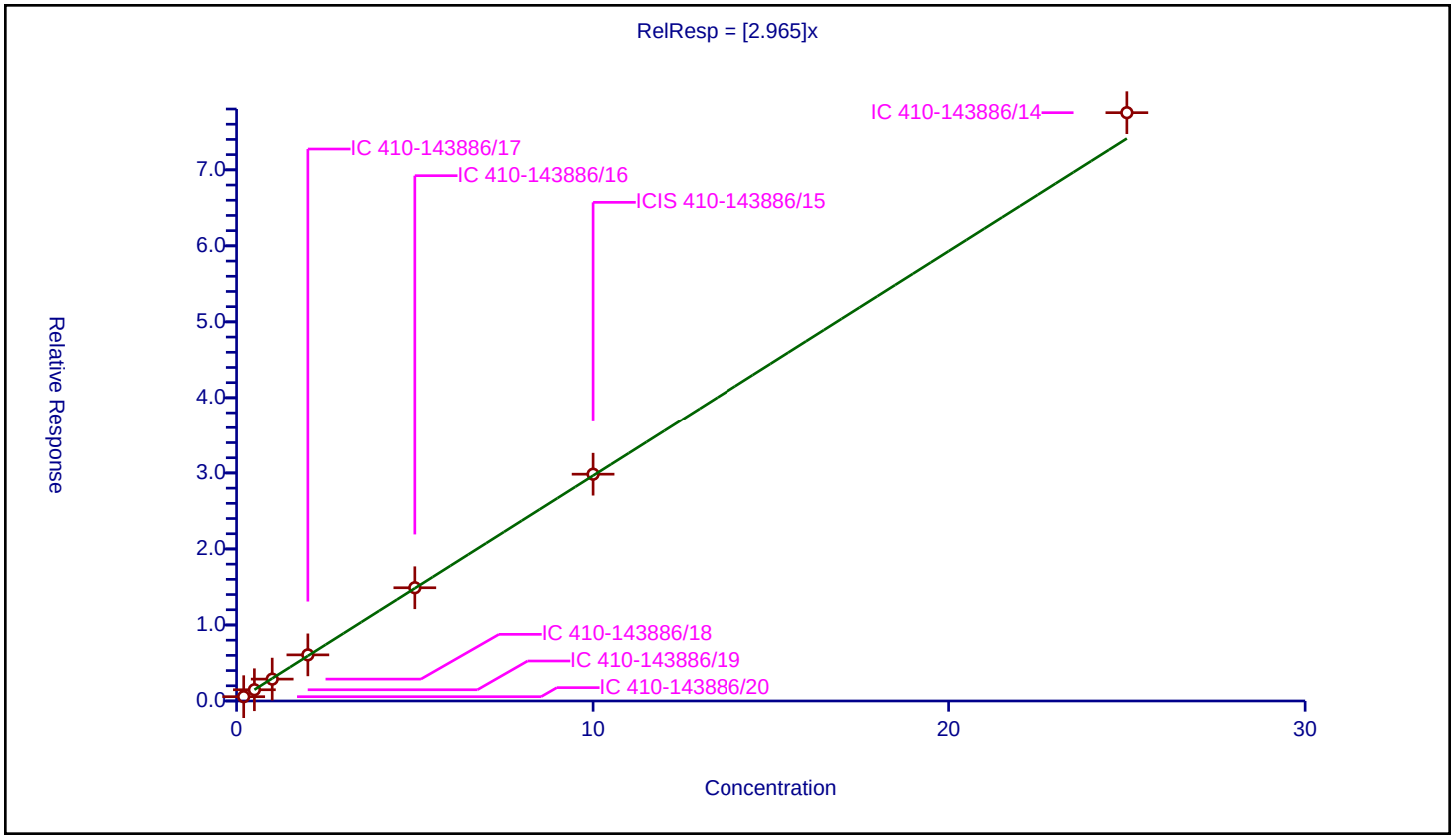
Curve Coefficients

Intercept:	0
Slope:	2.965

Error Coefficients

Standard Error:	3150000
Relative Standard Error:	3.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.564881	10.0	908776.0	2.824403	Y
2	IC 410-143886/19	0.5	1.478518	10.0	894470.0	2.957036	Y
3	IC 410-143886/18	1.0	2.876328	10.0	931316.0	2.876328	Y
4	IC 410-143886/17	2.0	6.067121	10.0	925401.0	3.033561	Y
5	IC 410-143886/16	5.0	14.895899	10.0	929147.0	2.97918	Y
6	ICIS 410-143886/15	10.0	29.835455	10.0	925399.0	2.983545	Y
7	IC 410-143886/14	25.0	77.518255	10.0	909469.0	3.10073	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

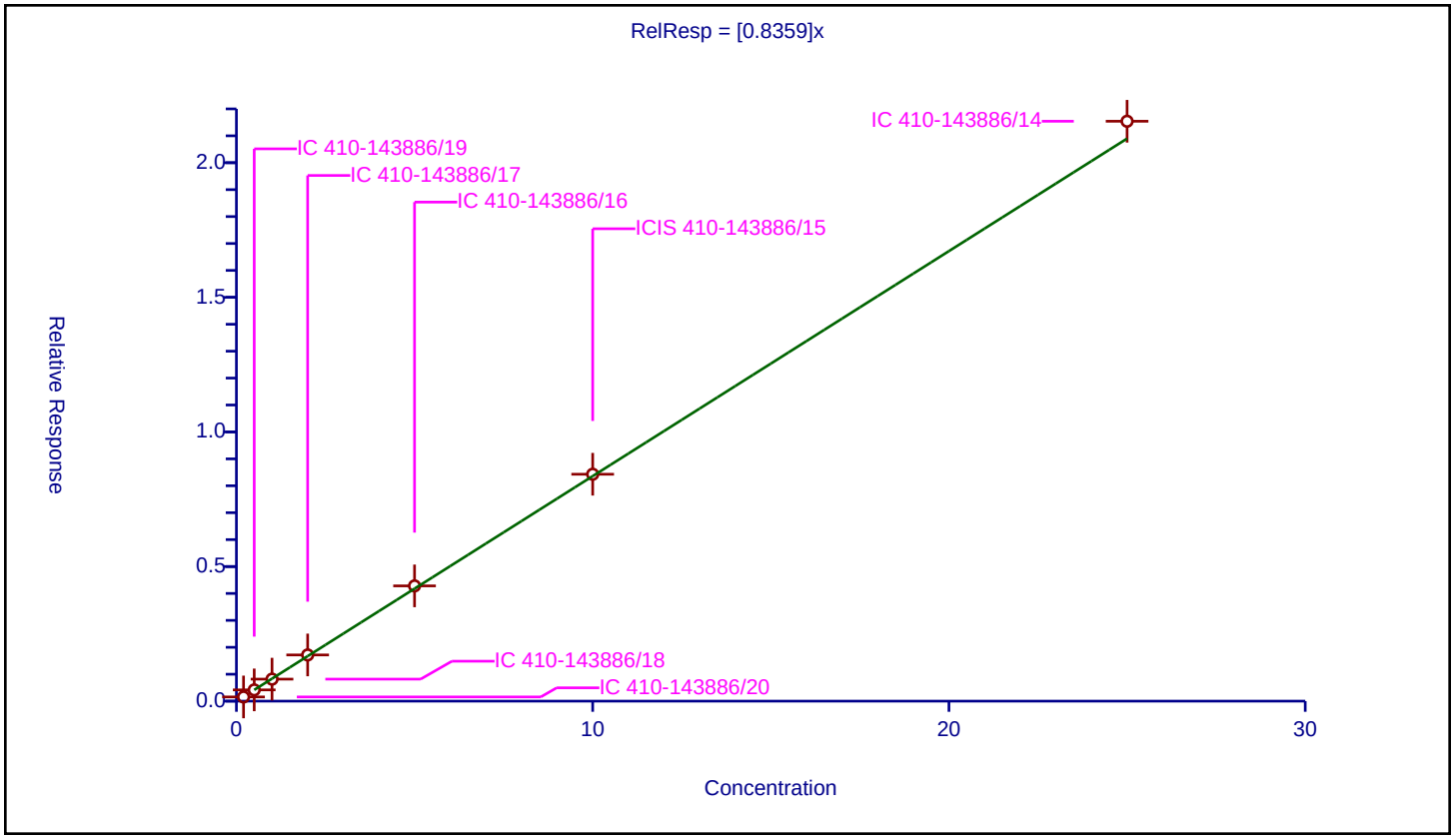
Curve Coefficients

Intercept:	0
Slope:	0.8359

Error Coefficients

Standard Error:	879000
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.155583	10.0	908776.0	0.777914	Y
2	IC 410-143886/19	0.5	0.418013	10.0	894470.0	0.836026	Y
3	IC 410-143886/18	1.0	0.818165	10.0	931316.0	0.818165	Y
4	IC 410-143886/17	2.0	1.71651	10.0	925401.0	0.858255	Y
5	IC 410-143886/16	5.0	4.281379	10.0	929147.0	0.856276	Y
6	ICIS 410-143886/15	10.0	8.428753	10.0	925399.0	0.842875	Y
7	IC 410-143886/14	25.0	21.540635	10.0	909469.0	0.861625	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

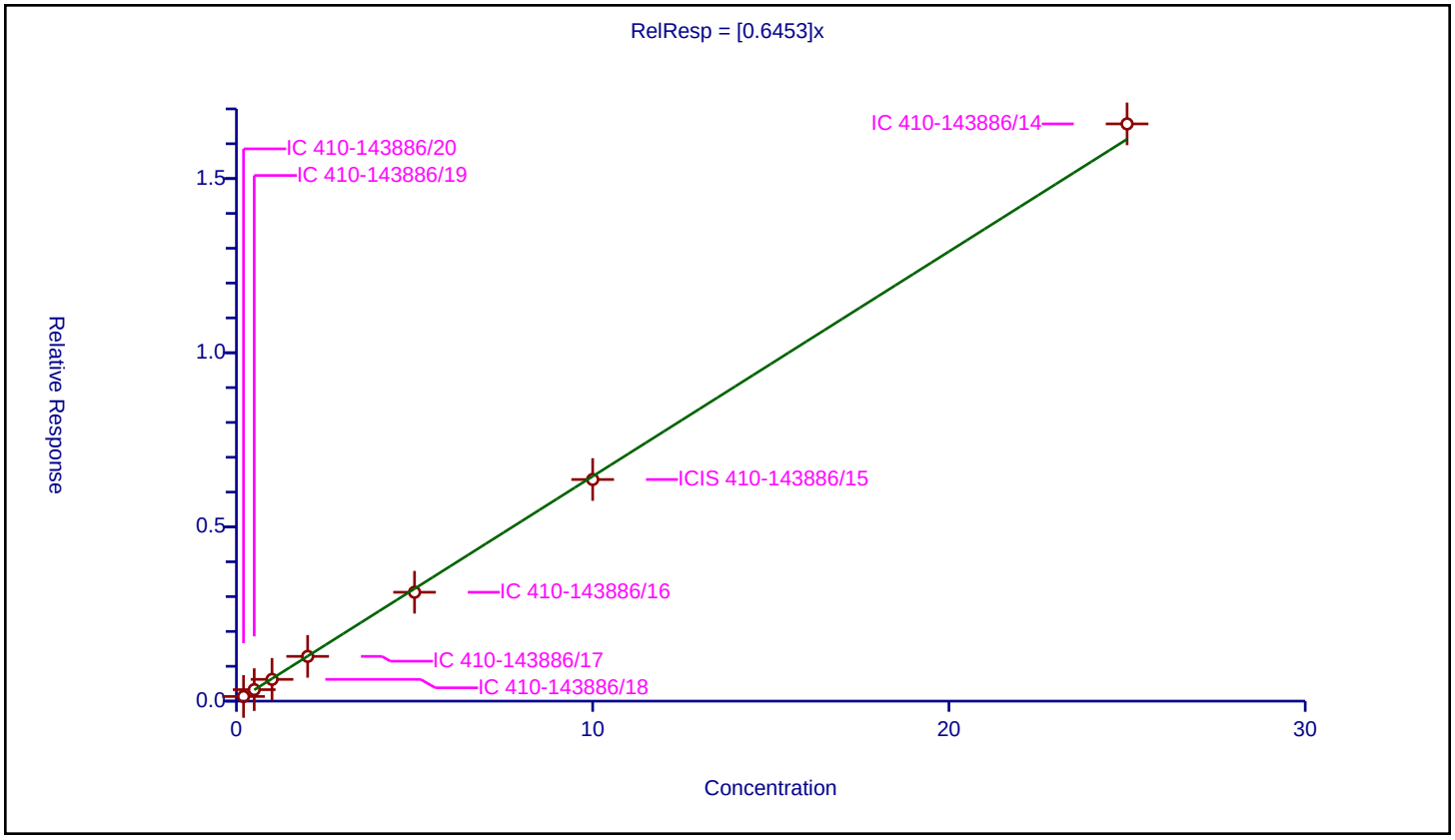
Curve Coefficients

Intercept:	0
Slope:	0.6453

Error Coefficients

Standard Error:	673000
Relative Standard Error:	2.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.133256	10.0	908776.0	0.666281	Y
2	IC 410-143886/19	0.5	0.329737	10.0	894470.0	0.659474	Y
3	IC 410-143886/18	1.0	0.624729	10.0	931316.0	0.624729	Y
4	IC 410-143886/17	2.0	1.284643	10.0	925401.0	0.642322	Y
5	IC 410-143886/16	5.0	3.125985	10.0	929147.0	0.625197	Y
6	ICIS 410-143886/15	10.0	6.361548	10.0	925399.0	0.636155	Y
7	IC 410-143886/14	25.0	16.569229	10.0	909469.0	0.662769	Y



Calibration / Pentachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

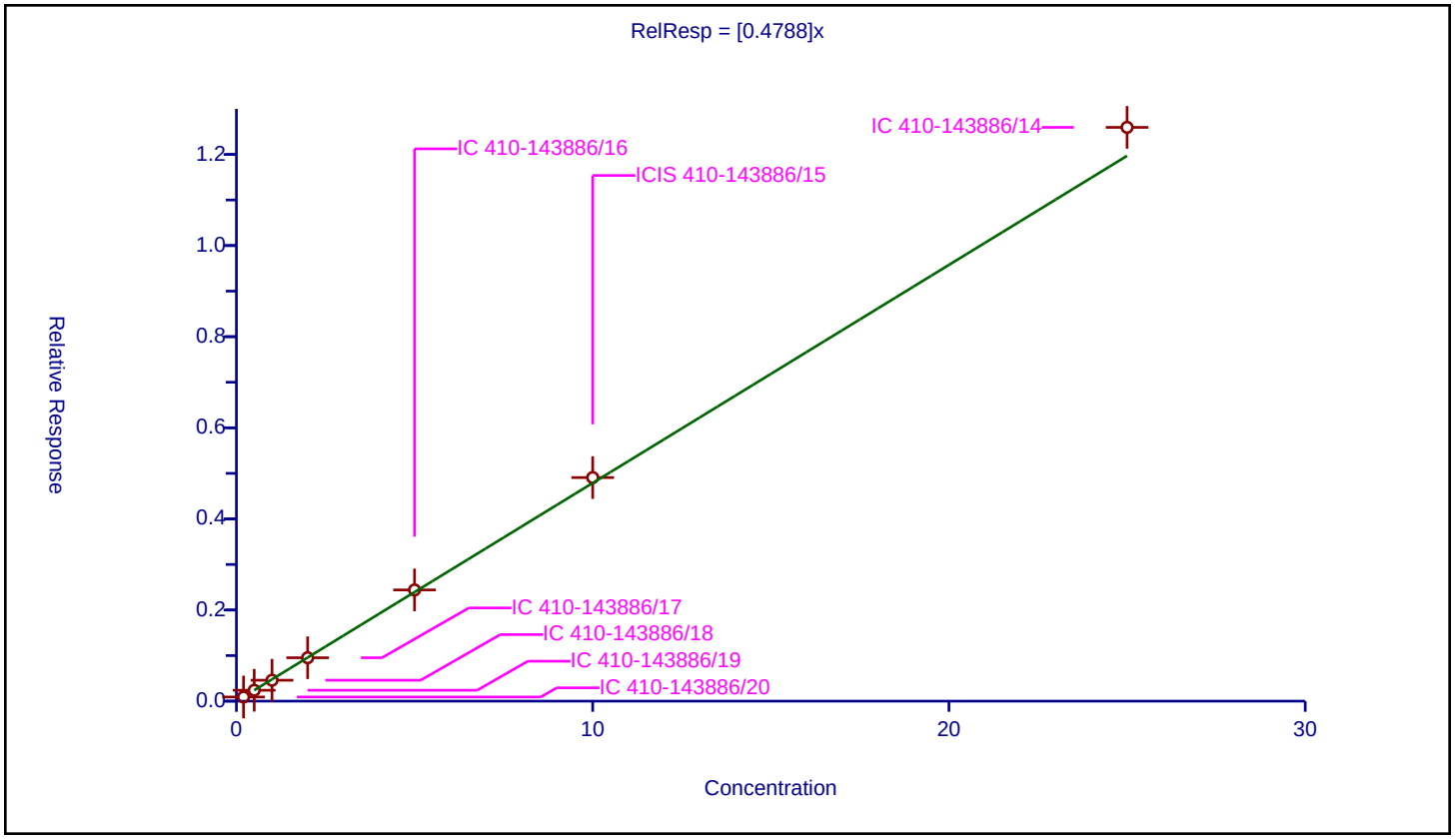
Curve Coefficients

Intercept:	0
Slope:	0.4788

Error Coefficients

Standard Error:	513000
Relative Standard Error:	3.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.090991	10.0	908776.0	0.454953	Y
2	IC 410-143886/19	0.5	0.239002	10.0	894470.0	0.478004	Y
3	IC 410-143886/18	1.0	0.459318	10.0	931316.0	0.459318	Y
4	IC 410-143886/17	2.0	0.952927	10.0	925401.0	0.476464	Y
5	IC 410-143886/16	5.0	2.440938	10.0	929147.0	0.488188	Y
6	ICIS 410-143886/15	10.0	4.907559	10.0	925399.0	0.490756	Y
7	IC 410-143886/14	25.0	12.59447	10.0	909469.0	0.503779	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

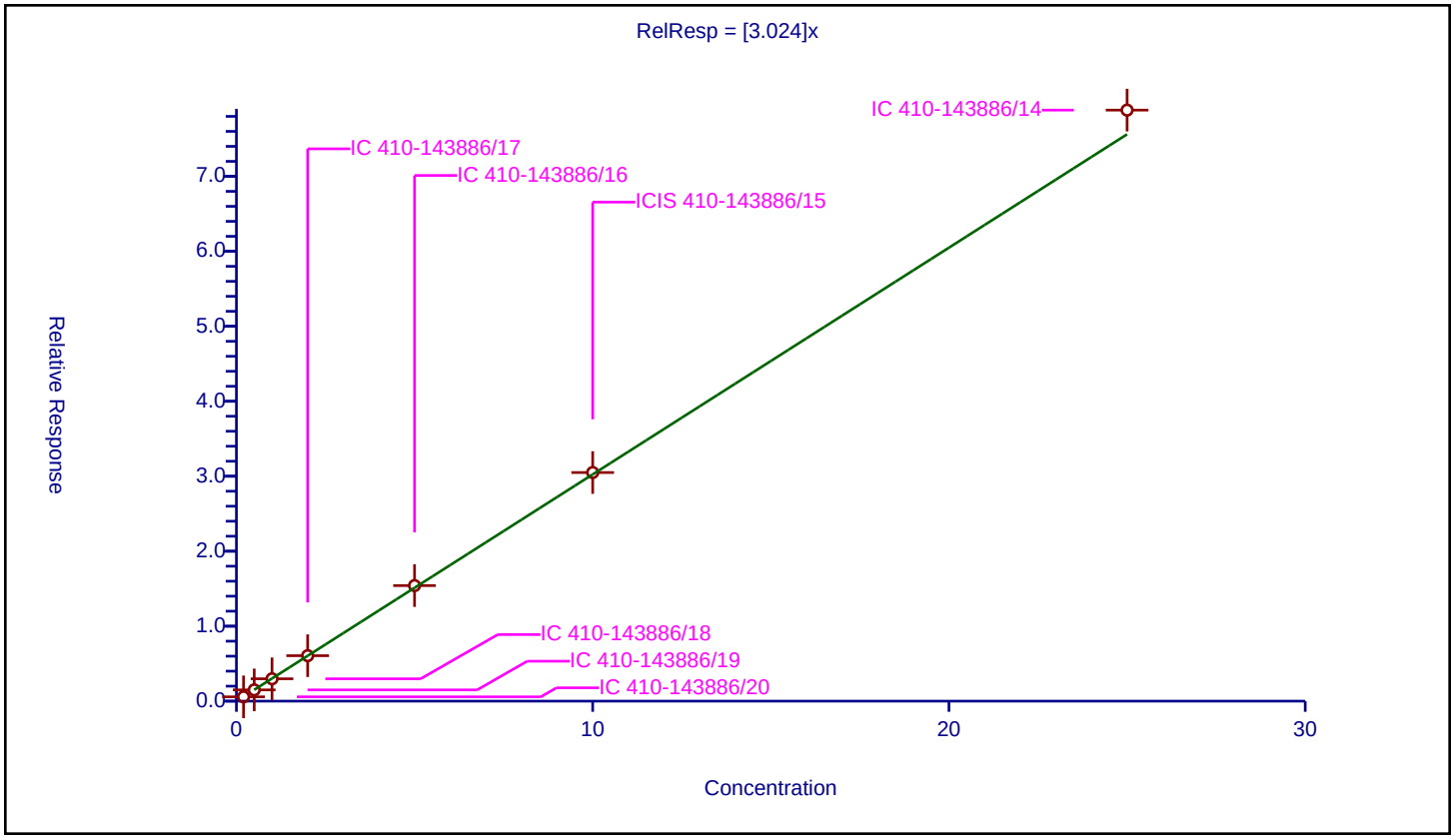
Curve Coefficients

Intercept:	0
Slope:	3.024

Error Coefficients

Standard Error:	3210000
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 410-143886/20	0.2	0.574421	10.0	908776.0	2.872105	Y
2	IC 410-143886/19	0.5	1.499659	10.0	894470.0	2.999318	Y
3	IC 410-143886/18	1.0	2.982038	10.0	931316.0	2.982038	Y
4	IC 410-143886/17	2.0	6.063166	10.0	925401.0	3.031583	Y
5	IC 410-143886/16	5.0	15.414698	10.0	929147.0	3.08294	Y
6	ICIS 410-143886/15	10.0	30.49543	10.0	925399.0	3.049543	Y
7	IC 410-143886/14	25.0	78.835859	10.0	909469.0	3.153434	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

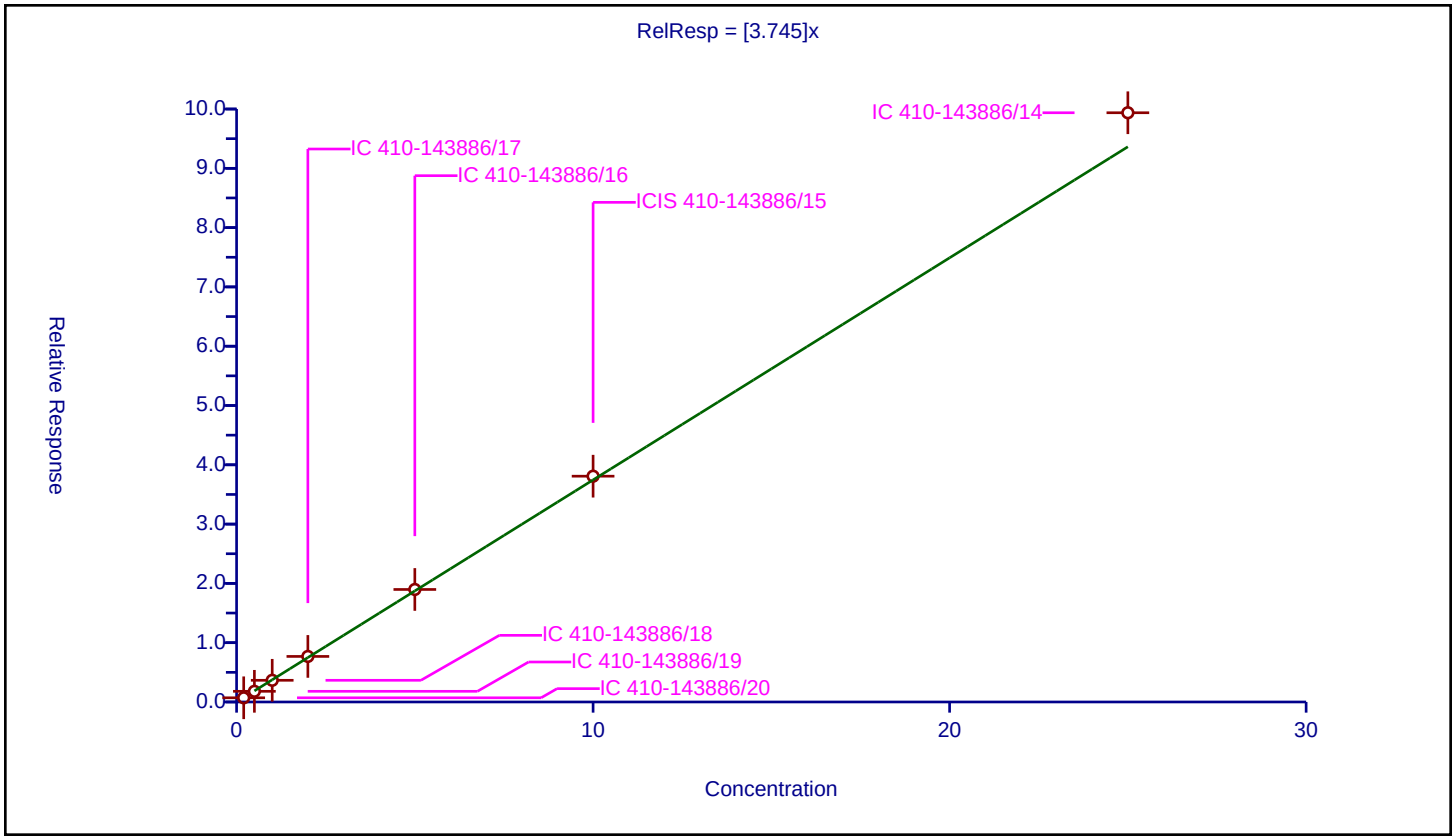
Curve Coefficients

Intercept:	0
Slope:	3.745

Error Coefficients

Standard Error:	4040000
Relative Standard Error:	4.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.707435	10.0	908776.0	3.537175	Y
2	IC 410-143886/19	0.5	1.801614	10.0	894470.0	3.603229	Y
3	IC 410-143886/18	1.0	3.656825	10.0	931316.0	3.656825	Y
4	IC 410-143886/17	2.0	7.683123	10.0	925401.0	3.841562	Y
5	IC 410-143886/16	5.0	18.974511	10.0	929147.0	3.794902	Y
6	ICIS 410-143886/15	10.0	38.080925	10.0	925399.0	3.808093	Y
7	IC 410-143886/14	25.0	99.370842	10.0	909469.0	3.974834	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

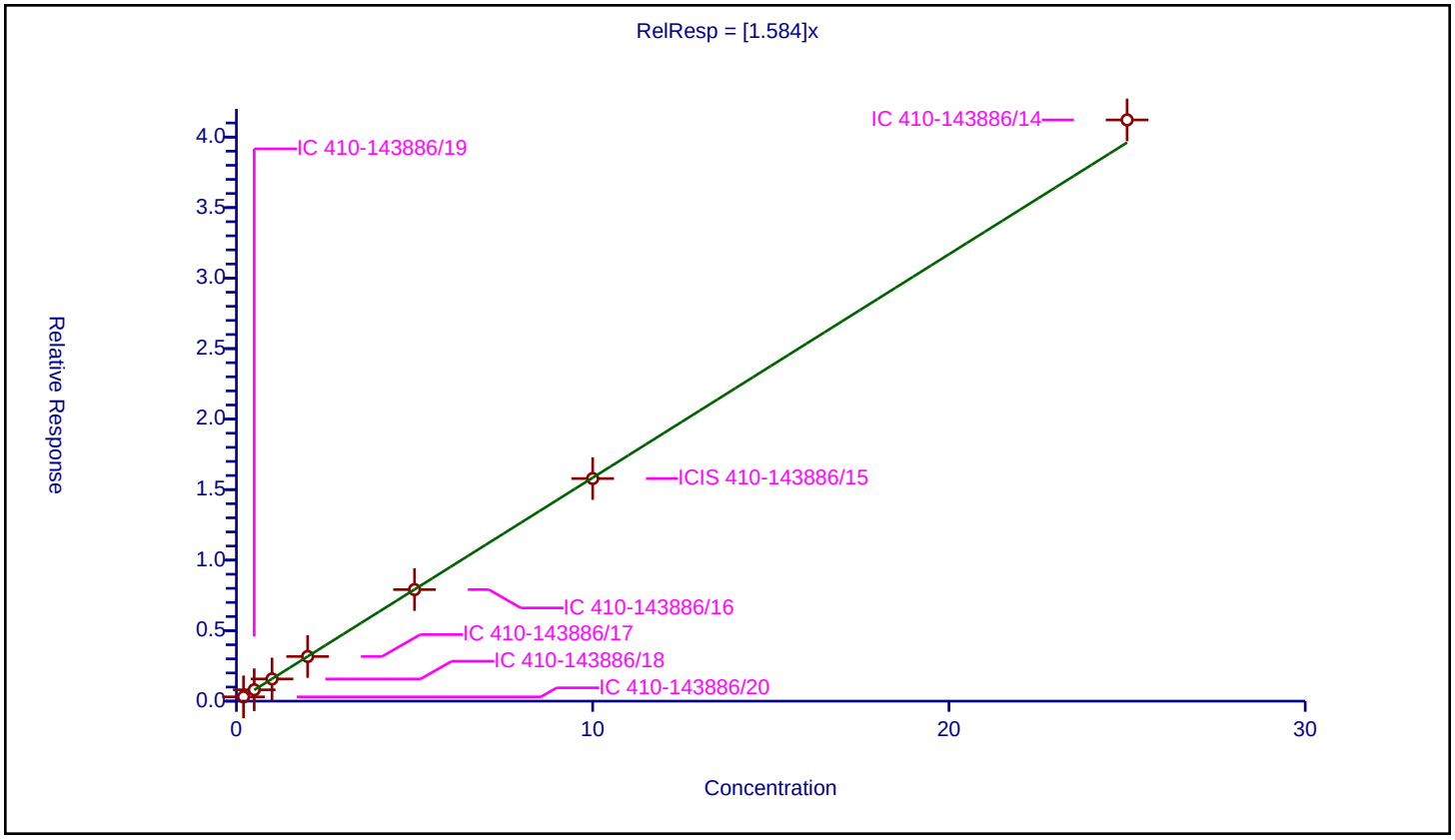
Curve Coefficients

Intercept:	0
Slope:	1.584

Error Coefficients

Standard Error:	1680000
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 410-143886/20	0.2	0.30277	10.0	908776.0	1.513849	Y
2	IC 410-143886/19	0.5	0.805125	10.0	894470.0	1.61025	Y
3	IC 410-143886/18	1.0	1.574256	10.0	931316.0	1.574256	Y
4	IC 410-143886/17	2.0	3.167254	10.0	925401.0	1.583627	Y
5	IC 410-143886/16	5.0	7.910815	10.0	929147.0	1.582163	Y
6	ICIS 410-143886/15	10.0	15.784759	10.0	925399.0	1.578476	Y
7	IC 410-143886/14	25.0	41.216699	10.0	909469.0	1.648668	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

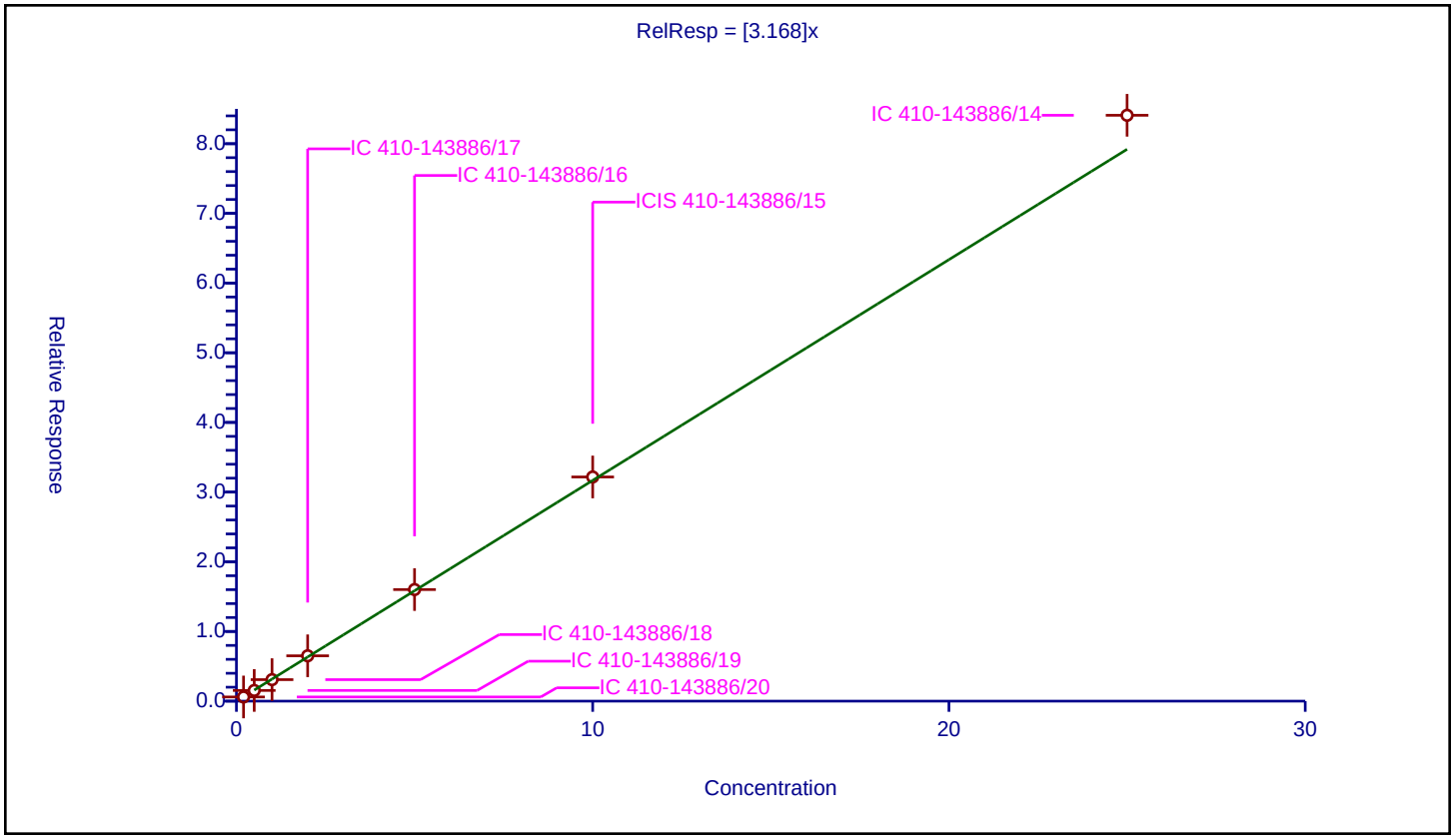
Curve Coefficients

Intercept:	0
Slope:	3.168

Error Coefficients

Standard Error:	3420000
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 410-143886/20	0.2	0.597848	10.0	908776.0	2.98924	Y
2	IC 410-143886/19	0.5	1.532952	10.0	894470.0	3.065905	Y
3	IC 410-143886/18	1.0	3.085172	10.0	931316.0	3.085172	Y
4	IC 410-143886/17	2.0	6.506304	10.0	925401.0	3.253152	Y
5	IC 410-143886/16	5.0	16.014172	10.0	929147.0	3.202834	Y
6	ICIS 410-143886/15	10.0	32.174122	10.0	925399.0	3.217412	Y
7	IC 410-143886/14	25.0	84.081481	10.0	909469.0	3.363259	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

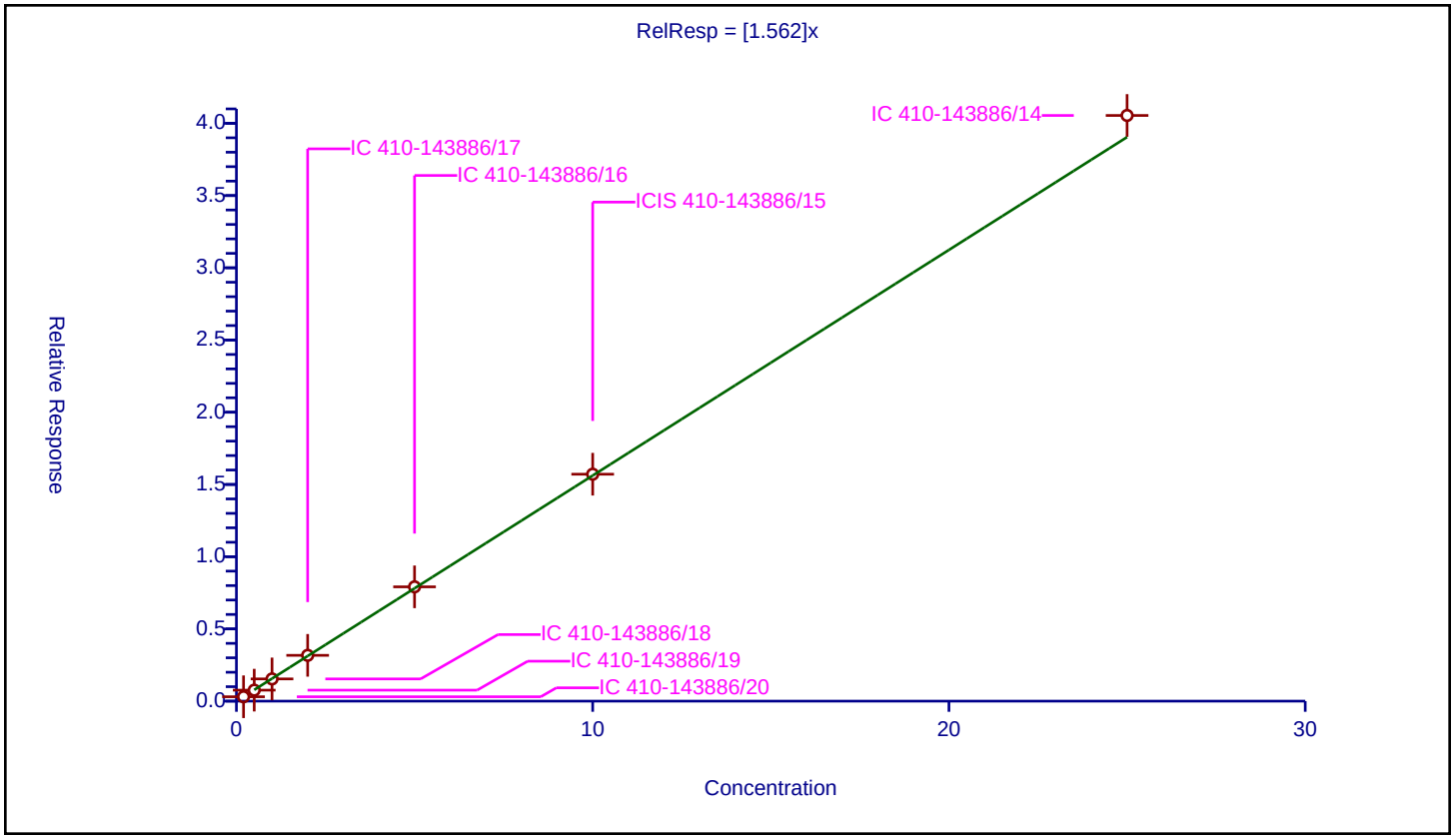
Curve Coefficients

Intercept:	0
Slope:	1.562

Error Coefficients

Standard Error:	1650000
Relative Standard Error:	2.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.999

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.302913	10.0	908776.0	1.514565	Y
2	IC 410-143886/19	0.5	0.759668	10.0	894470.0	1.519335	Y
3	IC 410-143886/18	1.0	1.538447	10.0	931316.0	1.538447	Y
4	IC 410-143886/17	2.0	3.170604	10.0	925401.0	1.585302	Y
5	IC 410-143886/16	5.0	7.913452	10.0	929147.0	1.58269	Y
6	ICIS 410-143886/15	10.0	15.711007	10.0	925399.0	1.571101	Y
7	IC 410-143886/14	25.0	40.545153	10.0	909469.0	1.621806	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

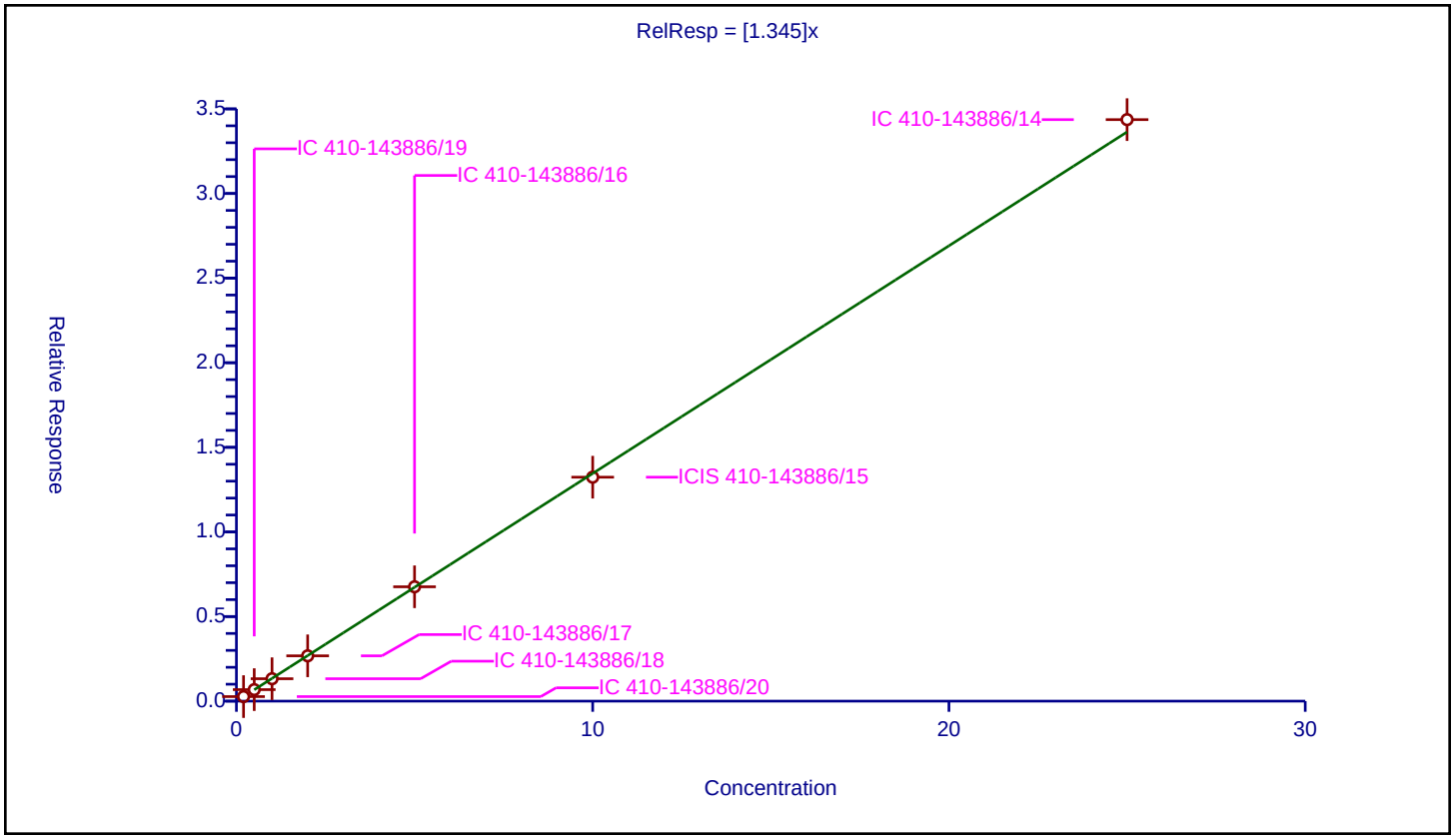
Curve Coefficients

Intercept:	0
Slope:	1.345

Error Coefficients

Standard Error:	1400000
Relative Standard Error:	1.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.268999	10.0	908776.0	1.344996	Y
2	IC 410-143886/19	0.5	0.680068	10.0	894470.0	1.360135	Y
3	IC 410-143886/18	1.0	1.324738	10.0	931316.0	1.324738	Y
4	IC 410-143886/17	2.0	2.677726	10.0	925401.0	1.338863	Y
5	IC 410-143886/16	5.0	6.758328	10.0	929147.0	1.351666	Y
6	ICIS 410-143886/15	10.0	13.234389	10.0	925399.0	1.323439	Y
7	IC 410-143886/14	25.0	34.365097	10.0	909469.0	1.374604	Y



Calibration / Benzyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

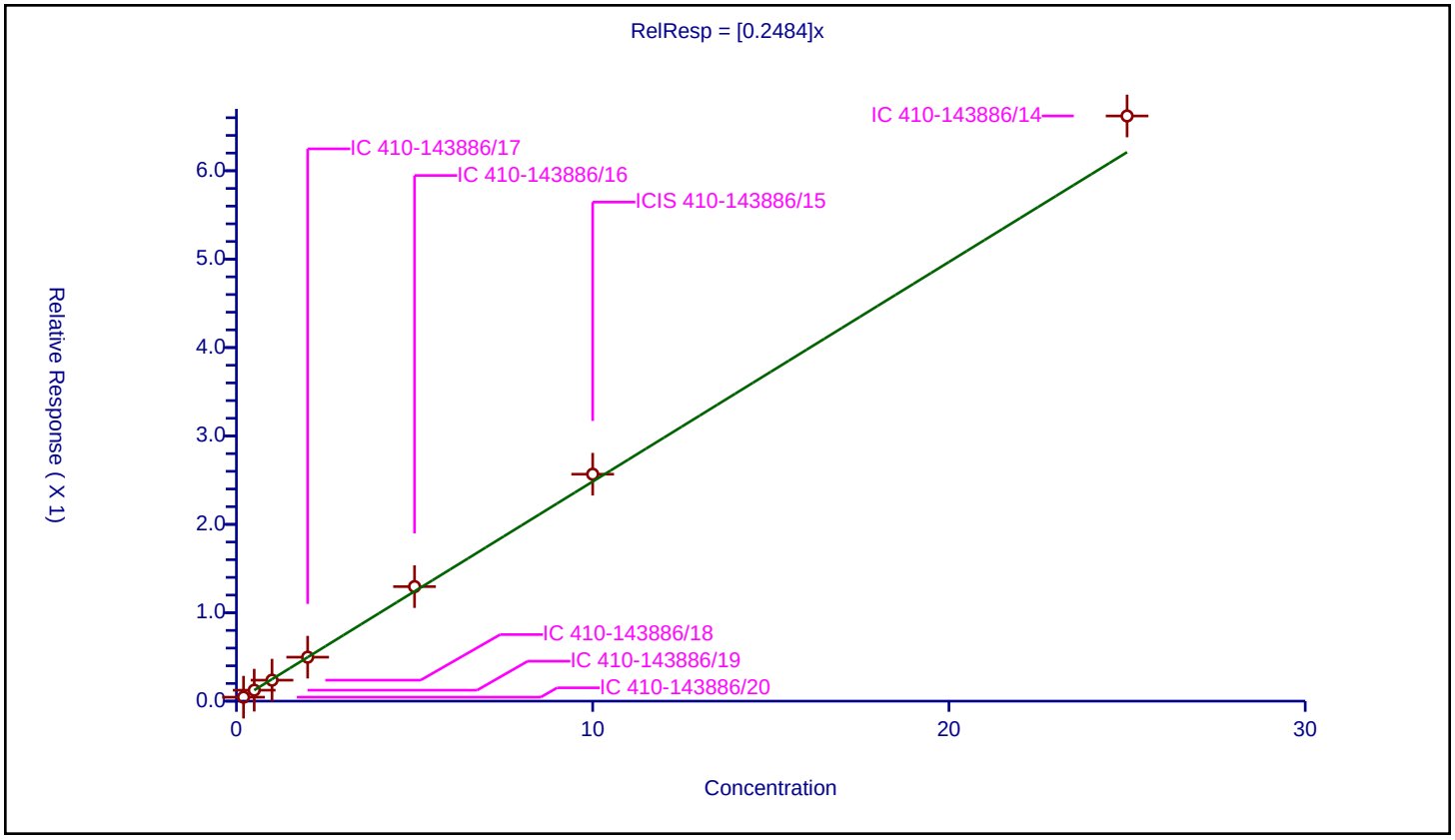
Curve Coefficients

Intercept:	0
Slope:	0.2484

Error Coefficients

Standard Error:	270000
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 410-143886/20	0.2	0.044808	10.0	908776.0	0.224038	Y
2	IC 410-143886/19	0.5	0.124062	10.0	894470.0	0.248125	Y
3	IC 410-143886/18	1.0	0.237363	10.0	931316.0	0.237363	Y
4	IC 410-143886/17	2.0	0.497352	10.0	925401.0	0.248676	Y
5	IC 410-143886/16	5.0	1.295683	10.0	929147.0	0.259137	Y
6	ICIS 410-143886/15	10.0	2.56739	10.0	925399.0	0.256739	Y
7	IC 410-143886/14	25.0	6.619973	10.0	909469.0	0.264799	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

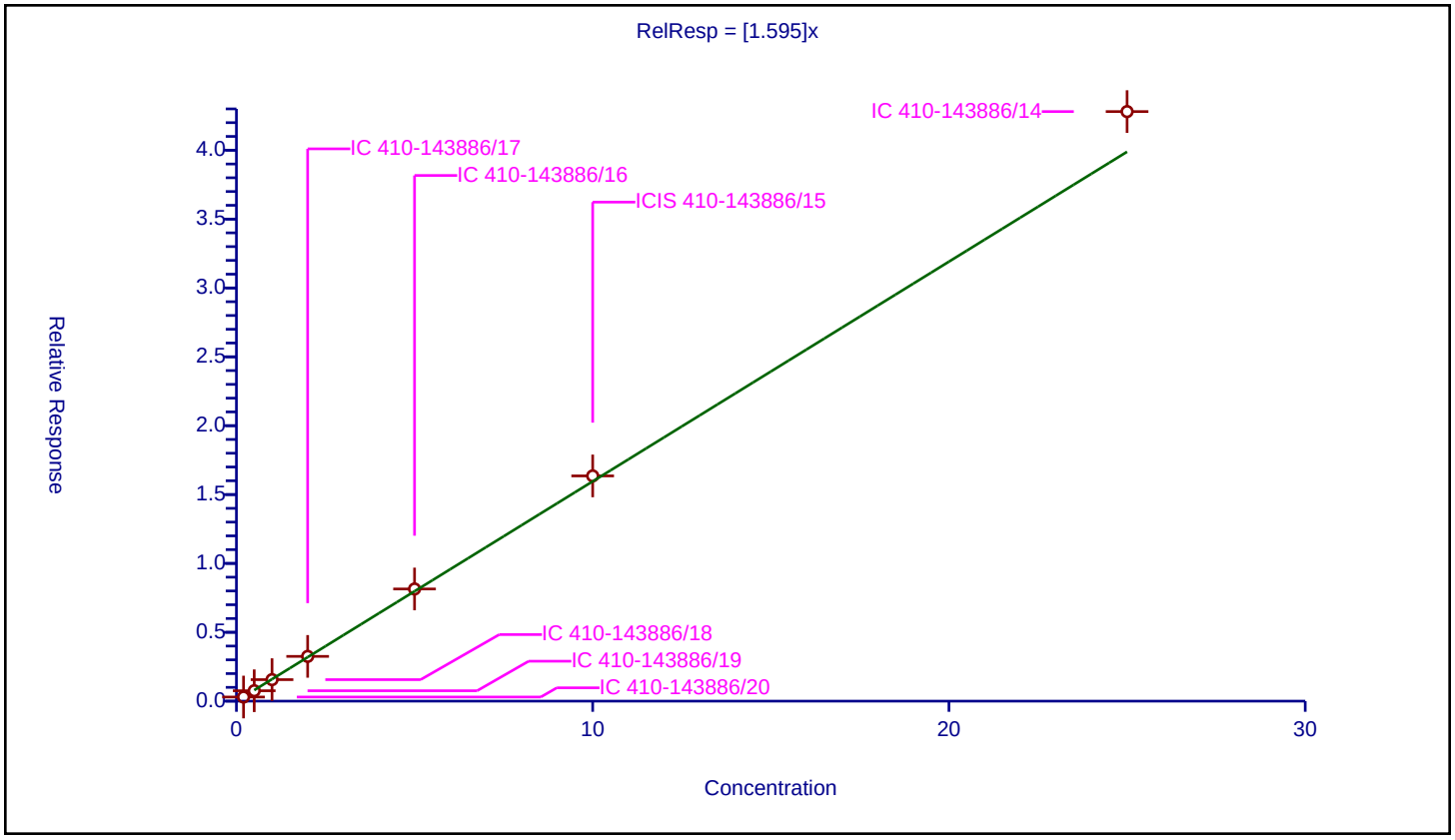
Curve Coefficients

Intercept:	0
Slope:	1.595

Error Coefficients

Standard Error:	1740000
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 410-143886/20	0.2	0.298941	10.0	908776.0	1.494703	Y
2	IC 410-143886/19	0.5	0.755777	10.0	894470.0	1.511554	Y
3	IC 410-143886/18	1.0	1.560609	10.0	931316.0	1.560609	Y
4	IC 410-143886/17	2.0	3.250223	10.0	925401.0	1.625112	Y
5	IC 410-143886/16	5.0	8.143534	10.0	929147.0	1.628707	Y
6	ICIS 410-143886/15	10.0	16.35367	10.0	925399.0	1.635367	Y
7	IC 410-143886/14	25.0	42.805252	10.0	909469.0	1.71221	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

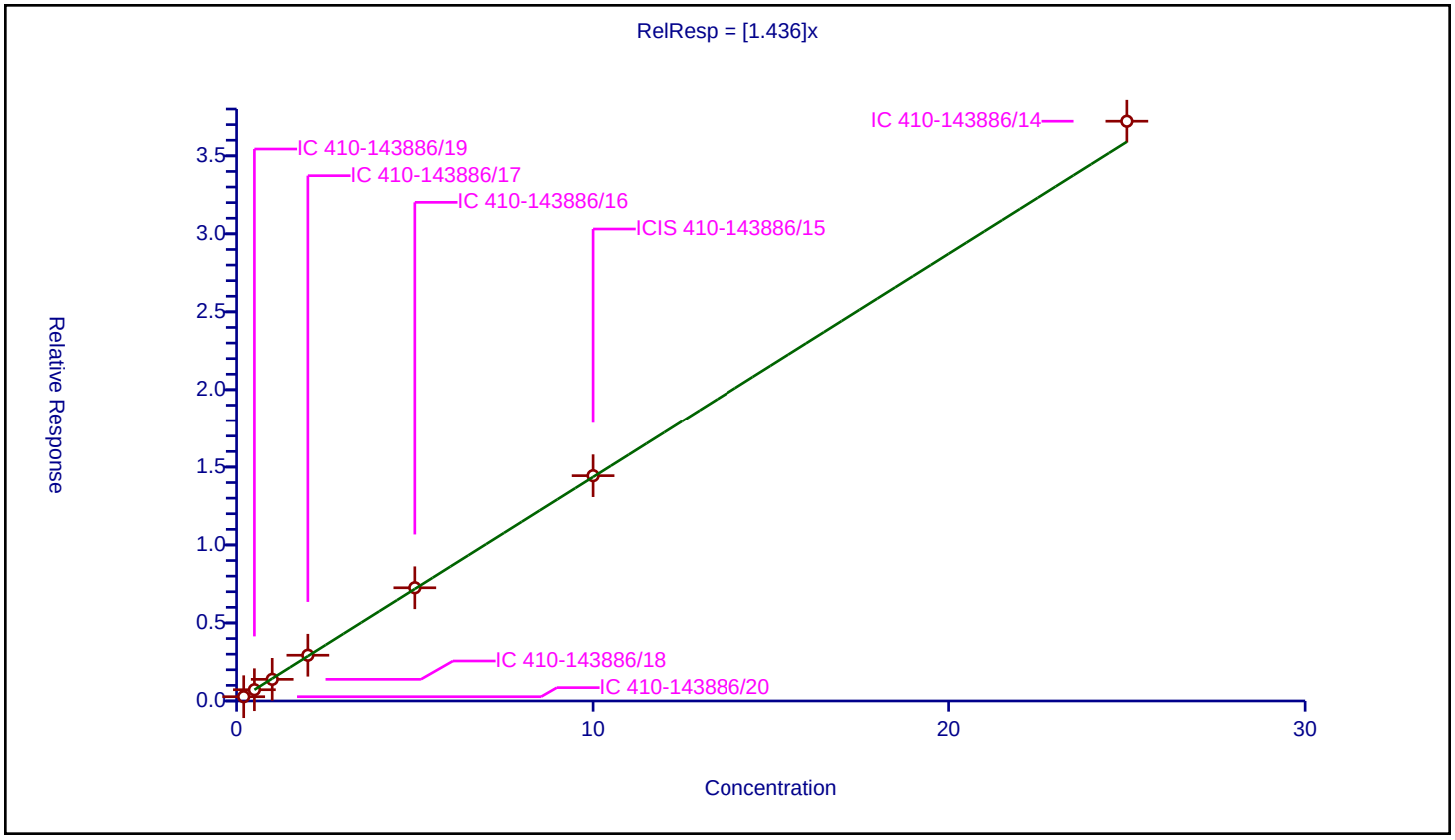
Curve Coefficients

Intercept:	0
Slope:	1.436

Error Coefficients

Standard Error:	1520000
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 410-143886/20	0.2	0.274358	10.0	908776.0	1.37179	Y
2	IC 410-143886/19	0.5	0.722405	10.0	894470.0	1.444811	Y
3	IC 410-143886/18	1.0	1.385974	10.0	931316.0	1.385974	Y
4	IC 410-143886/17	2.0	2.932037	10.0	925401.0	1.466019	Y
5	IC 410-143886/16	5.0	7.255623	10.0	929147.0	1.451125	Y
6	ICIS 410-143886/15	10.0	14.440938	10.0	925399.0	1.444094	Y
7	IC 410-143886/14	25.0	37.218696	10.0	909469.0	1.488748	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

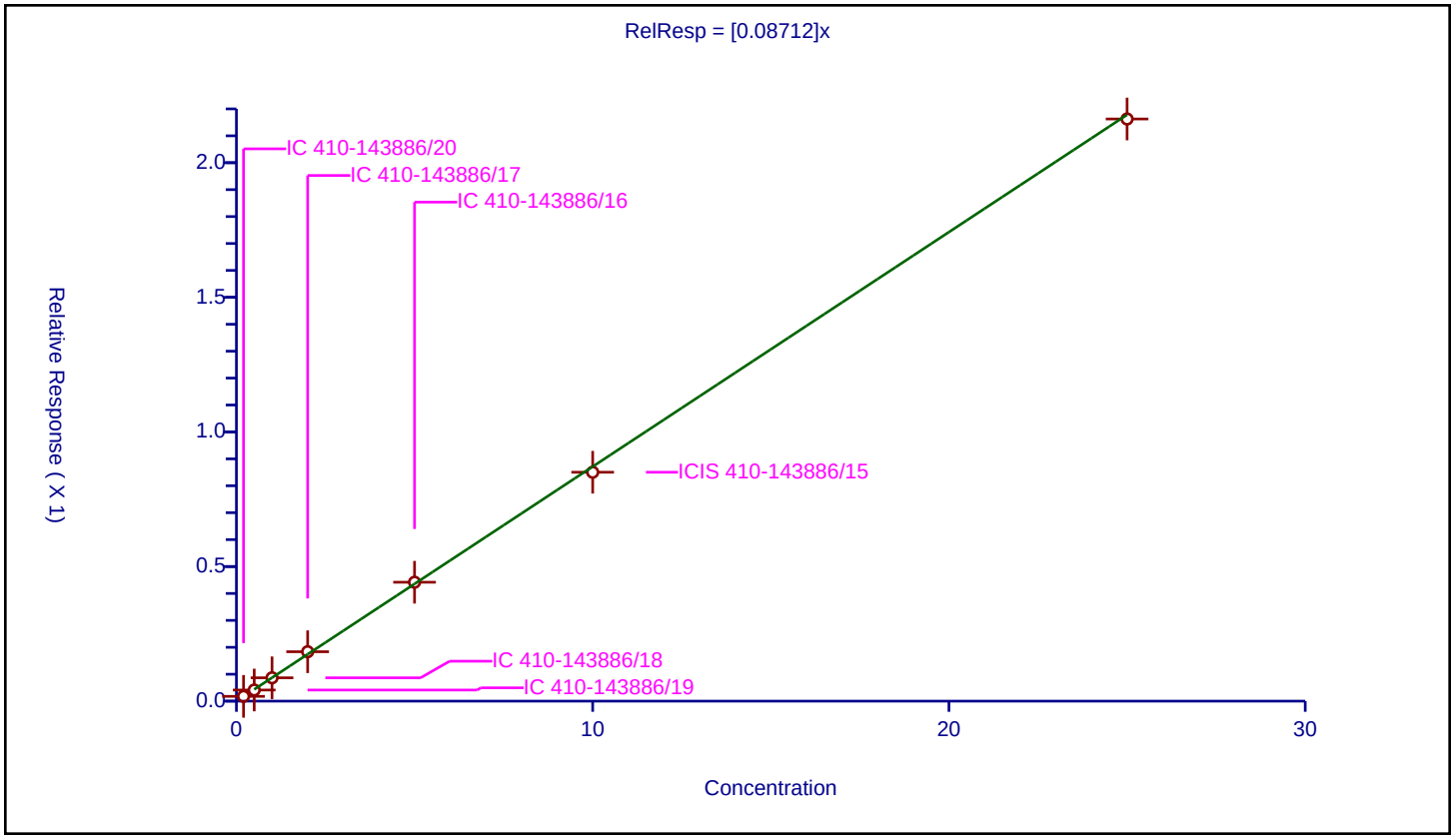
Curve Coefficients

Intercept:	0
Slope:	0.08712

Error Coefficients

Standard Error:	88400
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 410-143886/20	0.2	0.01776	10.0	908776.0	0.088801	Y
2	IC 410-143886/19	0.5	0.041321	10.0	894470.0	0.082641	Y
3	IC 410-143886/18	1.0	0.086727	10.0	931316.0	0.086727	Y
4	IC 410-143886/17	2.0	0.183607	10.0	925401.0	0.091803	Y
5	IC 410-143886/16	5.0	0.441717	10.0	929147.0	0.088343	Y
6	ICIS 410-143886/15	10.0	0.850293	10.0	925399.0	0.085029	Y
7	IC 410-143886/14	25.0	2.162515	10.0	909469.0	0.086501	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

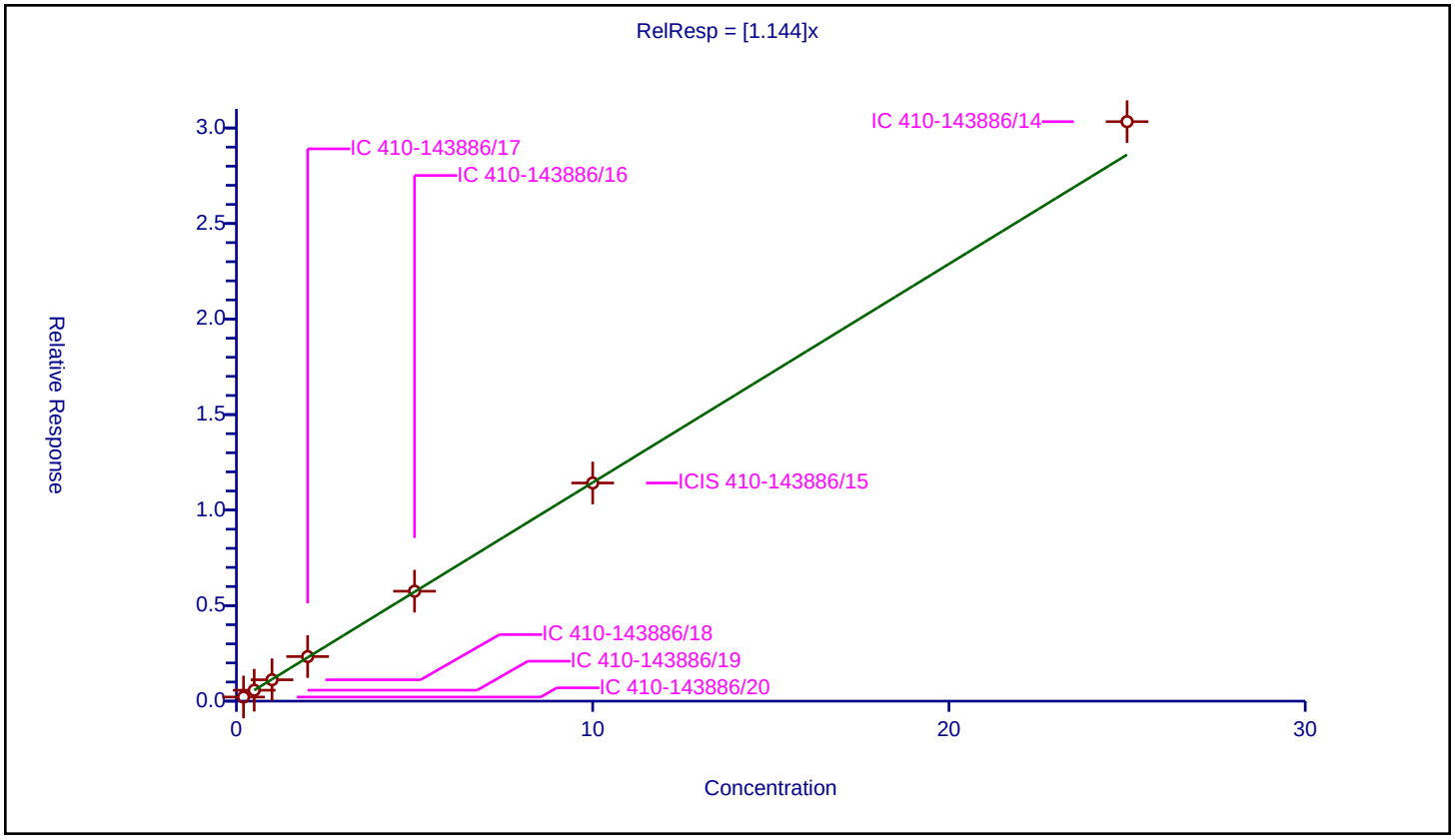
Curve Coefficients

Intercept:	0
Slope:	1.144

Error Coefficients

Standard Error:	1230000
Relative Standard Error:	3.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.214937	10.0	908776.0	1.074687	Y
2	IC 410-143886/19	0.5	0.571612	10.0	894470.0	1.143224	Y
3	IC 410-143886/18	1.0	1.118782	10.0	931316.0	1.118782	Y
4	IC 410-143886/17	2.0	2.332783	10.0	925401.0	1.166392	Y
5	IC 410-143886/16	5.0	5.753966	10.0	929147.0	1.150793	Y
6	ICIS 410-143886/15	10.0	11.418772	10.0	925399.0	1.141877	Y
7	IC 410-143886/14	25.0	30.33248	10.0	909469.0	1.213299	Y



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

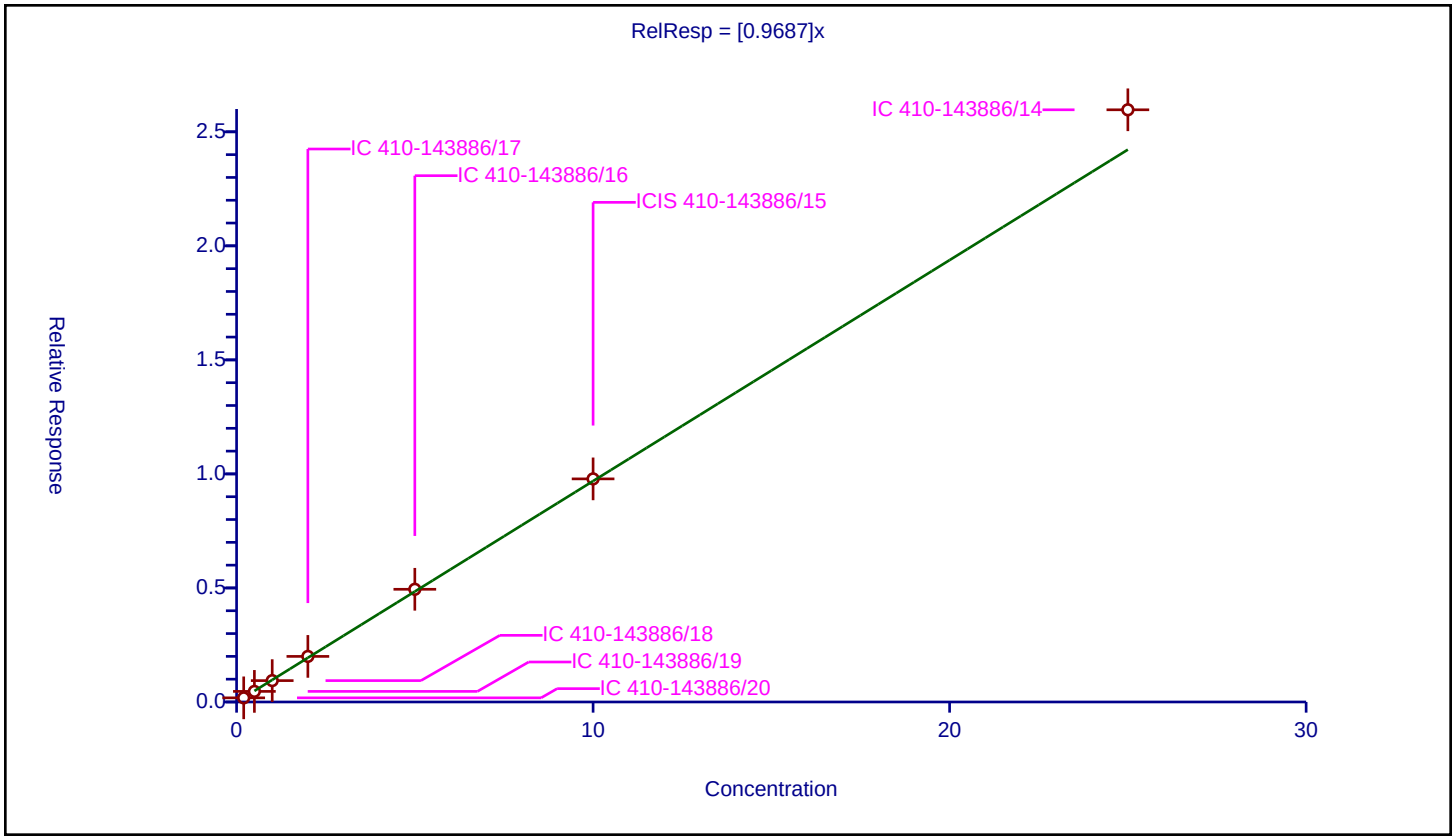
Curve Coefficients

Intercept:	0
Slope:	0.9687

Error Coefficients

Standard Error:	1050000
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 410-143886/20	0.2	0.181783	10.0	908776.0	0.908915	Y
2	IC 410-143886/19	0.5	0.464923	10.0	894470.0	0.929847	Y
3	IC 410-143886/18	1.0	0.93763	10.0	931316.0	0.93763	Y
4	IC 410-143886/17	2.0	1.99922	10.0	925401.0	0.99961	Y
5	IC 410-143886/16	5.0	4.941931	10.0	929147.0	0.988386	Y
6	ICIS 410-143886/15	10.0	9.782126	10.0	925399.0	0.978213	Y
7	IC 410-143886/14	25.0	25.965943	10.0	909469.0	1.038638	Y



Calibration / Hexachlorobutadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

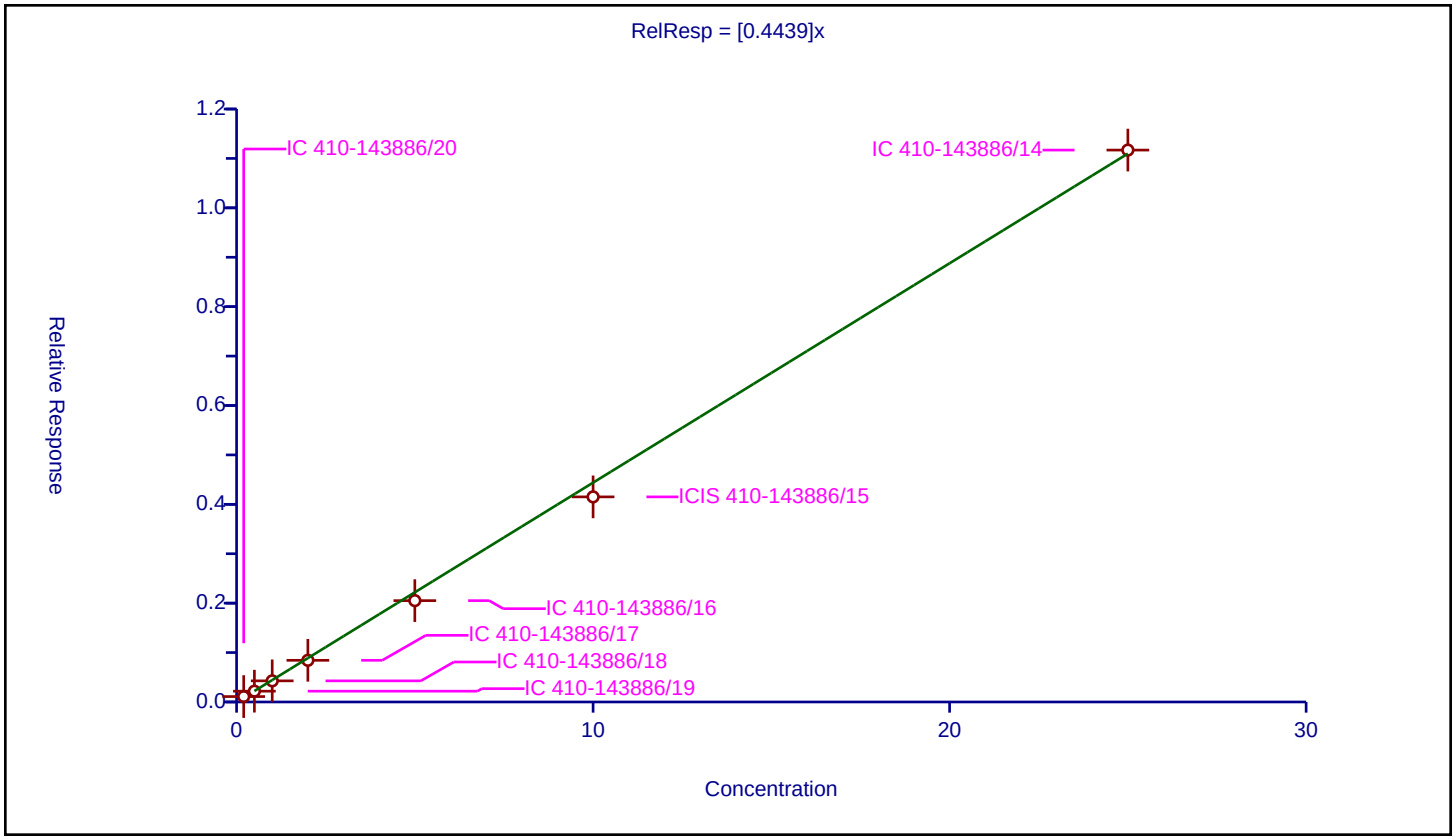
Curve Coefficients

Intercept:	0
Slope:	0.4439

Error Coefficients

Standard Error:	452000
Relative Standard Error:	10.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.982

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.109664	10.0	908776.0	0.54832	Y
2	IC 410-143886/19	0.5	0.218889	10.0	894470.0	0.437779	Y
3	IC 410-143886/18	1.0	0.427631	10.0	931316.0	0.427631	Y
4	IC 410-143886/17	2.0	0.842943	10.0	925401.0	0.421471	Y
5	IC 410-143886/16	5.0	2.051182	10.0	929147.0	0.410236	Y
6	ICIS 410-143886/15	10.0	4.150718	10.0	925399.0	0.415072	Y
7	IC 410-143886/14	25.0	11.169056	10.0	909469.0	0.446762	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

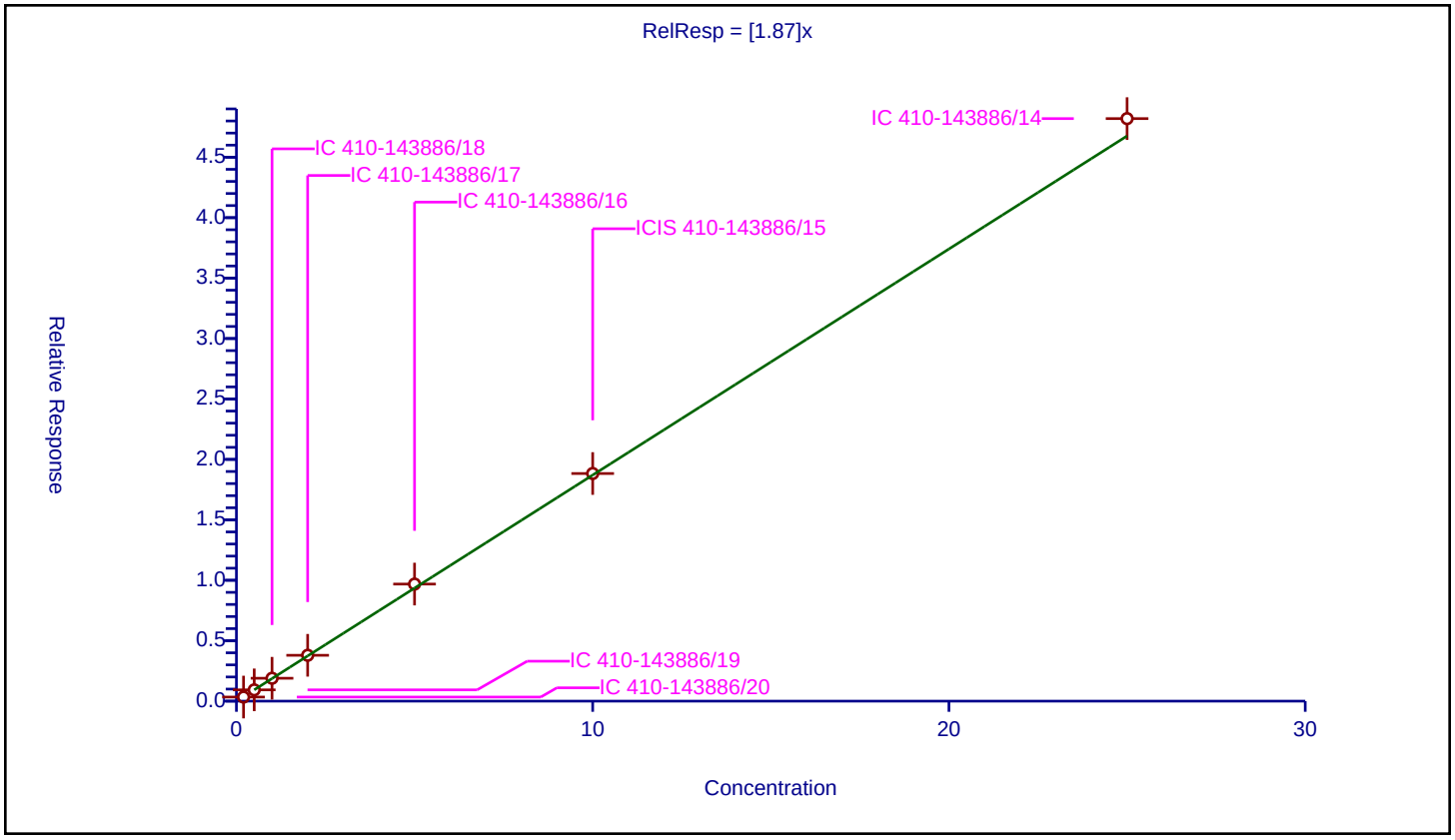
Curve Coefficients

Intercept:	0
Slope:	1.87

Error Coefficients

Standard Error:	1970000
Relative Standard Error:	4.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-143886/20	0.2	0.337399	10.0	908776.0	1.686994	Y
2	IC 410-143886/19	0.5	0.934218	10.0	894470.0	1.868436	Y
3	IC 410-143886/18	1.0	1.892902	10.0	931316.0	1.892902	Y
4	IC 410-143886/17	2.0	3.792378	10.0	925401.0	1.896189	Y
5	IC 410-143886/16	5.0	9.686035	10.0	929147.0	1.937207	Y
6	ICIS 410-143886/15	10.0	18.833746	10.0	925399.0	1.883375	Y
7	IC 410-143886/14	25.0	48.196673	10.0	909469.0	1.927867	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

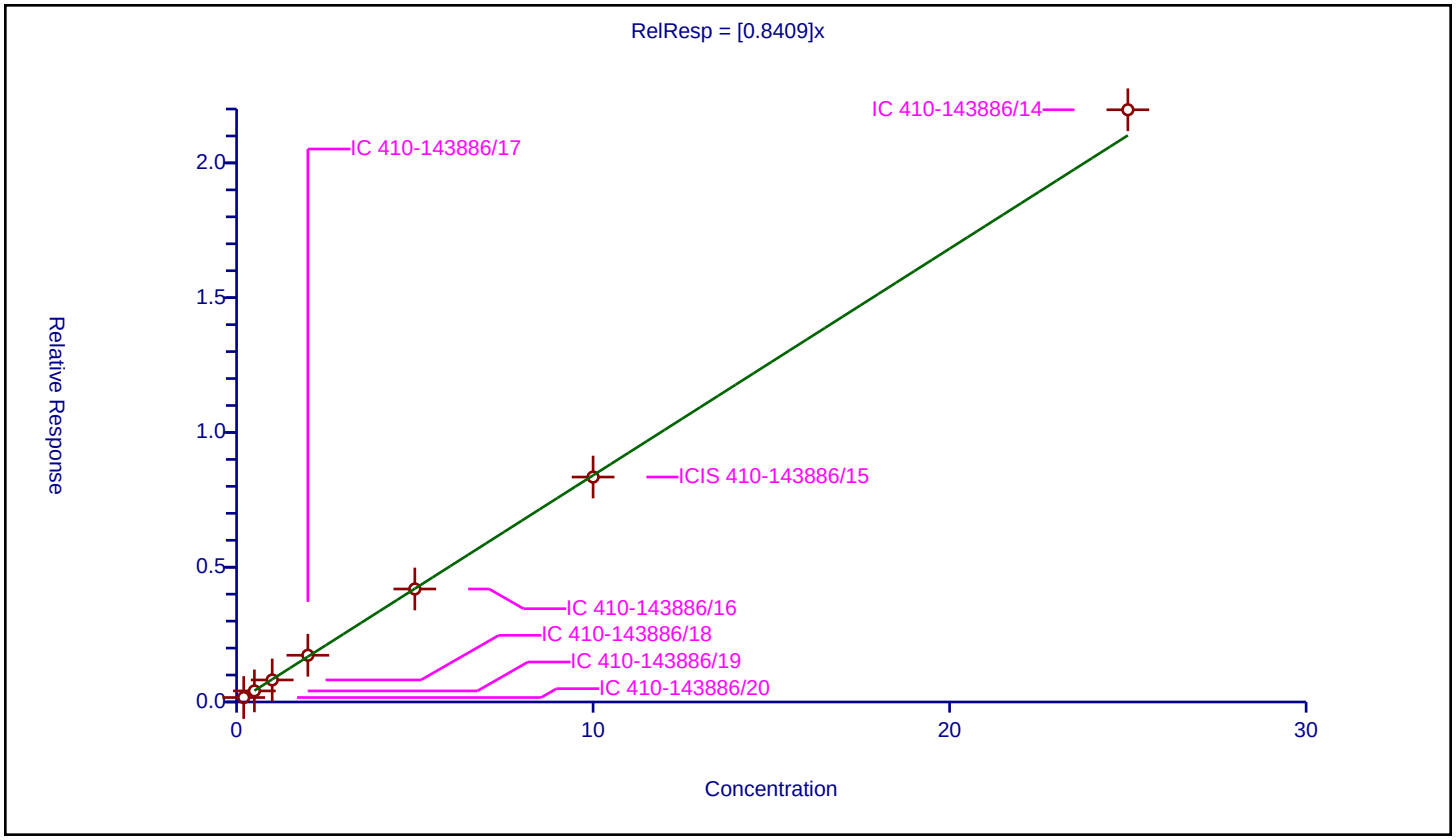
Curve Coefficients

Intercept:	0
Slope:	0.8409

Error Coefficients

Standard Error:	892000
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 410-143886/20	0.2	0.16553	10.0	908776.0	0.827652	Y
2	IC 410-143886/19	0.5	0.411115	10.0	894470.0	0.82223	Y
3	IC 410-143886/18	1.0	0.817746	10.0	931316.0	0.817746	Y
4	IC 410-143886/17	2.0	1.733562	10.0	925401.0	0.866781	Y
5	IC 410-143886/16	5.0	4.192695	10.0	929147.0	0.838539	Y
6	ICIS 410-143886/15	10.0	8.345935	10.0	925399.0	0.834594	Y
7	IC 410-143886/14	25.0	21.972239	10.0	909469.0	0.87889	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-49448-1

SDG No.:

Lab Sample ID: ICV 410-143886/21 Calibration Date: 06/30/2021 21:12

Instrument ID: 19094 Calib Start Date: 06/30/2021 18:47

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 06/30/2021 20:52

Lab File ID: HU30V11.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	0.2837	0.3114	0.1000	5.49	5.00	9.8	30.0
Chloromethane	Ave	0.3433	0.3566	0.1000	5.19	5.00	3.9	30.0
1,3-Butadiene	Ave	0.3174	0.3041		4.79	5.00	-4.2	30.0
Vinyl chloride	Ave	0.3468	0.3520	0.1000	5.07	5.00	1.5	30.0
Bromomethane	Ave	0.2566	0.2553	0.1000	4.97	5.00	-0.5	30.0
Chloroethane	Ave	0.2243	0.2205	0.1000	4.92	5.00	-1.7	30.0
Dichlorofluoromethane	Ave	0.5169	0.5200		5.03	5.00	0.6	30.0
Trichlorofluoromethane	Ave	0.4564	0.4450	0.1000	4.88	5.00	-2.5	30.0
Ethyl ether	Ave	0.1973	0.1802		4.59	5.02	-8.7	30.0
Freon 123a	Ave	0.3642	0.3518		4.83	5.00	-3.4	30.0
Acrolein	Ave	2.903	2.760		35.7	37.5	-4.9	30.0
1,1-Dichloroethene	Ave	0.2646	0.2490	0.1000	4.71	5.00	-5.9	30.0
Acetone	Ave	3.671	3.079	0.1000	52.4	62.5	-16.1	30.0
Freon 113	Ave	0.2813	0.2583	0.1000	4.59	5.00	-8.2	30.0
Methyl iodide	Ave	0.4647	0.4257		4.58	5.00	-8.4	30.0
Ethyl bromide	Ave	0.2229	0.2232		5.07	5.07	0.1	30.0
Carbon disulfide	Ave	0.7952	0.6990	0.1000	4.40	5.00	-12.1	30.0
Methyl acetate	Ave	10.92	10.19	0.1000	4.67	5.00	-6.7	30.0
Allyl chloride	Ave	0.4671	0.4380		4.69	5.00	-6.2	30.0
Methylene Chloride	Ave	0.2775	0.2644	0.1000	4.77	5.00	-4.7	30.0
t-Butyl alcohol	Ave	1.143	1.040		45.5	50.0	-9.0	30.0
Acrylonitrile	Ave	4.791	4.839		25.3	25.0	1.0	30.0
Methyl tert-butyl ether	Ave	0.6271	0.5848	0.1000	4.66	5.00	-6.7	30.0
trans-1,2-Dichloroethene	Ave	0.2856	0.2651	0.1000	4.64	5.00	-7.2	30.0
n-Hexane	Ave	0.4574	0.3921		4.29	5.00	-14.3	30.0
1,1-Dichloroethane	Ave	0.5245	0.4965	0.2000	4.73	5.00	-5.3	30.0
di-Isopropyl ether	Ave	0.9168	0.8790		4.79	5.00	-4.1	30.0
2-Chloro-1,3-butadiene	Ave	0.4430	0.4303		4.86	5.00	-2.9	30.0
Ethyl t-butyl ether	Ave	0.7970	0.7769		4.87	5.00	-2.5	30.0
2-Butanone (MEK)	Ave	6.141	6.083	0.1000	61.9	62.5	-0.9	30.0
cis-1,2-Dichloroethene	Ave	0.3153	0.3022	0.1000	4.79	5.00	-4.1	30.0
2,2-Dichloropropane	Ave	0.4281	0.4144		4.84	5.00	-3.2	30.0
Propionitrile	Ave	1.742	1.598		34.4	37.5	-8.2	30.0
Methacrylonitrile	Ave	6.410	6.364		37.2	37.5	-0.7	30.0
Bromochloromethane	Ave	0.1262	0.1250		4.95	5.00	-0.9	30.0
Tetrahydrofuran	Ave	1.703	1.675		24.6	25.0	-1.6	30.0
Chloroform	Ave	0.4930	0.4819	0.2000	4.89	5.00	-2.3	30.0
1,1,1-Trichloroethane	Ave	0.4529	0.4319	0.1000	4.77	5.00	-4.6	30.0
Cyclohexane	Ave	0.5697	0.5094	0.1000	4.47	5.00	-10.6	30.0
1,1-Dichloropropene	Ave	0.4167	0.3975		4.77	5.00	-4.6	30.0
Carbon tetrachloride	Ave	0.3911	0.3763	0.1000	4.81	5.00	-3.8	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-49448-1

SDG No.:

Lab Sample ID: ICV 410-143886/21 Calibration Date: 06/30/2021 21:12

Instrument ID: 19094 Calib Start Date: 06/30/2021 18:47

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 06/30/2021 20:52

Lab File ID: HU30V11.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Isobutyl alcohol	Ave	0.4336	0.3690		106	125	-14.9	30.0
Benzene	Ave	1.197	1.157	0.5000	4.83	5.00	-3.4	30.0
1,2-Dichloroethane	Ave	0.2925	0.2771	0.1000	4.74	5.00	-5.3	30.0
t-Amyl methyl ether	Ave	0.7012	0.6733		4.80	5.00	-4.0	30.0
n-Heptane	Ave	0.4989	0.4221		4.23	5.00	-15.4	30.0
n-Butanol	Ave	0.3797	0.3525		232	250	-7.2	30.0
Trichloroethene	Ave	0.3083	0.2946	0.2000	4.78	5.00	-4.4	30.0
Methylcyclohexane	Ave	0.5828	0.5319	0.1000	4.56	5.00	-8.7	30.0
1,2-Dichloropropane	Ave	0.3097	0.3039	0.1000	4.91	5.00	-1.9	30.0
Methyl methacrylate	Ave	11.80	11.60		4.91	5.00	-1.8	30.0
1,4-Dioxane	Ave	0.0773	0.0701	0.0050	113	125	-9.3	30.0
Dibromomethane	Ave	0.1328	0.1308		4.92	5.00	-1.6	30.0
Bromodichloromethane	Ave	0.3464	0.3447	0.2000	4.98	5.00	-0.5	30.0
2-Nitropropane	Ave	3.120	2.932		4.70	5.00	-6.0	30.0
1-Bromo-2-chloroethane	Ave	0.3010	0.2919		4.85	5.00	-3.0	30.0
cis-1,3-Dichloropropene	Ave	0.4483	0.4383	0.2000	4.89	5.00	-2.2	30.0
4-Methyl-2-pentanone (MIBK)	Ave	15.37	15.27	0.1000	62.1	62.5	-0.7	30.0
Toluene	Ave	1.025	0.9828	0.4000	4.79	5.00	-4.1	30.0
trans-1,3-Dichloropropene	Ave	0.4800	0.4810	0.1000	5.01	5.00	0.2	30.0
Ethyl methacrylate	Ave	0.3671	0.3657		4.98	5.00	-0.4	30.0
1,1,2-Trichloroethane	Ave	0.2614	0.2579	0.1000	4.93	5.00	-1.4	30.0
Tetrachloroethene	Ave	0.4446	0.4308	0.2000	4.85	5.00	-3.1	30.0
1,3-Dichloropropane	Ave	0.4542	0.4494		4.95	5.00	-1.1	30.0
2-Hexanone	Ave	10.51	10.68	0.1000	63.5	62.5	1.5	30.0
Dibromochloromethane	Ave	0.3246	0.3140		4.84	5.00	-3.3	30.0
1,2-Dibromoethane (EDB)	Ave	0.2520	0.2420	0.1000	4.80	5.00	-4.0	30.0
1-Chlorohexane	Ave	0.6228	0.5622		4.51	5.00	-9.7	30.0
Chlorobenzene	Ave	1.087	1.046	0.5000	4.81	5.00	-3.7	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3710	0.3649		4.92	5.00	-1.6	30.0
Ethylbenzene	Ave	1.935	1.882	0.1000	4.86	5.00	-2.7	30.0
m&p-Xylene	Ave	0.7396	0.7317	0.1000	9.89	10.0	-1.1	30.0
o-Xylene	Ave	0.7323	0.7137	0.3000	4.87	5.00	-2.5	30.0
Styrene	Ave	1.173	1.158	0.3000	4.94	5.00	-1.2	30.0
Bromoform	Ave	0.1795	0.1764	0.1000	4.91	5.00	-1.7	30.0
Isopropylbenzene	Ave	1.889	1.869	0.1000	4.95	5.00	-1.0	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6058	0.5934	0.3000	4.90	5.00	-2.0	30.0
Bromobenzene	Ave	0.7688	0.7682		5.00	5.00	-0.0	30.0
trans-1,4-Dichloro-2-butene	Ave	5.397	5.424		25.1	25.0	0.5	30.0
1,2,3-Trichloropropane	Ave	0.1547	0.1439		4.65	5.00	-7.0	30.0
N-Propylbenzene	Ave	4.237	4.106		4.85	5.00	-3.1	30.0
2-Chlorotoluene	Ave	0.8283	0.7971		4.81	5.00	-3.8	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-49448-1

SDG No.:

Lab Sample ID: ICV 410-143886/21 Calibration Date: 06/30/2021 21:12

Instrument ID: 19094 Calib Start Date: 06/30/2021 18:47

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 06/30/2021 20:52

Lab File ID: HU30V11.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	2.965	2.862		4.83	5.00	-3.5	30.0
4-Chlorotoluene	Ave	0.8359	0.8124		4.86	5.00	-2.8	30.0
tert-Butylbenzene	Ave	0.6453	0.6119		4.74	5.00	-5.2	30.0
Pentachloroethane	Ave	0.4788	0.4587		4.79	5.00	-4.2	30.0
1,2,4-Trimethylbenzene	Ave	3.024	2.920		4.83	5.00	-3.4	30.0
sec-Butylbenzene	Ave	3.745	3.674		4.91	5.00	-1.9	30.0
1,3-Dichlorobenzene	Ave	1.584	1.511	0.6000	4.77	5.00	-4.6	30.0
p-Isopropyltoluene	Ave	3.168	3.063		4.83	5.00	-3.3	30.0
1,4-Dichlorobenzene	Ave	1.562	1.514	0.5000	4.85	5.00	-3.1	30.0
1,2,3-Trimethylbenzene	Ave	1.345	1.287		4.78	5.00	-4.4	30.0
Benzyl chloride	Ave	0.2484	0.2430		4.89	5.00	-2.2	30.0
n-Butylbenzene	Ave	1.595	1.508		4.73	5.00	-5.5	30.0
1,2-Dichlorobenzene	Ave	1.436	1.417	0.4000	4.93	5.00	-1.3	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.0871	0.0768	0.0500	4.41	5.00	-11.8	30.0
1,3,5-Trichlorobenzene	Ave	1.144	1.095		4.79	5.00	-4.3	30.0
1,2,4-Trichlorobenzene	Ave	0.9687	0.9247	0.2000	4.77	5.00	-4.5	30.0
Hexachlorobutadiene	Ave	0.4439	0.4011		4.52	5.00	-9.6	30.0
Naphthalene	Ave	1.870	1.813		4.85	5.00	-3.0	30.0
1,2,3-Trichlorobenzene	Ave	0.8409	0.8186		4.87	5.00	-2.7	30.0
Dibromofluoromethane (Surr)	Ave	0.2419	0.2441		10.1	10.0	0.9	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0489	0.0490		10.0	10.0	0.2	30.0
Toluene-d8 (Surr)	Ave	1.344	1.347		10.0	10.0	0.2	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4904	0.4894		9.98	10.0	-0.2	30.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30V11.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 30-Jun-2021 21:12:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0033290-021
Misc. Info.: ICV
Operator ID: jml01693 Instrument ID: 19094
Sublist:

Method: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 01-Jul-2021 01:11:13 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: campbellme Date: 01-Jul-2021 01:04:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	2.008	2.007	0.000	99	359052	5.00	5.49	
6 Chloromethane	50	2.203	2.196	0.007	99	411130	5.00	5.19	
8 Butadiene	39	2.312	2.312	0.000	91	350580	5.00	4.79	
7 Vinyl chloride	62	2.325	2.324	0.000	83	405827	5.00	5.07	
9 Bromomethane	94	2.642	2.635	0.007	90	294351	5.00	4.97	
10 Chloroethane	64	2.733	2.721	0.012	100	254197	5.00	4.92	
11 Dichlorofluoromethane	67	2.977	2.971	0.006	97	599542	5.00	5.03	
13 Trichlorofluoromethane	101	3.044	3.044	0.000	96	513047	5.00	4.88	
15 Ethyl ether	59	3.282	3.282	0.000	92	208662	5.02	4.59	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.379	3.373	0.006	94	405587	5.00	4.83	
17 Acrolein	56	3.452	3.458	-0.006	91	251355	37.5	35.7	M
18 1,1-Dichloroethene	96	3.599	3.605	-0.006	98	287064	5.00	4.71	
19 Acetone	43	3.617	3.611	0.006	98	467179	62.5	52.4	M
20 112TCTFE	101	3.641	3.635	0.006	94	297767	5.00	4.59	
21 Isopropyl alcohol	45	3.757	3.769	-0.012	61	60381	37.5	33.6	M
22 Iodomethane	142	3.806	3.806	0.000	99	490757	5.00	4.58	
23 Ethyl bromide	108	3.824	3.824	0.000	98	260824	5.07	5.07	
24 Carbon disulfide	76	3.922	3.916	0.006	99	805854	5.00	4.40	
26 Methyl acetate	43	4.056	4.056	0.000	98	123705	5.00	4.67	
27 3-Chloro-1-propene	41	4.080	4.080	0.000	95	504945	5.00	4.69	
29 Methylene Chloride	84	4.269	4.263	0.006	93	304885	5.00	4.77	
* 28 t-Butyl alcohol-d10 (IS)	65	4.251	4.269	-0.018	40	121400	50.0	50.0	
30 2-Methyl-2-propanol	59	4.391	4.385	0.006	98	126253	50.0	45.5	
31 Acrylonitrile	53	4.605	4.617	-0.012	99	293737	25.0	25.3	
32 Methyl tert-butyl ether	73	4.672	4.665	0.007	94	674250	5.00	4.66	
33 trans-1,2-Dichloroethene	96	4.690	4.696	-0.006	99	305670	5.00	4.64	
34 Hexane	57	5.111	5.117	-0.006	91	452082	5.00	4.29	
35 1,1-Dichloroethane	63	5.348	5.348	0.000	96	572457	5.00	4.73	
37 Isopropyl ether	45	5.403	5.397	0.006	96	1013382	5.00	4.79	
38 2-Chloro-1,3-butadiene	53	5.458	5.458	0.000	89	496049	5.00	4.86	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.934	5.934	0.000	98	895698	5.00	4.87	
41 2-Butanone (MEK)	43	6.135	6.135	0.000	100	923110	62.5	61.9	
42 cis-1,2-Dichloroethene	96	6.177	6.183	-0.006	81	348405	5.00	4.79	
43 2,2-Dichloropropane	77	6.202	6.190	0.012	86	477789	5.00	4.84	
45 Propionitrile	54	6.226	6.214	0.012	98	145531	37.5	34.4	
47 Methacrylonitrile	67	6.440	6.440	0.000	91	579426	37.5	37.2	
48 Chlorobromomethane	128	6.507	6.507	0.000	96	144130	5.00	4.95	
49 Tetrahydrofuran	71	6.525	6.531	-0.006	78	101671	25.0	24.6	
50 Chloroform	83	6.659	6.659	0.000	93	555545	5.00	4.89	
$ 51 Dibromofluoromethane (Surr)	113	6.872	6.872	0.000	93	562931	10.0	10.1	
52 1,1,1-Trichloroethane	97	6.897	6.891	0.006	98	497935	5.00	4.77	
53 Cyclohexane	56	6.994	6.994	0.000	91	587310	5.00	4.47	
55 1,1-Dichloropropene	75	7.104	7.104	0.000	97	458325	5.00	4.77	
56 Carbon tetrachloride	117	7.110	7.110	0.000	83	433860	5.00	4.81	
57 Isobutyl alcohol	41	7.238	7.232	0.006	95	112000	125.0	106.4	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.336	7.330	0.006	96	112900	10.0	10.0	
59 Benzene	78	7.366	7.366	0.000	96	1333469	5.00	4.83	
60 1,2-Dichloroethane	62	7.439	7.439	0.000	97	319484	5.00	4.74	
62 Tert-amyl methyl ether	73	7.555	7.555	0.000	99	776244	5.00	4.80	
* 65 Fluorobenzene (IS)	96	7.769	7.769	0.000	99	2305813	10.0	10.0	
64 n-Heptane	43	7.781	7.781	0.000	91	486601	5.00	4.23	
66 n-Butanol	56	8.122	8.122	0.000	87	213986	250.0	232.1	
67 Trichloroethene	95	8.250	8.250	0.000	99	339619	5.00	4.78	
68 Methylcyclohexane	83	8.567	8.567	0.000	93	613252	5.00	4.56	
70 1,2-Dichloropropane	63	8.592	8.585	0.007	82	350313	5.00	4.91	
69 2-ethoxy-2-methyl butane	87	8.592	8.592	0.000	90	439610	5.00	4.88	
71 Methyl methacrylate	69	8.665	8.665	0.000	91	140799	5.00	4.91	
72 1,4-Dioxane	88	8.671	8.671	0.000	32	21263	125.0	113.3	M
73 Dibromomethane	93	8.695	8.689	0.006	97	150752	5.00	4.92	
75 Dichlorobromomethane	83	8.933	8.927	0.006	100	397393	5.00	4.98	
76 2-Nitropropane	41	9.195	9.195	0.000	98	35599	5.00	4.70	
79 1-Bromo-2-chloroethane	63	9.323	9.323	0.000	98	336591	5.00	4.85	
80 cis-1,3-Dichloropropene	75	9.476	9.476	0.000	97	505366	5.00	4.89	
81 4-Methyl-2-pentanone (MIBK)	43	9.640	9.640	0.000	96	2317450	62.5	62.1	
$ 82 Toluene-d8 (Surr)	98	9.780	9.780	0.000	93	2309193	10.0	10.0	
83 Toluene	92	9.860	9.860	0.000	98	842584	5.00	4.79	
85 trans-1,3-Dichloropropene	75	10.110	10.110	0.000	91	412391	5.00	5.01	
86 Ethyl methacrylate	69	10.171	10.170	0.001	88	313549	5.00	4.98	
87 1,1,2-Trichloroethane	97	10.317	10.317	0.000	89	221072	5.00	4.93	
88 Tetrachloroethene	166	10.408	10.408	0.000	97	369390	5.00	4.85	
89 1,3-Dichloropropane	76	10.475	10.475	0.000	88	385305	5.00	4.95	
91 2-Hexanone	43	10.524	10.524	0.000	96	1620119	62.5	63.5	
93 Chlorodibromomethane	129	10.695	10.695	0.000	90	269226	5.00	4.84	
94 Ethylene Dibromide	107	10.805	10.805	0.001	98	207441	5.00	4.80	
* 97 Chlorobenzene-d5 (IS)	117	11.237	11.237	0.000	86	1714728	10.0	10.0	
96 1-Chlorohexane	91	11.244	11.243	0.001	98	482046	5.00	4.51	
98 Chlorobenzene	112	11.262	11.262	0.000	95	897096	5.00	4.81	
99 1,1,1,2-Tetrachloroethane	131	11.347	11.347	0.000	98	312867	5.00	4.92	
100 Ethylbenzene	91	11.347	11.347	0.000	98	1613525	5.00	4.86	
101 m-Xylene & p-Xylene	106	11.463	11.463	0.000	98	1254625	10.0	9.89	
102 o-Xylene	106	11.792	11.792	0.000	96	611943	5.00	4.87	
103 Styrene	104	11.804	11.804	0.000	95	993168	5.00	4.94	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 Bromoform	173	11.963	11.963	0.000	97	151214	5.00	4.91	
105 Isopropylbenzene	105	12.091	12.091	0.000	96	1602753	5.00	4.95	
$ 108 4-Bromofluorobenzene (Surr)	95	12.237	12.237	0.000	90	839149	10.0	9.98	
109 1,1,2,2-Tetrachloroethane	83	12.335	12.335	0.000	93	271610	5.00	4.90	
111 Bromobenzene	156	12.353	12.353	0.000	95	351616	5.00	5.00	
110 trans-1,4-Dichloro-2-butene	53	12.359	12.359	0.000	87	329240	25.0	25.1	
112 1,2,3-Trichloropropane	110	12.384	12.383	0.001	83	65871	5.00	4.65	
113 N-Propylbenzene	91	12.420	12.420	0.000	99	1879287	5.00	4.85	
114 2-Chlorotoluene	126	12.493	12.493	0.000	97	364832	5.00	4.81	
115 1,3,5-Trimethylbenzene	105	12.554	12.554	0.000	94	1309762	5.00	4.83	
116 4-Chlorotoluene	126	12.585	12.585	0.000	98	371850	5.00	4.86	
118 tert-Butylbenzene	134	12.798	12.798	0.000	93	280078	5.00	4.74	
119 Pentachloroethane	167	12.829	12.829	0.001	89	209949	5.00	4.79	
120 1,2,4-Trimethylbenzene	105	12.835	12.835	0.000	96	1336662	5.00	4.83	
121 sec-Butylbenzene	105	12.957	12.957	0.000	94	1681762	5.00	4.91	
122 1,3-Dichlorobenzene	146	13.060	13.060	0.000	97	691550	5.00	4.77	
123 4-Isopropyltoluene	119	13.066	13.066	0.000	97	1402179	5.00	4.83	
* 124 1,4-Dichlorobenzene-d4	152	13.115	13.115	0.000	94	915426	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.133	13.133	0.000	95	692899	5.00	4.85	
126 1,2,3-Trimethylbenzene	120	13.139	13.139	0.000	98	588877	5.00	4.78	
127 Benzyl chloride	126	13.207	13.206	0.001	98	111203	5.00	4.89	
130 n-Butylbenzene	92	13.359	13.359	0.000	97	690293	5.00	4.73	
131 1,2-Dichlorobenzene	146	13.396	13.395	0.001	98	648601	5.00	4.93	
129 p-Diethylbenzene	119	13.408	13.408	0.000	87	698983	5.00	4.76	
134 1,2-Dibromo-3-Chloropropane	155	13.938	13.932	0.006	87	35151	5.00	4.41	
135 1,3,5-Trichlorobenzene	180	14.060	14.060	0.000	97	501268	5.00	4.79	
136 1,2,4-Trichlorobenzene	180	14.487	14.481	0.006	94	423267	5.00	4.77	
137 Hexachlorobutadiene	225	14.566	14.566	0.000	97	183611	5.00	4.52	
138 Naphthalene	128	14.664	14.664	0.000	97	830032	5.00	4.85	
139 1,2,3-Trichlorobenzene	180	14.810	14.810	0.000	96	374695	5.00	4.87	
140 2-Methylnaphthalene	142	15.444	15.444	0.000	92	446552	5.00	4.50	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_VOC#1_00007	Amount Added: 12.50	Units: uL	
MSV_LCS_Penta_00004	Amount Added: 12.50	Units: uL	
MSV_QC_Gas826_00010	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_LCS_ACROL_00009	Amount Added: 12.50	Units: uL	
MSV_LLcentISS_00001	Amount Added: 5.00	Units: uL	Run Reagent

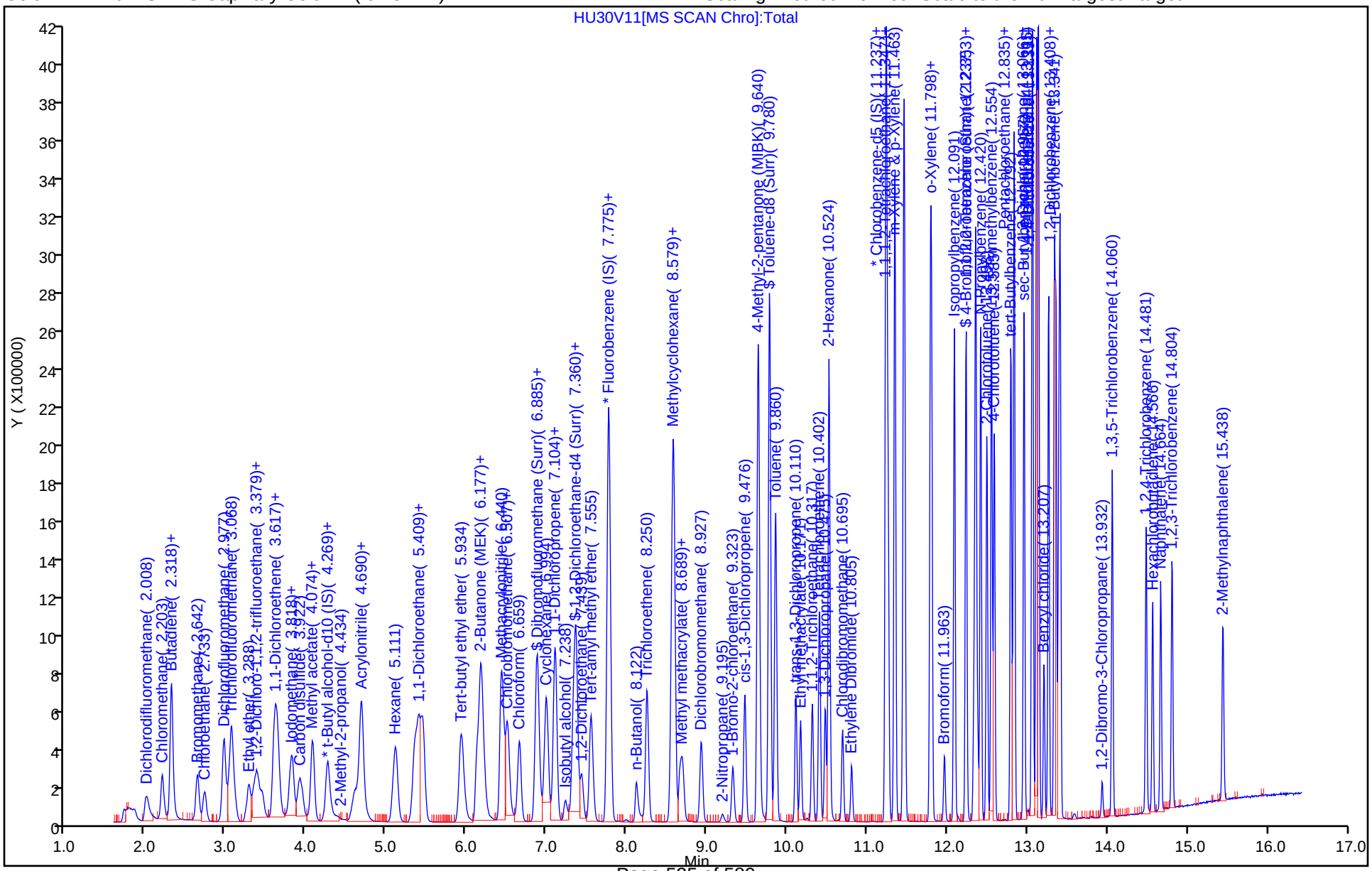
Report Date: 01-Jul-2021 01:11:17 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30V11.D

Injection Date:	30-Jun-2021 21:12:30	Instrument ID:	19094	Operator ID:	jml01693
Lims ID:	ICV			Worklist Smp#:	21
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

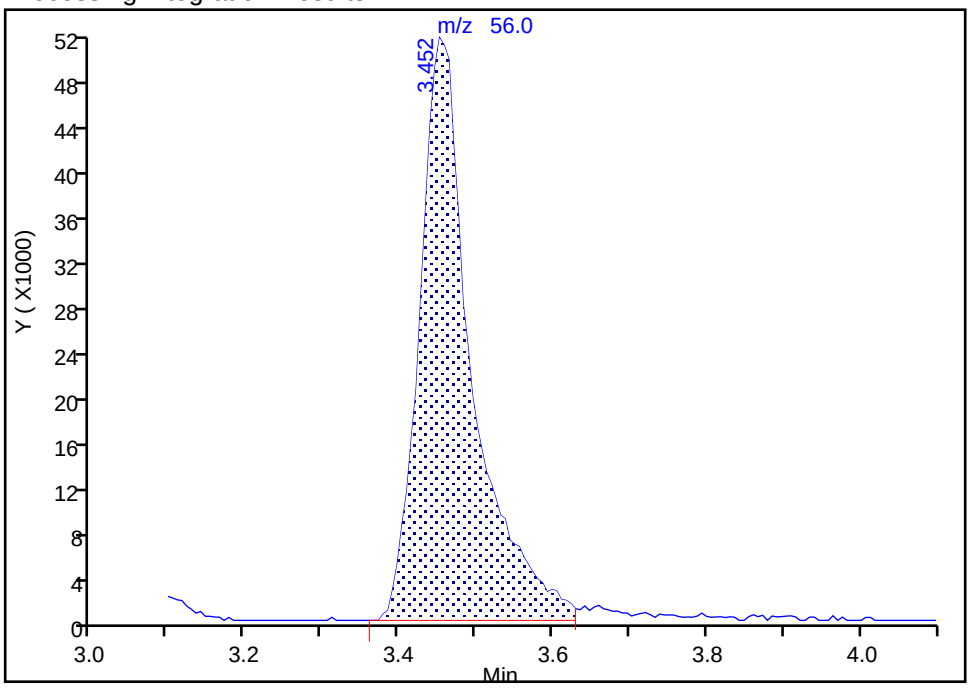
Data File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30V11.D				
Injection Date:	30-Jun-2021 21:12:30	Instrument ID:	19094		
Lims ID:	ICV				
Client ID:					
Operator ID:	jml01693	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

17 Acrolein, CAS: 107-02-8

Signal: 1

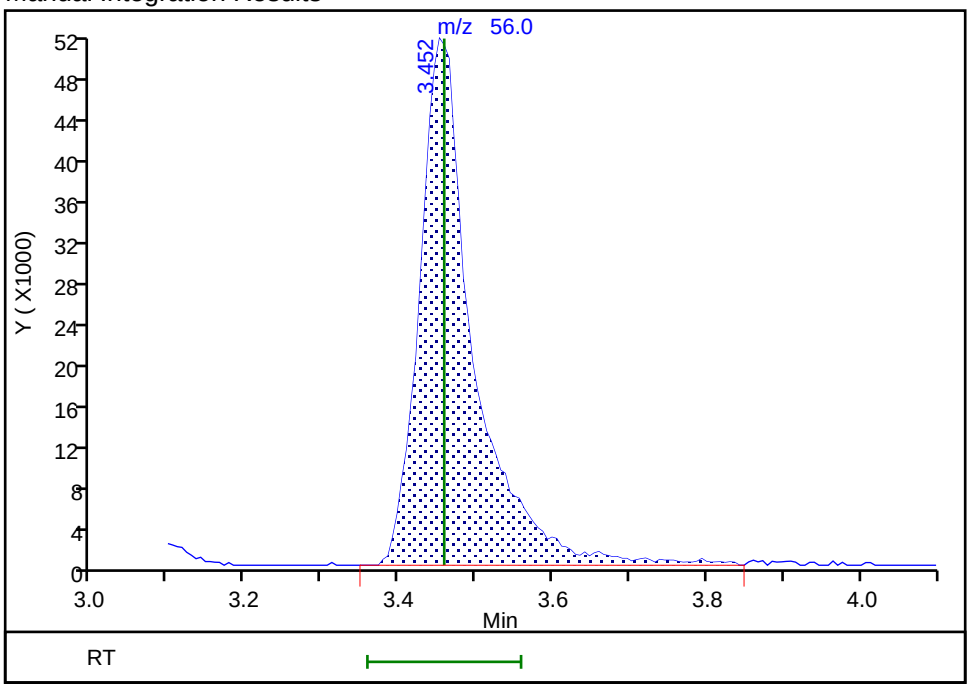
Processing Integration Results

RT: 3.45
Area: 244154
Amount: 34.640723
Amount Units: ug/l



Manual Integration Results

RT: 3.45
Area: 251355
Amount: 35.662406
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 01:02:53
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

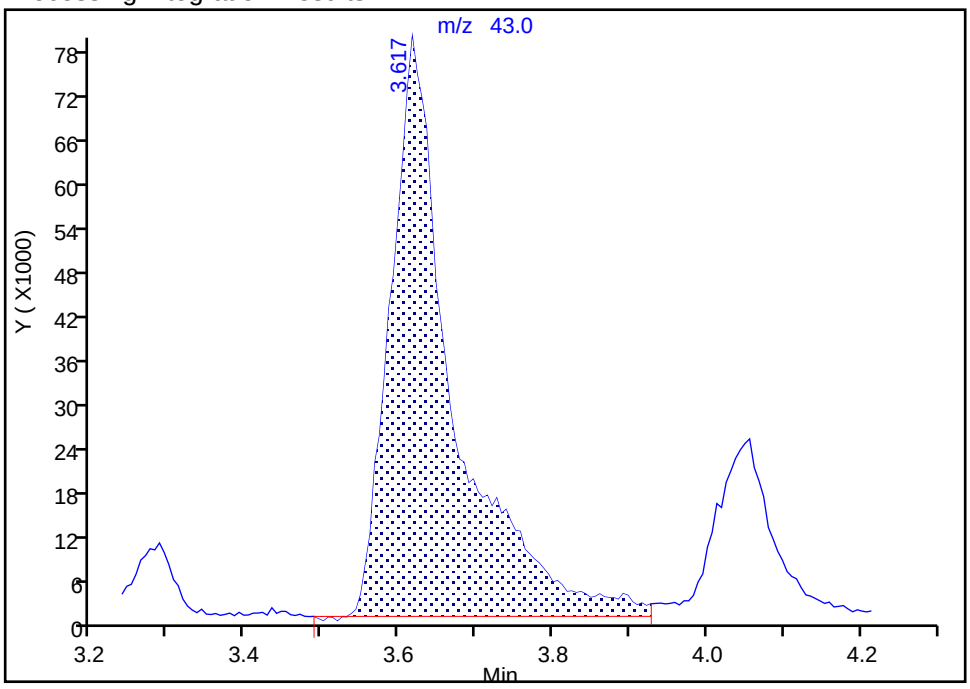
Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30V11.D
Injection Date: 30-Jun-2021 21:12:30 Instrument ID: 19094
Lims ID: ICV
Client ID:
Operator ID: jml01693 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

19 Acetone, CAS: 67-64-1

Signal: 1

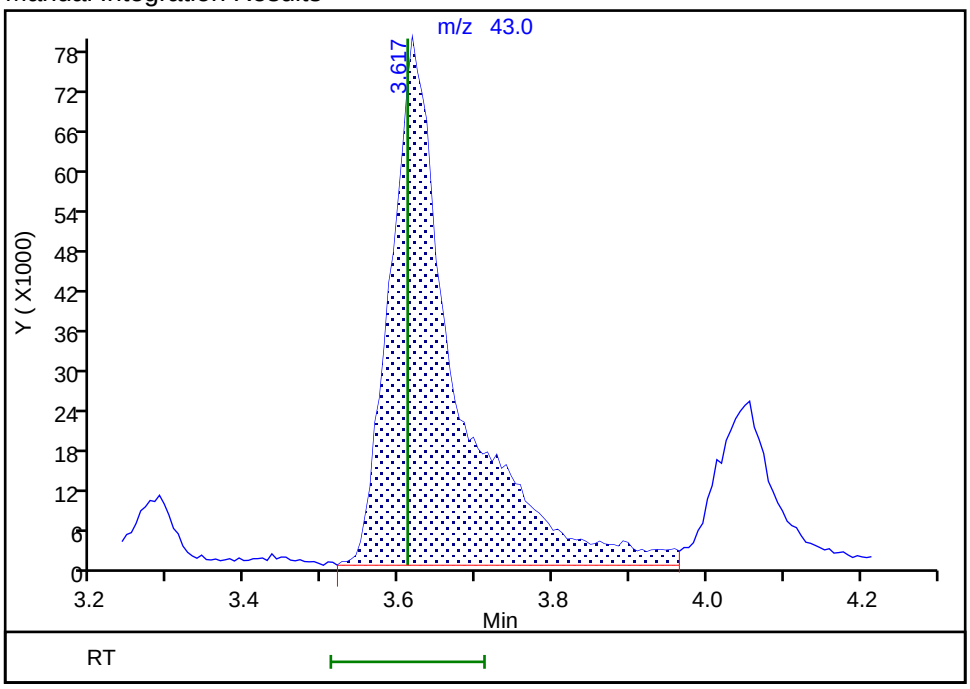
Processing Integration Results

RT: 3.62
Area: 448445
Amount: 50.311254
Amount Units: ug/l



Manual Integration Results

RT: 3.62
Area: 467179
Amount: 52.413030
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 01:03:06
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

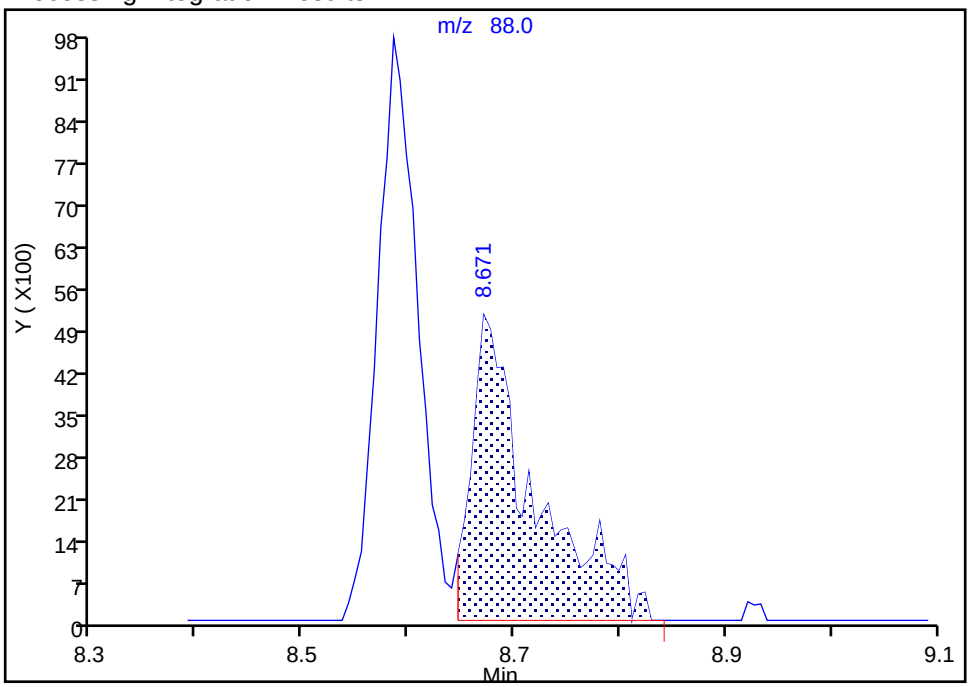
Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30V11.D
Injection Date: 30-Jun-2021 21:12:30 Instrument ID: 19094
Lims ID: ICV
Client ID:
Operator ID: jml01693 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

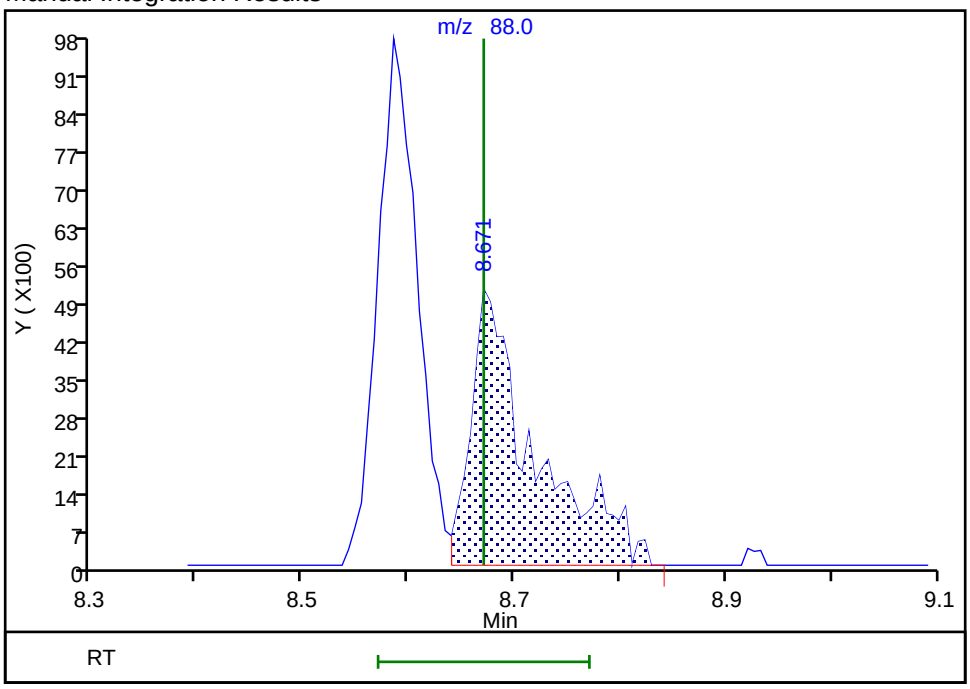
Processing Integration Results

RT: 8.67
Area: 21065
Amount: 112.2853
Amount Units: ug/l



Manual Integration Results

RT: 8.67
Area: 21263
Amount: 113.3407
Amount Units: ug/l



Reviewer: campbellme, 01-Jul-2021 01:03:49
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-49448-1

SDG No.:

Lab Sample ID: CCVIS 410-156699/3 Calibration Date: 08/04/2021 18:42

Instrument ID: 19094 Calib Start Date: 06/30/2021 18:47

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 06/30/2021 20:52

Lab File ID: HG04C01.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	0.2837	0.3096	0.1000	10.9	10.0	9.1	20.0
Chloromethane	Ave	0.3433	0.3238	0.1000	9.43	10.0	-5.7	20.0
1,3-Butadiene	Ave	0.3174	0.3080		9.71	10.0	-2.9	20.0
Vinyl chloride	Ave	0.3468	0.3347	0.1000	9.65	10.0	-3.5	20.0
Bromomethane	Ave	0.2566	0.2571	0.1000	10.0	10.0	0.2	20.0
Chloroethane	Ave	0.2243	0.2126	0.1000	9.48	10.0	-5.2	20.0
Dichlorofluoromethane	Ave	0.5169	0.5140		9.94	10.0	-0.6	20.0
Trichlorofluoromethane	Ave	0.4564	0.4878	0.1000	10.7	10.0	6.9	20.0
Ethyl ether	Ave	0.1973	0.1868		9.47	10.0	-5.3	20.0
Freon 123a	Ave	0.3642	0.3522		9.67	10.0	-3.3	20.0
Acrolein	Ave	2.903	2.481		427	500	-14.5	20.0
1,1-Dichloroethene	Ave	0.2646	0.2630	0.1000	9.94	10.0	-0.6	20.0
Acetone	Ave	3.671	2.934	0.1000	79.9	100	-20.1*	20.0
Freon 113	Ave	0.2813	0.2763	0.1000	9.82	10.0	-1.8	20.0
Methyl iodide	Ave	0.4647	0.4883		10.5	10.0	5.1	20.0
Ethyl bromide	Ave	0.2229	0.2251		10.1	9.99	1.0	20.0
Carbon disulfide	Ave	0.7952	0.7765	0.1000	9.76	10.0	-2.4	20.0
Methyl acetate	Ave	10.92	9.378	0.1000	8.59	10.0	-14.1	20.0
Allyl chloride	Ave	0.4671	0.4233		9.06	10.0	-9.4	20.0
Methylene Chloride	Ave	0.2775	0.2715	0.1000	9.78	10.0	-2.2	20.0
t-Butyl alcohol	Ave	1.143	1.011		177	200	-11.6	20.0
Acrylonitrile	Ave	4.791	4.445		23.2	25.0	-7.2	20.0
Methyl tert-butyl ether	Ave	0.6271	0.6183	0.1000	9.86	10.0	-1.4	20.0
trans-1,2-Dichloroethene	Ave	0.2856	0.2842	0.1000	9.95	10.0	-0.5	20.0
n-Hexane	Ave	0.4574	0.4224		9.24	10.0	-7.6	20.0
1,1-Dichloroethane	Ave	0.5245	0.5225	0.2000	9.96	10.0	-0.4	20.0
di-Isopropyl ether	Ave	0.9168	0.8468		9.24	10.0	-7.6	20.0
2-Chloro-1,3-butadiene	Ave	0.4430	0.4423		9.98	10.0	-0.2	20.0
Ethyl t-butyl ether	Ave	0.7970	0.7848		9.85	10.0	-1.5	20.0
2-Butanone (MEK)	Ave	6.141	5.311	0.1000	86.5	100	-13.5	20.0
cis-1,2-Dichloroethene	Ave	0.3153	0.3109	0.1000	9.86	10.0	-1.4	20.0
2,2-Dichloropropane	Ave	0.4281	0.4459		10.4	10.0	4.1	20.0
Propionitrile	Ave	1.742	1.554		178	200	-10.8	20.0
Methacrylonitrile	Ave	6.410	5.752		89.7	100	-10.3	20.0
Bromochloromethane	Ave	0.1262	0.1308		10.4	10.0	3.6	20.0
Tetrahydrofuran	Ave	1.703	1.556		45.7	50.0	-8.6	20.0
Chloroform	Ave	0.4930	0.5070	0.2000	10.3	10.0	2.8	20.0
1,1,1-Trichloroethane	Ave	0.4529	0.4665	0.1000	10.3	10.0	3.0	20.0
Cyclohexane	Ave	0.5697	0.5289	0.1000	9.28	10.0	-7.2	20.0
1,1-Dichloropropene	Ave	0.4167	0.4130		9.91	10.0	-0.9	20.0
Carbon tetrachloride	Ave	0.3911	0.4150	0.1000	10.6	10.0	6.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-49448-1

SDG No.:

Lab Sample ID: CCVIS 410-156699/3 Calibration Date: 08/04/2021 18:42

Instrument ID: 19094 Calib Start Date: 06/30/2021 18:47

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 06/30/2021 20:52

Lab File ID: HG04C01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Isobutyl alcohol	Ave	0.4336	0.3611		416	500	-16.7	20.0
Benzene	Ave	1.197	1.197	0.5000	10.0	10.0	-0.0	20.0
1,2-Dichloroethane	Ave	0.2925	0.2996	0.1000	10.2	10.0	2.4	20.0
t-Amyl methyl ether	Ave	0.7012	0.7089		10.1	10.0	1.1	20.0
n-Heptane	Ave	0.4989	0.4277		8.57	10.0	-14.3	20.0
n-Butanol	Ave	0.3797	0.3346		771	875	-11.9	20.0
Trichloroethene	Ave	0.3083	0.3145	0.2000	10.2	10.0	2.0	20.0
Methylcyclohexane	Ave	0.5828	0.5618	0.1000	9.64	10.0	-3.6	20.0
1,2-Dichloropropane	Ave	0.3097	0.3002	0.1000	9.69	10.0	-3.1	20.0
1,4-Dioxane	Ave	0.0773	0.0695	0.0050	449	500	-10.1	20.0
Methyl methacrylate	Ave	11.80	11.01		9.32	10.0	-6.8	20.0
Dibromomethane	Ave	0.1328	0.1395		10.5	10.0	5.0	20.0
Bromodichloromethane	Ave	0.3464	0.3642	0.2000	10.5	10.0	5.1	20.0
2-Nitropropane	Ave	3.120	3.043		48.8	50.0	-2.5	20.0
1-Bromo-2-chloroethane	Ave	0.3010	0.2938		9.76	10.0	-2.4	20.0
cis-1,3-Dichloropropene	Ave	0.4483	0.4621	0.2000	10.3	10.0	3.1	20.0
4-Methyl-2-pentanone (MIBK)	Ave	15.37	13.52	0.1000	88.0	100	-12.0	20.0
Toluene	Ave	1.025	0.9328	0.4000	9.10	10.0	-9.0	20.0
trans-1,3-Dichloropropene	Ave	0.4800	0.4467	0.1000	9.31	10.0	-6.9	20.0
Ethyl methacrylate	Ave	0.3671	0.3350		9.13	10.0	-8.7	20.0
1,1,2-Trichloroethane	Ave	0.2614	0.2371	0.1000	9.07	10.0	-9.3	20.0
Tetrachloroethene	Ave	0.4446	0.4282	0.2000	9.63	10.0	-3.7	20.0
1,3-Dichloropropane	Ave	0.4542	0.4153		9.14	10.0	-8.6	20.0
2-Hexanone	Ave	10.51	9.372	0.1000	89.1	100	-10.9	20.0
Dibromochloromethane	Ave	0.3246	0.3152		9.71	10.0	-2.9	20.0
1,2-Dibromoethane (EDB)	Ave	0.2520	0.2380	0.1000	9.45	10.0	-5.5	20.0
1-Chlorohexane	Ave	0.6228	0.5521		8.87	10.0	-11.3	20.0
Chlorobenzene	Ave	1.087	1.031	0.5000	9.49	10.0	-5.1	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3710	0.3566		9.61	10.0	-3.9	20.0
Ethylbenzene	Ave	1.935	1.814	0.1000	9.37	10.0	-6.3	20.0
m&p-Xylene	Ave	0.7396	0.7085	0.1000	19.2	20.0	-4.2	20.0
o-Xylene	Ave	0.7323	0.6933	0.3000	9.47	10.0	-5.3	20.0
Styrene	Ave	1.173	1.128	0.3000	9.62	10.0	-3.8	20.0
Bromoform	Ave	0.1795	0.1822	0.1000	10.2	10.0	1.5	20.0
Isopropylbenzene	Ave	1.889	1.814	0.1000	9.60	10.0	-4.0	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6058	0.5323	0.3000	8.79	10.0	-12.1	20.0
Bromobenzene	Ave	0.7688	0.7374		9.59	10.0	-4.1	20.0
trans-1,4-Dichloro-2-butene	Ave	5.397	5.249		97.3	100	-2.7	20.0
1,2,3-Trichloropropane	Ave	0.1547	0.1416		9.15	10.0	-8.5	20.0
N-Propylbenzene	Ave	4.237	3.900		9.21	10.0	-7.9	20.0
2-Chlorotoluene	Ave	0.8283	0.7714		9.31	10.0	-6.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-49448-1

SDG No.:

Lab Sample ID: CCVIS 410-156699/3 Calibration Date: 08/04/2021 18:42

Instrument ID: 19094 Calib Start Date: 06/30/2021 18:47

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 06/30/2021 20:52

Lab File ID: HG04C01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	2.965	2.751		9.28	10.0	-7.2	20.0
4-Chlorotoluene	Ave	0.8359	0.7901		9.45	10.0	-5.5	20.0
tert-Butylbenzene	Ave	0.6453	0.5805		9.00	10.0	-10.0	20.0
Pentachloroethane	Ave	0.4788	0.4622		9.65	10.0	-3.5	20.0
1,2,4-Trimethylbenzene	Ave	3.024	2.821		9.33	10.0	-6.7	20.0
sec-Butylbenzene	Ave	3.745	3.501		9.35	10.0	-6.5	20.0
1,3-Dichlorobenzene	Ave	1.584	1.496	0.6000	9.44	10.0	-5.6	20.0
p-Isopropyltoluene	Ave	3.168	3.001		9.47	10.0	-5.3	20.0
1,4-Dichlorobenzene	Ave	1.562	1.474	0.5000	9.43	10.0	-5.7	20.0
1,2,3-Trimethylbenzene	Ave	1.345	1.215		9.03	10.0	-9.7	20.0
Benzyl chloride	Ave	0.2484	0.2360		9.50	10.0	-5.0	20.0
n-Butylbenzene	Ave	1.595	1.480		9.28	10.0	-7.2	20.0
1,2-Dichlorobenzene	Ave	1.436	1.344	0.4000	9.36	10.0	-6.4	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0871	0.0798	0.0500	9.16	10.0	-8.4	20.0
1,3,5-Trichlorobenzene	Ave	1.144	1.100		9.61	10.0	-3.9	20.0
1,2,4-Trichlorobenzene	Ave	0.9687	0.9424	0.2000	9.73	10.0	-2.7	20.0
Hexachlorobutadiene	Ave	0.4439	0.4193		9.45	10.0	-5.5	20.0
Naphthalene	Ave	1.870	1.652		8.83	10.0	-11.7	20.0
1,2,3-Trichlorobenzene	Ave	0.8409	0.7863		9.35	10.0	-6.5	20.0
Dibromofluoromethane (Surr)	Ave	0.2419	0.2590		10.7	10.0	7.0	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0489	0.0487		9.96	10.0	-0.4	20.0
Toluene-d8 (Surr)	Ave	1.344	1.268		9.44	10.0	-5.6	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4904	0.4779		9.75	10.0	-2.5	20.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04C01.D
Lims ID: CCVIS VSTD10
Client ID:
Sample Type: CCVIS
Inject. Date: 04-Aug-2021 18:42:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-003
Misc. Info.: CCVIS VSTD010
Operator ID: MEC29284 Instrument ID: 19094
Sublist: chrom-MSV_19094_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 10:39:31 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: campbellme Date: 04-Aug-2021 19:09:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	1.989	1.989	0.000	99	738741	10.0	10.9	
6 Chloromethane	50	2.190	2.190	0.000	99	772661	10.0	9.43	
8 Butadiene	39	2.306	2.306	0.000	93	734959	10.0	9.71	
7 Vinyl chloride	62	2.312	2.312	0.000	98	798722	10.0	9.65	
9 Bromomethane	94	2.641	2.641	0.000	91	613421	10.0	10.0	
10 Chloroethane	64	2.727	2.727	0.000	100	507402	10.0	9.48	
11 Dichlorofluoromethane	67	2.977	2.977	0.000	97	1226488	10.0	9.94	
13 Trichlorofluoromethane	101	3.056	3.056	0.000	98	1164088	10.0	10.7	
15 Ethyl ether	59	3.294	3.294	0.000	91	445663	10.0	9.47	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.373	3.373	0.000	92	840455	10.0	9.67	
17 Acrolein	56	3.458	3.458	0.000	99	3475920	500.0	427.2	
18 1,1-Dichloroethene	96	3.611	3.611	0.000	98	627507	10.0	9.94	
19 Acetone	43	3.635	3.635	0.000	100	822237	100.0	79.9	
20 112TCTFE	101	3.647	3.647	0.000	93	659314	10.0	9.82	
21 Isopropyl alcohol	45	3.763	3.763	0.000	98	319704	200.0	171.9	M
22 Iodomethane	142	3.812	3.812	0.000	98	1165267	10.0	10.5	
23 Ethyl bromide	108	3.842	3.842	0.000	98	536907	10.0	10.1	
24 Carbon disulfide	76	3.934	3.934	0.000	99	1852769	10.0	9.76	
26 Methyl acetate	43	4.056	4.056	0.000	97	262837	10.0	8.59	M
27 3-Chloro-1-propene	41	4.098	4.098	0.000	93	1009987	10.0	9.06	
* 28 t-Butyl alcohol-d10 (IS)	65	4.281	4.281	0.000	88	140130	50.0	50.0	
29 Methylene Chloride	84	4.281	4.281	0.000	94	647823	10.0	9.78	
30 2-Methyl-2-propanol	59	4.403	4.403	0.000	99	566462	200.0	176.9	M
31 Acrylonitrile	53	4.629	4.629	0.000	99	311417	25.0	23.2	
32 Methyl tert-butyl ether	73	4.702	4.702	0.000	95	1475440	10.0	9.86	
33 trans-1,2-Dichloroethene	96	4.714	4.714	0.000	99	678207	10.0	9.95	
34 Hexane	57	5.135	5.135	0.000	91	1007964	10.0	9.24	
35 1,1-Dichloroethane	63	5.367	5.367	0.000	96	1246866	10.0	9.96	
37 Isopropyl ether	45	5.428	5.428	0.000	94	2020600	10.0	9.24	
38 2-Chloro-1,3-butadiene	53	5.476	5.476	0.000	90	1055337	10.0	9.98	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 Tert-butyl ethyl ether	59	5.958	5.958	0.000	97	1872671	10.0	9.85	
41 2-Butanone (MEK)	43	6.147	6.147	0.000	100	1488371	100.0	86.5	
42 cis-1,2-Dichloroethene	96	6.196	6.196	0.000	82	741798	10.0	9.86	
43 2,2-Dichloropropane	77	6.214	6.214	0.000	86	1063904	10.0	10.4	
45 Propionitrile	54	6.232	6.232	0.000	99	870802	200.0	178.4	
47 Methacrylonitrile	67	6.452	6.452	0.000	91	1612176	100.0	89.7	
48 Chlorobromomethane	128	6.525	6.525	0.000	94	312013	10.0	10.4	
49 Tetrahydrofuran	71	6.531	6.531	0.000	77	218095	50.0	45.7	
50 Chloroform	83	6.677	6.677	0.000	93	1209913	10.0	10.3	
$ 51 Dibromofluoromethane (Surr)	113	6.891	6.891	0.000	94	617968	10.0	10.7	
52 1,1,1-Trichloroethane	97	6.909	6.909	0.000	98	1113256	10.0	10.3	
53 Cyclohexane	56	7.006	7.006	0.000	89	1262014	10.0	9.28	
55 1,1-Dichloropropene	75	7.116	7.116	0.000	98	985394	10.0	9.91	
56 Carbon tetrachloride	117	7.122	7.122	0.000	95	990171	10.0	10.6	
57 Isobutyl alcohol	41	7.244	7.244	0.000	95	506063	500.0	416.5	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.336	7.336	0.000	80	116100	10.0	9.96	
59 Benzene	78	7.378	7.378	0.000	95	2856174	10.0	10.0	
60 1,2-Dichloroethane	62	7.439	7.439	0.000	97	714900	10.0	10.2	
62 Tert-amyl methyl ether	73	7.567	7.567	0.000	99	1691528	10.0	10.1	
* 65 Fluorobenzene (IS)	96	7.775	7.775	0.000	99	2386189	10.0	10.0	
64 n-Heptane	43	7.793	7.793	0.000	91	1020606	10.0	8.57	
66 n-Butanol	56	8.122	8.122	0.000	86	820652	875.0	771.1	
67 Trichloroethene	95	8.256	8.256	0.000	98	750342	10.0	10.2	
68 Methylcyclohexane	83	8.567	8.567	0.000	93	1340637	10.0	9.64	
70 1,2-Dichloropropane	63	8.585	8.585	0.000	72	716326	10.0	9.69	
69 2-ethoxy-2-methyl butane	87	8.592	8.592	0.000	93	1014368	10.0	10.9	
71 Methyl methacrylate	69	8.665	8.665	0.000	88	308441	10.0	9.32	
72 1,4-Dioxane	88	8.665	8.665	0.000	33	97332	500.0	449.5	M
73 Dibromomethane	93	8.695	8.695	0.000	96	332894	10.0	10.5	
75 Dichlorobromomethane	83	8.927	8.927	0.000	100	868934	10.0	10.5	
76 2-Nitropropane	41	9.189	9.189	0.000	98	426445	50.0	48.8	
79 1-Bromo-2-chloroethane	63	9.317	9.317	0.000	99	701049	10.0	9.76	
80 cis-1,3-Dichloropropene	75	9.463	9.463	0.000	96	1102555	10.0	10.3	
81 4-Methyl-2-pentanone (MIBK)	43	9.628	9.628	0.000	96	3790273	100.0	88.0	
$ 82 Toluene-d8 (Surr)	98	9.768	9.768	0.000	93	2505166	10.0	9.44	
83 Toluene	92	9.847	9.847	0.000	98	1843050	10.0	9.10	
85 trans-1,3-Dichloropropene	75	10.097	10.097	0.000	92	882555	10.0	9.31	
86 Ethyl methacrylate	69	10.152	10.152	0.000	88	662011	10.0	9.13	
87 1,1,2-Trichloroethane	97	10.299	10.299	0.000	90	468457	10.0	9.07	
88 Tetrachloroethene	166	10.390	10.390	0.000	98	846008	10.0	9.63	
89 1,3-Dichloropropane	76	10.457	10.457	0.000	89	820555	10.0	9.14	
91 2-Hexanone	43	10.506	10.506	0.000	97	2626562	100.0	89.1	
93 Chlorodibromomethane	129	10.670	10.670	0.000	89	622736	10.0	9.71	
94 Ethylene Dibromide	107	10.786	10.786	0.000	97	470335	10.0	9.45	
* 97 Chlorobenzene-d5 (IS)	117	11.213	11.213	0.000	84	1975896	10.0	10.0	
96 1-Chlorohexane	91	11.219	11.219	0.000	97	1090977	10.0	8.87	
98 Chlorobenzene	112	11.237	11.237	0.000	95	2037472	10.0	9.49	
99 1,1,1,2-Tetrachloroethane	131	11.317	11.317	0.000	96	704574	10.0	9.61	
100 Ethylbenzene	91	11.323	11.323	0.000	98	3583924	10.0	9.37	
101 m-Xylene & p-Xylene	106	11.439	11.439	0.000	98	2799880	20.0	19.2	
102 o-Xylene	106	11.762	11.762	0.000	96	1369931	10.0	9.47	
103 Styrene	104	11.780	11.780	0.000	95	2228756	10.0	9.62	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
104 Bromoform	173	11.938	11.938	0.000	96	360032	10.0	10.2	
105 Isopropylbenzene	105	12.060	12.060	0.000	95	3584851	10.0	9.60	
$ 108 4-Bromofluorobenzene (Surr)	95	12.201	12.201	0.000	90	944260	10.0	9.75	
109 1,1,2,2-Tetrachloroethane	83	12.298	12.298	0.000	92	581247	10.0	8.79	
111 Bromobenzene	156	12.323	12.323	0.000	93	805107	10.0	9.59	
110 trans-1,4-Dichloro-2-butene	53	12.323	12.323	0.000	91	1471082	100.0	97.3	
112 1,2,3-Trichloropropane	110	12.347	12.347	0.000	81	154572	10.0	9.15	
113 N-Propylbenzene	91	12.383	12.383	0.000	99	4258025	10.0	9.21	
114 2-Chlorotoluene	126	12.463	12.463	0.000	97	842223	10.0	9.31	
115 1,3,5-Trimethylbenzene	105	12.518	12.518	0.000	94	3003706	10.0	9.28	
116 4-Chlorotoluene	126	12.554	12.554	0.000	97	862706	10.0	9.45	
118 tert-Butylbenzene	134	12.761	12.761	0.000	93	633817	10.0	9.00	
119 Pentachloroethane	167	12.798	12.798	0.000	95	504678	10.0	9.65	
120 1,2,4-Trimethylbenzene	105	12.804	12.804	0.000	97	3080700	10.0	9.33	
121 sec-Butylbenzene	105	12.926	12.926	0.000	94	3822508	10.0	9.35	
122 1,3-Dichlorobenzene	146	13.024	13.024	0.000	98	1633895	10.0	9.44	
123 4-Isopropyltoluene	119	13.030	13.030	0.000	97	3276463	10.0	9.47	
* 124 1,4-Dichlorobenzene-d4	152	13.078	13.078	0.000	94	1091873	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.097	13.097	0.000	94	1608928	10.0	9.43	
126 1,2,3-Trimethylbenzene	120	13.103	13.103	0.000	98	1326124	10.0	9.03	
127 Benzyl chloride	126	13.170	13.170	0.000	98	257690	10.0	9.50	
130 n-Butylbenzene	92	13.322	13.322	0.000	97	1616084	10.0	9.28	
131 1,2-Dichlorobenzene	146	13.353	13.353	0.000	98	1467315	10.0	9.36	
129 p-Diethylbenzene	119	13.371	13.371	0.000	86	1599180	10.0	9.13	
134 1,2-Dibromo-3-Chloropropane	155	13.895	13.895	0.000	88	87103	10.0	9.16	
135 1,3,5-Trichlorobenzene	180	14.017	14.017	0.000	97	1200556	10.0	9.61	
136 1,2,4-Trichlorobenzene	180	14.438	14.438	0.000	94	1028988	10.0	9.73	
137 Hexachlorobutadiene	225	14.523	14.523	0.000	96	457825	10.0	9.45	
138 Naphthalene	128	14.621	14.621	0.000	97	1803268	10.0	8.83	
139 1,2,3-Trichlorobenzene	180	14.761	14.761	0.000	96	858486	10.0	9.35	
140 2-Methylnaphthalene	142	15.389	15.389	0.000	91	931164	10.0	7.87	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_GAS826_00020	Amount Added: 20.00	Units: uL	
MSV_LL_#1_826_00012	Amount Added: 20.00	Units: uL	
MSV_LL_#2_826_00012	Amount Added: 20.00	Units: uL	
MSV_LLcentISS_00001	Amount Added: 5.00	Units: uL	Run Reagent

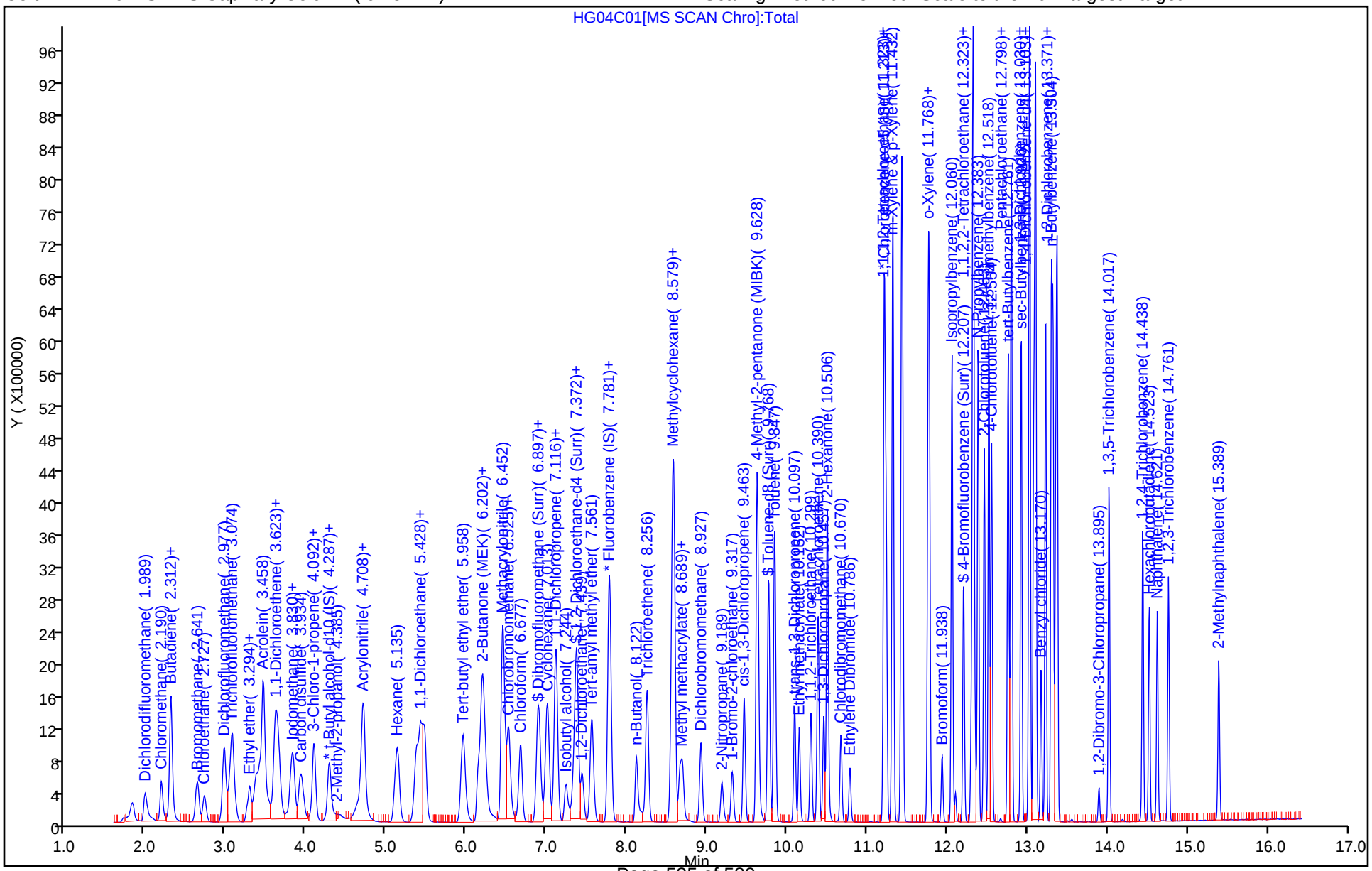
Report Date: 05-Aug-2021 10:39:33 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04C01.D

Injection Date:	04-Aug-2021 18:42:30	Instrument ID:	19094	Operator ID:	MEC29284
Lims ID:	CCVIS VSTD10			Worklist Smp#:	3
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

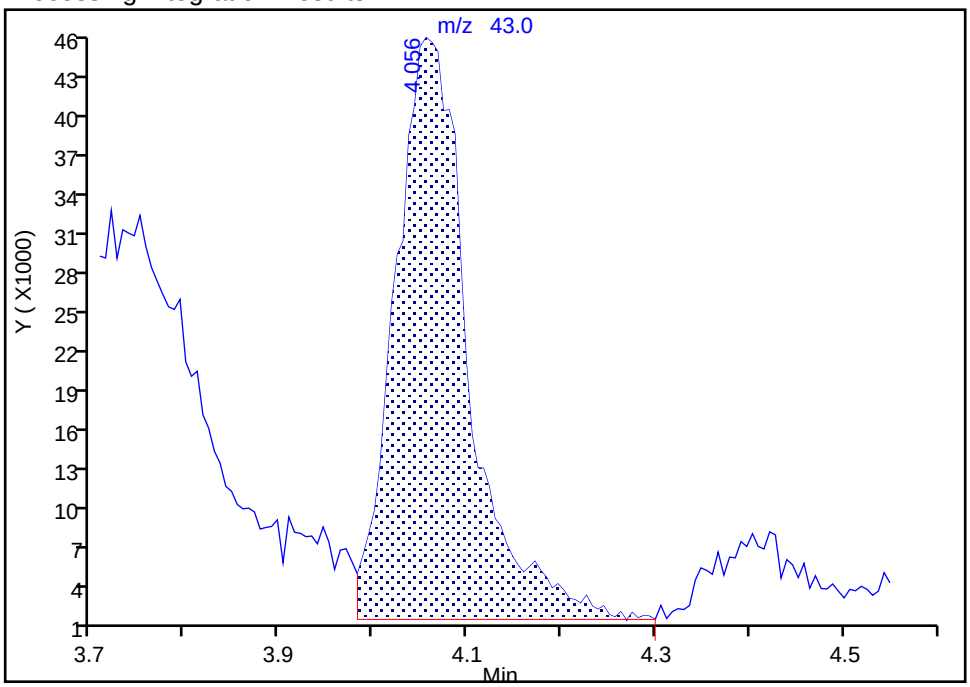
Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04C01.D				
Injection Date:	04-Aug-2021 18:42:30	Instrument ID:	19094		
Lims ID:	CCVIS VSTD10				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

26 Methyl acetate, CAS: 79-20-9

Signal: 1

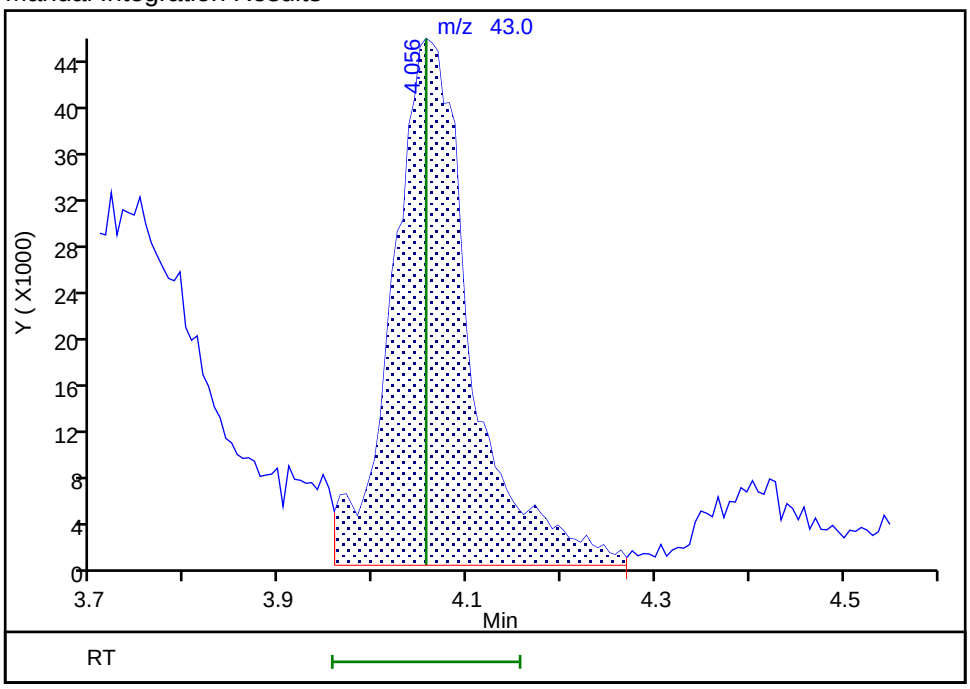
Processing Integration Results

RT: 4.06
Area: 242802
Amount: 7.935954
Amount Units: ug/l



Manual Integration Results

RT: 4.06
Area: 262837
Amount: 8.590795
Amount Units: ug/l



Reviewer: campbellme, 04-Aug-2021 19:08:31
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

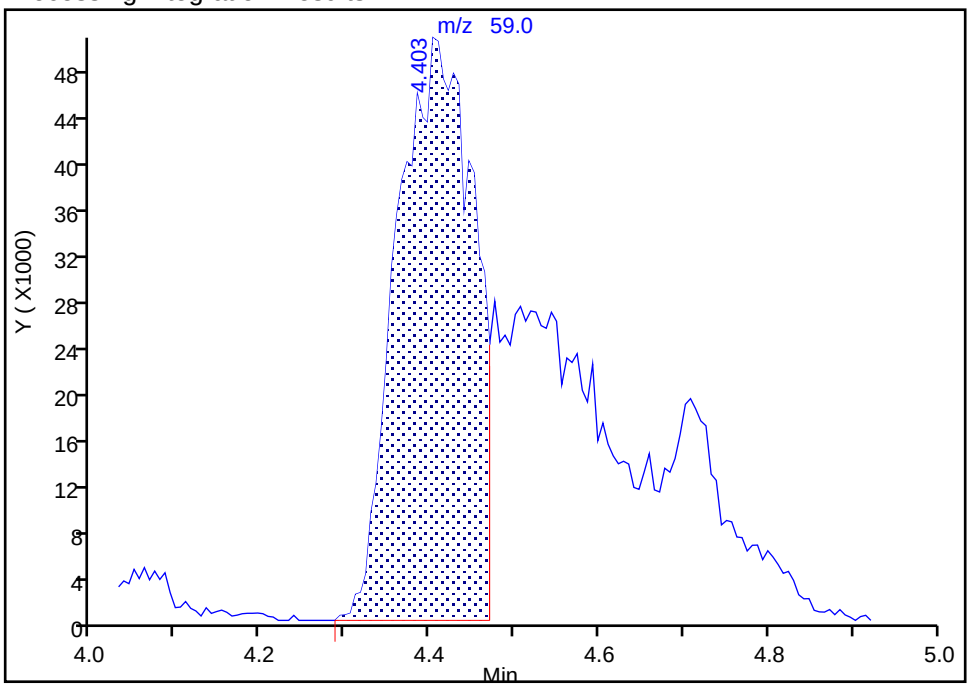
Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04C01.D				
Injection Date:	04-Aug-2021 18:42:30	Instrument ID:	19094		
Lims ID:	CCVIS VSTD10				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

30 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

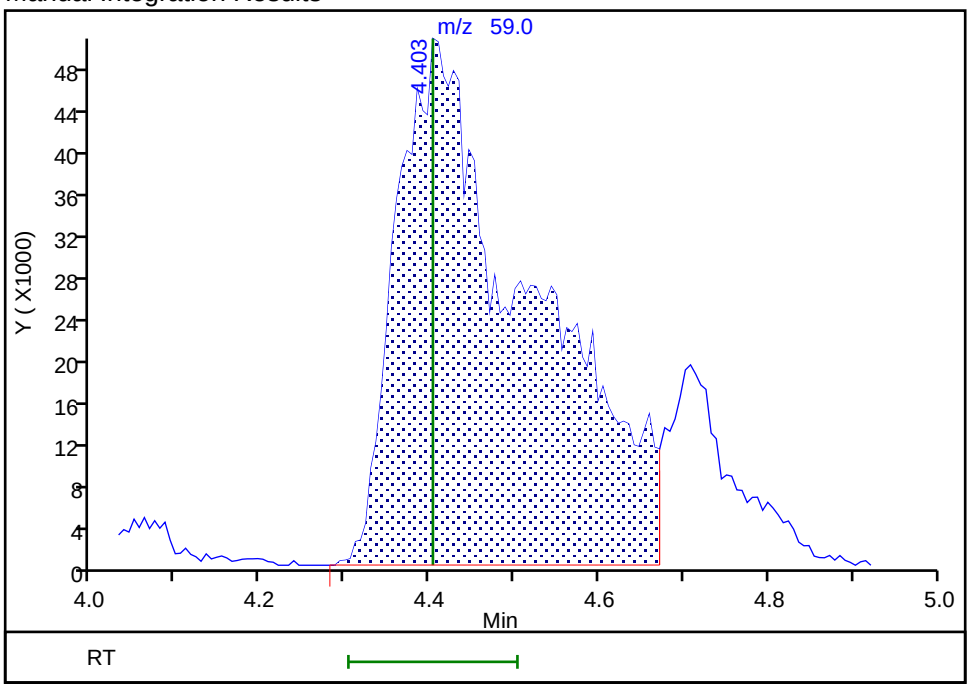
Processing Integration Results

RT: 4.40
Area: 322209
Amount: 100.6051
Amount Units: ug/l



Manual Integration Results

RT: 4.40
Area: 566462
Amount: 176.8696
Amount Units: ug/l



Reviewer: campbellme, 04-Aug-2021 19:08:50
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

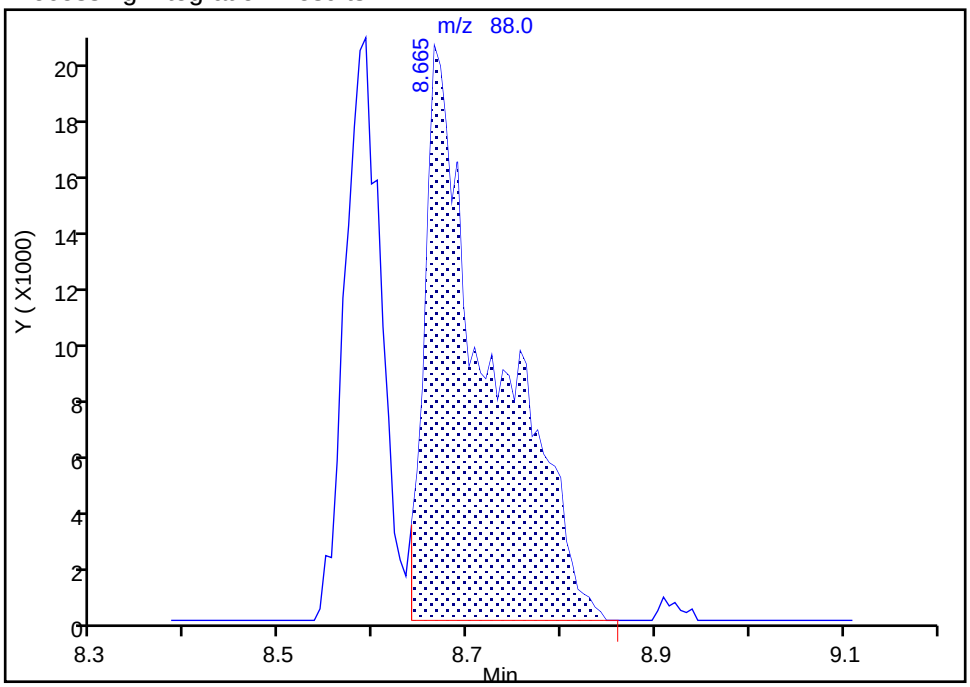
Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04C01.D				
Injection Date:	04-Aug-2021 18:42:30	Instrument ID:	19094		
Lims ID:	CCVIS VSTD10				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

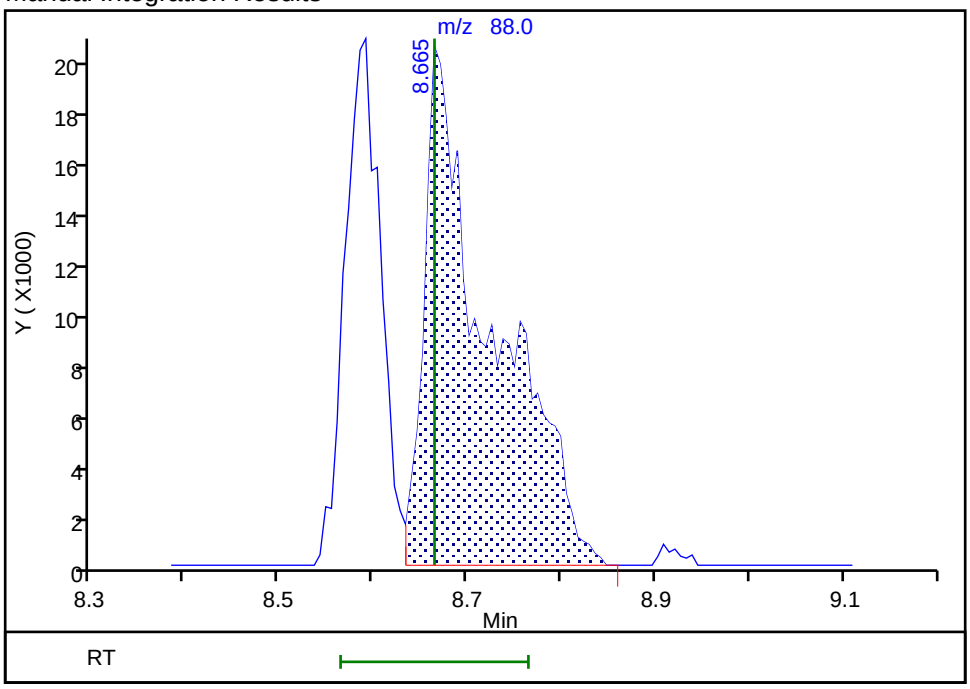
Processing Integration Results

RT: 8.66
Area: 96772
Amount: 446.8881
Amount Units: ug/l



Manual Integration Results

RT: 8.66
Area: 97332
Amount: 449.4741
Amount Units: ug/l



Reviewer: campbellme, 04-Aug-2021 19:09:08
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30T03.D				
Lims ID:	bfb				
Client ID:					
Sample Type:	BFB				
Inject. Date:	30-Jun-2021 14:20:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	410-0033290-001				
Misc. Info.:	BFB				
Operator ID:	jml01693	Instrument ID:	19094		
Method:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\MSV_19094_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	01-Jul-2021 01:11:13	Calib Date:	30-Jun-2021 20:52:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1617				
First Level Reviewer: longj		Date:	30-Jun-2021 14:37:51		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 165 BFB	95	5.233	5.233	0.000	89	469193	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

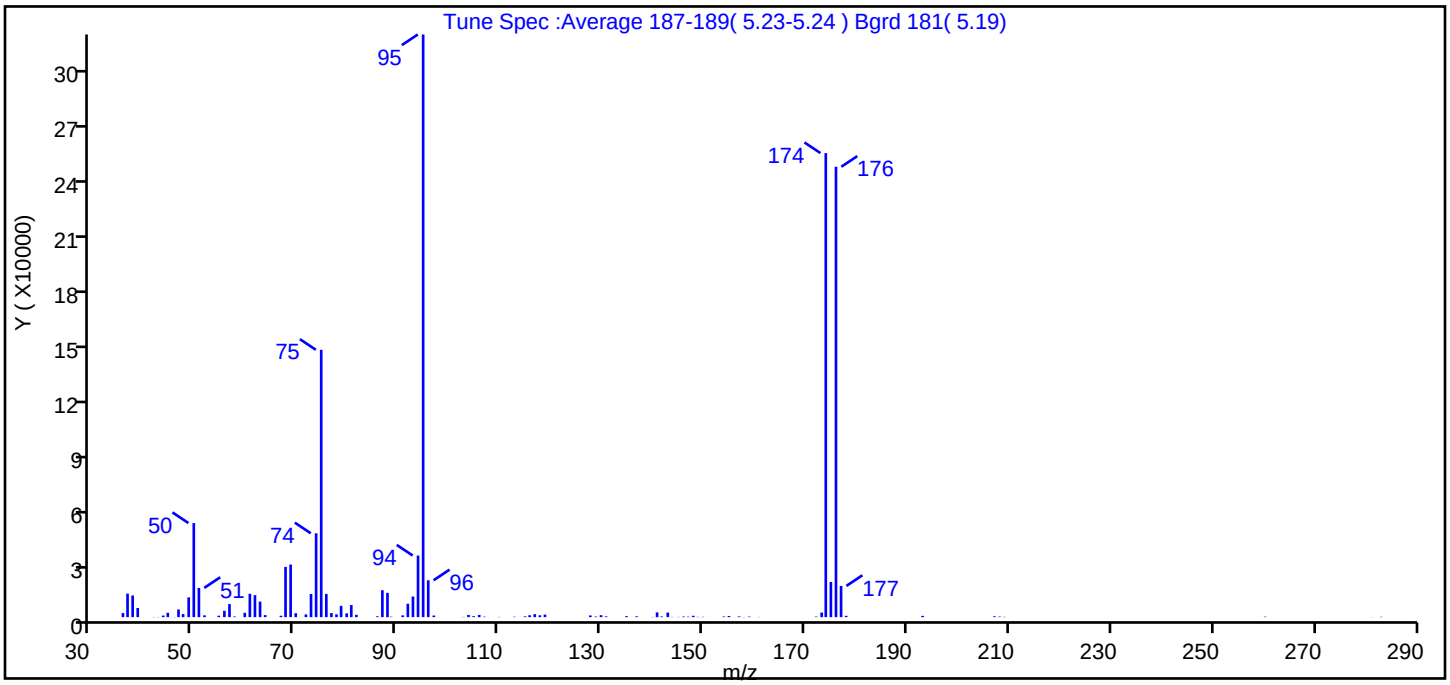
MSV_V_BFB_00005 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30T03.D
Injection Date: 30-Jun-2021 14:20:30 Instrument ID: 19094
Lims ID: bfb
Client ID:
Operator ID: jml01693 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Tune Method: BFB Method 8260

$ 165 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.1
75	30 to 60% of m/z 95	45.9
96	5 to 9% of m/z 95	6.3
173	Less than 2% of m/z 174	0.8 (1.0)
174	50 to 120% of m/z 95	79.6
175	5 to 9% of m/z 174	6.0 (7.6)
176	Greater than 95% but less than 101% of m/z 174	77.3 (97.1)
177	5 to 9% of m/z 176	5.4 (6.9)

Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30T03.D\MSV_19094_25mL.rslt\spectra.d
Injection Date: 30-Jun-2021 14:20:30
Spectrum: Tune Spec :Average 187-189(5.23-5.24) Bgrd 181(5.19)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 99

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2177	68.00	27040	103.00	127	147.00	257
37.00	12655	69.00	28320	104.00	1186	148.00	748
38.00	11668	70.00	2103	105.00	523	149.00	152
39.00	4930	72.00	1468	106.00	1203	150.00	173
42.00	96	73.00	12477	107.00	245	154.00	336
43.00	101	74.00	45152	110.00	120	155.00	604
44.00	855	75.00	143936	113.00	212	157.00	397
45.00	2357	76.00	12510	115.00	410	158.00	84
46.00	85	77.00	2187	116.00	1011	159.00	287
47.00	4120	78.00	1519	117.00	1601	161.00	102
48.00	1649	79.00	6075	118.00	978	172.00	297
49.00	10649	80.00	2026	119.00	1377	173.00	2469
50.00	50648	81.00	6513	128.00	922	174.00	249856
51.00	15736	82.00	1248	129.00	328	175.00	18944
52.00	976	86.00	447	130.00	1055	176.00	242496
55.00	768	87.00	14503	131.00	406	177.00	16808
56.00	3404	88.00	13077	135.00	554	178.00	718
57.00	7036	89.00	239	137.00	448	193.00	689
58.00	359	91.00	946	140.00	107	207.00	463
60.00	2338	92.00	7219	141.00	2553	208.00	278
61.00	12570	93.00	11097	142.00	372	209.00	158
62.00	11841	94.00	33168	143.00	2473	260.00	250
63.00	8378	95.00	313728	144.00	128	281.00	54
64.00	1105	96.00	19840	145.00	122	283.00	191
67.00	752	97.00	882	146.00	319		

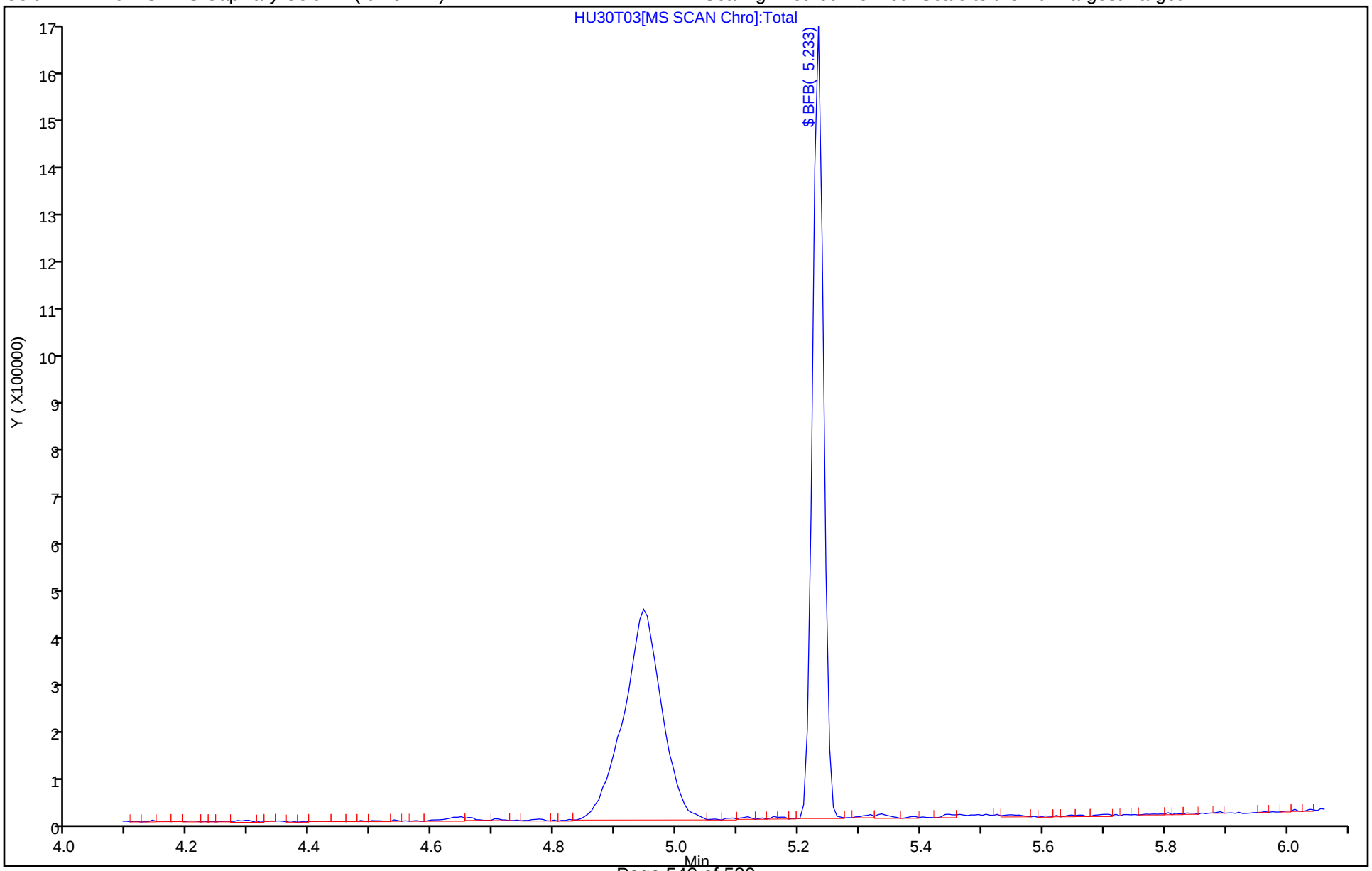
Report Date: 01-Jul-2021 01:11:13 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30T03.D

Injection Date:	30-Jun-2021 14:20:30	Instrument ID:	19094	Operator ID:	jml01693
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04T01.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	04-Aug-2021 18:03:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	BFB				
Operator ID:	MEC29284	Instrument ID:	19094		
Method:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	04-Aug-2021 18:21:17	Calib Date:	30-Jun-2021 20:52:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1614				
First Level Reviewer: campbellme		Date:	04-Aug-2021 18:19:31		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 165 BFB	95	5.203	5.203	0.000	92	434846	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

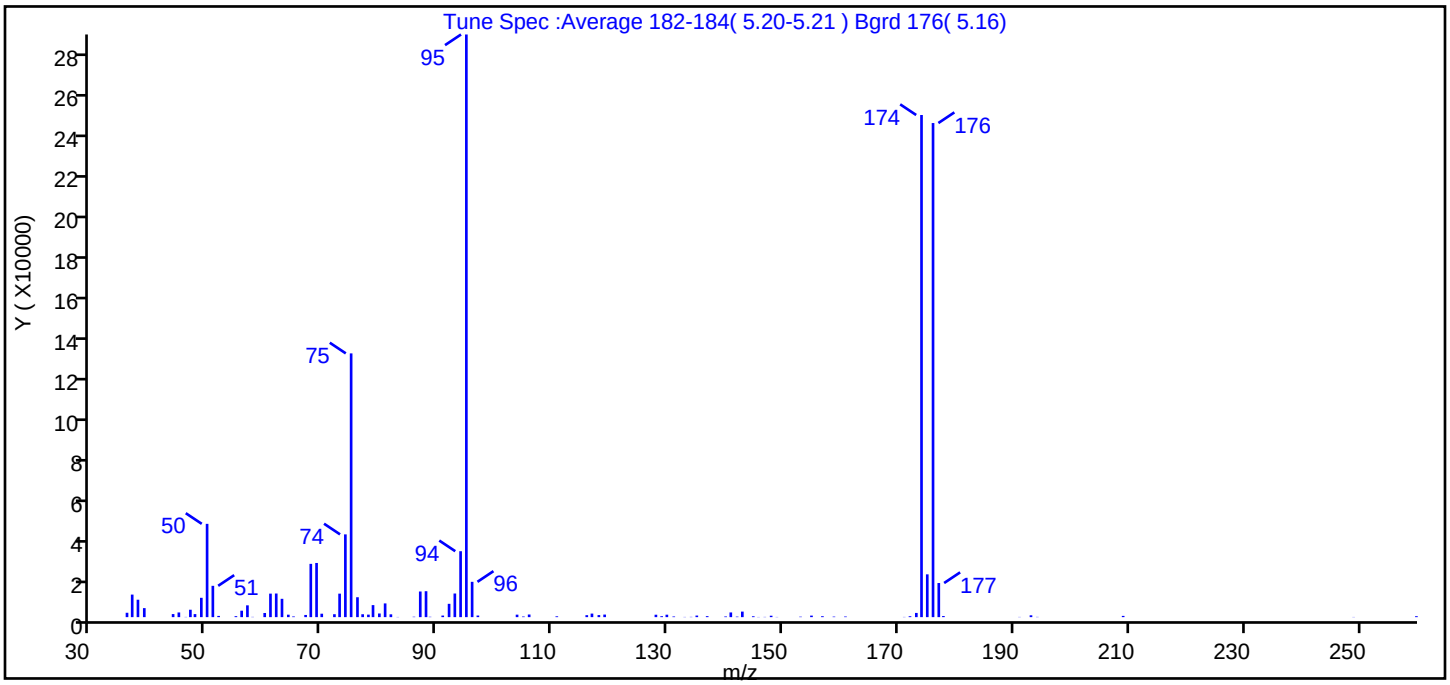
MSV_V_BFB_00006 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04T01.D
Injection Date: 04-Aug-2021 18:03:30 Instrument ID: 19094
Lims ID: BFB
Client ID:
Operator ID: MEC29284 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Tune Method: BFB Method 1624

$ 165 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.0
75	30 to 60% of m/z 95	45.3
96	5 to 9% of m/z 95	6.1
173	Less than 2% of m/z 174	0.7 (0.8)
174	50 to 120% of m/z 95	86.2
175	5 to 9% of m/z 174	7.3 (8.5)
176	Greater than 95% but less than 101% of m/z 174	84.8 (98.4)
177	5 to 9% of m/z 176	5.9 (6.9)

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04T01.D\MSV_19094_25mL.rslt\spectra.d
Injection Date: 04-Aug-2021 18:03:30
Spectrum: Tune Spec :Average 182-184(5.20-5.21) Bgrd 176(5.16)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 94

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2124	68.00	25872	96.00	17152	147.00	116
37.00	10954	69.00	26304	97.00	778	148.00	692
38.00	8459	70.00	1671	104.00	1209	149.00	90
39.00	4384	72.00	1423	105.00	301	153.00	224
44.00	1495	73.00	11410	106.00	1281	155.00	746
45.00	2271	74.00	40192	111.00	404	157.00	445
46.00	102	75.00	128080	116.00	957	159.00	260
47.00	3600	76.00	9666	117.00	1728	161.00	304
48.00	1478	77.00	1411	118.00	1003	171.00	101
49.00	9392	78.00	1227	119.00	1250	172.00	446
50.00	45304	79.00	5842	128.00	1175	173.00	2046
51.00	15210	80.00	1773	129.00	450	174.00	243840
52.00	598	81.00	6668	130.00	1190	175.00	20784
55.00	475	82.00	1366	131.00	323	176.00	239936
56.00	3132	83.00	91	133.00	102	177.00	16568
57.00	5733	86.00	196	134.00	131	178.00	526
58.00	123	87.00	12454	135.00	766	191.00	104
60.00	2018	88.00	12595	137.00	481	193.00	894
61.00	11420	89.00	171	140.00	331	194.00	120
62.00	11475	91.00	763	141.00	2281	209.00	606
63.00	8903	92.00	6470	142.00	253	249.00	88
64.00	1192	93.00	11478	143.00	2695	260.00	460
65.00	333	94.00	32016	145.00	418		
67.00	1061	95.00	282944	146.00	87		

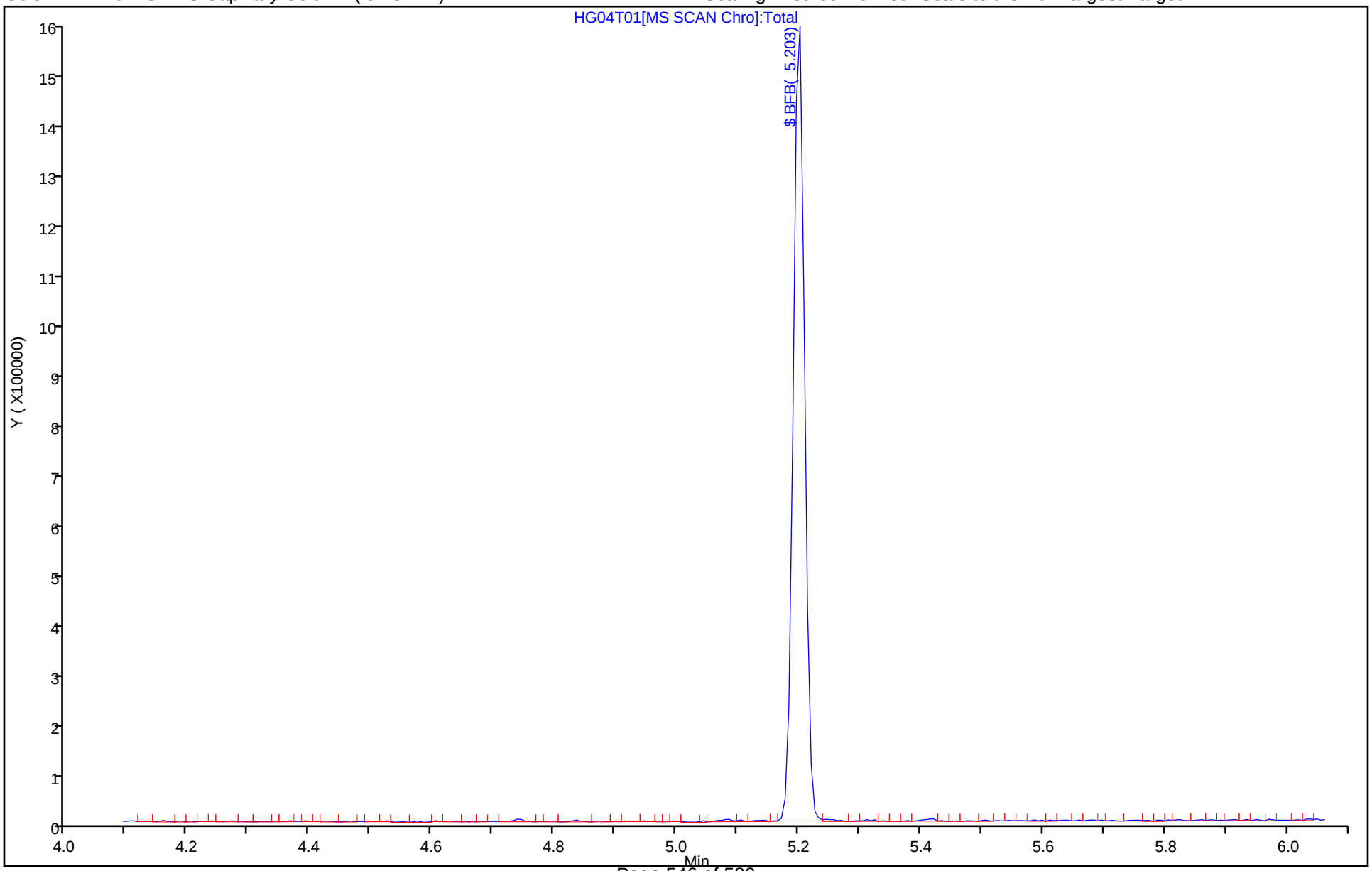
Report Date: 04-Aug-2021 18:21:17 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04T01.D

Injection Date:	04-Aug-2021 18:03:30	Instrument ID:	19094	Operator ID:	MEC29284
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-156699/6

Matrix: Water Lab File ID: HG04B01.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 08/04/2021 19:43

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.: 156699 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.: 410-49448-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-156699/6

Matrix: Water Lab File ID: HG04B01.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 08/04/2021 19:43

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.: 156699 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)	107		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\19094\20210804-36053.b\HG04B01.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 04-Aug-2021 19:43:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-006
Misc. Info.: MB
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 10:46:29 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: campbellme Date: 04-Aug-2021 20:15:23

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1	Chlorotrifluoroethene	116		1.885					ND	
3	Dichlorodifluoromethane	85		1.989					ND	
4	Dimethyl ether	45		2.074					ND	
2	Chlorodifluoromethane	51		2.093					ND	
6	Chloromethane	50		2.190					ND	
5	2-Chloro-1,1,1-Trifluoroethane	118		2.233					ND	
8	Butadiene	39		2.306					ND	7
7	Vinyl chloride	62		2.312					ND	
9	Bromomethane	94		2.641					ND	
10	Chloroethane	64		2.727					ND	
11	Dichlorofluoromethane	67		2.977					ND	
13	Trichlorofluoromethane	101		3.056					ND	
12	Ethanol	45		3.111					ND	
15	Ethyl ether	59		3.294					ND	
16	1,2-Dichloro-1,1,2-trifluoroetha	67		3.373					ND	
17	Acrolein	56		3.458					ND	
18	1,1-Dichloroethene	96		3.611					ND	
19	Acetone	43		3.635					ND	
20	112TCTFE	101		3.647					ND	
21	Isopropyl alcohol	45		3.763					ND	
22	Iodomethane	142		3.812					ND	
23	Ethyl bromide	108		3.842					ND	
24	Carbon disulfide	76		3.934					ND	7
25	Acetonitrile	41		4.013					ND	
26	Methyl acetate	43		4.056					ND	
27	3-Chloro-1-propene	41		4.098					ND	
* 28	t-Butyl alcohol-d10 (IS)	65	4.300	4.281	0.019	84	141165	50.0	50.0	
29	Methylene Chloride	84		4.281					ND	
30	2-Methyl-2-propanol	59		4.403					ND	
31	Acrylonitrile	53		4.629					ND	
32	Methyl tert-butyl ether	73		4.702					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
33 trans-1,2-Dichloroethene	96		4.714					ND	
34 Hexane	57		5.135					ND	
36 Vinyl acetate	43		5.330					ND	
35 1,1-Dichloroethane	63		5.367					ND	
37 Isopropyl ether	45		5.428					ND	
38 2-Chloro-1,3-butadiene	53		5.476					ND	
39 Tert-butyl ethyl ether	59		5.958					ND	
41 2-Butanone (MEK)	43		6.147					ND	
S 40 1,2-Dichloroethene, Total	100		6.155					ND	7
42 cis-1,2-Dichloroethene	96		6.196					ND	7
44 Ethyl acetate	43		6.208					ND	
43 2,2-Dichloropropane	77		6.214					ND	
45 Propionitrile	54		6.232					ND	
47 Methacrylonitrile	67		6.452					ND	
46 Methyl acrylate	55		6.482					ND	
48 Chlorobromomethane	128		6.525					ND	
49 Tetrahydrofuran	71		6.531					ND	
50 Chloroform	83		6.677					ND	
$ 51 Dibromofluoromethane (Surr)	113	6.891	6.891	0.000	93	624259	10.0	10.7	
52 1,1,1-Trichloroethane	97		6.909					ND	
53 Cyclohexane	56		7.006					ND	
55 1,1-Dichloropropene	75		7.116					ND	
56 Carbon tetrachloride	117		7.122					ND	
57 Isobutyl alcohol	41		7.244					ND	
54 1-Chlorobutane	56		7.250					ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.348	7.336	0.012	46	118489	10.0	10.0	
59 Benzene	78		7.378					ND	7
61 Isopropyl acetate	43		7.439					ND	
60 1,2-Dichloroethane	62	7.464	7.439	0.025	8	2150		0.0303	
62 Tert-amyl methyl ether	73		7.567					ND	
* 65 Fluorobenzene (IS)	96	7.781	7.775	0.006	99	2421817	10.0	10.0	
64 n-Heptane	43		7.793					ND	U
63 t-Amyl alcohol	73	7.842	7.842	0.000	1	139		NC	
66 n-Butanol	56		8.122					ND	
67 Trichloroethene	95		8.256					ND	
68 Methylcyclohexane	83		8.567					ND	
70 1,2-Dichloropropane	63		8.585					ND	
69 2-ethoxy-2-methyl butane	87		8.592					ND	
71 Methyl methacrylate	69		8.665					ND	
72 1,4-Dioxane	88		8.665					ND	
73 Dibromomethane	93		8.695					ND	
74 n-Propyl acetate	61		8.750					ND	
75 Dichlorobromomethane	83		8.927					ND	
76 2-Nitropropane	41		9.189					ND	
78 2-Chloroethyl vinyl ether	63		9.299					ND	
79 1-Bromo-2-chloroethane	63		9.317					ND	
77 Chloroacetonitrile	75		9.427					ND	
80 cis-1,3-Dichloropropene	75		9.463					ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.628					ND	7
$ 82 Toluene-d8 (Surr)	98	9.774	9.768	0.006	93	2528862	10.0	9.49	
83 Toluene	92		9.847					ND	
S 84 1,3-Dichloropropene, Total	100		10.060					ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
85 trans-1,3-Dichloropropene	75		10.097					ND	
86 Ethyl methacrylate	69		10.152					ND	
87 1,1,2-Trichloroethane	97		10.299					ND	
88 Tetrachloroethene	166		10.390					ND	
89 1,3-Dichloropropane	76		10.457					ND	
91 2-Hexanone	43		10.506					ND	7
92 n-Butyl acetate	43		10.646					ND	
93 Chlorodibromomethane	129		10.670					ND	
94 Ethylene Dibromide	107		10.786					ND	
* 97 Chlorobenzene-d5 (IS)	117	11.213	11.213	0.000	86	1983801	10.0	10.0	
96 1-Chlorohexane	91		11.219					ND	7
98 Chlorobenzene	112		11.237					ND	
S 95 Xylenes, Total	106		11.245					ND	7
99 1,1,1,2-Tetrachloroethane	131		11.317					ND	
100 Ethylbenzene	91		11.323					ND	
101 m-Xylene & p-Xylene	106		11.439					ND	
102 o-Xylene	106		11.762					ND	
103 Styrene	104		11.780					ND	
104 Bromoform	173		11.938					ND	
105 Isopropylbenzene	105		12.060					ND	
106 cis-1,4-Dichloro-2-butene	88		12.133					ND	U
107 Cyclohexanone	55		12.170					ND	
$ 108 4-Bromofluorobenzene (Surr)	95	12.207	12.201	0.006	91	950468	10.0	9.77	
109 1,1,2,2-Tetrachloroethane	83		12.298					ND	
111 Bromobenzene	156		12.323					ND	7
110 trans-1,4-Dichloro-2-butene	53		12.323					ND	
112 1,2,3-Trichloropropane	110		12.347					ND	
113 N-Propylbenzene	91		12.383					ND	7
114 2-Chlorotoluene	126		12.463					ND	
115 1,3,5-Trimethylbenzene	105		12.518					ND	7
116 4-Chlorotoluene	126		12.554					ND	
118 tert-Butylbenzene	134		12.761					ND	7
119 Pentachloroethane	167		12.798					ND	
120 1,2,4-Trimethylbenzene	105		12.804					ND	7
121 sec-Butylbenzene	105		12.926					ND	7
122 1,3-Dichlorobenzene	146		13.024					ND	7
123 4-Isopropyltoluene	119		13.030					ND	7
* 124 1,4-Dichlorobenzene-d4	152	13.079	13.078	0.001	95	1097251	10.0	10.0	
125 1,4-Dichlorobenzene	146		13.097					ND	7
126 1,2,3-Trimethylbenzene	120		13.103					ND	7
127 Benzyl chloride	126		13.170					ND	
130 n-Butylbenzene	92		13.322					ND	7
131 1,2-Dichlorobenzene	146		13.353					ND	
129 p-Diethylbenzene	119	13.377	13.371	0.006	1	1734		0.009854	
133 Hexachloroethane	201		13.682					ND	
134 1,2-Dibromo-3-Chloropropane	155		13.895					ND	
135 1,3,5-Trichlorobenzene	180		14.017					ND	7
136 1,2,4-Trichlorobenzene	180		14.438					ND	7
137 Hexachlorobutadiene	225	14.529	14.523	0.006	87	2782		0.0571	
138 Naphthalene	128		14.621					ND	7
139 1,2,3-Trichlorobenzene	180	14.767	14.761	0.006	1	3183		0.0345	
140 2-Methylnaphthalene	142	15.389	15.389	0.000	91	6520		0.0548	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
151 tert-Butyl Formate	1		0.000					ND	
152 Dodecane	57		0.000					ND	
157 Methylal	1		0.000					ND	
142 1,1-Dichloro-1-fluoroethane	1		0.000					ND	
150 Propene oxide	1		0.000					ND	
162 1-Chloropropane	1		0.000					ND	
163 1-Bromo-3-Chloropropane	1		0.000					ND	
160 n-Decane	57		0.000					ND	
161 2-Bromo-1-chloropropane	1		0.000					ND	
186 Isopropyl alcohol TIC	1		0.000					ND	

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- 7 - Failed Limit of Detection

Review Flags
- U - Marked Undetected

Reagents:

MSV_LLcentISS_00001 Amount Added: 5.00 Units: uL Run Reagent

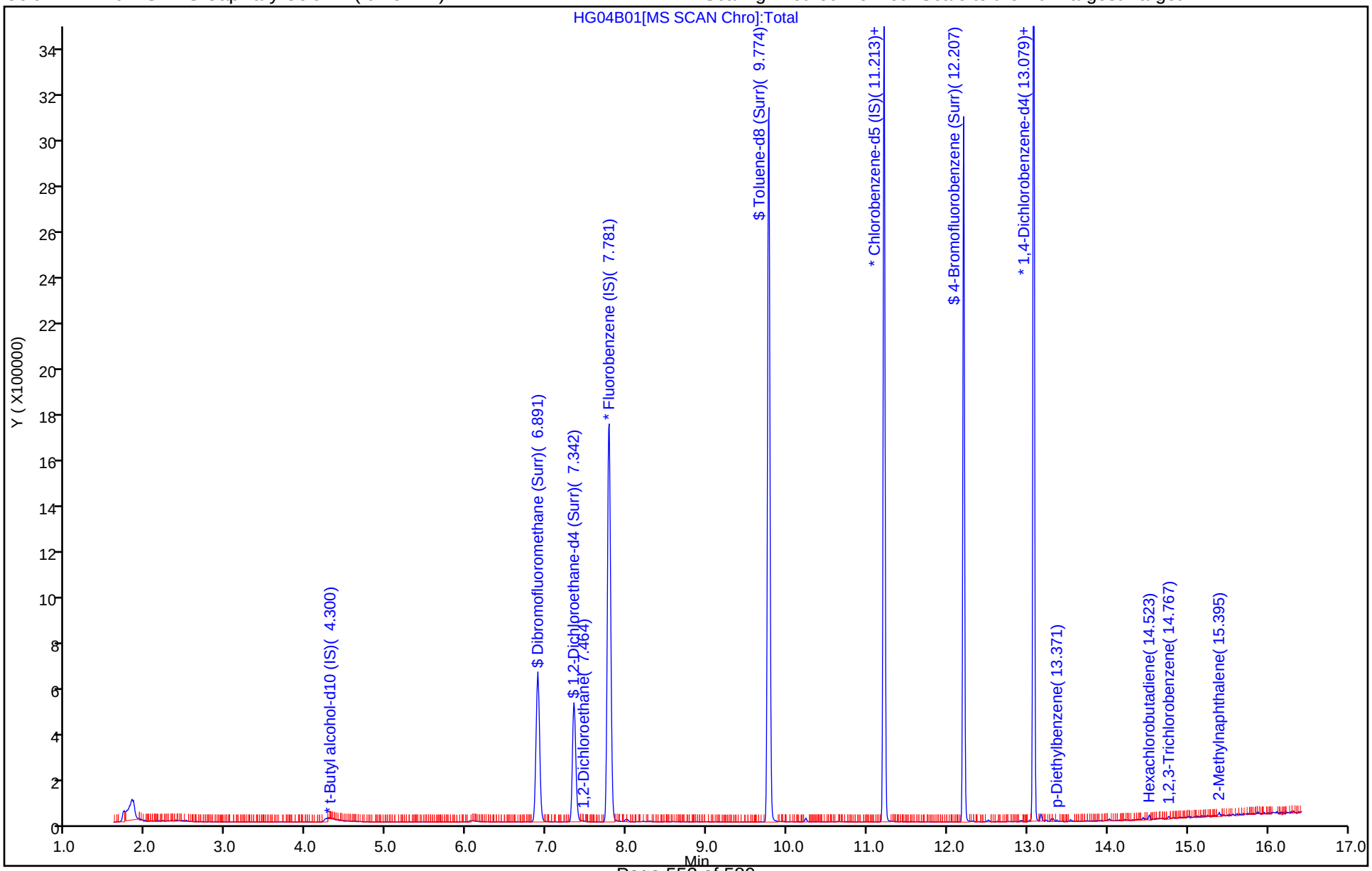
Report Date: 05-Aug-2021 10:46:31 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04B01.D

Injection Date:	04-Aug-2021 19:43:30	Instrument ID:	19094	Operator ID:	MEC29284
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04B01.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 04-Aug-2021 19:43:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-006
Misc. Info.: MB
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 10:46:29 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: campbellme Date: 04-Aug-2021 20:15:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	10.0	10.7	106.54
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	100.15
$ 82 Toluene-d8 (Surr)	10.0	9.49	94.87
$ 108 4-Bromofluorobenzene (Surr)	10.0	9.77	97.71

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-156699/4

Matrix: Water Lab File ID: HG04L01.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 08/04/2021 19:02

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 156699 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.61		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.84		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.24		0.50	0.070
79-00-5	1,1,2-Trichloroethane	4.43		0.50	0.060
75-34-3	1,1-Dichloroethane	4.56		0.50	0.070
75-35-4	1,1-Dichloroethene	4.65		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.42		0.50	0.060
107-06-2	1,2-Dichloroethane	4.95		0.50	0.050
78-87-5	1,2-Dichloropropane	4.68		0.50	0.060
78-93-3	2-Butanone (MEK)	56.8		5.0	0.60
591-78-6	2-Hexanone	59.6		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	56.8		5.0	0.70
67-64-1	Acetone	49.4		5.0	0.90
71-43-2	Benzene	4.74		0.50	0.050
74-97-5	Bromochloromethane	5.01		0.50	0.050
75-27-4	Bromodichloromethane	5.03		0.50	0.050
75-25-2	Bromoform	4.70		1.0	0.30
74-83-9	Bromomethane	5.13		0.50	0.070
75-15-0	Carbon disulfide	4.45		1.0	0.060
56-23-5	Carbon tetrachloride	4.88		0.50	0.070
108-90-7	Chlorobenzene	4.42		0.50	0.060
75-00-3	Chloroethane	4.78		0.50	0.070
67-66-3	Chloroform	4.88		0.50	0.090
74-87-3	Chloromethane	5.15		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	4.81		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.80		0.50	0.050
124-48-1	Dibromochloromethane	4.54		0.50	0.070
100-41-4	Ethylbenzene	4.37		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.67		0.50	0.050
75-09-2	Methylene Chloride	4.77		0.50	0.070
100-42-5	Styrene	4.49		0.50	0.050
127-18-4	Tetrachloroethene	4.35		0.50	0.060
108-88-3	Toluene	4.29		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.64		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.51		0.50	0.060
79-01-6	Trichloroethene	4.77		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-156699/4

Matrix: Water Lab File ID: HG04L01.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 08/04/2021 19:02

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 156699 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	5.10		0.50	0.10
1330-20-7	Xylenes, Total	13.4		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	107		80-120
2037-26-5	Toluene-d8 (Surr)	94		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04L01.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 04-Aug-2021 19:02:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-004
Misc. Info.: LCS
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 10:39:31 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 10:42:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	1.989	1.989	0.000	99	442266	5.00	6.43	
6 Chloromethane	50	2.190	2.190	0.000	99	428651	5.00	5.15	
8 Butadiene	39	2.306	2.306	0.000	92	362197	5.00	4.70	
7 Vinyl chloride	62	2.312	2.312	0.000	97	428991	5.00	5.10	
9 Bromomethane	94	2.641	2.641	0.000	91	319408	5.00	5.13	
10 Chloroethane	64	2.727	2.727	0.000	99	260183	5.00	4.78	
11 Dichlorofluoromethane	67	2.971	2.977	-0.006	97	643573	5.00	5.13	
13 Trichlorofluoromethane	101	3.056	3.056	0.000	97	593571	5.00	5.36	
15 Ethyl ether	59	3.288	3.294	-0.006	91	224421	5.02	4.69	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.385	3.373	0.012	94	405079	5.00	4.58	
17 Acrolein	56	3.464	3.458	0.006	97	255413	37.5	33.5	
18 1,1-Dichloroethene	96	3.611	3.611	0.000	98	298239	5.00	4.65	
19 Acetone	43	3.635	3.635	0.000	99	476143	62.5	49.4	
20 112TCTFE	101	3.647	3.647	0.000	92	315552	5.00	4.63	
21 Isopropyl alcohol	45	3.769	3.763	0.006	79	63506	37.5	33.6	M
22 Iodomethane	142	3.812	3.812	0.000	98	538264	5.00	4.78	
23 Ethyl bromide	108	3.836	3.842	-0.006	98	266416	5.07	4.93	
24 Carbon disulfide	76	3.928	3.934	-0.006	99	858289	5.00	4.45	
26 Methyl acetate	43	4.056	4.056	0.000	97	113236	5.00	3.95	
27 3-Chloro-1-propene	41	4.098	4.098	0.000	93	487880	5.00	4.31	
* 28 t-Butyl alcohol-d10 (IS)	65	4.275	4.281	-0.006	40	131372	50.0	50.0	
29 Methylene Chloride	84	4.281	4.281	0.000	90	321257	5.00	4.77	
30 2-Methyl-2-propanol	59	4.409	4.403	0.006	29	140326	50.0	46.7	M
31 Acrylonitrile	53	4.629	4.629	0.000	98	286650	25.0	22.8	
32 Methyl tert-butyl ether	73	4.696	4.702	-0.006	94	710193	5.00	4.67	
33 trans-1,2-Dichloroethene	96	4.714	4.714	0.000	99	321172	5.00	4.64	
34 Hexane	57	5.135	5.135	0.000	92	444018	5.00	4.00	
35 1,1-Dichloroethane	63	5.373	5.367	0.006	96	579935	5.00	4.56	
37 Isopropyl ether	45	5.415	5.428	-0.013	96	975929	5.00	4.39	
38 2-Chloro-1,3-butadiene	53	5.476	5.476	0.000	90	501743	5.00	4.67	
39 Tert-butyl ethyl ether	59	5.958	5.958	0.000	97	934475	5.00	4.83	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	6.147	6.147	0.000	99	916677	62.5	56.8	
42 cis-1,2-Dichloroethene	96	6.196	6.196	0.000	81	367903	5.00	4.81	
43 2,2-Dichloropropane	77	6.220	6.214	0.006	85	510182	5.00	4.91	
45 Propionitrile	54	6.232	6.232	0.000	98	123204	37.5	26.9	
47 Methacrylonitrile	67	6.452	6.452	0.000	91	573619	37.5	34.1	
48 Chlorobromomethane	128	6.519	6.525	-0.006	94	153373	5.00	5.01	
49 Tetrahydrofuran	71	6.537	6.531	0.006	78	112352	25.0	25.1	
50 Chloroform	83	6.677	6.677	0.000	93	583040	5.00	4.88	
$ 51 Dibromofluoromethane (Surr)	113	6.885	6.891	-0.006	94	625302	10.0	10.7	
52 1,1,1-Trichloroethane	97	6.909	6.909	0.000	98	531400	5.00	4.84	
53 Cyclohexane	56	7.006	7.006	0.000	89	565178	5.00	4.09	
55 1,1-Dichloropropene	75	7.116	7.116	0.000	97	470180	5.00	4.65	
56 Carbon tetrachloride	117	7.116	7.122	-0.006	95	462800	5.00	4.88	
57 Isobutyl alcohol	41	7.244	7.244	0.000	97	118165	125.0	103.7	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.336	7.336	0.000	83	127735	10.0	10.8	M
59 Benzene	78	7.378	7.378	0.000	96	1375816	5.00	4.74	
60 1,2-Dichloroethane	62	7.445	7.439	0.006	98	351492	5.00	4.95	
62 Tert-amyl methyl ether	73	7.561	7.567	-0.006	99	810729	5.00	4.77	
* 65 Fluorobenzene (IS)	96	7.775	7.775	0.000	99	2425660	10.0	10.0	
64 n-Heptane	43	7.793	7.793	0.000	90	487240	5.00	4.03	
66 n-Butanol	56	8.122	8.122	0.000	87	222405	250.0	222.9	
67 Trichloroethene	95	8.256	8.256	0.000	98	356372	5.00	4.77	
68 Methylcyclohexane	83	8.567	8.567	0.000	93	614215	5.00	4.35	
70 1,2-Dichloropropane	63	8.585	8.585	0.000	73	351760	5.00	4.68	
69 2-ethoxy-2-methyl butane	87	8.585	8.592	-0.007	92	492308	5.00	5.19	
71 Methyl methacrylate	69	8.665	8.665	0.000	90	151255	5.00	4.88	
72 1,4-Dioxane	88	8.677	8.665	0.012	31	25587	125.0	126.0	
73 Dibromomethane	93	8.695	8.695	0.000	96	161211	5.00	5.00	
75 Dichlorobromomethane	83	8.927	8.927	0.000	100	422692	5.00	5.03	
76 2-Nitropropane	41	9.195	9.189	0.006	96	38375	5.00	4.68	
79 1-Bromo-2-chloroethane	63	9.317	9.317	0.000	99	356979	5.00	4.89	
80 cis-1,3-Dichloropropene	75	9.463	9.463	0.000	96	522201	5.00	4.80	
81 4-Methyl-2-pentanone (MIBK)	43	9.628	9.628	0.000	96	2293441	62.5	56.8	
$ 82 Toluene-d8 (Surr)	98	9.774	9.768	0.006	93	2551758	10.0	9.43	
83 Toluene	92	9.847	9.847	0.000	98	885558	5.00	4.29	
85 trans-1,3-Dichloropropene	75	10.097	10.097	0.000	92	435768	5.00	4.51	
86 Ethyl methacrylate	69	10.152	10.152	0.000	89	321954	5.00	4.36	
87 1,1,2-Trichloroethane	97	10.298	10.299	0.000	90	233103	5.00	4.43	
88 Tetrachloroethene	166	10.390	10.390	0.000	96	389222	5.00	4.35	
89 1,3-Dichloropropane	76	10.457	10.457	0.000	90	396059	5.00	4.33	
91 2-Hexanone	43	10.506	10.506	0.000	97	1647053	62.5	59.6	
93 Chlorodibromomethane	129	10.676	10.670	0.006	90	296683	5.00	4.54	
94 Ethylene Dibromide	107	10.786	10.786	0.000	99	224335	5.00	4.42	
* 97 Chlorobenzene-d5 (IS)	117	11.213	11.213	0.000	85	2013409	10.0	10.0	
96 1-Chlorohexane	91	11.219	11.219	0.000	97	497602	5.00	3.97	
98 Chlorobenzene	112	11.237	11.237	0.000	95	967249	5.00	4.42	
99 1,1,1,2-Tetrachloroethane	131	11.317	11.317	0.000	96	344426	5.00	4.61	
100 Ethylbenzene	91	11.323	11.323	0.000	98	1704395	5.00	4.37	
101 m-Xylene & p-Xylene	106	11.439	11.439	-0.001	98	1331688	10.0	8.94	
102 o-Xylene	106	11.762	11.762	0.000	96	651528	5.00	4.42	
103 Styrene	104	11.780	11.780	0.000	94	1059763	5.00	4.49	
104 Bromoform	173	11.938	11.938	0.000	97	169919	5.00	4.70	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
105 Isopropylbenzene	105	12.060	12.060	0.000	96	1737723	5.00	4.57	
$ 108 4-Bromofluorobenzene (Surr)	95	12.207	12.201	0.006	92	973107	10.0	9.86	
109 1,1,2,2-Tetrachloroethane	83	12.298	12.298	0.000	94	282614	5.00	4.24	
111 Bromobenzene	156	12.322	12.323	0.000	95	395991	5.00	4.68	
110 trans-1,4-Dichloro-2-butene	53	12.322	12.323	0.000	89	350870	25.0	24.7	
112 1,2,3-Trichloropropane	110	12.353	12.347	0.006	83	75244	5.00	4.42	
113 N-Propylbenzene	91	12.383	12.383	0.000	99	2027428	5.00	4.35	
114 2-Chlorotoluene	126	12.463	12.463	0.000	97	400343	5.00	4.39	
115 1,3,5-Trimethylbenzene	105	12.518	12.518	0.000	94	1440044	5.00	4.41	
116 4-Chlorotoluene	126	12.554	12.554	0.000	97	417636	5.00	4.54	
118 tert-Butylbenzene	134	12.761	12.761	0.000	93	300543	5.00	4.23	
120 1,2,4-Trimethylbenzene	105	12.804	12.804	0.000	97	1465371	5.00	4.40	
121 sec-Butylbenzene	105	12.926	12.926	0.000	94	1851327	5.00	4.49	
122 1,3-Dichlorobenzene	146	13.024	13.024	0.000	98	770324	5.00	4.42	
123 4-Isopropyltoluene	119	13.030	13.030	0.000	97	1570582	5.00	4.50	
* 124 1,4-Dichlorobenzene-d4	152	13.078	13.078	0.000	94	1100603	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.097	13.097	0.000	94	779134	5.00	4.53	
126 1,2,3-Trimethylbenzene	120	13.103	13.103	0.000	98	623190	5.00	4.21	
127 Benzyl chloride	126	13.170	13.170	0.000	98	118037	5.00	4.32	
130 n-Butylbenzene	92	13.322	13.322	0.000	97	773836	5.00	4.41	
131 1,2-Dichlorobenzene	146	13.353	13.353	0.000	98	703115	5.00	4.45	
129 p-Diethylbenzene	119	13.371	13.371	0.000	86	752585	5.00	4.26	
134 1,2-Dibromo-3-Chloropropane	155	13.895	13.895	0.000	87	37532	5.00	3.91	
135 1,3,5-Trichlorobenzene	180	14.017	14.017	0.000	97	570540	5.00	4.53	
136 1,2,4-Trichlorobenzene	180	14.444	14.438	0.006	94	494239	5.00	4.64	
137 Hexachlorobutadiene	225	14.523	14.523	0.000	92	224451	5.00	4.59	
138 Naphthalene	128	14.621	14.621	0.000	97	871735	5.00	4.23	
139 1,2,3-Trichlorobenzene	180	14.761	14.761	0.000	95	428677	5.00	4.63	
140 2-Methylnaphthalene	142	15.389	15.389	0.000	92	474740	5.00	3.98	

QC Flag Legend

Processing Flags

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_00012	Amount Added:	12.50	Units: uL	
MSV_QC_Gas826_00020	Amount Added:	12.50	Units: uL	
MSV_LCS_ACROL_00014	Amount Added:	12.50	Units: uL	
MSV_LLcentISS_00001	Amount Added:	5.00	Units: uL	Run Reagent

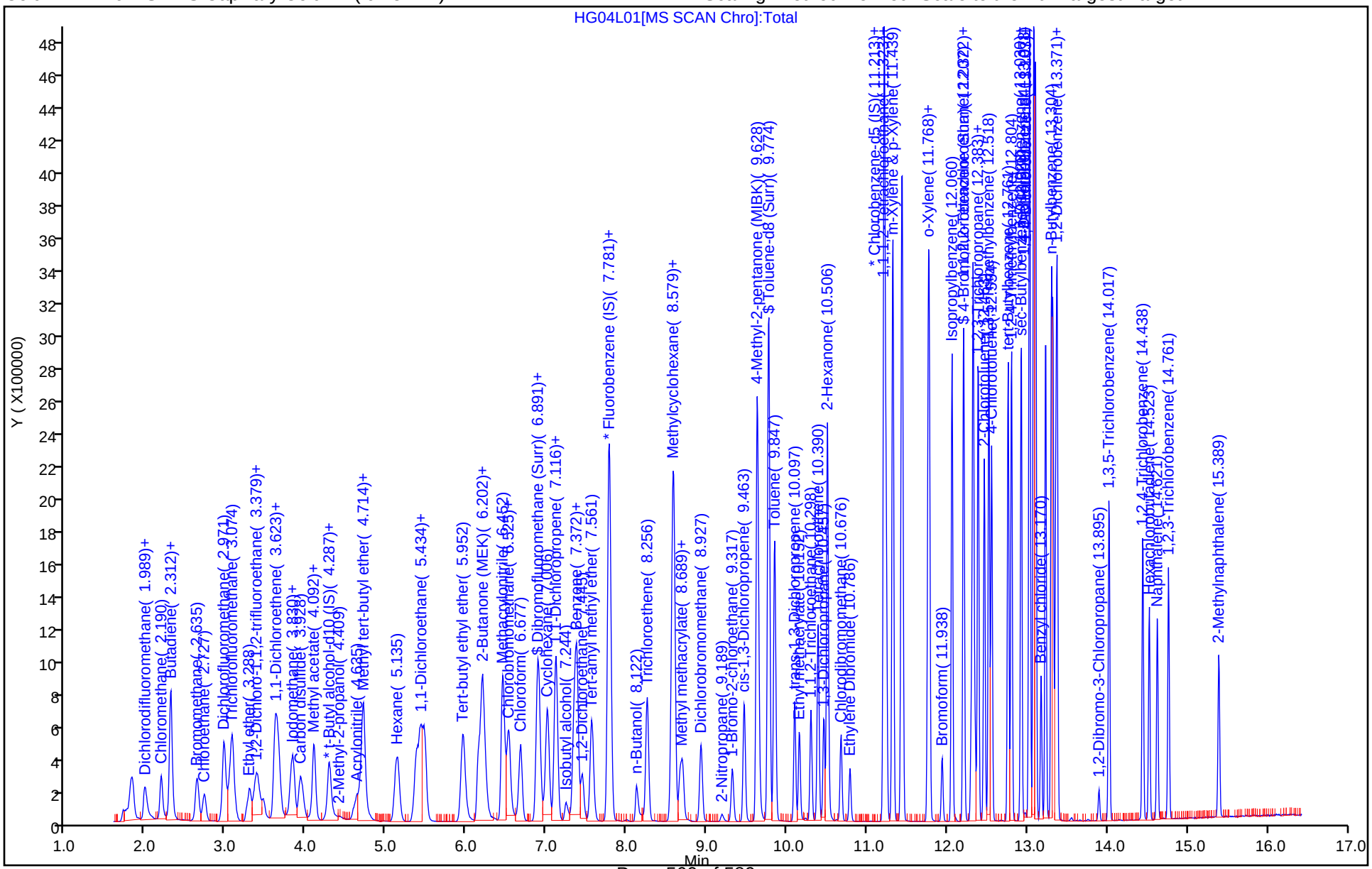
Report Date: 05-Aug-2021 10:42:18 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04L01.D

Injection Date:	04-Aug-2021 19:02:30	Instrument ID:	19094	Operator ID:	MEC29284
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04L01.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 04-Aug-2021 19:02:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-004
Misc. Info.: LCS
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 10:39:31 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 10:42:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	10.0	10.7	106.55
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.8	107.80
$ 82 Toluene-d8 (Surr)	10.0	9.43	94.32
$ 108 4-Bromofluorobenzene (Surr)	10.0	9.86	98.56

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

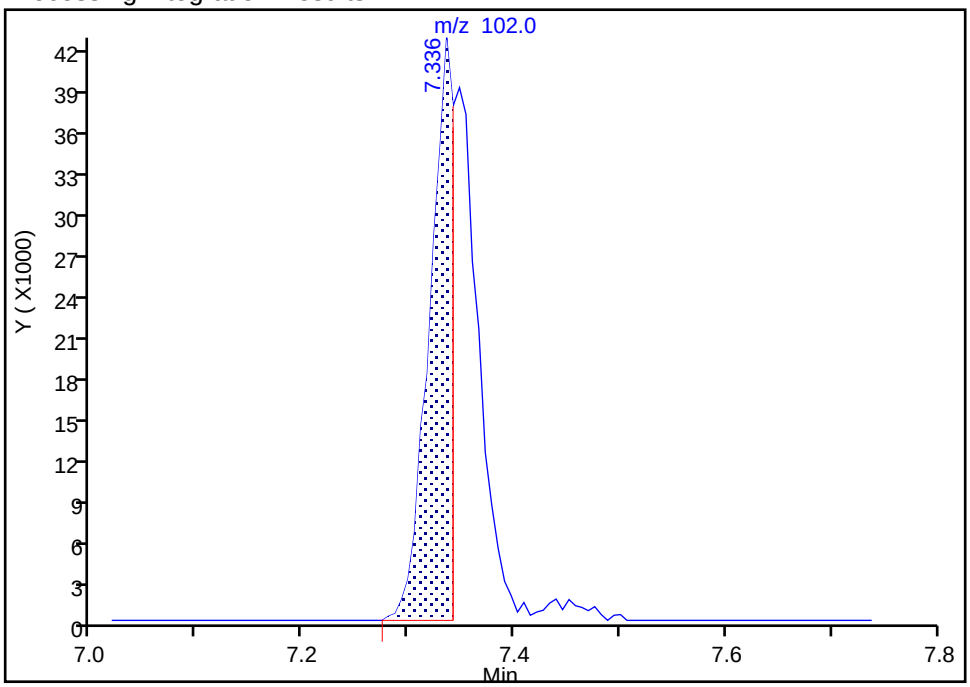
Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04L01.D
Injection Date: 04-Aug-2021 19:02:30 Instrument ID: 19094
Lims ID: LCS
Client ID:
Operator ID: MEC29284 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_19094_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

$ 58 1,2-Dichloroethane-d4 (Surr), CAS: 17060-07-0

Signal: 1

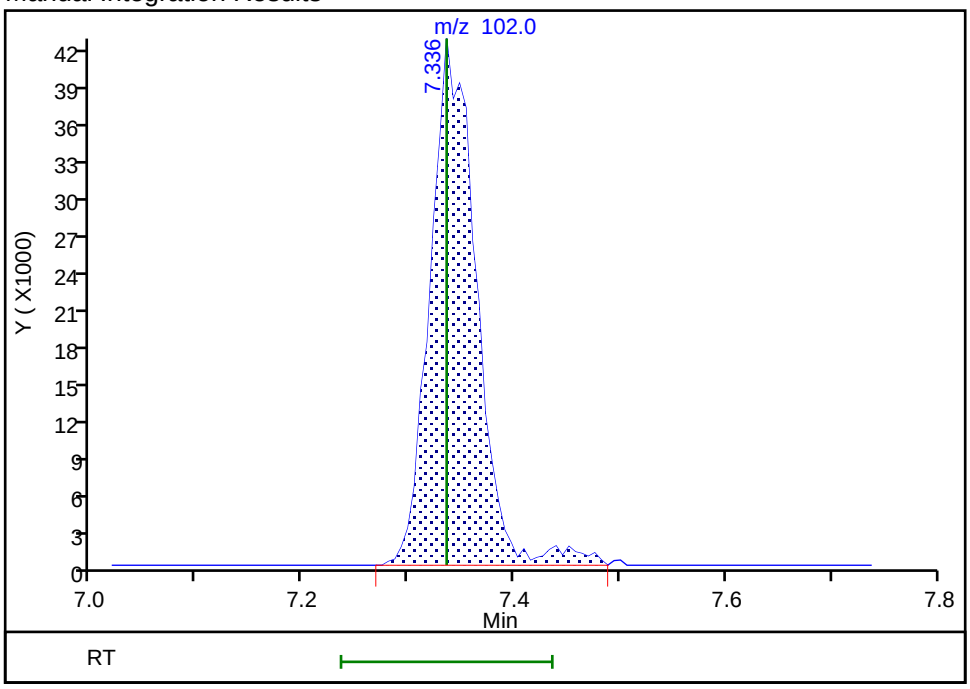
Processing Integration Results

RT: 7.34
Area: 67439
Amount: 5.691314
Amount Units: ug/l



Manual Integration Results

RT: 7.34
Area: 127735
Amount: 10.779817
Amount Units: ug/l



Reviewer: campbellme, 04-Aug-2021 19:31:57
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.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MS MS Lab Sample ID: 410-49448-6 MS

Matrix: Water Lab File ID: HG04S08.D

Analysis Method: 8260D Date Collected: 07/29/2021 11:00

Sample wt/vol: 25(mL) Date Analyzed: 08/04/2021 22:29

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.: 156699 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.11		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.66		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.48		0.50	0.070
79-00-5	1,1,2-Trichloroethane	4.77		0.50	0.060
75-34-3	1,1-Dichloroethane	5.19		0.50	0.070
75-35-4	1,1-Dichloroethene	5.60		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.72		0.50	0.060
107-06-2	1,2-Dichloroethane	5.18		0.50	0.050
78-87-5	1,2-Dichloropropane	5.06		0.50	0.060
78-93-3	2-Butanone (MEK)	58.3		5.0	0.60
591-78-6	2-Hexanone	61.3		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	58.7		5.0	0.70
67-64-1	Acetone	51.1		5.0	0.90
71-43-2	Benzene	5.20		0.50	0.050
74-97-5	Bromochloromethane	5.29		0.50	0.050
75-27-4	Bromodichloromethane	5.34		0.50	0.050
75-25-2	Bromoform	5.01		1.0	0.30
74-83-9	Bromomethane	5.41		0.50	0.070
75-15-0	Carbon disulfide	5.39		1.0	0.060
56-23-5	Carbon tetrachloride	5.84		0.50	0.070
108-90-7	Chlorobenzene	4.96		0.50	0.060
75-00-3	Chloroethane	5.30		0.50	0.070
67-66-3	Chloroform	5.72		0.50	0.090
74-87-3	Chloromethane	5.41		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	5.91		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	5.08		0.50	0.050
124-48-1	Dibromochloromethane	4.91		0.50	0.070
100-41-4	Ethylbenzene	5.02		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.91		0.50	0.050
75-09-2	Methylene Chloride	5.21		0.50	0.070
100-42-5	Styrene	5.05		0.50	0.050
127-18-4	Tetrachloroethene	7.36		0.50	0.060
108-88-3	Toluene	4.83		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	5.19		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.87		0.50	0.060
79-01-6	Trichloroethene	6.19		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MS MS Lab Sample ID: 410-49448-6 MS

Matrix: Water Lab File ID: HG04S08.D

Analysis Method: 8260D Date Collected: 07/29/2021 11:00

Sample wt/vol: 25(mL) Date Analyzed: 08/04/2021 22:29

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.: 156699 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	5.68		0.50	0.10
1330-20-7	Xylenes, Total	15.1		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)	100		80-120
1868-53-7	Dibromofluoromethane (Surr)	106		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\19094\20210804-36053.b\HG04S08.D
Lims ID: 410-49448-A-6 MS
Client ID: HD-COD-SW-15-0/1-0 MS
Sample Type: MS
Inject. Date: 04-Aug-2021 22:29:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-014
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 11:02:37 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 11:02:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	1.989	1.989	0.000	99	471555	5.00	7.01	
6 Chloromethane	50	2.196	2.190	0.006	99	440559	5.00	5.41	
8 Butadiene	39	2.312	2.306	0.006	90	400655	5.00	5.32	
7 Vinyl chloride	62	2.318	2.312	0.006	97	467017	5.00	5.68	
9 Bromomethane	94	2.648	2.641	0.007	90	329540	5.00	5.41	
10 Chloroethane	64	2.733	2.727	0.006	100	282059	5.00	5.30	
11 Dichlorofluoromethane	67	2.983	2.977	0.006	97	672473	5.00	5.48	
13 Trichlorofluoromethane	101	3.056	3.056	0.000	98	660443	5.00	6.10	
15 Ethyl ether	59	3.300	3.294	0.006	91	213476	5.03	4.56	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.385	3.373	0.012	92	453654	5.00	5.25	
17 Acrolein	56	3.477	3.458	0.019	98	222864	37.5	30.6	
18 1,1-Dichloroethene	96	3.623	3.611	0.012	98	351775	5.00	5.60	
19 Acetone	43	3.635	3.635	0.000	100	471109	62.6	51.1	
20 112TCTFE	101	3.653	3.647	0.006	93	369772	5.00	5.54	
21 Isopropyl alcohol	45	3.788	3.763	0.025	89	31034	37.5	16.8	
22 Iodomethane	142	3.818	3.812	0.006	98	608287	5.00	5.52	
23 Ethyl bromide	108	3.849	3.842	0.007	98	272578	5.07	5.15	
24 Carbon disulfide	76	3.934	3.934	0.000	98	1016541	5.00	5.39	
26 Methyl acetate	43	4.062	4.056	0.006	97	114513	5.00	4.18	
27 3-Chloro-1-propene	41	4.105	4.098	0.007	93	535780	5.00	4.83	
* 28 t-Butyl alcohol-d10 (IS)	65	4.318	4.281	0.037	87	125523	50.0	50.0	
29 Methylene Chloride	84	4.288	4.281	0.007	95	342842	5.00	5.21	
30 2-Methyl-2-propanol	59	4.416	4.403	0.013	31	137921	50.0	48.1	M
31 Acrylonitrile	53	4.635	4.629	0.006	100	287328	25.0	23.9	
32 Methyl tert-butyl ether	73	4.708	4.702	0.006	94	730617	5.00	4.91	
33 trans-1,2-Dichloroethene	96	4.720	4.714	0.006	98	351981	5.00	5.19	
34 Hexane	57	5.147	5.135	0.012	92	531946	5.00	4.90	
35 1,1-Dichloroethane	63	5.373	5.367	0.006	96	645983	5.00	5.19	
37 Isopropyl ether	45	5.428	5.428	0.000	95	1014479	5.00	4.66	
38 2-Chloro-1,3-butadiene	53	5.488	5.476	0.012	90	566276	5.00	5.39	
39 Tert-butyl ethyl ether	59	5.958	5.958	0.000	98	950723	5.00	5.03	
41 2-Butanone (MEK)	43	6.153	6.147	0.006	100	898552	62.6	58.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
42 cis-1,2-Dichloroethene	96	6.208	6.196	0.012	82	442351	5.00	5.91	
43 2,2-Dichloropropane	77	6.220	6.214	0.006	86	585275	5.00	5.76	
45 Propionitrile	54	6.244	6.232	0.012	98	104128	37.5	23.8	
47 Methacrylonitrile	67	6.452	6.452	0.000	90	585713	37.5	36.4	
48 Chlorobromomethane	128	6.537	6.525	0.012	94	158375	5.00	5.29	
49 Tetrahydrofuran	71	6.537	6.531	0.006	80	103406	25.0	24.2	
50 Chloroform	83	6.677	6.677	0.000	93	668821	5.00	5.72	
$ 51 Dibromofluoromethane (Surr)	113	6.891	6.891	0.000	94	610037	10.0	10.6	
52 1,1,1-Trichloroethane	97	6.909	6.909	0.000	99	607952	5.00	5.66	
53 Cyclohexane	56	7.019	7.006	0.013	90	684686	5.00	5.07	
55 1,1-Dichloropropene	75	7.116	7.116	0.000	96	540999	5.00	5.47	
56 Carbon tetrachloride	117	7.122	7.122	0.000	95	541580	5.00	5.84	
57 Isobutyl alcohol	41	7.244	7.244	0.000	95	116544	125.1	107.1	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.342	7.336	0.006	93	115627	10.0	9.98	
59 Benzene	78	7.378	7.378	0.000	96	1477566	5.00	5.20	
60 1,2-Dichloroethane	62	7.452	7.439	0.013	97	359283	5.00	5.18	
62 Tert-amyl methyl ether	73	7.567	7.567	0.000	99	826895	5.00	4.97	
* 65 Fluorobenzene (IS)	96	7.781	7.775	0.006	99	2372435	10.0	10.0	
64 n-Heptane	43	7.793	7.793	0.000	93	544532	5.00	4.60	
66 n-Butanol	56	8.128	8.122	0.006	87	206238	250.2	216.3	
67 Trichloroethene	95	8.256	8.256	0.000	99	452862	5.00	6.19	
68 Methylcyclohexane	83	8.567	8.567	0.000	94	727424	5.00	5.26	
70 1,2-Dichloropropane	63	8.592	8.585	0.007	89	371922	5.00	5.06	
69 2-ethoxy-2-methyl butane	87	8.592	8.592	0.000	90	513428	5.00	5.53	
71 Methyl methacrylate	69	8.665	8.665	0.000	90	145335	5.00	4.90	
72 1,4-Dioxane	88	8.689	8.665	0.024	30	22005	125.1	113.4	
73 Dibromomethane	93	8.701	8.695	0.006	97	167954	5.00	5.33	
75 Dichlorobromomethane	83	8.927	8.927	0.000	99	438704	5.00	5.34	
76 2-Nitropropane	41	9.189	9.189	0.000	98	39402	5.00	5.03	
79 1-Bromo-2-chloroethane	63	9.323	9.317	0.006	98	338623	5.00	4.74	
80 cis-1,3-Dichloropropene	75	9.469	9.463	0.006	96	539860	5.00	5.08	
81 4-Methyl-2-pentanone (MIBK)	43	9.628	9.628	0.000	96	2265813	62.6	58.7	
$ 82 Toluene-d8 (Surr)	98	9.774	9.768	0.006	93	2464646	10.0	9.57	
83 Toluene	92	9.847	9.847	0.000	98	950340	5.00	4.83	
85 trans-1,3-Dichloropropene	75	10.097	10.097	0.000	92	447990	5.00	4.87	
86 Ethyl methacrylate	69	10.152	10.152	0.000	89	318061	5.00	4.52	
87 1,1,2-Trichloroethane	97	10.299	10.299	0.001	90	239143	5.00	4.77	
88 Tetrachloroethene	166	10.390	10.390	0.000	98	627283	5.00	7.36	
89 1,3-Dichloropropane	76	10.463	10.457	0.006	89	412453	5.00	4.74	
91 2-Hexanone	43	10.506	10.506	0.000	97	1618118	62.6	61.3	
93 Chlorodibromomethane	129	10.677	10.670	0.006	90	305378	5.00	4.91	
94 Ethylene Dibromide	107	10.786	10.786	0.000	99	228116	5.00	4.72	
* 97 Chlorobenzene-d5 (IS)	117	11.213	11.213	0.000	86	1917561	10.0	10.0	
96 1-Chlorohexane	91	11.219	11.219	0.000	97	574092	5.00	4.81	
98 Chlorobenzene	112	11.237	11.237	0.000	98	1033809	5.00	4.96	
99 1,1,1,2-Tetrachloroethane	131	11.317	11.317	0.000	95	363275	5.00	5.11	
100 Ethylbenzene	91	11.323	11.323	0.000	98	1862024	5.00	5.02	
101 m-Xylene & p-Xylene	106	11.439	11.439	0.000	98	1445480	10.0	10.2	
102 o-Xylene	106	11.762	11.762	0.000	96	688419	5.00	4.90	
103 Styrene	104	11.780	11.780	0.000	95	1135101	5.00	5.05	
104 Bromoform	173	11.938	11.938	0.000	97	172272	5.00	5.01	
105 Isopropylbenzene	105	12.060	12.060	0.000	95	1879166	5.00	5.19	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 108 4-Bromofluorobenzene (Surr)	95	12.207	12.201	0.006	91	940202	10.0	10.0	
109 1,1,2,2-Tetrachloroethane	83	12.298	12.298	0.000	94	290469	5.00	4.48	
111 Bromobenzene	156	12.323	12.323	0.001	96	413545	5.00	5.03	
110 trans-1,4-Dichloro-2-butene	53	12.323	12.323	0.001	86	334319	25.0	24.7	
112 1,2,3-Trichloropropane	110	12.353	12.347	0.006	83	73869	5.00	4.47	
113 N-Propylbenzene	91	12.383	12.383	0.000	99	2199110	5.00	4.86	
114 2-Chlorotoluene	126	12.463	12.463	0.000	97	422933	5.00	4.78	
115 1,3,5-Trimethylbenzene	105	12.518	12.518	0.000	95	1540457	5.00	4.86	
116 4-Chlorotoluene	126	12.554	12.554	0.000	97	443190	5.00	4.96	
118 tert-Butylbenzene	134	12.761	12.761	0.000	93	318987	5.00	4.62	
120 1,2,4-Trimethylbenzene	105	12.804	12.804	0.000	97	1551254	5.00	4.80	
121 sec-Butylbenzene	105	12.926	12.926	0.000	94	2036422	5.00	5.09	
122 1,3-Dichlorobenzene	146	13.024	13.024	0.000	98	824955	5.00	4.87	
123 4-Isopropyltoluene	119	13.030	13.030	0.000	97	1697526	5.00	5.01	
* 124 1,4-Dichlorobenzene-d4	152	13.078	13.078	0.000	94	1069112	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.097	13.097	0.000	95	827256	5.00	4.95	
126 1,2,3-Trimethylbenzene	120	13.103	13.103	0.000	98	655183	5.00	4.55	
127 Benzyl chloride	126	13.170	13.170	0.000	98	125295	5.00	4.72	
130 n-Butylbenzene	92	13.322	13.322	0.000	98	842806	5.00	4.94	
131 1,2-Dichlorobenzene	146	13.353	13.353	0.000	98	745076	5.00	4.85	
129 p-Diethylbenzene	119	13.371	13.371	0.000	86	805580	5.00	4.70	
134 1,2-Dibromo-3-Chloropropane	155	13.895	13.895	0.000	87	39610	5.00	4.25	
135 1,3,5-Trichlorobenzene	180	14.017	14.017	0.000	98	595894	5.00	4.87	
136 1,2,4-Trichlorobenzene	180	14.438	14.438	0.000	94	508688	5.00	4.91	
137 Hexachlorobutadiene	225	14.523	14.523	0.000	96	245507	5.00	5.17	
138 Naphthalene	128	14.621	14.621	0.000	97	866535	5.00	4.33	
139 1,2,3-Trichlorobenzene	180	14.761	14.761	0.000	95	425837	5.00	4.74	
140 2-Methylnaphthalene	142	15.389	15.389	0.000	93	442070	5.00	3.81	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_VOC#1_00012	Amount Added:	5.38	Units: uL	
MSV_LCS_ACROL_00014	Amount Added:	5.38	Units: uL	
MSV_Q_EE_00004	Amount Added:	5.38	Units: uL	
MSV_Q_ETBR_00008	Amount Added:	5.38	Units: uL	
MSV_QC_Gas826_00020	Amount Added:	5.38	Units: uL	
MSV_LLcentISS_00001	Amount Added:	5.00	Units: uL	Run Reagent

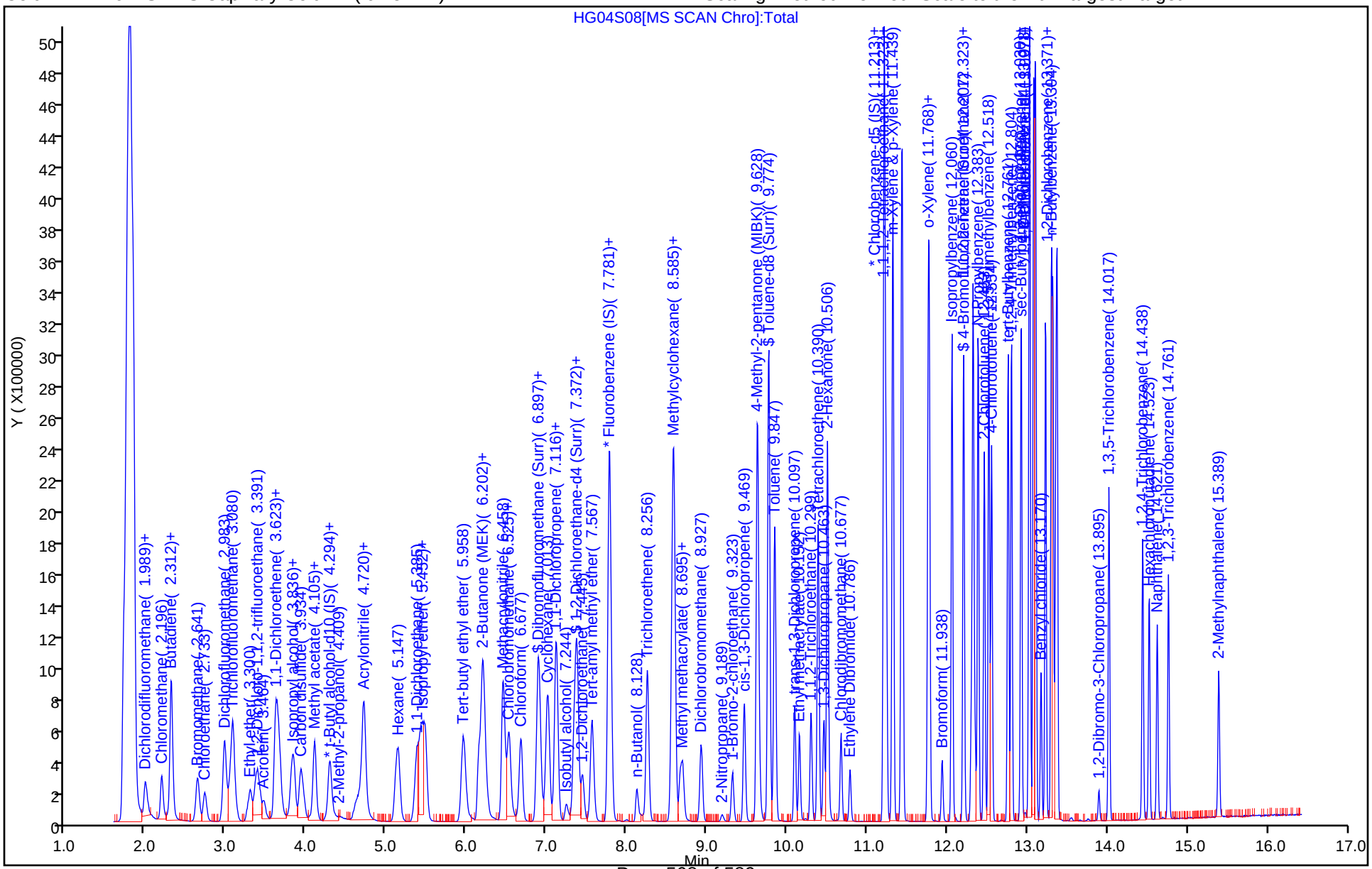
Report Date: 05-Aug-2021 11:02:37 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S08.D

Injection Date:	04-Aug-2021 22:29:30	Instrument ID:	19094	Operator ID:	MEC29284
Lims ID:	410-49448-A-6 MS			Worklist Smp#:	14
Client ID:	HD-COD-SW-15-0/1-0 MS				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S08.D				
Lims ID:	410-49448-A-6 MS				
Client ID:	HD-COD-SW-15-0/1-0 MS				
Sample Type:	MS				
Inject. Date:	04-Aug-2021 22:29:30	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0036053-014				
Operator ID:	MEC29284	Instrument ID:	19094		
Method:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	05-Aug-2021 11:02:37	Calib Date:	30-Jun-2021 20:52:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1672				

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 11:02:37

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	10.0	10.6	106.28
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	9.98	99.77
$ 82 Toluene-d8 (Surr)	10.0	9.57	95.65
$ 108 4-Bromofluorobenzene (Surr)	10.0	10.0	99.99

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MSD MSD Lab Sample ID: 410-49448-6 MSD

Matrix: Water Lab File ID: HG04S09.D

Analysis Method: 8260D Date Collected: 07/29/2021 11:00

Sample wt/vol: 25(mL) Date Analyzed: 08/04/2021 22:50

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.: 156699 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.81		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.47		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.25		0.50	0.070
79-00-5	1,1,2-Trichloroethane	4.57		0.50	0.060
75-34-3	1,1-Dichloroethane	5.03		0.50	0.070
75-35-4	1,1-Dichloroethene	5.42		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.46		0.50	0.060
107-06-2	1,2-Dichloroethane	5.00		0.50	0.050
78-87-5	1,2-Dichloropropane	4.80		0.50	0.060
78-93-3	2-Butanone (MEK)	57.0		5.0	0.60
591-78-6	2-Hexanone	61.1		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	58.7		5.0	0.70
67-64-1	Acetone	49.7		5.0	0.90
71-43-2	Benzene	4.97		0.50	0.050
74-97-5	Bromochloromethane	5.16		0.50	0.050
75-27-4	Bromodichloromethane	5.23		0.50	0.050
75-25-2	Bromoform	4.80		1.0	0.30
74-83-9	Bromomethane	5.44		0.50	0.070
75-15-0	Carbon disulfide	5.17		1.0	0.060
56-23-5	Carbon tetrachloride	5.66		0.50	0.070
108-90-7	Chlorobenzene	4.70		0.50	0.060
75-00-3	Chloroethane	5.25		0.50	0.070
67-66-3	Chloroform	5.44		0.50	0.090
74-87-3	Chloromethane	5.57		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	5.68		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.89		0.50	0.050
124-48-1	Dibromochloromethane	4.68		0.50	0.070
100-41-4	Ethylbenzene	4.74		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.78		0.50	0.050
75-09-2	Methylene Chloride	5.00		0.50	0.070
100-42-5	Styrene	4.76		0.50	0.050
127-18-4	Tetrachloroethene	7.03		0.50	0.060
108-88-3	Toluene	4.62		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	5.10		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.68		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-49448-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MSD MSD Lab Sample ID: 410-49448-6 MSD

Matrix: Water Lab File ID: HG04S09.D

Analysis Method: 8260D Date Collected: 07/29/2021 11:00

Sample wt/vol: 25(mL) Date Analyzed: 08/04/2021 22:50

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.: 156699 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-01-6	Trichloroethene	5.86		0.50	0.060
75-01-4	Vinyl chloride	5.72		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)	100		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	108		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\19094\20210804-36053.b\HG04S09.D
Lims ID: 410-49448-A-6 MSD
Client ID: HD-COD-SW-15-0/1-0 MSD
Sample Type: MSD
Inject. Date: 04-Aug-2021 22:50:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0036053-015
Operator ID: MEC29284 Instrument ID: 19094

Method: \\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 05-Aug-2021 11:03:04 Calib Date: 30-Jun-2021 20:52:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1672

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 11:03:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
3 Dichlorodifluoromethane	85	1.995	1.989	0.006	99	490432	5.00	7.20	
6 Chloromethane	50	2.190	2.190	0.000	98	459172	5.00	5.57	
8 Butadiene	39	2.312	2.306	0.006	90	417295	5.00	5.48	
7 Vinyl chloride	62	2.318	2.312	0.006	97	476200	5.00	5.72	
9 Bromomethane	94	2.642	2.641	0.001	90	335151	5.00	5.44	
10 Chloroethane	64	2.733	2.727	0.006	99	282699	5.00	5.25	
11 Dichlorofluoromethane	67	2.977	2.977	0.000	97	682569	5.00	5.50	
13 Trichlorofluoromethane	101	3.050	3.056	-0.006	98	650556	5.00	5.94	
15 Ethyl ether	59	3.306	3.294	0.012	91	217122	5.03	4.58	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	3.379	3.373	0.006	92	446662	5.00	5.11	
17 Acrolein	56	3.477	3.458	0.019	97	226939	37.5	32.1	
18 1,1-Dichloroethene	96	3.617	3.611	0.006	98	344092	5.00	5.42	
19 Acetone	43	3.641	3.635	0.006	81	443767	62.6	49.7	
20 112TCTFE	101	3.647	3.647	0.000	89	357965	5.00	5.30	
21 Isopropyl alcohol	45	3.775	3.763	0.012	25	29277	37.5	15.6	
22 Iodomethane	142	3.818	3.812	0.006	98	592958	5.00	5.31	
23 Ethyl bromide	108	3.843	3.842	0.001	98	273101	5.07	5.10	
24 Carbon disulfide	76	3.934	3.934	0.000	99	986649	5.00	5.17	
26 Methyl acetate	43	4.050	4.056	-0.006	98	100111	5.00	3.77	
27 3-Chloro-1-propene	41	4.099	4.098	0.001	93	515307	5.00	4.59	
* 28 t-Butyl alcohol-d10 (IS)	65	4.275	4.281	-0.006	88	121585	50.0	50.0	
29 Methylene Chloride	84	4.294	4.281	0.013	92	332965	5.00	5.00	
30 2-Methyl-2-propanol	59	4.403	4.403	0.000	28	125225	50.0	45.1	M
31 Acrylonitrile	53	4.629	4.629	0.000	98	270347	25.0	23.2	
32 Methyl tert-butyl ether	73	4.696	4.702	-0.006	89	719987	5.00	4.78	
33 trans-1,2-Dichloroethene	96	4.720	4.714	0.006	99	349540	5.00	5.10	
34 Hexane	57	5.141	5.135	0.006	90	512237	5.00	4.66	
35 1,1-Dichloroethane	63	5.373	5.367	0.006	96	633621	5.00	5.03	
37 Isopropyl ether	45	5.428	5.428	0.000	94	993822	5.00	4.51	
38 2-Chloro-1,3-butadiene	53	5.482	5.476	0.006	90	559577	5.00	5.26	
39 Tert-butyl ethyl ether	59	5.958	5.958	0.000	97	926795	5.00	4.84	
41 2-Butanone (MEK)	43	6.153	6.147	0.006	99	851536	62.6	57.0	

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	6.196	6.196	0.000	82	429868	5.00	5.68	
43 2,2-Dichloropropane	77	6.214	6.214	0.000	86	567677	5.00	5.52	
45 Propionitrile	54	6.245	6.232	0.013	96	143393	37.5	33.9	
47 Methacrylonitrile	67	6.458	6.452	0.006	90	563475	37.5	36.1	
48 Chlorobromomethane	128	6.531	6.525	0.006	94	156491	5.00	5.16	
49 Tetrahydrofuran	71	6.531	6.531	0.000	79	98951	25.0	23.9	
50 Chloroform	83	6.677	6.677	0.000	93	643579	5.00	5.44	
$ 51 Dibromofluoromethane (Surr)	113	6.885	6.891	-0.006	93	624815	10.0	10.8	
52 1,1,1-Trichloroethane	97	6.909	6.909	0.000	98	594891	5.00	5.47	
53 Cyclohexane	56	7.019	7.006	0.013	89	659175	5.00	4.82	
55 1,1-Dichloropropene	75	7.116	7.116	0.000	96	514545	5.00	5.14	
56 Carbon tetrachloride	117	7.122	7.122	0.000	96	531264	5.00	5.66	
57 Isobutyl alcohol	41	7.244	7.244	0.000	94	103251	125.1	97.9	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	7.342	7.336	0.006	98	117208	10.0	10.0	
59 Benzene	78	7.378	7.378	0.000	96	1428409	5.00	4.97	
60 1,2-Dichloroethane	62	7.452	7.439	0.013	97	350999	5.00	5.00	
62 Tert-amyl methyl ether	73	7.561	7.567	-0.006	99	814289	5.00	4.84	
* 65 Fluorobenzene (IS)	96	7.781	7.775	0.006	99	2401550	10.0	10.0	
64 n-Heptane	43	7.793	7.793	0.000	93	528538	5.00	4.41	
66 n-Butanol	56	8.122	8.122	0.000	88	201915	250.2	218.7	
67 Trichloroethene	95	8.256	8.256	0.000	98	433645	5.00	5.86	
68 Methylcyclohexane	83	8.567	8.567	0.000	93	703760	5.00	5.03	
70 1,2-Dichloropropane	63	8.586	8.585	0.001	84	357023	5.00	4.80	
69 2-ethoxy-2-methyl butane	87	8.592	8.592	0.000	93	505848	5.00	5.39	
71 Methyl methacrylate	69	8.665	8.665	0.000	89	143649	5.00	5.00	
72 1,4-Dioxane	88	8.677	8.665	0.012	30	19746	125.1	105.1	
73 Dibromomethane	93	8.695	8.695	0.000	97	159791	5.00	5.01	
75 Dichlorobromomethane	83	8.927	8.927	0.000	99	434955	5.00	5.23	
76 2-Nitropropane	41	9.189	9.189	0.000	95	37376	5.00	4.93	
79 1-Bromo-2-chloroethane	63	9.317	9.317	0.000	98	346877	5.00	4.80	
80 cis-1,3-Dichloropropene	75	9.470	9.463	0.007	97	526310	5.00	4.89	
81 4-Methyl-2-pentanone (MIBK)	43	9.628	9.628	0.000	97	2193410	62.6	58.7	
$ 82 Toluene-d8 (Surr)	98	9.768	9.768	0.000	93	2501984	10.0	9.51	
83 Toluene	92	9.847	9.847	0.000	98	926868	5.00	4.62	
85 trans-1,3-Dichloropropene	75	10.097	10.097	0.000	92	439958	5.00	4.68	
86 Ethyl methacrylate	69	10.152	10.152	0.000	89	304435	5.00	4.23	
87 1,1,2-Trichloroethane	97	10.299	10.299	0.001	90	234165	5.00	4.57	
88 Tetrachloroethene	166	10.390	10.390	0.000	97	612411	5.00	7.03	
89 1,3-Dichloropropane	76	10.463	10.457	0.006	88	405161	5.00	4.55	
91 2-Hexanone	43	10.506	10.506	0.000	97	1562629	62.6	61.1	
93 Chlorodibromomethane	129	10.677	10.670	0.007	89	297766	5.00	4.68	
94 Ethylene Dibromide	107	10.786	10.786	0.000	99	220033	5.00	4.46	
* 97 Chlorobenzene-d5 (IS)	117	11.213	11.213	0.000	86	1958370	10.0	10.0	
96 1-Chlorohexane	91	11.219	11.219	0.000	96	548213	5.00	4.49	
98 Chlorobenzene	112	11.237	11.237	0.000	95	999504	5.00	4.70	
99 1,1,1,2-Tetrachloroethane	131	11.317	11.317	0.000	96	349267	5.00	4.81	
100 Ethylbenzene	91	11.323	11.323	0.000	98	1796172	5.00	4.74	
101 m-Xylene & p-Xylene	106	11.433	11.439	-0.006	98	1409077	10.0	9.73	
102 o-Xylene	106	11.762	11.762	0.000	96	688379	5.00	4.80	
103 Styrene	104	11.780	11.780	0.000	95	1094173	5.00	4.76	
104 Bromoform	173	11.939	11.938	0.001	96	168537	5.00	4.80	
105 Isopropylbenzene	105	12.060	12.060	0.000	95	1840489	5.00	4.97	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 108 4-Bromofluorobenzene (Surr)	95	12.207	12.201	0.006	91	947545	10.0	9.87	
109 1,1,2,2-Tetrachloroethane	83	12.298	12.298	0.000	93	279880	5.00	4.25	
111 Bromobenzene	156	12.323	12.323	0.001	96	403229	5.00	4.83	
110 trans-1,4-Dichloro-2-butene	53	12.323	12.323	0.001	85	326836	25.0	24.9	
112 1,2,3-Trichloropropane	110	12.347	12.347	0.000	82	69399	5.00	4.13	
113 N-Propylbenzene	91	12.384	12.383	0.001	99	2153674	5.00	4.68	
114 2-Chlorotoluene	126	12.463	12.463	0.000	97	418505	5.00	4.65	
115 1,3,5-Trimethylbenzene	105	12.518	12.518	0.000	94	1488136	5.00	4.62	
116 4-Chlorotoluene	126	12.554	12.554	0.000	98	427896	5.00	4.71	
118 tert-Butylbenzene	134	12.762	12.761	0.001	93	312332	5.00	4.46	
120 1,2,4-Trimethylbenzene	105	12.804	12.804	0.000	97	1510549	5.00	4.60	
121 sec-Butylbenzene	105	12.926	12.926	0.000	94	1986583	5.00	4.88	
122 1,3-Dichlorobenzene	146	13.024	13.024	0.000	97	795007	5.00	4.62	
123 4-Isopropyltoluene	119	13.030	13.030	0.000	97	1670871	5.00	4.86	
* 124 1,4-Dichlorobenzene-d4	152	13.079	13.078	0.001	94	1086111	10.0	10.0	
125 1,4-Dichlorobenzene	146	13.097	13.097	0.000	94	793405	5.00	4.68	
126 1,2,3-Trimethylbenzene	120	13.103	13.103	0.000	98	649014	5.00	4.44	
127 Benzyl chloride	126	13.170	13.170	0.000	98	116060	5.00	4.30	
130 n-Butylbenzene	92	13.322	13.322	0.000	97	794548	5.00	4.59	
131 1,2-Dichlorobenzene	146	13.353	13.353	0.000	99	709030	5.00	4.55	
129 p-Diethylbenzene	119	13.371	13.371	0.000	86	776010	5.00	4.46	
134 1,2-Dibromo-3-Chloropropane	155	13.895	13.895	0.000	86	34245	5.00	3.62	
135 1,3,5-Trichlorobenzene	180	14.017	14.017	0.000	98	588073	5.00	4.73	
136 1,2,4-Trichlorobenzene	180	14.438	14.438	0.000	94	491482	5.00	4.67	
137 Hexachlorobutadiene	225	14.523	14.523	0.000	97	237591	5.00	4.93	
138 Naphthalene	128	14.621	14.621	0.000	97	827170	5.00	4.07	
139 1,2,3-Trichlorobenzene	180	14.761	14.761	0.000	95	417264	5.00	4.57	
140 2-Methylnaphthalene	142	15.389	15.389	0.000	92	436116	5.00	3.70	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

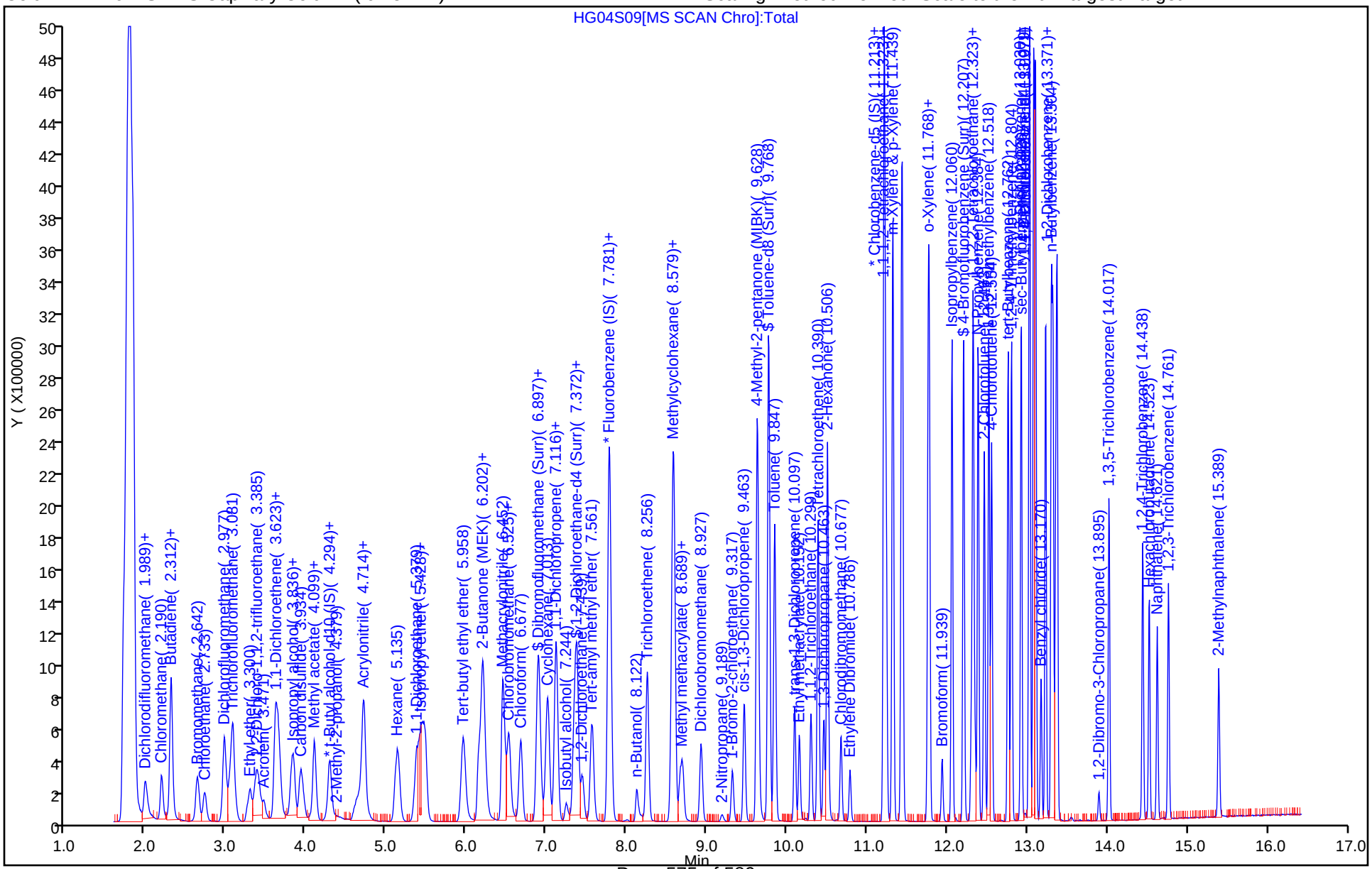
MSV_LCS_VOC#1_00012	Amount Added:	5.38	Units: uL	
MSV_LCS_ACROL_00014	Amount Added:	5.38	Units: uL	
MSV_Q_EE_00004	Amount Added:	5.38	Units: uL	
MSV_Q_ETBR_00008	Amount Added:	5.38	Units: uL	
MSV_QC_Gas826_00020	Amount Added:	5.38	Units: uL	
MSV_LLcentISS_00001	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 05-Aug-2021 11:03:19 Chrom Revision: 2.3 03-Aug-2021 10:08:16

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S09.D				
Injection Date:	04-Aug-2021 22:50:30	Instrument ID:	19094	Operator ID:	MEC29284
Lims ID:	410-49448-A-6 MSD			Worklist Smp#:	15
Client ID:	HD-COD-SW-15-0/1-0 MSD				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MSV_19094_25mL	Limit Group:	MSV - 8260C_D		

Column: Rxi-624Sil MS Capillary Column (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\HG04S09.D				
Lims ID:	410-49448-A-6 MSD				
Client ID:	HD-COD-SW-15-0/1-0 MSD				
Sample Type:	MSD				
Inject. Date:	04-Aug-2021 22:50:30	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0036053-015				
Operator ID:	MEC29284	Instrument ID:	19094		
Method:	\\chromfs\Lancaster\ChromData\19094\20210804-36053.b\MSV_19094_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	05-Aug-2021 11:03:04	Calib Date:	30-Jun-2021 20:52:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19094\20210630-33290.b\HU30I17.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1672				

First Level Reviewer: kaewrungrueangp Date: 05-Aug-2021 11:03:19

Compound	Amount Added	Amount Recovered	% Rec.
$ 51 Dibromofluoromethane (Surr)	10.0	10.8	107.54
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	99.91
$ 82 Toluene-d8 (Surr)	10.0	9.51	95.08
$ 108 4-Bromofluorobenzene (Surr)	10.0	9.87	98.67

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-49448-1

SDG No.:

Instrument ID: 19094 Start Date: 06/30/2021 14:20

Analysis Batch Number: 143886 End Date: 06/30/2021 21:12

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-143886/1		06/30/2021 14:20	1	HU30T03.D	R-624SilMS 30m 0.25(mm)
IC 410-143886/4		06/30/2021 15:20	1		R-624SilMS 30m 0.25(mm)
IC 410-143886/5		06/30/2021 15:41	1		R-624SilMS 30m 0.25(mm)
IC 410-143886/6		06/30/2021 16:02	1		R-624SilMS 30m 0.25(mm)
IC 410-143886/7		06/30/2021 16:22	1		R-624SilMS 30m 0.25(mm)
IC 410-143886/8		06/30/2021 16:43	1		R-624SilMS 30m 0.25(mm)
IC 410-143886/9		06/30/2021 17:04	1		R-624SilMS 30m 0.25(mm)
IC 410-143886/10		06/30/2021 17:25	1		R-624SilMS 30m 0.25(mm)
ICV 410-143886/11		06/30/2021 17:45	1		R-624SilMS 30m 0.25(mm)
IC 410-143886/14		06/30/2021 18:47	1	HU30I11.D	R-624SilMS 30m 0.25(mm)
ICIS 410-143886/15		06/30/2021 19:08	1	HU30I12.D	R-624SilMS 30m 0.25(mm)
IC 410-143886/16		06/30/2021 19:29	1	HU30I13.D	R-624SilMS 30m 0.25(mm)
IC 410-143886/17		06/30/2021 19:49	1	HU30I14.D	R-624SilMS 30m 0.25(mm)
IC 410-143886/18		06/30/2021 20:10	1	HU30I15.D	R-624SilMS 30m 0.25(mm)
IC 410-143886/19		06/30/2021 20:31	1	HU30I16.D	R-624SilMS 30m 0.25(mm)
IC 410-143886/20		06/30/2021 20:52	1	HU30I17.D	R-624SilMS 30m 0.25(mm)
ICV 410-143886/21		06/30/2021 21:12	1	HU30V11.D	R-624SilMS 30m 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-49448-1

SDG No.:

Instrument ID: 19094 Start Date: 08/04/2021 18:03

Analysis Batch Number: 156699 End Date: 08/05/2021 04:42

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-156699/1		08/04/2021 18:03	1	HG04T01.D	R-624SilMS 30m 0.25(mm)
CCVIS 410-156699/3		08/04/2021 18:42	1	HG04C01.D	R-624SilMS 30m 0.25(mm)
LCS 410-156699/4		08/04/2021 19:02	1	HG04L01.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		08/04/2021 19:23	1		R-624SilMS 30m 0.25(mm)
MB 410-156699/6		08/04/2021 19:43	1	HG04B01.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		08/04/2021 20:04	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		08/04/2021 20:25	1		R-624SilMS 30m 0.25(mm)
410-49448-16	HD-QC1-0/1-2	08/04/2021 20:46	1	HG04S03.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		08/04/2021 21:06	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		08/04/2021 21:27	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		08/04/2021 21:48	1		R-624SilMS 30m 0.25(mm)
410-49448-6	HD-COD-SW-15-0/1-0	08/04/2021 22:09	1	HG04S07.D	R-624SilMS 30m 0.25(mm)
410-49448-6 MS	HD-COD-SW-15-0/1-0 MS MS	08/04/2021 22:29	1	HG04S08.D	R-624SilMS 30m 0.25(mm)
410-49448-6 MSD	HD-COD-SW-15-0/1-0 MSD MSD	08/04/2021 22:50	1	HG04S09.D	R-624SilMS 30m 0.25(mm)
410-49448-1	HD-COD-SW-6-0/1-0	08/04/2021 23:31	1	HG04S11.D	R-624SilMS 30m 0.25(mm)
410-49448-2	HD-COD-SW-7-0/1-0	08/04/2021 23:52	1	HG04S12.D	R-624SilMS 30m 0.25(mm)
410-49448-3	HD-COD-SW-8-0/1-0	08/05/2021 00:13	1	HG04S13.D	R-624SilMS 30m 0.25(mm)
410-49448-4	HD-COD-SW-9-0/1-0	08/05/2021 00:34	1	HG04S14.D	R-624SilMS 30m 0.25(mm)
410-49448-5	HD-COD-SW-13-0/1-0	08/05/2021 00:54	1	HG04S15.D	R-624SilMS 30m 0.25(mm)
410-49448-9	HD-COD-SW-16-0/1-0	08/05/2021 01:15	1	HG04S16.D	R-624SilMS 30m 0.25(mm)
410-49448-10	HD-COD-SW-17-0/1-0	08/05/2021 01:36	1	HG04S17.D	R-624SilMS 30m 0.25(mm)
410-49448-11	HD-COD-SW-26-0/1-0	08/05/2021 01:56	1	HG04S18.D	R-624SilMS 30m 0.25(mm)
410-49448-12	HD-COD-SW-27-0/1-0	08/05/2021 02:17	1	HG04S19.D	R-624SilMS 30m 0.25(mm)
410-49448-13	HD-COD-SW-28-0/1-0	08/05/2021 02:38	1	HG04S20.D	R-624SilMS 30m 0.25(mm)
410-49448-14	HD-COD-SW-29-0/1-0	08/05/2021 02:59	1	HG04S21.D	R-624SilMS 30m 0.25(mm)
410-49448-15	HD-QC1-0/1-1	08/05/2021 03:19	1	HG04S22.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		08/05/2021 03:40	500		R-624SilMS 30m 0.25(mm)
ZZZZZ		08/05/2021 04:01	5000		R-624SilMS 30m 0.25(mm)
ZZZZZ		08/05/2021 04:22	500		R-624SilMS 30m 0.25(mm)
ZZZZZ		08/05/2021 04:42	5000		R-624SilMS 30m 0.25(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-49448-1

SDG No.:

Batch Number: 143886 Batch Start Date: 06/30/21 14:20 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Lot#Vial	MSV_LCS_ACROL 00009	MSV_LCS_Penta 00004	MSV_LCS_VOC#1 00007
BFB 410-143886/1		8260D		1 uL	1 uL				
IC 410-143886/14		8260D		25 mL	25 mL	2597			
ICIS 410-143886/15		8260D		25 mL	25 mL	2597			
IC 410-143886/16		8260D		25 mL	25 mL	2597			
IC 410-143886/17		8260D		25 mL	25 mL	2597			
IC 410-143886/18		8260D		25 mL	25 mL	2597			
IC 410-143886/19		8260D		25 mL	25 mL	2597			
IC 410-143886/20		8260D		25 mL	25 mL	2597			
ICV 410-143886/21		8260D		25 mL	25 mL	2597	12.5 uL	12.5 uL	12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LL_#1_826 00006	MSV_LL_#2_826 00007	MSV_LL_GAS826 00010	MSV_LLcentISS 00001	MSV_Q_EE 00004	MSV_Q_ETBR 00008
BFB 410-143886/1		8260D							
IC 410-143886/14		8260D		25 uL	25 uL	25 uL	5 uL		
ICIS 410-143886/15		8260D		10 uL	10 uL	10 uL	5 uL		
IC 410-143886/16		8260D		5 uL	5 uL	5 uL	5 uL		
IC 410-143886/17		8260D		2 uL	2 uL	2 uL	5 uL		
IC 410-143886/18		8260D		2 uL	2 uL	2 uL	5 uL		
IC 410-143886/19		8260D		2 uL	2 uL	2 uL	5 uL		
IC 410-143886/20		8260D		2 uL	2 uL	2 uL	5 uL		
ICV 410-143886/21		8260D					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.: 410-49448-1

SDG No.:

Batch Number: 143886 Batch Start Date: 06/30/21 14:20 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QC_Gas826 00010	MSV_V_BFB 00005				
BFB 410-143886/1		8260D			1 uL				
IC 410-143886/14		8260D							
ICIS 410-143886/15		8260D							
IC 410-143886/16		8260D							
IC 410-143886/17		8260D							
IC 410-143886/18		8260D							
IC 410-143886/19		8260D							
IC 410-143886/20		8260D							
ICV 410-143886/21		8260D		12.5 uL					

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-49448-1

SDG No.:

Batch Number: 156699 Batch Start Date: 08/04/21 18:03 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloCheck	Headspace	Lot#Vial
BFB 410-156699/1		8260D		1 uL	1 uL				
CCVIS 410-156699/3		8260D		25 mL	25 mL				2602
LCS 410-156699/4		8260D		25 mL	25 mL				2602
MB 410-156699/6		8260D		25 mL	25 mL				2602
410-49448-A-16	HD-QC1-0/1-2	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-49448-A-6	HD-COD-SW-15-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-49448-A-6 MS	HD-COD-SW-15-0/1-0 MS	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-49448-A-6 MSD	HD-COD-SW-15-0/1-0 MSD	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-49448-A-1	HD-COD-SW-6-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-49448-A-2	HD-COD-SW-7-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-49448-A-3	HD-COD-SW-8-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-49448-A-4	HD-COD-SW-9-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-49448-A-5	HD-COD-SW-13-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-49448-A-9	HD-COD-SW-16-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-49448-A-10	HD-COD-SW-17-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-49448-A-11	HD-COD-SW-26-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-49448-A-12	HD-COD-SW-27-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-49448-A-13	HD-COD-SW-28-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-49448-A-14	HD-COD-SW-29-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-49448-A-15	HD-QC1-0/1-1	8260D	T	25 mL	25 mL	<2 SU	N	N	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LCS_ACROL 00014	MSV_LCS_VOC#1 00012	MSV_LL_#1_826 00012	MSV_LL_#2_826 00012	MSV_LL_GAS826 00020	MSV_LLcentISS 00001

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.: 410-49448-1

SDG No.:

Batch Number: 156699 Batch Start Date: 08/04/21 18:03 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LCS_ACROL 00014	MSV_LCS_VOC#1 00012	MSV_LL_#1_826 00012	MSV_LL_#2_826 00012	MSV_LL_GAS826 00020	MSV_LLcentISS 00001
BFB 410-156699/1		8260D							
CCVIS 410-156699/3		8260D				20 uL	20 uL	20 uL	5 uL
LCS 410-156699/4		8260D		12.5 uL	12.5 uL				5 uL
MB 410-156699/6		8260D							5 uL
410-49448-A-16	HD-QC1-0/1-2	8260D	T						5 uL
410-49448-A-6	HD-COD-SW-15-0/1-0	8260D	T						5 uL
410-49448-A-6 MS	HD-COD-SW-15-0/1-0 MS	8260D	T	5.38 uL	5.38 uL				5 uL
410-49448-A-6 MSD	HD-COD-SW-15-0/1-0 MSD	8260D	T	5.38 uL	5.38 uL				5 uL
410-49448-A-1	HD-COD-SW-6-0/1-0	8260D	T						5 uL
410-49448-A-2	HD-COD-SW-7-0/1-0	8260D	T						5 uL
410-49448-A-3	HD-COD-SW-8-0/1-0	8260D	T						5 uL
410-49448-A-4	HD-COD-SW-9-0/1-0	8260D	T						5 uL
410-49448-A-5	HD-COD-SW-13-0/1-0	8260D	T						5 uL
410-49448-A-9	HD-COD-SW-16-0/1-0	8260D	T						5 uL
410-49448-A-10	HD-COD-SW-17-0/1-0	8260D	T						5 uL
410-49448-A-11	HD-COD-SW-26-0/1-0	8260D	T						5 uL
410-49448-A-12	HD-COD-SW-27-0/1-0	8260D	T						5 uL
410-49448-A-13	HD-COD-SW-28-0/1-0	8260D	T						5 uL
410-49448-A-14	HD-COD-SW-29-0/1-0	8260D	T						5 uL
410-49448-A-15	HD-QC1-0/1-1	8260D	T						5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_EE 00004	MSV_Q_ETBR 00008	MSV_QC_Gas826 00020	MSV_V_BFB 00006		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-49448-1

SDG No.:

Batch Number: 156699 Batch Start Date: 08/04/21 18:03 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_EE 00004	MSV_Q_ETBR 00008	MSV_QC_Gas826 00020	MSV_V_BFB 00006		
BFB 410-156699/1		8260D					1 uL		
CCVIS 410-156699/3		8260D							
LCS 410-156699/4		8260D		12.5 uL	12.5 uL	12.5 uL			
MB 410-156699/6		8260D							
410-49448-A-16	HD-QC1-0/1-2	8260D	T						
410-49448-A-6	HD-COD-SW-15-0/1-0	8260D	T						
410-49448-A-6 MS	HD-COD-SW-15-0/1-0 MS	8260D	T	5.38 uL	5.38 uL	5.38 uL			
410-49448-A-6 MSD	HD-COD-SW-15-0/1-0 MSD	8260D	T	5.38 uL	5.38 uL	5.38 uL			
410-49448-A-1	HD-COD-SW-6-0/1-0	8260D	T						
410-49448-A-2	HD-COD-SW-7-0/1-0	8260D	T						
410-49448-A-3	HD-COD-SW-8-0/1-0	8260D	T						
410-49448-A-4	HD-COD-SW-9-0/1-0	8260D	T						
410-49448-A-5	HD-COD-SW-13-0/1-0	8260D	T						
410-49448-A-9	HD-COD-SW-16-0/1-0	8260D	T						
410-49448-A-10	HD-COD-SW-17-0/1-0	8260D	T						
410-49448-A-11	HD-COD-SW-26-0/1-0	8260D	T						
410-49448-A-12	HD-COD-SW-27-0/1-0	8260D	T						
410-49448-A-13	HD-COD-SW-28-0/1-0	8260D	T						
410-49448-A-14	HD-COD-SW-29-0/1-0	8260D	T						
410-49448-A-15	HD-QC1-0/1-1	8260D	T						

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-49448-1

SDG No.:

Batch Number: 156699 Batch Start Date: 08/04/21 18:03 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

Environme[illegible] [barcode] [illegible]iest/Chain of Custody

410-49448 Chain of Custody

eurofins

Lancaster Laboratories Environmental

Acct. # _____ #_____

Client:	Groundwater Sciences Corporation		
Project Name/#:	fYNOP Monthly Surface Water	Site ID #:	fYNOP, York PA
Project Manager:	Chris O'Neil	P.O. #:	10012.42
Sampler:	Casey Littlefield / Erin Peeling	PWSID #:	N/A
Phone #:	(717) 901-8176 / (717) 756-1246	Quote #:	
State where samples were collected: York, PA		For Compliance: Yes ☐ No ☑	

Sample Identification	Collection Date	Collection Time	Grab	Composite	Matrix: Soil ☐ Sediment ☐ Tissue ☐	Water: Potable ☐ Ground ☐ NPDES ☐ Surface ☑	Other:	Total # of Containers	Analyses Requested: Aqueous VOCs via 8260D (low level - 25 ml purge)	Preservation Codes: H
HD-COD-SW-6-0/1-0	7-29-21	0945	X			X		3	X	
HD-COD-SW-7-0/1-0		1035	X			X		3	X	
HD-COD-SW-8-0/1-0		0825	X			X		3	X	
HD-COD-SW-9-0/1-0		1125	X			X		3	X	
HD-COD-SW-13-0/1-0		0850	X			X		3	X	
HD-COD-SW-15-0/1-0		1100	X			X		3	X	
HD-COD-SW-15-0/1-0 MS		1100	X			X		3	X	
HD-COD-SW-15-0/1-0 MSD		1100	X			X		3	X	
HD-COD-SW-16-0/1-0		0910	X			X		3	X	
HD-COD-SW-17-0/1-0		0925	X			X		3	X	

For Lab Use Only
SF #: _____
SCR #: _____

Preservation Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 P = H_3PO_4
O = Other

Remarks

Turnaround Time Requested (TAT) (please check): Standard ☑ Rush ☐
(Rush TAT is subject to laboratory approval and surcharges.)

Date results are needed:

Rush results requested by (please check): E-Mail ☐ Phone ☐

E-mail Address:

Phone:

Data Package Options (please check if required)

Type I (Validation/non-CLP)	☐	MA MCP	☐
Type III (Reduced non-CLP)	☐	CT RCP	☐
Type VI (Raw Data Only)	☐	TX TRRP-13	☐
NJ DKQP	☐	NYSDEC Category	☐ A or ☐ B

EDD Required? Yes ☑ No ☐ If yes, format: CLP Like Deliverables, Project Specific Analyte List

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	7/30/21	10:38	[signature]	7/30/21	1035
[signature]	7/30/21	1156			
			[signature]	7/30/21	1224

Relinquished by Commercial Carrier:

UPS _____ FedEx _____ Other _____

Temperature upon receipt 5.6 °C

Environmental Analysis Request/Chain of Custody

eurofins

Lancaster Laboratories Environmental

Acct. # _____ Group # _____ Sample # _____

Client: Groundwater Sciences Corporation

Project Name/#: fYNOP Monthly Surface Water | Site ID #: fYNOP, York PA

Project Manager: Chris O'Neil | P.O. #: 10012.42

Sampler: Casey Littlefield / Erin Peeling | PWSID #: N/A

Phone #: (717) 901-8176 / (717) 756-1246 | Quote #:

State where samples were collected: York, PA | For Compliance: Yes ☐ No ☑

Sample Identification	Collection Date	Collection Time	Grab	Composite	Matrix: Soil	Sediment	Tissue	Water: Potable	Ground	Surface	NPDES	Other: Trip Blank	Total # of Containers	Analyses Requested: Aqueous VOCs via 8260D (low level - 25 ml purge)	Preservation Codes: H
HD-COD-SW-26-0/1-0	7-29-21	1010	X					X					3	X	
HD-COD-SW-27-0/1-0		1050	X					X					3	X	
HD-COD-SW-28-0/1-0		1140	X					X					3	X	
HD-COD-SW-29-0/1-0		0815	X					X					3	X	
HD-QC1-0/1-1		1200	X					X					3	X	
HD-QC1-0/1-2		—	X									X	2	X	

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 #: _____

Remarks

Turnaround Time Requested (TAT) (please check): Standard ☑ Rush ☐

(Rush TAT is subject to laboratory approval and surcharges.)

Date results are needed:

Rush results requested by (please check): E-Mail ☐ Phone ☐

E-mail Address:

Phone:

Data Package Options (please check if required)

Type I (Validation/non-CLP) ☐ MA MCP ☐

Type III (Reduced non-CLP) ☐ CT RCP ☐

Type VI (Raw Data Only) ☐ TX TRRP-13 ☐

NJ DKQP ☐ NYSDEC Category ☐ A or ☐ B

EDD Required? Yes ☑ No ☐ If yes, format: CLP Like Deliverables, Project Specific Analyte List

Relinquished by:	Date	Time	Received by:	Date	Time
	7-30-21	10:38		7/30/21	1038
	7/30/21	1156			
				7/31/21	1224

Relinquished by Commercial Carrier: UPS _____ FedEx _____ Other _____

Temperature upon receipt 5.6 °C

DAB

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 410-4944

Login Number: 49448
List Number: 1
Creator: Bryan, Debra A

List Source: Eurofins Lancaster Laboratories Env, L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
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	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	N/A	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified.	N/A	
Residual Chlorine Checked.	N/A	
Sample custody seals are intact.	True	

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 410-4944

Login Number: 49448
List Number: 2
Creator: Hess, Anna

List Source: Eurofins Lancaster Laboratories Env, L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time (excluding tests with immediate HTs)		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		