ANALYTICAL REPORT

Job Number: 410-41319-1

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.
Marrissa C Williams
Project Manager
6/3/2021 11:48 AM

Marrissa C Williams, Project Manager
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06/03/2021

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

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

Table of Contents

Table of Contents

Qualifiers

GC/MS VOA

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

Glossary

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

Job Narrative
410-41319-1

Receipt
The samples were received on 5/26/2021 3:33 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.9°C

GC/MS VOA
Method 8260D_LL: The continuing calibration verification (CCV) associated with batch 410-132853 recovered outside acceptance criteria, low biased, for Acetone. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Non-detections of the affected analytes are reported. Any detections are considered estimated.

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

Detection Summary

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

Job ID: 410-41319-1

Client Sample ID: HD-COD-SW-6-0/1-0 — Lab Sample ID: 410-41319-1

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
Chloromethane	0.066	J	0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.087	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-7-0/1-0 — Lab Sample ID: 410-41319-2

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
Chloromethane	0.061	J	0.50	0.060	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.085	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	0.082	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-8-0/1-0 — Lab Sample ID: 410-41319-3

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	0.11	J	0.50	0.050	ug/L	1		8260D	Total/NA
Trichloroethene	0.095	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-9-0/1-0 — Lab Sample ID: 410-41319-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.4	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
Methylene Chloride	0.088	J	0.50	0.070	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.073	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.12	J	0.50	0.070	ug/L	1		8260D	Total/NA
Xylenes, Total	0.20	J	1.0	0.15	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-13-0/1-0 — Lab Sample ID: 410-41319-5

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
Chloromethane	0.070	J	0.50	0.060	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.11	J	0.50	0.050	ug/L	1		8260D	Total/NA
Trichloroethene	0.092	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-15-0/1-0 — Lab Sample ID: 410-41319-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.086	J	0.50	0.060	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.077	J	0.50	0.060	ug/L	1		8260D	Total/NA
Chloroform	0.26	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.63		0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	2.2		0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.75		0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-16-0/1-0 — Lab Sample ID: 410-41319-7

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
Chloromethane	0.065	J	0.50	0.060	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.11	J	0.50	0.050	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HD-COD-SW-16-0/1-0 (Continued) — Lab Sample ID: 410-41319-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.062	J	0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.087	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-17-0/1-0 — Lab Sample ID: 410-41319-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.2	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA
Chloromethane	0.061	J	0.50	0.060	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.36	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.54		0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.35	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-26-0/1-0 — Lab Sample ID: 410-41319-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.21	J	0.50	0.060	ug/L	1		8260D	Total/NA
Chloroform	0.59		0.50	0.090	ug/L	1		8260D	Total/NA
Tetrachloroethene	4.0		0.50	0.060	ug/L	1		8260D	Total/NA
Trichloroethene	0.17	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-27-0/1-0 — Lab Sample ID: 410-41319-10

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	0.086	J	1.0	0.060	ug/L	1		8260D	Total/NA
Chloromethane	0.069	J	0.50	0.060	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.094	J	0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.079	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.084	J	0.50	0.070	ug/L	1		8260D	Total/NA
Trichloroethene	0.084	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-28-0/1-0 — Lab Sample ID: 410-41319-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.6	J ^c	5.0	0.90	ug/L	1		8260D	Total/NA
Chloroform	0.10	J	0.50	0.090	ug/L	1		8260D	Total/NA
Chloromethane	0.066	J	0.50	0.060	ug/L	1		8260D	Total/NA
Methylene Chloride	0.10	J	0.50	0.070	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.087	J	0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.13	J	0.50	0.070	ug/L	1		8260D	Total/NA
Xylenes, Total	0.18	J	1.0	0.15	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-29-0/1-0 — Lab Sample ID: 410-41319-12

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
Chloromethane	0.068	J	0.50	0.060	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.11	J	0.50	0.050	ug/L	1		8260D	Total/NA
Trichloroethene	0.10	J	0.50	0.060	ug/L	1		8260D	Total/NA

Client Sample ID: HD-QC1-0/1-1 — Lab Sample ID: 410-41319-13

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

This Detection Summary does not include radiochemical test results.

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

Lab Sample ID: 410-41319-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.071	J	1.0	0.060	ug/L	1		8260D	Total/NA
Chloromethane	0.081	J	0.50	0.060	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.62		0.50	0.050	ug/L	1		8260D	Total/NA
Tetrachloroethene	1.0		0.50	0.060	ug/L	1		8260D	Total/NA
Toluene	0.076	J	0.50	0.070	ug/L	1		8260D	Total/NA
Trichloroethene	1.2		0.50	0.060	ug/L	1		8260D	Total/NA

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

Lab Sample ID: 410-41319-14

No Detections.

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

Date Collected: 05/25/21 10:25
Date Received: 05/26/21 15:33

Lab Sample ID: 410-41319-1

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			06/02/21 03:18	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 03:18	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/02/21 03:18	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 03:18	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/02/21 03:18	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 03:18	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/02/21 03:18	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/02/21 03:18	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/02/21 03:18	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/02/21 03:18	1
2-Hexanone	ND		5.0	0.60	ug/L			06/02/21 03:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/02/21 03:18	1
Acetone	**1.3**	**J ^c**	5.0	0.90	ug/L			06/02/21 03:18	1
Benzene	ND		0.50	0.050	ug/L			06/02/21 03:18	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/02/21 03:18	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/02/21 03:18	1
Bromoform	ND		1.0	0.30	ug/L			06/02/21 03:18	1
Bromomethane	ND		0.50	0.070	ug/L			06/02/21 03:18	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/02/21 03:18	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/02/21 03:18	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/02/21 03:18	1
Chloroethane	ND		0.50	0.070	ug/L			06/02/21 03:18	1
Chloroform	ND		0.50	0.090	ug/L			06/02/21 03:18	1
Chloromethane	**0.066**	**J**	0.50	0.060	ug/L			06/02/21 03:18	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			06/02/21 03:18	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/02/21 03:18	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/02/21 03:18	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/02/21 03:18	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/02/21 03:18	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/02/21 03:18	1
Styrene	ND		0.50	0.050	ug/L			06/02/21 03:18	1
Tetrachloroethene	ND		0.50	0.060	ug/L			06/02/21 03:18	1
Toluene	ND		0.50	0.070	ug/L			06/02/21 03:18	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 03:18	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/02/21 03:18	1
Trichloroethene	**0.087**	**J**	0.50	0.060	ug/L			06/02/21 03:18	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/02/21 03:18	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/02/21 03:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*06/02/21 03:18*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*06/02/21 03:18*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*06/02/21 03:18*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/02/21 03:18*	*1*

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

Date Collected: 05/25/21 11:05
Date Received: 05/26/21 15:33

Lab Sample ID: 410-41319-2

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			06/02/21 03:39	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 03:39	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/02/21 03:39	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 03:39	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/02/21 03:39	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 03:39	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/02/21 03:39	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/02/21 03:39	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/02/21 03:39	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/02/21 03:39	1
2-Hexanone	ND		5.0	0.60	ug/L			06/02/21 03:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/02/21 03:39	1
Acetone	**1.8**	**J ^c**	5.0	0.90	ug/L			06/02/21 03:39	1
Benzene	ND		0.50	0.050	ug/L			06/02/21 03:39	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/02/21 03:39	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/02/21 03:39	1
Bromoform	ND		1.0	0.30	ug/L			06/02/21 03:39	1
Bromomethane	ND		0.50	0.070	ug/L			06/02/21 03:39	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/02/21 03:39	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/02/21 03:39	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/02/21 03:39	1
Chloroethane	ND		0.50	0.070	ug/L			06/02/21 03:39	1
Chloroform	ND		0.50	0.090	ug/L			06/02/21 03:39	1
Chloromethane	**0.061**	**J**	0.50	0.060	ug/L			06/02/21 03:39	1
cis-1,2-Dichloroethene	**0.085**	**J**	0.50	0.050	ug/L			06/02/21 03:39	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/02/21 03:39	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/02/21 03:39	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/02/21 03:39	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/02/21 03:39	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/02/21 03:39	1
Styrene	ND		0.50	0.050	ug/L			06/02/21 03:39	1
Tetrachloroethene	**0.085**	**J**	0.50	0.060	ug/L			06/02/21 03:39	1
Toluene	ND		0.50	0.070	ug/L			06/02/21 03:39	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 03:39	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/02/21 03:39	1
Trichloroethene	**0.082**	**J**	0.50	0.060	ug/L			06/02/21 03:39	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/02/21 03:39	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/02/21 03:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*06/02/21 03:39*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*06/02/21 03:39*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 120*		*06/02/21 03:39*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/02/21 03:39*	*1*

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

Date Collected: 05/25/21 09:10
Date Received: 05/26/21 15:33

Lab Sample ID: 410-41319-3

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			06/02/21 04:00	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 04:00	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/02/21 04:00	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 04:00	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/02/21 04:00	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 04:00	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/02/21 04:00	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/02/21 04:00	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/02/21 04:00	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/02/21 04:00	1
2-Hexanone	ND		5.0	0.60	ug/L			06/02/21 04:00	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/02/21 04:00	1
Acetone	**1.4**	**J ^c**	5.0	0.90	ug/L			06/02/21 04:00	1
Benzene	ND		0.50	0.050	ug/L			06/02/21 04:00	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/02/21 04:00	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/02/21 04:00	1
Bromoform	ND		1.0	0.30	ug/L			06/02/21 04:00	1
Bromomethane	ND		0.50	0.070	ug/L			06/02/21 04:00	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/02/21 04:00	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/02/21 04:00	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/02/21 04:00	1
Chloroethane	ND		0.50	0.070	ug/L			06/02/21 04:00	1
Chloroform	ND		0.50	0.090	ug/L			06/02/21 04:00	1
Chloromethane	ND		0.50	0.060	ug/L			06/02/21 04:00	1
cis-1,2-Dichloroethene	**0.11**	**J**	0.50	0.050	ug/L			06/02/21 04:00	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/02/21 04:00	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/02/21 04:00	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/02/21 04:00	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/02/21 04:00	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/02/21 04:00	1
Styrene	ND		0.50	0.050	ug/L			06/02/21 04:00	1
Tetrachloroethene	ND		0.50	0.060	ug/L			06/02/21 04:00	1
Toluene	ND		0.50	0.070	ug/L			06/02/21 04:00	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 04:00	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/02/21 04:00	1
Trichloroethene	**0.095**	**J**	0.50	0.060	ug/L			06/02/21 04:00	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/02/21 04:00	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/02/21 04:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*06/02/21 04:00*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*06/02/21 04:00*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*06/02/21 04:00*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/02/21 04:00*	*1*

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

Date Collected: 05/25/21 12:10
Date Received: 05/26/21 15:33

Lab Sample ID: 410-41319-4

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			06/02/21 04:21	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 04:21	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/02/21 04:21	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 04:21	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/02/21 04:21	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 04:21	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/02/21 04:21	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/02/21 04:21	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/02/21 04:21	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/02/21 04:21	1
2-Hexanone	ND		5.0	0.60	ug/L			06/02/21 04:21	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/02/21 04:21	1
Acetone	**3.4**	**J ^c**	5.0	0.90	ug/L			06/02/21 04:21	1
Benzene	ND		0.50	0.050	ug/L			06/02/21 04:21	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/02/21 04:21	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/02/21 04:21	1
Bromoform	ND		1.0	0.30	ug/L			06/02/21 04:21	1
Bromomethane	ND		0.50	0.070	ug/L			06/02/21 04:21	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/02/21 04:21	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/02/21 04:21	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/02/21 04:21	1
Chloroethane	ND		0.50	0.070	ug/L			06/02/21 04:21	1
Chloroform	**0.11**	**J**	0.50	0.090	ug/L			06/02/21 04:21	1
Chloromethane	ND		0.50	0.060	ug/L			06/02/21 04:21	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			06/02/21 04:21	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/02/21 04:21	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/02/21 04:21	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/02/21 04:21	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/02/21 04:21	1
Methylene Chloride	**0.088**	**J**	0.50	0.070	ug/L			06/02/21 04:21	1
Styrene	ND		0.50	0.050	ug/L			06/02/21 04:21	1
Tetrachloroethene	**0.073**	**J**	0.50	0.060	ug/L			06/02/21 04:21	1
Toluene	**0.12**	**J**	0.50	0.070	ug/L			06/02/21 04:21	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 04:21	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/02/21 04:21	1
Trichloroethene	ND		0.50	0.060	ug/L			06/02/21 04:21	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/02/21 04:21	1
Xylenes, Total	**0.20**	**J**	1.0	0.15	ug/L			06/02/21 04:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*06/02/21 04:21*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*06/02/21 04:21*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*06/02/21 04:21*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/02/21 04:21*	*1*

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

Date Collected: 05/25/21 09:25
Date Received: 05/26/21 15:33

Lab Sample ID: 410-41319-5

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			06/02/21 04:43	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 04:43	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/02/21 04:43	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 04:43	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/02/21 04:43	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 04:43	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/02/21 04:43	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/02/21 04:43	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/02/21 04:43	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/02/21 04:43	1
2-Hexanone	ND		5.0	0.60	ug/L			06/02/21 04:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/02/21 04:43	1
Acetone	**1.3**	**J ^c**	5.0	0.90	ug/L			06/02/21 04:43	1
Benzene	ND		0.50	0.050	ug/L			06/02/21 04:43	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/02/21 04:43	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/02/21 04:43	1
Bromoform	ND		1.0	0.30	ug/L			06/02/21 04:43	1
Bromomethane	ND		0.50	0.070	ug/L			06/02/21 04:43	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/02/21 04:43	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/02/21 04:43	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/02/21 04:43	1
Chloroethane	ND		0.50	0.070	ug/L			06/02/21 04:43	1
Chloroform	ND		0.50	0.090	ug/L			06/02/21 04:43	1
Chloromethane	**0.070**	**J**	0.50	0.060	ug/L			06/02/21 04:43	1
cis-1,2-Dichloroethene	**0.11**	**J**	0.50	0.050	ug/L			06/02/21 04:43	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/02/21 04:43	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/02/21 04:43	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/02/21 04:43	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/02/21 04:43	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/02/21 04:43	1
Styrene	ND		0.50	0.050	ug/L			06/02/21 04:43	1
Tetrachloroethene	ND		0.50	0.060	ug/L			06/02/21 04:43	1
Toluene	ND		0.50	0.070	ug/L			06/02/21 04:43	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 04:43	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/02/21 04:43	1
Trichloroethene	**0.092**	**J**	0.50	0.060	ug/L			06/02/21 04:43	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/02/21 04:43	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/02/21 04:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*06/02/21 04:43*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*06/02/21 04:43*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*06/02/21 04:43*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*06/02/21 04:43*	*1*

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

Date Collected: 05/25/21 11:30
Date Received: 05/26/21 15:33

Lab Sample ID: 410-41319-6

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			06/02/21 01:32	1
1,1,1-Trichloroethane	**0.086**	**J**	0.50	0.060	ug/L			06/02/21 01:32	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/02/21 01:32	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 01:32	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/02/21 01:32	1
1,1-Dichloroethene	**0.077**	**J**	0.50	0.060	ug/L			06/02/21 01:32	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/02/21 01:32	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/02/21 01:32	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/02/21 01:32	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/02/21 01:32	1
2-Hexanone	ND		5.0	0.60	ug/L			06/02/21 01:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/02/21 01:32	1
Acetone	ND	^c	5.0	0.90	ug/L			06/02/21 01:32	1
Benzene	ND		0.50	0.050	ug/L			06/02/21 01:32	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/02/21 01:32	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/02/21 01:32	1
Bromoform	ND		1.0	0.30	ug/L			06/02/21 01:32	1
Bromomethane	ND		0.50	0.070	ug/L			06/02/21 01:32	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/02/21 01:32	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/02/21 01:32	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/02/21 01:32	1
Chloroethane	ND		0.50	0.070	ug/L			06/02/21 01:32	1
Chloroform	**0.26**	**J**	0.50	0.090	ug/L			06/02/21 01:32	1
Chloromethane	ND		0.50	0.060	ug/L			06/02/21 01:32	1
cis-1,2-Dichloroethene	**0.63**		0.50	0.050	ug/L			06/02/21 01:32	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/02/21 01:32	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/02/21 01:32	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/02/21 01:32	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/02/21 01:32	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/02/21 01:32	1
Styrene	ND		0.50	0.050	ug/L			06/02/21 01:32	1
Tetrachloroethene	**2.2**		0.50	0.060	ug/L			06/02/21 01:32	1
Toluene	ND		0.50	0.070	ug/L			06/02/21 01:32	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 01:32	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/02/21 01:32	1
Trichloroethene	**0.75**		0.50	0.060	ug/L			06/02/21 01:32	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/02/21 01:32	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/02/21 01:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*06/02/21 01:32*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*06/02/21 01:32*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*06/02/21 01:32*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/02/21 01:32*	*1*

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

Date Collected: 05/25/21 09:50
Date Received: 05/26/21 15:33

Lab Sample ID: 410-41319-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/02/21 05:04	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 05:04	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/02/21 05:04	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 05:04	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/02/21 05:04	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 05:04	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/02/21 05:04	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/02/21 05:04	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/02/21 05:04	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/02/21 05:04	1
2-Hexanone	ND		5.0	0.60	ug/L			06/02/21 05:04	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/02/21 05:04	1
Acetone	**1.3**	**J ^c**	5.0	0.90	ug/L			06/02/21 05:04	1
Benzene	ND		0.50	0.050	ug/L			06/02/21 05:04	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/02/21 05:04	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/02/21 05:04	1
Bromoform	ND		1.0	0.30	ug/L			06/02/21 05:04	1
Bromomethane	ND		0.50	0.070	ug/L			06/02/21 05:04	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/02/21 05:04	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/02/21 05:04	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/02/21 05:04	1
Chloroethane	ND		0.50	0.070	ug/L			06/02/21 05:04	1
Chloroform	ND		0.50	0.090	ug/L			06/02/21 05:04	1
Chloromethane	**0.065**	**J**	0.50	0.060	ug/L			06/02/21 05:04	1
cis-1,2-Dichloroethene	**0.11**	**J**	0.50	0.050	ug/L			06/02/21 05:04	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/02/21 05:04	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/02/21 05:04	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/02/21 05:04	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/02/21 05:04	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/02/21 05:04	1
Styrene	ND		0.50	0.050	ug/L			06/02/21 05:04	1
Tetrachloroethene	**0.062**	**J**	0.50	0.060	ug/L			06/02/21 05:04	1
Toluene	ND		0.50	0.070	ug/L			06/02/21 05:04	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 05:04	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/02/21 05:04	1
Trichloroethene	**0.087**	**J**	0.50	0.060	ug/L			06/02/21 05:04	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/02/21 05:04	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/02/21 05:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*06/02/21 05:04*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*06/02/21 05:04*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*06/02/21 05:04*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*06/02/21 05:04*	*1*

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

Date Collected: 05/25/21 10:05
Date Received: 05/26/21 15:33

Lab Sample ID: 410-41319-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/02/21 05:25	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 05:25	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/02/21 05:25	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 05:25	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/02/21 05:25	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 05:25	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/02/21 05:25	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/02/21 05:25	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/02/21 05:25	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/02/21 05:25	1
2-Hexanone	ND		5.0	0.60	ug/L			06/02/21 05:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/02/21 05:25	1
Acetone	**1.2**	**J ^c**	5.0	0.90	ug/L			06/02/21 05:25	1
Benzene	ND		0.50	0.050	ug/L			06/02/21 05:25	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/02/21 05:25	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/02/21 05:25	1
Bromoform	ND		1.0	0.30	ug/L			06/02/21 05:25	1
Bromomethane	ND		0.50	0.070	ug/L			06/02/21 05:25	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/02/21 05:25	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/02/21 05:25	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/02/21 05:25	1
Chloroethane	ND		0.50	0.070	ug/L			06/02/21 05:25	1
Chloroform	ND		0.50	0.090	ug/L			06/02/21 05:25	1
Chloromethane	**0.061**	**J**	0.50	0.060	ug/L			06/02/21 05:25	1
cis-1,2-Dichloroethene	**0.36**	**J**	0.50	0.050	ug/L			06/02/21 05:25	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/02/21 05:25	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/02/21 05:25	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/02/21 05:25	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/02/21 05:25	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/02/21 05:25	1
Styrene	ND		0.50	0.050	ug/L			06/02/21 05:25	1
Tetrachloroethene	**0.54**		0.50	0.060	ug/L			06/02/21 05:25	1
Toluene	ND		0.50	0.070	ug/L			06/02/21 05:25	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 05:25	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/02/21 05:25	1
Trichloroethene	**0.35**	**J**	0.50	0.060	ug/L			06/02/21 05:25	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/02/21 05:25	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/02/21 05:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*06/02/21 05:25*	*1*
4-Bromofluorobenzene (Surr)	*87*		*80 - 120*		*06/02/21 05:25*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*06/02/21 05:25*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*06/02/21 05:25*	*1*

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

Date Collected: 05/25/21 10:45
Date Received: 05/26/21 15:33

Lab Sample ID: 410-41319-9

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			06/02/21 05:47	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 05:47	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/02/21 05:47	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 05:47	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/02/21 05:47	1
1,1-Dichloroethene	**0.21**	**J**	0.50	0.060	ug/L			06/02/21 05:47	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/02/21 05:47	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/02/21 05:47	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/02/21 05:47	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/02/21 05:47	1
2-Hexanone	ND		5.0	0.60	ug/L			06/02/21 05:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/02/21 05:47	1
Acetone	ND	^c	5.0	0.90	ug/L			06/02/21 05:47	1
Benzene	ND		0.50	0.050	ug/L			06/02/21 05:47	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/02/21 05:47	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/02/21 05:47	1
Bromoform	ND		1.0	0.30	ug/L			06/02/21 05:47	1
Bromomethane	ND		0.50	0.070	ug/L			06/02/21 05:47	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/02/21 05:47	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/02/21 05:47	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/02/21 05:47	1
Chloroethane	ND		0.50	0.070	ug/L			06/02/21 05:47	1
Chloroform	**0.59**		0.50	0.090	ug/L			06/02/21 05:47	1
Chloromethane	ND		0.50	0.060	ug/L			06/02/21 05:47	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			06/02/21 05:47	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/02/21 05:47	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/02/21 05:47	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/02/21 05:47	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/02/21 05:47	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/02/21 05:47	1
Styrene	ND		0.50	0.050	ug/L			06/02/21 05:47	1
Tetrachloroethene	**4.0**		0.50	0.060	ug/L			06/02/21 05:47	1
Toluene	ND		0.50	0.070	ug/L			06/02/21 05:47	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 05:47	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/02/21 05:47	1
Trichloroethene	**0.17**	**J**	0.50	0.060	ug/L			06/02/21 05:47	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/02/21 05:47	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/02/21 05:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*06/02/21 05:47*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*06/02/21 05:47*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*06/02/21 05:47*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*06/02/21 05:47*	*1*

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

Date Collected: 05/25/21 11:20
Date Received: 05/26/21 15:33

Lab Sample ID: 410-41319-10

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			06/02/21 06:08	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 06:08	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/02/21 06:08	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 06:08	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/02/21 06:08	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 06:08	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/02/21 06:08	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/02/21 06:08	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/02/21 06:08	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/02/21 06:08	1
2-Hexanone	ND		5.0	0.60	ug/L			06/02/21 06:08	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/02/21 06:08	1
Acetone	**1.9**	**J ^c**	5.0	0.90	ug/L			06/02/21 06:08	1
Benzene	ND		0.50	0.050	ug/L			06/02/21 06:08	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/02/21 06:08	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/02/21 06:08	1
Bromoform	ND		1.0	0.30	ug/L			06/02/21 06:08	1
Bromomethane	ND		0.50	0.070	ug/L			06/02/21 06:08	1
Carbon disulfide	**0.086**	**J**	1.0	0.060	ug/L			06/02/21 06:08	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/02/21 06:08	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/02/21 06:08	1
Chloroethane	ND		0.50	0.070	ug/L			06/02/21 06:08	1
Chloroform	ND		0.50	0.090	ug/L			06/02/21 06:08	1
Chloromethane	**0.069**	**J**	0.50	0.060	ug/L			06/02/21 06:08	1
cis-1,2-Dichloroethene	**0.094**	**J**	0.50	0.050	ug/L			06/02/21 06:08	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/02/21 06:08	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/02/21 06:08	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/02/21 06:08	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/02/21 06:08	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/02/21 06:08	1
Styrene	ND		0.50	0.050	ug/L			06/02/21 06:08	1
Tetrachloroethene	**0.079**	**J**	0.50	0.060	ug/L			06/02/21 06:08	1
Toluene	**0.084**	**J**	0.50	0.070	ug/L			06/02/21 06:08	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 06:08	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/02/21 06:08	1
Trichloroethene	**0.084**	**J**	0.50	0.060	ug/L			06/02/21 06:08	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/02/21 06:08	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/02/21 06:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*06/02/21 06:08*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*06/02/21 06:08*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*06/02/21 06:08*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/02/21 06:08*	*1*

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

Date Collected: 05/25/21 12:25
Date Received: 05/26/21 15:33

Lab Sample ID: 410-41319-11

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			06/02/21 06:29	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 06:29	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/02/21 06:29	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 06:29	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/02/21 06:29	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 06:29	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/02/21 06:29	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/02/21 06:29	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/02/21 06:29	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/02/21 06:29	1
2-Hexanone	ND		5.0	0.60	ug/L			06/02/21 06:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/02/21 06:29	1
Acetone	**2.6**	**J ^c**	5.0	0.90	ug/L			06/02/21 06:29	1
Benzene	ND		0.50	0.050	ug/L			06/02/21 06:29	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/02/21 06:29	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/02/21 06:29	1
Bromoform	ND		1.0	0.30	ug/L			06/02/21 06:29	1
Bromomethane	ND		0.50	0.070	ug/L			06/02/21 06:29	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/02/21 06:29	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/02/21 06:29	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/02/21 06:29	1
Chloroethane	ND		0.50	0.070	ug/L			06/02/21 06:29	1
Chloroform	**0.10**	**J**	0.50	0.090	ug/L			06/02/21 06:29	1
Chloromethane	**0.066**	**J**	0.50	0.060	ug/L			06/02/21 06:29	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			06/02/21 06:29	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/02/21 06:29	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/02/21 06:29	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/02/21 06:29	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/02/21 06:29	1
Methylene Chloride	**0.10**	**J**	0.50	0.070	ug/L			06/02/21 06:29	1
Styrene	ND		0.50	0.050	ug/L			06/02/21 06:29	1
Tetrachloroethene	**0.087**	**J**	0.50	0.060	ug/L			06/02/21 06:29	1
Toluene	**0.13**	**J**	0.50	0.070	ug/L			06/02/21 06:29	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 06:29	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/02/21 06:29	1
Trichloroethene	ND		0.50	0.060	ug/L			06/02/21 06:29	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/02/21 06:29	1
Xylenes, Total	**0.18**	**J**	1.0	0.15	ug/L			06/02/21 06:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*06/02/21 06:29*	*1*
4-Bromofluorobenzene (Surr)	*85*		*80 - 120*		*06/02/21 06:29*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*06/02/21 06:29*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*06/02/21 06:29*	*1*

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

Date Collected: 05/25/21 08:50
Date Received: 05/26/21 15:33

Lab Sample ID: 410-41319-12

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			06/02/21 06:50	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 06:50	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/02/21 06:50	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 06:50	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/02/21 06:50	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 06:50	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/02/21 06:50	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/02/21 06:50	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/02/21 06:50	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/02/21 06:50	1
2-Hexanone	ND		5.0	0.60	ug/L			06/02/21 06:50	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/02/21 06:50	1
Acetone	**1.6**	**J ^c**	5.0	0.90	ug/L			06/02/21 06:50	1
Benzene	ND		0.50	0.050	ug/L			06/02/21 06:50	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/02/21 06:50	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/02/21 06:50	1
Bromoform	ND		1.0	0.30	ug/L			06/02/21 06:50	1
Bromomethane	ND		0.50	0.070	ug/L			06/02/21 06:50	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/02/21 06:50	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/02/21 06:50	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/02/21 06:50	1
Chloroethane	ND		0.50	0.070	ug/L			06/02/21 06:50	1
Chloroform	ND		0.50	0.090	ug/L			06/02/21 06:50	1
Chloromethane	**0.068**	**J**	0.50	0.060	ug/L			06/02/21 06:50	1
cis-1,2-Dichloroethene	**0.11**	**J**	0.50	0.050	ug/L			06/02/21 06:50	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/02/21 06:50	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/02/21 06:50	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/02/21 06:50	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/02/21 06:50	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/02/21 06:50	1
Styrene	ND		0.50	0.050	ug/L			06/02/21 06:50	1
Tetrachloroethene	ND		0.50	0.060	ug/L			06/02/21 06:50	1
Toluene	ND		0.50	0.070	ug/L			06/02/21 06:50	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 06:50	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/02/21 06:50	1
Trichloroethene	**0.10**	**J**	0.50	0.060	ug/L			06/02/21 06:50	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/02/21 06:50	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/02/21 06:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*06/02/21 06:50*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*06/02/21 06:50*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*06/02/21 06:50*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*06/02/21 06:50*	*1*

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

Date Collected: 05/25/21 12:00
Date Received: 05/26/21 15:33

Lab Sample ID: 410-41319-13

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			06/02/21 02:57	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 02:57	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/02/21 02:57	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 02:57	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/02/21 02:57	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 02:57	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/02/21 02:57	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/02/21 02:57	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/02/21 02:57	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/02/21 02:57	1
2-Hexanone	ND		5.0	0.60	ug/L			06/02/21 02:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/02/21 02:57	1
Acetone	**1.5**	**J ^c**	5.0	0.90	ug/L			06/02/21 02:57	1
Benzene	ND		0.50	0.050	ug/L			06/02/21 02:57	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/02/21 02:57	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/02/21 02:57	1
Bromoform	ND		1.0	0.30	ug/L			06/02/21 02:57	1
Bromomethane	ND		0.50	0.070	ug/L			06/02/21 02:57	1
Carbon disulfide	**0.071**	**J**	1.0	0.060	ug/L			06/02/21 02:57	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/02/21 02:57	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/02/21 02:57	1
Chloroethane	ND		0.50	0.070	ug/L			06/02/21 02:57	1
Chloroform	ND		0.50	0.090	ug/L			06/02/21 02:57	1
Chloromethane	**0.081**	**J**	0.50	0.060	ug/L			06/02/21 02:57	1
cis-1,2-Dichloroethene	**0.62**		0.50	0.050	ug/L			06/02/21 02:57	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/02/21 02:57	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/02/21 02:57	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/02/21 02:57	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/02/21 02:57	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/02/21 02:57	1
Styrene	ND		0.50	0.050	ug/L			06/02/21 02:57	1
Tetrachloroethene	**1.0**		0.50	0.060	ug/L			06/02/21 02:57	1
Toluene	**0.076**	**J**	0.50	0.070	ug/L			06/02/21 02:57	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 02:57	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/02/21 02:57	1
Trichloroethene	**1.2**		0.50	0.060	ug/L			06/02/21 02:57	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/02/21 02:57	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/02/21 02:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*06/02/21 02:57*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*06/02/21 02:57*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*06/02/21 02:57*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/02/21 02:57*	*1*

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

Date Collected: 05/25/21 00:00
Date Received: 05/26/21 15:33

Lab Sample ID: 410-41319-14

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			06/02/21 00:49	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 00:49	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/02/21 00:49	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 00:49	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/02/21 00:49	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 00:49	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/02/21 00:49	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/02/21 00:49	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/02/21 00:49	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/02/21 00:49	1
2-Hexanone	ND		5.0	0.60	ug/L			06/02/21 00:49	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/02/21 00:49	1
Acetone	ND	^c	5.0	0.90	ug/L			06/02/21 00:49	1
Benzene	ND		0.50	0.050	ug/L			06/02/21 00:49	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/02/21 00:49	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/02/21 00:49	1
Bromoform	ND		1.0	0.30	ug/L			06/02/21 00:49	1
Bromomethane	ND		0.50	0.070	ug/L			06/02/21 00:49	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/02/21 00:49	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/02/21 00:49	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/02/21 00:49	1
Chloroethane	ND		0.50	0.070	ug/L			06/02/21 00:49	1
Chloroform	ND		0.50	0.090	ug/L			06/02/21 00:49	1
Chloromethane	ND		0.50	0.060	ug/L			06/02/21 00:49	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			06/02/21 00:49	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/02/21 00:49	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/02/21 00:49	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/02/21 00:49	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/02/21 00:49	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/02/21 00:49	1
Styrene	ND		0.50	0.050	ug/L			06/02/21 00:49	1
Tetrachloroethene	ND		0.50	0.060	ug/L			06/02/21 00:49	1
Toluene	ND		0.50	0.070	ug/L			06/02/21 00:49	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 00:49	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/02/21 00:49	1
Trichloroethene	ND		0.50	0.060	ug/L			06/02/21 00:49	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/02/21 00:49	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/02/21 00:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*		*06/02/21 00:49*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*06/02/21 00:49*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*06/02/21 00:49*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*06/02/21 00:49*	*1*

Default Detection Limits

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

Job ID: 410-41319-1

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: 410-41319-1

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)
410-41319-1	HD-COD-SW-6-0/1-0	102	95	103	98
410-41319-2	HD-COD-SW-7-0/1-0	101	95	96	98
410-41319-3	HD-COD-SW-8-0/1-0	100	95	99	98
410-41319-4	HD-COD-SW-9-0/1-0	101	92	100	98
410-41319-5	HD-COD-SW-13-0/1-0	99	98	98	101
410-41319-6	HD-COD-SW-15-0/1-0	100	94	101	98
410-41319-6 MS	HD-COD-SW-15-0/1-0	95	96	100	99
410-41319-6 MSD	HD-COD-SW-15-0/1-0	99	96	99	98
410-41319-7	HD-COD-SW-16-0/1-0	101	98	99	100
410-41319-8	HD-COD-SW-17-0/1-0	100	87	99	95
410-41319-9	HD-COD-SW-26-0/1-0	99	92	98	99
410-41319-10	HD-COD-SW-27-0/1-0	99	95	98	98
410-41319-11	HD-COD-SW-28-0/1-0	99	85	99	97
410-41319-12	HD-COD-SW-29-0/1-0	102	94	99	92
410-41319-13	HD-QC1-0/1-1	103	96	99	98
410-41319-14	HD-QC1-0/1-2	98	94	99	97
LCS 410-132853/4	Lab Control Sample	98	95	99	99
MB 410-132853/6	Method Blank	100	94	101	99

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 410-132853/6
Matrix: Water
Analysis Batch: 132853

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/02/21 00:16	1
1,1,1-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 00:16	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.070	ug/L			06/02/21 00:16	1
1,1,2-Trichloroethane	ND		0.50	0.060	ug/L			06/02/21 00:16	1
1,1-Dichloroethane	ND		0.50	0.070	ug/L			06/02/21 00:16	1
1,1-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 00:16	1
1,2-Dibromoethane (EDB)	ND		0.50	0.060	ug/L			06/02/21 00:16	1
1,2-Dichloroethane	ND		0.50	0.050	ug/L			06/02/21 00:16	1
1,2-Dichloropropane	ND		0.50	0.060	ug/L			06/02/21 00:16	1
2-Butanone (MEK)	ND		5.0	0.60	ug/L			06/02/21 00:16	1
2-Hexanone	ND		5.0	0.60	ug/L			06/02/21 00:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70	ug/L			06/02/21 00:16	1
Acetone	ND		5.0	0.90	ug/L			06/02/21 00:16	1
Benzene	ND		0.50	0.050	ug/L			06/02/21 00:16	1
Bromochloromethane	ND		0.50	0.050	ug/L			06/02/21 00:16	1
Bromodichloromethane	ND		0.50	0.050	ug/L			06/02/21 00:16	1
Bromoform	ND		1.0	0.30	ug/L			06/02/21 00:16	1
Bromomethane	ND		0.50	0.070	ug/L			06/02/21 00:16	1
Carbon disulfide	ND		1.0	0.060	ug/L			06/02/21 00:16	1
Carbon tetrachloride	ND		0.50	0.070	ug/L			06/02/21 00:16	1
Chlorobenzene	ND		0.50	0.060	ug/L			06/02/21 00:16	1
Chloroethane	ND		0.50	0.070	ug/L			06/02/21 00:16	1
Chloroform	ND		0.50	0.090	ug/L			06/02/21 00:16	1
Chloromethane	ND		0.50	0.060	ug/L			06/02/21 00:16	1
cis-1,2-Dichloroethene	ND		0.50	0.050	ug/L			06/02/21 00:16	1
cis-1,3-Dichloropropene	ND		0.50	0.050	ug/L			06/02/21 00:16	1
Dibromochloromethane	ND		0.50	0.070	ug/L			06/02/21 00:16	1
Ethylbenzene	ND		0.50	0.060	ug/L			06/02/21 00:16	1
Methyl tert-butyl ether	ND		0.50	0.050	ug/L			06/02/21 00:16	1
Methylene Chloride	ND		0.50	0.070	ug/L			06/02/21 00:16	1
Styrene	ND		0.50	0.050	ug/L			06/02/21 00:16	1
Tetrachloroethene	ND		0.50	0.060	ug/L			06/02/21 00:16	1
Toluene	ND		0.50	0.070	ug/L			06/02/21 00:16	1
trans-1,2-Dichloroethene	ND		0.50	0.060	ug/L			06/02/21 00:16	1
trans-1,3-Dichloropropene	ND		0.50	0.060	ug/L			06/02/21 00:16	1
Trichloroethene	ND		0.50	0.060	ug/L			06/02/21 00:16	1
Vinyl chloride	ND		0.50	0.10	ug/L			06/02/21 00:16	1
Xylenes, Total	ND		1.0	0.15	ug/L			06/02/21 00:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*06/02/21 00:16*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*06/02/21 00:16*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*06/02/21 00:16*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*06/02/21 00:16*	*1*

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

Lab Sample ID: LCS 410-132853/4
Matrix: Water
Analysis Batch: 132853

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	4.84		ug/L		97	71 - 134
1,1,1-Trichloroethane	5.00	4.64		ug/L		93	78 - 126
1,1,2,2-Tetrachloroethane	5.00	4.96		ug/L		99	75 - 123
1,1,2-Trichloroethane	5.00	5.06		ug/L		101	80 - 120
1,1-Dichloroethane	5.00	4.58		ug/L		92	74 - 120
1,1-Dichloroethene	5.00	4.92		ug/L		98	80 - 131
1,2-Dibromoethane (EDB)	5.00	4.89		ug/L		98	80 - 120
1,2-Dichloroethane	5.00	4.14		ug/L		83	69 - 122
1,2-Dichloropropane	5.00	4.75		ug/L		95	80 - 120
2-Butanone (MEK)	62.5	56.7		ug/L		91	59 - 141
2-Hexanone	62.5	57.7		ug/L		92	52 - 140
4-Methyl-2-pentanone (MIBK)	62.5	56.6		ug/L		91	55 - 140
Acetone	62.5	50.9		ug/L		81	60 - 146
Benzene	5.00	4.81		ug/L		96	80 - 120
Bromochloromethane	5.00	4.75		ug/L		95	80 - 120
Bromodichloromethane	5.00	4.62		ug/L		92	73 - 124
Bromoform	5.00	4.10		ug/L		82	49 - 144
Bromomethane	5.00	5.27		ug/L		105	60 - 136
Carbon disulfide	5.00	4.30		ug/L		86	67 - 130
Carbon tetrachloride	5.00	4.69		ug/L		94	64 - 141
Chlorobenzene	5.00	4.97		ug/L		99	80 - 120
Chloroethane	5.00	4.85		ug/L		97	63 - 120
Chloroform	5.00	4.76		ug/L		95	80 - 120
Chloromethane	5.00	5.39		ug/L		108	56 - 124
cis-1,2-Dichloroethene	5.00	4.92		ug/L		98	80 - 122
cis-1,3-Dichloropropene	5.00	4.46		ug/L		89	67 - 121
Dibromochloromethane	5.00	4.66		ug/L		93	64 - 138
Ethylbenzene	5.00	4.80		ug/L		96	80 - 120
Methyl tert-butyl ether	5.00	4.52		ug/L		90	69 - 120
Methylene Chloride	5.00	4.91		ug/L		98	80 - 120
Styrene	5.00	4.92		ug/L		98	80 - 120
Tetrachloroethene	5.00	4.73		ug/L		95	80 - 120
Toluene	5.00	4.84		ug/L		97	80 - 120
trans-1,2-Dichloroethene	5.00	4.78		ug/L		96	80 - 122
trans-1,3-Dichloropropene	5.00	4.44		ug/L		89	61 - 129
Trichloroethene	5.00	4.95		ug/L		99	80 - 120
Vinyl chloride	5.00	5.56		ug/L		111	60 - 125
Xylenes, Total	15.0	14.9		ug/L		99	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*

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

Lab Sample ID: 410-41319-6 MS
Matrix: Water
Analysis Batch: 132853

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		5.00	5.17		ug/L		103	71 - 134
1,1,1-Trichloroethane	0.086	J	5.00	5.24		ug/L		103	78 - 126
1,1,2,2-Tetrachloroethane	ND		5.00	5.25		ug/L		105	75 - 123
1,1,2-Trichloroethane	ND		5.00	5.23		ug/L		105	80 - 120
1,1-Dichloroethane	ND		5.00	4.96		ug/L		99	74 - 120
1,1-Dichloroethene	0.077	J	5.00	5.94		ug/L		117	80 - 131
1,2-Dibromoethane (EDB)	ND		5.00	4.90		ug/L		98	80 - 120
1,2-Dichloroethane	ND		5.00	4.48		ug/L		89	69 - 122
1,2-Dichloropropane	ND		5.00	5.08		ug/L		101	80 - 120
2-Butanone (MEK)	ND		62.6	61.5		ug/L		98	59 - 141
2-Hexanone	ND		62.6	63.0		ug/L		101	52 - 140
4-Methyl-2-pentanone (MIBK)	ND		62.6	62.6		ug/L		100	55 - 140
Acetone	ND	^c	62.6	53.0		ug/L		85	60 - 146
Benzene	ND		5.00	5.25		ug/L		105	80 - 120
Bromochloromethane	ND		5.00	4.98		ug/L		99	80 - 120
Bromodichloromethane	ND		5.00	4.80		ug/L		96	73 - 124
Bromoform	ND		5.00	4.06		ug/L		81	49 - 144
Bromomethane	ND		5.00	5.43		ug/L		109	60 - 136
Carbon disulfide	ND		5.00	5.02		ug/L		100	67 - 130
Carbon tetrachloride	ND		5.00	5.30		ug/L		106	64 - 141
Chlorobenzene	ND		5.00	5.39		ug/L		108	80 - 120
Chloroethane	ND		5.00	4.96		ug/L		99	63 - 120
Chloroform	0.26	J	5.00	5.33		ug/L		101	80 - 120
Chloromethane	ND		5.00	5.48		ug/L		110	80 - 120
cis-1,2-Dichloroethene	0.63		5.00	6.01		ug/L		107	80 - 122
cis-1,3-Dichloropropene	ND		5.00	4.66		ug/L		93	67 - 121
Dibromochloromethane	ND		5.00	4.74		ug/L		95	64 - 138
Ethylbenzene	ND		5.00	5.28		ug/L		106	80 - 120
Methyl tert-butyl ether	ND		5.00	4.62		ug/L		92	69 - 120
Methylene Chloride	ND		5.00	5.28		ug/L		105	80 - 120
Styrene	ND		5.00	5.28		ug/L		106	80 - 120
Tetrachloroethene	2.2		5.00	7.62		ug/L		109	80 - 120
Toluene	ND		5.00	5.27		ug/L		105	80 - 120
trans-1,2-Dichloroethene	ND		5.00	5.42		ug/L		108	80 - 122
trans-1,3-Dichloropropene	ND		5.00	4.54		ug/L		91	61 - 129
Trichloroethene	0.75		5.00	6.02		ug/L		105	80 - 120
Vinyl chloride	ND		5.00	5.81		ug/L		116	60 - 125
Xylenes, Total	ND		15.0	16.2		ug/L		108	80 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*80 - 120*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*

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

Lab Sample ID: 410-41319-6 MSD
Matrix: Water
Analysis Batch: 132853

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		5.00	5.05		ug/L		101	71 - 134	2	30
1,1,1-Trichloroethane	0.086	J	5.00	5.10		ug/L		100	78 - 126	3	30
1,1,2,2-Tetrachloroethane	ND		5.00	4.78		ug/L		96	75 - 123	9	30
1,1,2-Trichloroethane	ND		5.00	5.01		ug/L		100	80 - 120	4	30
1,1-Dichloroethane	ND		5.00	4.83		ug/L		97	74 - 120	3	30
1,1-Dichloroethene	0.077	J	5.00	5.70		ug/L		112	80 - 131	4	30
1,2-Dibromoethane (EDB)	ND		5.00	4.78		ug/L		95	80 - 120	2	30
1,2-Dichloroethane	ND		5.00	4.34		ug/L		87	69 - 122	3	30
1,2-Dichloropropane	ND		5.00	4.98		ug/L		99	80 - 120	2	30
2-Butanone (MEK)	ND		62.6	60.0		ug/L		96	59 - 141	2	30
2-Hexanone	ND		62.6	60.6		ug/L		97	52 - 140	4	30
4-Methyl-2-pentanone (MIBK)	ND		62.6	60.0		ug/L		96	55 - 140	4	30
Acetone	ND	^c	62.6	43.9		ug/L		70	60 - 146	19	30
Benzene	ND		5.00	5.13		ug/L		103	80 - 120	2	30
Bromochloromethane	ND		5.00	4.90		ug/L		98	80 - 120	2	30
Bromodichloromethane	ND		5.00	4.73		ug/L		94	73 - 124	1	30
Bromoform	ND		5.00	4.03		ug/L		81	49 - 144	1	30
Bromomethane	ND		5.00	5.30		ug/L		106	60 - 136	2	30
Carbon disulfide	ND		5.00	4.98		ug/L		100	67 - 130	1	30
Carbon tetrachloride	ND		5.00	5.20		ug/L		104	64 - 141	2	30
Chlorobenzene	ND		5.00	5.20		ug/L		104	80 - 120	4	30
Chloroethane	ND		5.00	4.93		ug/L		99	63 - 120	0	30
Chloroform	0.26	J	5.00	5.23		ug/L		99	80 - 120	2	30
Chloromethane	ND		5.00	5.33		ug/L		107	80 - 120	3	30
cis-1,2-Dichloroethene	0.63		5.00	5.87		ug/L		105	80 - 122	2	30
cis-1,3-Dichloropropene	ND		5.00	4.54		ug/L		91	67 - 121	3	30
Dibromochloromethane	ND		5.00	4.58		ug/L		91	64 - 138	4	30
Ethylbenzene	ND		5.00	5.12		ug/L		102	80 - 120	3	30
Methyl tert-butyl ether	ND		5.00	4.54		ug/L		91	69 - 120	2	30
Methylene Chloride	ND		5.00	5.07		ug/L		101	80 - 120	4	30
Styrene	ND		5.00	5.12		ug/L		102	80 - 120	3	30
Tetrachloroethene	2.2		5.00	7.39		ug/L		104	80 - 120	3	30
Toluene	ND		5.00	5.19		ug/L		104	80 - 120	2	30
trans-1,2-Dichloroethene	ND		5.00	5.29		ug/L		106	80 - 122	2	30
trans-1,3-Dichloropropene	ND		5.00	4.47		ug/L		89	61 - 129	1	30
Trichloroethene	0.75		5.00	5.91		ug/L		103	80 - 120	2	30
Vinyl chloride	ND		5.00	5.61		ug/L		112	60 - 125	4	30
Xylenes, Total	ND		15.0	15.7		ug/L		105	80 - 120	3	30

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

QC Association Summary

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

Job ID: 410-41319-1

GC/MS VOA

Analysis Batch: 132853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-41319-1	HD-COD-SW-6-0/1-0	Total/NA	Water	8260D	
410-41319-2	HD-COD-SW-7-0/1-0	Total/NA	Water	8260D	
410-41319-3	HD-COD-SW-8-0/1-0	Total/NA	Water	8260D	
410-41319-4	HD-COD-SW-9-0/1-0	Total/NA	Water	8260D	
410-41319-5	HD-COD-SW-13-0/1-0	Total/NA	Water	8260D	
410-41319-6	HD-COD-SW-15-0/1-0	Total/NA	Water	8260D	
410-41319-7	HD-COD-SW-16-0/1-0	Total/NA	Water	8260D	
410-41319-8	HD-COD-SW-17-0/1-0	Total/NA	Water	8260D	
410-41319-9	HD-COD-SW-26-0/1-0	Total/NA	Water	8260D	
410-41319-10	HD-COD-SW-27-0/1-0	Total/NA	Water	8260D	
410-41319-11	HD-COD-SW-28-0/1-0	Total/NA	Water	8260D	
410-41319-12	HD-COD-SW-29-0/1-0	Total/NA	Water	8260D	
410-41319-13	HD-QC1-0/1-1	Total/NA	Water	8260D	
410-41319-14	HD-QC1-0/1-2	Total/NA	Water	8260D	
MB 410-132853/6	Method Blank	Total/NA	Water	8260D	
LCS 410-132853/4	Lab Control Sample	Total/NA	Water	8260D	
410-41319-6 MS	HD-COD-SW-15-0/1-0	Total/NA	Water	8260D	
410-41319-6 MSD	HD-COD-SW-15-0/1-0	Total/NA	Water	8260D	

Client Sample ID: HD-COD-SW-6-0/1-0
Lab Sample ID: 410-41319-1
Date Collected: 05/25/21 10:25
Matrix: Water
Date Received: 05/26/21 15:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	132853	06/02/21 03:18	J5QQ	ELLE

Client Sample ID: HD-COD-SW-7-0/1-0
Lab Sample ID: 410-41319-2
Date Collected: 05/25/21 11:05
Matrix: Water
Date Received: 05/26/21 15:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	132853	06/02/21 03:39	J5QQ	ELLE

Client Sample ID: HD-COD-SW-8-0/1-0
Lab Sample ID: 410-41319-3
Date Collected: 05/25/21 09:10
Matrix: Water
Date Received: 05/26/21 15:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	132853	06/02/21 04:00	J5QQ	ELLE

Client Sample ID: HD-COD-SW-9-0/1-0
Lab Sample ID: 410-41319-4
Date Collected: 05/25/21 12:10
Matrix: Water
Date Received: 05/26/21 15:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	132853	06/02/21 04:21	J5QQ	ELLE

Client Sample ID: HD-COD-SW-13-0/1-0
Lab Sample ID: 410-41319-5
Date Collected: 05/25/21 09:25
Matrix: Water
Date Received: 05/26/21 15:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	132853	06/02/21 04:43	J5QQ	ELLE

Client Sample ID: HD-COD-SW-15-0/1-0
Lab Sample ID: 410-41319-6
Date Collected: 05/25/21 11:30
Matrix: Water
Date Received: 05/26/21 15:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	132853	06/02/21 01:32	J5QQ	ELLE

Client Sample ID: HD-COD-SW-16-0/1-0
Lab Sample ID: 410-41319-7
Date Collected: 05/25/21 09:50
Matrix: Water
Date Received: 05/26/21 15:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	132853	06/02/21 05:04	J5QQ	ELLE

Client Sample ID: HD-COD-SW-17-0/1-0
Lab Sample ID: 410-41319-8
Date Collected: 05/25/21 10:05
Matrix: Water
Date Received: 05/26/21 15:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	132853	06/02/21 05:25	J5QQ	ELLE

Client Sample ID: HD-COD-SW-26-0/1-0
Lab Sample ID: 410-41319-9
Date Collected: 05/25/21 10:45
Matrix: Water
Date Received: 05/26/21 15:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	132853	06/02/21 05:47	J5QQ	ELLE

Client Sample ID: HD-COD-SW-27-0/1-0
Lab Sample ID: 410-41319-10
Date Collected: 05/25/21 11:20
Matrix: Water
Date Received: 05/26/21 15:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	132853	06/02/21 06:08	J5QQ	ELLE

Client Sample ID: HD-COD-SW-28-0/1-0
Lab Sample ID: 410-41319-11
Date Collected: 05/25/21 12:25
Matrix: Water
Date Received: 05/26/21 15:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	132853	06/02/21 06:29	J5QQ	ELLE

Client Sample ID: HD-COD-SW-29-0/1-0
Lab Sample ID: 410-41319-12
Date Collected: 05/25/21 08:50
Matrix: Water
Date Received: 05/26/21 15:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	132853	06/02/21 06:50	J5QQ	ELLE

Client Sample ID: HD-QC1-0/1-1
Lab Sample ID: 410-41319-13
Date Collected: 05/25/21 12:00
Matrix: Water
Date Received: 05/26/21 15:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	132853	06/02/21 02:57	J5QQ	ELLE

Client Sample ID: HD-QC1-0/1-2
Lab Sample ID: 410-41319-14
Date Collected: 05/25/21 00:00
Matrix: Water
Date Received: 05/26/21 15:33

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	132853	06/02/21 00:49	J5QQ	ELLE

Laboratory References:

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

Accreditation/Certification Summary

Client: Groundwater Sciences Corporation
Job ID: 410-41319-1
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: 410-41319-1

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: 410-41319-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-41319-1	HD-COD-SW-6-0/1-0	Water	05/25/21 10:25	05/26/21 15:33	
410-41319-2	HD-COD-SW-7-0/1-0	Water	05/25/21 11:05	05/26/21 15:33	
410-41319-3	HD-COD-SW-8-0/1-0	Water	05/25/21 09:10	05/26/21 15:33	
410-41319-4	HD-COD-SW-9-0/1-0	Water	05/25/21 12:10	05/26/21 15:33	
410-41319-5	HD-COD-SW-13-0/1-0	Water	05/25/21 09:25	05/26/21 15:33	
410-41319-6	HD-COD-SW-15-0/1-0	Water	05/25/21 11:30	05/26/21 15:33	
410-41319-7	HD-COD-SW-16-0/1-0	Water	05/25/21 09:50	05/26/21 15:33	
410-41319-8	HD-COD-SW-17-0/1-0	Water	05/25/21 10:05	05/26/21 15:33	
410-41319-9	HD-COD-SW-26-0/1-0	Water	05/25/21 10:45	05/26/21 15:33	
410-41319-10	HD-COD-SW-27-0/1-0	Water	05/25/21 11:20	05/26/21 15:33	
410-41319-11	HD-COD-SW-28-0/1-0	Water	05/25/21 12:25	05/26/21 15:33	
410-41319-12	HD-COD-SW-29-0/1-0	Water	05/25/21 08:50	05/26/21 15:33	
410-41319-13	HD-QC1-0/1-1	Water	05/25/21 12:00	05/26/21 15:33	
410-41319-14	HD-QC1-0/1-2	Water	05/25/21 00:00	05/26/21 15:33	

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-41319-1

SDG No.:

Instrument ID: 19930 Analysis Batch Number: 107390

Lab Sample ID: IC 410-107390/12 Client Sample ID:

Date Analyzed: 03/25/21 23:19 Lab File ID: IM25I01.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.63	Incomplete Integration	campbellme	03/26/21 16:41

Lab Sample ID: ICIS 410-107390/13 Client Sample ID:

Date Analyzed: 03/25/21 23:41 Lab File ID: IM25I02.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.97	Incomplete Integration	campbellme	03/26/21 16:42
Bromomethane	2.62	Incomplete Integration	campbellme	03/26/21 16:42
1,4-Dioxane	8.63	Incomplete Integration	campbellme	03/26/21 16:43

Lab Sample ID: IC 410-107390/14 Client Sample ID:

Date Analyzed: 03/26/21 00:02 Lab File ID: IM25I03.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.61	Incomplete Integration	campbellme	03/26/21 16:44
Methyl acetate	4.04	Baseline	campbellme	03/26/21 16:45
n-Butanol	8.09	Incomplete Integration	campbellme	03/26/21 16:45
1,4-Dioxane	8.64	Incomplete Integration	campbellme	03/26/21 16:46

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-41319-1

SDG No.:

Instrument ID: 19930 Analysis Batch Number: 107390

Lab Sample ID: IC 410-107390/15 Client Sample ID:

Date Analyzed: 03/26/21 00:23 Lab File ID: IM25I04.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.98	Incomplete Integration	campbellme	03/26/21 16:46
Chloromethane	2.18	Baseline	campbellme	03/26/21 16:47
Methyl acetate	4.05	Baseline	campbellme	03/26/21 16:47
Bromochloromethane	6.49	Baseline	campbellme	03/26/21 16:47
n-Butanol	8.09	Incomplete Integration	campbellme	03/26/21 16:48
1,4-Dioxane	8.63	Incomplete Integration	campbellme	03/26/21 16:48

Lab Sample ID: IC 410-107390/16 Client Sample ID:

Date Analyzed: 03/26/21 00:44 Lab File ID: IM25I05.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.97	Incomplete Integration	campbellme	03/26/21 16:49
Methyl acetate	4.04	Incomplete Integration	campbellme	03/26/21 16:49
2-Butanone (MEK)	6.12	Incomplete Integration	campbellme	03/26/21 16:50
n-Butanol	8.09	Incomplete Integration	campbellme	03/26/21 16:50
1,4-Dioxane	8.65	Incomplete Integration	campbellme	03/26/21 16:50

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-41319-1

SDG No.:

Instrument ID: 19930 Analysis Batch Number: 107390

Lab Sample ID: IC 410-107390/17 Client Sample ID:

Date Analyzed: 03/26/21 01:05 Lab File ID: IM25I06.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.97	Incomplete Integration	campbellme	03/26/21 16:51
1,3-Butadiene	2.29	Incomplete Integration	campbellme	03/26/21 16:51
Acetone	3.61	Incomplete Integration	campbellme	03/26/21 16:52
Methyl acetate	4.04	Incomplete Integration	campbellme	03/26/21 16:52
Acrylonitrile	4.62	Incomplete Integration	campbellme	03/26/21 16:52
trans-1,2-Dichloroethene	4.67	Incomplete Integration	campbellme	03/26/21 16:52
Cyclohexane	6.96	Incomplete Integration	campbellme	03/26/21 16:53
n-Butanol	8.10	Incomplete Integration	campbellme	03/26/21 16:53
Methyl methacrylate	8.63	Incomplete Integration	campbellme	03/26/21 16:53
1,4-Dioxane	8.64	Incomplete Integration	campbellme	03/26/21 16:53

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-41319-1

SDG No.:

Instrument ID: 19930 Analysis Batch Number: 107390

Lab Sample ID: IC 410-107390/18 Client Sample ID:

Date Analyzed: 03/26/21 01:26 Lab File ID: IM25I07.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.62	Incomplete Integration	campbellme	03/26/21 16:54
Acetone	3.62	Incomplete Integration	campbellme	03/26/21 16:54
Methyl iodide	3.79	Incomplete Integration	campbellme	03/26/21 16:54
t-Butyl alcohol	4.40	Incomplete Integration	campbellme	03/26/21 16:55
Cyclohexane	6.96	Incomplete Integration	campbellme	03/26/21 16:55
Isobutyl alcohol	7.23	Incomplete Integration	campbellme	03/26/21 16:55
n-Butanol	8.11	Incomplete Integration	campbellme	03/26/21 16:55
1,4-Dioxane	8.63	Incomplete Integration	campbellme	03/26/21 16:55
1,1,2,2-Tetrachloroethane	12.29	Incomplete Integration	campbellme	03/26/21 16:55

Lab Sample ID: ICV 410-107390/19 Client Sample ID:

Date Analyzed: 03/26/21 01:47 Lab File ID: IM25V01.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.97	Incomplete Integration	campbellme	03/26/21 17:07
1,4-Dioxane	8.64	Incomplete Integration	campbellme	03/26/21 17:03

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-41319-1

SDG No.:

Instrument ID: 19930 Analysis Batch Number: 132853

Lab Sample ID: CCVIS 410-132853/3 Client Sample ID:

Date Analyzed: 06/01/21 23:12 Lab File ID: IU01C01.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	4.02	Incomplete Integration	campbellme	06/01/21 23:39
1,4-Dioxane	8.63	Incomplete Integration	campbellme	06/01/21 23:39

Lab Sample ID: 410-41319-1 Client Sample ID: HD-COD-SW-6-0/1-0

Date Analyzed: 06/02/21 03:18 Lab File ID: IU01S08.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.63	Missed Peak	riehlc	06/02/21 14:11
Trichloroethene	8.23	Incomplete Integration	riehlc	06/02/21 14:11

Lab Sample ID: 410-41319-3 Client Sample ID: HD-COD-SW-8-0/1-0

Date Analyzed: 06/02/21 04:00 Lab File ID: IU01S10.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.90	Incomplete Integration	riehlc	06/02/21 14:13

Lab Sample ID: 410-41319-7 Client Sample ID: HD-COD-SW-16-0/1-0

Date Analyzed: 06/02/21 05:04 Lab File ID: IU01S13.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	6.64	Missed Peak	riehlc	06/02/21 14:16

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-41319-1

SDG No.:

Instrument ID: 19930 Analysis Batch Number: 132853

Lab Sample ID: 410-41319-9 Client Sample ID: HD-COD-SW-26-0/1-0

Date Analyzed: 06/02/21 05:47 Lab File ID: IU01S15.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
m-Xylene & p-Xylene	11.41	Incomplete Integration	riehlc	06/02/21 16:12

Lab Sample ID: 410-41319-11 Client Sample ID: HD-COD-SW-28-0/1-0

Date Analyzed: 06/02/21 06:29 Lab File ID: IU01S17.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.89	Incomplete Integration	riehlc	06/02/21 16:14
Trichloroethene	8.23	Incomplete Integration	riehlc	06/02/21 16:14

Lab Sample ID: 410-41319-12 Client Sample ID: HD-COD-SW-29-0/1-0

Date Analyzed: 06/02/21 06:50 Lab File ID: IU01S18.D GC Column: R-624SilMS 30 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichloroethene	8.22	Missed Peak	riehlc	06/02/21 16:16

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MSV_31_826ISS_00004	05/31/21	01/26/21	Methanol, Lot DZ644	50 mL	MSV_8260_SS_00284	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_00173	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_00284	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_00173	05/31/21		Restek, Lot A0138205		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5 (IS)	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_LCS_VOC#1_00003	07/01/21	06/01/21	Methanol, Lot DZ644	25 mL	MSV_M_MIX1SEC_00004	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_00004	1 mL	Carbon disulfide	40 ug/mL
							Methyl tert-butyl ether	40 ug/mL
					MSV_Q_Ketones_00005	1 mL	2-Butanone (MEK)	500 ug/mL
							2-Hexanone	500 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Methyl-2-pentanone (MIBK)	500 ug/mL
							Acetone	500 ug/mL
.MSV_M_MIX1SEC_00004	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_00004	04/30/24		Restek, Lot A0171837		(Purchased Reagent)		Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
.MSV_Q_Ketones_00005	08/31/23		Restek, Lot A0163783		(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_00002	07/01/21	06/01/21	Methanol, Lot DZ644	1 mL	MSV_CCV_VOC#1_00003	50 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dibromoethane (EDB)	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_00003	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_00003	07/01/21	06/01/21	Methanol, Lot DZ644	5 mL	MSV_MegaMIX#1_00003	1 mL	1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							Benzene	1000 ug/mL
							Bromochloromethane	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Methylene Chloride	1000 ug/mL
							Styrene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MSV_MegaMix#2_00003	1 mL	Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
..MSV_MegaMIX#1_00003	07/01/21	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_00003	07/01/21	Restek, Lot A0172089			(Purchased Reagent)		Carbon disulfide	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
.MSV_CCV_VOC#3_00003	07/01/21	06/01/21	Methanol, Lot DZ644	5 mL	MSV_V_Ketones_00003	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_00003	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_LL_GAS826_00003	06/08/21	06/01/21	Methanol, Lot DZ644	1 mL	MSV_CCV_GASES_00007	25 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_CCV_GASES_00007	06/08/21	Restek, Lot A0172364			(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MSV_LLcentISS_00001	11/25/21	05/25/21	Methanol, Lot DZ644	50 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_Cus826_IS_00310	05/31/23	Restek, Lot A0160586			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5 (IS)	2500 ug/mL
							Fluorobenzene (IS)	2500 ug/mL
							t-Butyl alcohol-d10 (IS)	12500 ug/mL
MSV_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_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_Q_QVOA1_00073	03/31/21	03/22/21	Methanol, Lot DZ644	25 mL	MSV_Q#1B_00092	1 mL	1,1,1,2-Tetrachloroethane	40 mg/L
							1,1,1-Trichloroethane	40 mg/L
							1,1,2,2-Tetrachloroethane	40 mg/L
							1,1,2-Trichloroethane	40 mg/L
							1,1-Dichloroethane	40 mg/L
							1,1-Dichloroethene	40 mg/L
							1,2-Dibromoethane (EDB)	40 mg/L
							1,2-Dichloroethane	40 mg/L
							1,2-Dichloropropane	40 mg/L
							Benzene	40 mg/L
							Bromodichloromethane	40 mg/L
							Bromoform	40 mg/L
							Carbon tetrachloride	40 mg/L
							Chlorobenzene	40 mg/L
							Chloroform	40 mg/L
							cis-1,2-Dichloroethene	40 mg/L
							cis-1,3-Dichloropropene	40 mg/L
							Dibromochloromethane	40 mg/L
							Ethylbenzene	40 mg/L
							Methylene Chloride	40 mg/L
							Styrene	40 mg/L
							Tetrachloroethene	40 mg/L
							Toluene	40 mg/L
							trans-1,2-Dichloroethene	40 mg/L
							trans-1,3-Dichloropropene	40 mg/L
							Trichloroethene	40 mg/L
					MSV_Q#3B_00081	1 mL	2-Butanone (MEK)	300 mg/L
							2-Hexanone	200 mg/L
							4-Methyl-2-pentanone (MIBK)	200 mg/L
							Acetone	300 mg/L
					MSV_Q#4C_00088	1 mL	Carbon disulfide	40 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1

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 mg/L
.MSV_Q#1B_00092	10/31/23		Restek, Lot A0165522		(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
							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_Q#3B_00081	09/30/21		Restek, Lot A0158722		(Purchased Reagent)		2-Butanone (MEK)	7500 ug/mL
							2-Hexanone	5000 ug/mL
							4-Methyl-2-pentanone (MIBK)	5000 ug/mL
							Acetone	7500 ug/mL
.MSV_Q#4C_00088	03/31/21		Restek, Lot A0158704		(Purchased Reagent)		Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
MSV_Q_QVOA6_00071	04/21/21	03/22/21	Methanol, Lot DZ644	25 mL	MSV_QCS#6Std_00088	1 mL	Bromochloromethane	40 ug/mL
.MSV_QCS#6Std_00088	09/30/21		Restek, Lot A0158906		(Purchased Reagent)		Bromochloromethane	1000 ug/mL
MSV_QC_Gas826_00003	06/08/21	06/01/21	Methanol, Lot DZ644	1 mL	MSV_QC_2K_GAS_00004	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_QC_2K_GAS_00004	06/08/21		Restek, Lot A0172021		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_QGAS_826_00118	04/01/21	03/25/21	Methanol, Lot DZ644	1 mL	MSV_502QGas_00160	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.MSV_502QGas_00160	04/01/21		Restek, Lot A0155823		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_RV1_826_00042	03/31/21	03/25/21	Methanol, Lot DZ644	1 mL	MSV_V_VOA1_00134	50 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane (EDB)	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trichlorobenzene	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
							1-Chlorohexane	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
							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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							1,4-Dioxane	2500 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	5000 ug/mL
							Propionitrile	1000 ug/mL
							trans-1,4-Dichloro-2-butene	500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,2-Dichloro-1,1,2-trifluoroethane	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							Benzyl chloride	50 ug/mL
							Butadiene	50 ug/mL
							Carbon disulfide	50 ug/mL
							Cyclohexane	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isopropyl ether	50 ug/mL
							Methyl methacrylate	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							n-Heptane	50 ug/mL
							Tert-amyl methyl ether	50 ug/mL
							Tert-butyl ethyl ether	50 ug/mL
					MSV_V_VOA2_00076	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	5000 ug/mL
							Propionitrile	1000 ug/mL
							trans-1,4-Dichloro-2-butene	500 ug/mL
					MSV_V_VOA3_00074	100 uL	2-Butanone (MEK)	500 ug/mL
							2-Hexanone	500 ug/mL
							2-Nitropropane	500 ug/mL
							4-Methyl-2-pentanone (MIBK)	500 ug/mL
							Acetone	500 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acrylonitrile	250 ug/mL
							Tetrahydrofuran	500 ug/mL
							Acrolein	2499.89 ug/mL
.MSV_V_VOA1_00134	03/31/21	03/22/21	Methanol, Lot DZ644	5 mL	MSV_V#1B_00148	1 mL	1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,1-Dichloropropene	1000 ug/mL
							1,2,3-Trichlorobenzene	1000 ug/mL
							1,2,3-Trichloropropane	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2,4-Trimethylbenzene	1000 ug/mL
							1,2-Dibromo-3-Chloropropane	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							1,3,5-Trichlorobenzene	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
							1-Chlorohexane	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
							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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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_V#2B_00201	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#4C_00128	1 mL	1,1,2-Trichloro-1,2,2-trifluoroethane	1000 ug/mL
							1,2-Dichloro-1,1,2-trifluoroethane	1000 ug/mL
							2-Chloro-1,3-butadiene	1000 ug/mL
							Benzyl chloride	1000 ug/mL
							Butadiene	1000 ug/mL
							Carbon disulfide	1000 ug/mL
							Cyclohexane	1000 ug/mL
							Ethyl methacrylate	1000 ug/mL
							Hexane	1000 ug/mL
							Iodomethane	1000 ug/mL
							Isopropyl ether	1000 ug/mL
							Methyl methacrylate	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
							n-Heptane	1000 ug/mL
							Tert-amyl methyl ether	1000 ug/mL
							Tert-butyl ethyl ether	1000 ug/mL
..MSV_V#1B_00148	04/21/21		Restek, Lot A0158586		(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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichloroethane	5000 ug/mL
							1,2-Dichloropropane	5000 ug/mL
							1,3,5-Trichlorobenzene	5000 ug/mL
							1,3,5-Trimethylbenzene	5000 ug/mL
							1,3-Dichlorobenzene	5000 ug/mL
							1,3-Dichloropropane	5000 ug/mL
							1,4-Dichlorobenzene	5000 ug/mL
							1-Chlorohexane	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
							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_V#2B_00201	04/21/21		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

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..MSV_V#4C_00128	03/31/21		Restek, Lot A0158660		(Purchased Reagent)		1,1,2-Trichloro-1,2,2-trifluoroethane	5000 ug/mL
							1,2-Dichloro-1,1,2-trifluoroethane	5000 ug/mL
							2-Chloro-1,3-butadiene	5000 ug/mL
							Benzyl chloride	5000 ug/mL
							Butadiene	5000 ug/mL
							Carbon disulfide	5000 ug/mL
							Cyclohexane	5000 ug/mL
							Ethyl methacrylate	5000 ug/mL
							Hexane	5000 ug/mL
							Iodomethane	5000 ug/mL
							Isopropyl ether	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
							n-Heptane	5000 ug/mL
							Tert-amyl methyl ether	5000 ug/mL
							Tert-butyl ethyl ether	5000 ug/mL
.MSV_V_VOA2_00076	04/21/21	03/22/21	Methanol, Lot DZ644	5 mL	MSV_V#2B_00202	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_00202	04/21/21		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_V_VOA3_00074	04/11/21	03/22/21	Methanol, Lot DZ644	5 mL	MSV_V#3B_00087	1 mL	2-Butanone (MEK)	5000 ug/mL
							2-Hexanone	5000 ug/mL
							2-Nitropropane	5000 ug/mL
							4-Methyl-2-pentanone (MIBK)	5000 ug/mL
							Acetone	5000 ug/mL
							Acrylonitrile	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
					MSV_VACR_00015	1 mL	Acrolein	24998.9 ug/mL
..MSV_V#3B_00087	04/21/21		Restek, Lot A0158677		(Purchased Reagent)		2-Butanone (MEK)	25000 ug/mL
							2-Hexanone	25000 ug/mL
							2-Nitropropane	25000 ug/mL
							4-Methyl-2-pentanone (MIBK)	25000 ug/mL
							Acetone	25000 ug/mL
							Acrylonitrile	12500 ug/mL
							Tetrahydrofuran	25000 ug/mL
..MSV_VACR_00015	04/11/21	02/10/21	Methanol, Lot DZ644	10 mL	MSV_VACR_STK_00017	9.135 mL	Acrolein	124994 ug/mL

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
...MSV_VACR_STK_00017	04/11/21	02/10/21	Methanol, Lot DZ644	10 mL	MSV_ACROLEIN_00010	1.4603 g	Acrolein	136830 ug/mL
....MSV_ACROLEIN_00010	09/30/21	Chem Service, Lot 10804400			(Purchased Reagent)		Acrolein	0.937 g/g
MSV_RV4_826_00048	04/21/21	03/24/21	Methanol, Lot DZ644	1 mL	MSV_V_EE_00004	50 uL	Ethyl ether	50.0108 ug/mL
					MSV_V_VOA6_00080	50 uL	1,2,3-Trimethylbenzene	50 ug/mL
							3-Chloro-1-propene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Methyl acetate	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Pentachloroethane	50 ug/mL
.MSV_V_EE_00004	04/21/21	10/21/20	Methanol, Lot DX212	100 mL	MSV_EE_MISCSK_00005	1.434 mL	Ethyl ether	1000.22 ug/mL
..MSV_EE_MISCSK_00005	04/21/21	10/21/20	Methanol, Lot DX212	10 mL	MSV_EE_Neat_00003	0.6975 g	Ethyl ether	69750 ug/mL
...MSV_EE_Neat_00003	11/30/21	Chem Service, Lot 7967000			(Purchased Reagent)		Ethyl ether	1 g/g
.MSV_V_VOA6_00080	04/21/21	03/22/21	Methanol, Lot DZ644	5 mL	MSV_V#6_00064	1 mL	1,2,3-Trimethylbenzene	1000 ug/mL
							3-Chloro-1-propene	1000 ug/mL
							Bromochloromethane	1000 ug/mL
							Methyl acetate	1000 ug/mL
							Methylcyclohexane	1000 ug/mL
							Pentachloroethane	1000 ug/mL
..MSV_V#6_00064	04/21/21	Restek, Lot A0158625			(Purchased Reagent)		1,2,3-Trimethylbenzene	5000 ug/mL
							3-Chloro-1-propene	5000 ug/mL
							Bromochloromethane	5000 ug/mL
							Methyl acetate	5000 ug/mL
							Methylcyclohexane	5000 ug/mL
							Pentachloroethane	5000 ug/mL
MSV_RV4GAS826_00121	04/01/21	03/25/21	Methanol, Lot DZ644	1 mL	MSV_DCFM_00036	25 uL	Dichlorofluoromethane	50 ug/mL
					MSV_V_Gas_00230	25 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_DCFM_00036	04/07/21	AccuStandard, Lot 220101035			(Purchased Reagent)		Dichlorofluoromethane	2000 ug/mL
.MSV_V_Gas_00230	04/01/21	Restek, Lot A0159812			(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_V_BFB_00004							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_00005							1,2-Dichloroethene, Total	

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1

SDG No.:

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

Reagent

MSV_502QGas_00160

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

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 55669.SEC **Lot No.:** A0155823

Description : Custom 502.2 "Q" Gas Mix

Custom 502.2 "Q" Gas Mix 2,000µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : January 31, 2027 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,016.5 µg/mL	+/- 19.3550 µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 26165)		+/- 114.1077 µg/mL	Unstressed
	Purity 99%		+/- 116.7296 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,005.6 µg/mL	+/- 18.7428 µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/- 113.4037 µg/mL	Unstressed
	Purity 99%		+/- 116.0133 µg/mL	Stressed
3	Vinyl chloride	2,004.4 µg/mL	+/- 15.4000 µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/- 112.8325 µg/mL	Unstressed
	Purity 99%		+/- 115.4519 µg/mL	Stressed
4	Bromomethane (methyl bromide)	2,022.0 µg/mL	+/- 18.0735 µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot Q119-46)		+/- 114.2018 µg/mL	Unstressed
	Purity 99%		+/- 116.8358 µg/mL	Stressed
5	Chloroethane (ethyl chloride)	2,013.1 µg/mL	+/- 20.5181 µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/- 114.1209 µg/mL	Unstressed
	Purity 99%		+/- 116.7336 µg/mL	Stressed
6	Trichlorofluoromethane (CFC-11)	2,001.1 µg/mL	+/- 17.4531 µg/mL	Gravimetric
	CAS # 75-69-4.SEC (Lot 253600)		+/- 112.9531 µg/mL	Unstressed
	Purity 99%		+/- 115.5613 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)

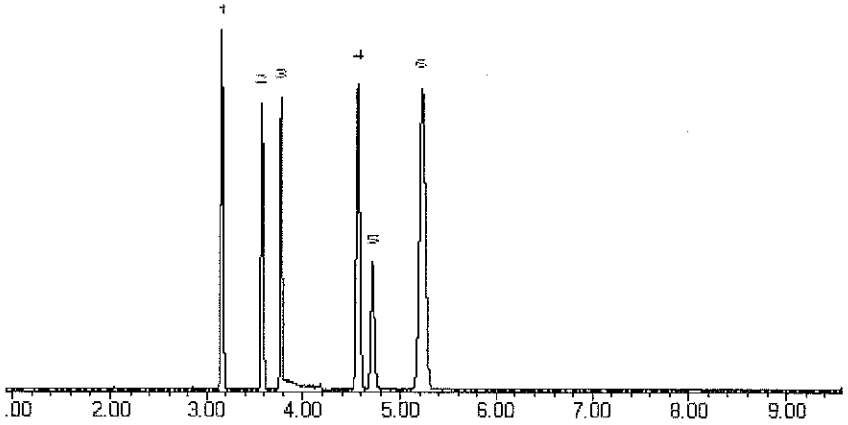
Carrier Gas:
helium-constant flow 2.0 mL/min.

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: 16-Dec-2019 **Balance:** 1127510105

Amanda Miller - Operations Tech-ARM QC

Date Passed: 27-Dec-2019

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_8260_SS_00284

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110 Benner Circle
Bellefonte, PA 16823-8812
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 8260A Surrogate Mix

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

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

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

CERTIFIED VALUES

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

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

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

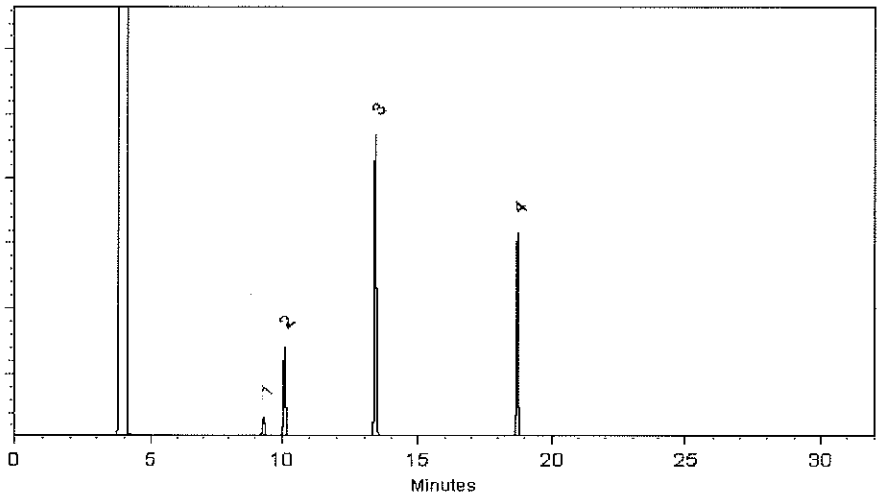
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Maggie Wang
Maggie Wang - Operations Technician I

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

Jennifer J Pollino
Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 15-Mar-2019

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_8260_SS_00366

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Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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)

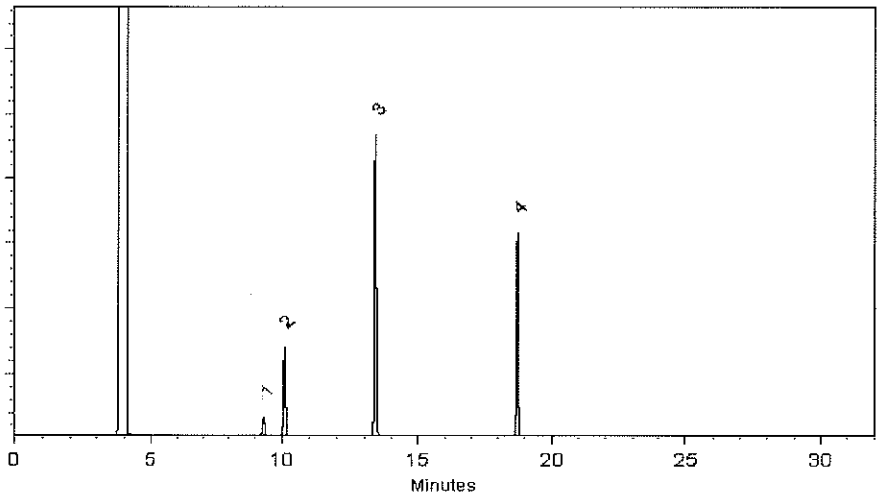
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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_CCV_GASES_00007

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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)

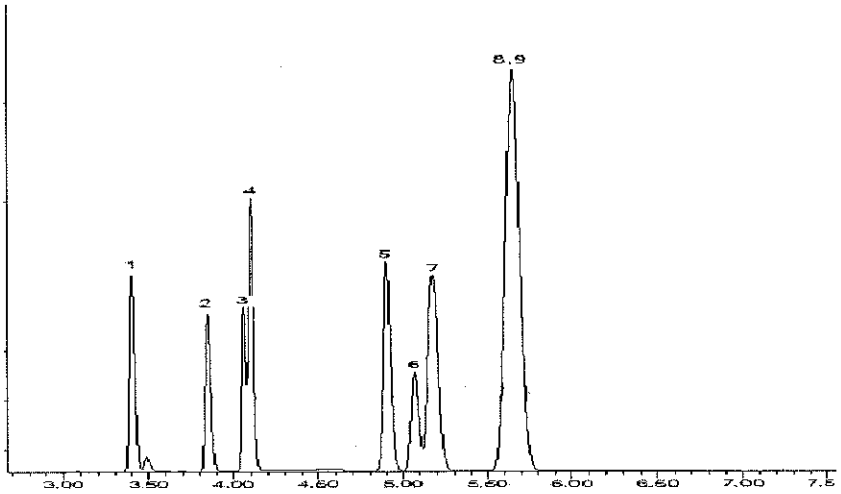
Carrier Gas:
helium-constant flow 2.0 mL/min.

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_00173

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CERTIFIED REFERENCE MATERIAL

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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.:** A0138205

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, 2021 **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		12,613.8	µg/mL	+/- 73.3376	µg/mL	Gravimetric
	CAS # 53001-22-2	(Lot PR-29485)			+/- 270.0624	µg/mL	Unstressed
	Purity 98%				+/- 277.9136	µg/mL	Stressed
2	Fluorobenzene		2,517.8	µg/mL	+/- 14.6387	µg/mL	Gravimetric
	CAS # 462-06-6	(Lot BCBK8171V)			+/- 53.9064	µg/mL	Unstressed
	Purity 99%				+/- 55.4736	µg/mL	Stressed
3	Chlorobenzene-d5		2,518.8	µg/mL	+/- 14.6445	µg/mL	Gravimetric
	CAS # 3114-55-4	(Lot PR-22736)			+/- 53.9278	µg/mL	Unstressed
	Purity 99%				+/- 55.4956	µg/mL	Stressed
4	1,4-Dichlorobenzene-d4		2,511.0	µg/mL	+/- 14.5992	µg/mL	Gravimetric
	CAS # 3855-82-1	(Lot PR-18488)			+/- 53.7608	µg/mL	Unstressed
	Purity 99%				+/- 55.3237	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)

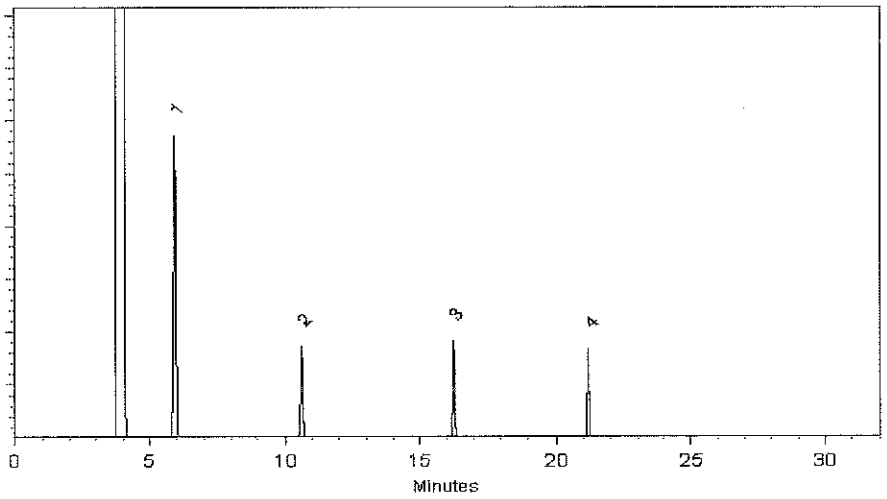
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Tom Suckar - Mix Technician

Date Mixed: 21-May-2018 **Balance:** 1128342314

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 23-May-2018

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_Cus826_IS_00310

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110 Benner Circle
Bellefonte, PA 16823-8812
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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)

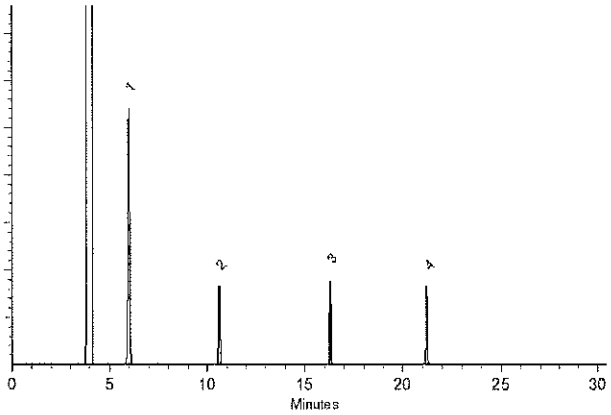
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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_DCFM_00036

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-502-61-10X
Description: Dichlorofluoromethane
Lot: 220101035
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Oct 6, 2020
Expiration: Oct 6, 2030
Sample Size: 1 mL
Components: 1
Storage Condition: Refrig (0-5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Dichlorofluoromethane	75-43-4	98.0	2006	1966

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

1. **Quality Standards:**

   ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

Reagent

MSV_EE_Neat_00003

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

CERTIFICATE OF ANALYSIS

Ethyl ether

CATALOG NUMBER	N-11897-1G
LOT NUMBER	7967000
DATE CERTIFIED	11/16/18
EXPIRATION DATE	11/30/21
CAS NUMBER	60-29-7
MOLECULAR FORMULA	C4H10O
MOLECULAR WEIGHT	74.12
STORAGE	Store under refrigeration.
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.
ISO GUIDE 34 CERTIFIED	[ ]

Analytical Test	Value
% PURITY (GC/TCD)	99.5

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

Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

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
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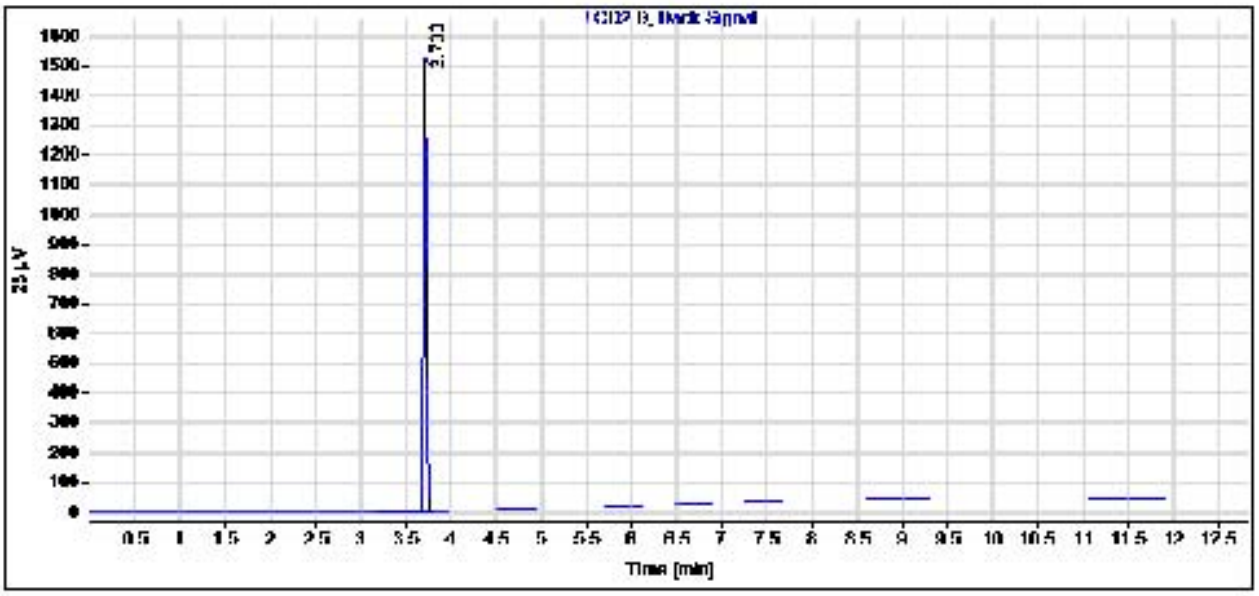
CERTIFICATE OF ANALYSIS

Gas Chromatography / Thermal Conductivity Detector (GC/TCD)

Data file: C:\CHEM32\1\DATA\2018 DATA\1118\SIG2080873.D

Sample name: Ethyl ether

Instrument:	GC 1	**Sample type:**	Sample
Injection date:	11/16/2018 10:06:22 AM	**Location:**	Vial 1
Acq. method:	TCD_M	**Injection volume:**	1.0uL
Column name:	DB-624 (30m x 0.53mm x 3.0um)		



Signal: TCD2 B, Back Signal

RT [min]	Type	Width [min]	Area	Height	Area%
3.706	BV	0.0361	3473.9382	1497.5255	100.0000
		Sum	3473.9382		

Reagent

MSV_MegaMIX#1_00003

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom VOC MegaMix® #1 Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

8	Bromochloromethane		5,000.9	µg/mL	+/-	31.8976	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)			+/-	280.7022	µg/mL	Unstressed
	Purity 99%				+/-	287.2560	µg/mL	Stressed
9	1,1,1-trichloroethane		5,000.1	µg/mL	+/-	31.7041	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot 190123CG)			+/-	280.6383	µg/mL	Unstressed
	Purity 98%				+/-	287.1917	µg/mL	Stressed
10	1,1-Dichloropropene		5,000.9	µg/mL	+/-	31.8976	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 201106JLM)			+/-	280.7022	µg/mL	Unstressed
	Purity 99%				+/-	287.2560	µg/mL	Stressed
11	carbon tetrachloride		5,000.5	µg/mL	+/-	31.7063	µg/mL	Gravimetric
	CAS # 56-23-5	(Lot SHBJ2110)			+/-	280.6583	µg/mL	Unstressed
	Purity 99%				+/-	287.2122	µg/mL	Stressed
12	1,2-Dichloroethane		5,000.4	µg/mL	+/-	31.7059	µg/mL	Gravimetric
	CAS # 107-06-2	(Lot MKCM8716)			+/-	280.6548	µg/mL	Unstressed
	Purity 99%				+/-	287.2086	µg/mL	Stressed
13	Benzene		5,001.0	µg/mL	+/-	31.8982	µg/mL	Gravimetric
	CAS # 71-43-2	(Lot SHBM3620)			+/-	280.7078	µg/mL	Unstressed
	Purity 99%				+/-	287.2618	µg/mL	Stressed
14	Trichloroethene		5,000.8	µg/mL	+/-	31.7079	µg/mL	Gravimetric
	CAS # 79-01-6	(Lot SHBL5816)			+/-	280.6723	µg/mL	Unstressed
	Purity 99%				+/-	287.2265	µg/mL	Stressed
15	1,2-Dichloropropane		5,001.1	µg/mL	+/-	31.7099	µg/mL	Gravimetric
	CAS # 78-87-5	(Lot BCBR0882V)			+/-	280.6899	µg/mL	Unstressed
	Purity 99%				+/-	287.2445	µg/mL	Stressed
16	bromodichloromethane		5,000.2	µg/mL	+/-	31.7043	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCK3742)			+/-	280.6408	µg/mL	Unstressed
	Purity 99%				+/-	287.1942	µg/mL	Stressed
17	Dibromomethane		5,000.2	µg/mL	+/-	31.8931	µg/mL	Gravimetric
	CAS # 74-95-3	(Lot 10215970)			+/-	280.6629	µg/mL	Unstressed
	Purity 99%				+/-	287.2158	µg/mL	Stressed
18	cis-1,3-Dichloropropene		5,001.9	µg/mL	+/-	31.7154	µg/mL	Gravimetric
	CAS # 10061-01-5	(Lot D26147-1217)			+/-	280.7390	µg/mL	Unstressed
	Purity 99%				+/-	287.2947	µg/mL	Stressed
19	Toluene		5,001.3	µg/mL	+/-	31.9001	µg/mL	Gravimetric
	CAS # 108-88-3	(Lot SHBM6128)			+/-	280.7246	µg/mL	Unstressed
	Purity 99%				+/-	287.2790	µg/mL	Stressed
20	trans-1,3-Dichloropropene		5,000.5	µg/mL	+/-	31.7063	µg/mL	Gravimetric
	CAS # 10061-02-6	(Lot RP201030)			+/-	280.6583	µg/mL	Unstressed
	Purity 99%				+/-	287.2122	µg/mL	Stressed
21	1,1,2-Trichloroethane		5,000.9	µg/mL	+/-	31.7087	µg/mL	Gravimetric
	CAS # 79-00-5	(Lot FGB01)			+/-	280.6794	µg/mL	Unstressed
	Purity 99%				+/-	287.2337	µg/mL	Stressed
22	1,3-Dichloropropane		5,000.5	µg/mL	+/-	31.8950	µg/mL	Gravimetric
	CAS # 142-28-9	(Lot BCBC6265)			+/-	280.6797	µg/mL	Unstressed
	Purity 99%				+/-	287.2331	µg/mL	Stressed
23	Tetrachloroethene		5,000.8	µg/mL	+/-	31.7079	µg/mL	Gravimetric
	CAS # 127-18-4	(Lot SHBJ7422)			+/-	280.6723	µg/mL	Unstressed
	Purity 99%				+/-	287.2265	µg/mL	Stressed

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

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

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

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

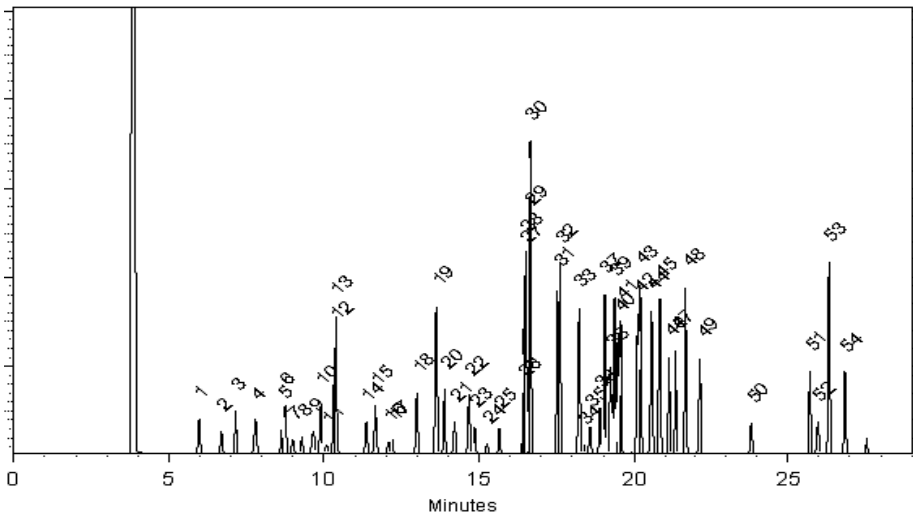
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Walker Workman - Operations Technician I

Date Mixed: 22-Apr-2021 **Balance:** 1128360905

Alexis Shelow - Operations Tech I

Date Passed: 26-Apr-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_MegaMix#2_00003

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)

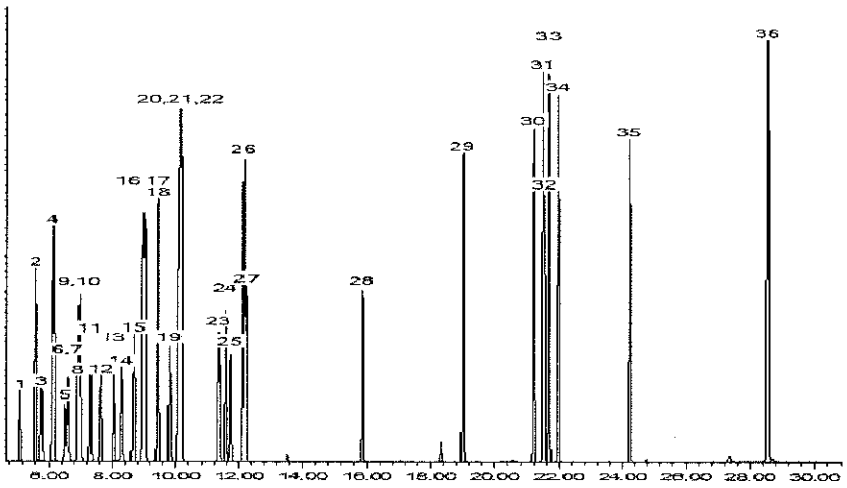
Carrier Gas:
hellum-constant pressure 30 psi

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#1B_00092

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. : 569936-1.SEC **Lot No.:** A0165522

Description : Custom Revised Q #1B Standard

Custom Revised Q #1B Standard 1,000µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : October 31, 2023 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,1-Dichloroethene	1,003.8 µg/mL	+/- 27.1548 µg/mL	Gravimetric
	CAS # 75-35-4.SEC (Lot 9201700)		+/- 62.2148 µg/mL	Unstressed
	Purity 99%		+/- 63.4085 µg/mL	Stressed
2	Methylene chloride (dichloromethane)	1,001.8 µg/mL	+/- 27.1007 µg/mL	Gravimetric
	CAS # 75-09-2.SEC (Lot FGM02)		+/- 62.0908 µg/mL	Unstressed
	Purity 99%		+/- 63.2822 µg/mL	Stressed
3	trans-1,2-Dichloroethene	1,000.3 µg/mL	+/- 27.0615 µg/mL	Gravimetric
	CAS # 156-60-5.SEC (Lot TS5UB)		+/- 62.0010 µg/mL	Unstressed
	Purity 99%		+/- 63.1906 µg/mL	Stressed
4	1,1-Dichloroethane	1,002.0 µg/mL	+/- 27.1075 µg/mL	Gravimetric
	CAS # 75-34-3.SEC (Lot 7482000)		+/- 62.1063 µg/mL	Unstressed
	Purity 99%		+/- 63.2980 µg/mL	Stressed
5	2,2-Dichloropropane	1,000.0 µg/mL	+/- 7.1361 µg/mL	Gravimetric
	CAS # 594-20-7.SEC (Lot I7E8E)		+/- 56.2215 µg/mL	Unstressed
	Purity 99%		+/- 57.5299 µg/mL	Stressed
6	cis-1,2-Dichloroethene	1,000.2 µg/mL	+/- 7.1372 µg/mL	Gravimetric
	CAS # 156-59-2.SEC (Lot YZO5O)		+/- 56.2305 µg/mL	Unstressed
	Purity 99%		+/- 57.5391 µg/mL	Stressed
7	Chloroform	1,000.8 µg/mL	+/- 27.0736 µg/mL	Gravimetric
	CAS # 67-66-3.SEC (Lot 1297547)		+/- 62.0289 µg/mL	Unstressed
	Purity 99%		+/- 63.2190 µg/mL	Stressed

8	1,1,1-trichloroethane		1,000.3	µg/mL	+/-	27.0618	µg/mL	Gravimetric
	CAS # 71-55-6 *	(Lot 190123CG)			+/-	62.0018	µg/mL	Unstressed
	Purity 98%				+/-	63.1914	µg/mL	Stressed
9	1,1-Dichloropropene		1,000.4	µg/mL	+/-	7.1389	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 556500)			+/-	56.2440	µg/mL	Unstressed
	Purity 99%				+/-	57.5529	µg/mL	Stressed
10	Carbon tetrachloride		1,000.8	µg/mL	+/-	27.0736	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)			+/-	62.0289	µg/mL	Unstressed
	Purity 99%				+/-	63.2190	µg/mL	Stressed
11	1,2-Dichloroethane		1,000.6	µg/mL	+/-	27.0707	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot 00016165)			+/-	62.0222	µg/mL	Unstressed
	Purity 99%				+/-	63.2122	µg/mL	Stressed
12	Benzene		1,000.1	µg/mL	+/-	7.1366	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)			+/-	56.2260	µg/mL	Unstressed
	Purity 99%				+/-	57.5345	µg/mL	Stressed
13	Trichloroethene		1,000.9	µg/mL	+/-	27.0771	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)			+/-	62.0368	µg/mL	Unstressed
	Purity 99%				+/-	63.2271	µg/mL	Stressed
14	1,2-Dichloropropane		1,000.1	µg/mL	+/-	27.0571	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot ERRBI-RH)			+/-	61.9910	µg/mL	Unstressed
	Purity 99%				+/-	63.1805	µg/mL	Stressed
15	Bromodichloromethane		1,000.8	µg/mL	+/-	27.0749	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 13780)			+/-	62.0316	µg/mL	Unstressed
	Purity 99%				+/-	63.2218	µg/mL	Stressed
16	Dibromomethane		1,000.1	µg/mL	+/-	7.1366	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot MOKKJ)			+/-	56.2260	µg/mL	Unstressed
	Purity 99%				+/-	57.5345	µg/mL	Stressed
17	cis-1,3-Dichloropropene		1,000.9	µg/mL	+/-	27.0778	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 487OA)			+/-	62.0384	µg/mL	Unstressed
	Purity 98%				+/-	63.2287	µg/mL	Stressed
18	Toluene		1,000.1	µg/mL	+/-	7.1366	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)			+/-	56.2260	µg/mL	Unstressed
	Purity 99%				+/-	57.5345	µg/mL	Stressed
19	trans-1,3-Dichloropropene		1,002.1	µg/mL	+/-	27.1112	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot ZDMSL)			+/-	62.1150	µg/mL	Unstressed
	Purity 96%				+/-	63.3068	µg/mL	Stressed
20	1,1,2-Trichloroethane		1,001.3	µg/mL	+/-	27.0872	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 7871500)			+/-	62.0598	µg/mL	Unstressed
	Purity 99%				+/-	63.2506	µg/mL	Stressed
21	1,3-Dichloropropane		1,000.1	µg/mL	+/-	7.1366	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot IQCON)			+/-	56.2260	µg/mL	Unstressed
	Purity 99%				+/-	57.5345	µg/mL	Stressed
22	Tetrachloroethene		1,000.2	µg/mL	+/-	27.0598	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)			+/-	61.9972	µg/mL	Unstressed
	Purity 99%				+/-	63.1868	µg/mL	Stressed
23	Dibromochloromethane		1,000.5	µg/mL	+/-	27.0665	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot 10206360)			+/-	62.0126	µg/mL	Unstressed
	Purity 97%				+/-	63.2024	µg/mL	Stressed

24	1,2-Dibromoethane (EDB)		1,000.3	µg/mL	+/-	7.1384	µg/mL	Gravimetric
	CAS # 106-93-4.SEC	(Lot 8529900)			+/-	56.2395	µg/mL	Unstressed
	Purity 99%				+/-	57.5483	µg/mL	Stressed
25	1-Chlorohexane		1,002.0	µg/mL	+/-	5.9516	µg/mL	Gravimetric
	CAS # 544-10-5.SEC	(Lot 8171700)			+/-	56.1943	µg/mL	Unstressed
	Purity 99%				+/-	57.5086	µg/mL	Stressed
26	Chlorobenzene		1,001.4	µg/mL	+/-	27.0909	µg/mL	Gravimetric
	CAS # 108-90-7.SEC	(Lot 1161936)			+/-	62.0684	µg/mL	Unstressed
	Purity 99%				+/-	63.2593	µg/mL	Stressed
27	1,1,1,2-Tetrachloroethane		1,000.5	µg/mL	+/-	7.1395	µg/mL	Gravimetric
	CAS # 630-20-6.SEC	(Lot 9366000)			+/-	56.2485	µg/mL	Unstressed
	Purity 99%				+/-	57.5576	µg/mL	Stressed
28	Ethylbenzene		1,000.4	µg/mL	+/-	7.1389	µg/mL	Gravimetric
	CAS # 100-41-4.SEC	(Lot PI4SE)			+/-	56.2440	µg/mL	Unstressed
	Purity 99%				+/-	57.5529	µg/mL	Stressed
29	m-Xylene		1,000.3	µg/mL	+/-	7.1384	µg/mL	Gravimetric
	CAS # 108-38-3.SEC	(Lot OUKMG-GB)			+/-	56.2395	µg/mL	Unstressed
	Purity 99%				+/-	57.5483	µg/mL	Stressed
30	p-Xylene		1,000.0	µg/mL	+/-	7.1361	µg/mL	Gravimetric
	CAS # 106-42-3.SEC	(Lot D6UOA)			+/-	56.2215	µg/mL	Unstressed
	Purity 99%				+/-	57.5299	µg/mL	Stressed
31	o-Xylene		1,000.2	µg/mL	+/-	7.1372	µg/mL	Gravimetric
	CAS # 95-47-6.SEC	(Lot FGL01)			+/-	56.2305	µg/mL	Unstressed
	Purity 99%				+/-	57.5391	µg/mL	Stressed
32	Styrene		1,000.5	µg/mL	+/-	7.1395	µg/mL	Gravimetric
	CAS # 100-42-5.SEC	(Lot QGQ7F)			+/-	56.2485	µg/mL	Unstressed
	Purity 99%				+/-	57.5576	µg/mL	Stressed
33	Isopropylbenzene (cumene)		1,000.1	µg/mL	+/-	7.1366	µg/mL	Gravimetric
	CAS # 98-82-8.SEC	(Lot WVREC)			+/-	56.2260	µg/mL	Unstressed
	Purity 99%				+/-	57.5345	µg/mL	Stressed
34	Bromoform		1,001.7	µg/mL	+/-	27.1004	µg/mL	Gravimetric
	CAS # 75-25-2.SEC	(Lot 9170700)			+/-	62.0902	µg/mL	Unstressed
	Purity 99%				+/-	63.2815	µg/mL	Stressed
35	1,1,2,2-Tetrachloroethane		1,001.6	µg/mL	+/-	27.0978	µg/mL	Gravimetric
	CAS # 79-34-5.SEC	(Lot BCCB0724)			+/-	62.0842	µg/mL	Unstressed
	Purity 98%				+/-	63.2754	µg/mL	Stressed
36	1,2,3-Trichloropropane		1,000.0	µg/mL	+/-	7.1361	µg/mL	Gravimetric
	CAS # 96-18-4.SEC	(Lot GUHZN)			+/-	56.2215	µg/mL	Unstressed
	Purity 99%				+/-	57.5299	µg/mL	Stressed
37	n-Propylbenzene		1,000.2	µg/mL	+/-	7.1372	µg/mL	Gravimetric
	CAS # 103-65-1.SEC	(Lot T2HFC)			+/-	56.2305	µg/mL	Unstressed
	Purity 99%				+/-	57.5391	µg/mL	Stressed
38	Bromobenzene		1,000.1	µg/mL	+/-	7.1366	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 8DKWJ)			+/-	56.2260	µg/mL	Unstressed
	Purity 99%				+/-	57.5345	µg/mL	Stressed
39	1,3,5-Trichlorobenzene		1,002.0	µg/mL	+/-	5.9516	µg/mL	Gravimetric
	CAS # 108-70-3.SEC	(Lot I28U021)			+/-	56.1943	µg/mL	Unstressed
	Purity 99%				+/-	57.5086	µg/mL	Stressed

40	2-Chlorotoluene		1,000.1	µg/mL	+/- 7.1366	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot BRHPM)			+/- 56.2260	µg/mL	Unstressed
	Purity 99%				+/- 57.5345	µg/mL	Stressed
41	4-Chlorotoluene		1,000.1	µg/mL	+/- 7.1366	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot S5SKD)			+/- 56.2260	µg/mL	Unstressed
	Purity 99%				+/- 57.5345	µg/mL	Stressed
42	tert-Butylbenzene		1,000.2	µg/mL	+/- 7.1378	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot D6OHC)			+/- 56.2350	µg/mL	Unstressed
	Purity 99%				+/- 57.5437	µg/mL	Stressed
43	1,2,4-Trimethylbenzene		1,000.5	µg/mL	+/- 7.1395	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot JMIYD)			+/- 56.2485	µg/mL	Unstressed
	Purity 99%				+/- 57.5576	µg/mL	Stressed
44	sec-Butylbenzene		1,000.0	µg/mL	+/- 7.1361	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot O4HRF)			+/- 56.2215	µg/mL	Unstressed
	Purity 99%				+/- 57.5299	µg/mL	Stressed
45	4-Isopropyltoluene (p-cymene)		1,000.2	µg/mL	+/- 7.1378	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 6628200)			+/- 56.2350	µg/mL	Unstressed
	Purity 99%				+/- 57.5437	µg/mL	Stressed
46	1,3-Dichlorobenzene		1,000.1	µg/mL	+/- 27.0551	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/- 61.9864	µg/mL	Unstressed
	Purity 99%				+/- 63.1757	µg/mL	Stressed
47	1,4-Dichlorobenzene		1,002.5	µg/mL	+/- 27.1206	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot YWKDC-MK)			+/- 62.1364	µg/mL	Unstressed
	Purity 99%				+/- 63.3286	µg/mL	Stressed
48	n-Butylbenzene		1,000.2	µg/mL	+/- 7.1372	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot MMPGA)			+/- 56.2305	µg/mL	Unstressed
	Purity 99%				+/- 57.5391	µg/mL	Stressed
49	1,2-Dichlorobenzene		1,001.6	µg/mL	+/- 27.0966	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/- 62.0815	µg/mL	Unstressed
	Purity 99%				+/- 63.2727	µg/mL	Stressed
50	1,2-Dibromo-3-chloropropane		1,000.5	µg/mL	+/- 7.1395	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot Q135-105)			+/- 56.2485	µg/mL	Unstressed
	Purity 99%				+/- 57.5576	µg/mL	Stressed
51	1,3,5-Trimethylbenzene		1,000.2	µg/mL	+/- 7.1372	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot TOOOF)			+/- 56.2305	µg/mL	Unstressed
	Purity 99%				+/- 57.5391	µg/mL	Stressed
52	1,2,4-Trichlorobenzene		1,000.2	µg/mL	+/- 7.1372	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot IGLFA)			+/- 56.2305	µg/mL	Unstressed
	Purity 99%				+/- 57.5391	µg/mL	Stressed
53	Hexachlorobutadiene		1,000.0	µg/mL	+/- 7.1363	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 6878400)			+/- 56.2232	µg/mL	Unstressed
	Purity 97%				+/- 57.5317	µg/mL	Stressed
54	Naphthalene		1,000.4	µg/mL	+/- 7.1389	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot SKZ5N)			+/- 56.2440	µg/mL	Unstressed
	Purity 99%				+/- 57.5529	µg/mL	Stressed
55	1,2,3-Trichlorobenzene		1,000.2	µg/mL	+/- 7.1377	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)			+/- 56.2342	µg/mL	Unstressed
	Purity 98%				+/- 57.5430	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)

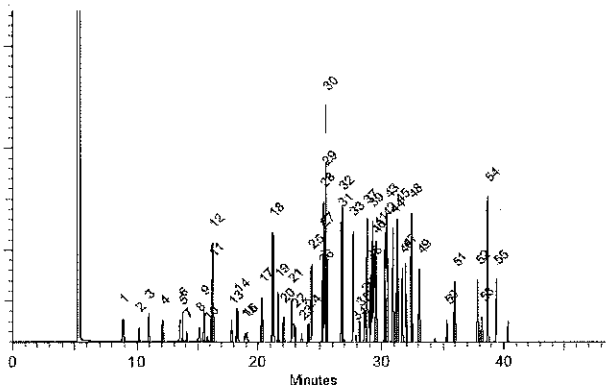
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 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.

Michael J Maye

Date Mixed: 20-Oct-2020 **Balance:** 1128342314

Justine Albertson - Operations Tech-ARM QC

Date Passed: 23-Oct-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_Q#3B_00081

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. : 56736.SEC **Lot No.:** A0158722

Description : Custom Q #3B Standard

Custom Q #3B Standard 1,000-7,500µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

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

Expiration Date : September 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone	7,550.0 µg/mL	+/- 44.3076 µg/mL	Gravimetric
	CAS # 67-64-1.SEC (Lot U13B039)		+/- 373.5308 µg/mL	Unstressed
	Purity 99%		+/- 382.8166 µg/mL	Stressed
2	Acrylonitrile	5,003.0 µg/mL	+/- 29.3604 µg/mL	Gravimetric
	CAS # 107-13-1.SEC (Lot CCFKL-GL)		+/- 247.5198 µg/mL	Unstressed
	Purity 99%		+/- 253.6730 µg/mL	Stressed
3	2-Butanone (MEK)	7,517.0 µg/mL	+/- 44.1140 µg/mL	Gravimetric
	CAS # 78-93-3.SEC (Lot RGZ2A)		+/- 371.8982 µg/mL	Unstressed
	Purity 99%		+/- 381.1434 µg/mL	Stressed
4	Tetrahydrofuran	5,023.0 µg/mL	+/- 29.4778 µg/mL	Gravimetric
	CAS # 109-99-9.SEC (Lot 8DAOJ)		+/- 248.5093 µg/mL	Unstressed
	Purity 99%		+/- 254.6871 µg/mL	Stressed
5	2-Nitropropane	1,000.6 µg/mL	+/- 5.9431 µg/mL	Gravimetric
	CAS # 79-46-9.SEC (Lot Y4YWD)		+/- 49.5115 µg/mL	Unstressed
	Purity 98%		+/- 50.7419 µg/mL	Stressed
6	4-Methyl-2-pentanone (MIBK)	5,032.0 µg/mL	+/- 29.5306 µg/mL	Gravimetric
	CAS # 108-10-1.SEC (Lot E29T040)		+/- 248.9546 µg/mL	Unstressed
	Purity 99%		+/- 255.1435 µg/mL	Stressed
7	2-Hexanone	5,036.2 µg/mL	+/- 29.5554 µg/mL	Gravimetric
	CAS # 591-78-6.SEC (Lot Y3TUO)		+/- 249.1634 µg/mL	Unstressed
	Purity 98%		+/- 255.3574 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)

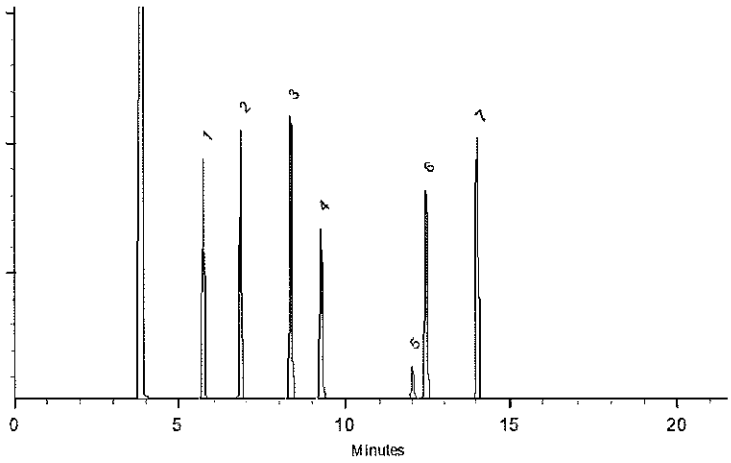
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Brandon Reish - Mix Technician

Date Mixed: 11-Mar-2020 **Balance:** 1127510105

Justine Albertson - Operations Tech-ARM QC

Date Passed: 19-Mar-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_Q#4C_00088

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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. : 572312.SEC **Lot No.:** A0158704

Description : Custom Q #4C (Rev 3) Standard

Custom Q #4C (Rev 3) Standard 1,000µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : March 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,3-Butadiene	999.8 µg/mL	+/- 9.3559 µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 24033)		+/- 60.7686 µg/mL	Unstressed
	Purity 99%		+/- 60.9107 µg/mL	Stressed
2	1,2-Dichloro-1,1,2-trifluoroethane (CFC-123a)	998.8 µg/mL	+/- 17.4916 µg/mL	Gravimetric
	CAS # 354-23-4 * (Lot Q9B-64)		+/- 62.4823 µg/mL	Unstressed
	Purity 99%		+/- 62.6203 µg/mL	Stressed
3	n-Pentane (C5)	1,002.5 µg/mL	+/- 5.8832 µg/mL	Gravimetric
	CAS # 109-66-0.SEC (Lot FGH02)		+/- 60.4906 µg/mL	Unstressed
	Purity 99%		+/- 60.6341 µg/mL	Stressed
4	1,1,2-Trichlorotrifluoroethane (CFC-113)	1,003.5 µg/mL	+/- 5.8891 µg/mL	Gravimetric
	CAS # 76-13-1.SEC (Lot 18342)		+/- 60.5509 µg/mL	Unstressed
	Purity 99%		+/- 60.6946 µg/mL	Stressed
5	Iodomethane (methyl iodide)	1,008.0 µg/mL	+/- 5.9155 µg/mL	Gravimetric
	CAS # 74-88-4.SEC (Lot Y25A027)		+/- 60.8224 µg/mL	Unstressed
	Purity 99%		+/- 60.9668 µg/mL	Stressed
6	Carbon disulfide	1,005.0 µg/mL	+/- 5.8979 µg/mL	Gravimetric
	CAS # 75-15-0.SEC (Lot MKBL1376V)		+/- 60.6414 µg/mL	Unstressed
	Purity 99%		+/- 60.7854 µg/mL	Stressed
7	Methyl-tert-butyl ether (MTBE)	1,002.0 µg/mL	+/- 5.8803 µg/mL	Gravimetric
	CAS # 1634-04-4.SEC (Lot ZHKYA)		+/- 60.4604 µg/mL	Unstressed
	Purity 99%		+/- 60.6039 µg/mL	Stressed

8	n-Hexane (C6)		1,002.0	µg/mL	+/-	5.8803	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot 10188491)			+/-	60.4604	µg/mL	Unstressed
	Purity 99%				+/-	60.6039	µg/mL	Stressed
9	Diisopropyl ether (DIPE)		1,003.0	µg/mL	+/-	5.8862	µg/mL	Gravimetric
	CAS # 108-20-3.SEC	(Lot LL7TN-SH)			+/-	60.5207	µg/mL	Unstressed
	Purity 99%				+/-	60.6644	µg/mL	Stressed
10	Chloroprene (2-chloro-1,3-butadiene)		1,001.5	µg/mL	+/-	5.8774	µg/mL	Gravimetric
	CAS # 126-99-8 *	(Lot 191204JLM)			+/-	60.4302	µg/mL	Unstressed
	Purity 99%				+/-	60.5737	µg/mL	Stressed
11	Ethyl-tert-butyl ether (ETBE)		1,001.0	µg/mL	+/-	5.8744	µg/mL	Gravimetric
	CAS # 637-92-3.SEC	(Lot MHBJG-QK)			+/-	60.4000	µg/mL	Unstressed
	Purity 99%				+/-	60.5434	µg/mL	Stressed
12	Cyclohexane		1,001.5	µg/mL	+/-	5.8774	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	60.4302	µg/mL	Unstressed
	Purity 99%				+/-	60.5737	µg/mL	Stressed
13	tert-Amyl methyl ether (TAME)		1,006.0	µg/mL	+/-	5.9038	µg/mL	Gravimetric
	CAS # 994-05-8.SEC	(Lot 8471400)			+/-	60.7017	µg/mL	Unstressed
	Purity 99%				+/-	60.8458	µg/mL	Stressed
14	n-Heptane (C7)		1,006.0	µg/mL	+/-	5.9038	µg/mL	Gravimetric
	CAS # 142-82-5.SEC	(Lot OGM01)			+/-	60.7017	µg/mL	Unstressed
	Purity 99%				+/-	60.8458	µg/mL	Stressed
15	tert-Amyl ethyl ether (TAEE)		1,006.0	µg/mL	+/-	5.9038	µg/mL	Gravimetric
	CAS # 919-94-8.SEC	(Lot 6455100)			+/-	60.7017	µg/mL	Unstressed
	Purity 99%				+/-	60.8458	µg/mL	Stressed
16	Methyl methacrylate		1,006.0	µg/mL	+/-	5.9038	µg/mL	Gravimetric
	CAS # 80-62-6.SEC	(Lot G01X021)			+/-	60.7017	µg/mL	Unstressed
	Purity 99%				+/-	60.8458	µg/mL	Stressed
17	Ethyl methacrylate		1,004.5	µg/mL	+/-	5.8950	µg/mL	Gravimetric
	CAS # 97-63-2.SEC	(Lot MLWYK-LS)			+/-	60.6112	µg/mL	Unstressed
	Purity 99%				+/-	60.7551	µg/mL	Stressed
18	Benzyl chloride		1,003.5	µg/mL	+/-	5.8891	µg/mL	Gravimetric
	CAS # 100-44-7.SEC	(Lot H29N03)			+/-	60.5509	µg/mL	Unstressed
	Purity 99%				+/-	60.6946	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)

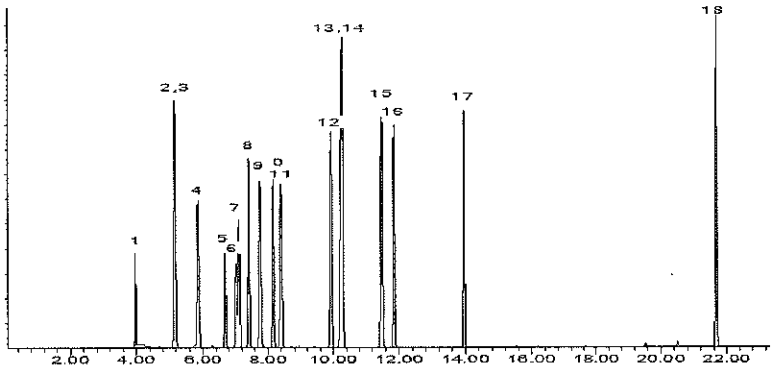
Carrier Gas:
helium-constant pressure 30 psi

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.

Matt Fragassi - Mix Technician

Date Mixed: 11-Mar-2020 **Balance:** 1128342314

Feng-Yun Lo – QC Analyst

Date Passed: 25-Mar-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_Q_Ketones_00005

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 569721.SEC **Lot No.:** A0163783

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

Ship: Ambient

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone	12,500.0 µg/mL	+/- 73.1902 µg/mL	Gravimetric
	CAS # 67-64-1.SEC (Lot U13B039)		+/- 754.2301 µg/mL	Unstressed
	Purity 99%		+/- 756.0205 µg/mL	Stressed
2	2-Butanone (MEK)	12,500.0 µg/mL	+/- 73.1902 µg/mL	Gravimetric
	CAS # 78-93-3.SEC (Lot RGZ2A)		+/- 754.2301 µg/mL	Unstressed
	Purity 99%		+/- 756.0205 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,507.0 µg/mL	+/- 73.2312 µg/mL	Gravimetric
	CAS # 108-10-1.SEC (Lot E29T040)		+/- 754.6525 µg/mL	Unstressed
	Purity 99%		+/- 756.4439 µg/mL	Stressed
4	2-Hexanone	12,507.0 µg/mL	+/- 73.2312 µg/mL	Gravimetric
	CAS # 591-78-6.SEC (Lot V3NRA)		+/- 754.6525 µg/mL	Unstressed
	Purity 99%		+/- 756.4439 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)

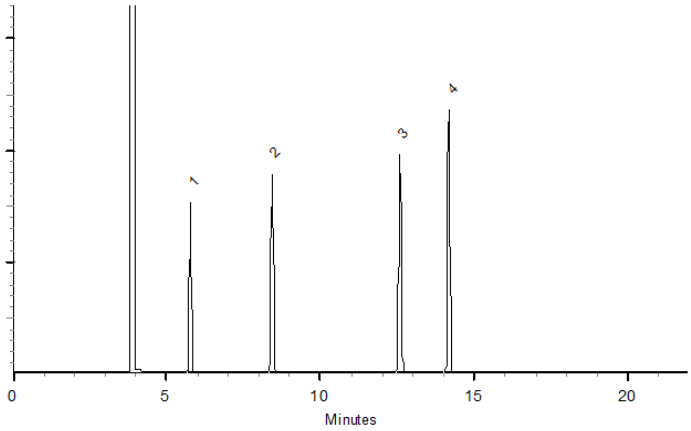
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Michael J Maye

Date Mixed: 22-Aug-2020 **Balance:** 1127510105

Justine Albertson - Operations Tech-ARM QC

Date Passed: 26-Aug-2020

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_QC_2K_GAS_00004

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Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 577488.SEC **Lot No.:** A0172021

Description : Custom Gases.SEC Standard

Custom Gases.SEC Standard 2,000µg/mL, P&T Methanol, 1mL/ampul

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

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

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

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

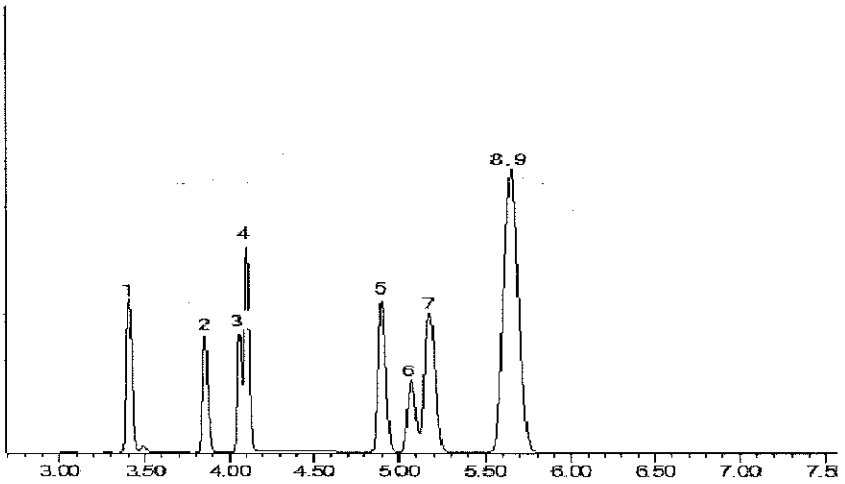
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Lane Kibe - Mix Technician

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

Alexis Shelow - Operations Tech I

Date Passed: 17-May-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_QCS#6Std_00088

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 558268.SEC **Lot No.:** A0158906

Description : Custom QCS #6 Standard

Custom QCS #6 Standard 1,000µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : September 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Methyl acetate		1,005.3 µg/mL	+/- 5.9714 µg/mL	Gravimetric
	CAS # 79-20-9.SEC	(Lot 6WOXM-KD)		+/- 60.6685 µg/mL	Unstressed
	Purity 99%			+/- 60.8125 µg/mL	Stressed
2	Allyl chloride (3-chloropropene)		1,001.3 µg/mL	+/- 5.9476 µg/mL	Gravimetric
	CAS # 107-05-1.SEC	(Lot H3HGC)		+/- 60.4271 µg/mL	Unstressed
	Purity 99%			+/- 60.5705 µg/mL	Stressed
3	Bromochloromethane		1,002.0 µg/mL	+/- 5.9516 µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 8529200)		+/- 60.4674 µg/mL	Unstressed
	Purity 99%			+/- 60.6109 µg/mL	Stressed
4	Methylcyclohexane		1,004.7 µg/mL	+/- 5.9674 µg/mL	Gravimetric
	CAS # 108-87-2.SEC	(Lot 24MSD-CD)		+/- 60.6283 µg/mL	Unstressed
	Purity 99%			+/- 60.7722 µg/mL	Stressed
5	Pentachloroethane		1,004.7 µg/mL	+/- 5.9674 µg/mL	Gravimetric
	CAS # 76-01-7.SEC	(Lot 8170200)		+/- 60.6283 µg/mL	Unstressed
	Purity 99%			+/- 60.7722 µg/mL	Stressed
6	1,2,3-Trimethylbenzene		1,004.6 µg/mL	+/- 5.9673 µg/mL	Gravimetric
	CAS # 526-73-8.SEC	(Lot 7110200)		+/- 60.6267 µg/mL	Unstressed
	Purity 92%			+/- 60.7706 µg/mL	Stressed
7	1,3-Diethylbenzene		1,006.0 µg/mL	+/- 5.9753 µg/mL	Gravimetric
	CAS # 141-93-5.SEC	(Lot 113566-1)		+/- 60.7087 µg/mL	Unstressed
	Purity 99%			+/- 60.8528 µg/mL	Stressed

8	1,4-Diethylbenzene		1,006.1 µg/mL	+/-	5.9761	µg/mL	Gravimetric
	CAS # 105-05-5.SEC	(Lot FBQ02)		+/-	60.7168	µg/mL	Unstressed
	Purity 98%			+/-	60.8609	µg/mL	Stressed
9	1,2-Diethylbenzene		1,008.7 µg/mL	+/-	5.9912	µg/mL	Gravimetric
	CAS # 135-01-3.SEC	(Lot BCBF3667V)		+/-	60.8697	µg/mL	Unstressed
	Purity 99%			+/-	61.0141	µg/mL	Stressed
10	2-Methylnaphthalene		1,006.0 µg/mL	+/-	5.9753	µg/mL	Gravimetric
	CAS # 91-57-6.SEC	(Lot 76023-1)		+/-	60.7087	µg/mL	Unstressed
	Purity 99%			+/-	60.8528	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)

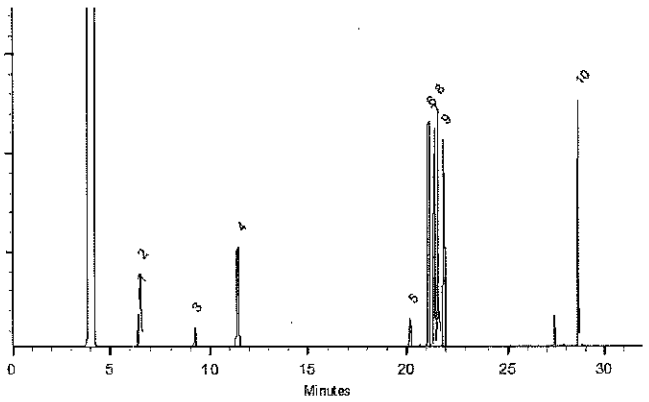
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Dalton Stover - Operations Technician I

Date Mixed: 17-Mar-2020 **Balance:** 1128342314

Feng-Yun Lo - QC Analyst

Date Passed: 20-Mar-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_V#1B_00148

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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. : 569936-1 **Lot No.:** A0158586

Description : Custom Revised V #1B Standard

Custom Revised V #1B Standard 5,000µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : March 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,1-dichloroethene **CAS #** 75-35-4 (Lot SHBK2437) **Purity** 99%	5,011.4 µg/mL	+/- 31.9644 µg/mL +/- 281.2901 µg/mL +/- 287.8577 µg/mL	Gravimetric Unstressed Stressed
2	Methylene chloride (dichloromethane) **CAS #** 75-09-2 (Lot SHBL3107) **Purity** 99%	5,004.6 µg/mL	+/- 31.9213 µg/mL +/- 280.9112 µg/mL +/- 287.4700 µg/mL	Gravimetric Unstressed Stressed
3	trans-1,2-Dichloroethene **CAS #** 156-60-5 (Lot MKBH9850V) **Purity** 99%	5,017.5 µg/mL	+/- 32.0035 µg/mL +/- 281.6339 µg/mL +/- 288.2096 µg/mL	Gravimetric Unstressed Stressed
4	1,1-Dichloroethane **CAS #** 75-34-3 (Lot 580900) **Purity** 99%	5,020.4 µg/mL	+/- 32.0218 µg/mL +/- 281.7953 µg/mL +/- 288.3747 µg/mL	Gravimetric Unstressed Stressed
5	2,2-Dichloropropane **CAS #** 594-20-7 (Lot BCBT5124) **Purity** 99%	5,050.0 µg/mL	+/- 32.0202 µg/mL +/- 283.4366 µg/mL +/- 290.0553 µg/mL	Gravimetric Unstressed Stressed
6	cis-1,2-Dichloroethene **CAS #** 156-59-2 (Lot MKBX5945V) **Purity** 99%	5,046.5 µg/mL	+/- 31.9980 µg/mL +/- 283.2401 µg/mL +/- 289.8543 µg/mL	Gravimetric Unstressed Stressed
7	chloroform **CAS #** 67-66-3 (Lot SHBJ9076) **Purity** 99%	5,034.3 µg/mL	+/- 32.1103 µg/mL +/- 282.5741 µg/mL +/- 289.1717 µg/mL	Gravimetric Unstressed Stressed

8	1,1,1-trichloroethane		5,001.3	µg/mL	+/-	31.9002	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot 190123CG)			+/-	280.7250	µg/mL	Unstressed
	Purity 98%				+/-	287.2795	µg/mL	Stressed
9	1,1-Dichloropropene		5,048.9	µg/mL	+/-	32.0131	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 170301JLM)			+/-	283.3734	µg/mL	Unstressed
	Purity 99%				+/-	289.9907	µg/mL	Stressed
10	carbon tetrachloride		5,022.9	µg/mL	+/-	32.0378	µg/mL	Gravimetric
	CAS # 56-23-5	(Lot SHBG8938V)			+/-	281.9356	µg/mL	Unstressed
	Purity 99%				+/-	288.5183	µg/mL	Stressed
11	1,2-Dichloroethane		5,007.9	µg/mL	+/-	31.9421	µg/mL	Gravimetric
	CAS # 107-06-2	(Lot MKCH9948)			+/-	281.0937	µg/mL	Unstressed
	Purity 99%				+/-	287.6567	µg/mL	Stressed
12	Benzene		5,042.9	µg/mL	+/-	31.9750	µg/mL	Gravimetric
	CAS # 71-43-2	(Lot SHBG7317V)			+/-	283.0367	µg/mL	Unstressed
	Purity 99%				+/-	289.6461	µg/mL	Stressed
13	Trichloroethene		5,012.9	µg/mL	+/-	31.9740	µg/mL	Gravimetric
	CAS # 79-01-6	(Lot SHBJ4611)			+/-	281.3743	µg/mL	Unstressed
	Purity 99%				+/-	287.9439	µg/mL	Stressed
14	1,2-Dichloropropane		5,012.6	µg/mL	+/-	31.9724	µg/mL	Gravimetric
	CAS # 78-87-5	(Lot BCBR0882V)			+/-	281.3603	µg/mL	Unstressed
	Purity 99%				+/-	287.9295	µg/mL	Stressed
15	bromodichloromethane		5,039.1	µg/mL	+/-	32.1414	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCJ0238)			+/-	282.8477	µg/mL	Unstressed
	Purity 99%				+/-	289.4517	µg/mL	Stressed
16	Dibromomethane		5,047.3	µg/mL	+/-	32.0027	µg/mL	Gravimetric
	CAS # 74-95-3	(Lot 10201030)			+/-	283.2822	µg/mL	Unstressed
	Purity 99%				+/-	289.8973	µg/mL	Stressed
17	cis-1,3-Dichloropropene		5,015.1	µg/mL	+/-	31.9883	µg/mL	Gravimetric
	CAS # 10061-01-5	(Lot 200107JLM)			+/-	281.5006	µg/mL	Unstressed
	Purity 99%				+/-	288.0731	µg/mL	Stressed
18	Toluene		5,031.9	µg/mL	+/-	31.9053	µg/mL	Gravimetric
	CAS # 108-88-3	(Lot SHBH9895)			+/-	282.4193	µg/mL	Unstressed
	Purity 99%				+/-	289.0143	µg/mL	Stressed
19	trans-1,3-Dichloropropene		5,003.8	µg/mL	+/-	31.9158	µg/mL	Gravimetric
	CAS # 10061-02-6	(Lot 19420164-D1219)			+/-	280.8621	µg/mL	Unstressed
	Purity 99%				+/-	287.4198	µg/mL	Stressed
20	1,1,2-Trichloroethane		5,015.4	µg/mL	+/-	31.9899	µg/mL	Gravimetric
	CAS # 79-00-5	(Lot FGB01)			+/-	281.5146	µg/mL	Unstressed
	Purity 99%				+/-	288.0875	µg/mL	Stressed
21	1,3-Dichloropropane		5,042.4	µg/mL	+/-	31.9718	µg/mL	Gravimetric
	CAS # 142-28-9	(Lot BCBG2162V)			+/-	283.0086	µg/mL	Unstressed
	Purity 99%				+/-	289.6173	µg/mL	Stressed
22	Tetrachloroethene		5,014.3	µg/mL	+/-	31.9827	µg/mL	Gravimetric
	CAS # 127-18-4	(Lot SHBJ7422)			+/-	281.4515	µg/mL	Unstressed
	Purity 99%				+/-	288.0229	µg/mL	Stressed
23	dibromochloromethane		5,016.1	µg/mL	+/-	31.9947	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCK6472)			+/-	281.5567	µg/mL	Unstressed
	Purity 99%				+/-	288.1306	µg/mL	Stressed

24	1,2-Dibromoethane (EDB) **CAS #** 106-93-4 **Purity** 99%	(Lot BCBP2268V)	5,037.4	µg/mL	+/- 31.9401 +/- 282.7280 +/- 289.3302	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	1-Chlorohexane **CAS #** 544-10-5 **Purity** 98%	(Lot BCBS3368V)	5,010.7	µg/mL	+/- 29.3390 +/- 280.9687 +/- 287.5420	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Chlorobenzene **CAS #** 108-90-7 **Purity** 99%	(Lot SHBJ0839)	5,009.0	µg/mL	+/- 31.9493 +/- 281.1568 +/- 287.7213	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	1,1,1,2-Tetrachloroethane **CAS #** 630-20-6 **Purity** 99%	(Lot MKBS3769V)	5,038.6	µg/mL	+/- 31.9481 +/- 282.7981 +/- 289.4020	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	Ethylbenzene **CAS #** 100-41-4 **Purity** 99%	(Lot SHBJ3183)	5,029.3	µg/mL	+/- 31.8886 +/- 282.2719 +/- 288.8635	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	m-Xylene **CAS #** 108-38-3 **Purity** 99%	(Lot SHBH8323)	5,038.4	µg/mL	+/- 31.9465 +/- 282.7841 +/- 289.3876	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	p-Xylene **CAS #** 106-42-3 **Purity** 99%	(Lot SHBJ0052)	5,038.0	µg/mL	+/- 31.9441 +/- 282.7630 +/- 289.3661	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	o-Xylene **CAS #** 95-47-6 **Purity** 99%	(Lot SHBH3432V)	5,046.4	µg/mL	+/- 31.9972 +/- 283.2331 +/- 289.8471	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	Styrene **CAS #** 100-42-5 **Purity** 99%	(Lot MKBV4061V)	5,047.0	µg/mL	+/- 32.0012 +/- 283.2682 +/- 289.8830	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	Isopropylbenzene (cumene) **CAS #** 98-82-8 **Purity** 99%	(Lot 10185056)	5,035.3	µg/mL	+/- 31.9267 +/- 282.6087 +/- 289.2081	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	bromoform **CAS #** 75-25-2 **Purity** 99%	(Lot SHBJ4835)	5,013.0	µg/mL	+/- 31.9748 +/- 281.3813 +/- 287.9511	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,1,2,2-Tetrachloroethane **CAS #** 79-34-5 **Purity** 99%	(Lot CFA4D)	5,016.0	µg/mL	+/- 31.9939 +/- 281.5497 +/- 288.1234	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	1,2,3-Trichloropropane **CAS #** 96-18-4 **Purity** 99%	(Lot BCBH8722V)	5,033.4	µg/mL	+/- 31.9148 +/- 282.5035 +/- 289.1004	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	n-Propylbenzene **CAS #** 103-65-1 **Purity** 99%	(Lot MKBJ0332V)	5,032.4	µg/mL	+/- 31.9084 +/- 282.4473 +/- 289.0430	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	Bromobenzene **CAS #** 108-86-1 **Purity** 99%	(Lot WXBC5147V)	5,035.5	µg/mL	+/- 31.9282 +/- 282.6227 +/- 289.2225	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	1,3,5-Trimethylbenzene **CAS #** 108-67-8 **Purity** 99%	(Lot BCBS7648V)	5,029.8	µg/mL	+/- 31.8918 +/- 282.3000 +/- 288.8922	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	2-Chlorotoluene **CAS #** 95-49-8 **Purity** 99%	(Lot MKBW5554V)	5,037.5	µg/mL	+/- 31.9409 +/- 282.7350 +/- 289.3373	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	4-Chlorotoluene **CAS #** 106-43-4 **Purity** 99%	(Lot MKBL7753V)	5,039.1	µg/mL	+/- 31.9512 +/- 282.8262 +/- 289.4307	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	tert-Butylbenzene **CAS #** 98-06-6 **Purity** 99%	(Lot STBD6954V)	5,049.8	µg/mL	+/- 32.0186 +/- 283.4225 +/- 290.0409	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	1,2,4-Trimethylbenzene **CAS #** 95-63-6 **Purity** 98%	(Lot MKBJ6229V)	5,046.8	µg/mL	+/- 31.9996 +/- 283.2544 +/- 289.8689	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	sec-Butylbenzene **CAS #** 135-98-8 **Purity** 99%	(Lot MKBR9260V)	5,042.8	µg/mL	+/- 31.9742 +/- 283.0296 +/- 289.6389	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	p-Isopropyltoluene (p-Cymene) **CAS #** 99-87-6 **Purity** 99%	(Lot MKBV3556V)	5,038.4	µg/mL	+/- 31.9465 +/- 282.7841 +/- 289.3876	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	(Lot BCBQ7100V)	5,017.6	µg/mL	+/- 32.0043 +/- 281.6409 +/- 288.2167	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBS4401V)	5,023.8	µg/mL	+/- 32.0433 +/- 281.9847 +/- 288.5686	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	n-Butylbenzene **CAS #** 104-51-8 **Purity** 99%	(Lot 09804AE)	5,024.8	µg/mL	+/- 31.8601 +/- 282.0194 +/- 288.6050	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	1,2-Dichlorobenzene **CAS #** 95-50-1 **Purity** 99%	(Lot SHBG3111V)	5,024.5	µg/mL	+/- 32.0481 +/- 282.0268 +/- 288.6117	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	1,2-Dibromo-3-chloropropane **CAS #** 96-12-8 **Purity** 99%	(Lot FBL01)	5,036.4	µg/mL	+/- 31.9338 +/- 282.6718 +/- 289.2727	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	1,3,5-Trichlorobenzene **CAS #** 108-70-3 **Purity** 99%	(Lot 11319AS)	5,034.0	µg/mL	+/- 29.4752 +/- 282.2729 +/- 288.8768	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	1,2,4-Trichlorobenzene **CAS #** 120-82-1 **Purity** 99%	(Lot SHBJ0905)	5,036.5	µg/mL	+/- 31.9346 +/- 282.6789 +/- 289.2799	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 99%	(Lot J31X013)	5,033.6	µg/mL	+/- 31.9164 +/- 282.5175 +/- 289.1148	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBW2603V)	5,033.6	µg/mL	+/- 31.9164 +/- 282.5175 +/- 289.1148	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	1,2,3-Trichlorobenzene **CAS #** 87-61-6 **Purity** 99%	(Lot MKBS4859V)	5,016.0	µg/mL	+/- 31.8046 +/- 281.5283 +/- 288.1024	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

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

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

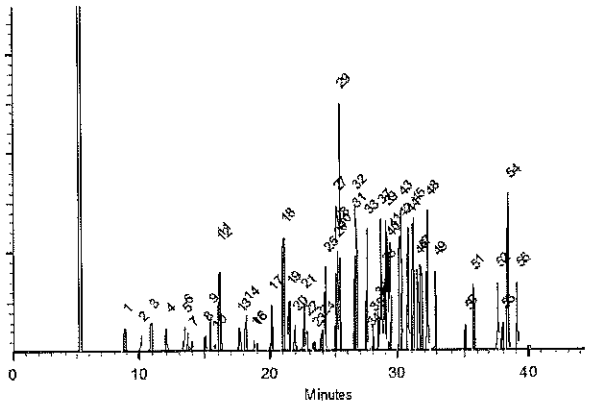
Carrier Gas:
hydrogen-constant pressure 8.0 psi.

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 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.

Cydnei L. Crust - Mix Technician

Date Mixed: 09-Mar-2020 **Balance:** B251644995

Feng-Yun Lo - QC Analyst

Date Passed: 11-Mar-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_V#2B_00201

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

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 56734 **Lot No.:** 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)

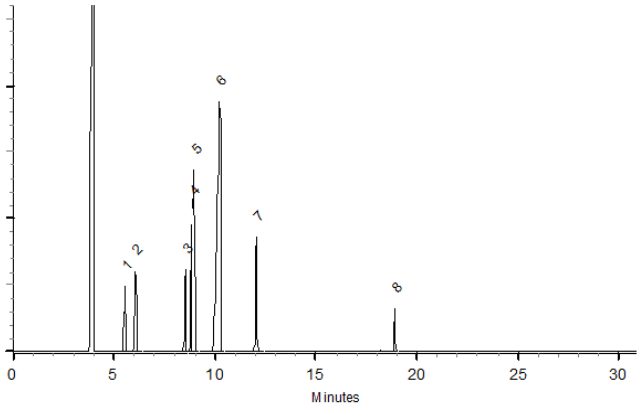
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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#2B_00202

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 56734 **Lot No.:** 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)

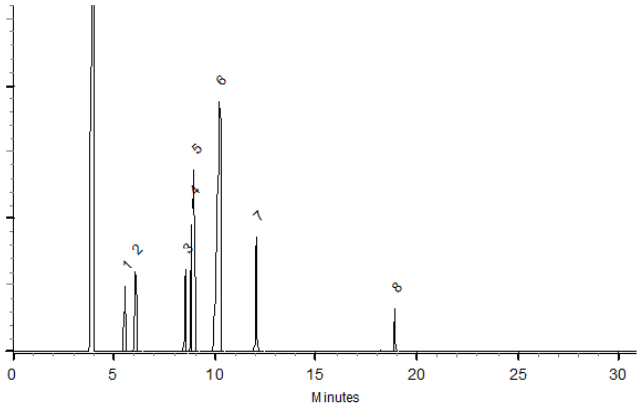
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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#3B_00087

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Fax: (814)353-1309

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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. : 56736 **Lot No.:** A0158677

Description : Custom V # 3B Standard

Custom V #3B Standard 12,500-25,000µg/mL, P&T Methanol/Water (90:10), 1mL/ampul

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

Expiration Date : March 31, 2023 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone		25,001.0	µg/mL	+/- 146.3864	µg/mL	Gravimetric
	CAS # 67-64-1	(Lot MKCK2598)			+/- 1,236.8670	µg/mL	Unstressed
	Purity 99%				+/- 1,267.6168	µg/mL	Stressed
2	Acrylonitrile		12,511.0	µg/mL	+/- 73.2547	µg/mL	Gravimetric
	CAS # 107-13-1	(Lot A0387097)			+/- 618.9529	µg/mL	Unstressed
	Purity 99%				+/- 634.3408	µg/mL	Stressed
3	2-Butanone (MEK)		25,007.0	µg/mL	+/- 146.4215	µg/mL	Gravimetric
	CAS # 78-93-3	(Lot SHBK9603)			+/- 1,237.1638	µg/mL	Unstressed
	Purity 99%				+/- 1,267.9210	µg/mL	Stressed
4	Tetrahydrofuran		25,049.0	µg/mL	+/- 146.6674	µg/mL	Gravimetric
	CAS # 109-99-9	(Lot SHBK8926)			+/- 1,239.2417	µg/mL	Unstressed
	Purity 99%				+/- 1,270.0505	µg/mL	Stressed
5	2-Nitropropane		24,758.3	µg/mL	+/- 144.9652	µg/mL	Gravimetric
	CAS # 79-46-9	(Lot BCCB9352)			+/- 1,224.8589	µg/mL	Unstressed
	Purity 97%				+/- 1,255.3102	µg/mL	Stressed
6	4-Methyl-2-pentanone (MIBK)		25,014.0	µg/mL	+/- 146.4625	µg/mL	Gravimetric
	CAS # 108-10-1	(Lot SHBL5515)			+/- 1,237.5101	µg/mL	Unstressed
	Purity 99%				+/- 1,268.2759	µg/mL	Stressed
7	2-Hexanone		25,016.0	µg/mL	+/- 146.4742	µg/mL	Gravimetric
	CAS # 591-78-6	(Lot MKCL1599)			+/- 1,237.6091	µg/mL	Unstressed
	Purity 99%				+/- 1,268.3773	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)

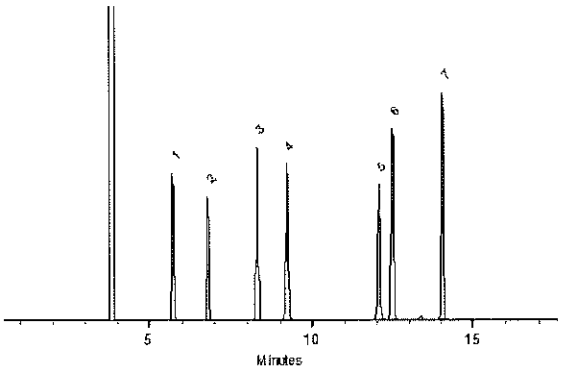
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Kylie Struble - Operations Technician I

Date Mixed: 10-Mar-2020 **Balance:** B251644995

Feng-Yen Lo - QC Analyst

Date Passed: 12-Mar-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_V#4C_00128

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Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 572312 **Lot No.:** A0158660

Description : Custom V #4C (Rev 3) Standard

Custom V #4C (Rev 3) Standard 5,000µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : March 31, 2021 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,3-Butadiene	5,002.1 µg/mL	+/- 39.8717 µg/mL	Gravimetric
	CAS # 106-99-0 (Lot SHBK2299)		+/- 303.0271 µg/mL	Unstressed
	Purity 99%		+/- 303.7407 µg/mL	Stressed
2	1,2-Dichloro-1,1,2-trifluoroethane (CFC-123a)	5,001.4 µg/mL	+/- 47.3932 µg/mL	Gravimetric
	CAS # 354-23-4 (Lot Q9B-64)		+/- 304.0702 µg/mL	Unstressed
	Purity 99%		+/- 304.7812 µg/mL	Stressed
3	n-Pentane (C5)	5,025.0 µg/mL	+/- 29.4225 µg/mL	Gravimetric
	CAS # 109-66-0 (Lot SHBL0400)		+/- 303.2005 µg/mL	Unstressed
	Purity 99%		+/- 303.9203 µg/mL	Stressed
4	1,1,2-Trichlorotrifluoroethane (CFC-113)	5,024.0 µg/mL	+/- 29.4166 µg/mL	Gravimetric
	CAS # 76-13-1 (Lot 00016133)		+/- 303.1402 µg/mL	Unstressed
	Purity 99%		+/- 303.8598 µg/mL	Stressed
5	Iodomethane (methyl iodide)	5,035.0 µg/mL	+/- 29.4810 µg/mL	Gravimetric
	CAS # 74-88-4 (Lot D4406-0122JM)		+/- 303.8039 µg/mL	Unstressed
	Purity 99%		+/- 304.5251 µg/mL	Stressed
6	Carbon disulfide	5,046.0 µg/mL	+/- 29.5454 µg/mL	Gravimetric
	CAS # 75-15-0 (Lot U22D706)		+/- 304.4676 µg/mL	Unstressed
	Purity 99%		+/- 305.1904 µg/mL	Stressed
7	Methyl-tert-butyl ether (MTBE)	5,025.0 µg/mL	+/- 29.4225 µg/mL	Gravimetric
	CAS # 1634-04-4 (Lot SHBK4806)		+/- 303.2005 µg/mL	Unstressed
	Purity 99%		+/- 303.9203 µg/mL	Stressed

8	n-Hexane (C6)		5,025.5	µg/mL	+/-	29.4254	µg/mL	Gravimetric
	CAS # 110-54-3	(Lot SHBL0924)			+/-	303.2307	µg/mL	Unstressed
	Purity 99%				+/-	303.9505	µg/mL	Stressed
9	Diisopropyl ether (DIPE)		5,015.0	µg/mL	+/-	29.3639	µg/mL	Gravimetric
	CAS # 108-20-3	(Lot SHBH1927V)			+/-	302.5971	µg/mL	Unstressed
	Purity 99%				+/-	303.3154	µg/mL	Stressed
10	Chloroprene (2-chloro-1,3-butadiene)		5,046.5	µg/mL	+/-	29.5484	µg/mL	Gravimetric
	CAS # 126-99-8	(Lot 191204JLM)			+/-	304.4978	µg/mL	Unstressed
	Purity 99%				+/-	305.2206	µg/mL	Stressed
11	Ethyl-tert-butyl ether (ETBE)		5,026.5	µg/mL	+/-	29.4313	µg/mL	Gravimetric
	CAS # 637-92-3	(Lot MKCJ3589)			+/-	303.2910	µg/mL	Unstressed
	Purity 99%				+/-	304.0110	µg/mL	Stressed
12	Cyclohexane		5,028.5	µg/mL	+/-	29.4430	µg/mL	Gravimetric
	CAS # 110-82-7	(Lot MKCF5831)			+/-	303.4117	µg/mL	Unstressed
	Purity 99%				+/-	304.1319	µg/mL	Stressed
13	tert-Amyl methyl ether (TAME)		5,021.0	µg/mL	+/-	29.3991	µg/mL	Gravimetric
	CAS # 994-05-8	(Lot HMBG6382V)			+/-	302.9592	µg/mL	Unstressed
	Purity 99%				+/-	303.6783	µg/mL	Stressed
14	n-Heptane (C7)		5,044.1	µg/mL	+/-	29.5341	µg/mL	Gravimetric
	CAS # 142-82-5	(Lot SHBK8626)			+/-	304.3506	µg/mL	Unstressed
	Purity 98%				+/-	305.0730	µg/mL	Stressed
15	tert-Amyl ethyl ether (TAEE)		5,018.5	µg/mL	+/-	29.3844	µg/mL	Gravimetric
	CAS # 919-94-8	(Lot IKVYB)			+/-	302.8083	µg/mL	Unstressed
	Purity 99%				+/-	303.5271	µg/mL	Stressed
16	Methyl methacrylate		5,028.0	µg/mL	+/-	29.4400	µg/mL	Gravimetric
	CAS # 80-62-6	(Lot MKCG6589)			+/-	303.3815	µg/mL	Unstressed
	Purity 99%				+/-	304.1017	µg/mL	Stressed
17	Ethyl methacrylate		5,043.0	µg/mL	+/-	29.5279	µg/mL	Gravimetric
	CAS # 97-63-2	(Lot SHBF9649V)			+/-	304.2866	µg/mL	Unstressed
	Purity 99%				+/-	305.0089	µg/mL	Stressed
18	Benzyl chloride		5,019.5	µg/mL	+/-	29.3903	µg/mL	Gravimetric
	CAS # 100-44-7	(Lot SHBH2102V)			+/-	302.8686	µg/mL	Unstressed
	Purity 99%				+/-	303.5876	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)

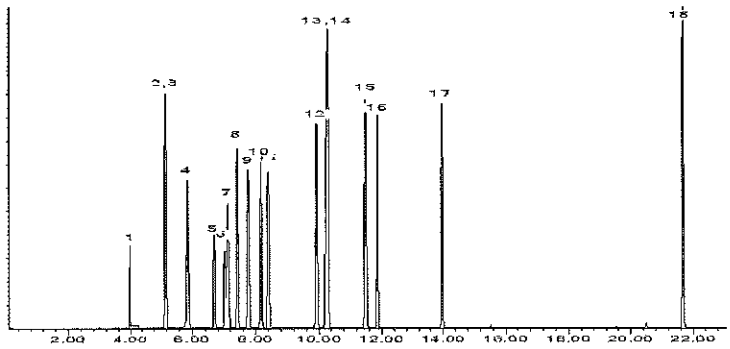
Carrier Gas:
helium-constant pressure 30 psi

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.

Tom Suckar - Mix Technician

Date Mixed: 10-Mar-2020 **Balance:** B707717271

Fang-Yun Lo - QC Analyst

Date Passed: 25-Mar-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_V#6_00064

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
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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. : 558268 **Lot No.:** A0158625

Description : Custom CS#6 Standard

Custom CS#6 Standard 5,000µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : September 30, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Methyl acetate		5,039.0 µg/mL	+/- 29.5717	µg/mL	Gravimetric
	CAS # 79-20-9	(Lot SHBK5436)		+/- 304.0518	µg/mL	Unstressed
	Purity 99%			+/- 304.7735	µg/mL	Stressed
2	Allyl chloride (3-chloropropene)		5,046.0 µg/mL	+/- 29.6128	µg/mL	Gravimetric
	CAS # 107-05-1	(Lot 191118KJ)		+/- 304.4742	µg/mL	Unstressed
	Purity 99%			+/- 305.1969	µg/mL	Stressed
3	Bromochloromethane		5,040.1 µg/mL	+/- 29.5784	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)		+/- 304.1206	µg/mL	Unstressed
	Purity 98%			+/- 304.8425	µg/mL	Stressed
4	Methylcyclohexane		5,041.0 µg/mL	+/- 29.5834	µg/mL	Gravimetric
	CAS # 108-87-2	(Lot SHBJ0457)		+/- 304.1725	µg/mL	Unstressed
	Purity 99%			+/- 304.8945	µg/mL	Stressed
5	Pentachloroethane		5,035.0 µg/mL	+/- 29.5482	µg/mL	Gravimetric
	CAS # 76-01-7	(Lot 8866000)		+/- 303.8104	µg/mL	Unstressed
	Purity 99%			+/- 304.5316	µg/mL	Stressed
6	1,2,3-Trimethylbenzene		5,012.0 µg/mL	+/- 29.4132	µg/mL	Gravimetric
	CAS # 526-73-8	(Lot 8766.05-14)		+/- 302.4226	µg/mL	Unstressed
	Purity 99%			+/- 303.1405	µg/mL	Stressed
7	1,3-Diethylbenzene		5,041.1 µg/mL	+/- 29.5841	µg/mL	Gravimetric
	CAS # 141-93-5	(Lot BCBT8967)		+/- 304.1797	µg/mL	Unstressed
	Purity 98%			+/- 304.9017	µg/mL	Stressed

8	1,4-Diethylbenzene		5,035.2	µg/mL	+/- 29.5496	µg/mL	Gravimetric
	CAS # 105-05-5	(Lot RLHJK)			+/- 303.8249	µg/mL	Unstressed
	Purity 98%				+/- 304.5461	µg/mL	Stressed
9	1,2-Diethylbenzene		5,011.0	µg/mL	+/- 29.4074	µg/mL	Gravimetric
	CAS # 135-01-3	(Lot ECH2970181)			+/- 302.3623	µg/mL	Unstressed
	Purity 99%				+/- 303.0800	µg/mL	Stressed
10	2-Methylnaphthalene		5,023.7	µg/mL	+/- 29.4818	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot STBG8884)			+/- 303.1274	µg/mL	Unstressed
	Purity 96%				+/- 303.8469	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)

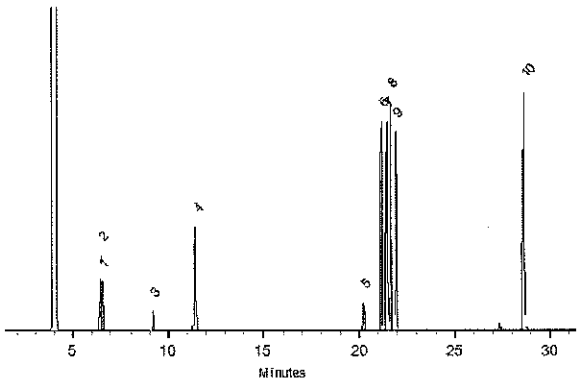
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Tom Suckar - Mix Technician

Date Mixed: 09-Mar-2020 **Balance:** B707717271

Feng-Yue Lu - QC Analyst

Date Passed: 12-Mar-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_V_Gas_00230

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 55669 **Lot No.:** A0159812

Description : Custom 502.2 "V" Gas Mix

Custom 502.2 "V" Gas Mix 2,000µg/mL, P&T Methanol, 1mL/ampul

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

Expiration Date : May 31, 2027 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,005.1 µg/mL	+/- 16.8576 µg/mL	Gravimetric
	CAS # 75-71-8 (Lot 00012554)		+/- 113.0809 µg/mL	Unstressed
	Purity 99%		+/- 115.6966 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,003.5 µg/mL	+/- 19.3327 µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBK6571)		+/- 113.3884 µg/mL	Unstressed
	Purity 99%		+/- 115.9929 µg/mL	Stressed
3	Vinyl chloride	2,001.1 µg/mL	+/- 18.1213 µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 00015559)		+/- 113.0560 µg/mL	Unstressed
	Purity 99%		+/- 115.6619 µg/mL	Stressed
4	Bromomethane (methyl bromide)	1,998.8 µg/mL	+/- 17.7535 µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/- 112.8737 µg/mL	Unstressed
	Purity 99%		+/- 115.4779 µg/mL	Stressed
5	Chloroethane (ethyl chloride)	2,002.3 µg/mL	+/- 17.1357 µg/mL	Gravimetric
	CAS # 75-00-3 (Lot 107-401039114-1)		+/- 112.9711 µg/mL	Unstressed
	Purity 99%		+/- 115.5821 µg/mL	Stressed
6	Trichlorofluoromethane (CFC-11)	2,020.0 µg/mL	+/- 11.7716 µg/mL	Gravimetric
	CAS # 75-69-4 (Lot 25931)		+/- 113.2622 µg/mL	Unstressed
	Purity 99%		+/- 115.9123 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)

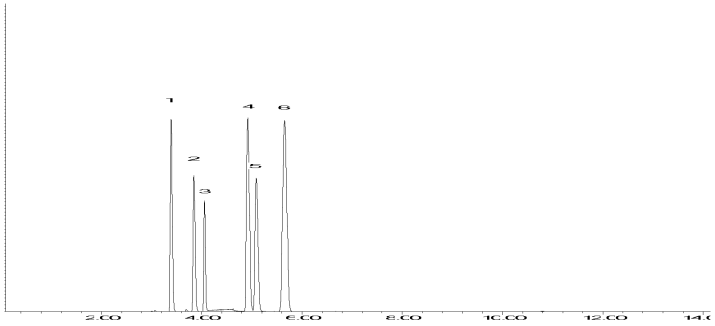
Carrier Gas:
helium-constant flow 2.0 mL/min.

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: 10-Apr-2020 **Balance:** B707717271

Jennifer Pollino - 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_V_Ketones_00003

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

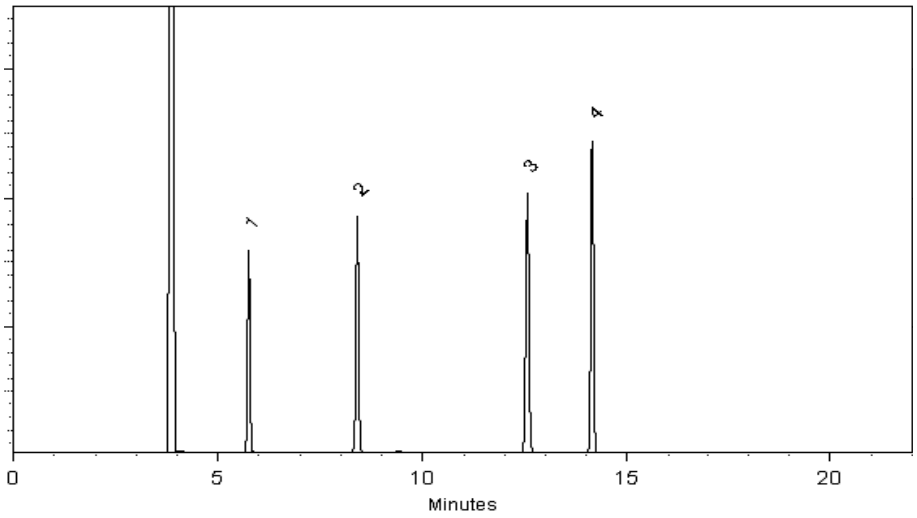
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

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.: 410-41319-1

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	410-41319-1	103	102	98	95
HD-COD-SW-7-0/1-0	410-41319-2	96	101	98	95
HD-COD-SW-8-0/1-0	410-41319-3	99	100	98	95
HD-COD-SW-9-0/1-0	410-41319-4	100	101	98	92
HD-COD-SW-13-0/1-0	410-41319-5	98	99	101	98
HD-COD-SW-15-0/1-0	410-41319-6	101	100	98	94
HD-COD-SW-16-0/1-0	410-41319-7	99	101	100	98
HD-COD-SW-17-0/1-0	410-41319-8	99	100	95	87
HD-COD-SW-26-0/1-0	410-41319-9	98	99	99	92
HD-COD-SW-27-0/1-0	410-41319-10	98	99	98	95
HD-COD-SW-28-0/1-0	410-41319-11	99	99	97	85
HD-COD-SW-29-0/1-0	410-41319-12	99	102	92	94
HD-QC1-0/1-1	410-41319-13	99	103	98	96
HD-QC1-0/1-2	410-41319-14	99	98	97	94
	MB 410-132853/6	101	100	99	94
	LCS 410-132853/4	99	98	99	95
HD-COD-SW-15-0/1-0 MS	410-41319-6 MS	100	95	99	96
HD-COD-SW-15-0/1-0 MSD	410-41319-6 MSD	99	99	98	96

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	80-120
DCA = 1,2-Dichloroethane-d4 (Surr)	80-120
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	80-120

Column to be used to flag recovery values

FORM II 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-41319-1

SDG No.:

Matrix: Water Level: Low Lab File ID: IU01L01.D

Lab ID: LCS 410-132853/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	4.84	97	71-134	
1,1,1-Trichloroethane	5.00	4.64	93	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.96	99	75-123	
1,1,2-Trichloroethane	5.00	5.06	101	80-120	
1,1-Dichloroethane	5.00	4.58	92	74-120	
1,1-Dichloroethene	5.00	4.92	98	80-131	
1,2-Dibromoethane (EDB)	5.00	4.89	98	80-120	
1,2-Dichloroethane	5.00	4.14	83	69-122	
1,2-Dichloropropane	5.00	4.75	95	80-120	
2-Butanone (MEK)	62.5	56.7	91	59-141	
2-Hexanone	62.5	57.7	92	52-140	
4-Methyl-2-pentanone (MIBK)	62.5	56.6	91	55-140	
Acetone	62.5	50.9	81	60-146	
Benzene	5.00	4.81	96	80-120	
Bromochloromethane	5.00	4.75	95	80-120	
Bromodichloromethane	5.00	4.62	92	73-124	
Bromoform	5.00	4.10	82	49-144	
Bromomethane	5.00	5.27	105	60-136	
Carbon disulfide	5.00	4.30	86	67-130	
Carbon tetrachloride	5.00	4.69	94	64-141	
Chlorobenzene	5.00	4.97	99	80-120	
Chloroethane	5.00	4.85	97	63-120	
Chloroform	5.00	4.76	95	80-120	
Chloromethane	5.00	5.39	108	56-124	
cis-1,2-Dichloroethene	5.00	4.92	98	80-122	
cis-1,3-Dichloropropene	5.00	4.46	89	67-121	
Dibromochloromethane	5.00	4.66	93	64-138	
Ethylbenzene	5.00	4.80	96	80-120	
Methyl tert-butyl ether	5.00	4.52	90	69-120	
Methylene Chloride	5.00	4.91	98	80-120	
Styrene	5.00	4.92	98	80-120	
Tetrachloroethene	5.00	4.73	95	80-120	
Toluene	5.00	4.84	97	80-120	
trans-1,2-Dichloroethene	5.00	4.78	96	80-122	
trans-1,3-Dichloropropene	5.00	4.44	89	61-129	
Trichloroethene	5.00	4.95	99	80-120	
Vinyl chloride	5.00	5.56	111	60-125	
Xylenes, Total	15.0	14.9	99	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.: 410-41319-1

SDG No.:

Matrix: Water Level: Low Lab File ID: IU01S04.D

Lab ID: 410-41319-6 MS Client ID: HD-COD-SW-15-0/1-0 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	ND	5.17	103	71-134	
1,1,1-Trichloroethane	5.00	0.086 J	5.24	103	78-126	
1,1,2,2-Tetrachloroethane	5.00	ND	5.25	105	75-123	
1,1,2-Trichloroethane	5.00	ND	5.23	105	80-120	
1,1-Dichloroethane	5.00	ND	4.96	99	74-120	
1,1-Dichloroethene	5.00	0.077 J	5.94	117	80-131	
1,2-Dibromoethane (EDB)	5.00	ND	4.90	98	80-120	
1,2-Dichloroethane	5.00	ND	4.48	89	69-122	
1,2-Dichloropropane	5.00	ND	5.08	101	80-120	
2-Butanone (MEK)	62.6	ND	61.5	98	59-141	
2-Hexanone	62.6	ND	63.0	101	52-140	
4-Methyl-2-pentanone (MIBK)	62.6	ND	62.6	100	55-140	
Acetone	62.6	ND	53.0	85	60-146	
Benzene	5.00	ND	5.25	105	80-120	
Bromochloromethane	5.00	ND	4.98	99	80-120	
Bromodichloromethane	5.00	ND	4.80	96	73-124	
Bromoform	5.00	ND	4.06	81	49-144	
Bromomethane	5.00	ND	5.43	109	60-136	
Carbon disulfide	5.00	ND	5.02	100	67-130	
Carbon tetrachloride	5.00	ND	5.30	106	64-141	
Chlorobenzene	5.00	ND	5.39	108	80-120	
Chloroethane	5.00	ND	4.96	99	63-120	
Chloroform	5.00	0.26 J	5.33	101	80-120	
Chloromethane	5.00	ND	5.48	110	80-120	
cis-1,2-Dichloroethene	5.00	0.63	6.01	107	80-122	
cis-1,3-Dichloropropene	5.00	ND	4.66	93	67-121	
Dibromochloromethane	5.00	ND	4.74	95	64-138	
Ethylbenzene	5.00	ND	5.28	106	80-120	
Methyl tert-butyl ether	5.00	ND	4.62	92	69-120	
Methylene Chloride	5.00	ND	5.28	105	80-120	
Styrene	5.00	ND	5.28	106	80-120	
Tetrachloroethene	5.00	2.2	7.62	109	80-120	
Toluene	5.00	ND	5.27	105	80-120	
trans-1,2-Dichloroethene	5.00	ND	5.42	108	80-122	
trans-1,3-Dichloropropene	5.00	ND	4.54	91	61-129	
Trichloroethene	5.00	0.75	6.02	105	80-120	
Vinyl chloride	5.00	ND	5.81	116	60-125	
Xylenes, Total	15.0	ND	16.2	108	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.: 410-41319-1

SDG No.:

Matrix: Water Level: Low Lab File ID: IU01S05.D

Lab ID: 410-41319-6 MSD Client ID: HD-COD-SW-15-0/1-0 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	5.05	101	2	30	71-134	
1,1,1-Trichloroethane	5.00	5.10	100	3	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	4.78	96	9	30	75-123	
1,1,2-Trichloroethane	5.00	5.01	100	4	30	80-120	
1,1-Dichloroethane	5.00	4.83	97	3	30	74-120	
1,1-Dichloroethene	5.00	5.70	112	4	30	80-131	
1,2-Dibromoethane (EDB)	5.00	4.78	95	2	30	80-120	
1,2-Dichloroethane	5.00	4.34	87	3	30	69-122	
1,2-Dichloropropane	5.00	4.98	99	2	30	80-120	
2-Butanone (MEK)	62.6	60.0	96	2	30	59-141	
2-Hexanone	62.6	60.6	97	4	30	52-140	
4-Methyl-2-pentanone (MIBK)	62.6	60.0	96	4	30	55-140	
Acetone	62.6	43.9	70	19	30	60-146	
Benzene	5.00	5.13	103	2	30	80-120	
Bromochloromethane	5.00	4.90	98	2	30	80-120	
Bromodichloromethane	5.00	4.73	94	1	30	73-124	
Bromoform	5.00	4.03	81	1	30	49-144	
Bromomethane	5.00	5.30	106	2	30	60-136	
Carbon disulfide	5.00	4.98	100	1	30	67-130	
Carbon tetrachloride	5.00	5.20	104	2	30	64-141	
Chlorobenzene	5.00	5.20	104	4	30	80-120	
Chloroethane	5.00	4.93	99	0	30	63-120	
Chloroform	5.00	5.23	99	2	30	80-120	
Chloromethane	5.00	5.33	107	3	30	80-120	
cis-1,2-Dichloroethene	5.00	5.87	105	2	30	80-122	
cis-1,3-Dichloropropene	5.00	4.54	91	3	30	67-121	
Dibromochloromethane	5.00	4.58	91	4	30	64-138	
Ethylbenzene	5.00	5.12	102	3	30	80-120	
Methyl tert-butyl ether	5.00	4.54	91	2	30	69-120	
Methylene Chloride	5.00	5.07	101	4	30	80-120	
Styrene	5.00	5.12	102	3	30	80-120	
Tetrachloroethene	5.00	7.39	104	3	30	80-120	
Toluene	5.00	5.19	104	2	30	80-120	
trans-1,2-Dichloroethene	5.00	5.29	106	2	30	80-122	
trans-1,3-Dichloropropene	5.00	4.47	89	1	30	61-129	
Trichloroethene	5.00	5.91	103	2	30	80-120	
Vinyl chloride	5.00	5.61	112	4	30	60-125	
Xylenes, Total	15.0	15.7	105	3	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.: 410-41319-1

SDG No.:

Lab File ID: IU01B01.D Lab Sample ID: MB 410-132853/6

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

Instrument ID: 19930 Date Analyzed: 06/02/2021 00:16

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 410-132853/4	IU01L01.D	06/01/2021 23:34
HD-QC1-0/1-2	410-41319-14	IU01S01.D	06/02/2021 00:49
HD-COD-SW-15-0/1-0	410-41319-6	IU01S03.D	06/02/2021 01:32
HD-COD-SW-15-0/1-0 MS	410-41319-6 MS	IU01S04.D	06/02/2021 01:53
HD-COD-SW-15-0/1-0 MSD	410-41319-6 MSD	IU01S05.D	06/02/2021 02:15
HD-QC1-0/1-1	410-41319-13	IU01S07.D	06/02/2021 02:57
HD-COD-SW-6-0/1-0	410-41319-1	IU01S08.D	06/02/2021 03:18
HD-COD-SW-7-0/1-0	410-41319-2	IU01S09.D	06/02/2021 03:39
HD-COD-SW-8-0/1-0	410-41319-3	IU01S10.D	06/02/2021 04:00
HD-COD-SW-9-0/1-0	410-41319-4	IU01S11.D	06/02/2021 04:21
HD-COD-SW-13-0/1-0	410-41319-5	IU01S12.D	06/02/2021 04:43
HD-COD-SW-16-0/1-0	410-41319-7	IU01S13.D	06/02/2021 05:04
HD-COD-SW-17-0/1-0	410-41319-8	IU01S14.D	06/02/2021 05:25
HD-COD-SW-26-0/1-0	410-41319-9	IU01S15.D	06/02/2021 05:47
HD-COD-SW-27-0/1-0	410-41319-10	IU01S16.D	06/02/2021 06:08
HD-COD-SW-28-0/1-0	410-41319-11	IU01S17.D	06/02/2021 06:29
HD-COD-SW-29-0/1-0	410-41319-12	IU01S18.D	06/02/2021 06:50

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Lab File ID: IM25T01.D BFB Injection Date: 03/25/2021

Instrument ID: 19930 BFB Injection Time: 19:32

Analysis Batch No.: 107390

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.9	
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	6.6	
173	Less than 2.0 % of mass 174	1.0	(1.2) 1
174	Greater than 50% of mass 95	84.4	
175	5.0 - 9.0 % of mass 174	6.6	(7.8) 1
176	95.0 - 101.0 % of mass 174	80.7	(95.7) 1
177	5.0 - 9.0 % of mass 176	5.2	(6.5) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 410-107390/12	IM25I01.D	03/25/2021	23:19
	ICIS 410-107390/13	IM25I02.D	03/25/2021	23:41
	IC 410-107390/14	IM25I03.D	03/26/2021	0:02
	IC 410-107390/15	IM25I04.D	03/26/2021	0:23
	IC 410-107390/16	IM25I05.D	03/26/2021	0:44
	IC 410-107390/17	IM25I06.D	03/26/2021	1:05
	IC 410-107390/18	IM25I07.D	03/26/2021	1:26
	ICV 410-107390/19	IM25V01.D	03/26/2021	1:47

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Lab File ID: IU01T04.D BFB Injection Date: 06/01/2021

Instrument ID: 19930 BFB Injection Time: 22:39

Analysis Batch No.: 132853

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.6	
75	30.0 - 60.0 % of mass 95	44.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	1.2	(1.4) 1
174	Greater than 50% of mass 95	84.7	
175	5.0 - 9.0 % of mass 174	6.3	(7.5) 1
176	95.0 - 101.0 % of mass 174	81.7	(96.6) 1
177	5.0 - 9.0 % of mass 176	5.0	(6.1) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-132853/3	IU01C01.D	06/01/2021	23:12
	LCS 410-132853/4	IU01L01.D	06/01/2021	23:34
	MB 410-132853/6	IU01B01.D	06/02/2021	0:16
HD-QC1-0/1-2	410-41319-14	IU01S01.D	06/02/2021	0:49
HD-COD-SW-15-0/1-0	410-41319-6	IU01S03.D	06/02/2021	1:32
HD-COD-SW-15-0/1-0 MS	410-41319-6 MS	IU01S04.D	06/02/2021	1:53
HD-COD-SW-15-0/1-0 MSD	410-41319-6 MSD	IU01S05.D	06/02/2021	2:15
HD-QC1-0/1-1	410-41319-13	IU01S07.D	06/02/2021	2:57
HD-COD-SW-6-0/1-0	410-41319-1	IU01S08.D	06/02/2021	3:18
HD-COD-SW-7-0/1-0	410-41319-2	IU01S09.D	06/02/2021	3:39
HD-COD-SW-8-0/1-0	410-41319-3	IU01S10.D	06/02/2021	4:00
HD-COD-SW-9-0/1-0	410-41319-4	IU01S11.D	06/02/2021	4:21
HD-COD-SW-13-0/1-0	410-41319-5	IU01S12.D	06/02/2021	4:43
HD-COD-SW-16-0/1-0	410-41319-7	IU01S13.D	06/02/2021	5:04
HD-COD-SW-17-0/1-0	410-41319-8	IU01S14.D	06/02/2021	5:25
HD-COD-SW-26-0/1-0	410-41319-9	IU01S15.D	06/02/2021	5:47
HD-COD-SW-27-0/1-0	410-41319-10	IU01S16.D	06/02/2021	6:08
HD-COD-SW-28-0/1-0	410-41319-11	IU01S17.D	06/02/2021	6:29
HD-COD-SW-29-0/1-0	410-41319-12	IU01S18.D	06/02/2021	6:50

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

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Sample No.: ICIS 410-107390/13 Date Analyzed: 03/25/2021 23:41

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

Lab File ID (Standard): IM25I02.D Heated Purge: (Y/N) N

Calibration ID: 22087

		TBAd10		FB		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		155217	4.27	2148304	7.74	1638803	11.19
UPPER LIMIT		310434	4.77	4296608	8.24	3277606	11.69
LOWER LIMIT		77609	3.77	1074152	7.24	819402	10.69
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-107390/19		167068	4.27	2148117	7.74	1633240	11.19
CCVIS 410-132853/3		144303	4.23	1854150	7.73	1463006	11.19

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.: 410-41319-1

SDG No.:

Sample No.: ICIS 410-107390/13 Date Analyzed: 03/25/2021 23:41

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

Lab File ID (Standard): IM25I02.D Heated Purge: (Y/N) N

Calibration ID: 22087

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		899738	13.07				
UPPER LIMIT		1799476	13.57				
LOWER LIMIT		449869	12.57				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-107390/19		915488	13.07				
CCVIS 410-132853/3		825359	13.07				

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.: 410-41319-1

SDG No.:

Sample No.: CCVIS 410-132853/3 Date Analyzed: 06/01/2021 23:12

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

Lab File ID (Standard): IU01C01.D Heated Purge: (Y/N) N

Calibration ID: 22087

		TBAd10		FB		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		144303	4.23	1854150	7.73	1463006	11.19
UPPER LIMIT		288606	4.73	3708300	8.23	2926012	11.69
LOWER LIMIT		72152	3.73	927075	7.23	731503	10.69
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-132853/4		135650	4.27	1814120	7.74	1411230	11.19
MB 410-132853/6		125876	4.25	1784970	7.74	1391720	11.19
410-41319-14	HD-QC1-0/1-2	146665	4.26	1877980	7.73	1462965	11.19
410-41319-6	HD-COD-SW-15-0/1-0	141156	4.25	1913540	7.74	1495578	11.19
410-41319-6 MS	HD-COD-SW-15-0/1-0 MS	118041	4.26	1807570	7.73	1394126	11.19
410-41319-6 MSD	HD-COD-SW-15-0/1-0 MSD	122112	4.24	1816794	7.74	1409039	11.19
410-41319-13	HD-QC1-0/1-1	124534	4.26	1742670	7.74	1348809	11.19
410-41319-1	HD-COD-SW-6-0/1-0	135445	4.27	1649803	7.73	1348977	11.19
410-41319-2	HD-COD-SW-7-0/1-0	112376	4.28	1704980	7.74	1349985	11.19
410-41319-3	HD-COD-SW-8-0/1-0	115580	4.28	1746406	7.74	1349740	11.19
410-41319-4	HD-COD-SW-9-0/1-0	121415	4.27	1729278	7.74	1349086	11.19
410-41319-5	HD-COD-SW-13-0/1-0	129827	4.25	1741987	7.74	1294062	11.19
410-41319-7	HD-COD-SW-16-0/1-0	123840	4.28	1748063	7.74	1321688	11.19
410-41319-8	HD-COD-SW-17-0/1-0	127268	4.25	1734354	7.73	1350138	11.19
410-41319-9	HD-COD-SW-26-0/1-0	137032	4.25	1741691	7.74	1349690	11.19
410-41319-10	HD-COD-SW-27-0/1-0	108869	4.26	1718035	7.74	1316874	11.19
410-41319-11	HD-COD-SW-28-0/1-0	124811	4.25	1706700	7.73	1330902	11.19
410-41319-12	HD-COD-SW-29-0/1-0	109246	4.26	1696676	7.74	1316682	11.19

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.: 410-41319-1

SDG No.:

Sample No.: CCVIS 410-132853/3 Date Analyzed: 06/01/2021 23:12

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

Lab File ID (Standard): IU01C01.D Heated Purge: (Y/N) N

Calibration ID: 22087

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		825359	13.07				
UPPER LIMIT		1650718	13.57				
LOWER LIMIT		412680	12.57				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-132853/4		810759	13.07				
MB 410-132853/6		812492	13.07				
410-41319-14	HD-QC1-0/1-2	844510	13.07				
410-41319-6	HD-COD-SW-15-0/1-0	876332	13.07				
410-41319-6 MS	HD-COD-SW-15-0/1-0 MS	739698	13.07				
410-41319-6 MSD	HD-COD-SW-15-0/1-0 MSD	806918	13.07				
410-41319-13	HD-QC1-0/1-1	783499	13.07				
410-41319-1	HD-COD-SW-6-0/1-0	772944	13.07				
410-41319-2	HD-COD-SW-7-0/1-0	778084	13.07				
410-41319-3	HD-COD-SW-8-0/1-0	751794	13.07				
410-41319-4	HD-COD-SW-9-0/1-0	780222	13.07				
410-41319-5	HD-COD-SW-13-0/1-0	782172	13.07				
410-41319-7	HD-COD-SW-16-0/1-0	732238	13.07				
410-41319-8	HD-COD-SW-17-0/1-0	718771	13.07				
410-41319-9	HD-COD-SW-26-0/1-0	789191	13.07				
410-41319-10	HD-COD-SW-27-0/1-0	770662	13.07				
410-41319-11	HD-COD-SW-28-0/1-0	773062	13.07				
410-41319-12	HD-COD-SW-29-0/1-0	716770	13.07				

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.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 410-41319-1

Matrix: Water Lab File ID: IU01S08.D

Analysis Method: 8260D Date Collected: 05/25/2021 10:25

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 03:18

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.: 132853 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	ND		0.50	0.090
74-87-3	Chloromethane	0.066	J	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	0.087	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-6-0/1-0 Lab Sample ID: 410-41319-1

Matrix: Water Lab File ID: IU01S08.D

Analysis Method: 8260D Date Collected: 05/25/2021 10:25

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 03:18

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.: 132853 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)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S08.D
Lims ID: 410-41319-A-1
Client ID: HD-COD-SW-6-0/1-0
Sample Type: Client
Inject. Date: 02-Jun-2021 03:18:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-014
Misc. Info.: 410-41319-A-1
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 14:16:43 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: riehlc Date: 02-Jun-2021 14:12:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.172	2.172	0.000	22	4156	0.0664	
5 Vinyl chloride	62		2.294				ND	
7 Bromomethane	94		2.623				ND	
8 Chloroethane	64		2.702				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.617	3.592	0.025	98	11505	1.31	
19 Carbon disulfide	76	3.891	3.885	0.006	73	6860	0.0541	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.233	0.036	21	135445	50.0	
23 Methylene Chloride	84		4.245				ND	
27 Methyl tert-butyl ether	73		4.647				ND	
28 trans-1,2-Dichloroethene	96		4.659				ND	
31 1,1-Dichloroethane	63		5.318				ND	
36 2-Butanone (MEK)	43		6.116				ND	7
37 cis-1,2-Dichloroethene	96		6.147				ND	
43 Chlorobromomethane	128		6.482				ND	
45 Chloroform	83	6.629	6.628	0.001	17	4317	0.0480	M
$ 46 Dibromofluoromethane (Surr)	113	6.842	6.848	-0.006	94	427645	10.3	
47 1,1,1-Trichloroethane	97		6.860				ND	
50 Carbon tetrachloride	117		7.073				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.299	7.299	0.000	84	82716	10.2	
54 Benzene	78		7.336				ND	7
56 1,2-Dichloroethane	62		7.403				ND	
* 58 Fluorobenzene (IS)	96	7.732	7.732	0.000	99	1649803	10.0	
61 Trichloroethene	95	8.226	8.213	0.013	92	4788	0.0867	M
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	7
$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	93	1736665	9.84	
76 Toluene	92	9.811	9.811	0.000	98	7182	0.0494	
78 trans-1,3-Dichloropropene	75		10.067				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.366	10.359	0.007	87	2756	0.0399	
83 2-Hexanone	43		10.481				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.001	84	1348977	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.292				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.755				ND	
96 Bromoform	173		11.920				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.189	12.188	0.000	94	635073	9.47	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	772944	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

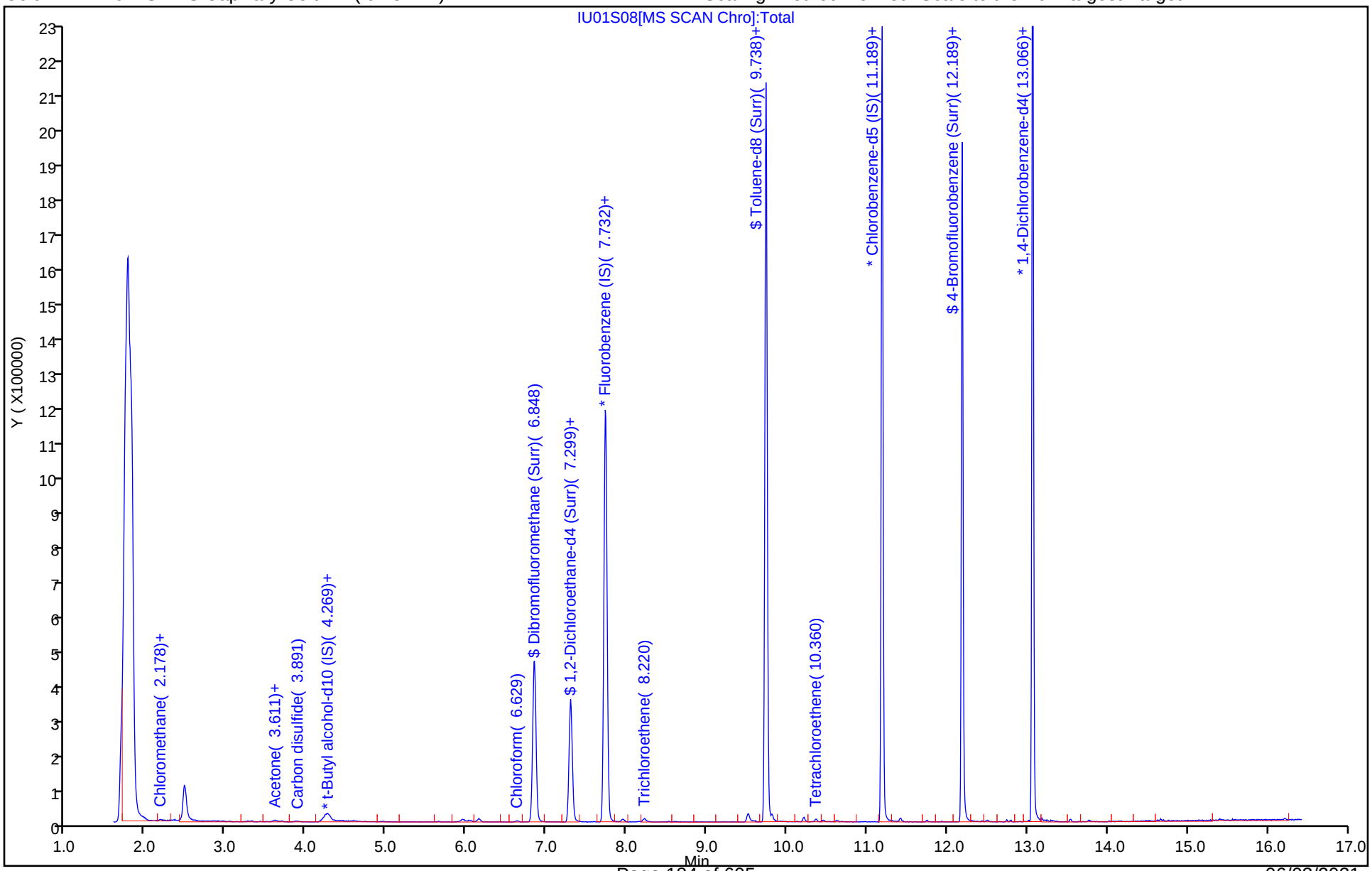
Report Date: 02-Jun-2021 14:18:02 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S08.D

Injection Date:	02-Jun-2021 03:18:30	Instrument ID:	19930	Operator ID:	MEC29284
Lims ID:	410-41319-A-1	Lab Sample ID:	410-41319-1	Worklist Smp#:	14
Client ID:	HD-COD-SW-6-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S08.D
Lims ID: 410-41319-A-1
Client ID: HD-COD-SW-6-0/1-0
Sample Type: Client
Inject. Date: 02-Jun-2021 03:18:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-014
Misc. Info.: 410-41319-A-1
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 14:16:43 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

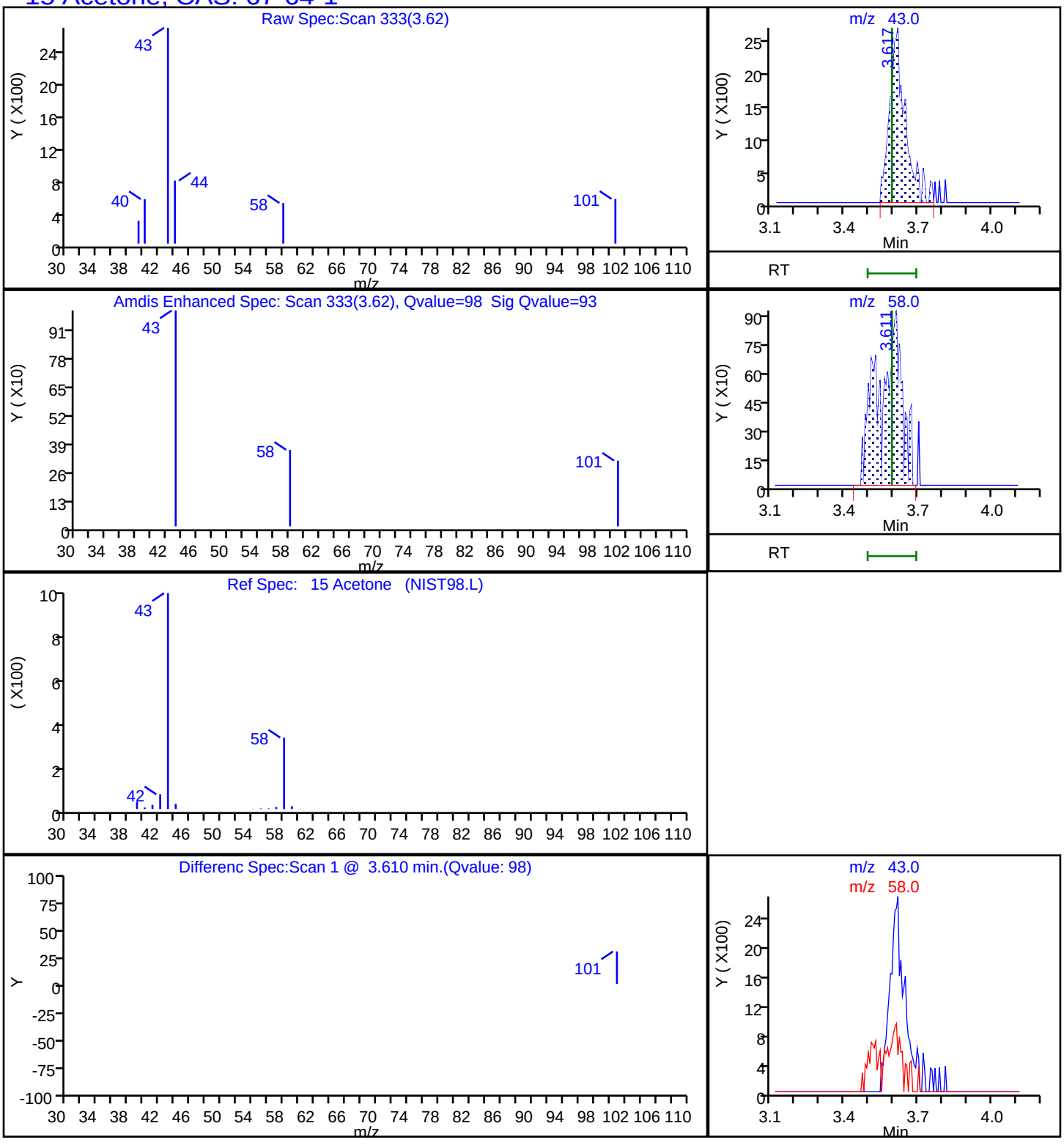
First Level Reviewer: riehlc Date: 02-Jun-2021 14:12:34

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.3	103.09
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.87
$ 75 Toluene-d8 (Surr)	10.0	9.84	98.37
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.47	94.68

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S08.D				
Injection Date:	02-Jun-2021 03:18:30	Instrument ID:	19930		
Lims ID:	410-41319-A-1	Lab Sample ID:	410-41319-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

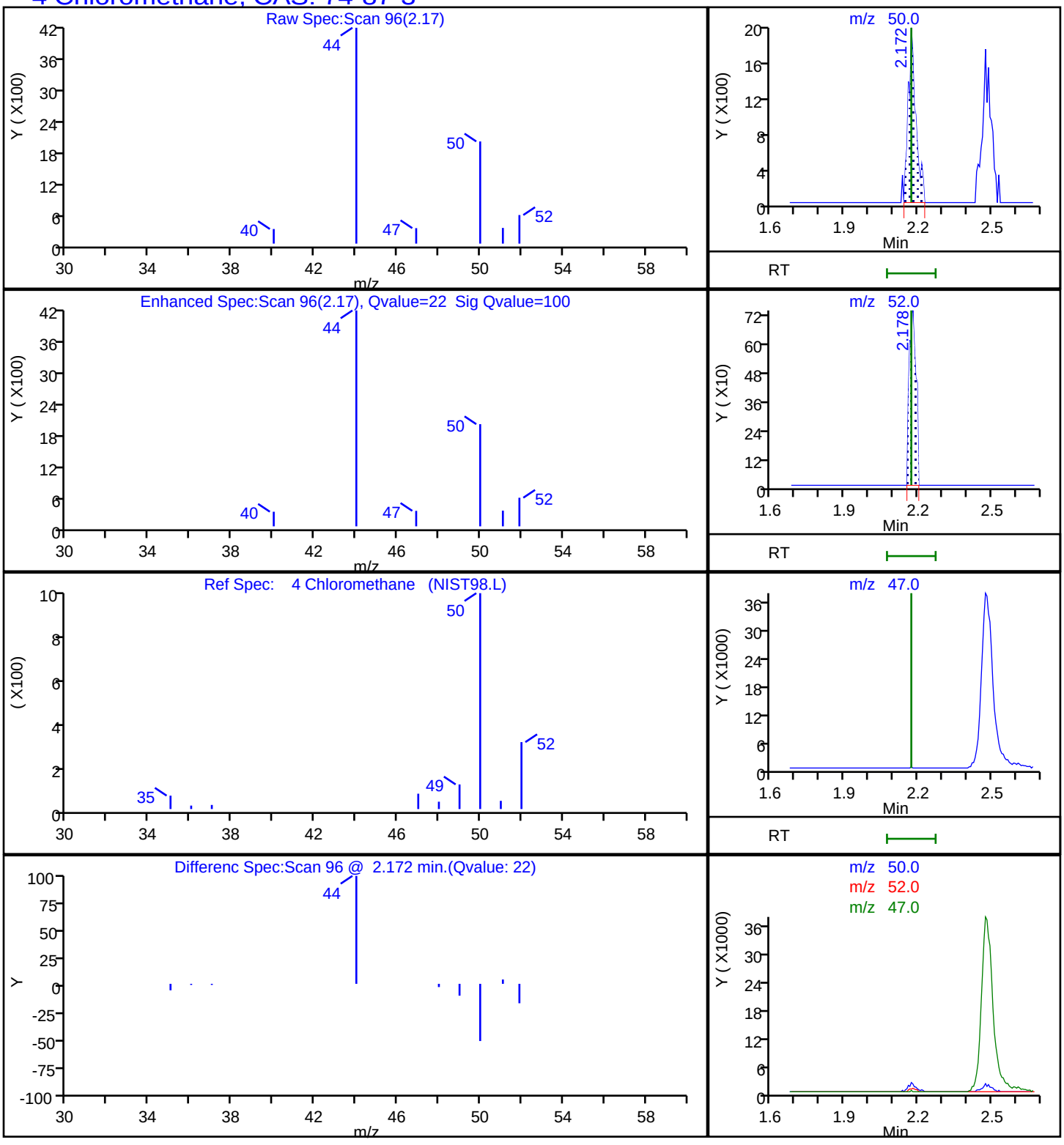
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S08.D				
Injection Date:	02-Jun-2021 03:18:30	Instrument ID:	19930		
Lims ID:	410-41319-A-1	Lab Sample ID:	410-41319-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

4 Chloromethane, CAS: 74-87-3

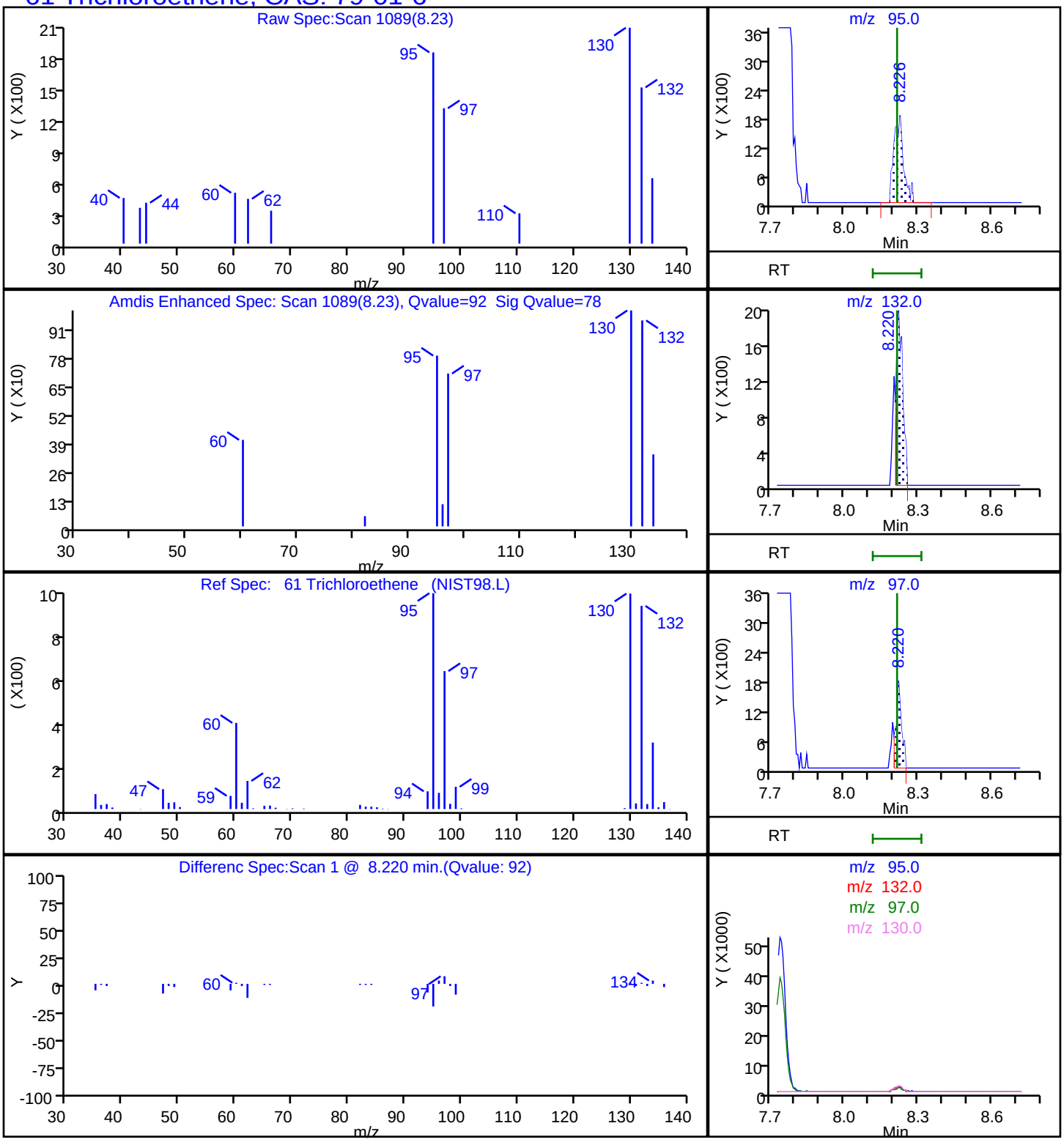


Report Date: 02-Jun-2021 14:18:02 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S08.D				
Injection Date:	02-Jun-2021 03:18:30	Instrument ID:	19930		
Lims ID:	410-41319-A-1	Lab Sample ID:	410-41319-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

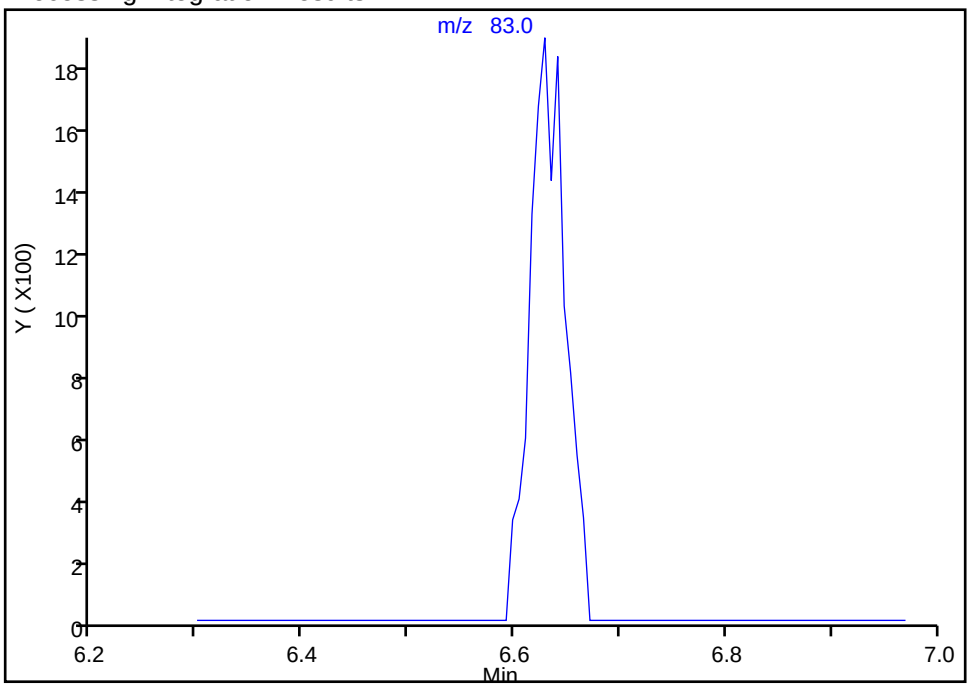
Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S08.D				
Injection Date:	02-Jun-2021 03:18:30	Instrument ID:	19930		
Lims ID:	410-41319-A-1	Lab Sample ID:	410-41319-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

45 Chloroform, CAS: 67-66-3

Signal: 1

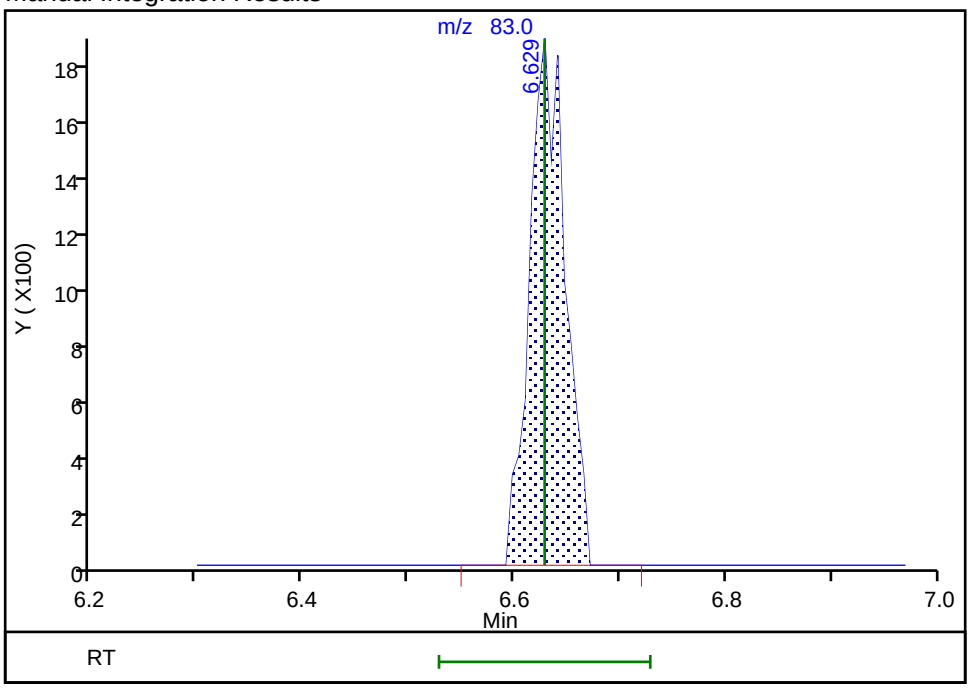
Not Detected
Expected RT: 6.63

Processing Integration Results



Manual Integration Results

RT: 6.63
Area: 4317
Amount: 0.048007
Amount Units: ug/l



Reviewer: riehlc, 02-Jun-2021 14:11:47
Audit Action: Manually Integrated Audit Reason: Missed Peak

Eurofins Lancaster Laboratories Env, LLC

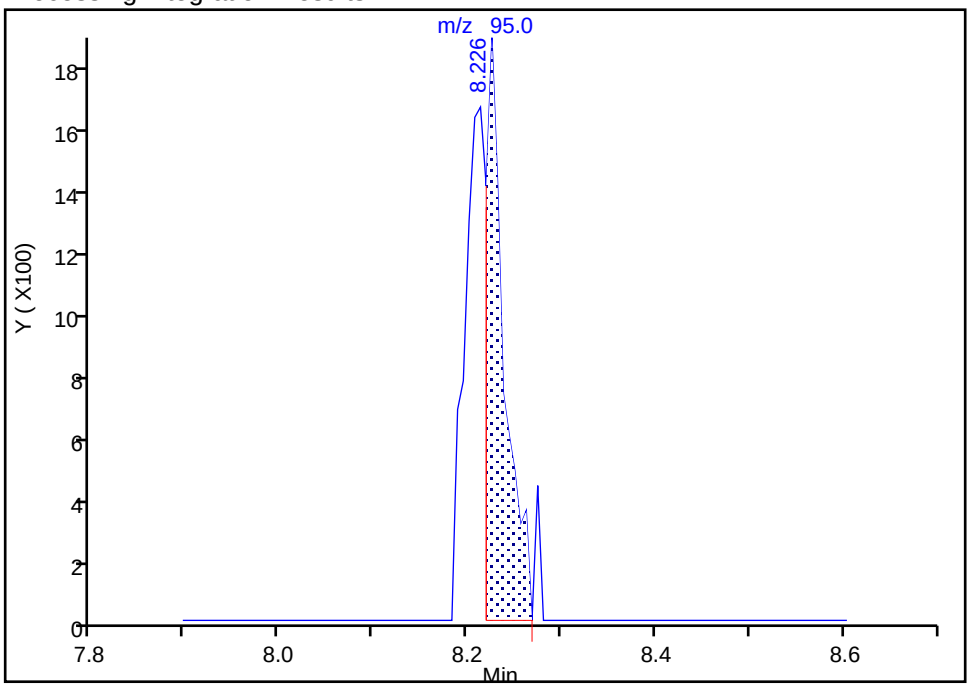
Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S08.D				
Injection Date:	02-Jun-2021 03:18:30	Instrument ID:	19930		
Lims ID:	410-41319-A-1	Lab Sample ID:	410-41319-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6

Signal: 1

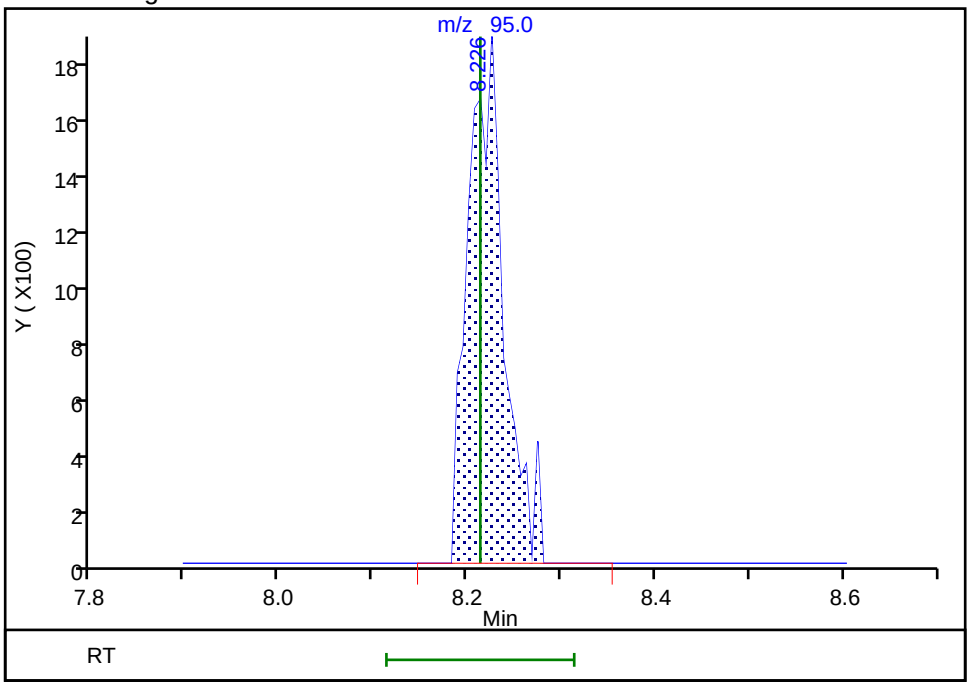
Processing Integration Results

RT: 8.23
Area: 2519
Amount: 0.045588
Amount Units: ug/l



Manual Integration Results

RT: 8.23
Area: 4788
Amount: 0.086651
Amount Units: ug/l



Reviewer: riehlc, 02-Jun-2021 14:11:59
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.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 410-41319-2

Matrix: Water Lab File ID: IU01S09.D

Analysis Method: 8260D Date Collected: 05/25/2021 11:05

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 03:39

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.: 132853 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	0.061	J	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.085	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	0.082	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0 Lab Sample ID: 410-41319-2

Matrix: Water Lab File ID: IU01S09.D

Analysis Method: 8260D Date Collected: 05/25/2021 11:05

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 03:39

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.: 132853 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)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	96		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S09.D
Lims ID: 410-41319-A-2
Client ID: HD-COD-SW-7-0/1-0
Sample Type: Client
Inject. Date: 02-Jun-2021 03:39:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-015
Misc. Info.: 410-41319-A-2
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 14:16:43 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: riehlc Date: 02-Jun-2021 14:13:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.184	2.172	0.012	91	3942	0.0609	
5 Vinyl chloride	62		2.294				ND	7
7 Bromomethane	94		2.623				ND	
8 Chloroethane	64		2.702				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.623	3.592	0.031	70	13030	1.79	
19 Carbon disulfide	76	3.897	3.885	0.012	94	6947	0.0530	
* 24 t-Butyl alcohol-d10 (IS)	65	4.275	4.233	0.042	22	112376	50.0	
23 Methylene Chloride	84		4.245				ND	
27 Methyl tert-butyl ether	73		4.647				ND	
28 trans-1,2-Dichloroethene	96		4.659				ND	
31 1,1-Dichloroethane	63		5.318				ND	
36 2-Butanone (MEK)	43		6.116				ND	7
37 cis-1,2-Dichloroethene	96	6.159	6.147	0.012	76	4925	0.0845	
43 Chlorobromomethane	128		6.482				ND	
45 Chloroform	83	6.635	6.628	0.006	90	8071	0.0868	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.848	0.006	93	410434	9.57	
47 1,1,1-Trichloroethane	97		6.860				ND	
50 Carbon tetrachloride	117		7.073				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.299	0.006	83	85014	10.1	
54 Benzene	78		7.336				ND	7
56 1,2-Dichloroethane	62		7.403				ND	
* 58 Fluorobenzene (IS)	96	7.738	7.732	0.006	99	1704980	10.0	
61 Trichloroethene	95	8.220	8.213	0.007	93	4697	0.0823	
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	7
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	7
$ 75 Toluene-d8 (Surr)	98	9.744	9.738	0.006	93	1725969	9.77	
76 Toluene	92	9.817	9.811	0.006	98	9208	0.0633	
78 trans-1,3-Dichloropropene	75		10.067				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.372	10.359	0.013	92	5897	0.0853	
83 2-Hexanone	43		10.481				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1349985	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.292				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106	11.408	11.414	-0.006	98	5075	0.0455	
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.755				ND	
96 Bromoform	173		11.920				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	634544	9.45	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	778084	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_LLcentISS_00001 Amount Added: 5.00 Units: uL Run Reagent

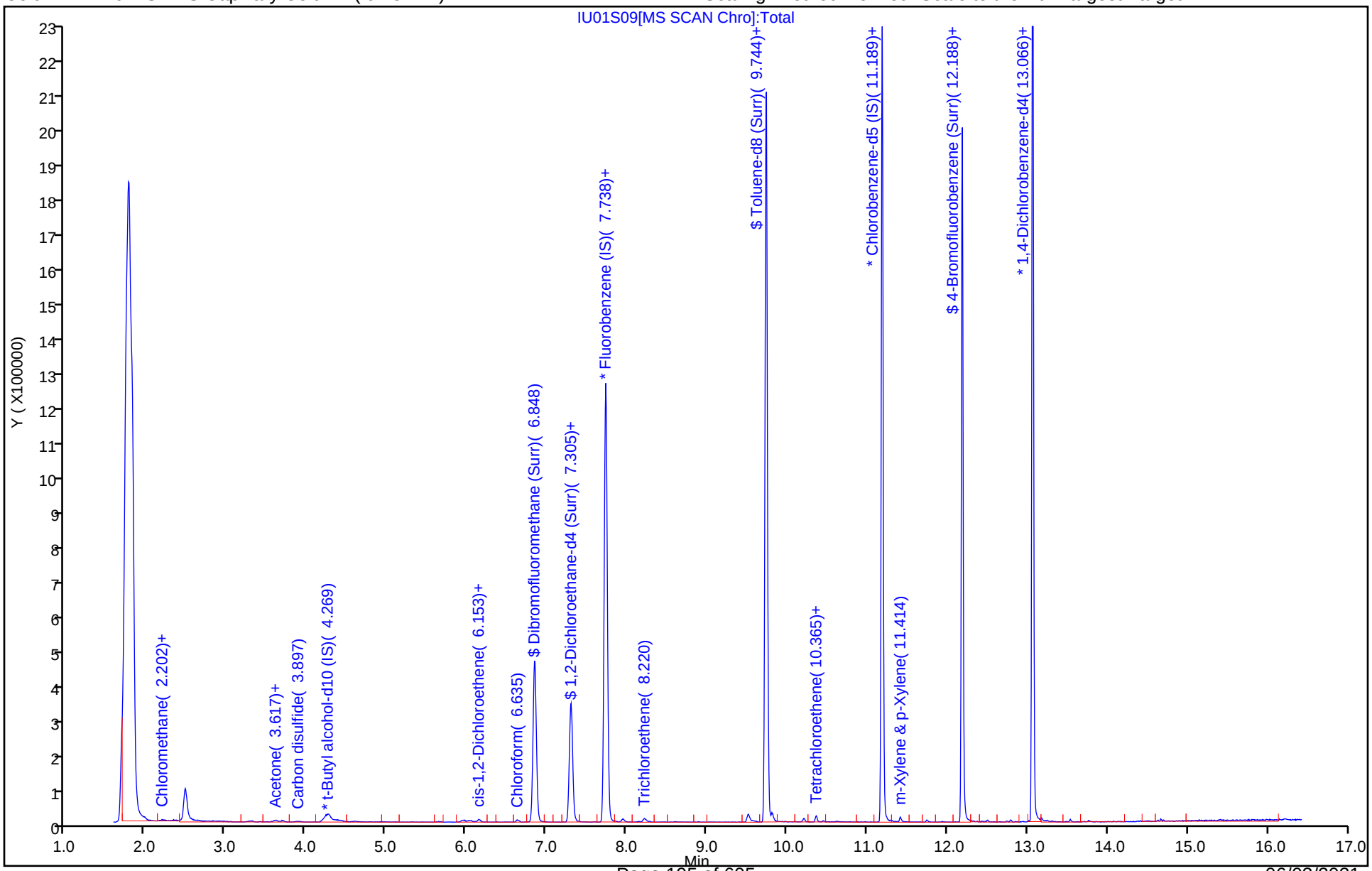
Report Date: 02-Jun-2021 14:18:04 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S09.D

Injection Date:	02-Jun-2021 03:39:30	Instrument ID:	19930	Operator ID:	MEC29284
Lims ID:	410-41319-A-2	Lab Sample ID:	410-41319-2	Worklist Smp#:	15
Client ID:	HD-COD-SW-7-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S09.D
Lims ID: 410-41319-A-2
Client ID: HD-COD-SW-7-0/1-0
Sample Type: Client
Inject. Date: 02-Jun-2021 03:39:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-015
Misc. Info.: 410-41319-A-2
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 14:16:43 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

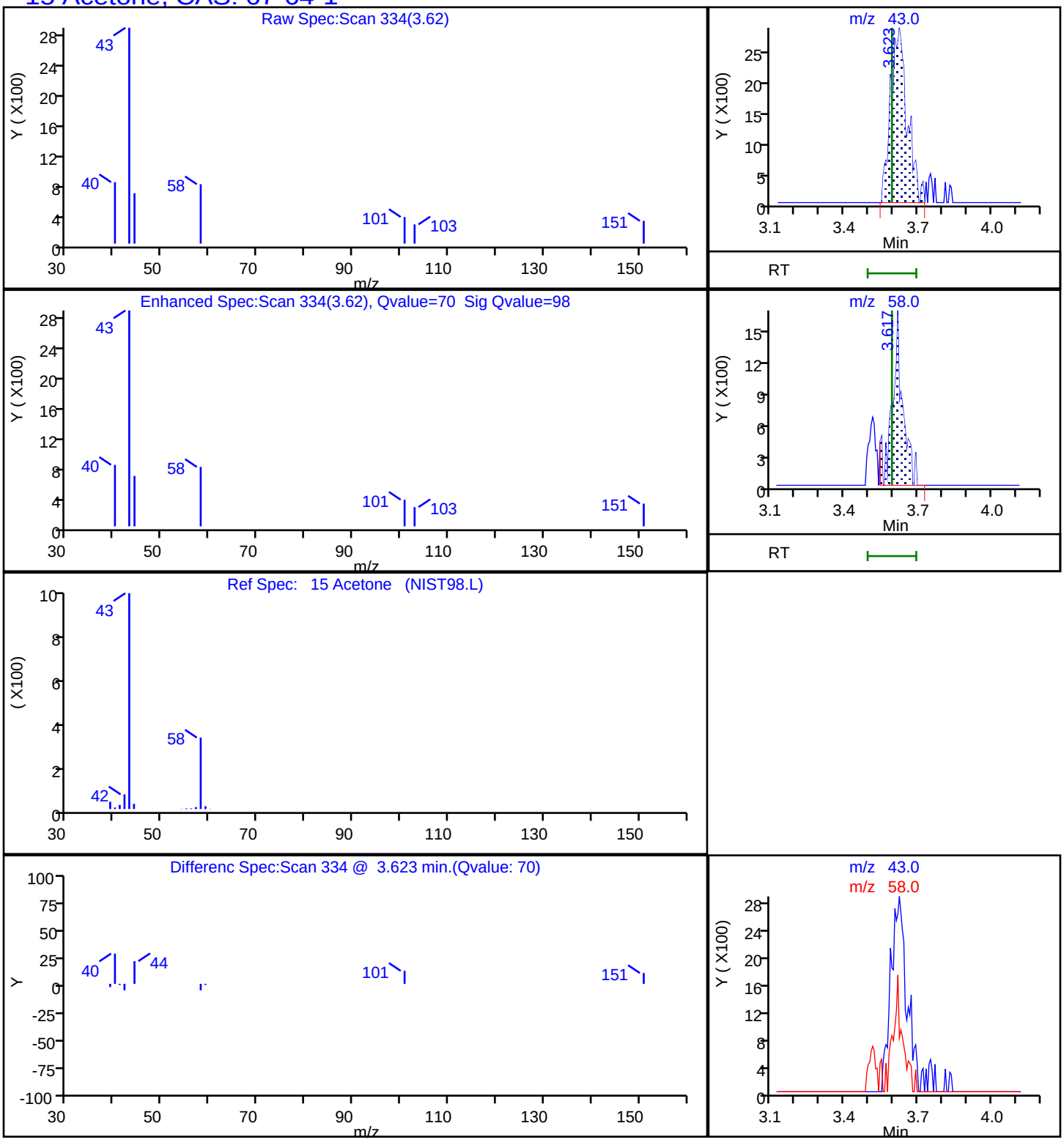
First Level Reviewer: riehlc Date: 02-Jun-2021 14:13:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	9.57	95.74
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	101.32
$ 75 Toluene-d8 (Surr)	10.0	9.77	97.69
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.45	94.53

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S09.D				
Injection Date:	02-Jun-2021 03:39:30	Instrument ID:	19930		
Lims ID:	410-41319-A-2	Lab Sample ID:	410-41319-2		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

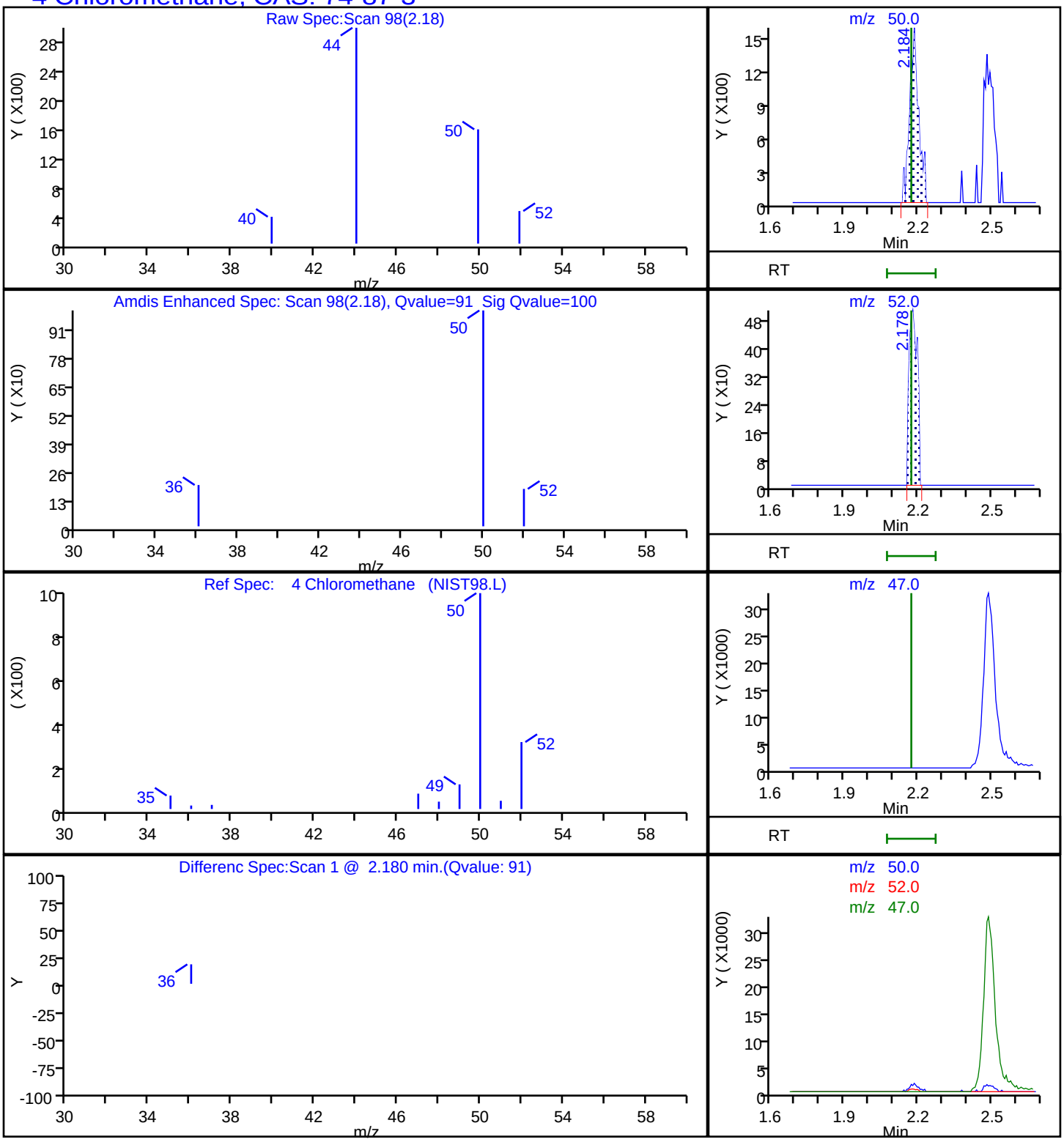
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S09.D				
Injection Date:	02-Jun-2021 03:39:30	Instrument ID:	19930		
Lims ID:	410-41319-A-2	Lab Sample ID:	410-41319-2		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

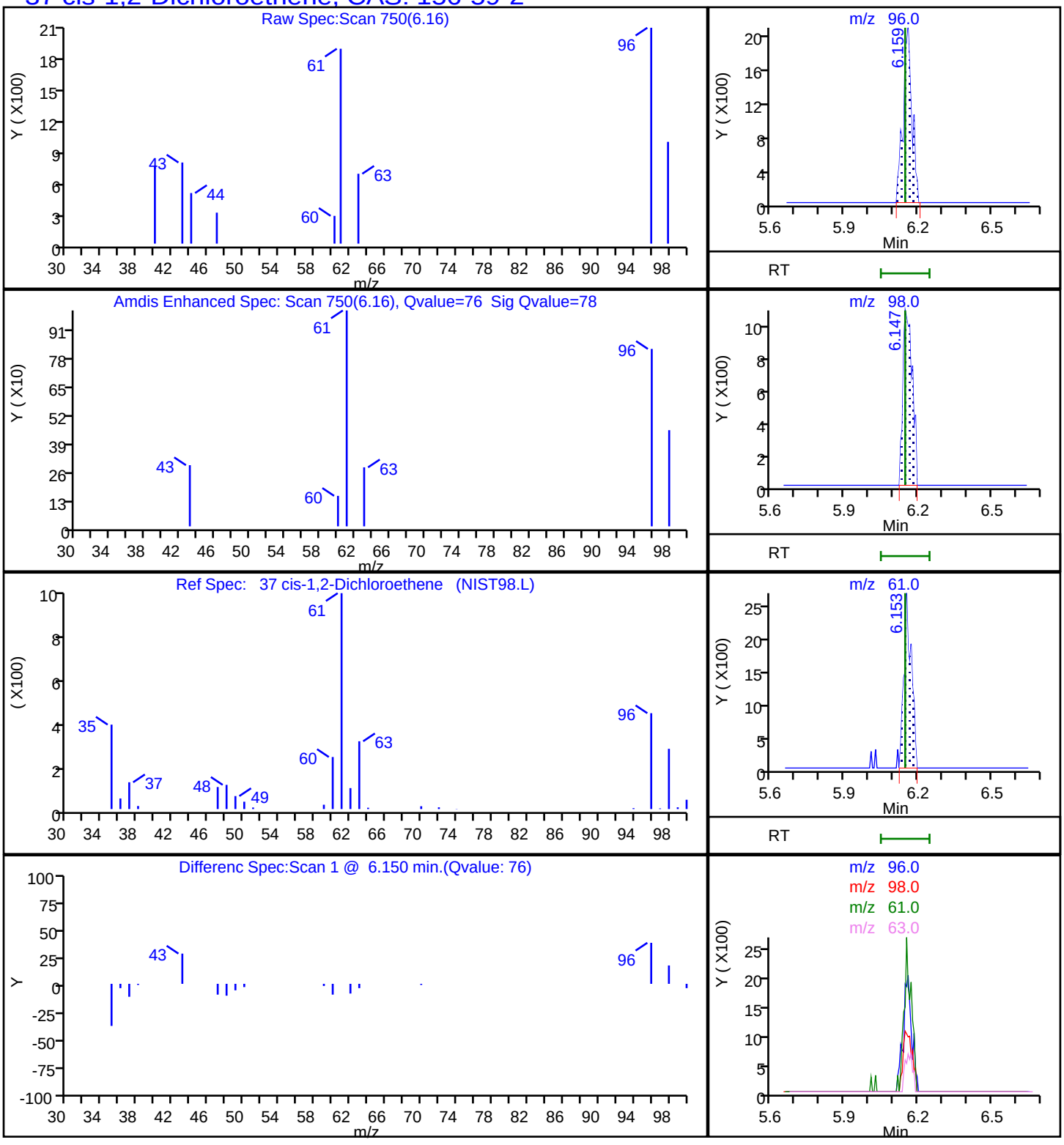
4 Chloromethane, CAS: 74-87-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S09.D				
Injection Date:	02-Jun-2021 03:39:30	Instrument ID:	19930		
Lims ID:	410-41319-A-2	Lab Sample ID:	410-41319-2		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

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



Report Date: 02-Jun-2021 14:18:04 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S09.D

Injection Date: 02-Jun-2021 03:39:30 Instrument ID: 19930

Lims ID: 410-41319-A-2 Lab Sample ID: 410-41319-2

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

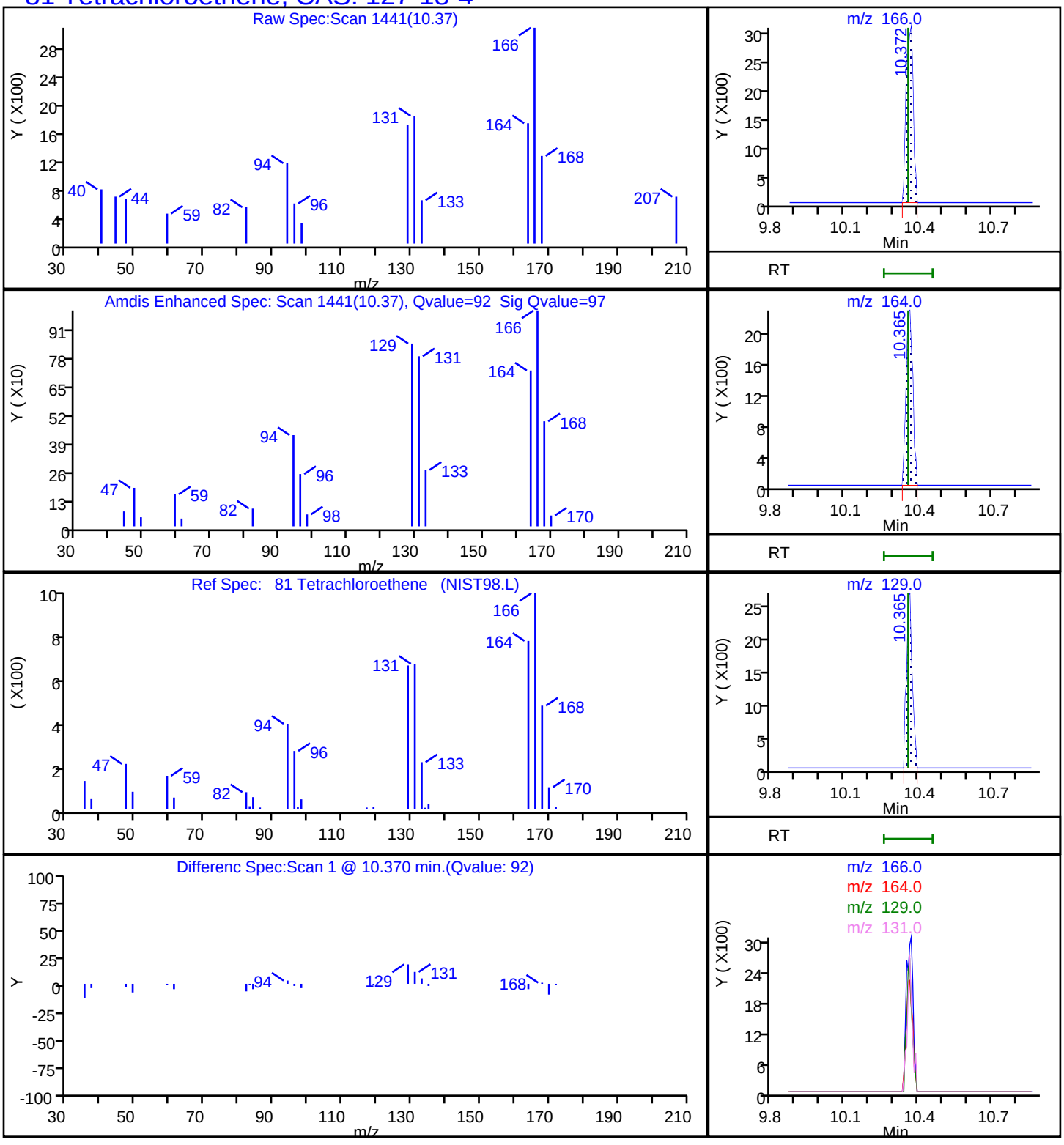
Operator ID: MEC29284 ALS Bottle#: 14 Worklist Smp#: 15

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

81 Tetrachloroethene, CAS: 127-18-4



Report Date: 02-Jun-2021 14:18:04 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S09.D

Injection Date: 02-Jun-2021 03:39:30 Instrument ID: 19930

Lims ID: 410-41319-A-2 Lab Sample ID: 410-41319-2

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

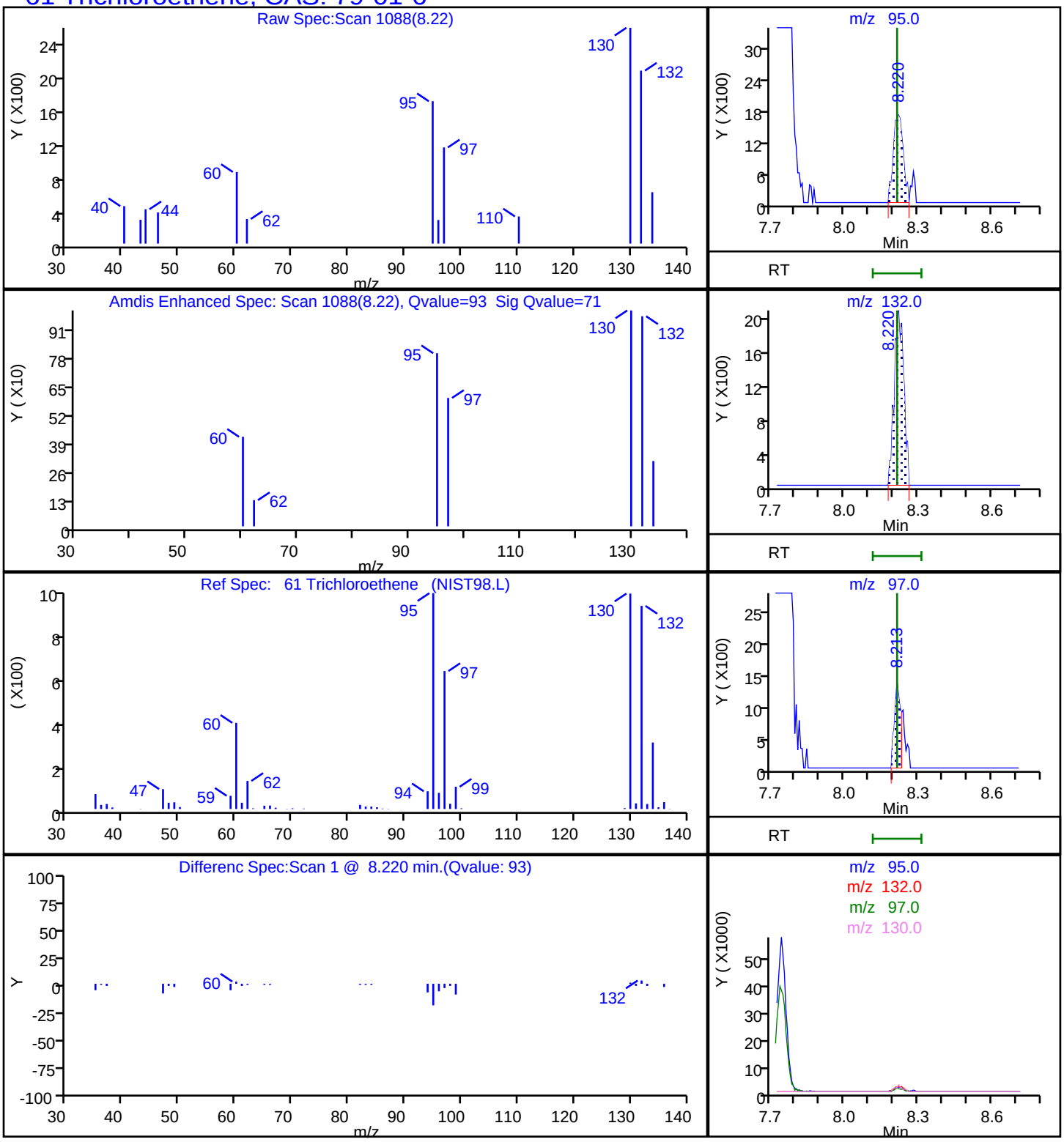
Operator ID: MEC29284 ALS Bottle#: 14 Worklist Smp#: 15

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

61 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 410-41319-3

Matrix: Water Lab File ID: IU01S10.D

Analysis Method: 8260D Date Collected: 05/25/2021 09:10

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 04:00

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 132853 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	0.11	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	0.095	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 410-41319-3

Matrix: Water Lab File ID: IU01S10.D

Analysis Method: 8260D Date Collected: 05/25/2021 09:10

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 04:00

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 132853 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)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S10.D
Lims ID: 410-41319-A-3
Client ID: HD-COD-SW-8-0/1-0
Sample Type: Client
Inject. Date: 02-Jun-2021 04:00:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-016
Misc. Info.: 410-41319-A-3
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 14:16:43 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: riehlc Date: 02-Jun-2021 14:14:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50		2.172				ND	
5 Vinyl chloride	62		2.294				ND	
7 Bromomethane	94		2.623				ND	
8 Chloroethane	64		2.702				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.617	3.592	0.025	82	10527	1.41	
19 Carbon disulfide	76	3.897	3.885	0.012	56	5044	0.0376	M
* 24 t-Butyl alcohol-d10 (IS)	65	4.275	4.233	0.042	18	115580	50.0	
23 Methylene Chloride	84		4.245				ND	
27 Methyl tert-butyl ether	73		4.647				ND	
28 trans-1,2-Dichloroethene	96		4.659				ND	
31 1,1-Dichloroethane	63		5.318				ND	
36 2-Butanone (MEK)	43		6.116				ND	7
37 cis-1,2-Dichloroethene	96	6.159	6.147	0.012	72	6604	0.1107	
43 Chlorobromomethane	128		6.482				ND	
45 Chloroform	83	6.641	6.628	0.013	14	3958	0.0416	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.848	0.006	94	433761	9.88	
47 1,1,1-Trichloroethane	97		6.860				ND	
50 Carbon tetrachloride	117		7.073				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.299	7.299	0.000	83	85896	10.0	
54 Benzene	78		7.336				ND	7
56 1,2-Dichloroethane	62		7.403				ND	
* 58 Fluorobenzene (IS)	96	7.738	7.732	0.006	99	1746406	10.0	
61 Trichloroethene	95	8.226	8.213	0.013	92	5543	0.0948	
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	7
$ 75 Toluene-d8 (Surr)	98	9.744	9.738	0.006	93	1732620	9.81	
76 Toluene	92	9.817	9.811	0.006	96	6037	0.0415	
78 trans-1,3-Dichloropropene	75		10.067				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.372	10.359	0.013	89	2771	0.0401	
83 2-Hexanone	43		10.481				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.001	84	1349740	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.292				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.755				ND	
96 Bromoform	173		11.920				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	636389	9.48	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	751794	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

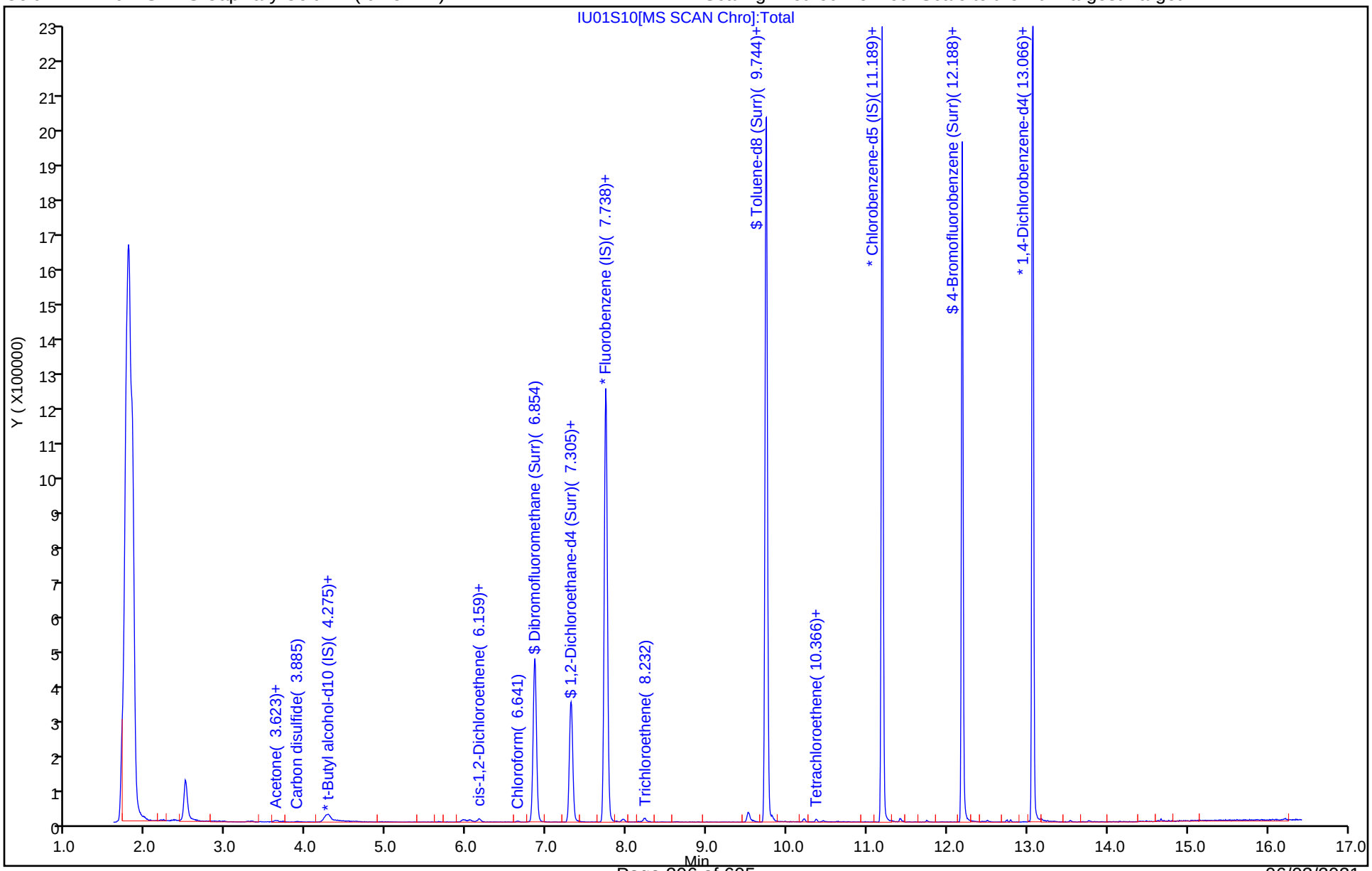
Report Date: 02-Jun-2021 14:18:05 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S10.D

Injection Date:	02-Jun-2021 04:00:30	Instrument ID:	19930	Operator ID:	MEC29284
Lims ID:	410-41319-A-3	Lab Sample ID:	410-41319-3	Worklist Smp#:	16
Client ID:	HD-COD-SW-8-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

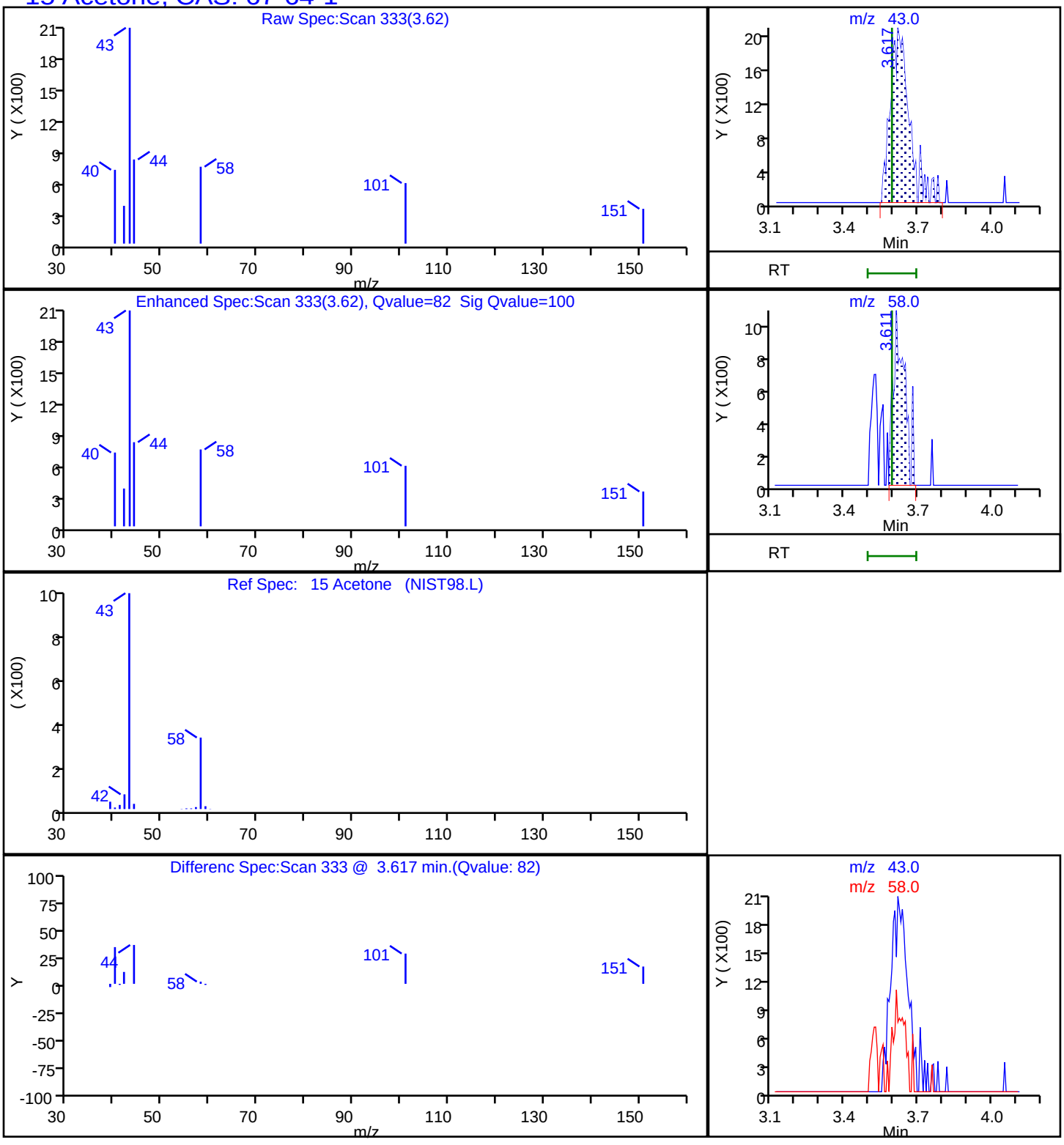
Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S10.D				
Lims ID:	410-41319-A-3				
Client ID:	HD-COD-SW-8-0/1-0				
Sample Type:	Client				
Inject. Date:	02-Jun-2021 04:00:30	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0030814-016				
Misc. Info.:	410-41319-A-3				
Operator ID:	MEC29284	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	02-Jun-2021 14:16:43	Calib Date:	26-Mar-2021 01:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1617				
First Level Reviewer: riehlc		Date:	02-Jun-2021 14:14:20		

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	9.88	98.78
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	99.94
$ 75 Toluene-d8 (Surr)	10.0	9.81	98.09
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.48	94.82

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S10.D				
Injection Date:	02-Jun-2021 04:00:30	Instrument ID:	19930		
Lims ID:	410-41319-A-3	Lab Sample ID:	410-41319-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

15 Acetone, CAS: 67-64-1



Report Date: 02-Jun-2021 14:18:05 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S10.D

Injection Date: 02-Jun-2021 04:00:30 Instrument ID: 19930

Lims ID: 410-41319-A-3 Lab Sample ID: 410-41319-3

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

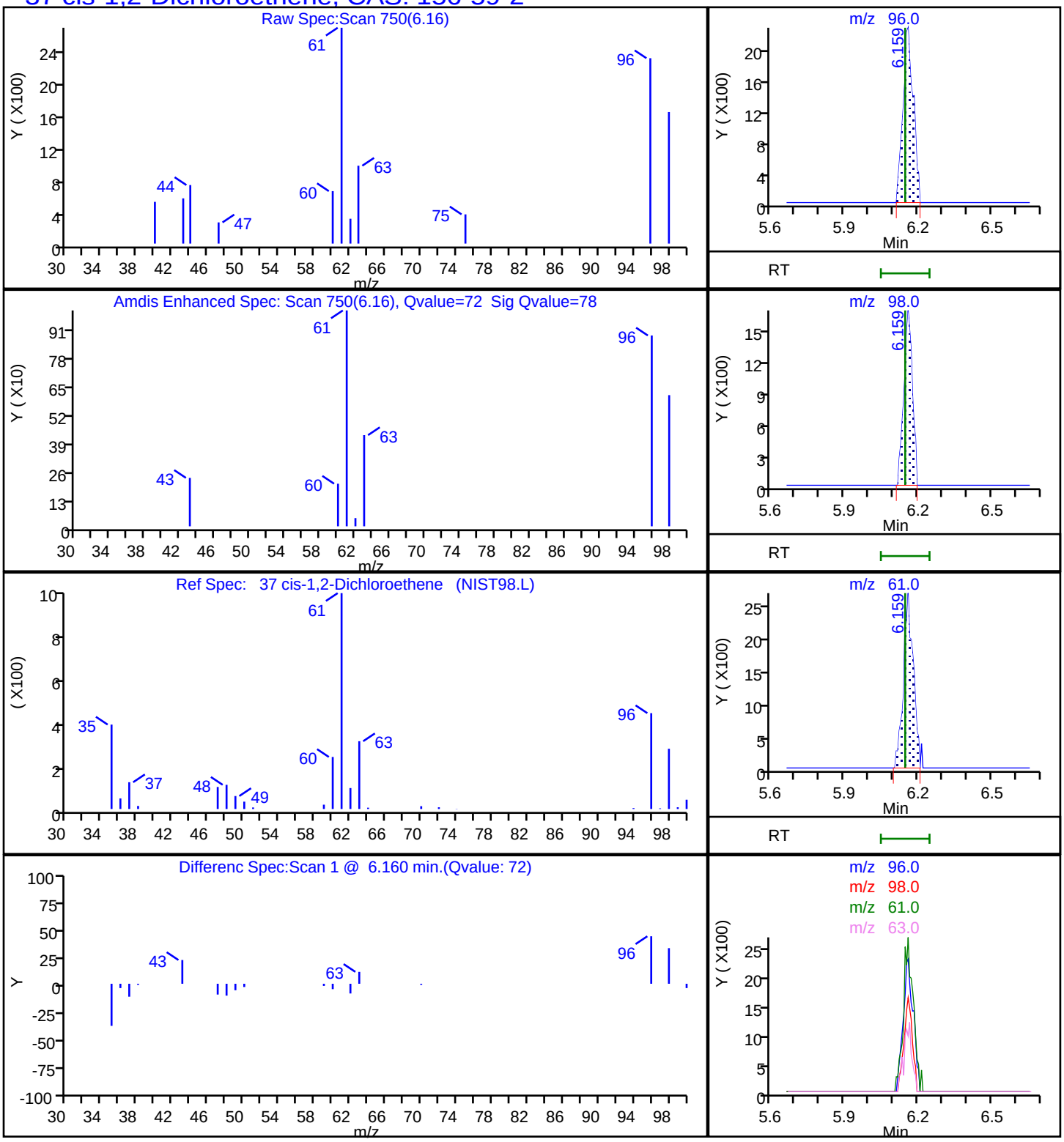
Operator ID: MEC29284 ALS Bottle#: 15 Worklist Smp#: 16

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

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



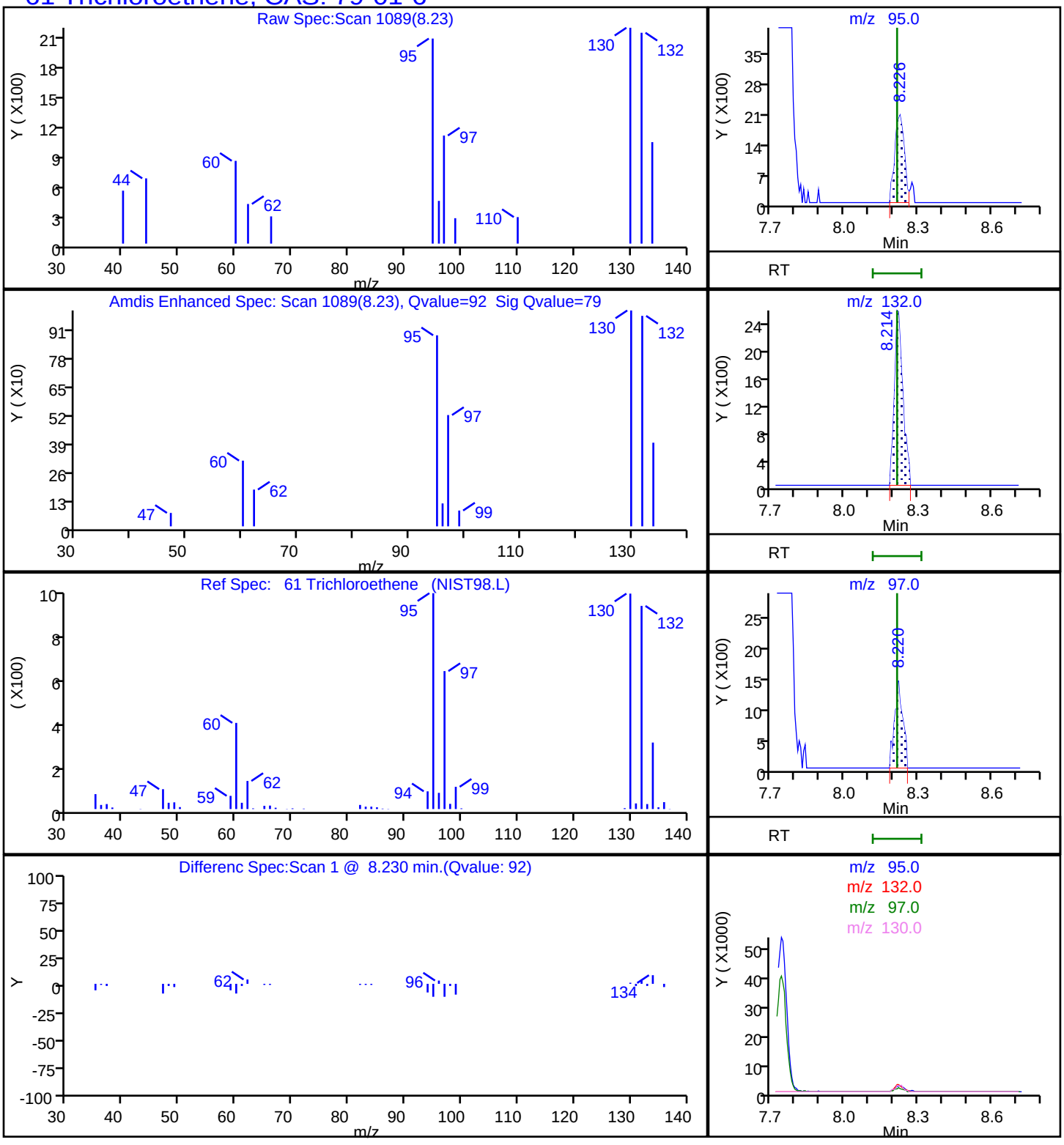
Report Date: 02-Jun-2021 14:18:05 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S10.D

Injection Date:	02-Jun-2021 04:00:30	Instrument ID:	19930		
Lims ID:	410-41319-A-3	Lab Sample ID:	410-41319-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

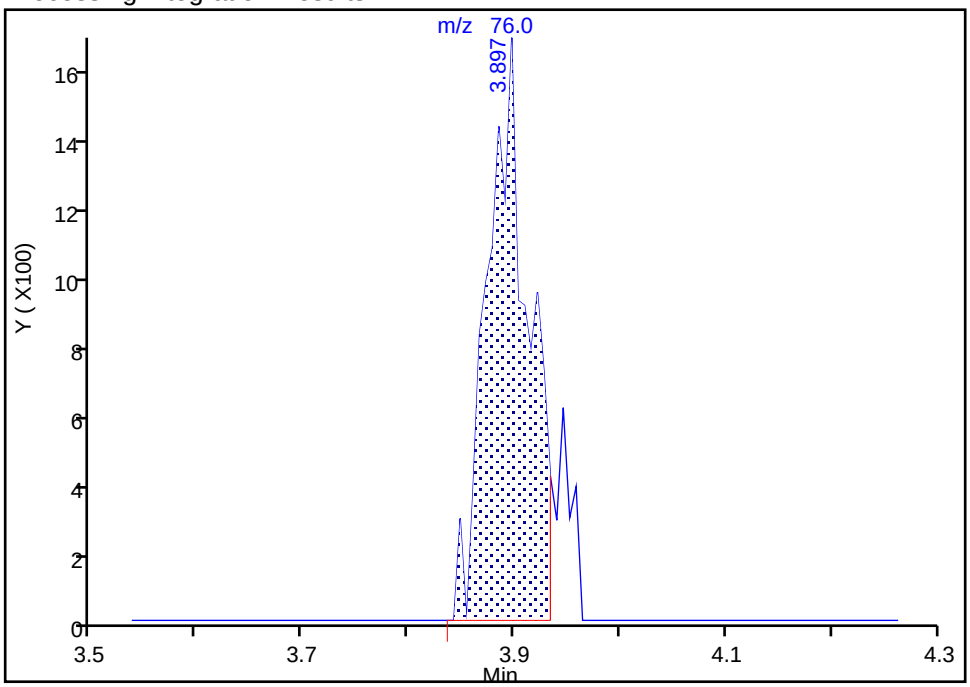
Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S10.D				
Injection Date:	02-Jun-2021 04:00:30	Instrument ID:	19930		
Lims ID:	410-41319-A-3	Lab Sample ID:	410-41319-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

19 Carbon disulfide, CAS: 75-15-0

Signal: 1

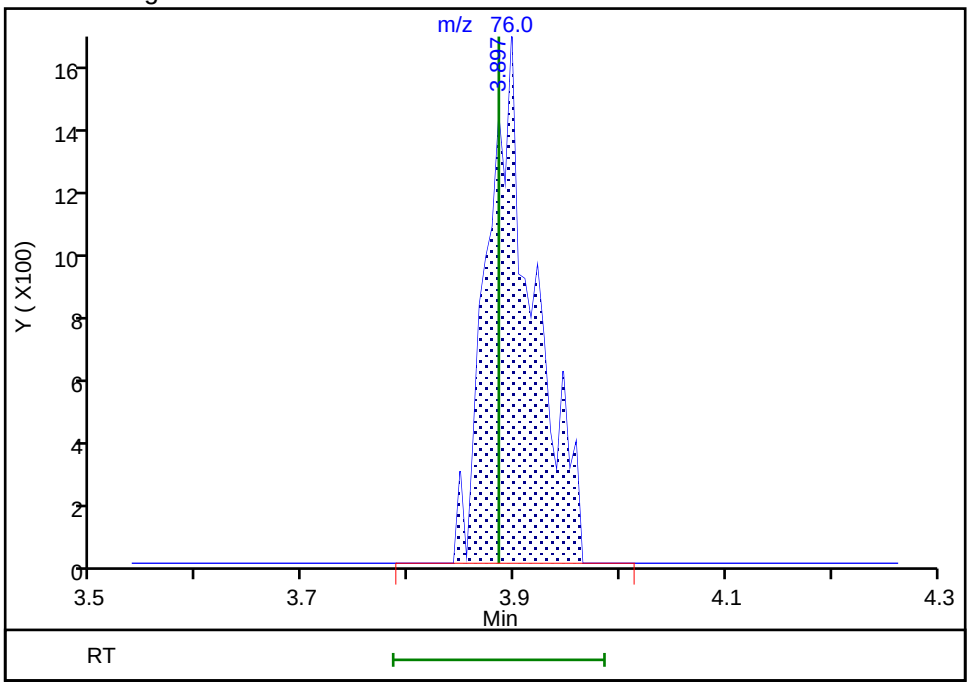
Processing Integration Results

RT: 3.90
Area: 4479
Amount: 0.033358
Amount Units: ug/l



Manual Integration Results

RT: 3.90
Area: 5044
Amount: 0.037566
Amount Units: ug/l



Reviewer: riehlc, 02-Jun-2021 14:13:45

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.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 410-41319-4

Matrix: Water Lab File ID: IU01S11.D

Analysis Method: 8260D Date Collected: 05/25/2021 12:10

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 04:21

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.: 132853 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	3.4	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	0.11	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	0.088	J	0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.073	J	0.50	0.060
108-88-3	Toluene	0.12	J	0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-9-0/1-0 Lab Sample ID: 410-41319-4

Matrix: Water Lab File ID: IU01S11.D

Analysis Method: 8260D Date Collected: 05/25/2021 12:10

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 04:21

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.: 132853 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	0.20	J	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)	92		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S11.D
Lims ID: 410-41319-A-4
Client ID: HD-COD-SW-9-0/1-0
Sample Type: Client
Inject. Date: 02-Jun-2021 04:21:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-017
Misc. Info.: 410-41319-A-4
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 14:16:43 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: riehlc Date: 02-Jun-2021 14:15:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.184	2.172	0.012	26	3834	0.0584	
5 Vinyl chloride	62		2.294				ND	
7 Bromomethane	94		2.623				ND	
8 Chloroethane	64		2.702				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.617	3.592	0.025	100	27119	3.45	
19 Carbon disulfide	76	3.891	3.885	0.006	51	5305	0.0399	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.233	0.036	78	121415	50.0	
23 Methylene Chloride	84	4.245	4.245	0.000	72	4446	0.0881	
27 Methyl tert-butyl ether	73		4.647				ND	
28 trans-1,2-Dichloroethene	96		4.659				ND	
31 1,1-Dichloroethane	63		5.318				ND	
36 2-Butanone (MEK)	43		6.116				ND	7
37 cis-1,2-Dichloroethene	96		6.147				ND	
43 Chlorobromomethane	128		6.482				ND	
45 Chloroform	83	6.641	6.628	0.013	88	10260	0.1089	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.848	0.006	94	434538	10.0	
47 1,1,1-Trichloroethane	97		6.860				ND	
50 Carbon tetrachloride	117		7.073				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.299	0.006	84	85920	10.1	
54 Benzene	78		7.336				ND	7
56 1,2-Dichloroethane	62		7.403				ND	
* 58 Fluorobenzene (IS)	96	7.738	7.732	0.006	99	1729278	10.0	
61 Trichloroethene	95	8.220	8.213	0.007	91	2019	0.0349	
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	7
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	7
$ 75 Toluene-d8 (Surr)	98	9.744	9.738	0.006	93	1724803	9.77	
76 Toluene	92	9.817	9.811	0.006	99	17928	0.1234	
78 trans-1,3-Dichloropropene	75		10.067				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.366	10.359	0.007	89	5063	0.0732	
83 2-Hexanone	43		10.481				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.001	84	1349086	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106				0		0.1989	
91 1,1,1,2-Tetrachloroethane	131		11.292				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	14962	0.1342	
94 o-Xylene	106	11.749	11.743	0.006	96	7057	0.0647	
95 Styrene	104		11.755				ND	7
96 Bromoform	173		11.920				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	95	617236	9.20	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	780222	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_LLcentISS_00001 Amount Added: 5.00 Units: uL Run Reagent

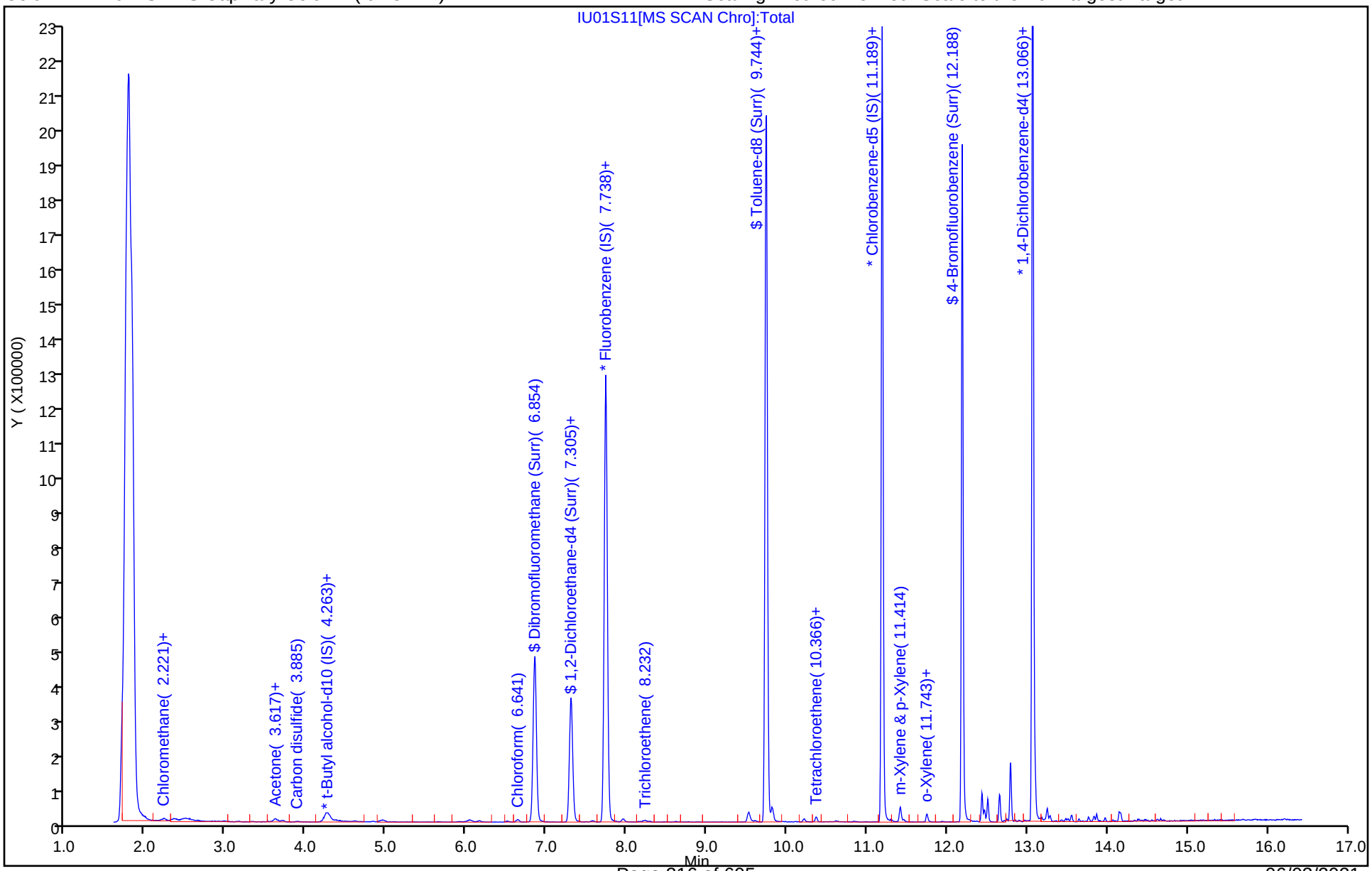
Report Date: 02-Jun-2021 14:18:07 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S11.D

Injection Date:	02-Jun-2021 04:21:30	Instrument ID:	19930	Operator ID:	MEC29284
Lims ID:	410-41319-A-4	Lab Sample ID:	410-41319-4	Worklist Smp#:	17
Client ID:	HD-COD-SW-9-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S11.D
Lims ID: 410-41319-A-4
Client ID: HD-COD-SW-9-0/1-0
Sample Type: Client
Inject. Date: 02-Jun-2021 04:21:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-017
Misc. Info.: 410-41319-A-4
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 14:16:43 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

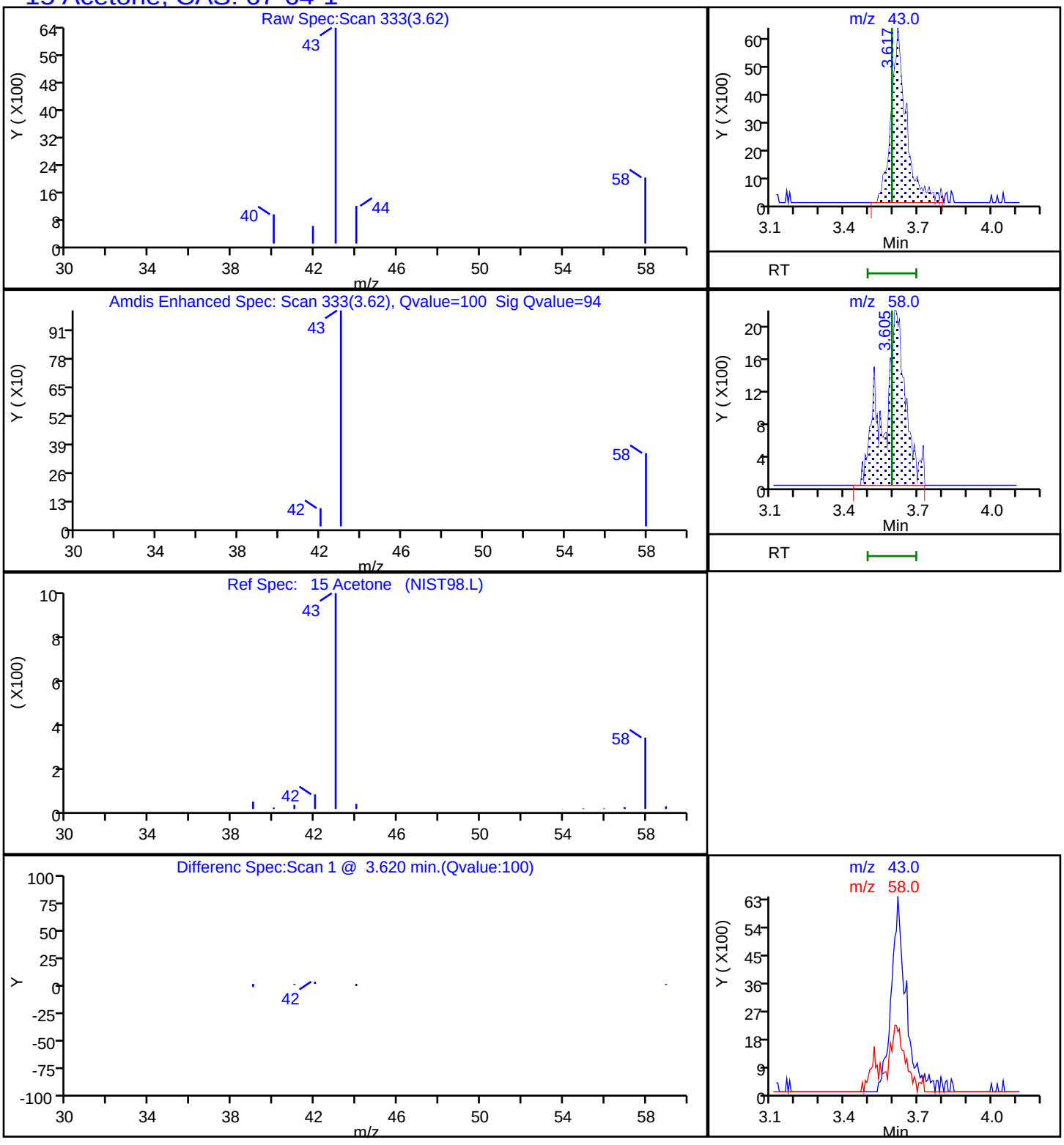
First Level Reviewer: riehlc Date: 02-Jun-2021 14:15:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.0	99.93
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.96
$ 75 Toluene-d8 (Surr)	10.0	9.77	97.69
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.20	92.02

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S11.D				
Injection Date:	02-Jun-2021 04:21:30	Instrument ID:	19930		
Lims ID:	410-41319-A-4	Lab Sample ID:	410-41319-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

15 Acetone, CAS: 67-64-1

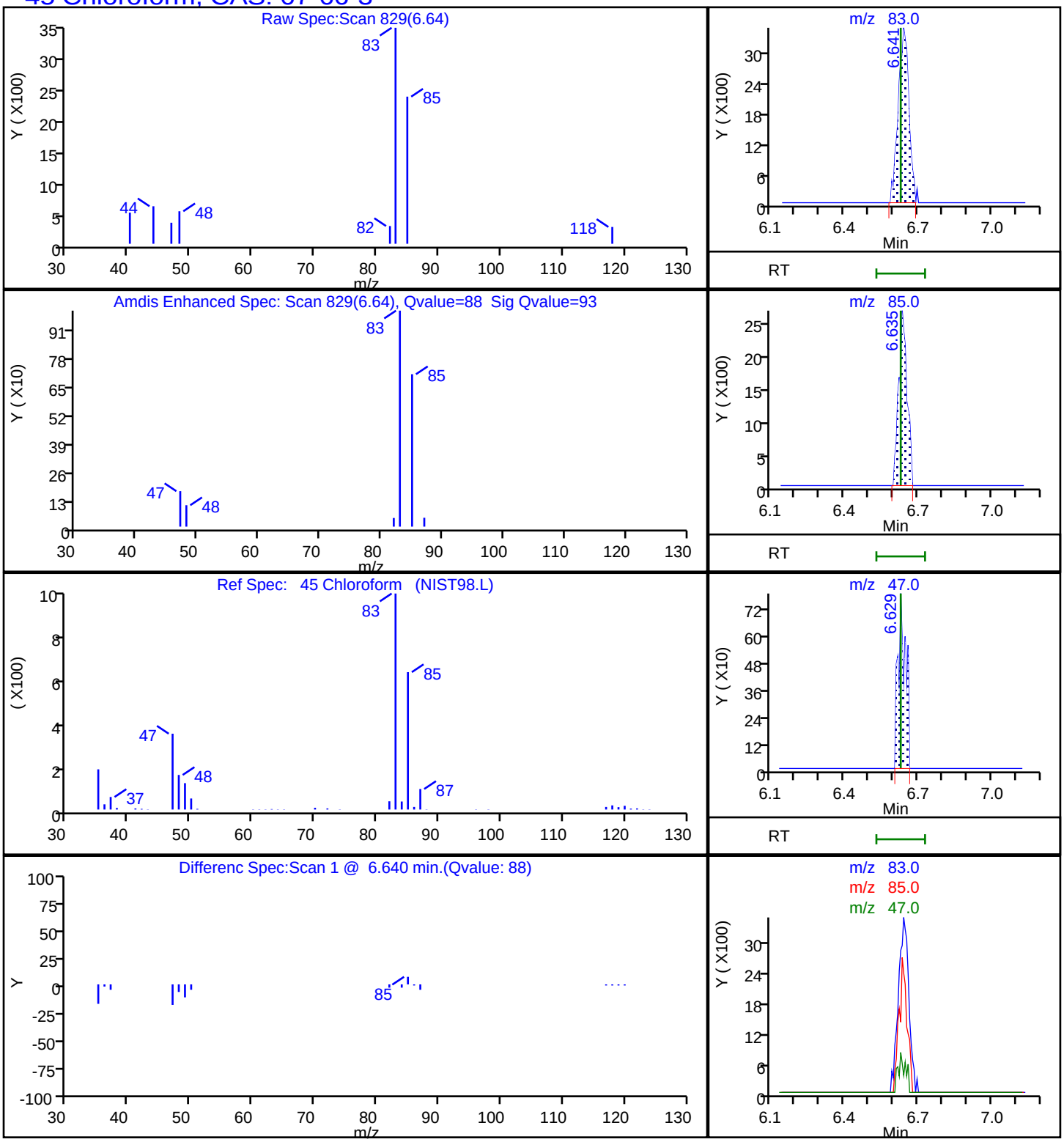


Report Date: 02-Jun-2021 14:18:07 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S11.D				
Injection Date:	02-Jun-2021 04:21:30	Instrument ID:	19930		
Lims ID:	410-41319-A-4	Lab Sample ID:	410-41319-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

45 Chloroform, CAS: 67-66-3



Report Date: 02-Jun-2021 14:18:07 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S11.D

Injection Date: 02-Jun-2021 04:21:30 Instrument ID: 19930

Lims ID: 410-41319-A-4 Lab Sample ID: 410-41319-4

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

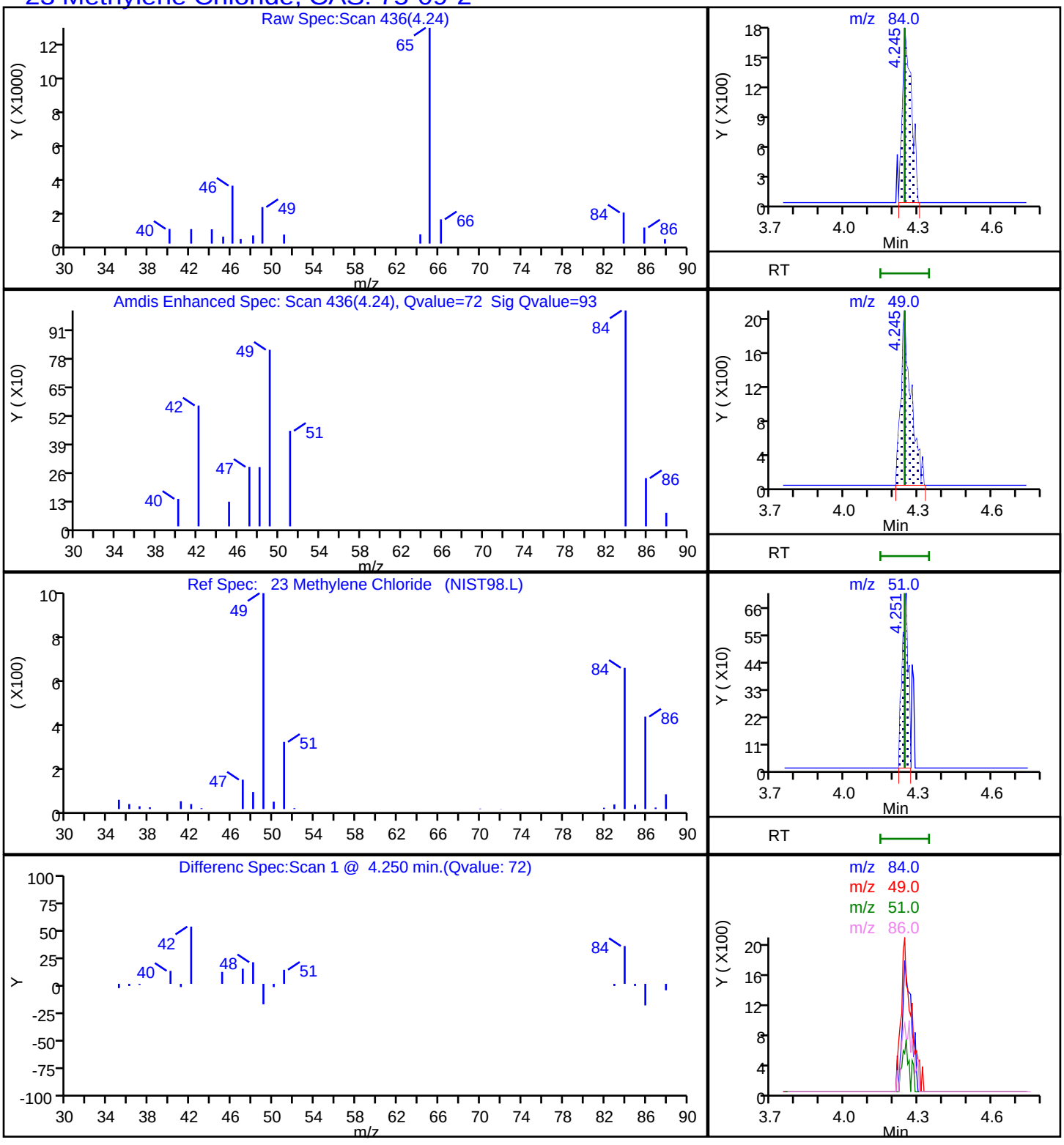
Operator ID: MEC29284 ALS Bottle#: 16 Worklist Smp#: 17

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

23 Methylene Chloride, CAS: 75-09-2



Report Date: 02-Jun-2021 14:18:08 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S11.D

Injection Date: 02-Jun-2021 04:21:30 Instrument ID: 19930

Lims ID: 410-41319-A-4 Lab Sample ID: 410-41319-4

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

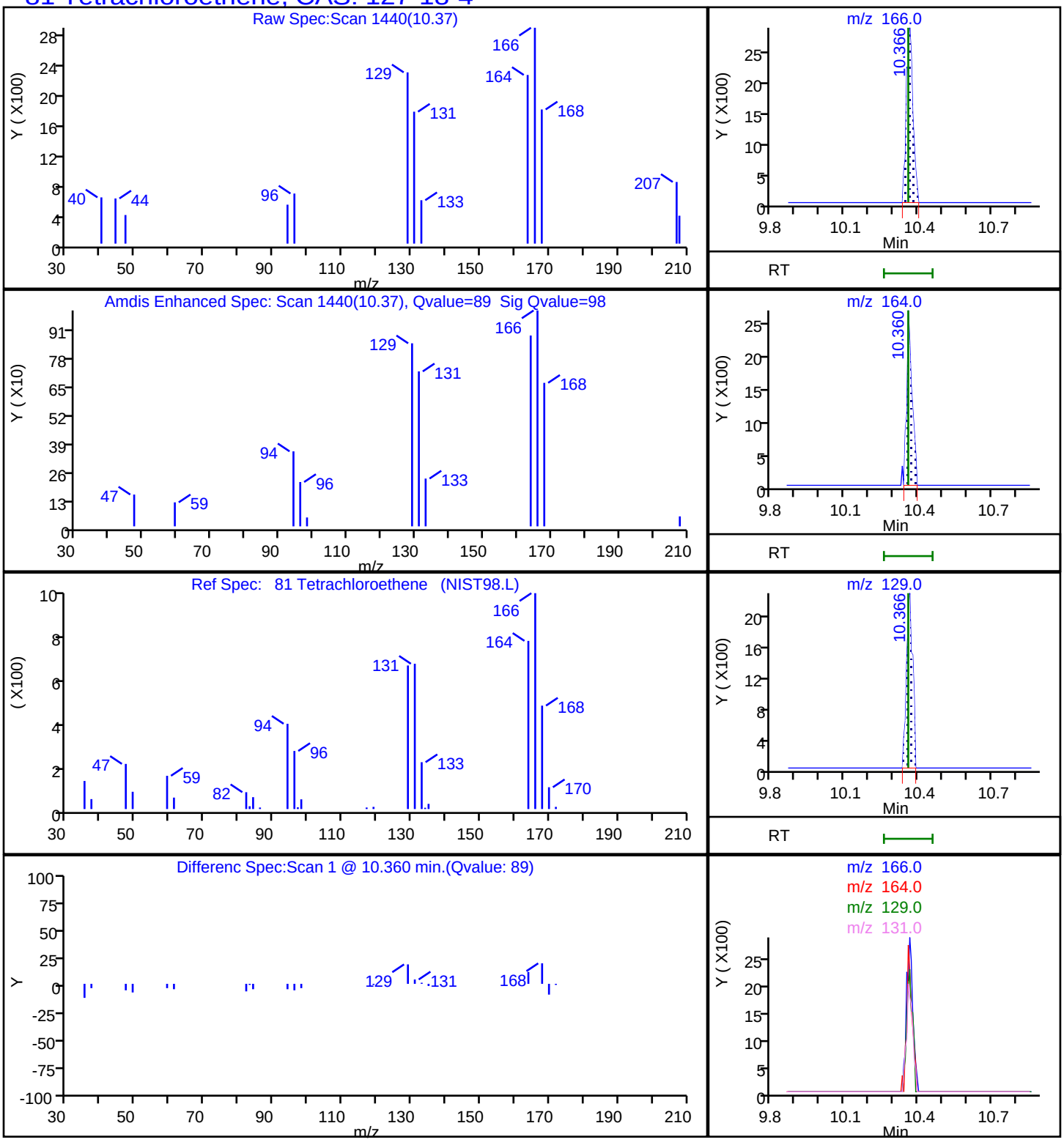
Operator ID: MEC29284 ALS Bottle#: 16 Worklist Smp#: 17

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

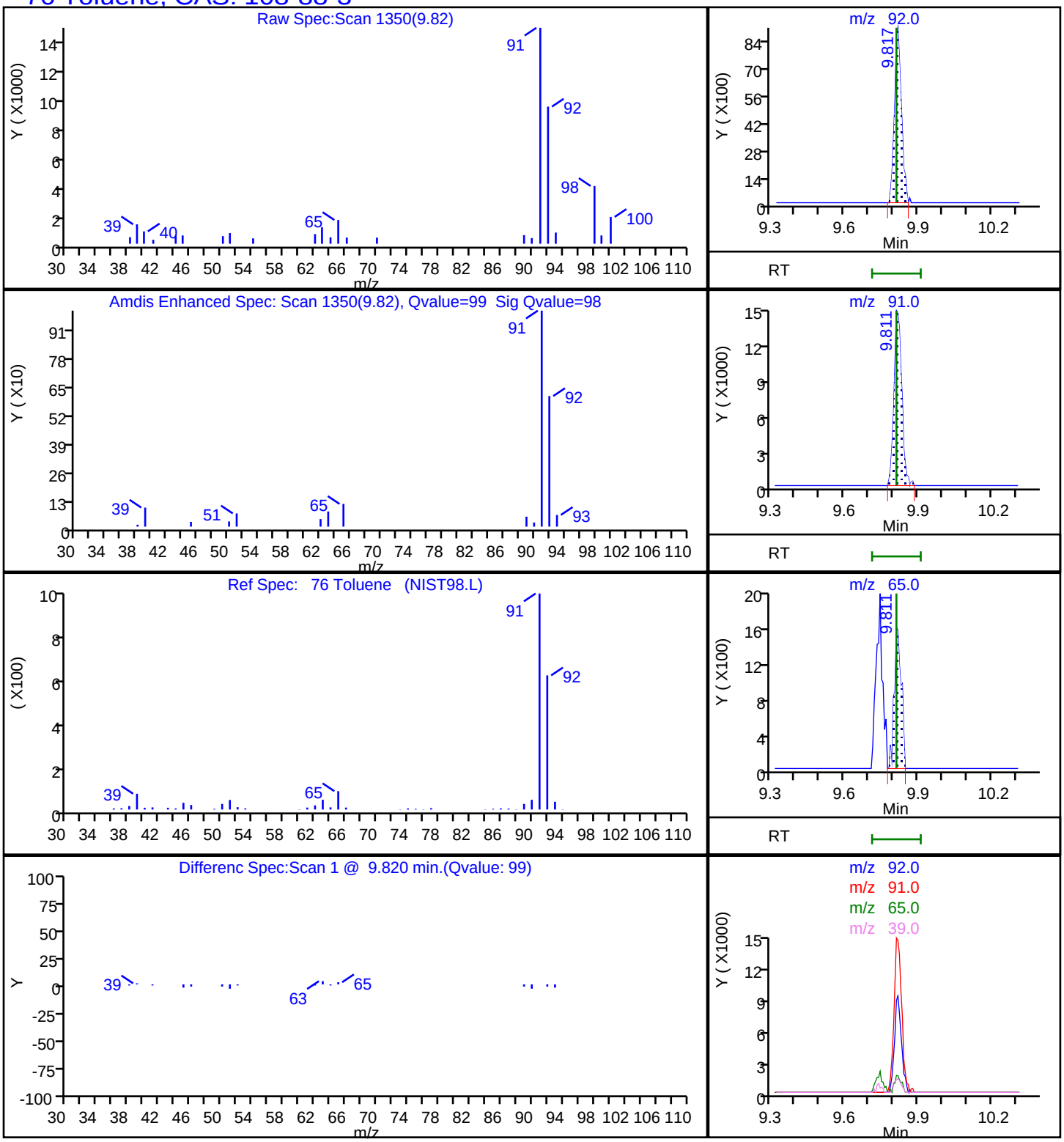
81 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S11.D				
Injection Date:	02-Jun-2021 04:21:30	Instrument ID:	19930		
Lims ID:	410-41319-A-4	Lab Sample ID:	410-41319-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

76 Toluene, CAS: 108-88-3

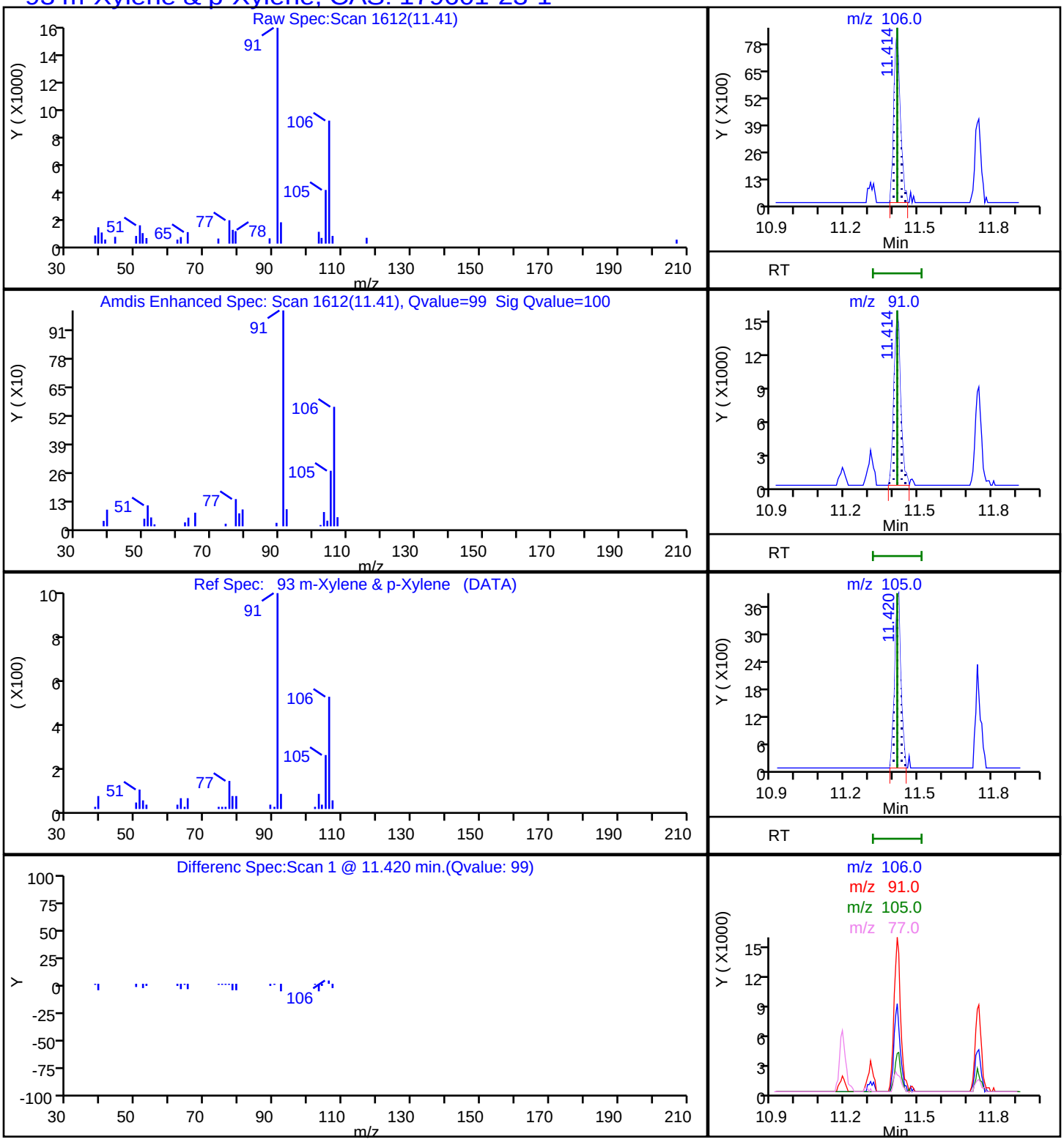


Report Date: 02-Jun-2021 14:18:08 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S11.D				
Injection Date:	02-Jun-2021 04:21:30	Instrument ID:	19930		
Lims ID:	410-41319-A-4	Lab Sample ID:	410-41319-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

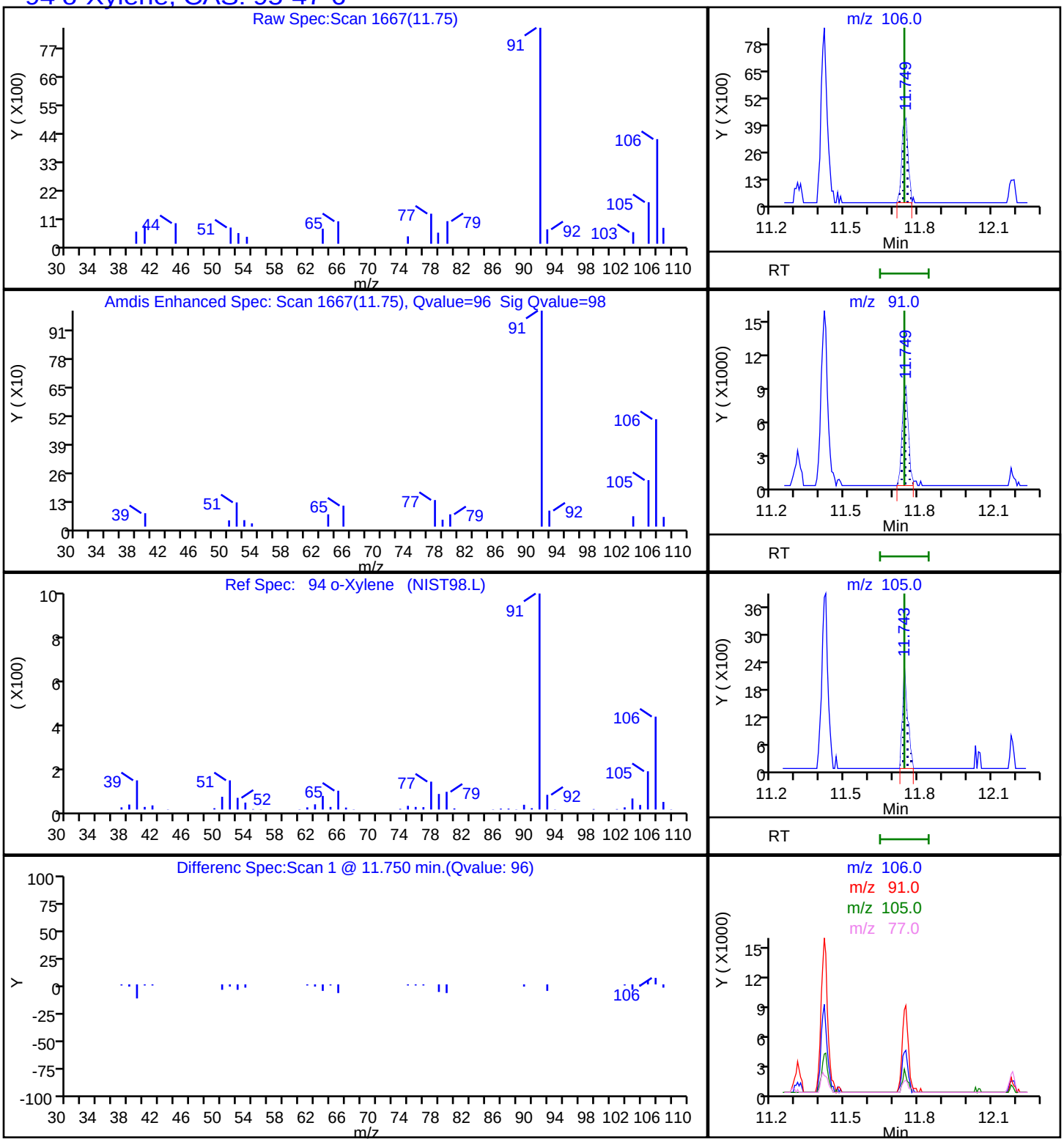
93 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S11.D				
Injection Date:	02-Jun-2021 04:21:30	Instrument ID:	19930		
Lims ID:	410-41319-A-4	Lab Sample ID:	410-41319-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

94 o-Xylene, CAS: 95-47-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 410-41319-5

Matrix: Water Lab File ID: IU01S12.D

Analysis Method: 8260D Date Collected: 05/25/2021 09:25

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 04:43

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.: 132853 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	ND		0.50	0.090
74-87-3	Chloromethane	0.070	J	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	0.092	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-13-0/1-0 Lab Sample ID: 410-41319-5

Matrix: Water Lab File ID: IU01S12.D

Analysis Method: 8260D Date Collected: 05/25/2021 09:25

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 04:43

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.: 132853 Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-120
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S12.D
Lims ID: 410-41319-A-5
Client ID: HD-COD-SW-13-0/1-0
Sample Type: Client
Inject. Date: 02-Jun-2021 04:43:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-018
Misc. Info.: 410-41319-A-5
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 14:16:43 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: riehlc Date: 02-Jun-2021 14:15:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.184	2.172	0.012	92	4607	0.0697	
5 Vinyl chloride	62		2.294				ND	
7 Bromomethane	94		2.623				ND	
8 Chloroethane	64		2.702				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.611	3.592	0.019	98	10879	1.29	
19 Carbon disulfide	76	3.879	3.885	-0.006	94	5519	0.0412	
* 24 t-Butyl alcohol-d10 (IS)	65	4.251	4.233	0.018	22	129827	50.0	
23 Methylene Chloride	84		4.245				ND	
27 Methyl tert-butyl ether	73		4.647				ND	
28 trans-1,2-Dichloroethene	96		4.659				ND	
31 1,1-Dichloroethane	63		5.318				ND	
36 2-Butanone (MEK)	43		6.116				ND	7
37 cis-1,2-Dichloroethene	96	6.159	6.147	0.012	74	6580	0.1105	
43 Chlorobromomethane	128		6.482				ND	
45 Chloroform	83	6.641	6.628	0.013	88	3830	0.0403	
$ 46 Dibromofluoromethane (Surr)	113	6.848	6.848	0.000	94	430073	9.82	
47 1,1,1-Trichloroethane	97		6.860				ND	
50 Carbon tetrachloride	117		7.073				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.293	7.299	-0.006	83	85151	9.93	
54 Benzene	78		7.336				ND	7
56 1,2-Dichloroethane	62		7.403				ND	
* 58 Fluorobenzene (IS)	96	7.738	7.732	0.006	99	1741987	10.0	
61 Trichloroethene	95	8.220	8.213	0.007	94	5340	0.0915	
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	7
$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	93	1718548	10.1	
76 Toluene	92	9.811	9.811	0.000	93	5604	0.0402	
78 trans-1,3-Dichloropropene	75		10.067				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.372	10.359	0.013	93	3414	0.0515	
83 2-Hexanone	43		10.481				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1294062	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.292				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.755				ND	
96 Bromoform	173		11.920				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	632499	9.83	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	782172	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_LLcentISS_00001 Amount Added: 5.00 Units: uL Run Reagent

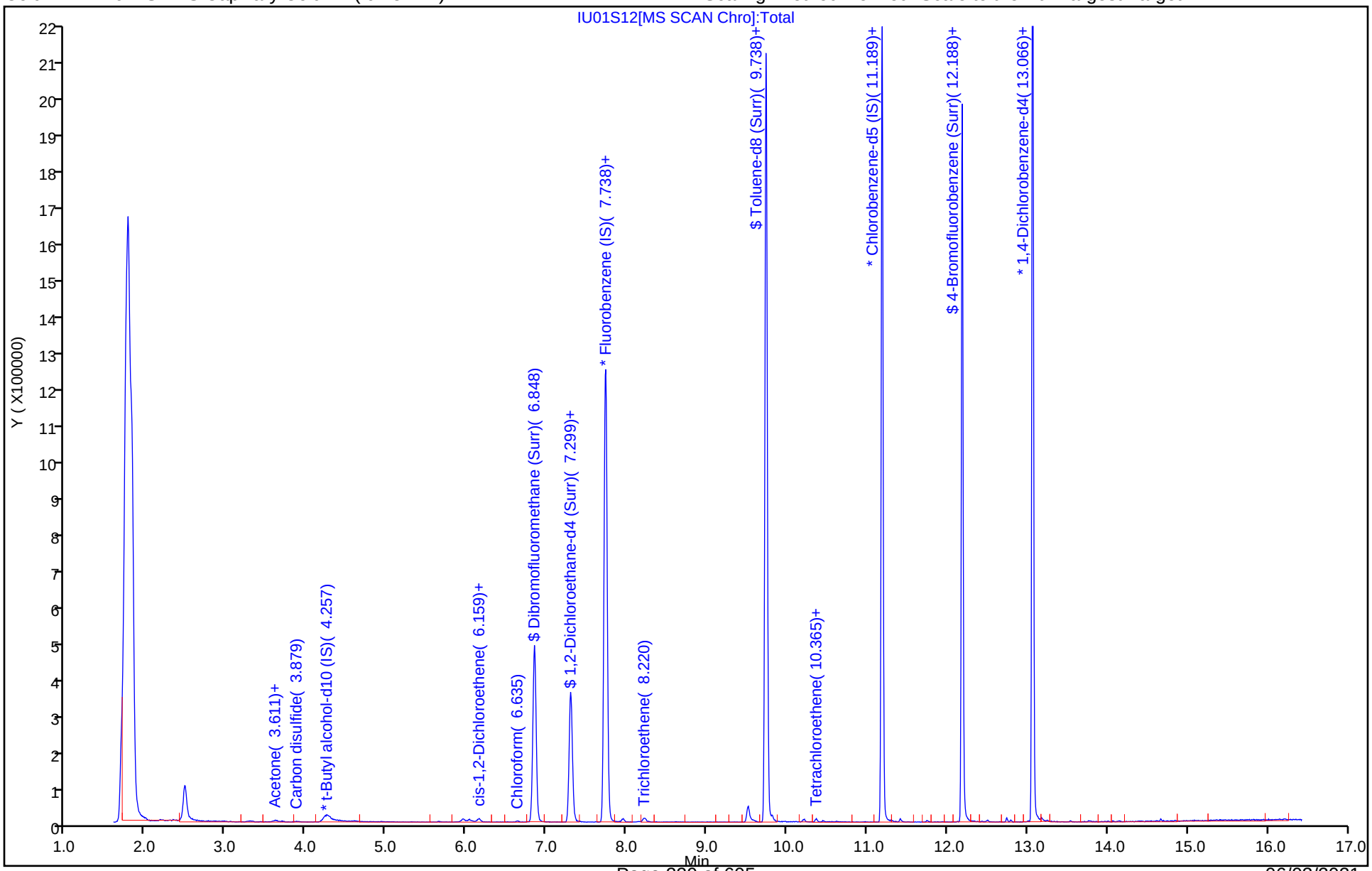
Report Date: 02-Jun-2021 14:18:09 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S12.D

Injection Date:	02-Jun-2021 04:43:30	Instrument ID:	19930	Operator ID:	MEC29284
Lims ID:	410-41319-A-5	Lab Sample ID:	410-41319-5	Worklist Smp#:	18
Client ID:	HD-COD-SW-13-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

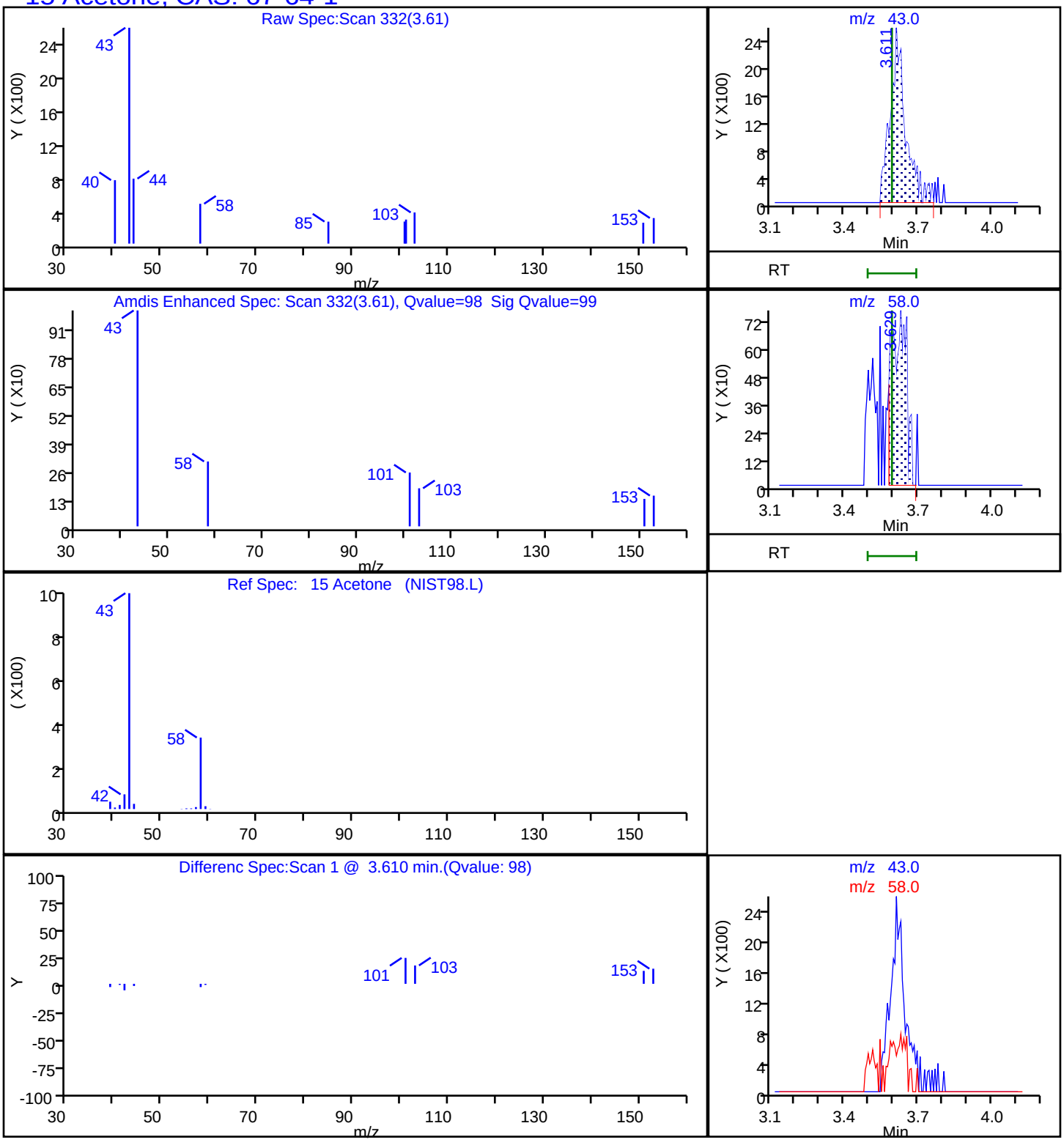
Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S12.D				
Lims ID:	410-41319-A-5				
Client ID:	HD-COD-SW-13-0/1-0				
Sample Type:	Client				
Inject. Date:	02-Jun-2021 04:43:30	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0030814-018				
Misc. Info.:	410-41319-A-5				
Operator ID:	MEC29284	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	02-Jun-2021 14:16:43	Calib Date:	26-Mar-2021 01:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1617				
First Level Reviewer: riehlc		Date:	02-Jun-2021 14:15:47		

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	9.82	98.19
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.93	99.32
$ 75 Toluene-d8 (Surr)	10.0	10.1	101.48
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.83	98.30

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S12.D				
Injection Date:	02-Jun-2021 04:43:30	Instrument ID:	19930		
Lims ID:	410-41319-A-5	Lab Sample ID:	410-41319-5		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

15 Acetone, CAS: 67-64-1



Report Date: 02-Jun-2021 14:18:09 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S12.D

Injection Date: 02-Jun-2021 04:43:30 Instrument ID: 19930

Lims ID: 410-41319-A-5 Lab Sample ID: 410-41319-5

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

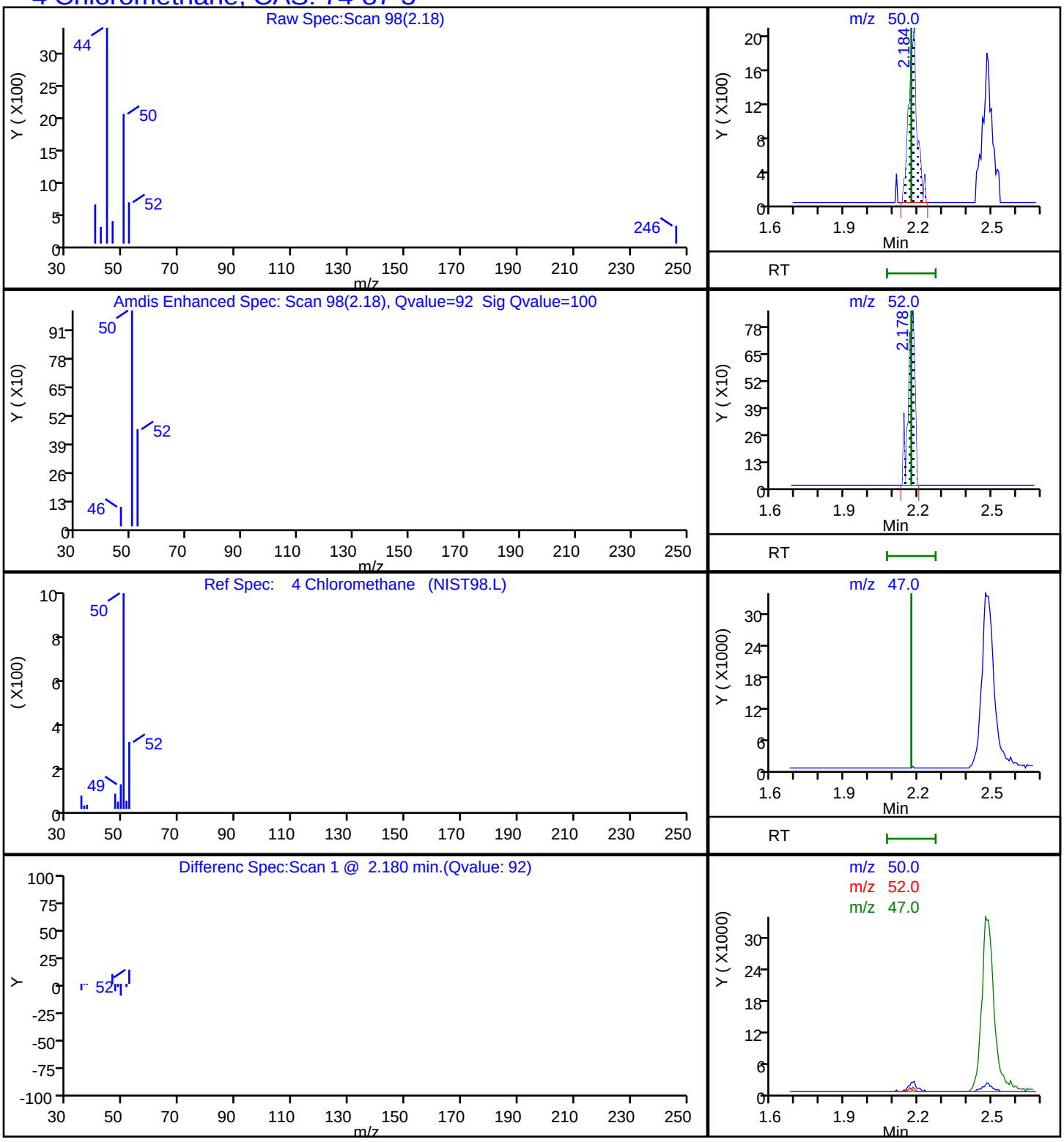
Operator ID: MEC29284 ALS Bottle#: 17 Worklist Smp#: 18

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

4 Chloromethane, CAS: 74-87-3



Report Date: 02-Jun-2021 14:18:09 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S12.D

Injection Date: 02-Jun-2021 04:43:30 Instrument ID: 19930

Lims ID: 410-41319-A-5 Lab Sample ID: 410-41319-5

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

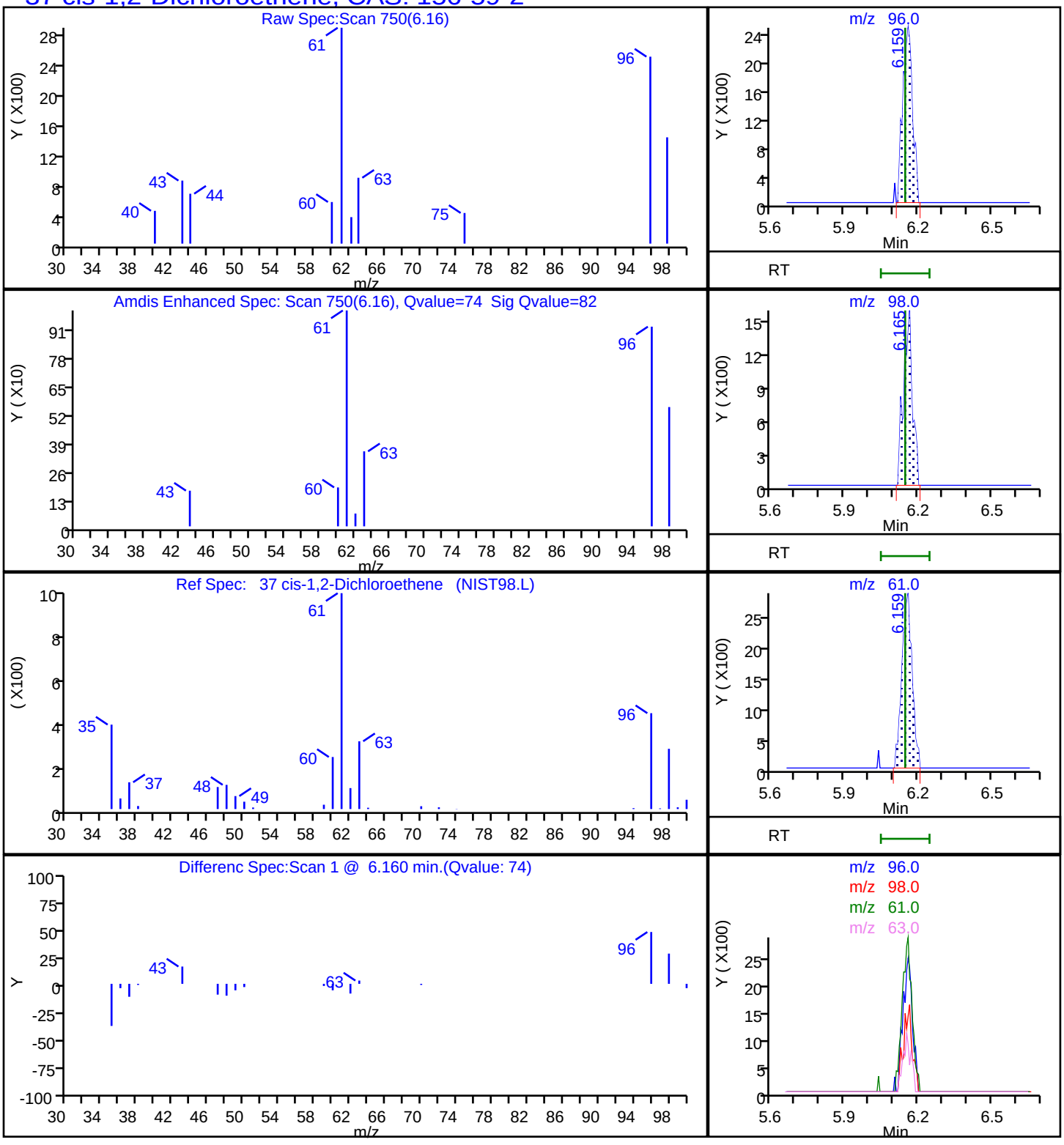
Operator ID: MEC29284 ALS Bottle#: 17 Worklist Smp#: 18

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

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



Report Date: 02-Jun-2021 14:18:09 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S12.D

Injection Date: 02-Jun-2021 04:43:30 Instrument ID: 19930

Lims ID: 410-41319-A-5 Lab Sample ID: 410-41319-5

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

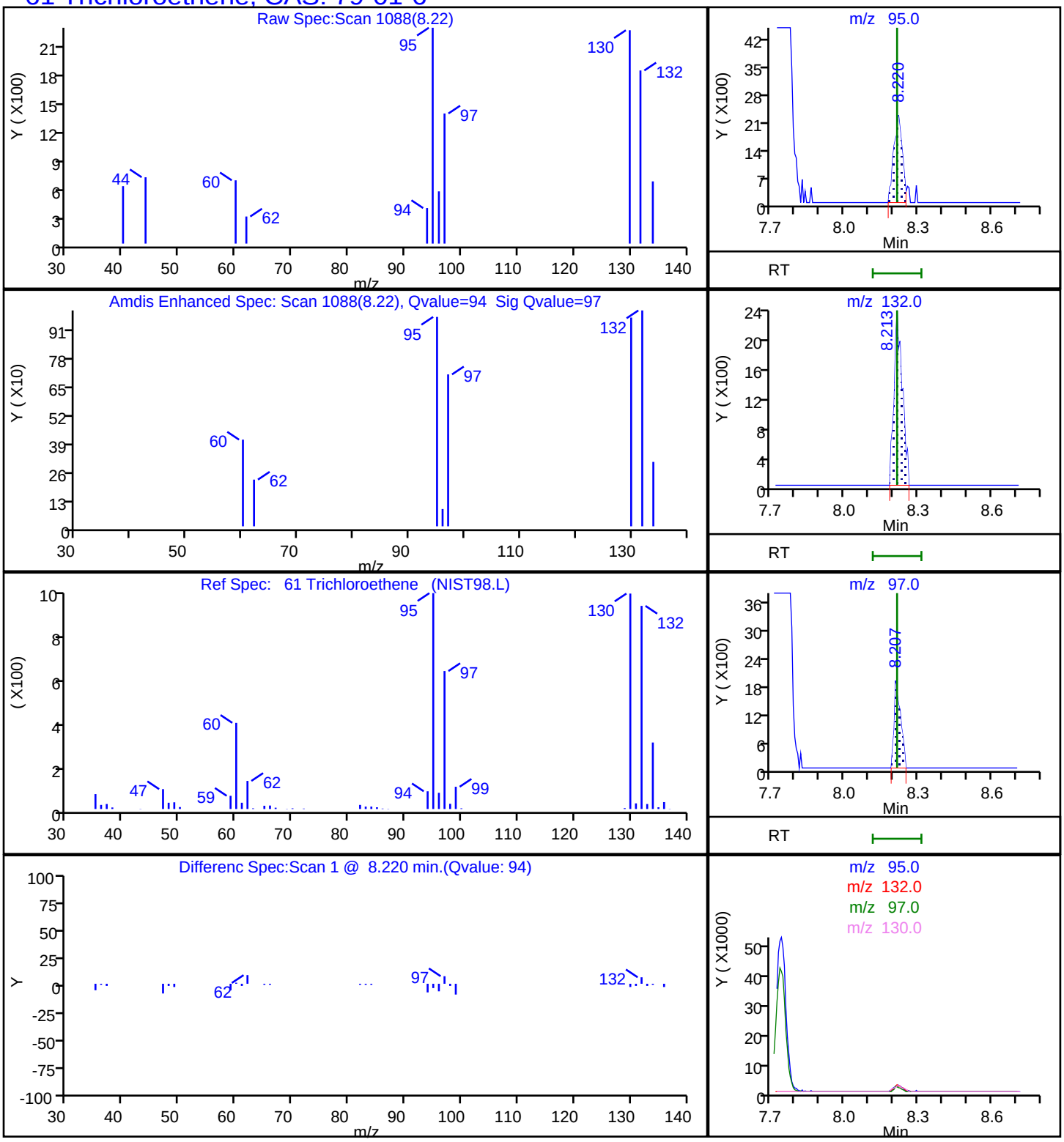
Operator ID: MEC29284 ALS Bottle#: 17 Worklist Smp#: 18

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

61 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 410-41319-6

Matrix: Water Lab File ID: IU01S03.D

Analysis Method: 8260D Date Collected: 05/25/2021 11:30

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 01:32

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 132853 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	0.086	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	0.077	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	0.26	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.63		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	0.75		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 410-41319-6

Matrix: Water Lab File ID: IU01S03.D

Analysis Method: 8260D Date Collected: 05/25/2021 11:30

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 01:32

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 132853 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)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S03.D
Lims ID: 410-41319-A-6
Client ID: HD-COD-SW-15-0/1-0
Sample Type: Client
Inject. Date: 02-Jun-2021 01:32:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-009
Misc. Info.: 410-41319-A-6
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 14:16:43 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: riehlc Date: 02-Jun-2021 14:04:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85		1.977				ND	
2 Chlorodifluoromethane	51		1.989				ND	
3 Dimethyl ether	45		2.044				ND	
4 Chloromethane	50		2.172				ND	
6 Butadiene	39		2.288				ND	7
5 Vinyl chloride	62		2.294				ND	
7 Bromomethane	94		2.623				ND	
8 Chloroethane	64		2.702				ND	
9 Dichlorofluoromethane	67		2.946				ND	7
10 Trichlorofluoromethane	101		3.019				ND	
11 Ethyl ether	59		3.251				ND	
T 200 Ethanol TIC	45		3.288				ND	7
12 1,2-Dichloro-1,1,2-trifluoroetha	67		3.349				ND	
13 Acrolein	56		3.422				ND	7
14 1,1-Dichloroethene	96	3.580	3.574	0.006	93	3834	0.0771	
15 Acetone	43		3.592				ND	7
16 112TCTFE	101		3.611				ND	
17 Iodomethane	142		3.769				ND	
18 Ethyl bromide	108		3.800				ND	
19 Carbon disulfide	76		3.885				ND	7
20 Acetonitrile	41		3.995				ND	
21 Methyl acetate	43		4.019				ND	
22 3-Chloro-1-propene	41		4.050				ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.251	4.233	0.018	17	141156	50.0	
23 Methylene Chloride	84		4.245				ND	
25 2-Methyl-2-propanol	59		4.367				ND	7
26 Acrylonitrile	53		4.580				ND	
27 Methyl tert-butyl ether	73	4.653	4.647	0.006	1	4561	0.0313	
28 trans-1,2-Dichloroethene	96		4.659				ND	
29 Hexane	57		5.080				ND	
31 1,1-Dichloroethane	63	5.318	5.318	0.000	85	4264	0.0389	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
30 Vinyl acetate	43		5.324				ND	
T 208 Vinyl acetate (TIC)	43		5.336				ND	
32 Isopropyl ether	45		5.379				ND	
33 2-Chloro-1,3-butadiene	53		5.427				ND	
34 Tert-butyl ethyl ether	59		5.909				ND	7
36 2-Butanone (MEK)	43		6.116				ND	7
37 cis-1,2-Dichloroethene	96	6.159	6.147	0.012	78	41189	0.6299	
S 35 1,2-Dichloroethene, Total	100				0		0.6299	
38 2,2-Dichloropropane	77		6.171				ND	
39 Ethyl acetate	43		6.190				ND	U
40 Propionitrile	54		6.202				ND	
41 Methyl acrylate	55		6.245				ND	
42 Methacrylonitrile	67		6.415				ND	
43 Chlorobromomethane	128		6.482				ND	
44 Tetrahydrofuran	71		6.494				ND	
45 Chloroform	83	6.641	6.628	0.013	93	27488	0.2635	
$ 46 Dibromofluoromethane (Surr)	113	6.848	6.848	0.000	94	484241	10.1	
47 1,1,1-Trichloroethane	97	6.866	6.860	0.006	55	8187	0.0863	
48 Cyclohexane	56		6.958				ND	
49 1-Chlorobutane	56		7.019				ND	
50 Carbon tetrachloride	117		7.073				ND	
51 1,1-Dichloropropene	75		7.073				ND	
52 Isobutyl alcohol	41		7.214				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.299	0.006	84	94286	10.0	
54 Benzene	78		7.336				ND	
56 1,2-Dichloroethane	62		7.403				ND	
55 Isopropyl acetate	43	7.500	7.409	0.091	1	191	0.002311	
57 Tert-amyl methyl ether	73		7.518				ND	
* 58 Fluorobenzene (IS)	96	7.738	7.732	0.006	99	1913540	10.0	
59 n-Heptane	43		7.744				ND	7
60 n-Butanol	56		8.092				ND	
61 Trichloroethene	95	8.214	8.213	0.001	96	48112	0.7507	
62 Methylcyclohexane	83		8.518				ND	
63 1,2-Dichloropropane	63		8.549				ND	
64 Methyl methacrylate	69		8.622				ND	
65 1,4-Dioxane	88		8.634				ND	
66 Dibromomethane	93		8.659				ND	
67 n-Propyl acetate	43		8.708				ND	
68 Dichlorobromomethane	83		8.890				ND	
69 2-Nitropropane	41		9.152				ND	
70 Chloroacetonitrile	75		9.226				ND	
71 2-Chloroethyl vinyl ether	63		9.250				ND	
72 1-Bromo-2-chloroethane	63		9.280				ND	
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	7
$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	93	1918557	9.80	
76 Toluene	92	9.817	9.811	0.006	99	7433	0.0461	
T 157 3-Chloro-1,2-propanediol TIC	44	9.994	10.000	-0.006	1	660	0.003449	
T 146 2,3-Dibromo-1-propanol TIC	57	9.756	10.000	-0.244	1	380	0.001986	
T 147 2-Bromoethanol TIC	45	9.768	10.000	-0.232	1	213	0.001113	
T 156 2,3-Dibromopropene TIC	119	10.366	10.000	0.366	1	1109	0.005796	
T 149 2-Chloroethanol TIC	44	9.994	10.000	-0.006	1	660	0.003449	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
T 151 Chloroacetaldehyde TIC	50	9.823	10.000	-0.177	1	299	0.001563	
T 148 Monochloroacetic acid TIC	50	9.823	10.000	-0.177	1	299	0.001563	
T 154 2-Bromo-3-chloropropene TIC	75	9.738	10.000	-0.262	1	307	0.001604	
T 153 Epichlorohydrin TIC	57		10.000				ND	
T 155 Ethylene oxide TIC	44	9.994	10.000	-0.006	62	660	0.003449	
T 152 Vinyl bromide TIC	106	11.304	10.000	1.304	1	988	0.005163	
T 150 Epibromohydrin TIC	57	9.756	10.000	-0.244	6	380	0.001986	
S 77 1,3-Dichloropropene, Total	100		10.060				ND	7
78 trans-1,3-Dichloropropene	75		10.067				ND	
79 Ethyl methacrylate	69		10.128				ND	
80 1,1,2-Trichloroethane	97		10.274				ND	7
81 Tetrachloroethene	166	10.359	10.359	0.000	96	167760	2.19	
82 1,3-Dichloropropane	76		10.433				ND	
83 2-Hexanone	43		10.481				ND	
84 n-Butyl acetate	43		10.603				ND	
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.001	84	1495578	10.0	
88 1-Chlorohexane	91		11.195				ND	7
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.292				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.755				ND	
96 Bromoform	173		11.920				ND	
97 Isopropylbenzene	105		12.042				ND	
98 cis-1,4-Dichloro-2-butene	88		12.085				ND	
99 Cyclohexanone	55		12.115				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	702337	9.44	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
102 Bromobenzene	156		12.304				ND	
103 trans-1,4-Dichloro-2-butene	53		12.310				ND	
104 1,2,3-Trichloropropane	110		12.329				ND	
105 N-Propylbenzene	91		12.371				ND	7
106 2-Chlorotoluene	126		12.444				ND	
107 1,3,5-Trimethylbenzene	105		12.505				ND	7
108 4-Chlorotoluene	126		12.542				ND	
109 tert-Butylbenzene	134		12.749				ND	
110 Pentachloroethane	167		12.780				ND	
111 1,2,4-Trimethylbenzene	105		12.786				ND	7
112 sec-Butylbenzene	105		12.908				ND	
113 1,3-Dichlorobenzene	146		13.011				ND	
114 4-Isopropyltoluene	119		13.017				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	876332	10.0	
116 1,4-Dichlorobenzene	146		13.084				ND	7
117 1,2,3-Trimethylbenzene	120		13.091				ND	7
118 Benzyl chloride	126		13.158				ND	
119 n-Butylbenzene	92		13.310				ND	7
120 1,2-Dichlorobenzene	146		13.347				ND	
121 Hexachloroethane	117		13.542				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
122 1,2-Dibromo-3-Chloropropane	155		13.889				ND	
123 1,3,5-Trichlorobenzene	180		14.011				ND	
124 1,2,4-Trichlorobenzene	180		14.438				ND	
125 Hexachlorobutadiene	225		14.517				ND	7
126 Naphthalene	128		14.615				ND	7
127 1,2,3-Trichlorobenzene	180		14.761				ND	
128 Dodecane	57		0.000				ND	
204 Pentane	43		0.000				ND	
203 Propargyl alcohol TIC	1		0.000				ND	
202 1,3-Dichloro-2-propanol TIC	1		0.000				ND	
138 1,1-Dichloro-1-fluoroethane	1		0.000				ND	
137 2-Methylnaphthalene	142		0.000				ND	
135 p-Diethylbenzene	1		0.000				ND	
136 2-Chloro-1,1,1-Trifluoroethane	1		0.000				ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	
205 1,1-Dichloroacetone	1		0.000				ND	
139 1-Bromo-3-Chloropropane	1		0.000				ND	
143 n-Decane	57		0.000				ND	
129 Propene oxide	1		0.000				ND	
141 1-Chloropropane	1		0.000				ND	
134 Isopropyl alcohol	45		0.000				ND	
T 201 Isopropyl alcohol TIC	45	1.788	0.000	1.788	1	256723	1.34	
133 t-Amyl alcohol	1		0.000				ND	
132 Methylal	1		0.000				ND	
131 tert-Butyl Formate	1		0.000				ND	
142 2-Bromo-1-chloropropane	1		0.000				ND	
206 Pentachloroethane TIC	1		0.000				ND	
130 Chlorotrifluoroethene	1		0.000				ND	
207 Acetonitrile TIC	1		0.000				ND	
140 Ethanol	45		3.288				ND	

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

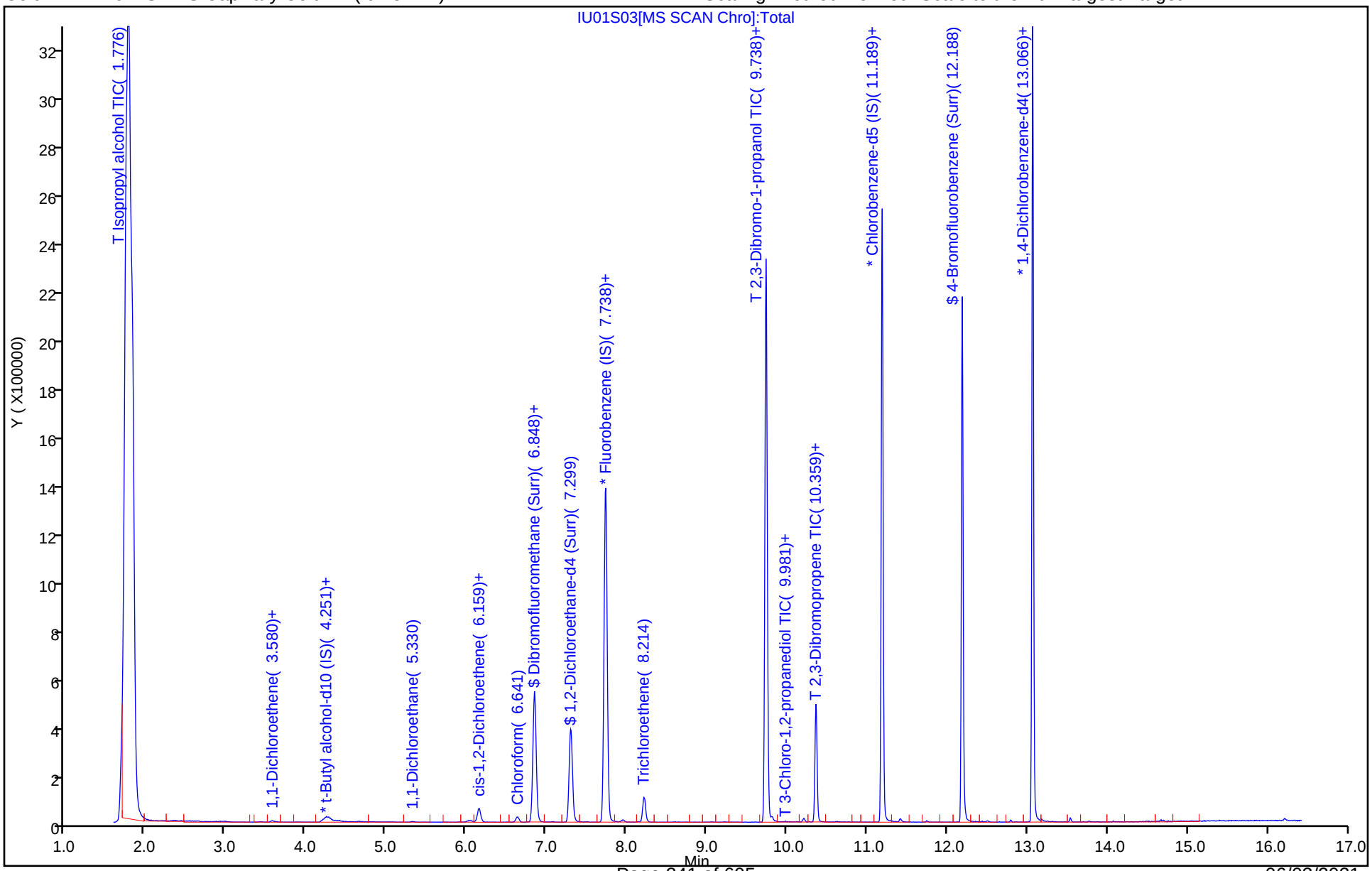
Report Date: 02-Jun-2021 14:18:18 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S03.D

Injection Date:	02-Jun-2021 01:32:30	Instrument ID:	19930	Operator ID:	MEC29284
Lims ID:	410-41319-A-6	Lab Sample ID:	410-41319-6	Worklist Smp#:	9
Client ID:	HD-COD-SW-15-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S03.D
Lims ID: 410-41319-A-6
Client ID: HD-COD-SW-15-0/1-0
Sample Type: Client
Inject. Date: 02-Jun-2021 01:32:30 ALS Bottle#: 8 Worklist Smp#: 9
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-009
Misc. Info.: 410-41319-A-6
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 14:16:43 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

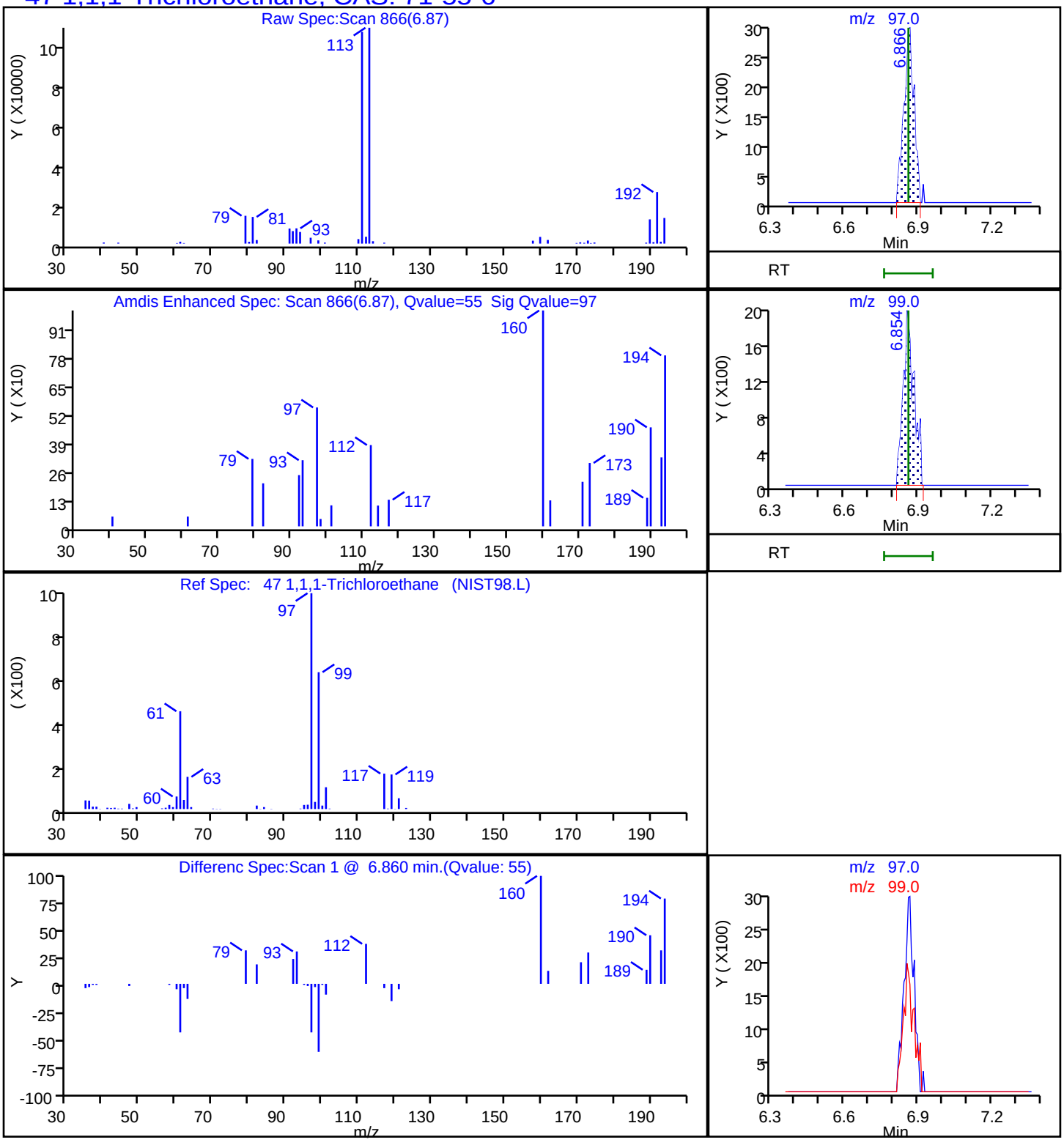
First Level Reviewer: riehlc Date: 02-Jun-2021 14:04:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.1	100.64
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	100.12
$ 75 Toluene-d8 (Surr)	10.0	9.80	98.02
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.44	94.45

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S03.D				
Injection Date:	02-Jun-2021 01:32:30	Instrument ID:	19930		
Lims ID:	410-41319-A-6	Lab Sample ID:	410-41319-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

47 1,1,1-Trichloroethane, CAS: 71-55-6



Report Date: 02-Jun-2021 14:18:18 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S03.D

Injection Date: 02-Jun-2021 01:32:30 Instrument ID: 19930

Lims ID: 410-41319-A-6 Lab Sample ID: 410-41319-6

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

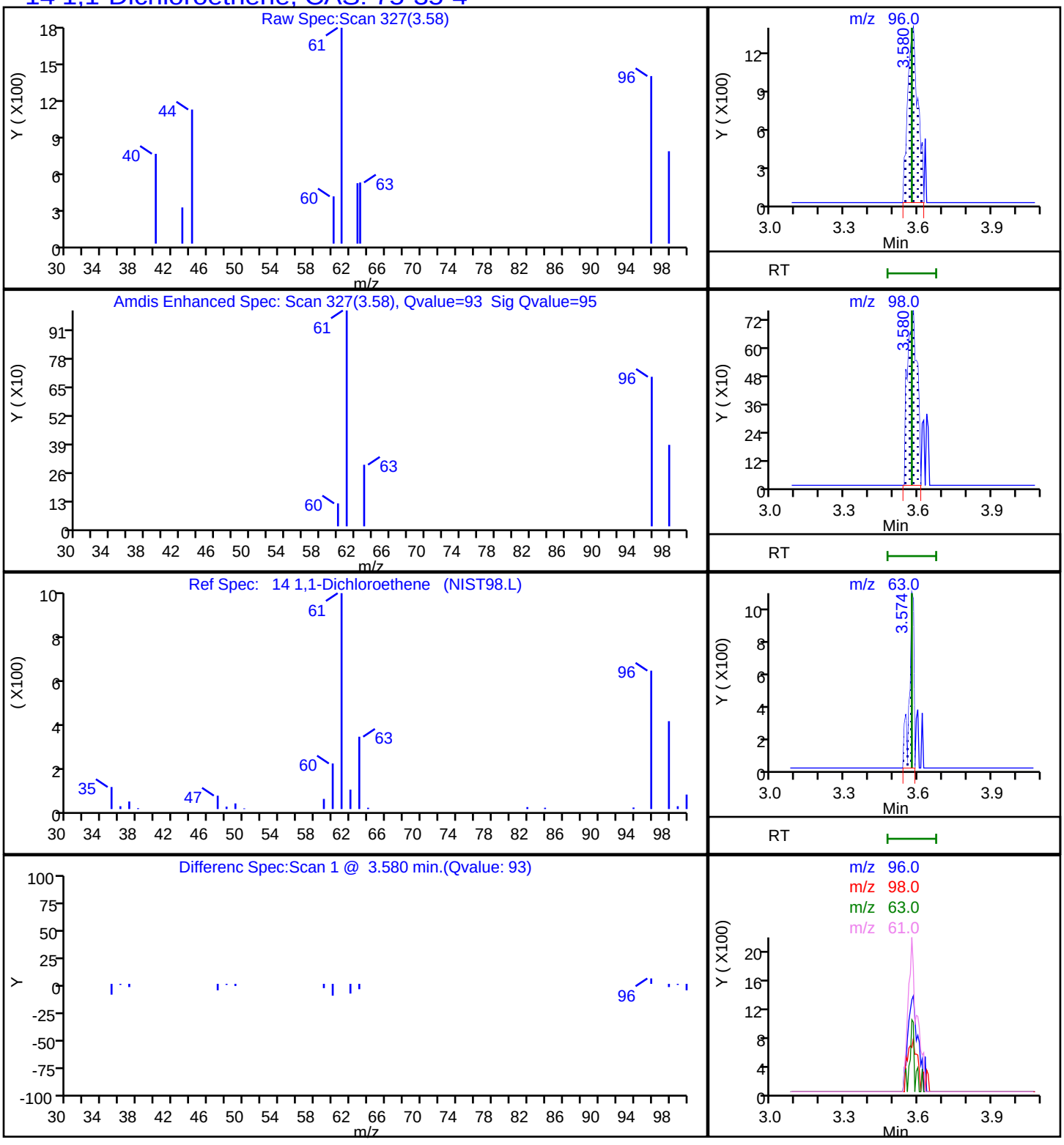
Operator ID: MEC29284 ALS Bottle#: 8 Worklist Smp#: 9

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

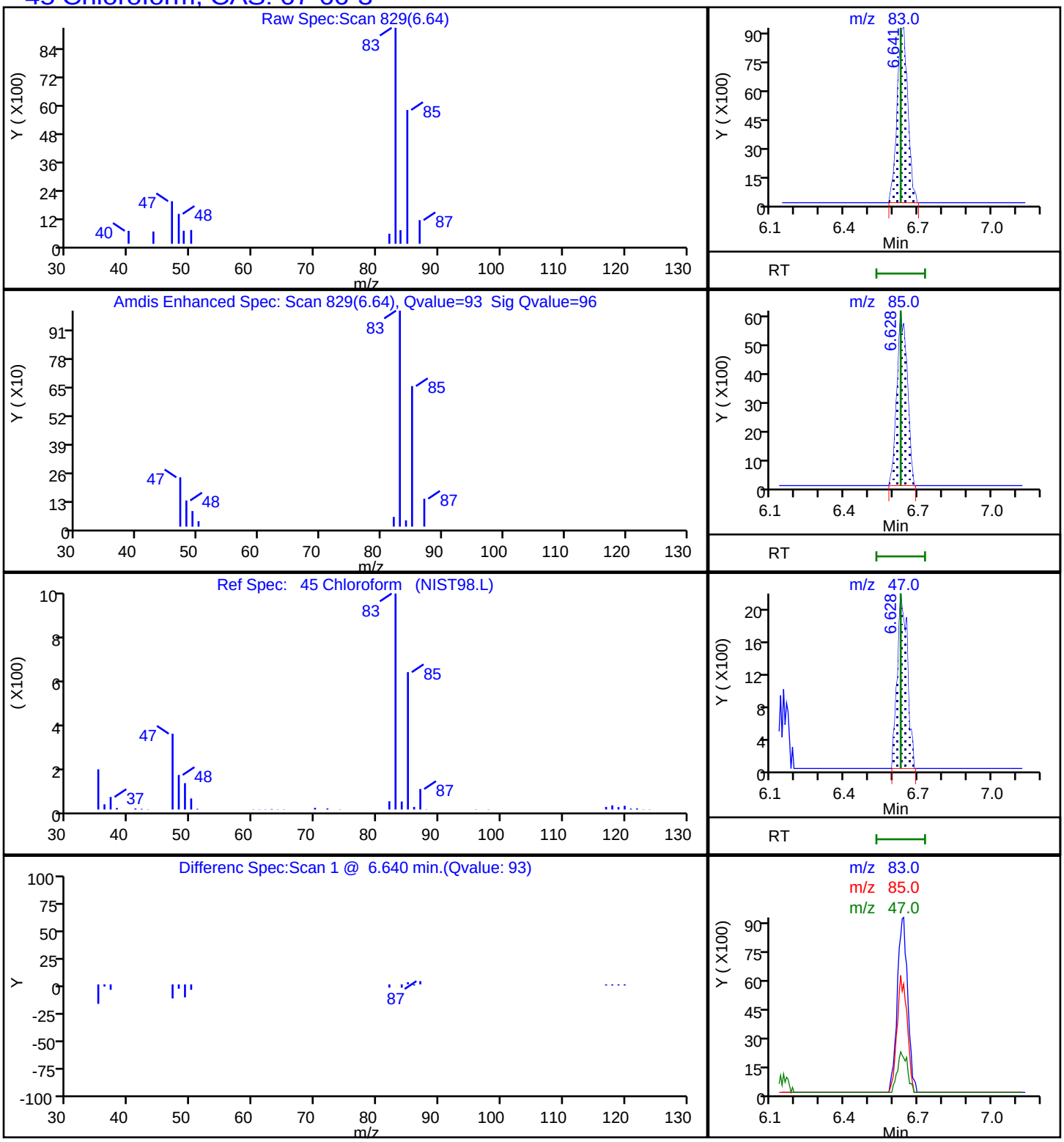
14 1,1-Dichloroethene, CAS: 75-35-4



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S03.D				
Injection Date:	02-Jun-2021 01:32:30	Instrument ID:	19930		
Lims ID:	410-41319-A-6	Lab Sample ID:	410-41319-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

45 Chloroform, CAS: 67-66-3

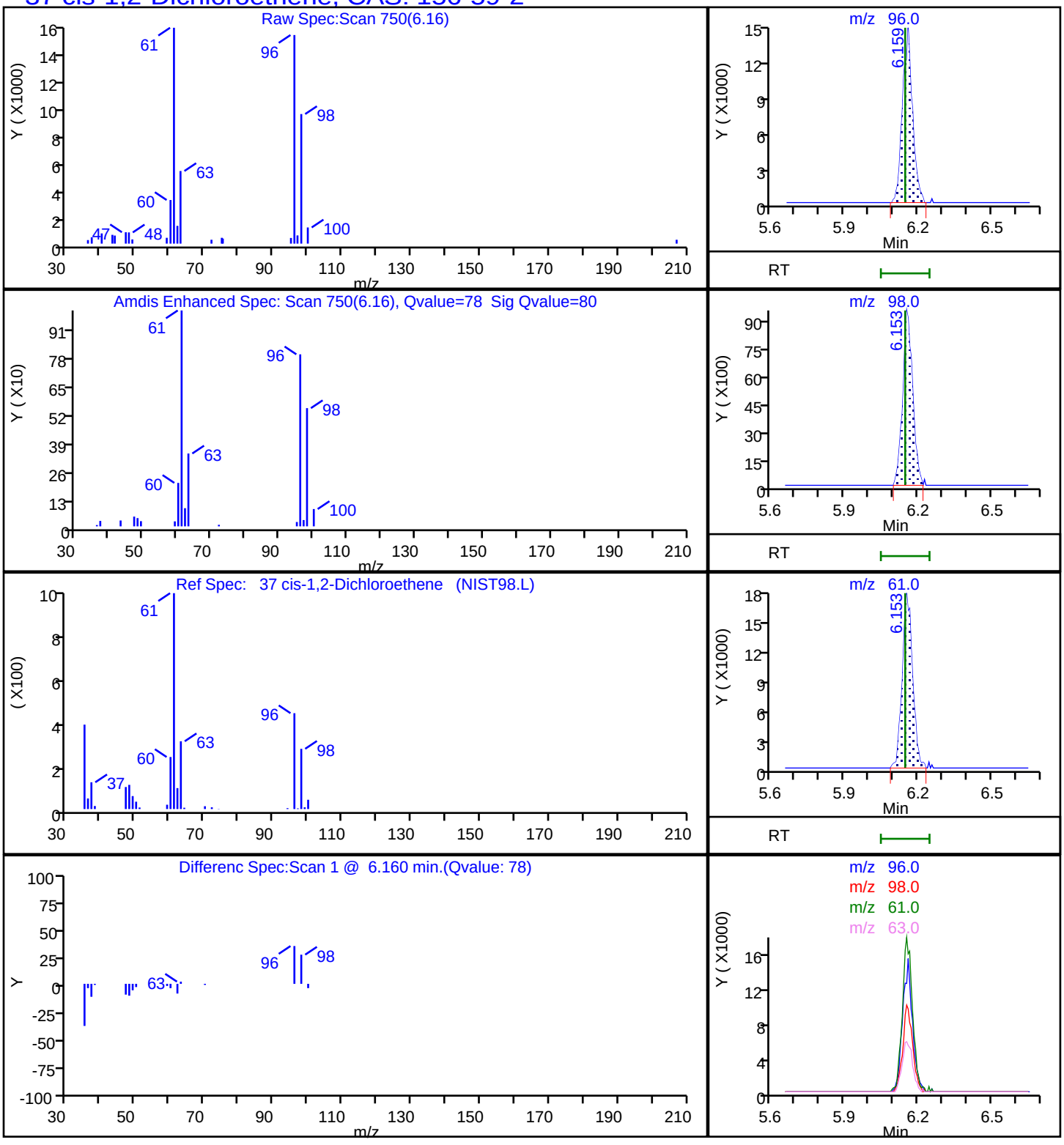


Report Date: 02-Jun-2021 14:18:18 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S03.D				
Injection Date:	02-Jun-2021 01:32:30	Instrument ID:	19930		
Lims ID:	410-41319-A-6	Lab Sample ID:	410-41319-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

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



Report Date: 02-Jun-2021 14:18:19 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S03.D

Injection Date: 02-Jun-2021 01:32:30 Instrument ID: 19930

Lims ID: 410-41319-A-6 Lab Sample ID: 410-41319-6

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

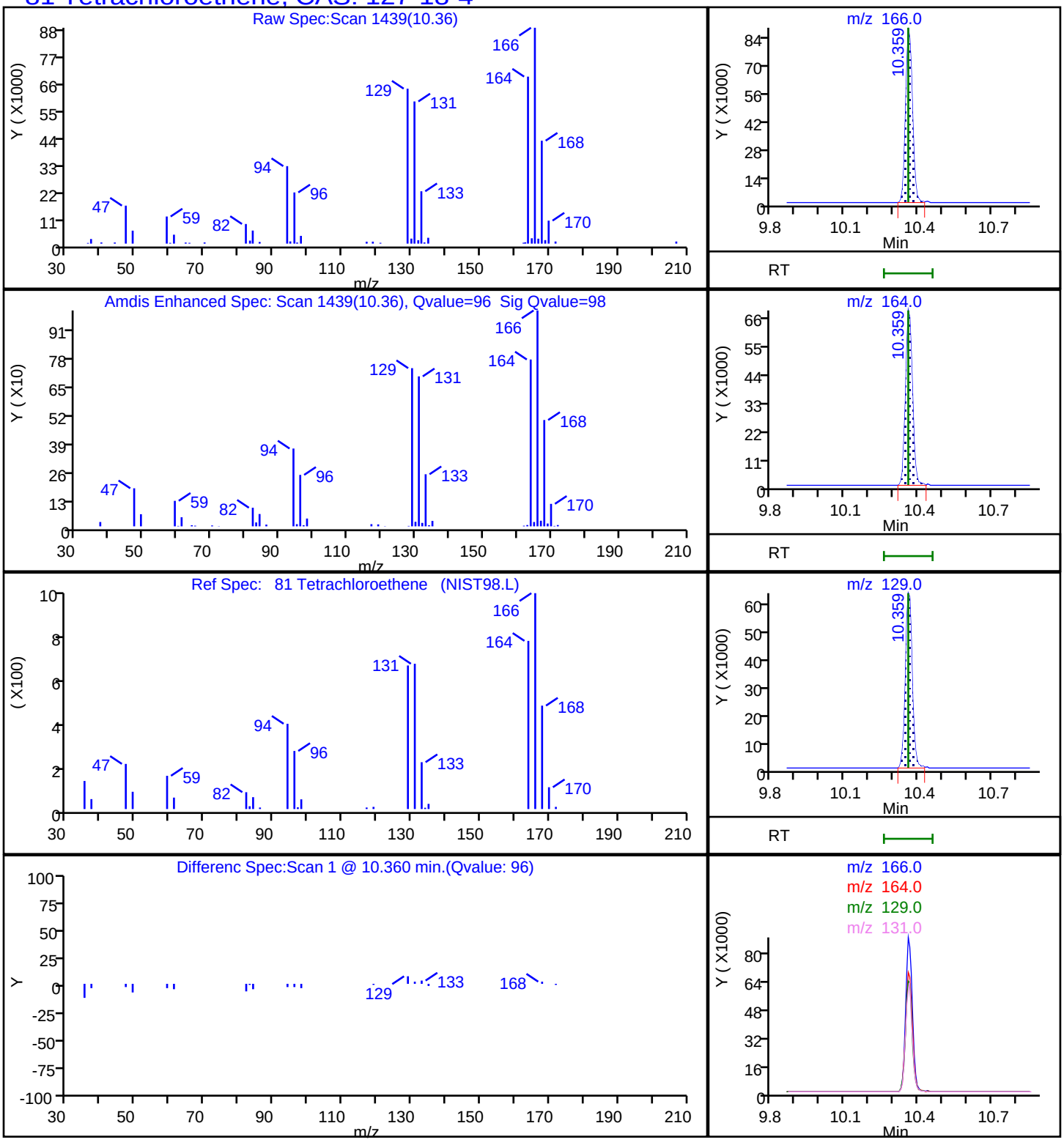
Operator ID: MEC29284 ALS Bottle#: 8 Worklist Smp#: 9

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

81 Tetrachloroethene, CAS: 127-18-4

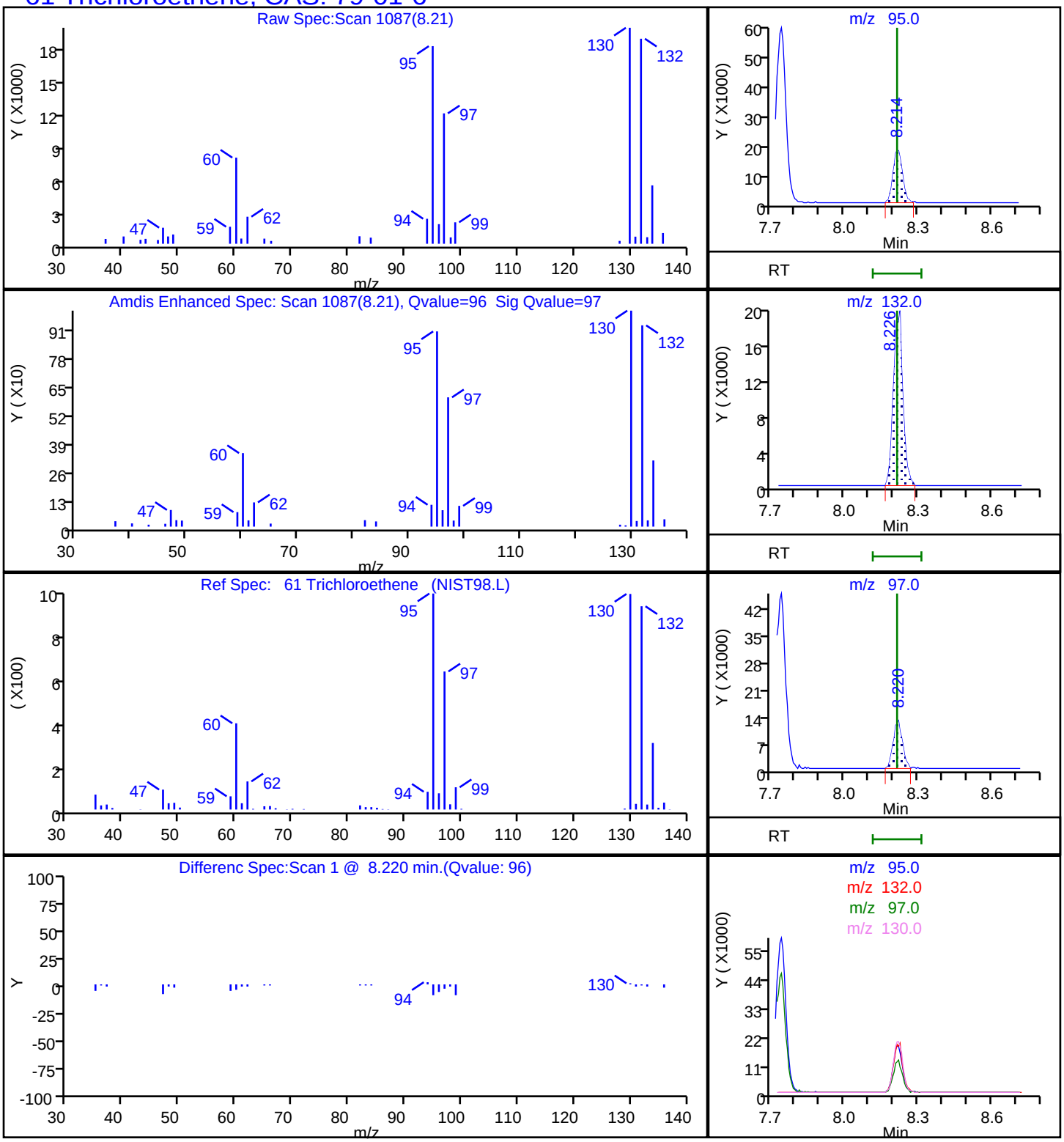


Report Date: 02-Jun-2021 14:18:18 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S03.D				
Injection Date:	02-Jun-2021 01:32:30	Instrument ID:	19930		
Lims ID:	410-41319-A-6	Lab Sample ID:	410-41319-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	8	Worklist Smp#:	9
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 410-41319-7

Matrix: Water Lab File ID: IU01S13.D

Analysis Method: 8260D Date Collected: 05/25/2021 09:50

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 05:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 132853 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	ND		0.50	0.090
74-87-3	Chloromethane	0.065	J	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.11	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.062	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	0.087	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 410-41319-7

Matrix: Water Lab File ID: IU01S13.D

Analysis Method: 8260D Date Collected: 05/25/2021 09:50

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 05:04

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 132853 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)	99		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S13.D
Lims ID: 410-41319-A-7
Client ID: HD-COD-SW-16-0/1-0
Sample Type: Client
Inject. Date: 02-Jun-2021 05:04:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-019
Misc. Info.: 410-41319-A-7
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 14:16:43 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: riehlc Date: 02-Jun-2021 14:16:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.184	2.172	0.012	2	4324	0.0652	
5 Vinyl chloride	62		2.294				ND	
7 Bromomethane	94		2.623				ND	
8 Chloroethane	64		2.702				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.623	3.592	0.031	98	10692	1.33	
19 Carbon disulfide	76	3.879	3.885	-0.006	56	6326	0.0471	
* 24 t-Butyl alcohol-d10 (IS)	65	4.275	4.233	0.042	22	123840	50.0	
23 Methylene Chloride	84		4.245				ND	7
27 Methyl tert-butyl ether	73		4.647				ND	
28 trans-1,2-Dichloroethene	96		4.659				ND	
31 1,1-Dichloroethane	63		5.318				ND	
36 2-Butanone (MEK)	43		6.116				ND	7
37 cis-1,2-Dichloroethene	96	6.159	6.147	0.012	76	6350	0.1063	
43 Chlorobromomethane	128		6.482				ND	
45 Chloroform	83	6.641	6.628	0.013	1	3850	0.0404	M
$ 46 Dibromofluoromethane (Surr)	113	6.848	6.848	0.000	94	433876	9.87	
47 1,1,1-Trichloroethane	97		6.860				ND	
50 Carbon tetrachloride	117		7.073				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.299	0.006	84	87147	10.1	
54 Benzene	78		7.336				ND	7
56 1,2-Dichloroethane	62		7.403				ND	
* 58 Fluorobenzene (IS)	96	7.738	7.732	0.006	99	1748063	10.0	
61 Trichloroethene	95	8.220	8.213	0.007	91	5103	0.0872	
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	7
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	7
$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	93	1734419	10.0	
76 Toluene	92	9.823	9.811	0.012	99	9765	0.0686	
78 trans-1,3-Dichloropropene	75		10.067				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.372	10.359	0.013	91	4186	0.0618	
83 2-Hexanone	43		10.481				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.001	84	1321688	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.292				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106	11.420	11.414	0.006	97	4592	0.0420	
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.755				ND	
96 Bromoform	173		11.920				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	93	644702	9.81	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	732238	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

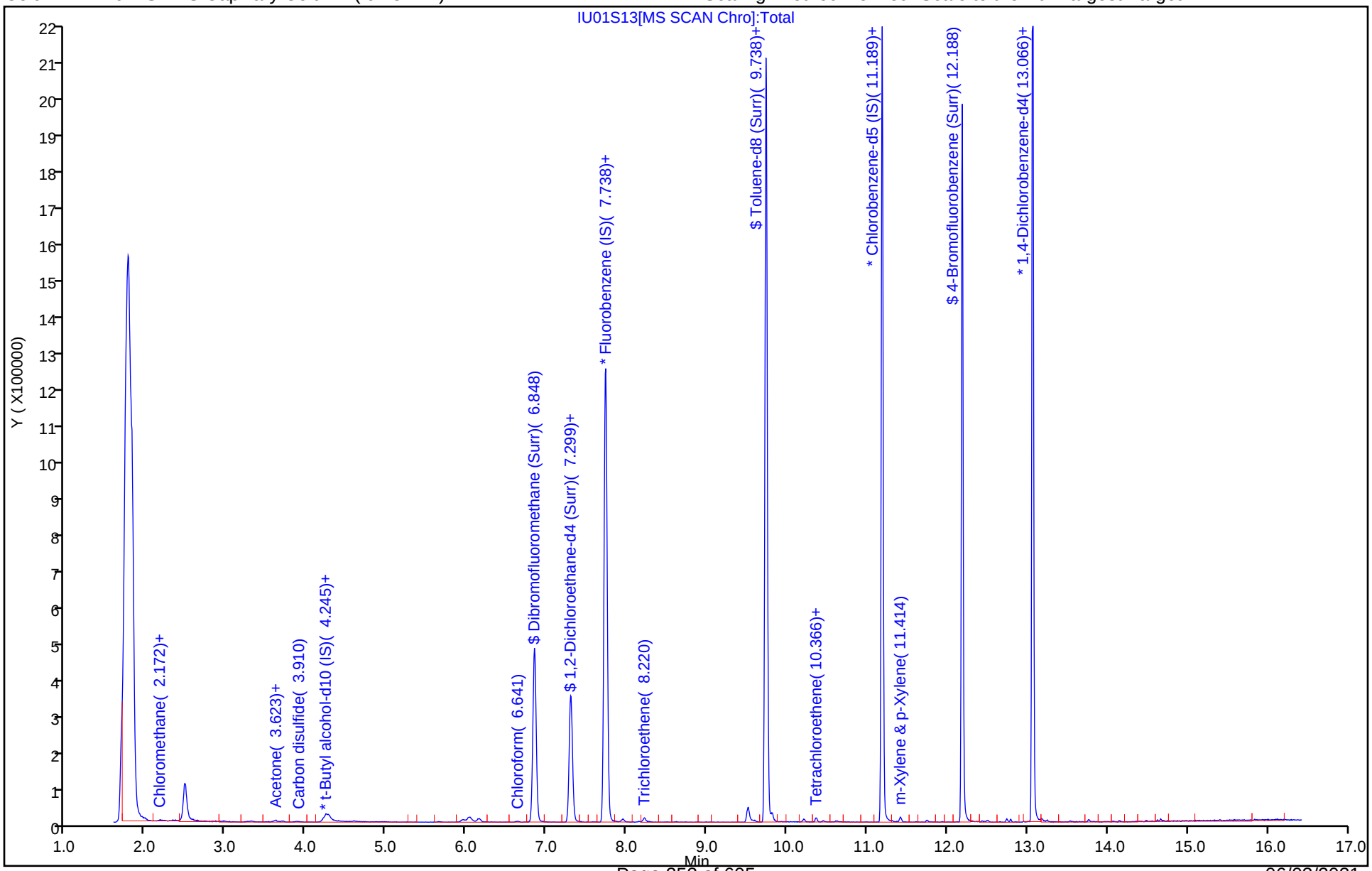
Report Date: 02-Jun-2021 14:18:11 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S13.D

Injection Date:	02-Jun-2021 05:04:30	Instrument ID:	19930	Operator ID:	MEC29284
Lims ID:	410-41319-A-7	Lab Sample ID:	410-41319-7	Worklist Smp#:	19
Client ID:	HD-COD-SW-16-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

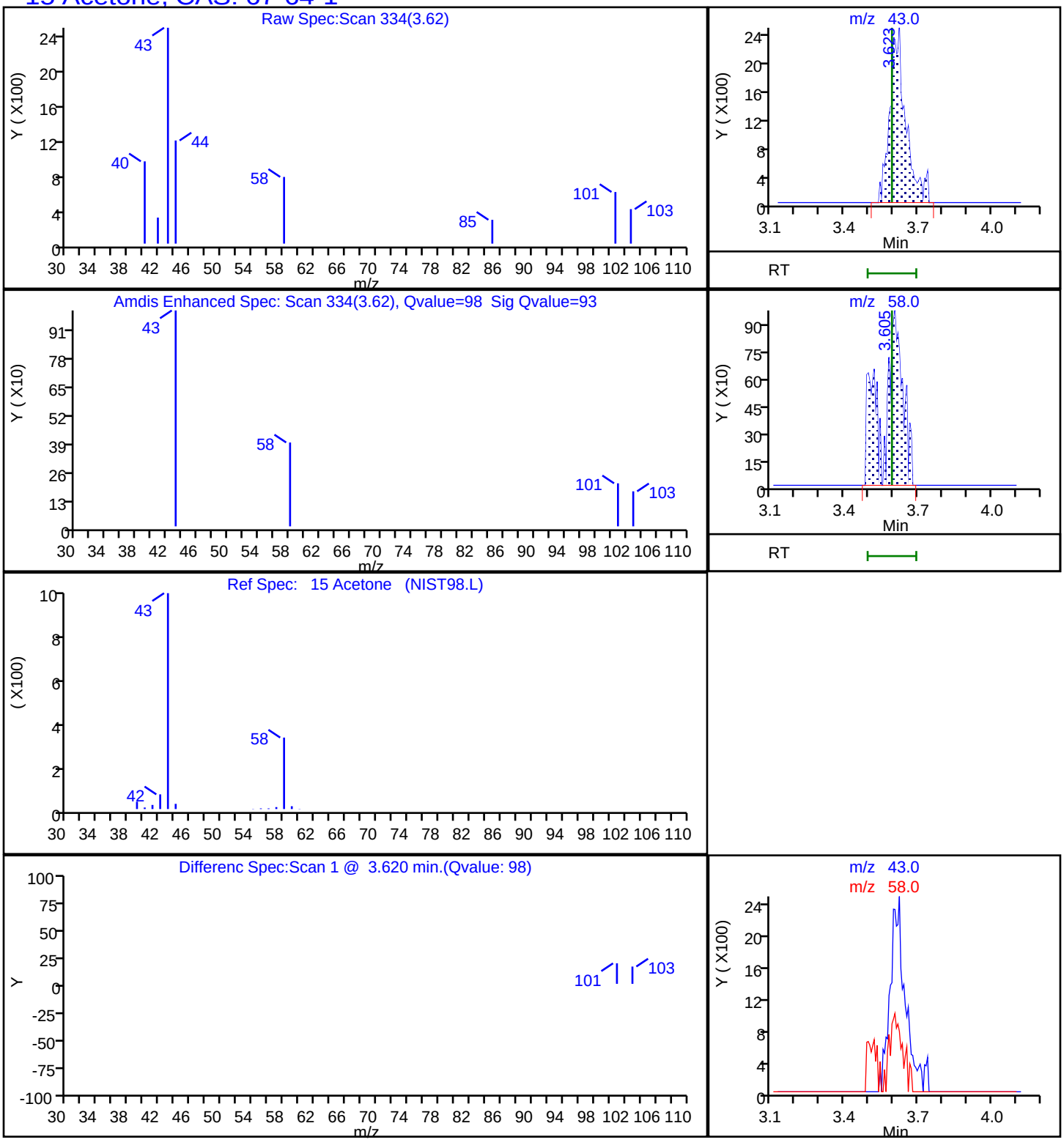
Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S13.D				
Lims ID:	410-41319-A-7				
Client ID:	HD-COD-SW-16-0/1-0				
Sample Type:	Client				
Inject. Date:	02-Jun-2021 05:04:30	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0030814-019				
Misc. Info.:	410-41319-A-7				
Operator ID:	MEC29284	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	02-Jun-2021 14:16:43	Calib Date:	26-Mar-2021 01:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1617				
First Level Reviewer: riehlc		Date:	02-Jun-2021 14:16:43		

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	9.87	98.71
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	101.30
$ 75 Toluene-d8 (Surr)	10.0	10.0	100.27
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.81	98.10

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S13.D				
Injection Date:	02-Jun-2021 05:04:30	Instrument ID:	19930		
Lims ID:	410-41319-A-7	Lab Sample ID:	410-41319-7		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

15 Acetone, CAS: 67-64-1



Report Date: 02-Jun-2021 14:18:11 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S13.D

Injection Date: 02-Jun-2021 05:04:30 Instrument ID: 19930

Lims ID: 410-41319-A-7 Lab Sample ID: 410-41319-7

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

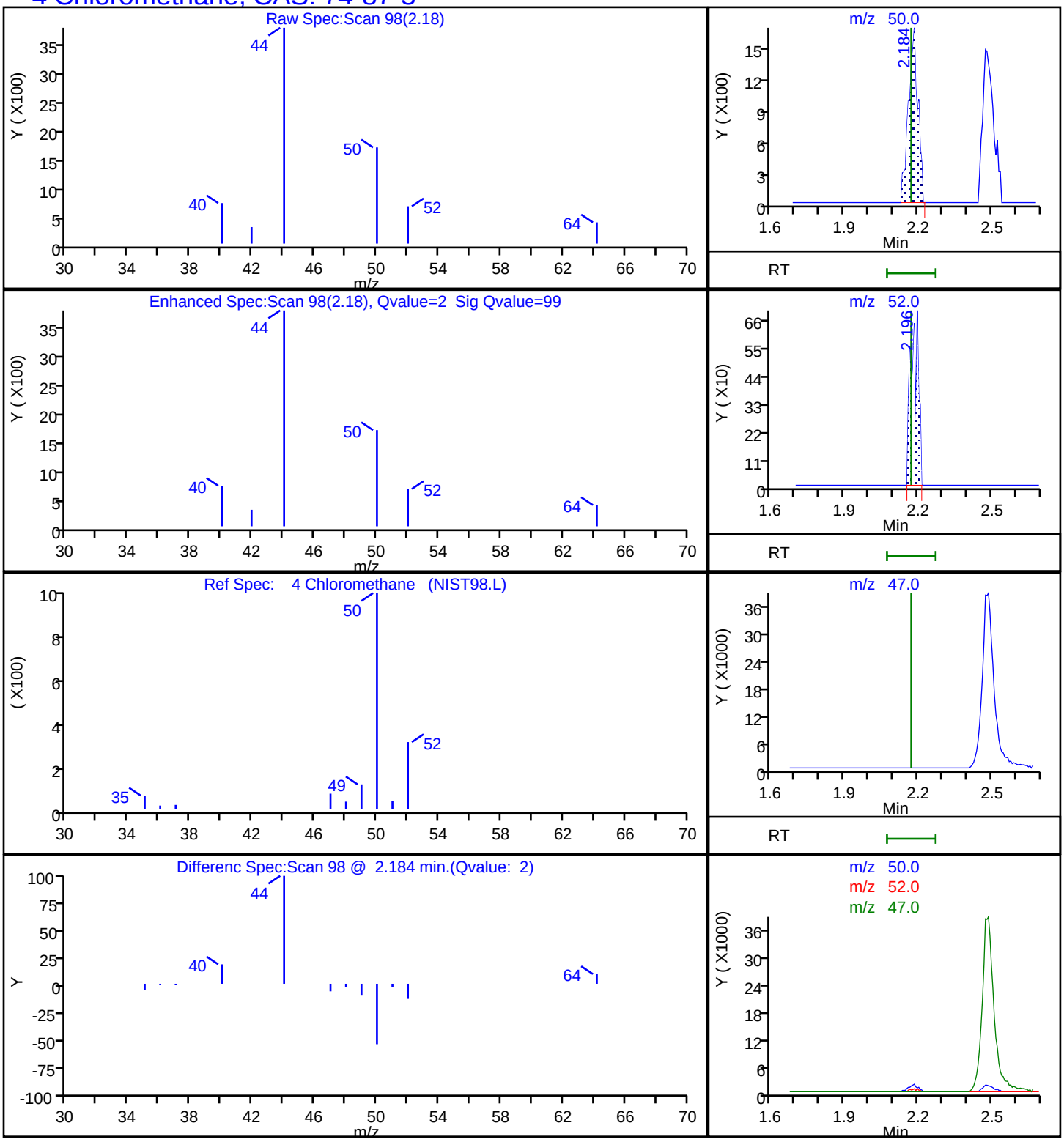
Operator ID: MEC29284 ALS Bottle#: 18 Worklist Smp#: 19

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

4 Chloromethane, CAS: 74-87-3



Report Date: 02-Jun-2021 14:18:11 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S13.D

Injection Date: 02-Jun-2021 05:04:30 Instrument ID: 19930

Lims ID: 410-41319-A-7 Lab Sample ID: 410-41319-7

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

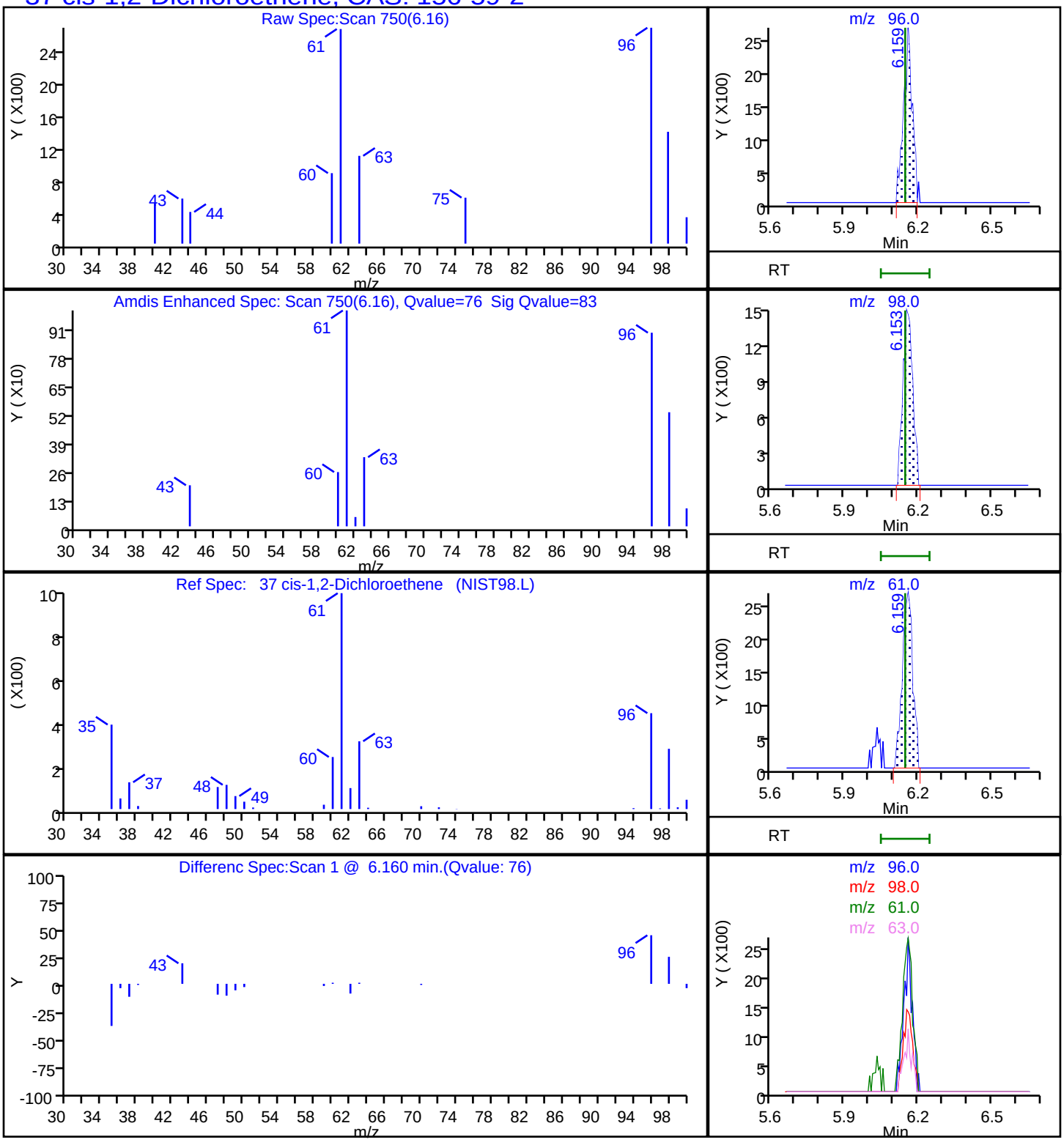
Operator ID: MEC29284 ALS Bottle#: 18 Worklist Smp#: 19

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

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



Report Date: 02-Jun-2021 14:18:11 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S13.D

Injection Date: 02-Jun-2021 05:04:30 Instrument ID: 19930

Lims ID: 410-41319-A-7 Lab Sample ID: 410-41319-7

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

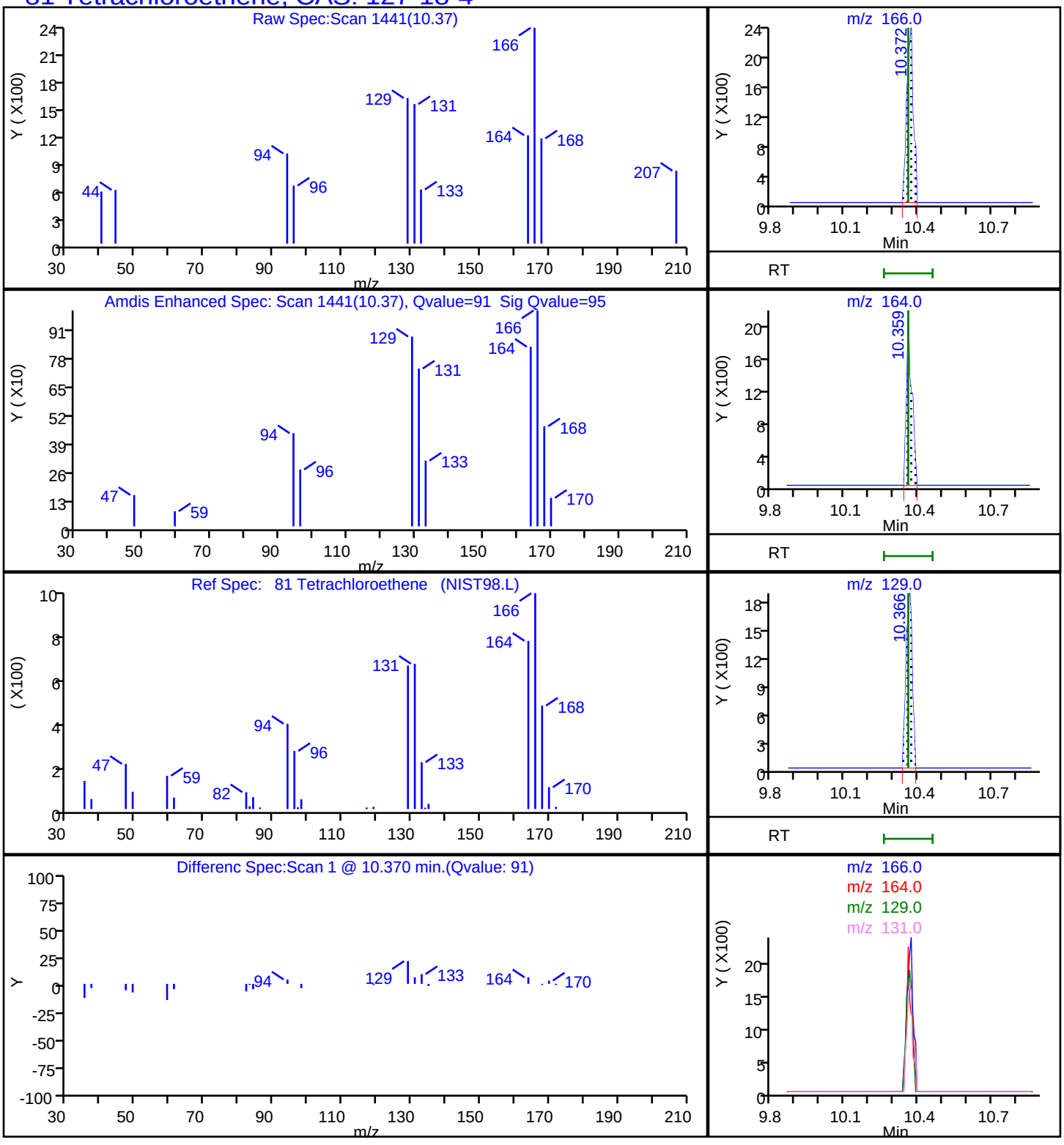
Operator ID: MEC29284 ALS Bottle#: 18 Worklist Smp#: 19

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

81 Tetrachloroethene, CAS: 127-18-4



Report Date: 02-Jun-2021 14:18:11 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S13.D

Injection Date: 02-Jun-2021 05:04:30 Instrument ID: 19930

Lims ID: 410-41319-A-7 Lab Sample ID: 410-41319-7

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

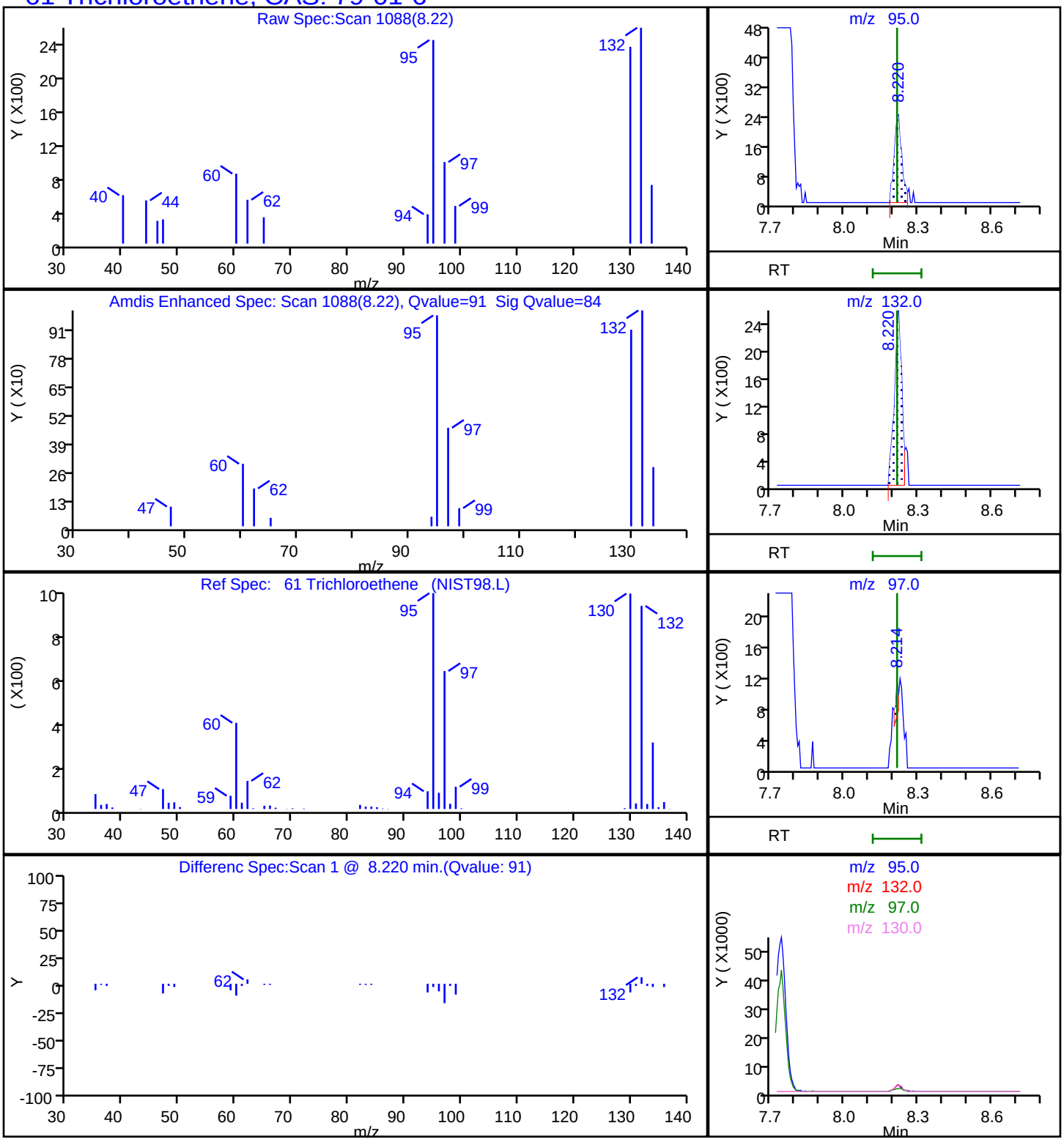
Operator ID: MEC29284 ALS Bottle#: 18 Worklist Smp#: 19

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

61 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

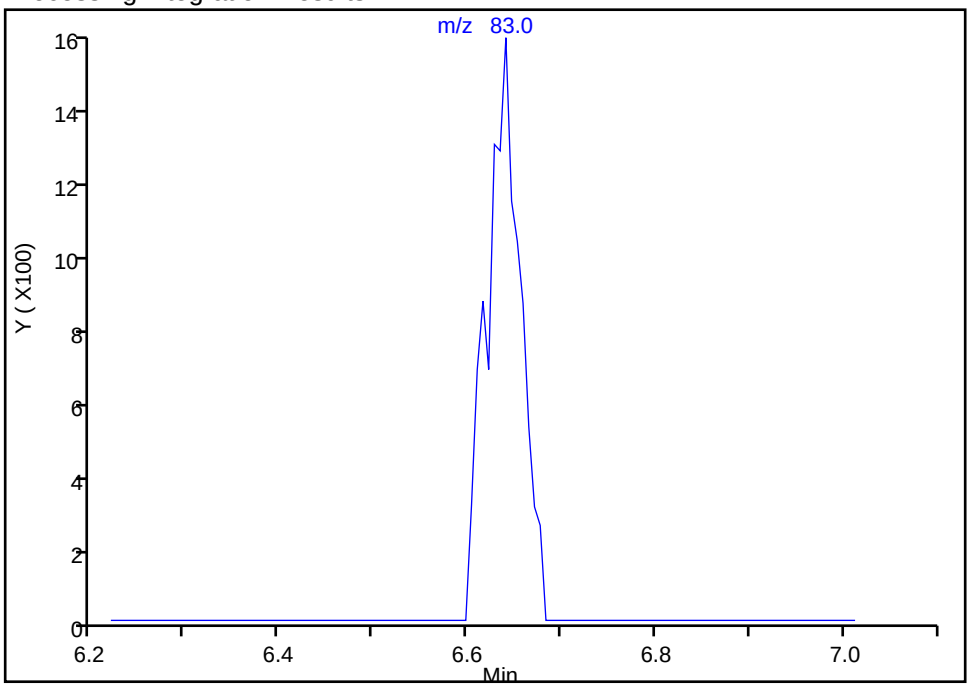
Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S13.D				
Injection Date:	02-Jun-2021 05:04:30	Instrument ID:	19930		
Lims ID:	410-41319-A-7	Lab Sample ID:	410-41319-7		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

45 Chloroform, CAS: 67-66-3

Signal: 1

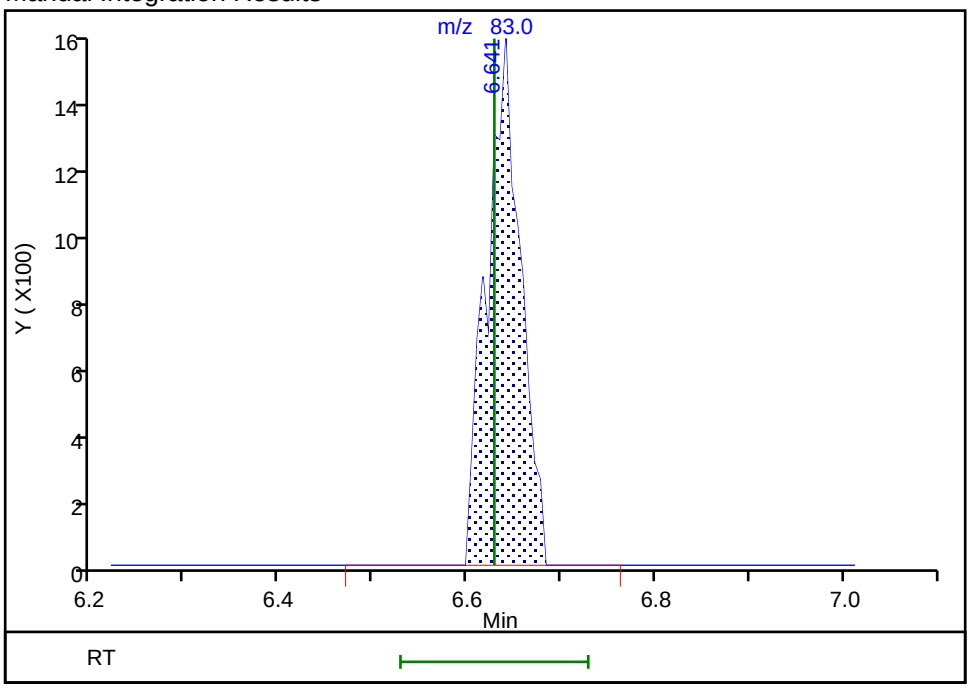
Not Detected
Expected RT: 6.63

Processing Integration Results



Manual Integration Results

RT: 6.64
Area: 3850
Amount: 0.040407
Amount Units: ug/l



Reviewer: riehlc, 02-Jun-2021 14:16:08
Audit Action: Manually Integrated Audit Reason: Missed Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 410-41319-8

Matrix: Water Lab File ID: IU01S14.D

Analysis Method: 8260D Date Collected: 05/25/2021 10:05

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 05:25

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.: 132853 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	1.2	J ^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	0.061	J	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.36	J	0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.050
124-48-1	Dibromochloromethane	ND		0.50	0.070
100-41-4	Ethylbenzene	ND		0.50	0.060
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.050
75-09-2	Methylene Chloride	ND		0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.54		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
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	0.35	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 Lab Sample ID: 410-41319-8

Matrix: Water Lab File ID: IU01S14.D

Analysis Method: 8260D Date Collected: 05/25/2021 10:05

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 05:25

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.: 132853 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)	87		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		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\19930\20210601-30814.b\IU01S14.D
Lims ID: 410-41319-A-8
Client ID: HD-COD-SW-17-0/1-0
Sample Type: Client
Inject. Date: 02-Jun-2021 05:25:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-020
Misc. Info.: 410-41319-A-8
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 14:16:43 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: riehlc Date: 02-Jun-2021 14:17:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.166	2.172	-0.006	95	4006	0.0609	
5 Vinyl chloride	62		2.294				ND	7
7 Bromomethane	94		2.623				ND	
8 Chloroethane	64		2.702				ND	
14 1,1-Dichloroethene	96		3.574				ND	7
15 Acetone	43	3.599	3.592	0.007	69	9557	1.16	
19 Carbon disulfide	76	3.885	3.885	0.000	94	6024	0.0452	
* 24 t-Butyl alcohol-d10 (IS)	65	4.251	4.233	0.018	18	127268	50.0	
23 Methylene Chloride	84		4.245				ND	
27 Methyl tert-butyl ether	73		4.647				ND	
28 trans-1,2-Dichloroethene	96		4.659				ND	
31 1,1-Dichloroethane	63		5.318				ND	
36 2-Butanone (MEK)	43		6.116				ND	7
37 cis-1,2-Dichloroethene	96	6.159	6.147	0.012	78	21222	0.3581	
43 Chlorobromomethane	128		6.482				ND	
45 Chloroform	83		6.628				ND	
$ 46 Dibromofluoromethane (Surr)	113	6.848	6.848	0.000	94	433821	9.95	
47 1,1,1-Trichloroethane	97		6.860				ND	
50 Carbon tetrachloride	117		7.073				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.299	7.299	0.000	83	85740	10.0	
54 Benzene	78		7.336				ND	7
56 1,2-Dichloroethane	62		7.403				ND	
* 58 Fluorobenzene (IS)	96	7.732	7.732	0.000	99	1734354	10.0	
61 Trichloroethene	95	8.220	8.213	0.007	96	20294	0.3494	
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	7
$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	93	1682645	9.52	
76 Toluene	92	9.805	9.811	-0.006	96	7149	0.0492	
78 trans-1,3-Dichloropropene	75		10.067				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.366	10.359	0.007	97	37236	0.5383	
83 2-Hexanone	43		10.481				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.001	84	1350138	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.292				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	97	4785	0.0429	
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.755				ND	
96 Bromoform	173		11.920				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	95	584198	8.70	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	718771	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_LLcentISS_00001 Amount Added: 5.00 Units: uL Run Reagent

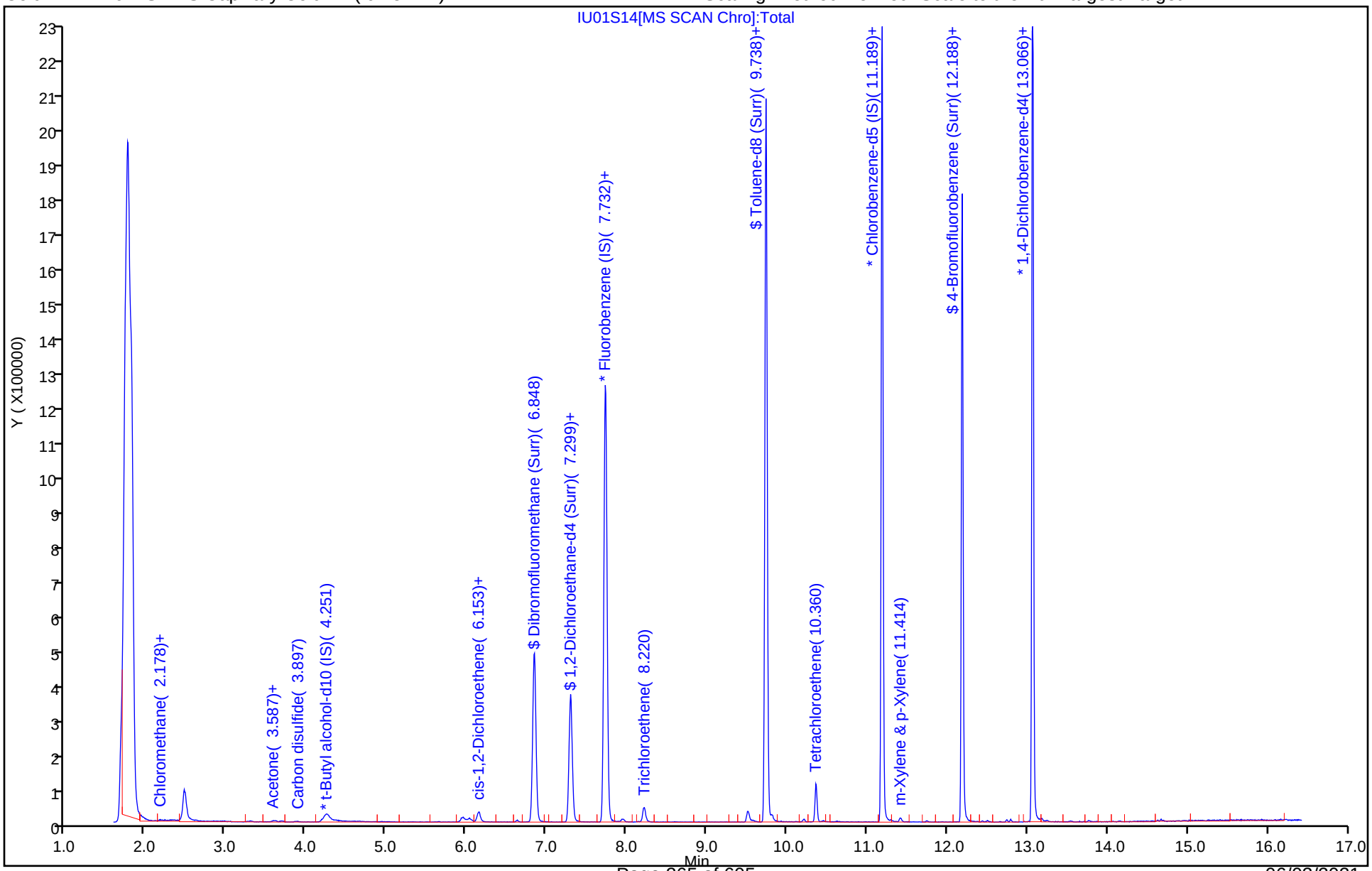
Report Date: 02-Jun-2021 14:18:13 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S14.D

Injection Date:	02-Jun-2021 05:25:30	Instrument ID:	19930	Operator ID:	MEC29284
Lims ID:	410-41319-A-8	Lab Sample ID:	410-41319-8	Worklist Smp#:	20
Client ID:	HD-COD-SW-17-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

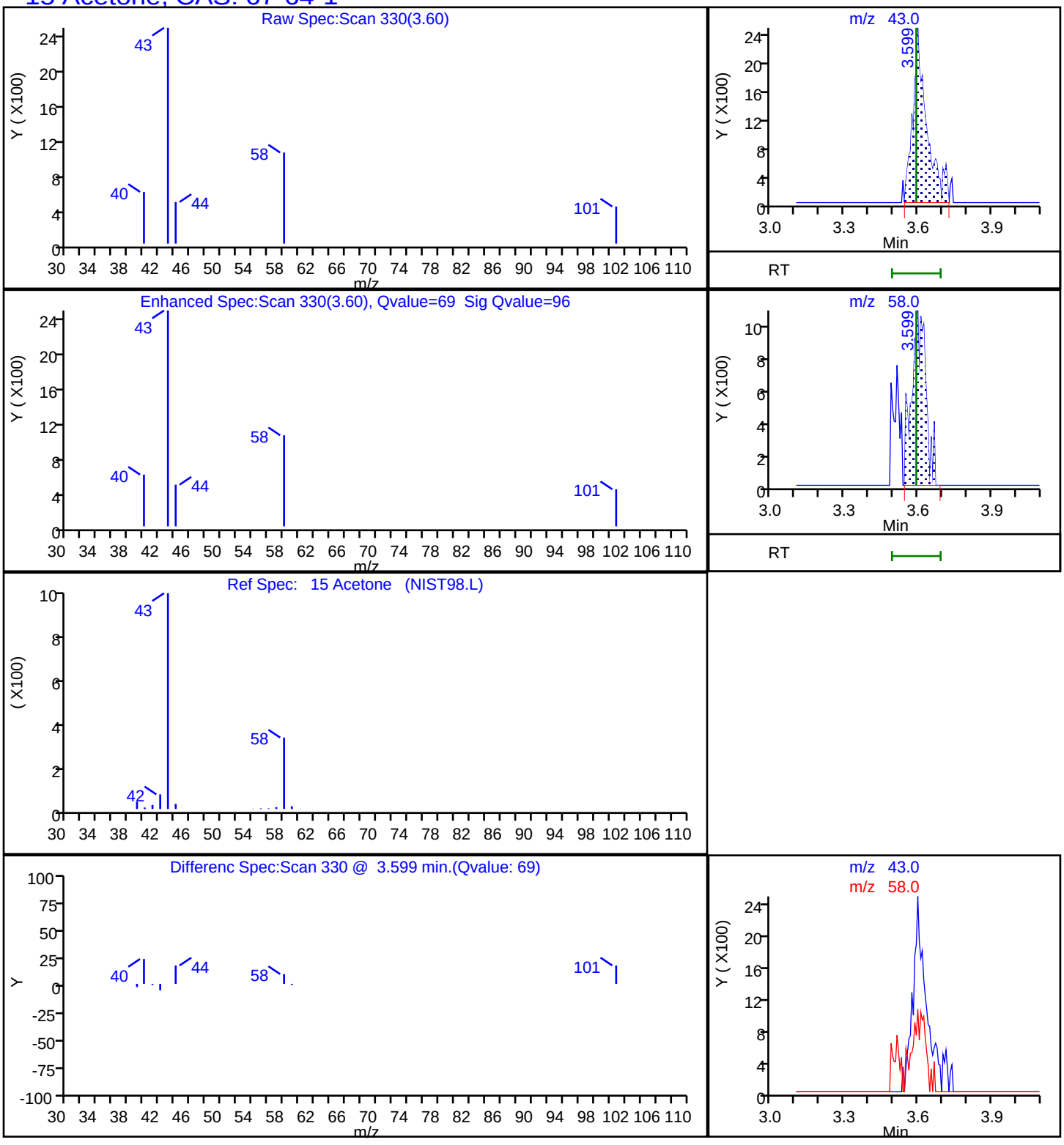
Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S14.D				
Lims ID:	410-41319-A-8				
Client ID:	HD-COD-SW-17-0/1-0				
Sample Type:	Client				
Inject. Date:	02-Jun-2021 05:25:30	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0030814-020				
Misc. Info.:	410-41319-A-8				
Operator ID:	MEC29284	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	02-Jun-2021 14:16:43	Calib Date:	26-Mar-2021 01:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1617				
First Level Reviewer: riehlc		Date:	02-Jun-2021 14:17:46		

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	9.95	99.48
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	100.45
$ 75 Toluene-d8 (Surr)	10.0	9.52	95.23
$ 100 4-Bromofluorobenzene (Surr)	10.0	8.70	87.02

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S14.D				
Injection Date:	02-Jun-2021 05:25:30	Instrument ID:	19930		
Lims ID:	410-41319-A-8	Lab Sample ID:	410-41319-8		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

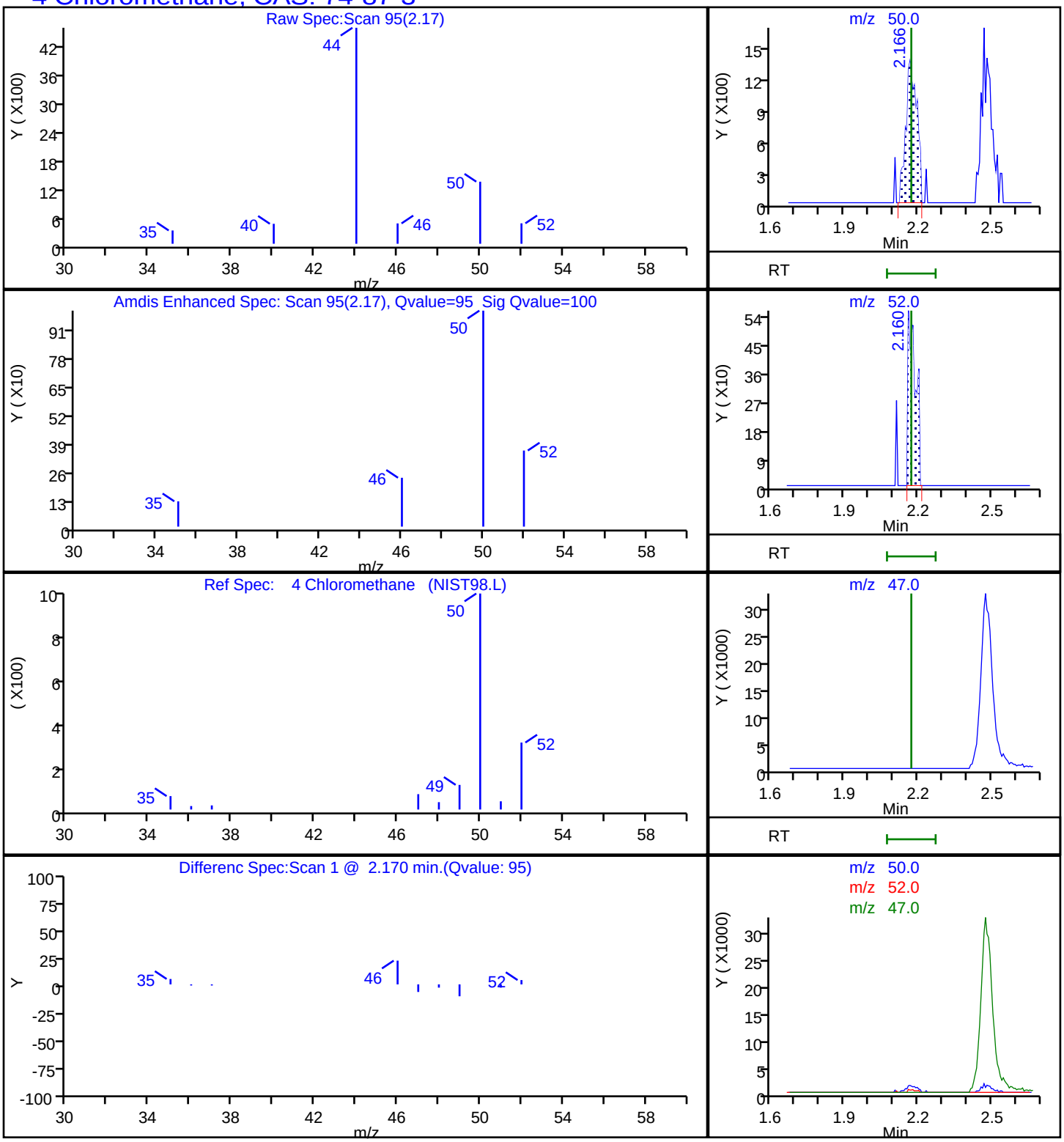
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S14.D				
Injection Date:	02-Jun-2021 05:25:30	Instrument ID:	19930		
Lims ID:	410-41319-A-8	Lab Sample ID:	410-41319-8		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

4 Chloromethane, CAS: 74-87-3



Report Date: 02-Jun-2021 14:18:13 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S14.D

Injection Date: 02-Jun-2021 05:25:30 Instrument ID: 19930

Lims ID: 410-41319-A-8 Lab Sample ID: 410-41319-8

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

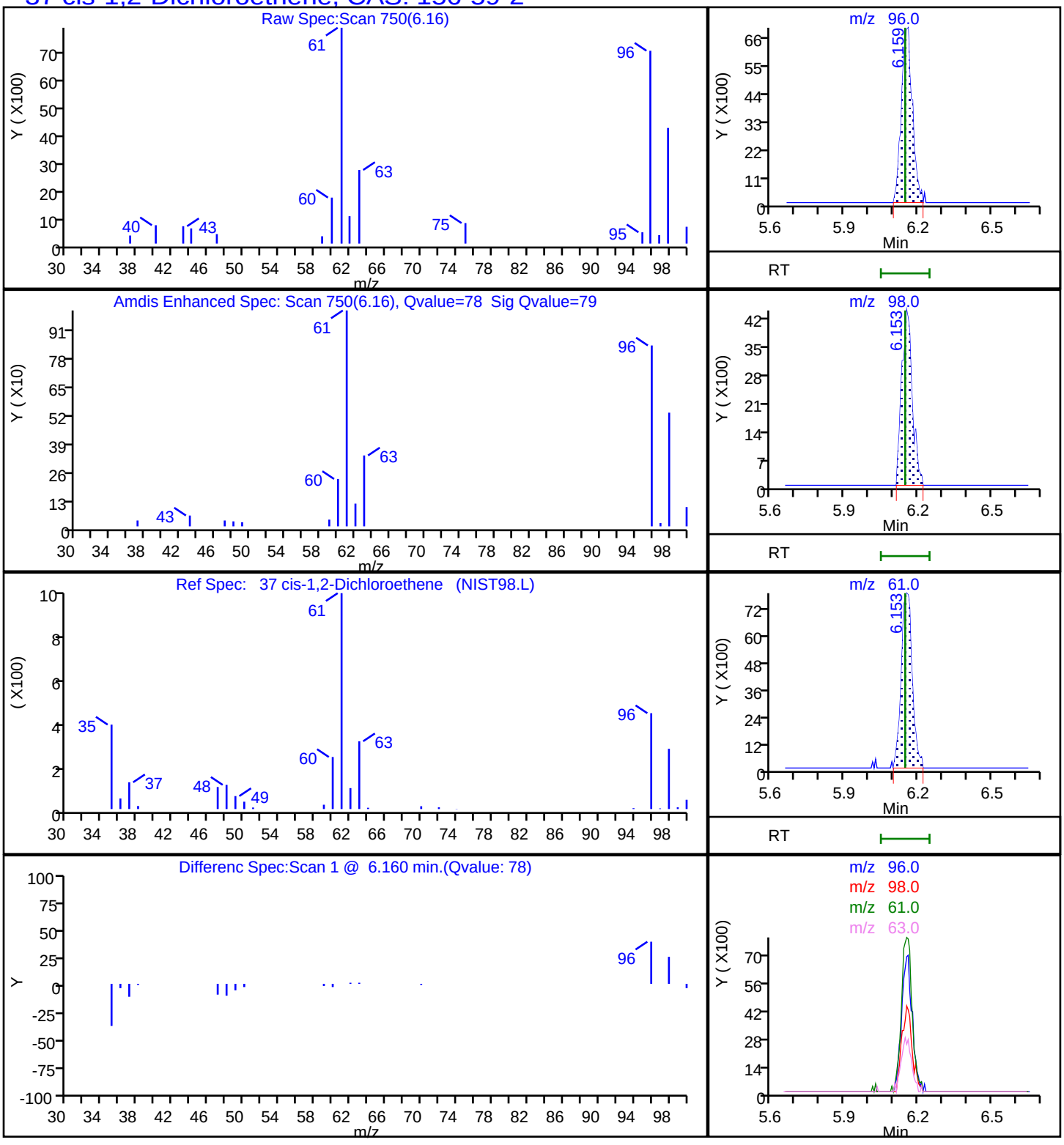
Operator ID: MEC29284 ALS Bottle#: 19 Worklist Smp#: 20

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

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



Report Date: 02-Jun-2021 14:18:13 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S14.D

Injection Date: 02-Jun-2021 05:25:30 Instrument ID: 19930

Lims ID: 410-41319-A-8 Lab Sample ID: 410-41319-8

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

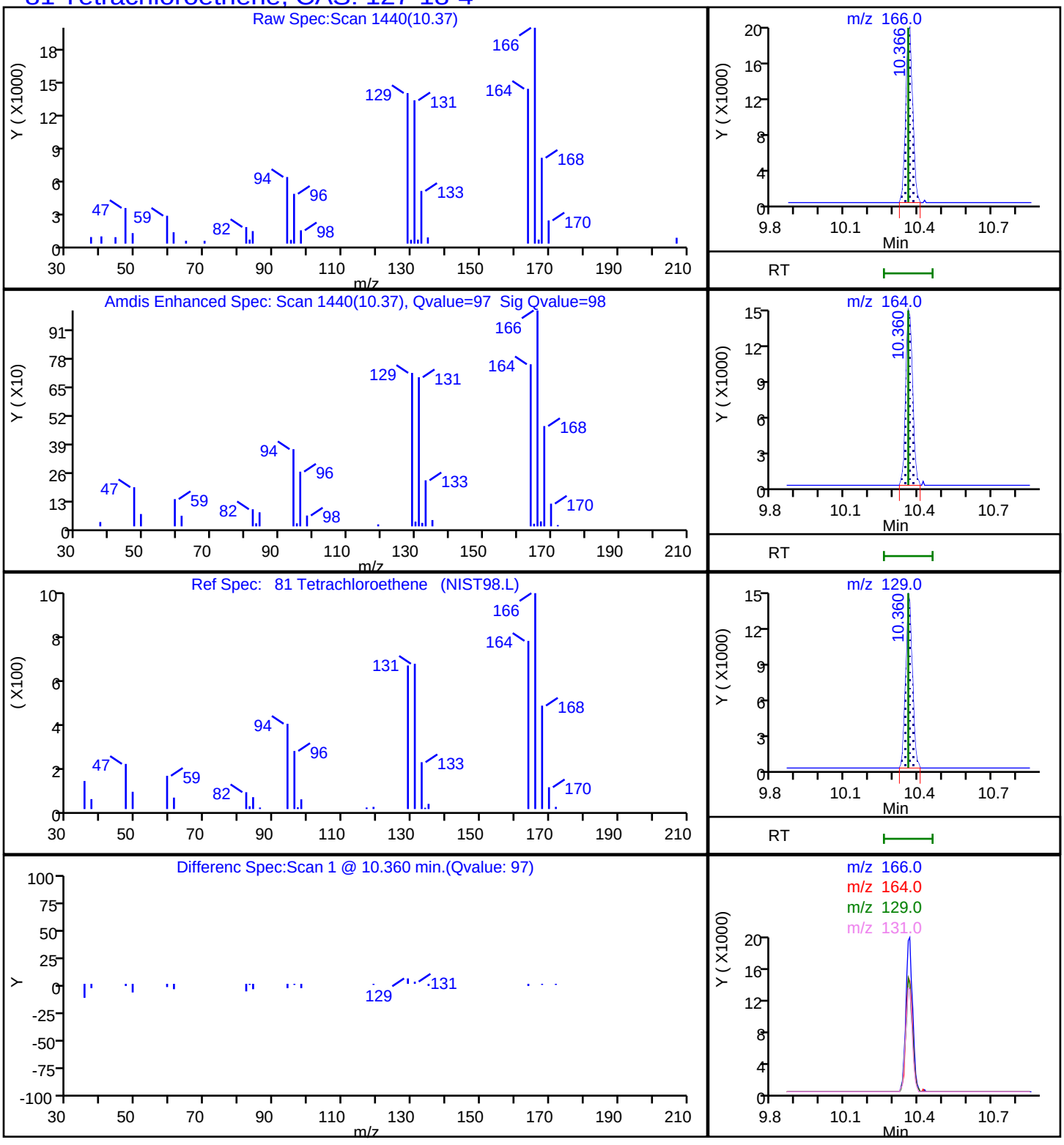
Operator ID: MEC29284 ALS Bottle#: 19 Worklist Smp#: 20

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

81 Tetrachloroethene, CAS: 127-18-4



Report Date: 02-Jun-2021 14:18:13 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S14.D

Injection Date: 02-Jun-2021 05:25:30 Instrument ID: 19930

Lims ID: 410-41319-A-8 Lab Sample ID: 410-41319-8

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

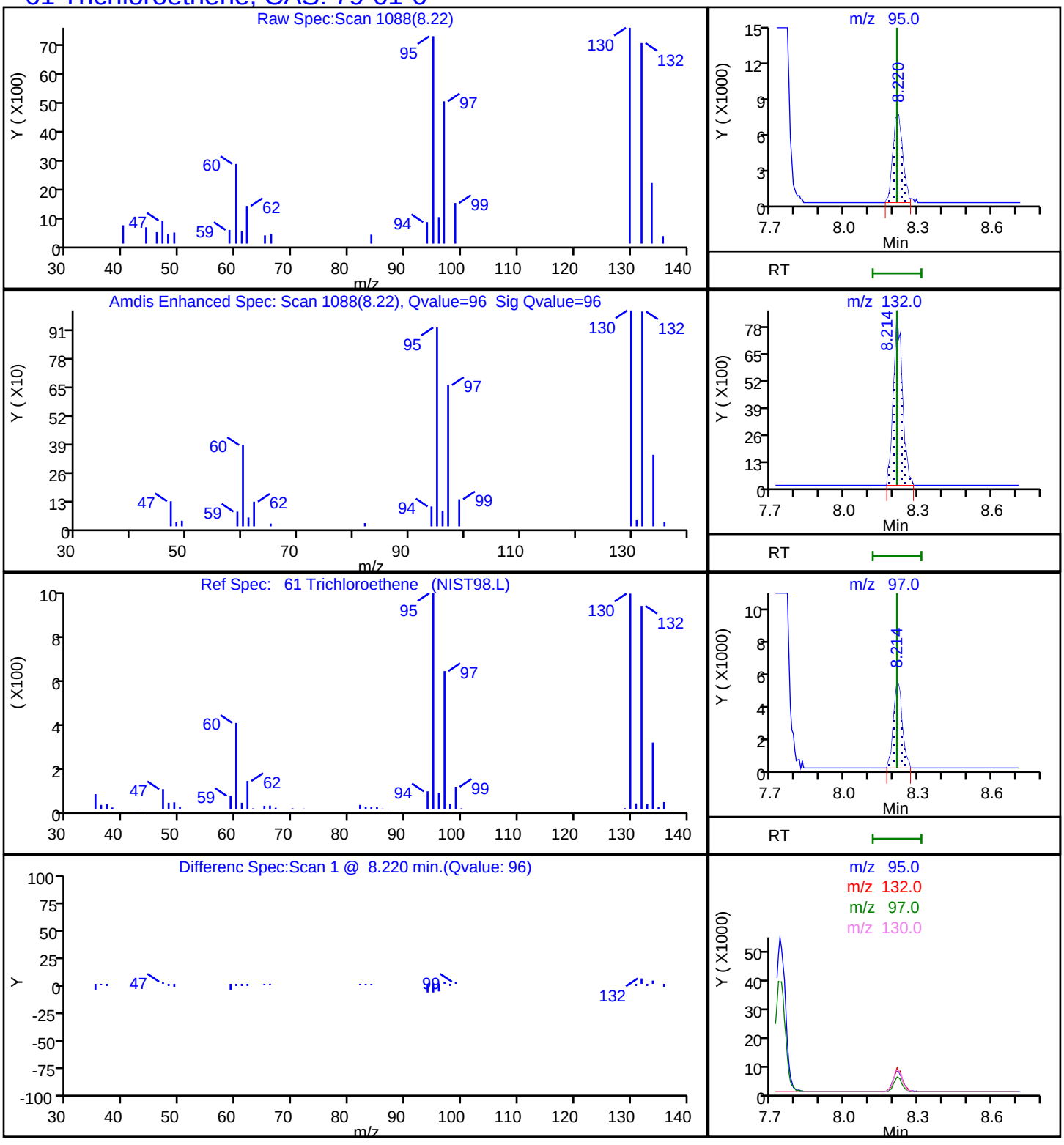
Operator ID: MEC29284 ALS Bottle#: 19 Worklist Smp#: 20

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

61 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 410-41319-9

Matrix: Water Lab File ID: IU01S15.D

Analysis Method: 8260D Date Collected: 05/25/2021 10:45

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 05:47

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 132853 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	0.21	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	0.59		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	4.0		0.50	0.060
108-88-3	Toluene	ND		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.17	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 410-41319-9

Matrix: Water Lab File ID: IU01S15.D

Analysis Method: 8260D Date Collected: 05/25/2021 10:45

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 05:47

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 132853 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)	92		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S15.D
Lims ID: 410-41319-A-9
Client ID: HD-COD-SW-26-0/1-0
Sample Type: Client
Inject. Date: 02-Jun-2021 05:47:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-021
Misc. Info.: 410-41319-A-9
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 16:19:01 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: riehlc Date: 02-Jun-2021 16:12:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50		2.172				ND	
5 Vinyl chloride	62		2.294				ND	
7 Bromomethane	94		2.623				ND	
8 Chloroethane	64		2.702				ND	
14 1,1-Dichloroethene	96	3.587	3.574	0.013	85	9284	0.2052	
15 Acetone	43		3.592				ND	7
19 Carbon disulfide	76		3.885				ND	7
* 24 t-Butyl alcohol-d10 (IS)	65	4.251	4.233	0.018	17	137032	50.0	
23 Methylene Chloride	84		4.245				ND	
27 Methyl tert-butyl ether	73		4.647				ND	
28 trans-1,2-Dichloroethene	96		4.659				ND	
31 1,1-Dichloroethane	63		5.318				ND	
36 2-Butanone (MEK)	43		6.116				ND	7
37 cis-1,2-Dichloroethene	96		6.147				ND	
43 Chlorobromomethane	128		6.482				ND	
45 Chloroform	83	6.647	6.628	0.019	93	55705	0.5868	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.848	0.006	94	429276	9.80	
47 1,1,1-Trichloroethane	97		6.860				ND	
50 Carbon tetrachloride	117		7.073				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.299	0.006	84	85274	9.95	
54 Benzene	78		7.336				ND	
56 1,2-Dichloroethane	62		7.403				ND	
* 58 Fluorobenzene (IS)	96	7.738	7.732	0.006	99	1741691	10.0	
61 Trichloroethene	95	8.226	8.213	0.013	94	9914	0.1700	
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	7
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	
$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	93	1743203	9.87	
76 Toluene	92	9.817	9.811	0.006	96	7987	0.0549	
78 trans-1,3-Dichloropropene	75		10.067				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.366	10.359	0.007	97	277231	4.01	
83 2-Hexanone	43		10.481				ND	
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.001	84	1349690	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.292				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	98	5938	0.0532	M
94 o-Xylene	106		11.743				ND	
95 Styrene	104		11.755				ND	
96 Bromoform	173		11.920				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.189	12.188	0.001	94	619765	9.24	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	789191	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

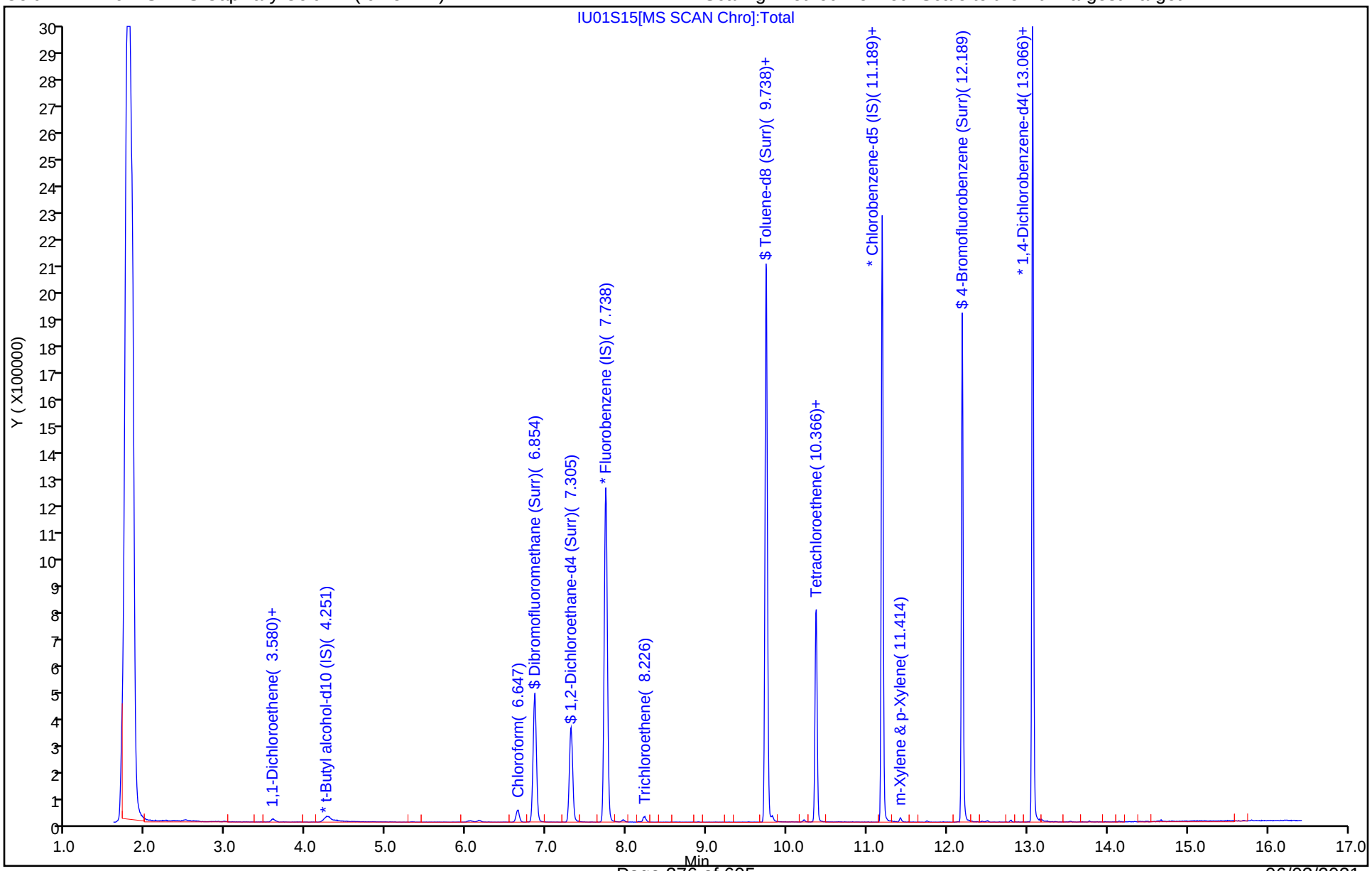
Report Date: 02-Jun-2021 16:19:56 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S15.D

Injection Date:	02-Jun-2021 05:47:30	Instrument ID:	19930	Operator ID:	MEC29284
Lims ID:	410-41319-A-9	Lab Sample ID:	410-41319-9	Worklist Smp#:	21
Client ID:	HD-COD-SW-26-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S15.D				
Lims ID:	410-41319-A-9				
Client ID:	HD-COD-SW-26-0/1-0				
Sample Type:	Client				
Inject. Date:	02-Jun-2021 05:47:30	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0030814-021				
Misc. Info.:	410-41319-A-9				
Operator ID:	MEC29284	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	02-Jun-2021 16:19:01	Calib Date:	26-Mar-2021 01:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1617				
First Level Reviewer: riehlc		Date:	02-Jun-2021 16:12:53		

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	9.80	98.02
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.95	99.48
$ 75 Toluene-d8 (Surr)	10.0	9.87	98.69
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.24	92.35

Report Date: 02-Jun-2021 16:19:56 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S15.D

Injection Date: 02-Jun-2021 05:47:30 Instrument ID: 19930

Lims ID: 410-41319-A-9 Lab Sample ID: 410-41319-9

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

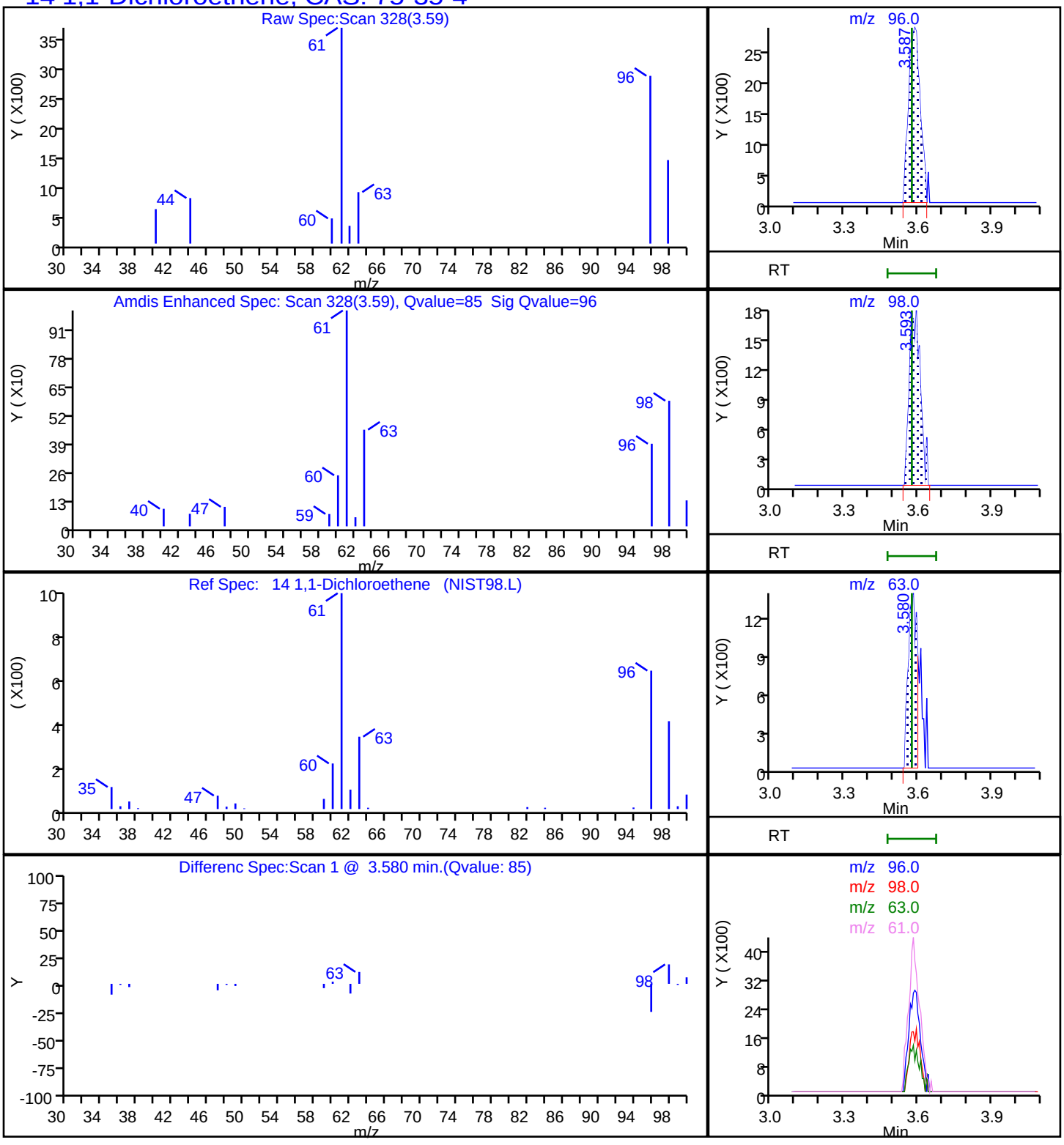
Operator ID: MEC29284 ALS Bottle#: 20 Worklist Smp#: 21

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

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



Report Date: 02-Jun-2021 16:19:56 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S15.D

Injection Date: 02-Jun-2021 05:47:30 Instrument ID: 19930

Lims ID: 410-41319-A-9 Lab Sample ID: 410-41319-9

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

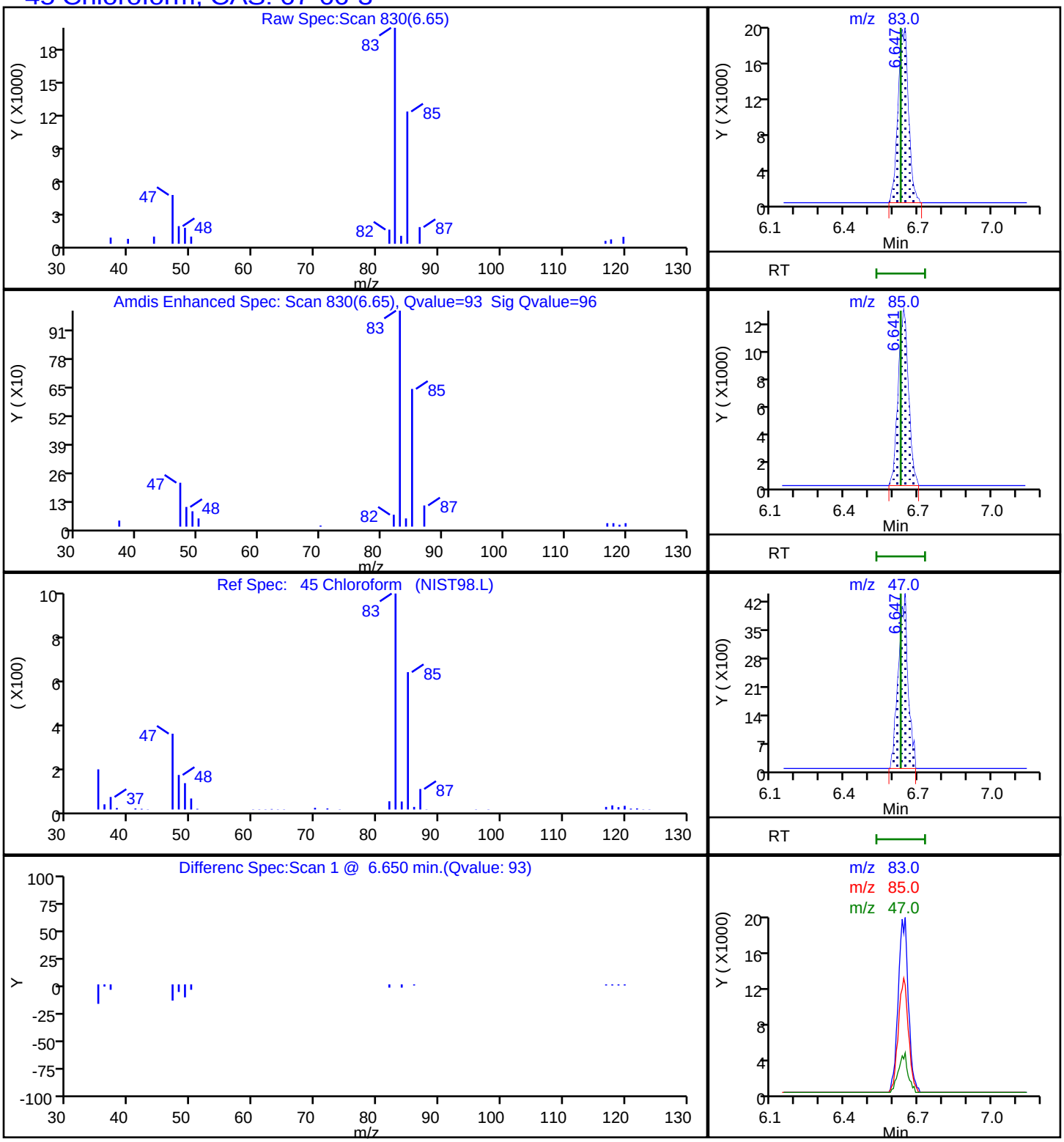
Operator ID: MEC29284 ALS Bottle#: 20 Worklist Smp#: 21

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

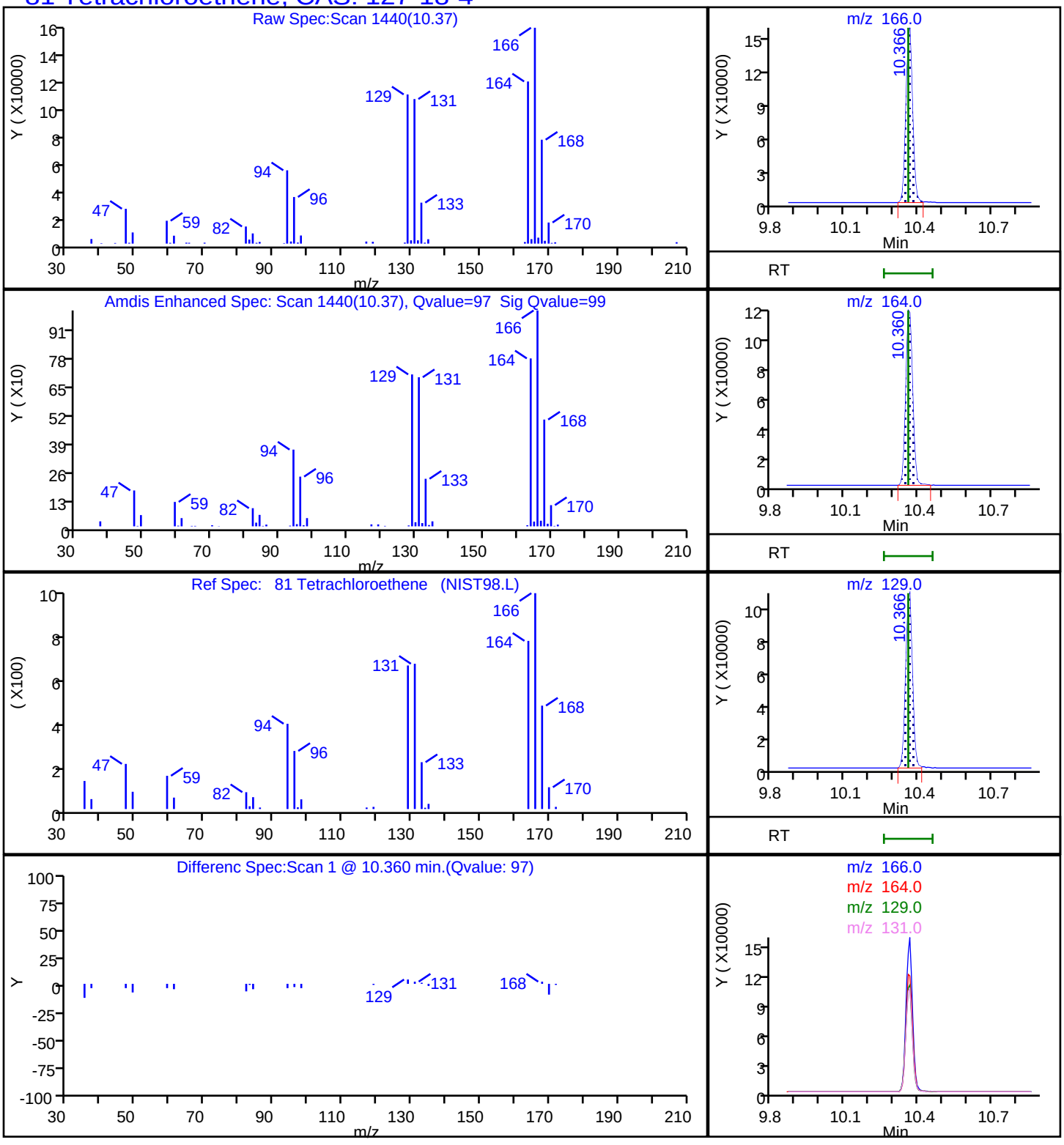
45 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S15.D
Injection Date: 02-Jun-2021 05:47:30 Instrument ID: 19930
Lims ID: 410-41319-A-9 Lab Sample ID: 410-41319-9
Client ID: HD-COD-SW-26-0/1-0
Operator ID: MEC29284 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

81 Tetrachloroethene, CAS: 127-18-4

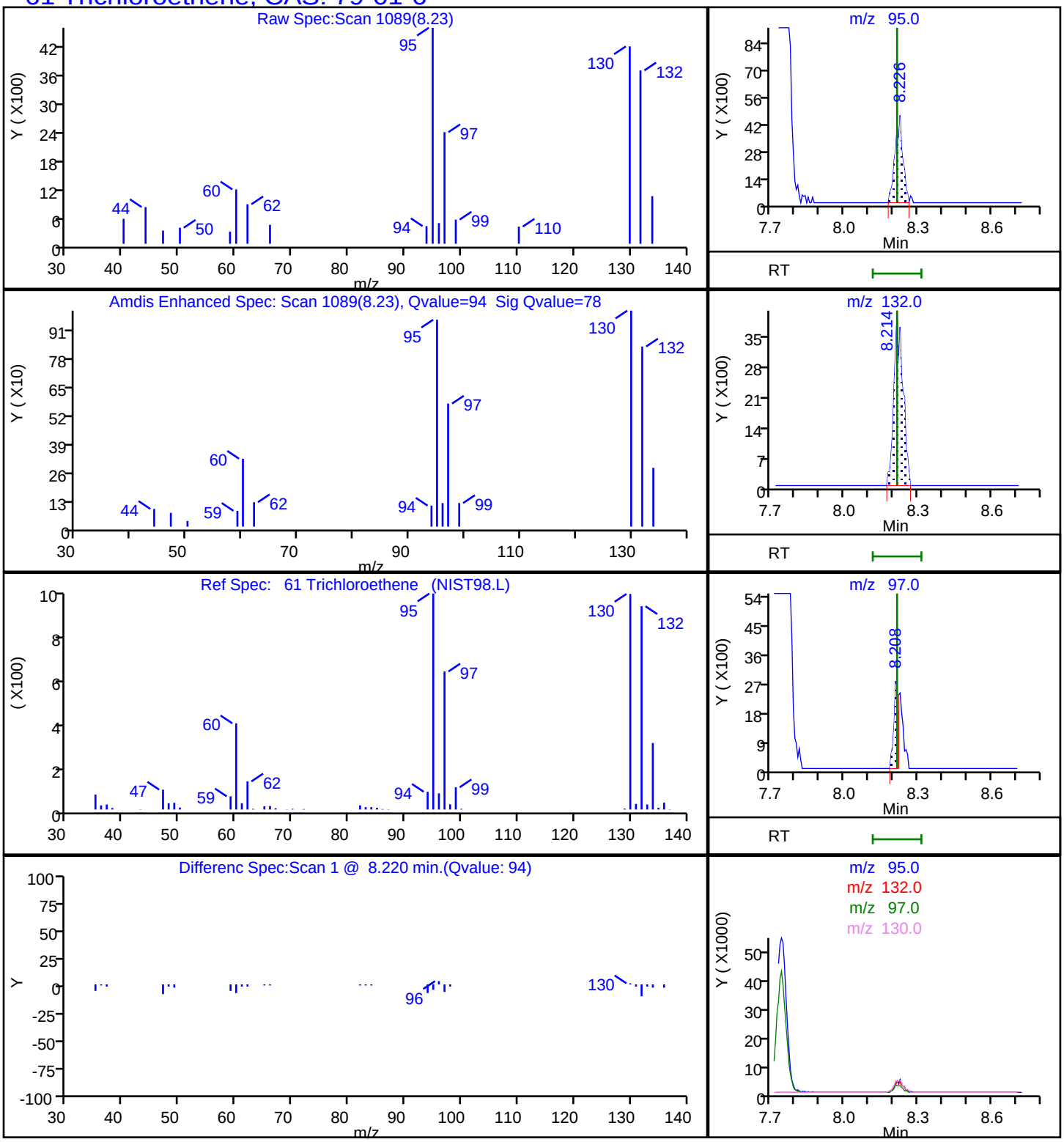


Report Date: 02-Jun-2021 16:19:56 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S15.D				
Injection Date:	02-Jun-2021 05:47:30	Instrument ID:	19930		
Lims ID:	410-41319-A-9	Lab Sample ID:	410-41319-9		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

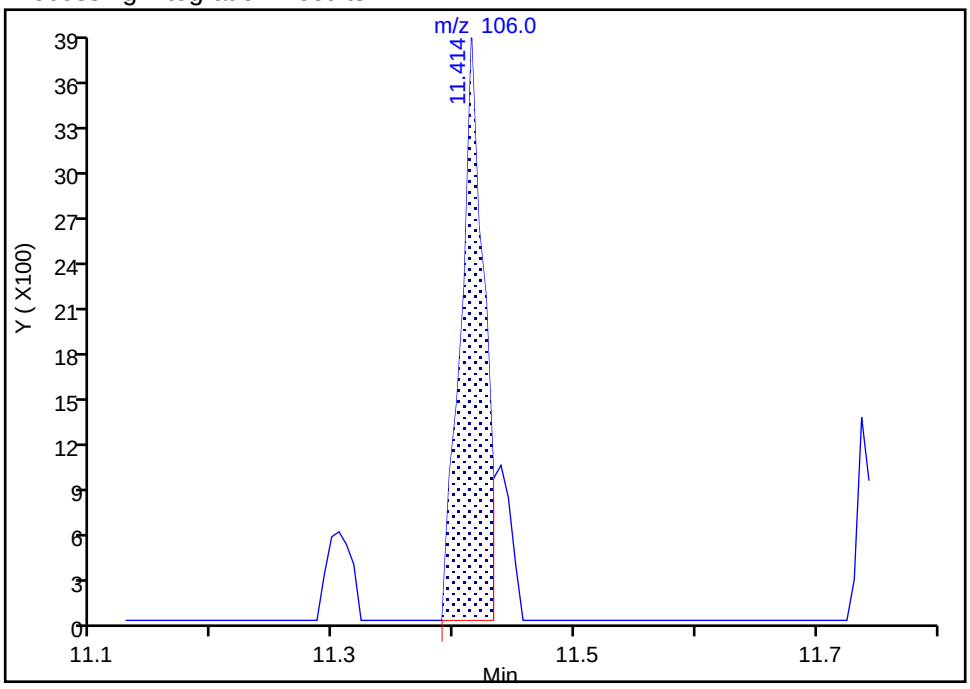
Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S15.D				
Injection Date:	02-Jun-2021 05:47:30	Instrument ID:	19930		
Lims ID:	410-41319-A-9	Lab Sample ID:	410-41319-9		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

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

Signal: 1

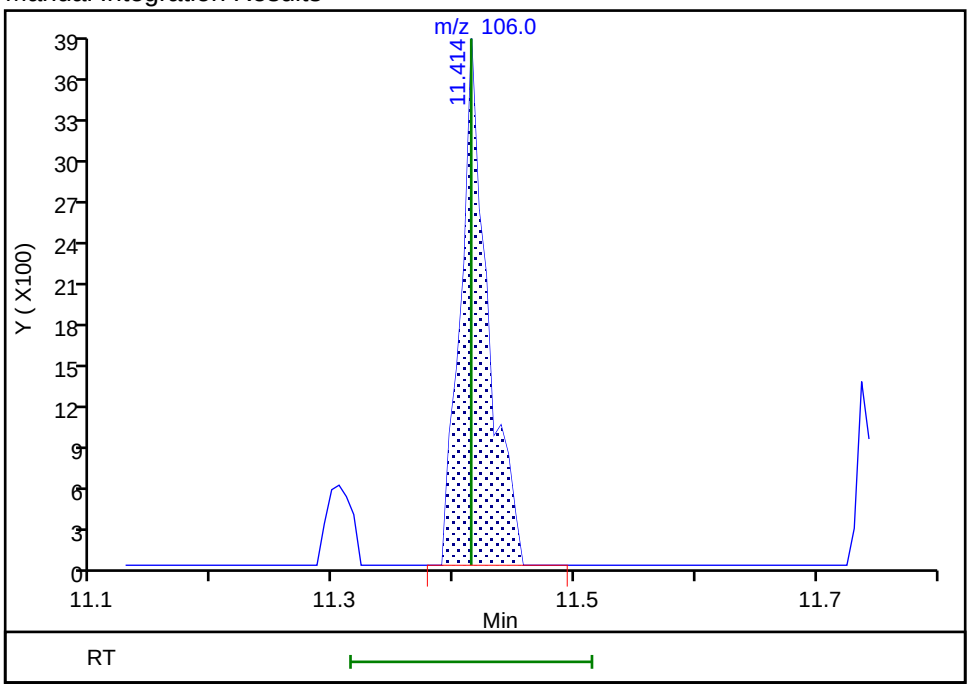
Processing Integration Results

RT: 11.41
Area: 5138
Amount: 0.046070
Amount Units: ug/l



Manual Integration Results

RT: 11.41
Area: 5938
Amount: 0.053243
Amount Units: ug/l



Reviewer: riehlc, 02-Jun-2021 16:12:47

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.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 410-41319-10

Matrix: Water Lab File ID: IU01S16.D

Analysis Method: 8260D Date Collected: 05/25/2021 11:20

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 06:08

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.: 132853 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	0.086	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	0.069	J	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.094	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	0.079	J	0.50	0.060
108-88-3	Toluene	0.084	J	0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	0.084	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 410-41319-10

Matrix: Water Lab File ID: IU01S16.D

Analysis Method: 8260D Date Collected: 05/25/2021 11:20

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 06:08

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.: 132853 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)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S16.D
Lims ID: 410-41319-A-10
Client ID: HD-COD-SW-27-0/1-0
Sample Type: Client
Inject. Date: 02-Jun-2021 06:08:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-022
Misc. Info.: 410-41319-A-10
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 16:19:01 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: riehlc Date: 02-Jun-2021 16:14:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.178	2.172	0.006	1	4478	0.0687	
5 Vinyl chloride	62		2.294				ND	
7 Bromomethane	94		2.623				ND	
8 Chloroethane	64		2.702				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.611	3.592	0.019	100	13228	1.88	
19 Carbon disulfide	76	3.879	3.885	-0.006	95	11420	0.0865	
* 24 t-Butyl alcohol-d10 (IS)	65	4.257	4.233	0.024	22	108869	50.0	
23 Methylene Chloride	84		4.245				ND	
27 Methyl tert-butyl ether	73		4.647				ND	
28 trans-1,2-Dichloroethene	96		4.659				ND	
31 1,1-Dichloroethane	63		5.318				ND	
36 2-Butanone (MEK)	43	6.153	6.116	0.037	44	3971	0.3199	
37 cis-1,2-Dichloroethene	96	6.159	6.147	0.012	76	5539	0.0943	
43 Chlorobromomethane	128		6.482				ND	
45 Chloroform	83	6.641	6.628	0.013	90	6001	0.0641	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.848	0.006	94	425464	9.85	
47 1,1,1-Trichloroethane	97		6.860				ND	
50 Carbon tetrachloride	117		7.073				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.299	0.006	83	83842	9.92	
54 Benzene	78		7.336				ND	7
56 1,2-Dichloroethane	62		7.403				ND	
* 58 Fluorobenzene (IS)	96	7.738	7.732	0.006	99	1718035	10.0	
61 Trichloroethene	95	8.232	8.213	0.019	69	4825	0.0839	
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	7
$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	93	1695394	9.84	
76 Toluene	92	9.817	9.811	0.006	96	11868	0.0837	
78 trans-1,3-Dichloropropene	75		10.067				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.359	10.359	0.000	89	5328	0.0790	
83 2-Hexanone	43		10.481				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.188	11.189	0.000	84	1316874	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.292				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106	11.420	11.414	0.006	96	6164	0.0566	
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.755				ND	
96 Bromoform	173		11.920				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	93	621974	9.50	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	770662	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_LLcentISS_00001 Amount Added: 5.00 Units: uL Run Reagent

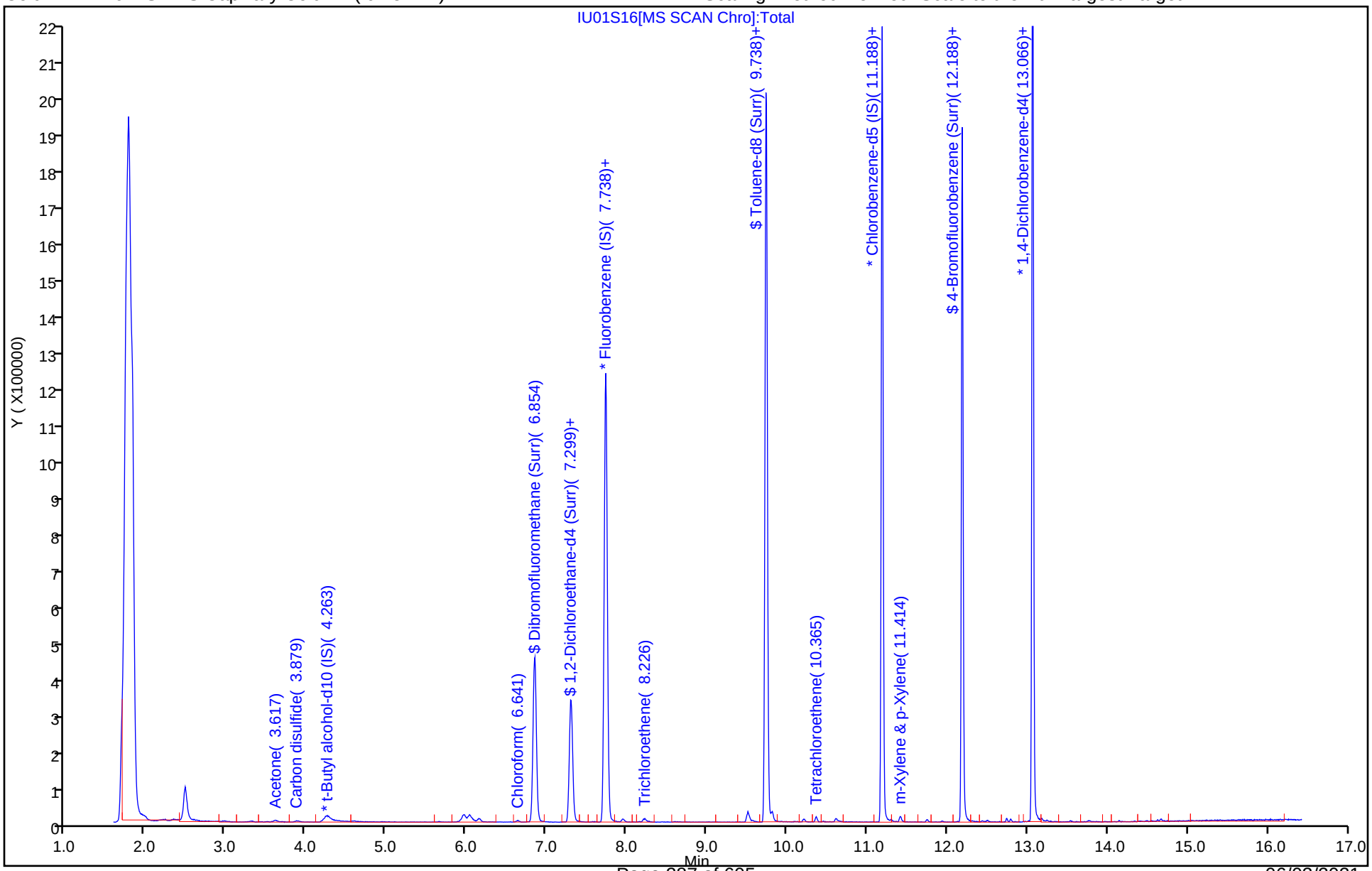
Report Date: 02-Jun-2021 16:19:57 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S16.D

Injection Date:	02-Jun-2021 06:08:30	Instrument ID:	19930	Operator ID:	MEC29284
Lims ID:	410-41319-A-10	Lab Sample ID:	410-41319-10	Worklist Smp#:	22
Client ID:	HD-COD-SW-27-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S16.D
Lims ID: 410-41319-A-10
Client ID: HD-COD-SW-27-0/1-0
Sample Type: Client
Inject. Date: 02-Jun-2021 06:08:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-022
Misc. Info.: 410-41319-A-10
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 16:19:01 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

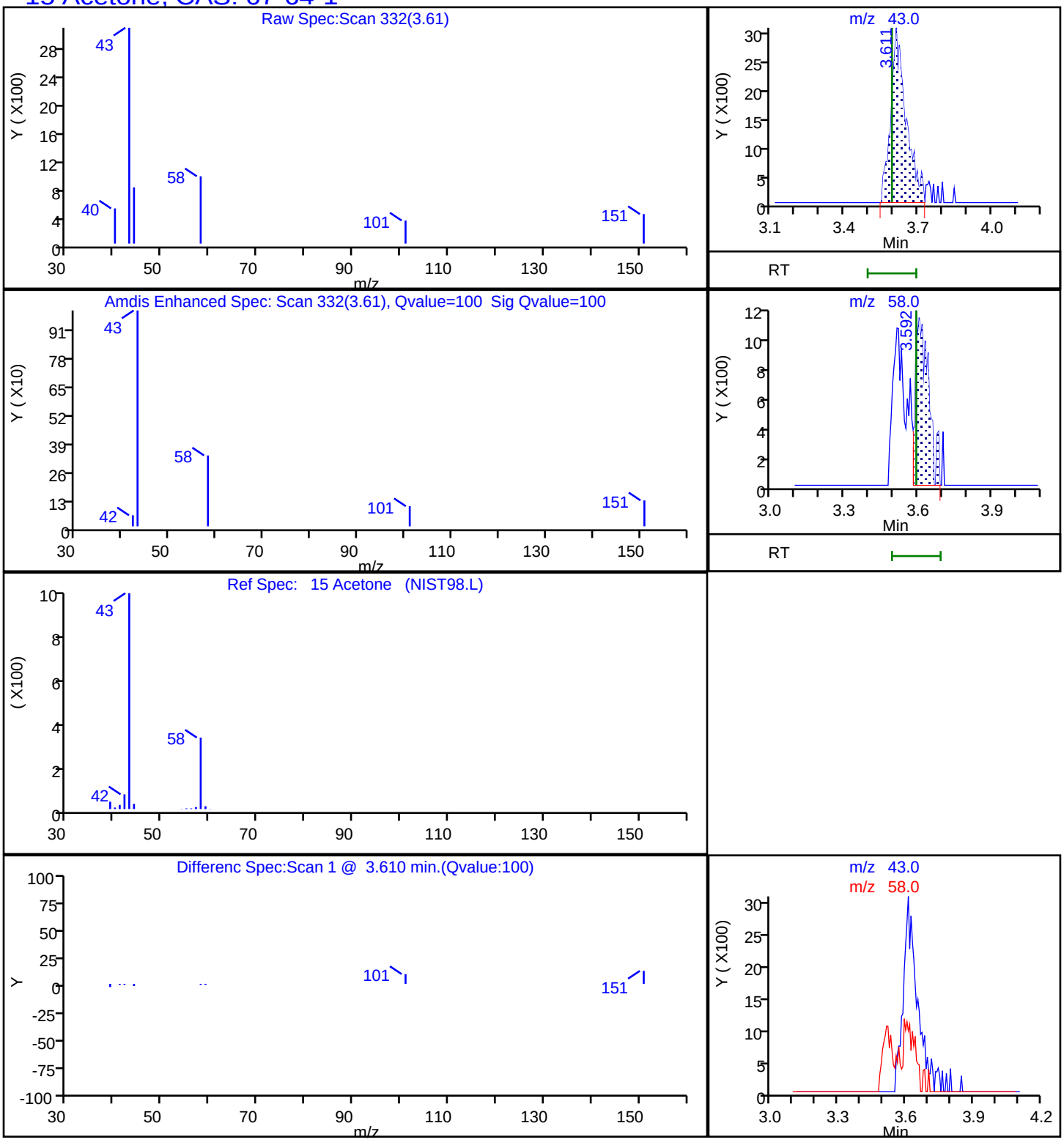
First Level Reviewer: riehlc Date: 02-Jun-2021 16:14:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	9.85	98.49
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.92	99.16
$ 75 Toluene-d8 (Surr)	10.0	9.84	98.37
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.50	94.99

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S16.D				
Injection Date:	02-Jun-2021 06:08:30	Instrument ID:	19930		
Lims ID:	410-41319-A-10	Lab Sample ID:	410-41319-10		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

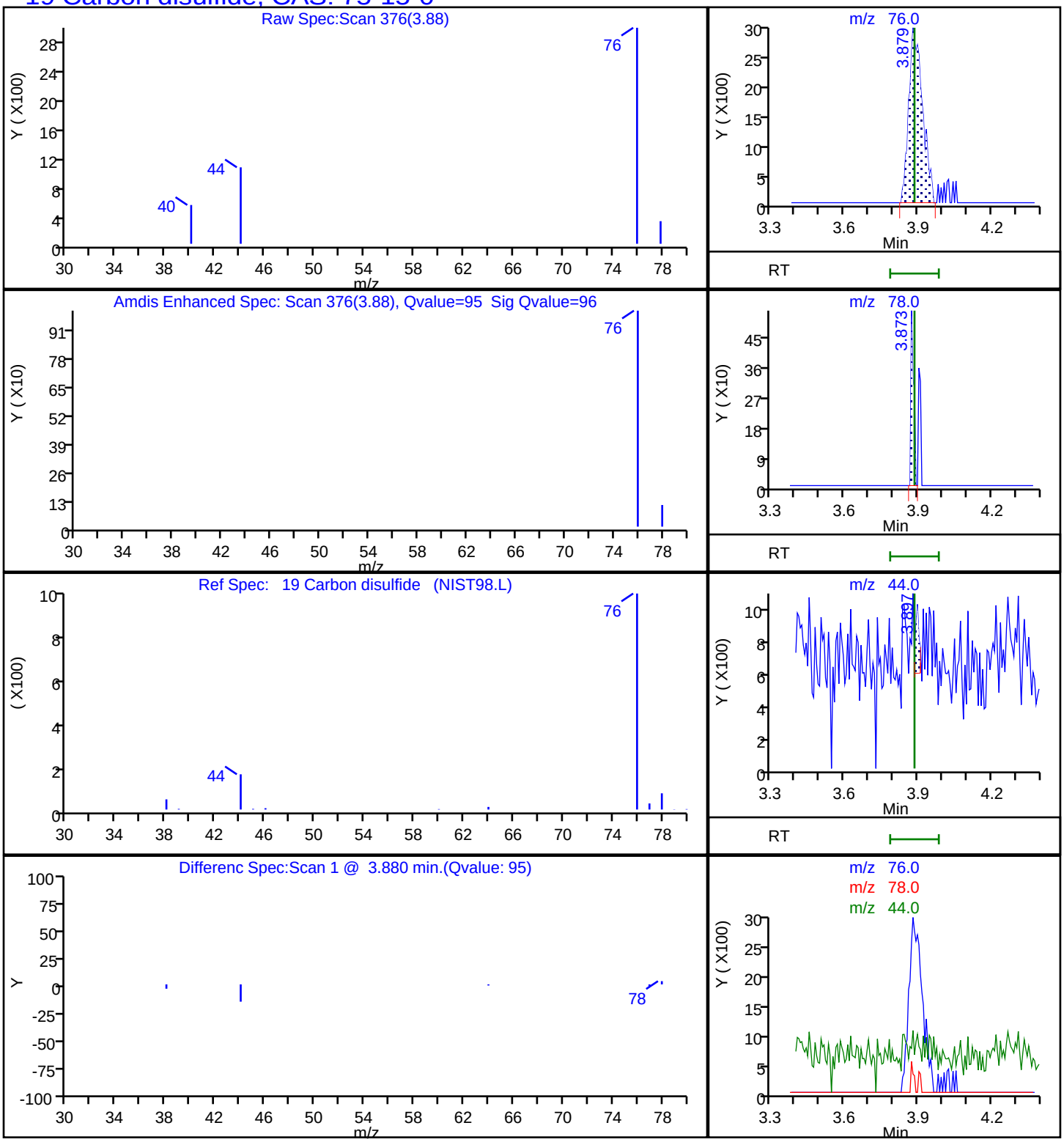
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S16.D				
Injection Date:	02-Jun-2021 06:08:30	Instrument ID:	19930		
Lims ID:	410-41319-A-10	Lab Sample ID:	410-41319-10		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

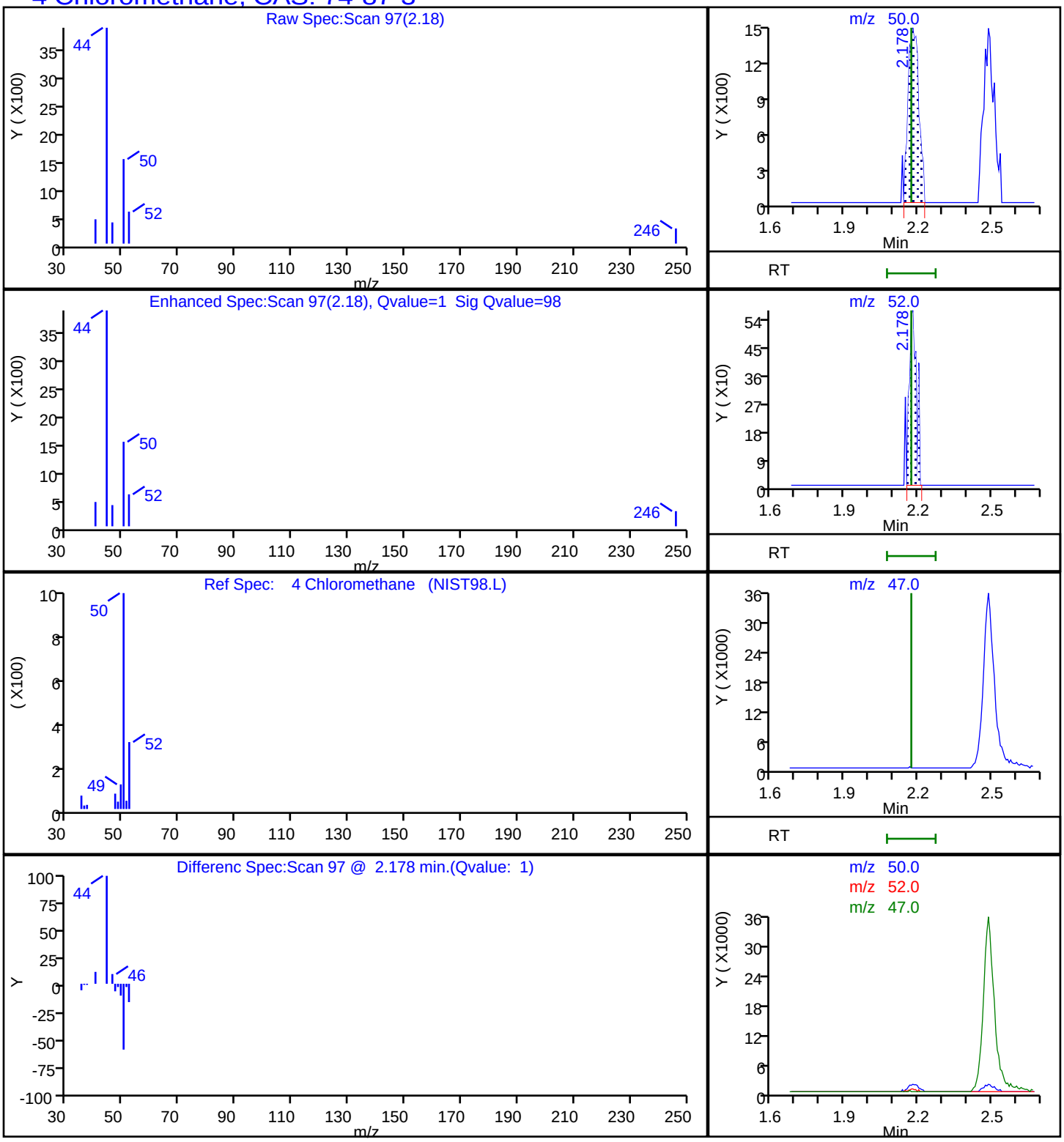
19 Carbon disulfide, CAS: 75-15-0



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S16.D				
Injection Date:	02-Jun-2021 06:08:30	Instrument ID:	19930		
Lims ID:	410-41319-A-10	Lab Sample ID:	410-41319-10		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

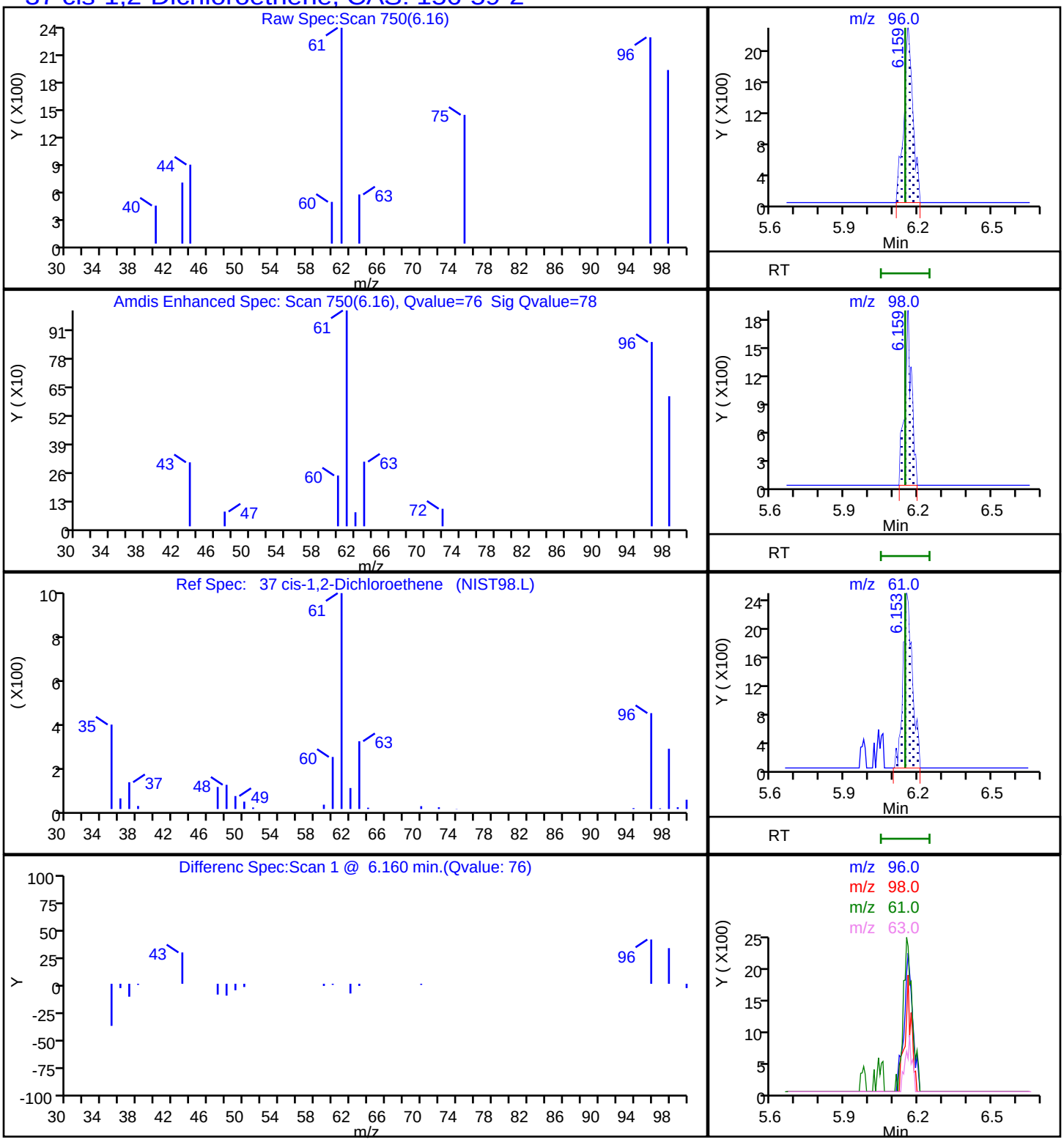
4 Chloromethane, CAS: 74-87-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S16.D				
Injection Date:	02-Jun-2021 06:08:30	Instrument ID:	19930		
Lims ID:	410-41319-A-10	Lab Sample ID:	410-41319-10		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

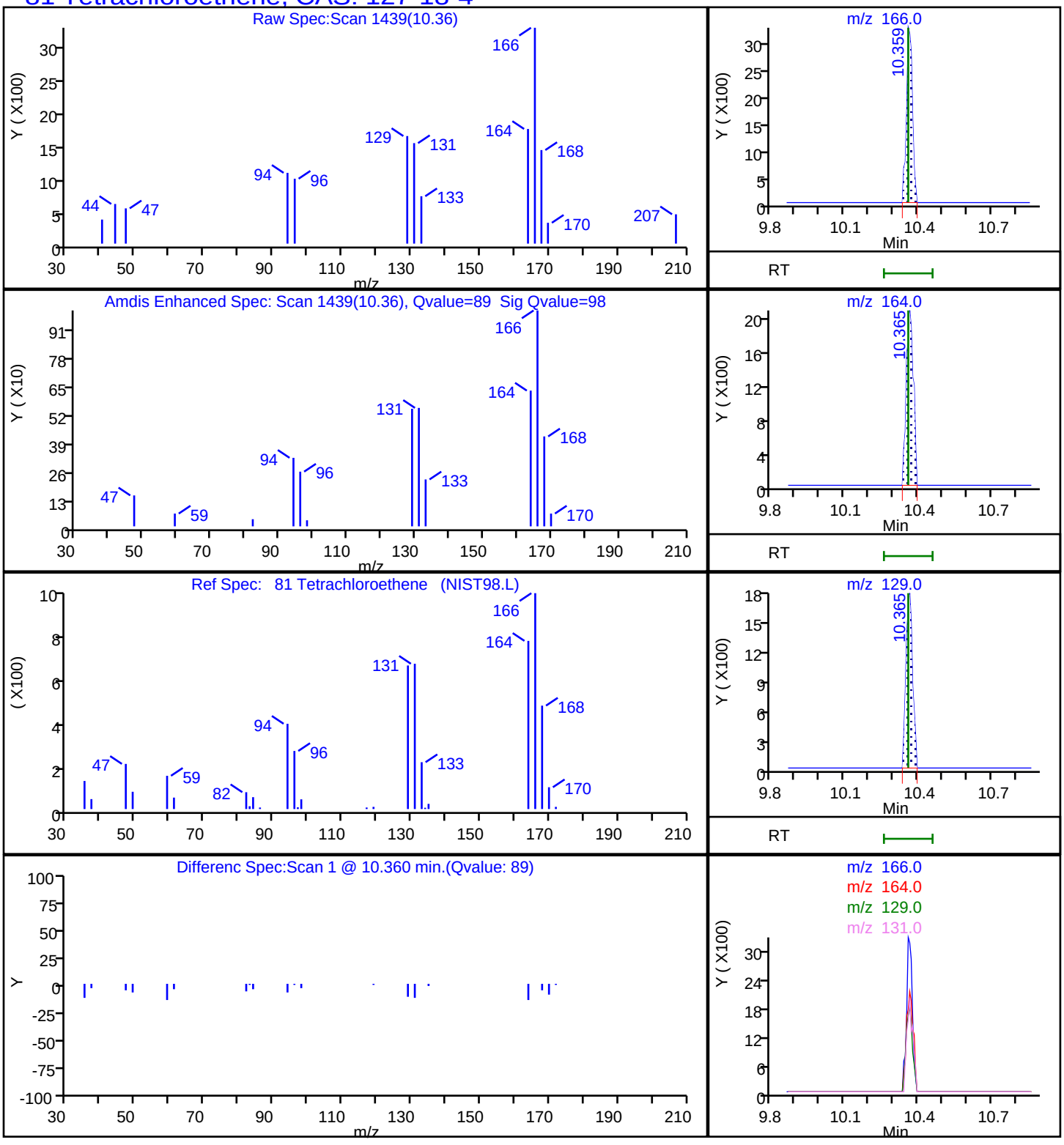
37 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S16.D
Injection Date: 02-Jun-2021 06:08:30 Instrument ID: 19930
Lims ID: 410-41319-A-10 Lab Sample ID: 410-41319-10
Client ID: HD-COD-SW-27-0/1-0
Operator ID: MEC29284 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

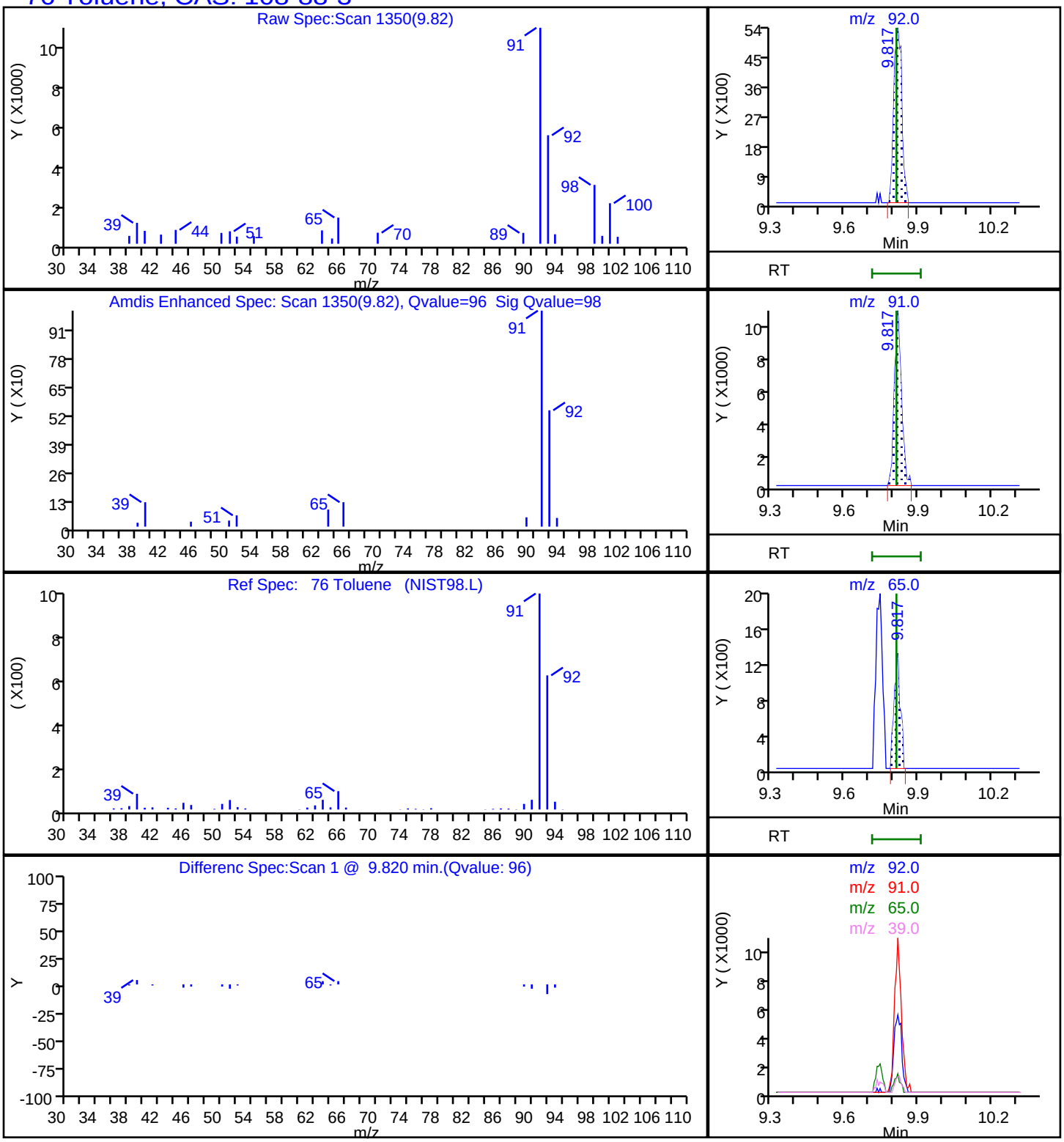
81 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S16.D				
Injection Date:	02-Jun-2021 06:08:30	Instrument ID:	19930		
Lims ID:	410-41319-A-10	Lab Sample ID:	410-41319-10		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

76 Toluene, CAS: 108-88-3



Report Date: 02-Jun-2021 16:19:57 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S16.D

Injection Date: 02-Jun-2021 06:08:30 Instrument ID: 19930

Lims ID: 410-41319-A-10 Lab Sample ID: 410-41319-10

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

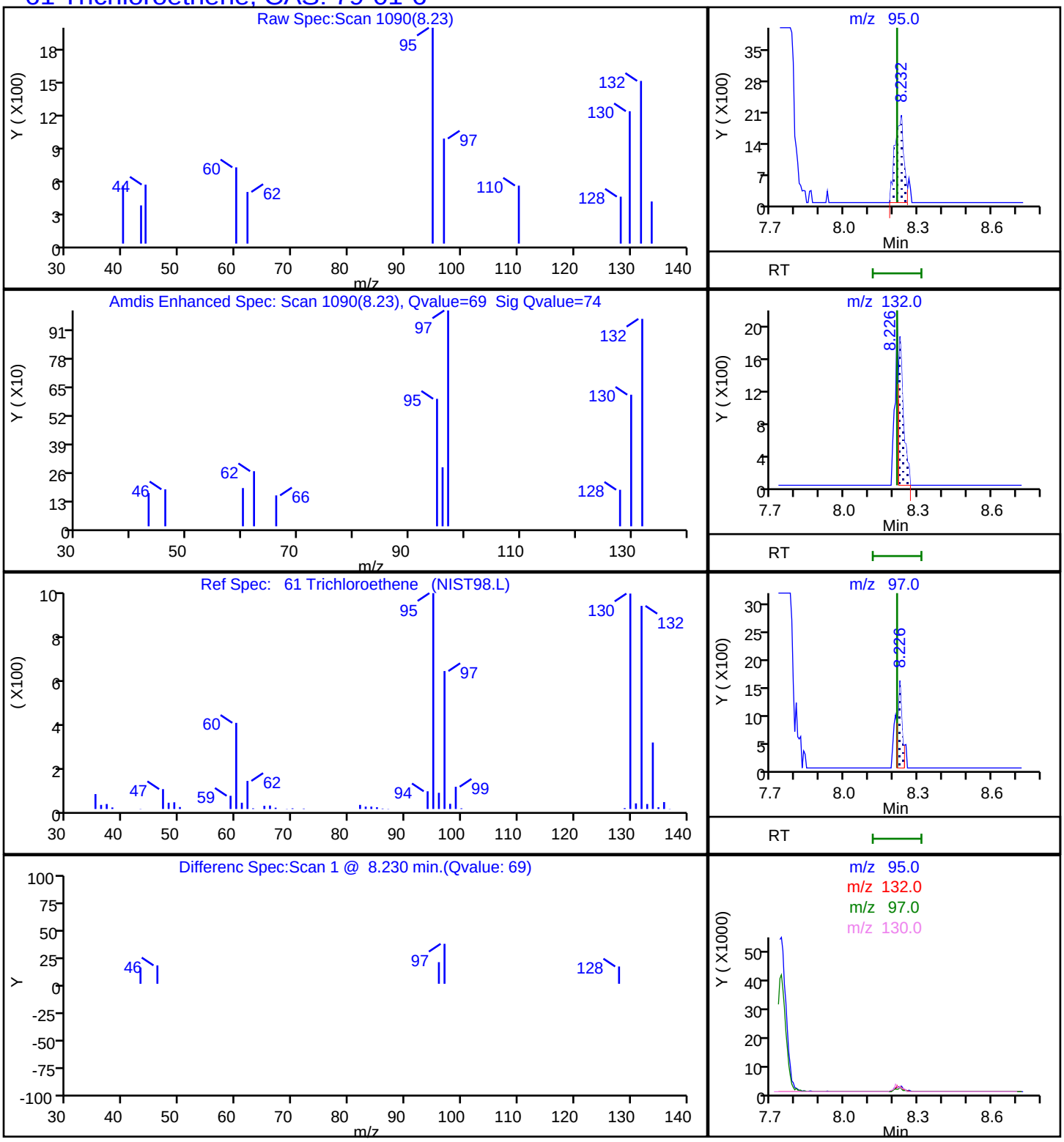
Operator ID: MEC29284 ALS Bottle#: 21 Worklist Smp#: 22

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

61 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 410-41319-11

Matrix: Water Lab File ID: IU01S17.D

Analysis Method: 8260D Date Collected: 05/25/2021 12:25

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 06:29

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.: 132853 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.070
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.060
75-34-3	1,1-Dichloroethane	ND		0.50	0.070
75-35-4	1,1-Dichloroethene	ND		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.060
107-06-2	1,2-Dichloroethane	ND		0.50	0.050
78-87-5	1,2-Dichloropropane	ND		0.50	0.060
78-93-3	2-Butanone (MEK)	ND		5.0	0.60
591-78-6	2-Hexanone	ND		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	0.70
67-64-1	Acetone	2.6	J ^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	0.10	J	0.50	0.090
74-87-3	Chloromethane	0.066	J	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	0.10	J	0.50	0.070
100-42-5	Styrene	ND		0.50	0.050
127-18-4	Tetrachloroethene	0.087	J	0.50	0.060
108-88-3	Toluene	0.13	J	0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	ND		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-28-0/1-0 Lab Sample ID: 410-41319-11

Matrix: Water Lab File ID: IU01S17.D

Analysis Method: 8260D Date Collected: 05/25/2021 12:25

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 06:29

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.: 132853 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	0.18	J	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)	85		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S17.D
Lims ID: 410-41319-A-11
Client ID: HD-COD-SW-28-0/1-0
Sample Type: Client
Inject. Date: 02-Jun-2021 06:29:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-023
Misc. Info.: 410-41319-A-11
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 16:19:01 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: riehlc Date: 02-Jun-2021 16:15:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.172	2.172	0.000	93	4271	0.0659	
5 Vinyl chloride	62		2.294				ND	
7 Bromomethane	94		2.623				ND	
8 Chloroethane	64		2.702				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.599	3.592	0.007	99	21244	2.63	
19 Carbon disulfide	76	3.885	3.885	0.000	53	4925	0.0375	M
* 24 t-Butyl alcohol-d10 (IS)	65	4.245	4.233	0.012	28	124811	50.0	
23 Methylene Chloride	84	4.233	4.245	-0.012	41	5066	0.1017	
27 Methyl tert-butyl ether	73		4.647				ND	
28 trans-1,2-Dichloroethene	96		4.659				ND	
31 1,1-Dichloroethane	63		5.318				ND	
36 2-Butanone (MEK)	43		6.116				ND	7
37 cis-1,2-Dichloroethene	96		6.147				ND	
43 Chlorobromomethane	128		6.482				ND	
45 Chloroform	83	6.641	6.628	0.013	88	9687	0.1041	
$ 46 Dibromofluoromethane (Surr)	113	6.842	6.848	-0.006	94	426406	9.94	
47 1,1,1-Trichloroethane	97		6.860				ND	
50 Carbon tetrachloride	117		7.073				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.299	7.299	0.000	83	82877	9.87	
54 Benzene	78	7.324	7.336	-0.012	41	5515	0.0251	
56 1,2-Dichloroethane	62		7.403				ND	
* 58 Fluorobenzene (IS)	96	7.732	7.732	0.000	99	1706700	10.0	
61 Trichloroethene	95	8.226	8.213	0.013	89	2772	0.0485	M
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	7
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	7
$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	93	1696276	9.74	
76 Toluene	92	9.811	9.811	0.000	99	18751	0.1308	
78 trans-1,3-Dichloropropene	75		10.067				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.360	10.359	0.001	93	5918	0.0868	
83 2-Hexanone	43		10.481				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.001	84	1330902	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106				0		0.1782	
91 1,1,1,2-Tetrachloroethane	131		11.292				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	97	12976	0.1180	
94 o-Xylene	106	11.743	11.743	0.000	97	6479	0.0602	
95 Styrene	104		11.755				ND	7
96 Bromoform	173		11.920				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	95	563182	8.51	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	773062	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

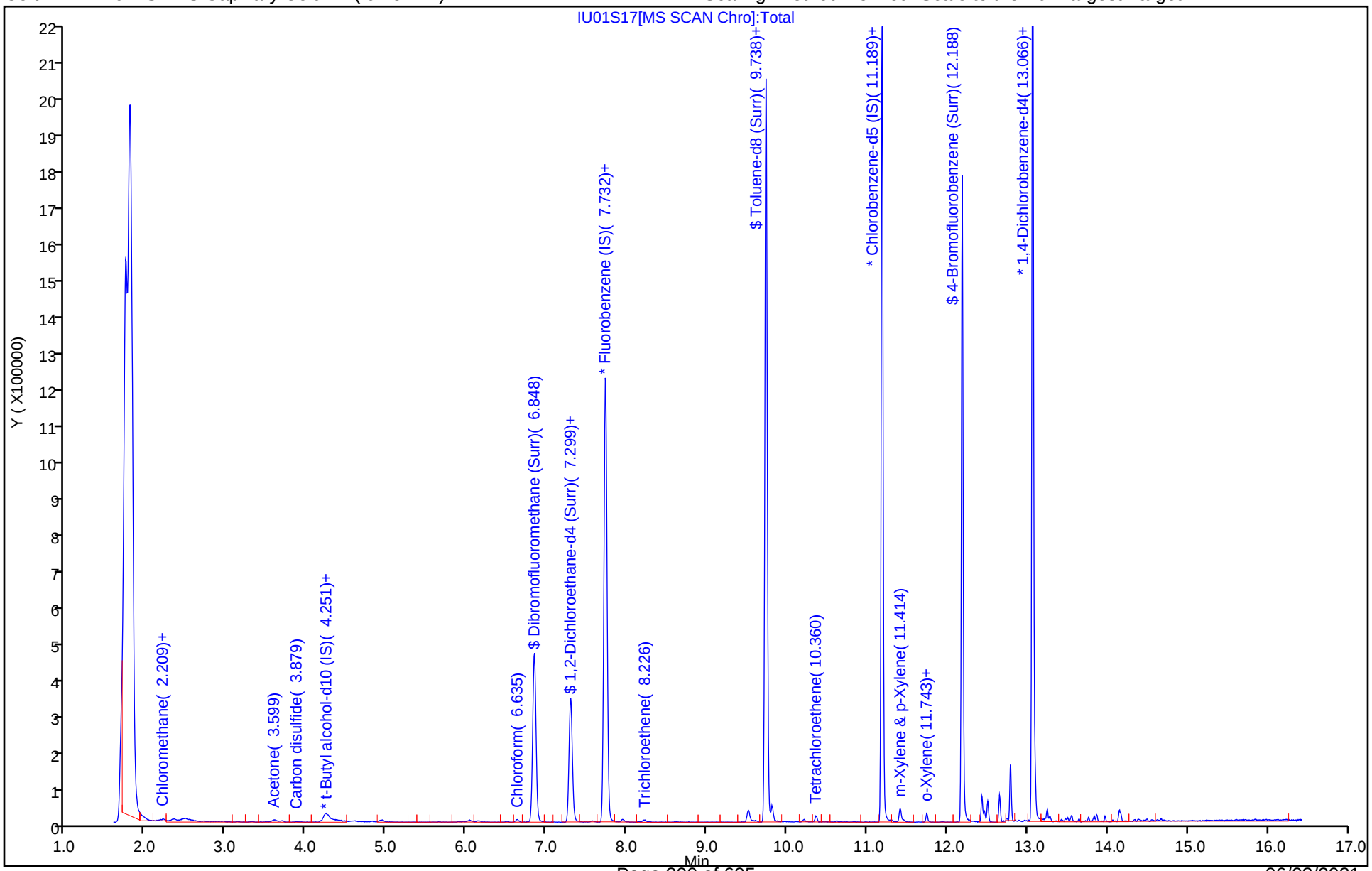
Report Date: 02-Jun-2021 16:19:59 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S17.D

Injection Date:	02-Jun-2021 06:29:30	Instrument ID:	19930	Operator ID:	MEC29284
Lims ID:	410-41319-A-11	Lab Sample ID:	410-41319-11	Worklist Smp#:	23
Client ID:	HD-COD-SW-28-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S17.D
Lims ID: 410-41319-A-11
Client ID: HD-COD-SW-28-0/1-0
Sample Type: Client
Inject. Date: 02-Jun-2021 06:29:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-023
Misc. Info.: 410-41319-A-11
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 16:19:01 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

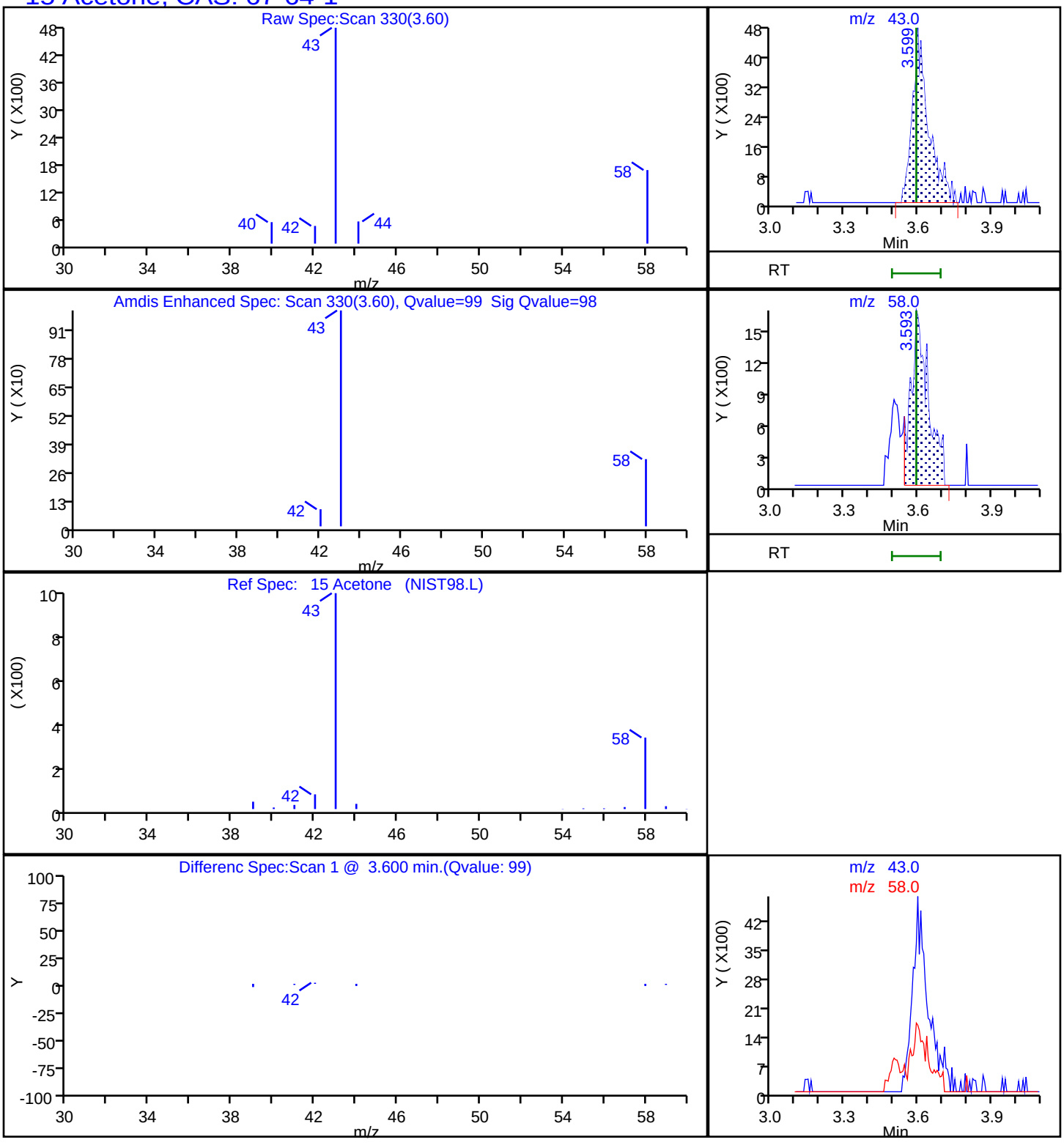
First Level Reviewer: riehlc Date: 02-Jun-2021 16:15:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	9.94	99.36
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.87	98.67
$ 75 Toluene-d8 (Surr)	10.0	9.74	97.39
$ 100 4-Bromofluorobenzene (Surr)	10.0	8.51	85.10

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S17.D				
Injection Date:	02-Jun-2021 06:29:30	Instrument ID:	19930		
Lims ID:	410-41319-A-11	Lab Sample ID:	410-41319-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

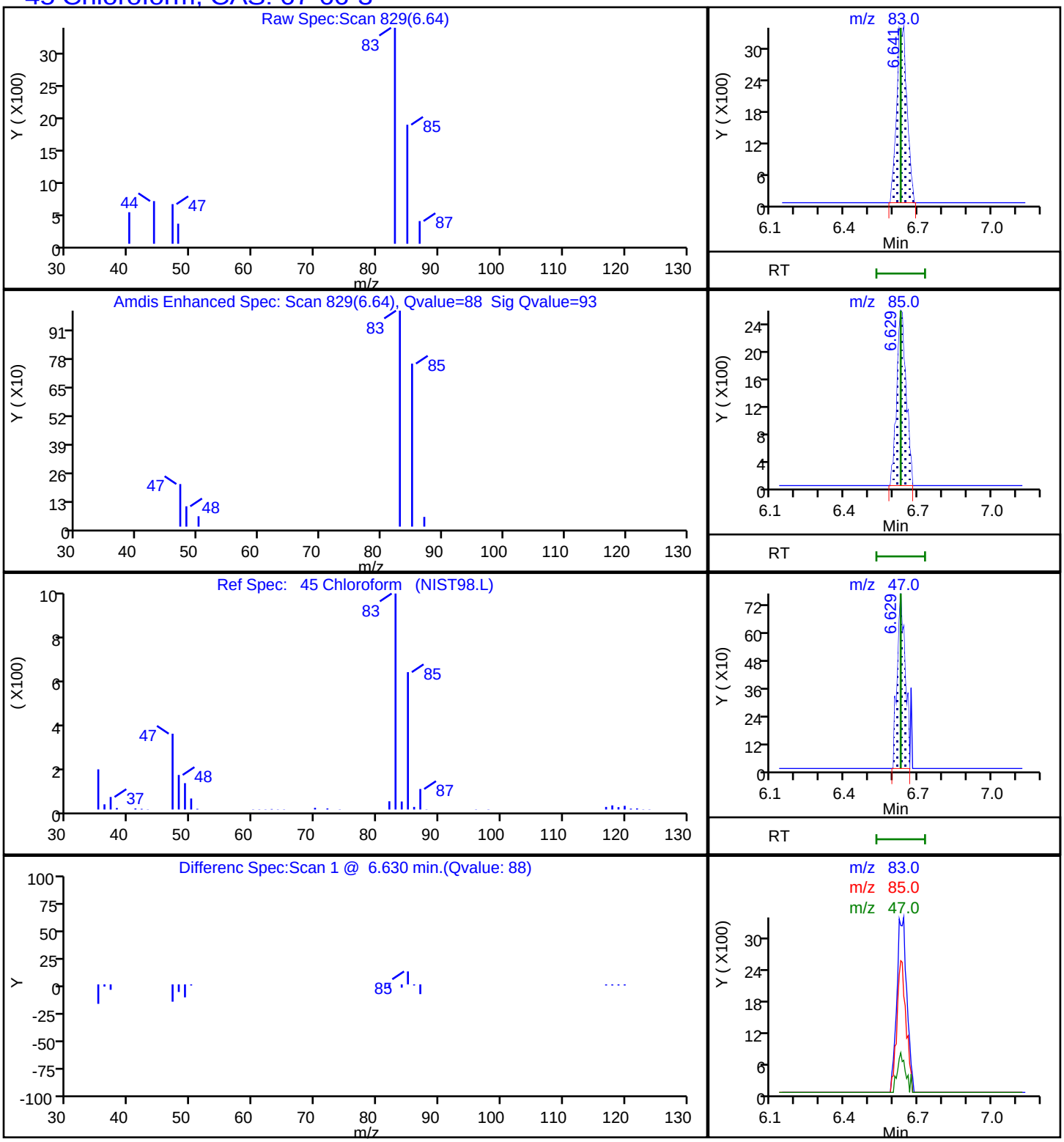
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S17.D				
Injection Date:	02-Jun-2021 06:29:30	Instrument ID:	19930		
Lims ID:	410-41319-A-11	Lab Sample ID:	410-41319-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

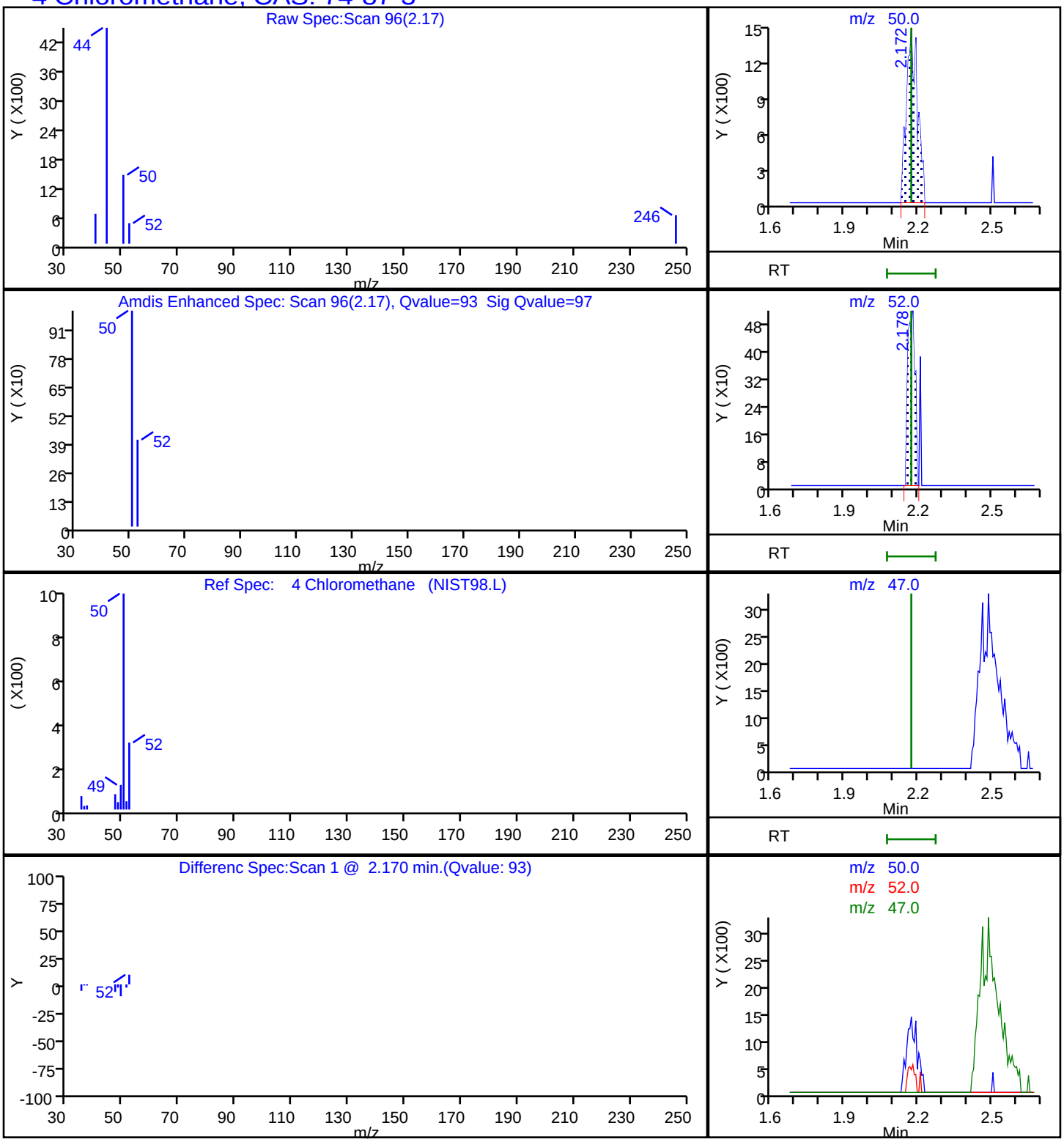
45 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S17.D				
Injection Date:	02-Jun-2021 06:29:30	Instrument ID:	19930		
Lims ID:	410-41319-A-11	Lab Sample ID:	410-41319-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

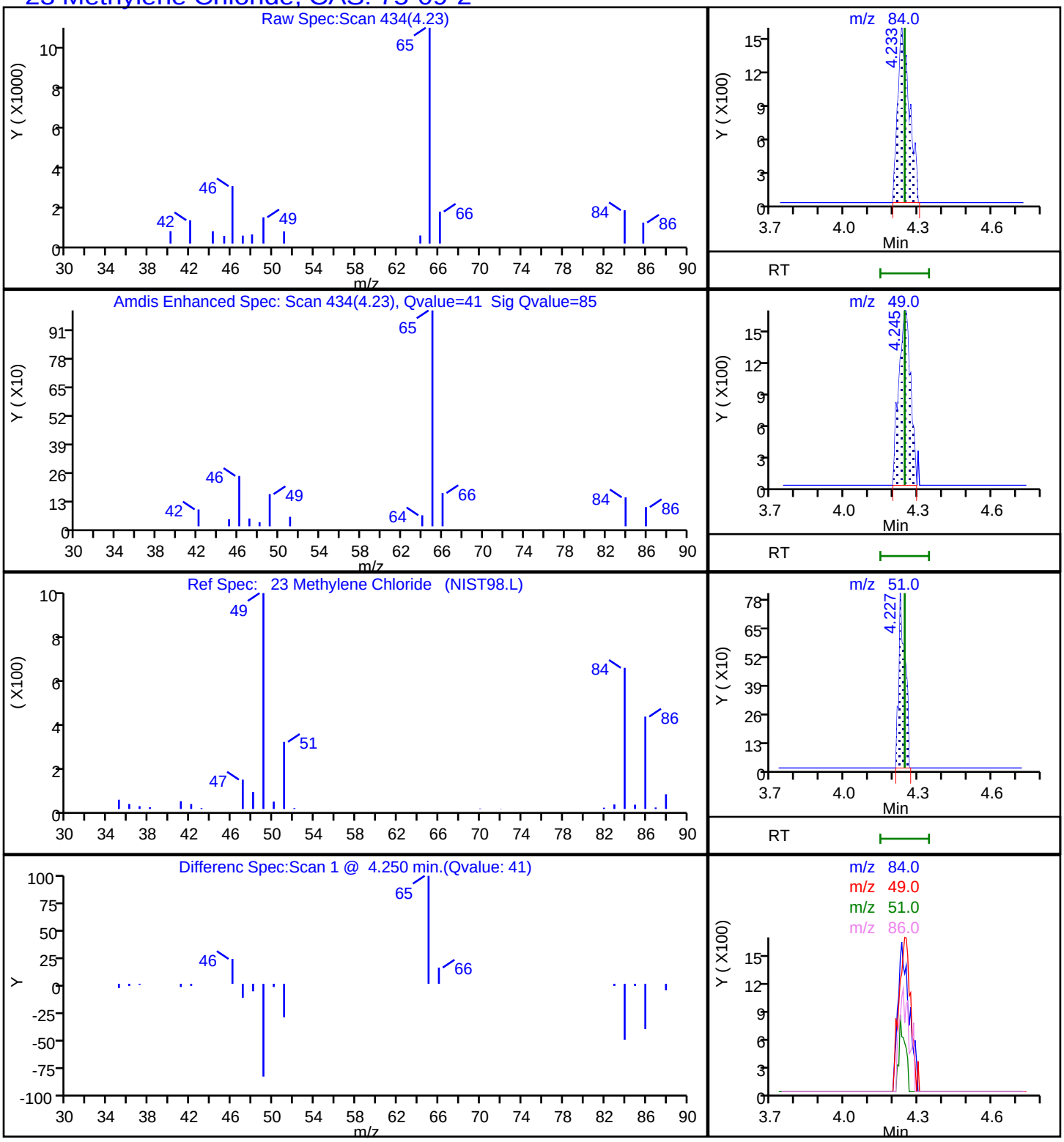
4 Chloromethane, CAS: 74-87-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S17.D				
Injection Date:	02-Jun-2021 06:29:30	Instrument ID:	19930		
Lims ID:	410-41319-A-11	Lab Sample ID:	410-41319-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

23 Methylene Chloride, CAS: 75-09-2



Report Date: 02-Jun-2021 16:19:59 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S17.D

Injection Date: 02-Jun-2021 06:29:30 Instrument ID: 19930

Lims ID: 410-41319-A-11 Lab Sample ID: 410-41319-11

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

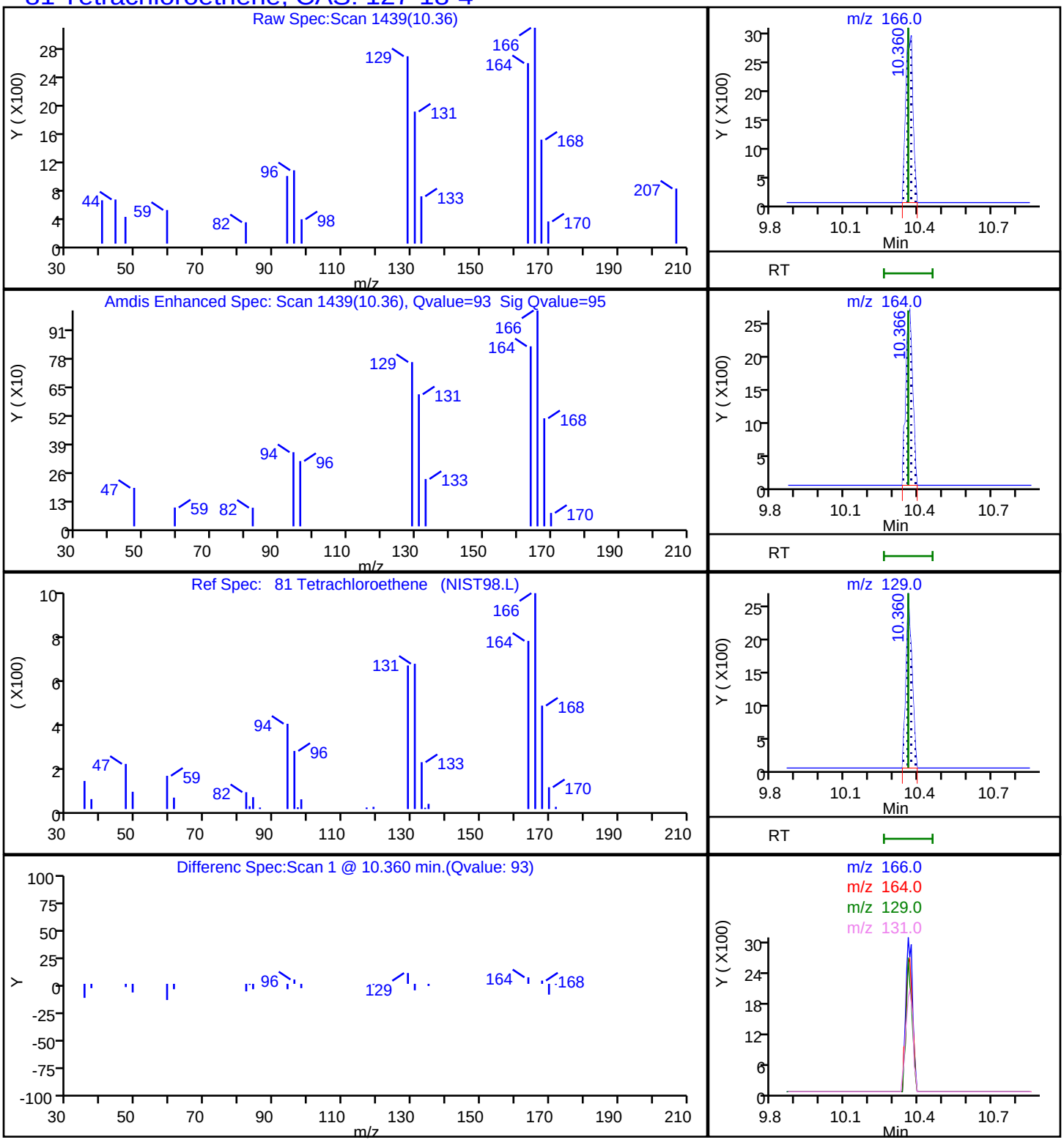
Operator ID: MEC29284 ALS Bottle#: 22 Worklist Smp#: 23

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

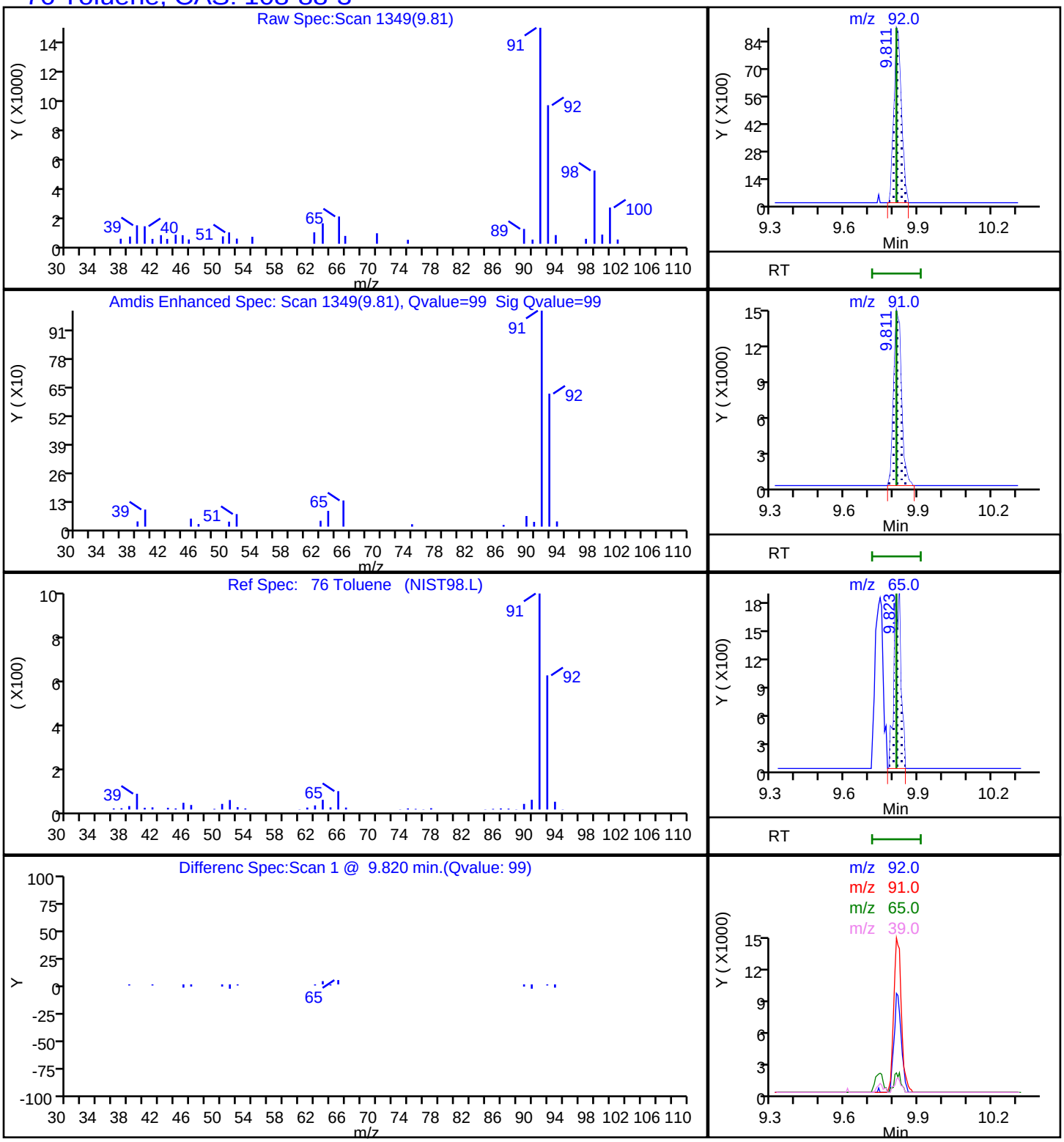
81 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S17.D				
Injection Date:	02-Jun-2021 06:29:30	Instrument ID:	19930		
Lims ID:	410-41319-A-11	Lab Sample ID:	410-41319-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

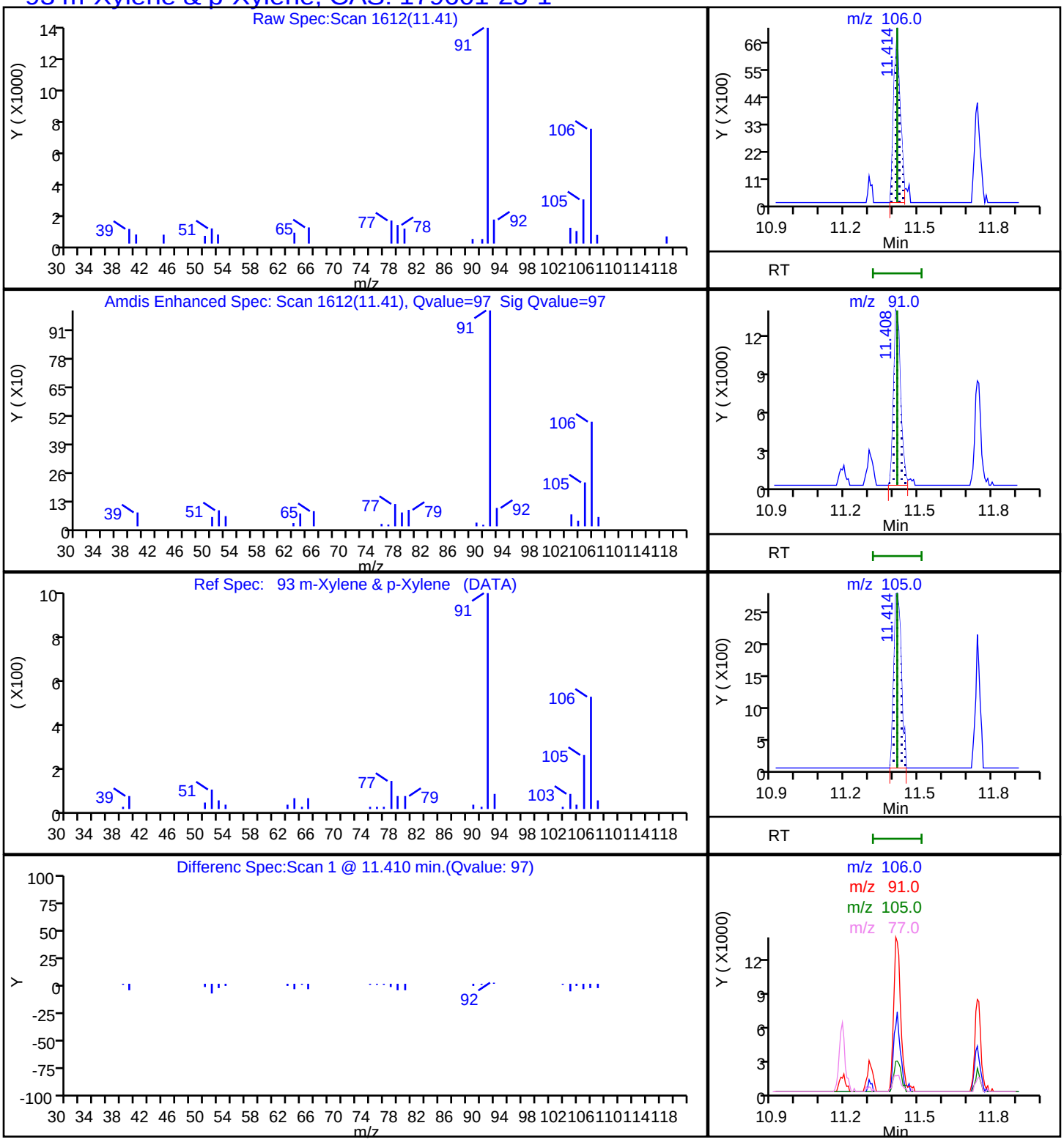
76 Toluene, CAS: 108-88-3



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S17.D				
Injection Date:	02-Jun-2021 06:29:30	Instrument ID:	19930		
Lims ID:	410-41319-A-11	Lab Sample ID:	410-41319-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

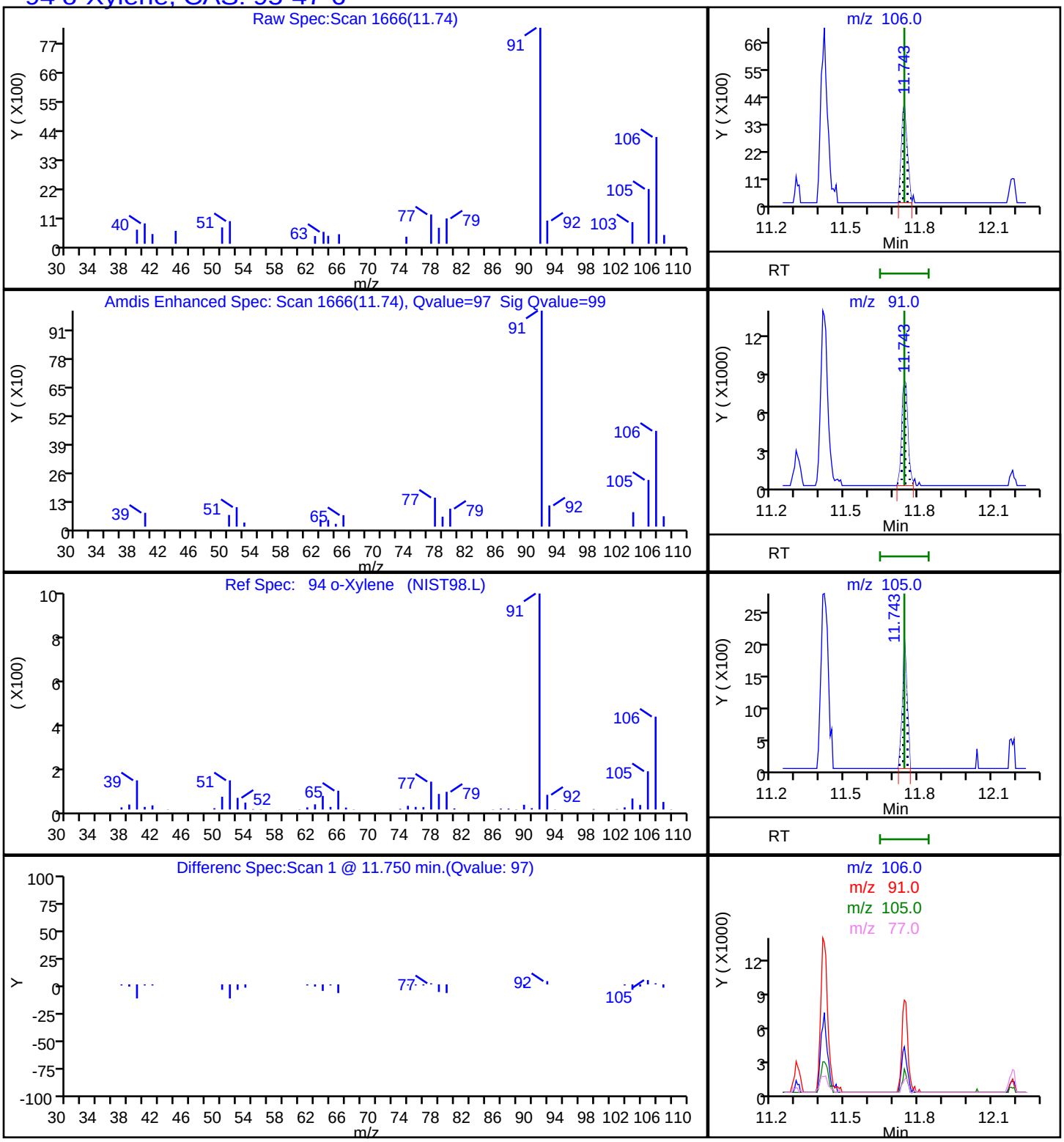
93 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S17.D				
Injection Date:	02-Jun-2021 06:29:30	Instrument ID:	19930		
Lims ID:	410-41319-A-11	Lab Sample ID:	410-41319-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

94 o-Xylene, CAS: 95-47-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

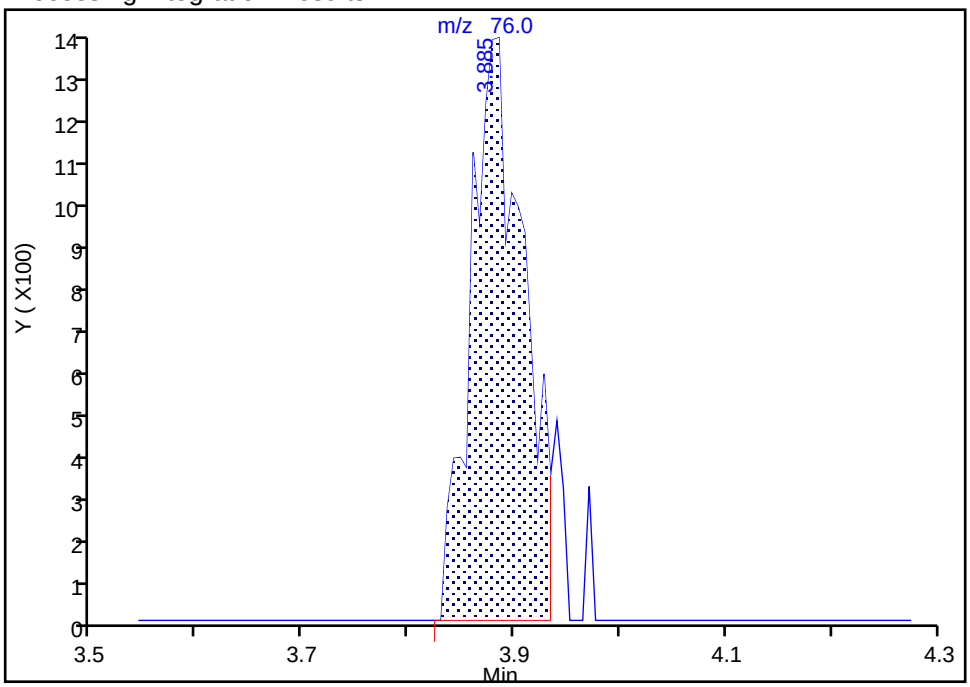
Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S17.D				
Injection Date:	02-Jun-2021 06:29:30	Instrument ID:	19930		
Lims ID:	410-41319-A-11	Lab Sample ID:	410-41319-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

19 Carbon disulfide, CAS: 75-15-0

Signal: 1

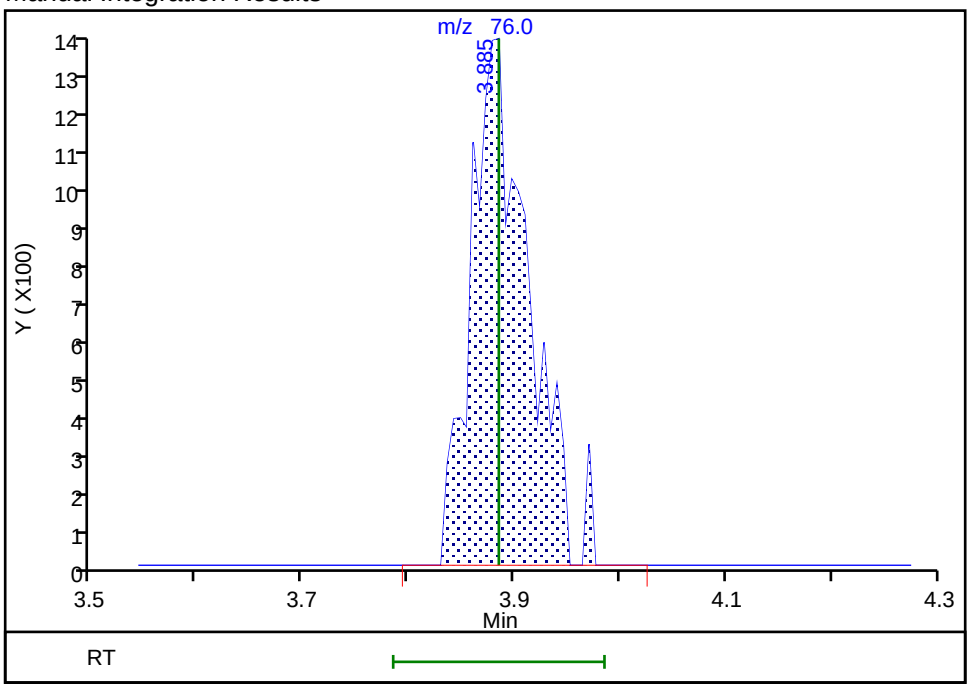
Processing Integration Results

RT: 3.89
Area: 4543
Amount: 0.034622
Amount Units: ug/l



Manual Integration Results

RT: 3.89
Area: 4925
Amount: 0.037533
Amount Units: ug/l



Reviewer: riehlc, 02-Jun-2021 16:14:36
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

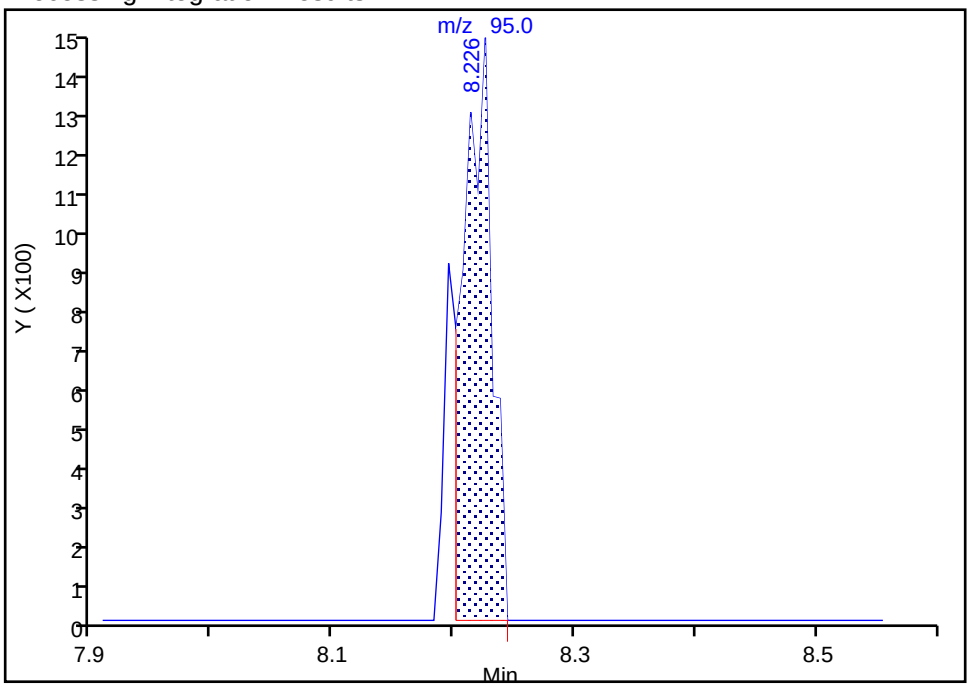
Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S17.D				
Injection Date:	02-Jun-2021 06:29:30	Instrument ID:	19930		
Lims ID:	410-41319-A-11	Lab Sample ID:	410-41319-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6

Signal: 1

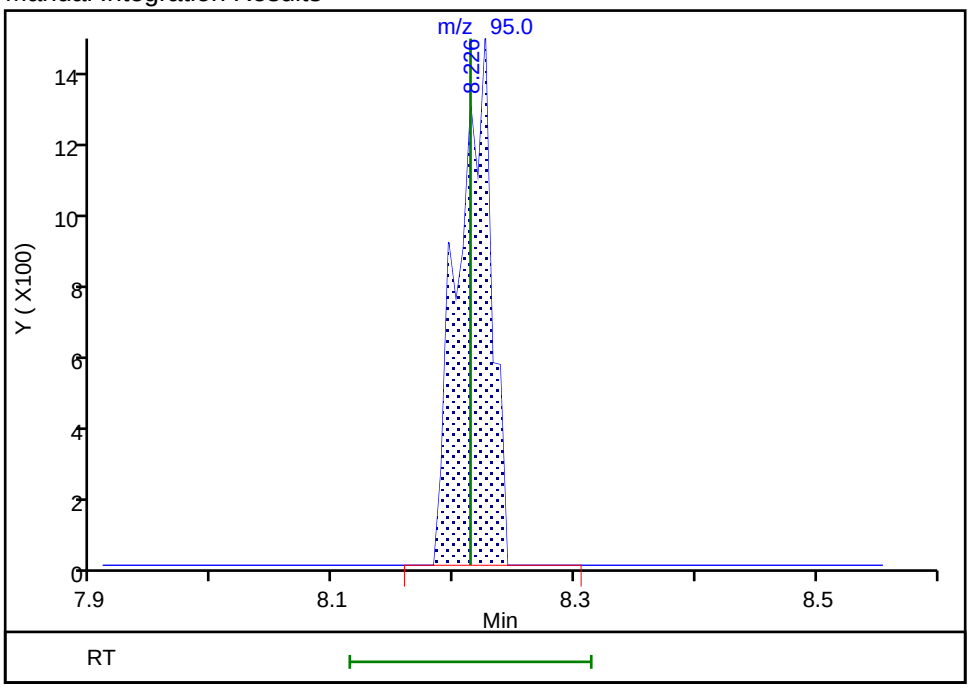
Processing Integration Results

RT: 8.23
Area: 2351
Amount: 0.041129
Amount Units: ug/l



Manual Integration Results

RT: 8.23
Area: 2772
Amount: 0.048494
Amount Units: ug/l



Reviewer: riehlc, 02-Jun-2021 16:14:58

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.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 410-41319-12

Matrix: Water Lab File ID: IU01S18.D

Analysis Method: 8260D Date Collected: 05/25/2021 08:50

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 06:50

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.: 132853 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	0.068	J	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	0.10	J	0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-29-0/1-0 Lab Sample ID: 410-41319-12

Matrix: Water Lab File ID: IU01S18.D

Analysis Method: 8260D Date Collected: 05/25/2021 08:50

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 06:50

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.: 132853 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)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	92		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S18.D
Lims ID: 410-41319-A-12
Client ID: HD-COD-SW-29-0/1-0
Sample Type: Client
Inject. Date: 02-Jun-2021 06:50:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-024
Misc. Info.: 410-41319-A-12
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 16:19:01 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: riehlc Date: 02-Jun-2021 16:16:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.172	2.172	0.000	49	4359	0.0677	
5 Vinyl chloride	62		2.294				ND	
7 Bromomethane	94		2.623				ND	
8 Chloroethane	64		2.702				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.617	3.592	0.025	69	11022	1.56	
19 Carbon disulfide	76	3.885	3.885	0.000	94	4744	0.0364	
* 24 t-Butyl alcohol-d10 (IS)	65	4.257	4.233	0.024	17	109246	50.0	
23 Methylene Chloride	84		4.245				ND	
27 Methyl tert-butyl ether	73		4.647				ND	
28 trans-1,2-Dichloroethene	96		4.659				ND	
31 1,1-Dichloroethane	63		5.318				ND	
36 2-Butanone (MEK)	43		6.116				ND	7
37 cis-1,2-Dichloroethene	96	6.159	6.147	0.012	79	6398	0.1103	
43 Chlorobromomethane	128		6.482				ND	
45 Chloroform	83	6.641	6.628	0.013	82	3998	0.0432	
$ 46 Dibromofluoromethane (Surr)	113	6.848	6.848	0.000	94	422972	9.91	
47 1,1,1-Trichloroethane	97		6.860				ND	
50 Carbon tetrachloride	117		7.073				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.299	7.299	0.000	73	84759	10.2	
54 Benzene	78		7.336				ND	7
56 1,2-Dichloroethane	62		7.403				ND	
* 58 Fluorobenzene (IS)	96	7.738	7.732	0.006	99	1696676	10.0	
61 Trichloroethene	95	8.220	8.213	0.007	89	5869	0.1033	M
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	7
$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	92	1581532	9.18	
76 Toluene	92	9.817	9.811	0.006	97	4586	0.0323	
78 trans-1,3-Dichloropropene	75		10.067				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.359	10.359	0.000	83	3077	0.0456	
83 2-Hexanone	43		10.481				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.188	11.189	0.000	84	1316682	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.292				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.755				ND	
96 Bromoform	173		11.920				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	616905	9.42	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	716770	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

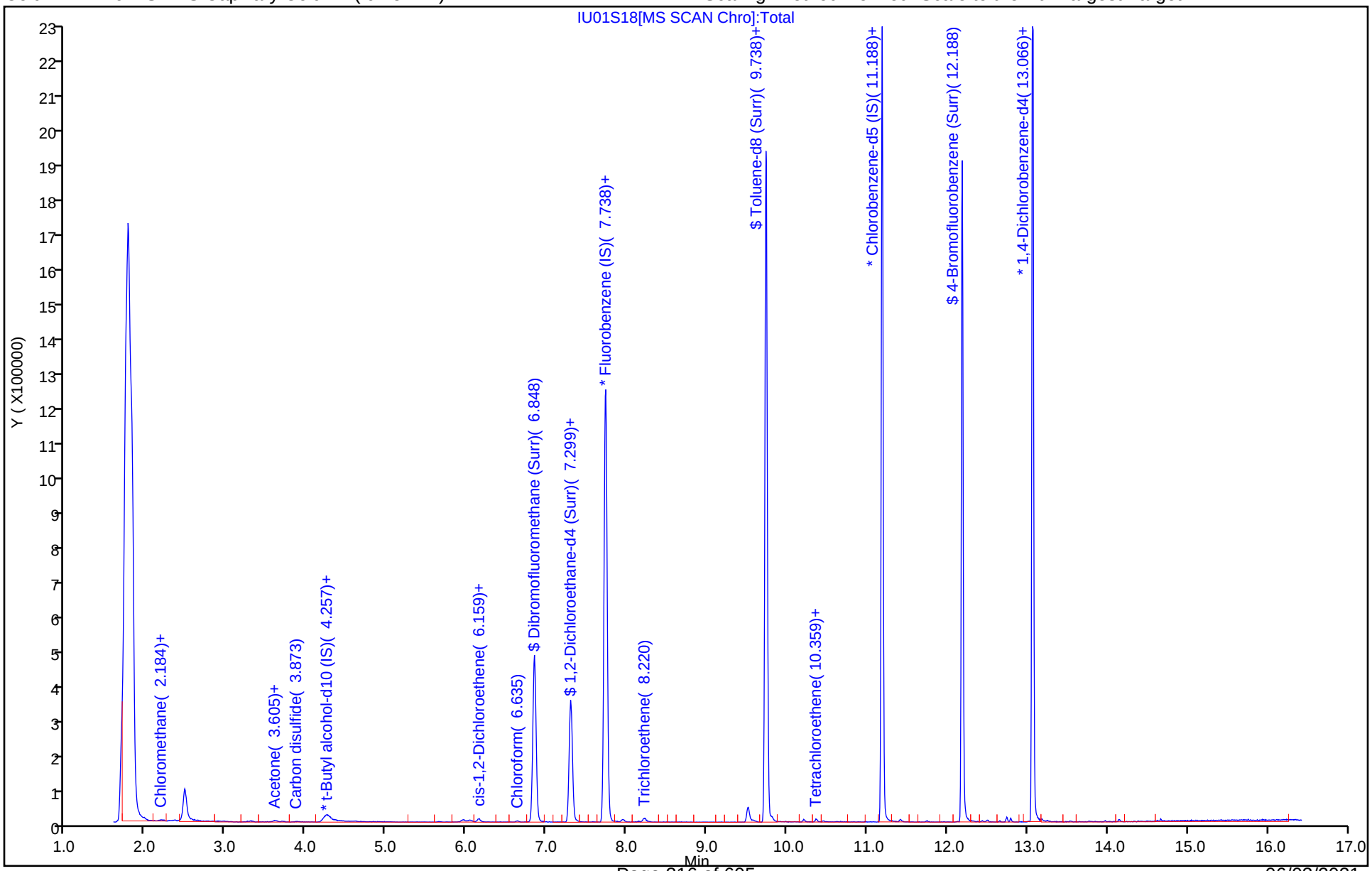
Report Date: 02-Jun-2021 16:20:01 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S18.D

Injection Date:	02-Jun-2021 06:50:30	Instrument ID:	19930	Operator ID:	MEC29284
Lims ID:	410-41319-A-12	Lab Sample ID:	410-41319-12	Worklist Smp#:	24
Client ID:	HD-COD-SW-29-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S18.D
Lims ID: 410-41319-A-12
Client ID: HD-COD-SW-29-0/1-0
Sample Type: Client
Inject. Date: 02-Jun-2021 06:50:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-024
Misc. Info.: 410-41319-A-12
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 16:19:01 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

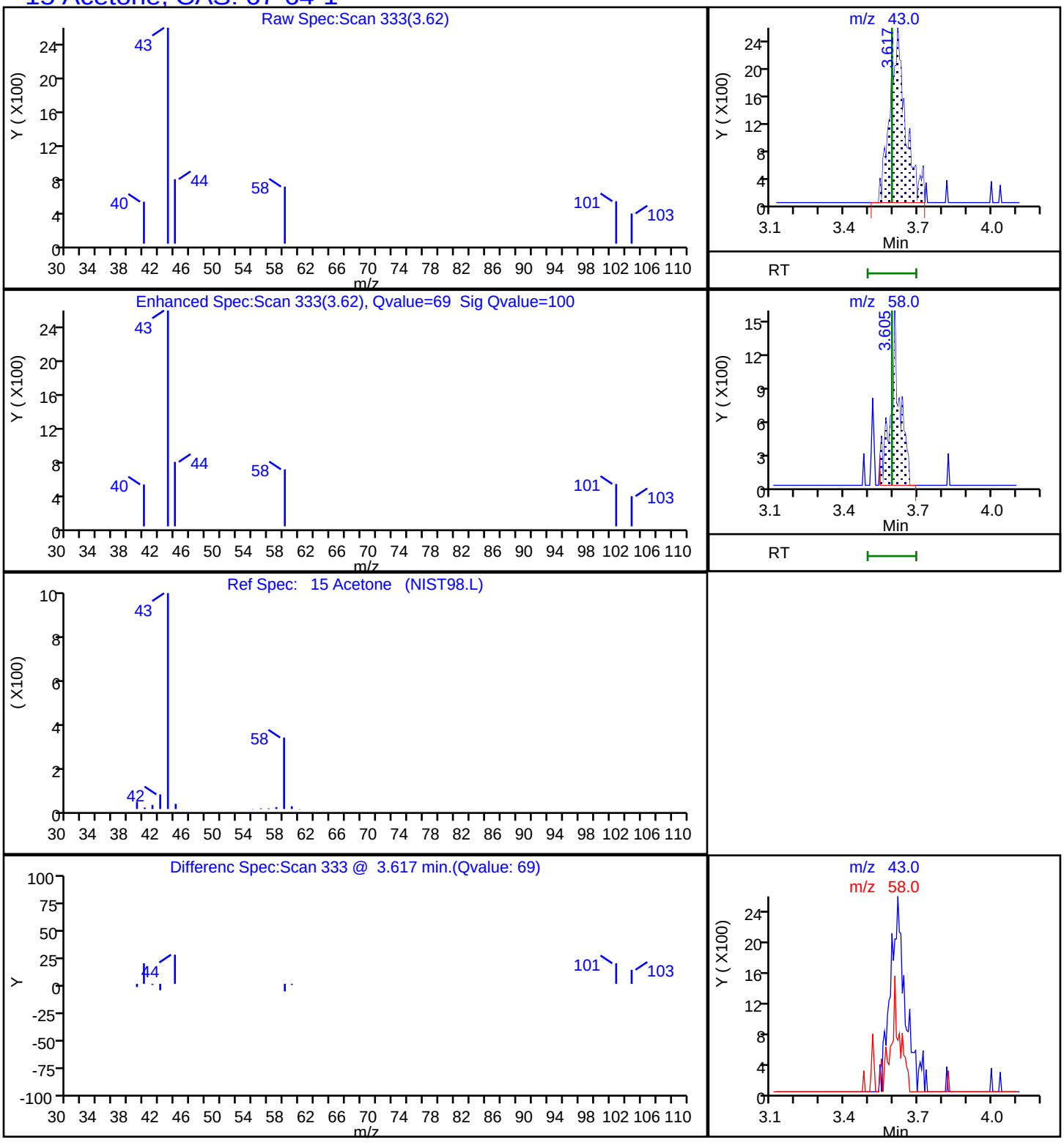
First Level Reviewer: riehlc Date: 02-Jun-2021 16:16:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	9.91	99.14
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.51
$ 75 Toluene-d8 (Surr)	10.0	9.18	91.78
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.42	94.23

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S18.D				
Injection Date:	02-Jun-2021 06:50:30	Instrument ID:	19930		
Lims ID:	410-41319-A-12	Lab Sample ID:	410-41319-12		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

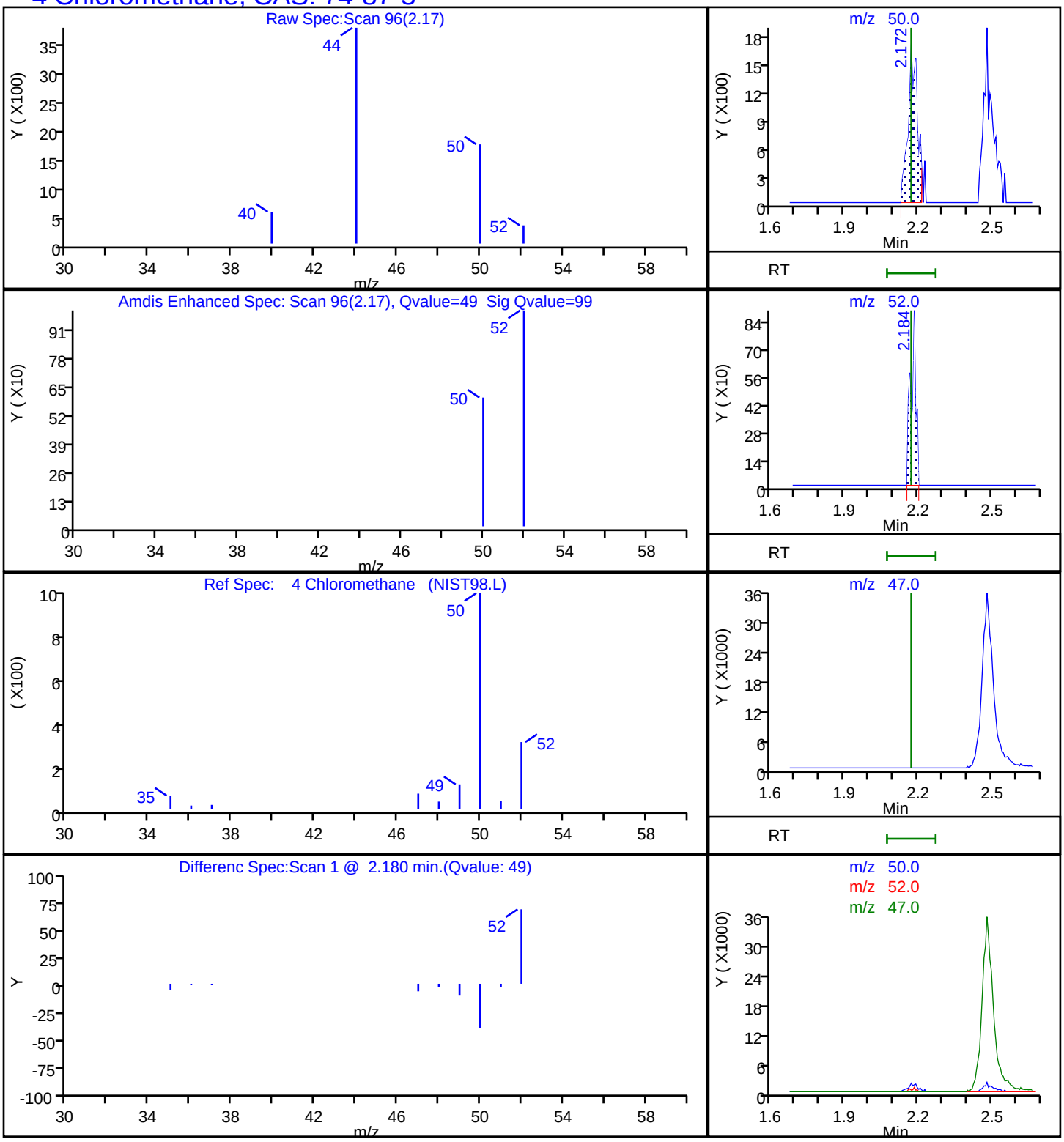
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S18.D				
Injection Date:	02-Jun-2021 06:50:30	Instrument ID:	19930		
Lims ID:	410-41319-A-12	Lab Sample ID:	410-41319-12		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

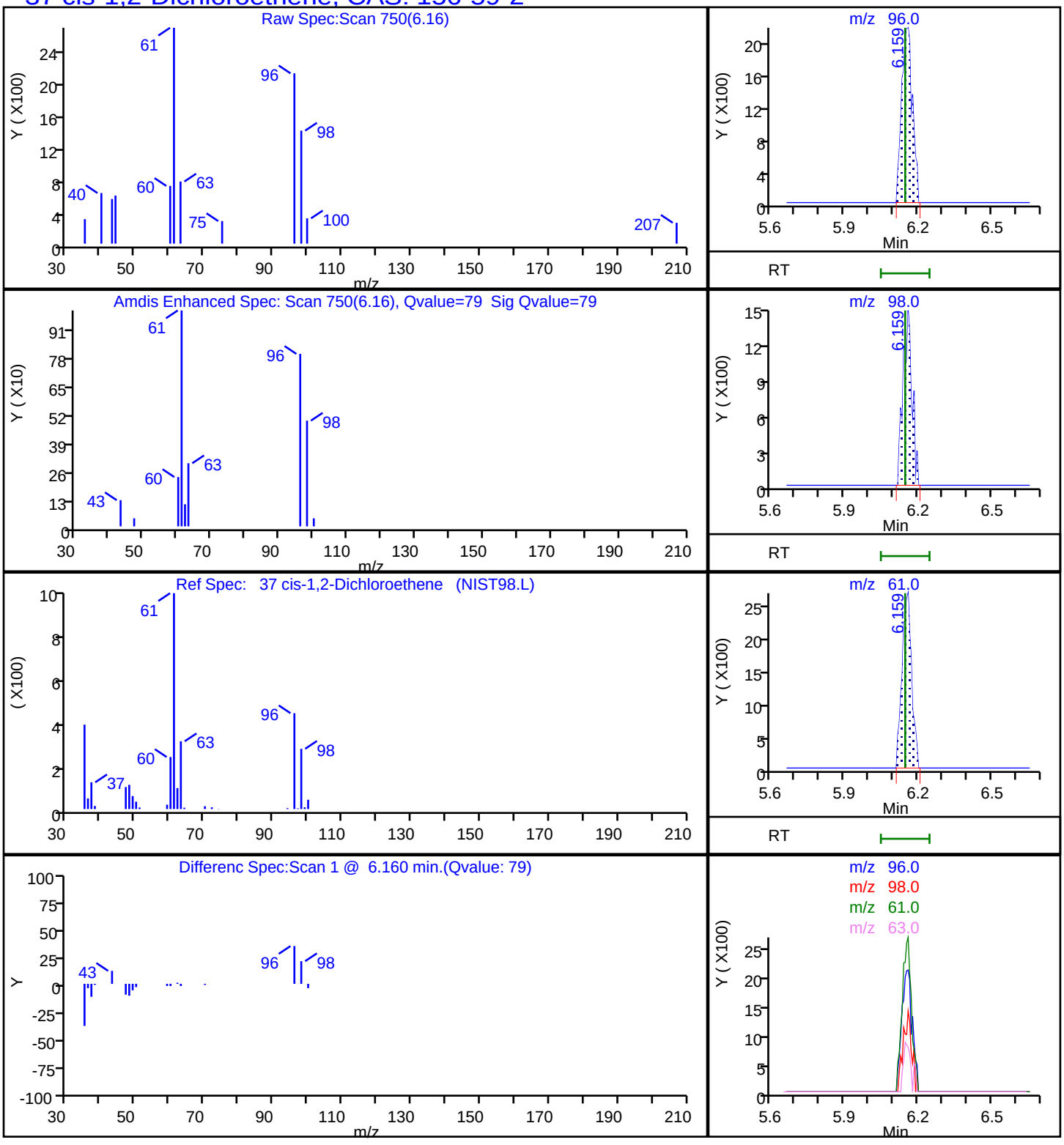
4 Chloromethane, CAS: 74-87-3



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S18.D
Injection Date: 02-Jun-2021 06:50:30 Instrument ID: 19930
Lims ID: 410-41319-A-12 Lab Sample ID: 410-41319-12
Client ID: HD-COD-SW-29-0/1-0
Operator ID: MEC29284 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

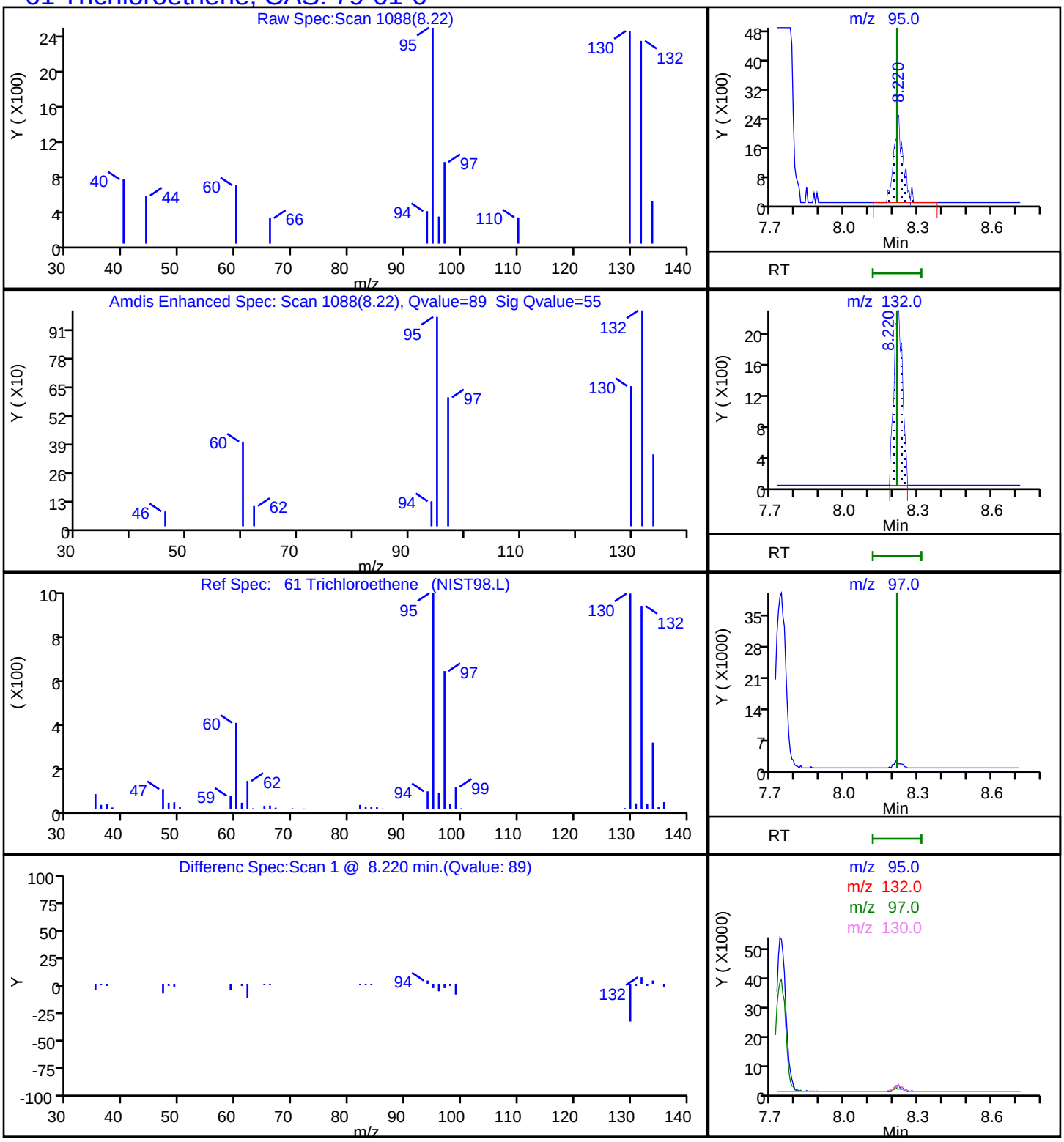
37 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S18.D				
Injection Date:	02-Jun-2021 06:50:30	Instrument ID:	19930		
Lims ID:	410-41319-A-12	Lab Sample ID:	410-41319-12		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

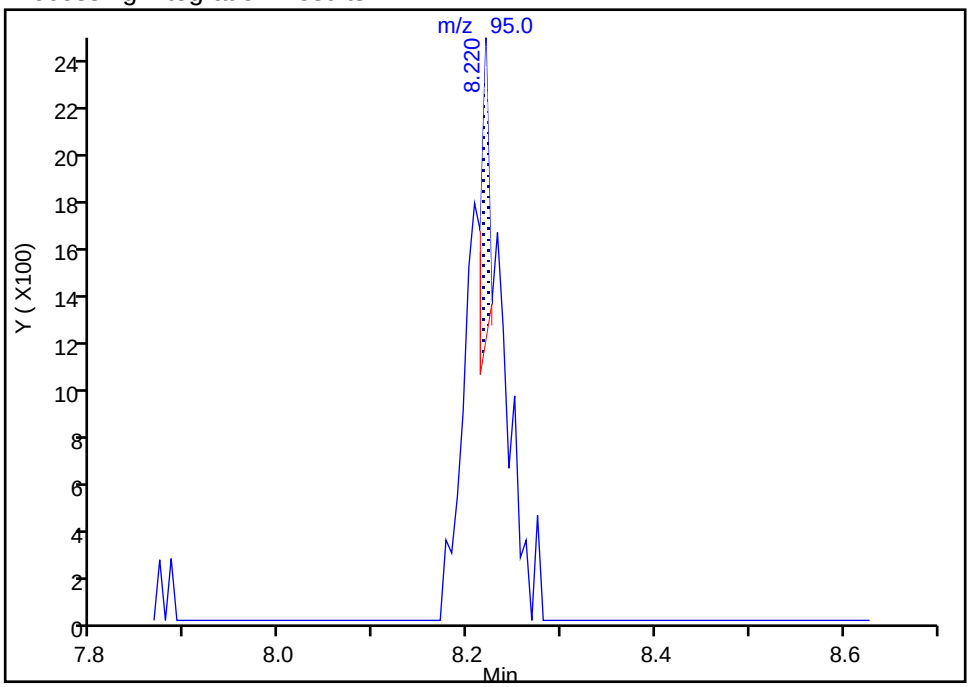
Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S18.D				
Injection Date:	02-Jun-2021 06:50:30	Instrument ID:	19930		
Lims ID:	410-41319-A-12	Lab Sample ID:	410-41319-12		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	MEC29284	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

61 Trichloroethene, CAS: 79-01-6

Signal: 1

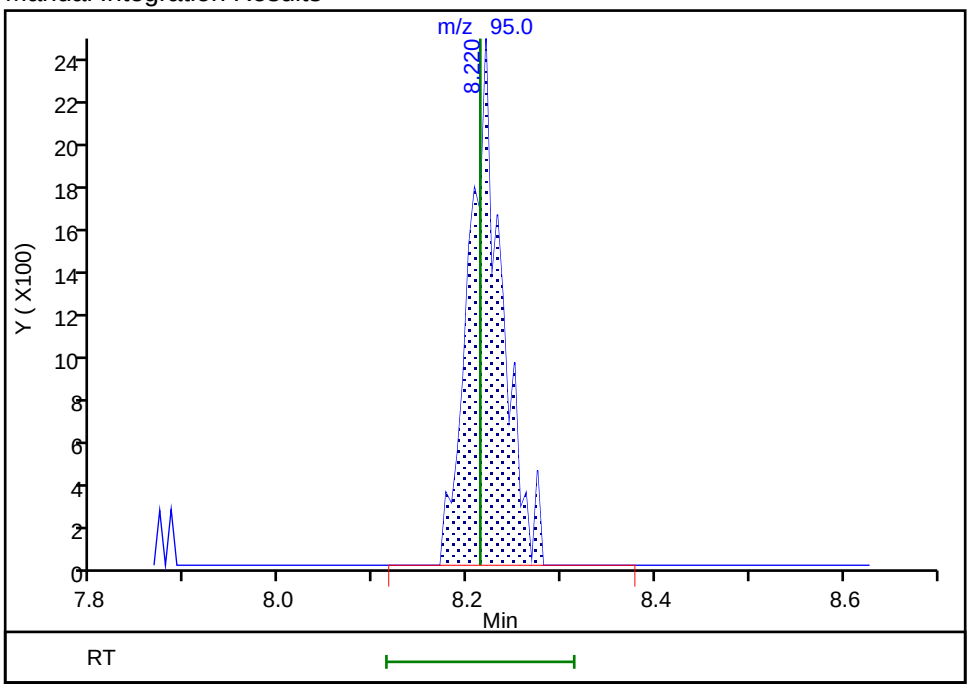
Processing Integration Results

RT: 8.22
Area: 680
Amount: 0.011966
Amount Units: ug/l



Manual Integration Results

RT: 8.22
Area: 5869
Amount: 0.103280
Amount Units: ug/l



Reviewer: riehlc, 02-Jun-2021 16:16:14
Audit Action: Manually Integrated Audit Reason: Missed Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 410-41319-13

Matrix: Water Lab File ID: IU01S07.D

Analysis Method: 8260D Date Collected: 05/25/2021 12:00

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 02:57

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.: 132853 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	0.071	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	0.081	J	0.50	0.060
156-59-2	cis-1,2-Dichloroethene	0.62		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	1.0		0.50	0.060
108-88-3	Toluene	0.076	J	0.50	0.070
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.060
79-01-6	Trichloroethene	1.2		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-QC1-0/1-1 Lab Sample ID: 410-41319-13

Matrix: Water Lab File ID: IU01S07.D

Analysis Method: 8260D Date Collected: 05/25/2021 12:00

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 02:57

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.: 132853 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)	99		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S07.D
Lims ID: 410-41319-A-13
Client ID: HD-QC1-0/1-1
Sample Type: Client
Inject. Date: 02-Jun-2021 02:57:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-013
Misc. Info.: 410-41319-A-13
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 14:16:43 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: riehlc Date: 02-Jun-2021 14:11:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.178	2.172	0.006	94	5335	0.0807	
5 Vinyl chloride	62	2.306	2.294	0.012	1	2907	0.0486	
7 Bromomethane	94		2.623				ND	
8 Chloroethane	64		2.702				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.623	3.592	0.031	97	12038	1.49	
19 Carbon disulfide	76	3.897	3.885	0.012	98	9539	0.0712	
* 24 t-Butyl alcohol-d10 (IS)	65	4.257	4.233	0.024	18	124534	50.0	
23 Methylene Chloride	84		4.245				ND	
27 Methyl tert-butyl ether	73		4.647				ND	
28 trans-1,2-Dichloroethene	96		4.659				ND	7
31 1,1-Dichloroethane	63		5.318				ND	
36 2-Butanone (MEK)	43		6.116				ND	7
37 cis-1,2-Dichloroethene	96	6.159	6.147	0.012	78	36626	0.6150	
43 Chlorobromomethane	128		6.482				ND	
45 Chloroform	83	6.641	6.628	0.013	86	6795	0.0715	
$ 46 Dibromofluoromethane (Surr)	113	6.848	6.848	0.000	94	432921	9.88	
47 1,1,1-Trichloroethane	97		6.860				ND	
50 Carbon tetrachloride	117		7.073				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.299	0.006	83	88056	10.3	
54 Benzene	78		7.336				ND	7
56 1,2-Dichloroethane	62		7.403				ND	
* 58 Fluorobenzene (IS)	96	7.738	7.732	0.006	99	1742670	10.0	
61 Trichloroethene	95	8.220	8.213	0.007	97	67534	1.16	
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	7
$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	93	1726470	9.78	
76 Toluene	92	9.811	9.811	0.000	96	11076	0.0762	
78 trans-1,3-Dichloropropene	75		10.067				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
80 1,1,2-Trichloroethane	97		10.274				ND	
81 Tetrachloroethene	166	10.365	10.359	0.006	98	71578	1.04	
83 2-Hexanone	43		10.481				ND	7
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.188	11.189	0.000	84	1348809	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.292				ND	
92 Ethylbenzene	91		11.298				ND	7
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	97	5642	0.0506	
94 o-Xylene	106		11.743				ND	7
95 Styrene	104		11.755				ND	
96 Bromoform	173		11.920				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	643807	9.60	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	783499	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_LLcentISS_00001 Amount Added: 5.00 Units: uL Run Reagent

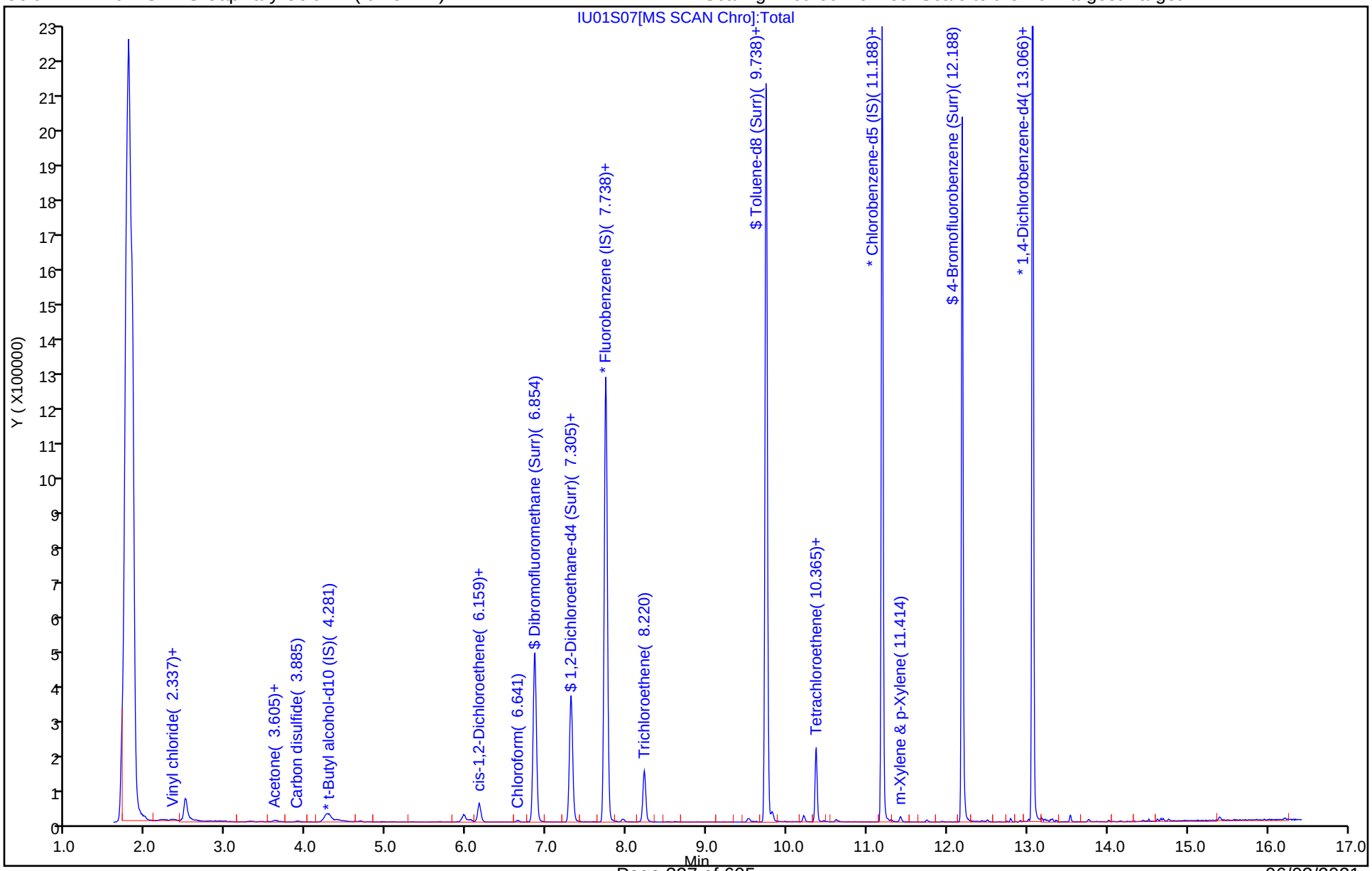
Report Date: 02-Jun-2021 14:18:00 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S07.D

Injection Date:	02-Jun-2021 02:57:30	Instrument ID:	19930	Operator ID:	MEC29284
Lims ID:	410-41319-A-13	Lab Sample ID:	410-41319-13	Worklist Smp#:	13
Client ID:	HD-QC1-0/1-1				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S07.D
Lims ID: 410-41319-A-13
Client ID: HD-QC1-0/1-1
Sample Type: Client
Inject. Date: 02-Jun-2021 02:57:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-013
Misc. Info.: 410-41319-A-13
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 14:16:43 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: riehlc Date: 02-Jun-2021 14:11:21

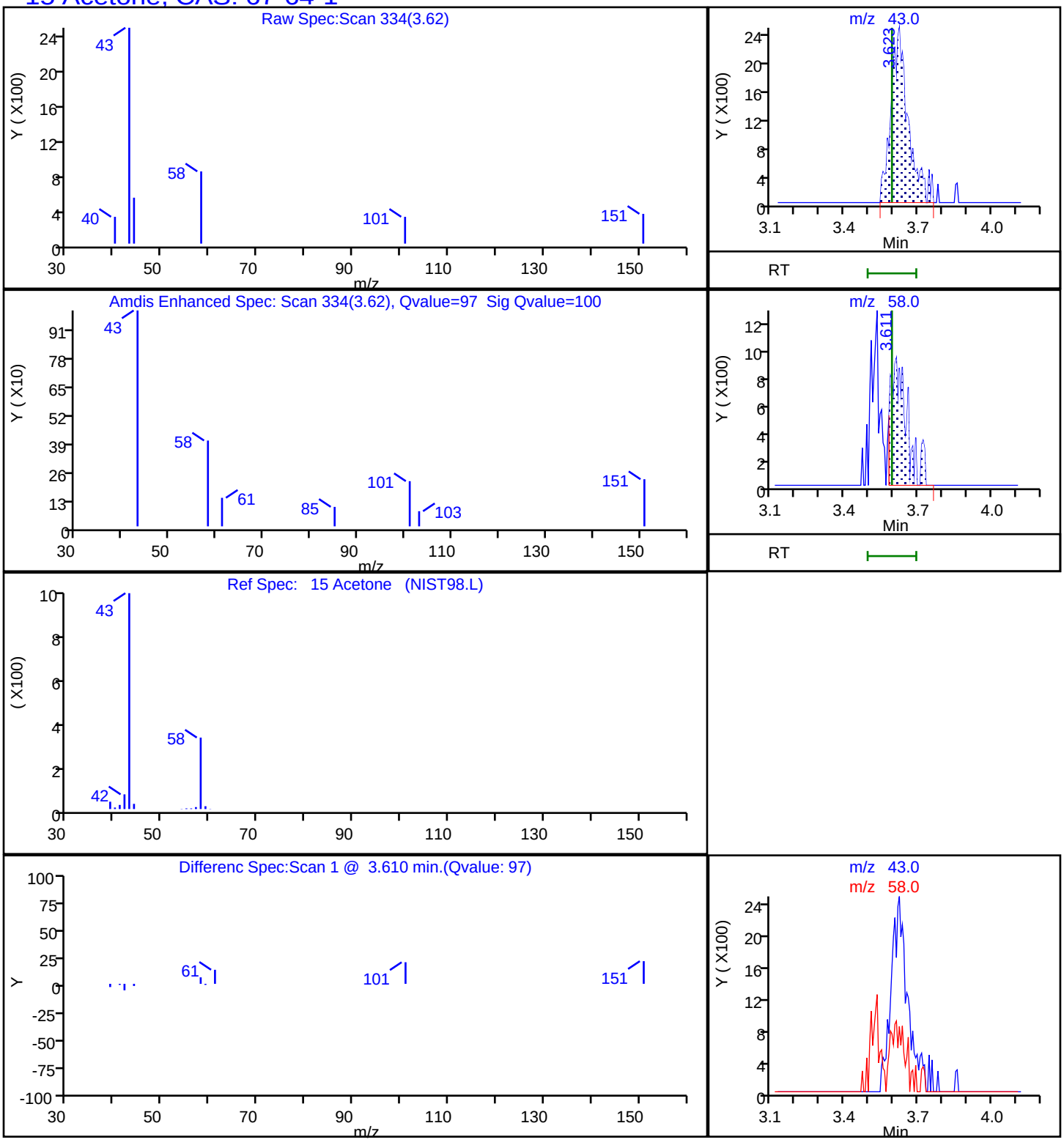
Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	9.88	98.80
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	102.67
$ 75 Toluene-d8 (Surr)	10.0	9.78	97.81
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.60	96.00

Report Date: 02-Jun-2021 14:18:01 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S07.D				
Injection Date:	02-Jun-2021 02:57:30	Instrument ID:	19930		
Lims ID:	410-41319-A-13	Lab Sample ID:	410-41319-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	MEC29284	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

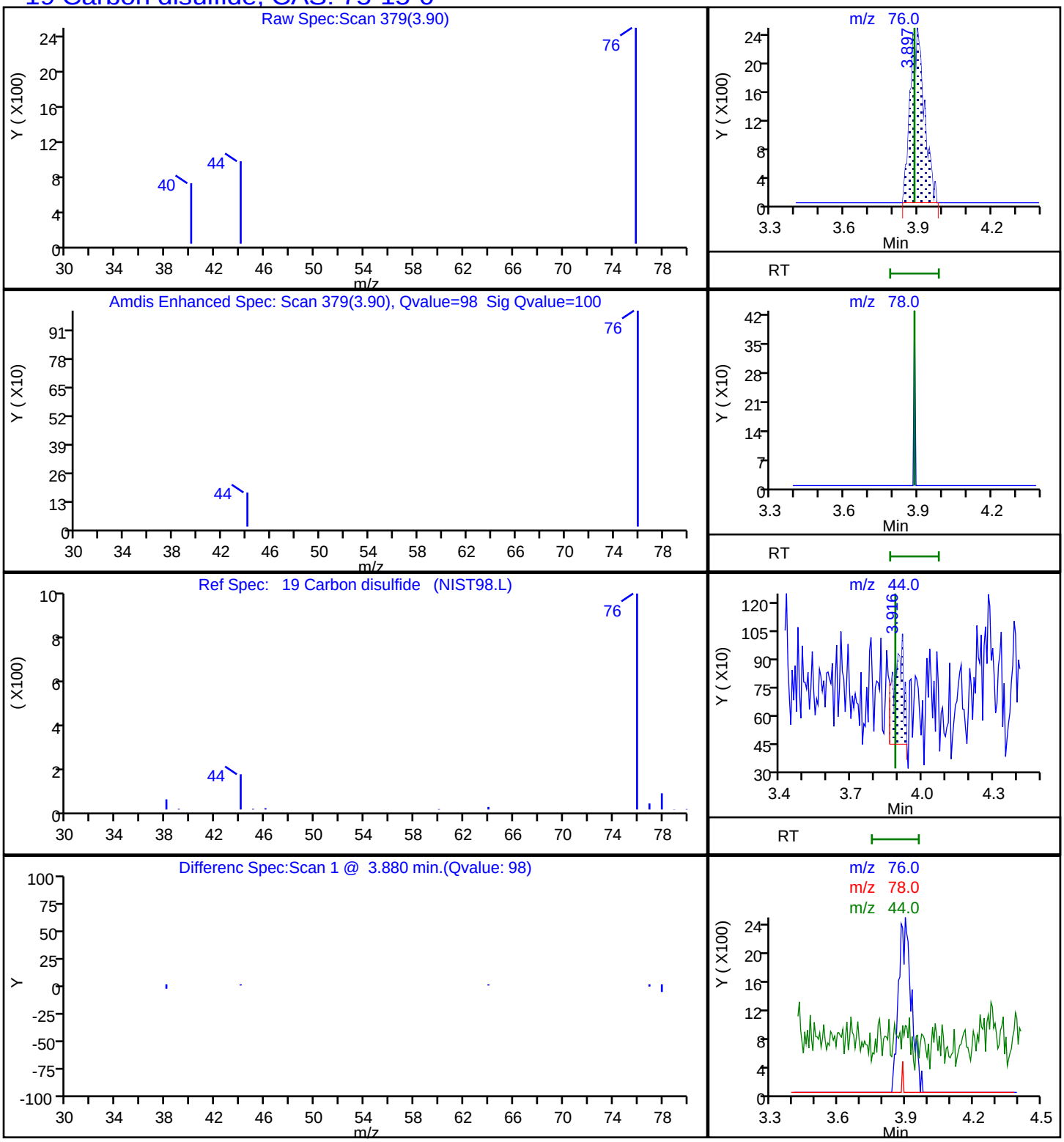
15 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S07.D				
Injection Date:	02-Jun-2021 02:57:30	Instrument ID:	19930		
Lims ID:	410-41319-A-13	Lab Sample ID:	410-41319-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	MEC29284	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

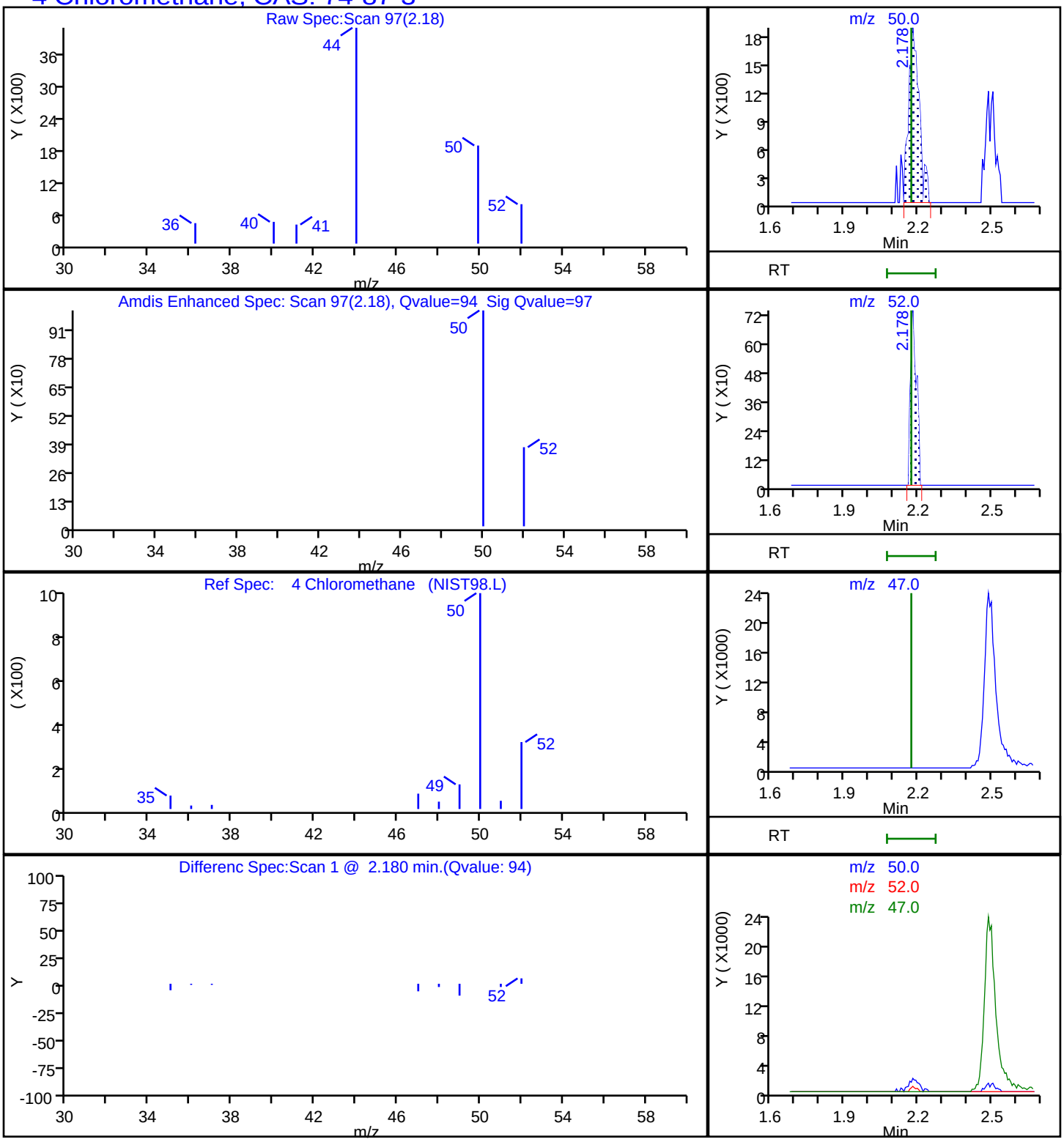
19 Carbon disulfide, CAS: 75-15-0



Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S07.D
Injection Date: 02-Jun-2021 02:57:30 Instrument ID: 19930
Lims ID: 410-41319-A-13 Lab Sample ID: 410-41319-13
Client ID: HD-QC1-0/1-1
Operator ID: MEC29284 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

4 Chloromethane, CAS: 74-87-3



Report Date: 02-Jun-2021 14:18:01 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S07.D

Injection Date: 02-Jun-2021 02:57:30 Instrument ID: 19930

Lims ID: 410-41319-A-13 Lab Sample ID: 410-41319-13

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

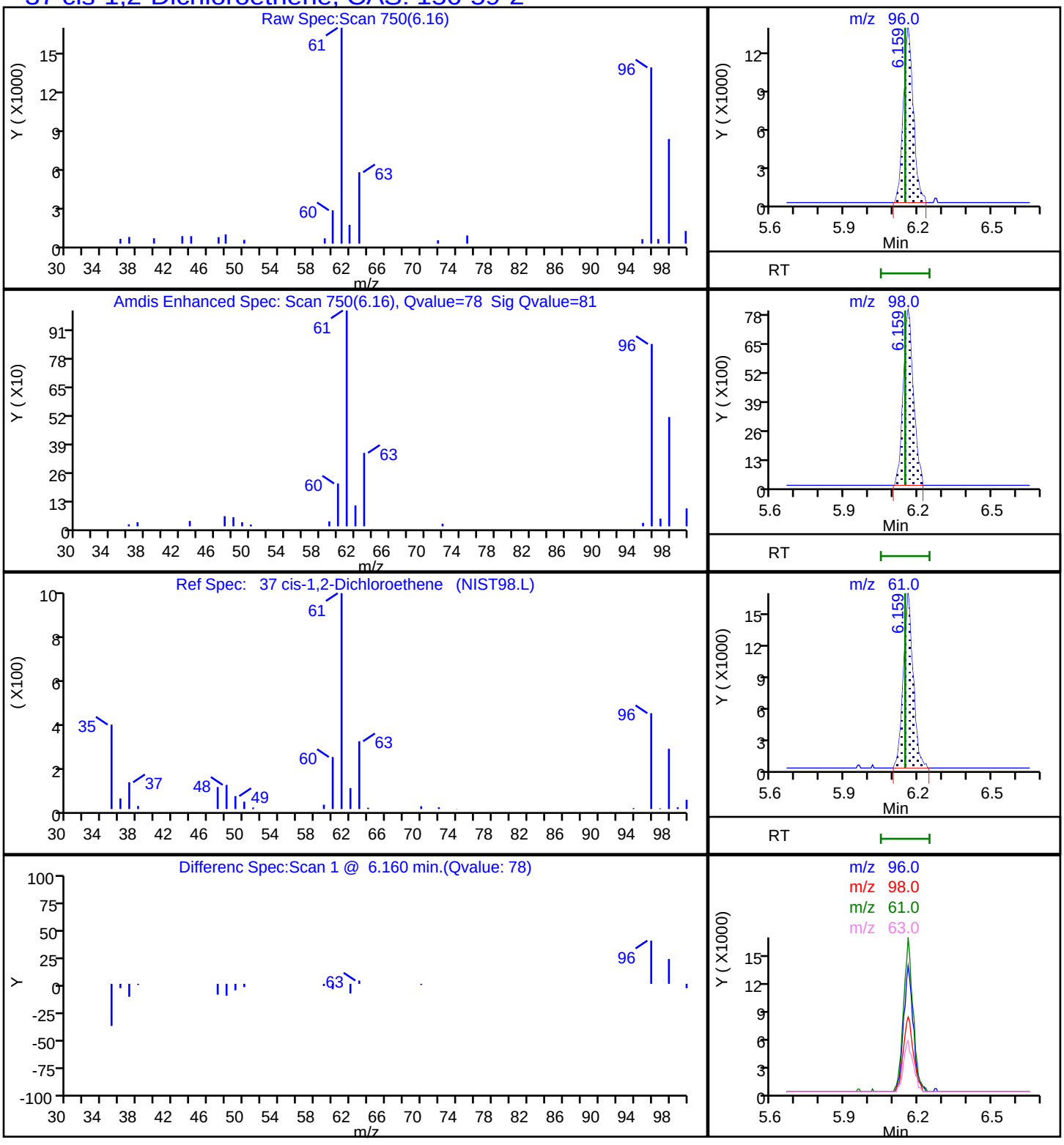
Operator ID: MEC29284 ALS Bottle#: 12 Worklist Smp#: 13

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

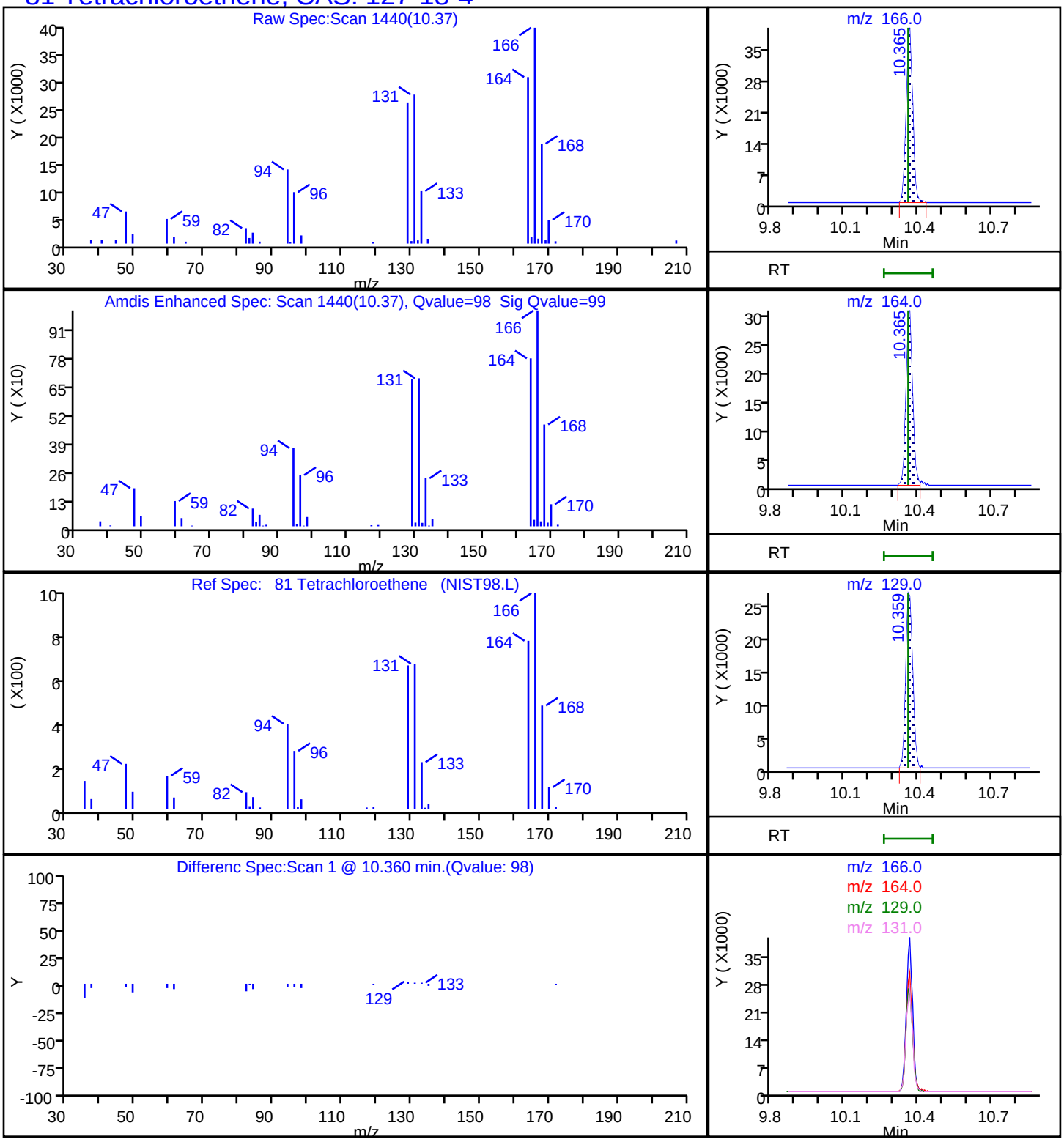
37 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S07.D				
Injection Date:	02-Jun-2021 02:57:30	Instrument ID:	19930		
Lims ID:	410-41319-A-13	Lab Sample ID:	410-41319-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	MEC29284	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

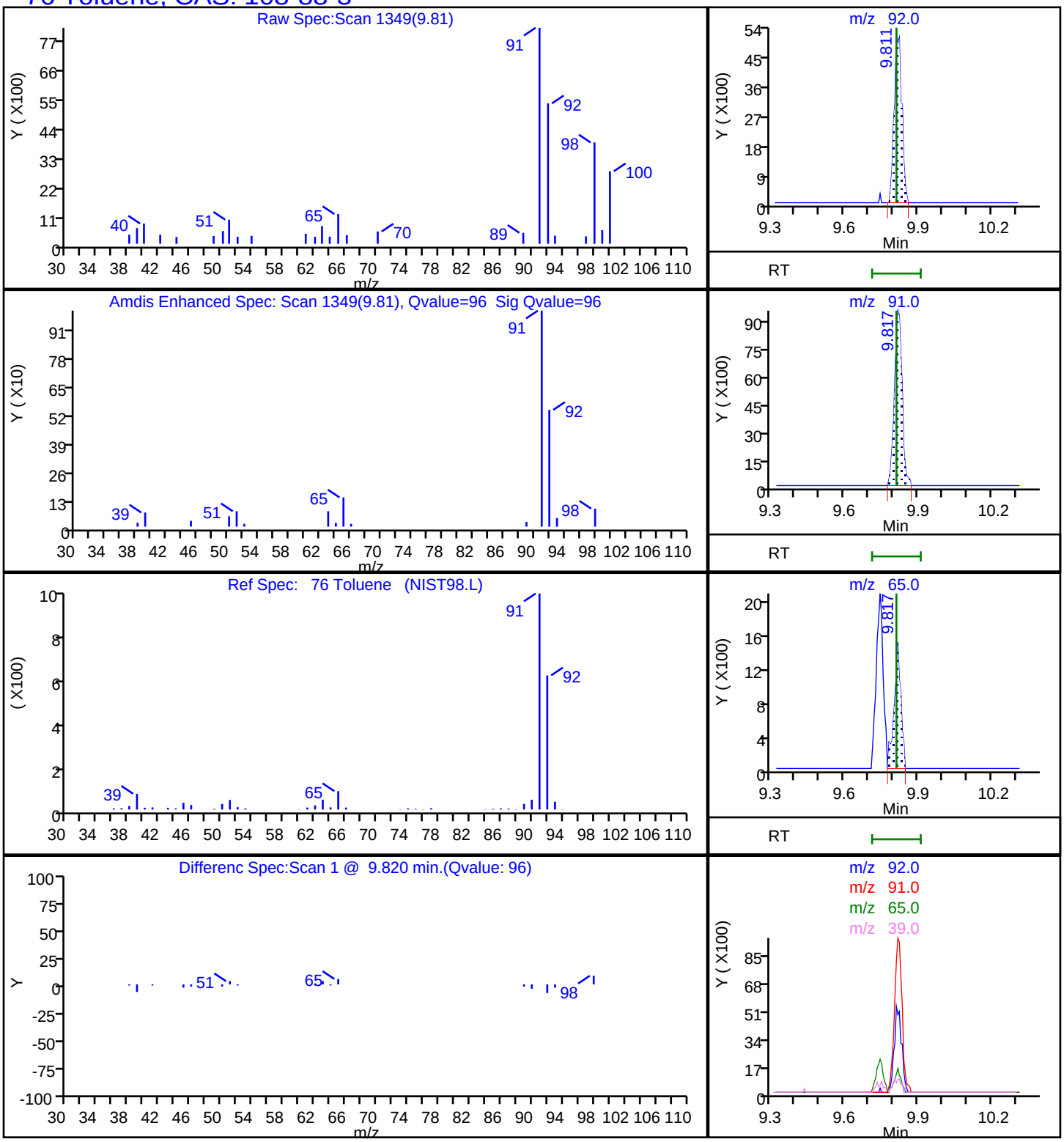
81 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S07.D				
Injection Date:	02-Jun-2021 02:57:30	Instrument ID:	19930		
Lims ID:	410-41319-A-13	Lab Sample ID:	410-41319-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	MEC29284	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

76 Toluene, CAS: 108-88-3



Report Date: 02-Jun-2021 14:18:01 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S07.D

Injection Date: 02-Jun-2021 02:57:30 Instrument ID: 19930

Lims ID: 410-41319-A-13 Lab Sample ID: 410-41319-13

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

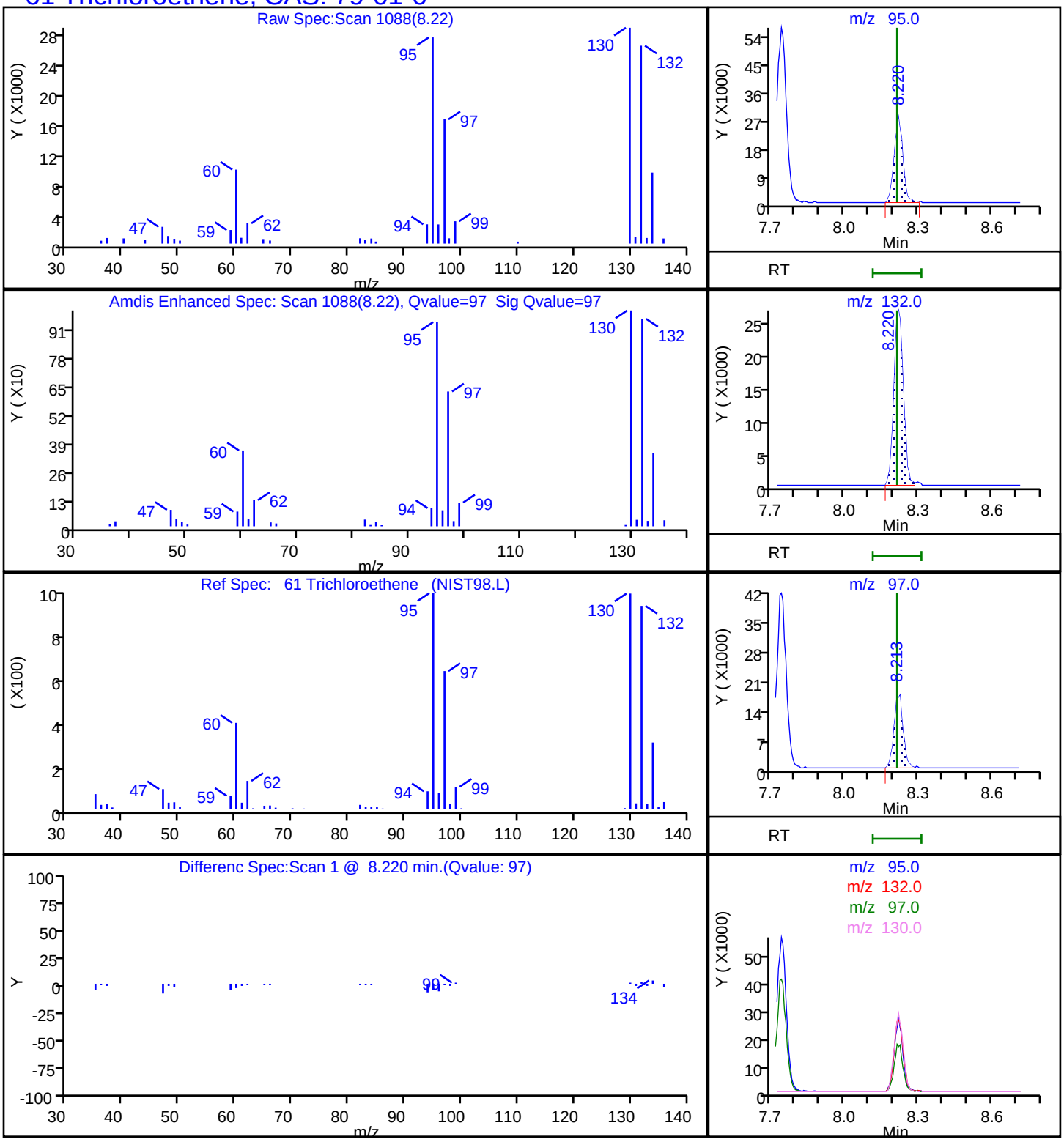
Operator ID: MEC29284 ALS Bottle#: 12 Worklist Smp#: 13

Purge Vol: 25.000 mL Dil. Factor: 1.0000

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

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

61 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 410-41319-14

Matrix: Water Lab File ID: IU01S01.D

Analysis Method: 8260D Date Collected: 05/25/2021 00:00

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 00:49

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.: 132853 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.: 410-41319-1

SDG No.:

Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 410-41319-14

Matrix: Water Lab File ID: IU01S01.D

Analysis Method: 8260D Date Collected: 05/25/2021 00:00

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 00:49

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.: 132853 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)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S01.D
Lims ID: 410-41319-A-14
Client ID: HD-QC1-0/1-2
Sample Type: Client
Inject. Date: 02-Jun-2021 00:49:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-007
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 14:16:43 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: riehlc Date: 02-Jun-2021 14:01:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
4 Chloromethane	50	2.178	2.172	0.006	1	2372	0.0333	
5 Vinyl chloride	62		2.294				ND	
7 Bromomethane	94		2.623				ND	
8 Chloroethane	64		2.702				ND	
14 1,1-Dichloroethene	96		3.574				ND	
15 Acetone	43	3.629	3.592	0.037	67	7231	0.7609	
19 Carbon disulfide	76		3.885				ND	7
* 24 t-Butyl alcohol-d10 (IS)	65	4.257	4.233	0.024	18	146665	50.0	
23 Methylene Chloride	84		4.245				ND	
27 Methyl tert-butyl ether	73		4.647				ND	
28 trans-1,2-Dichloroethene	96		4.659				ND	
31 1,1-Dichloroethane	63		5.318				ND	
36 2-Butanone (MEK)	43		6.116				ND	7
37 cis-1,2-Dichloroethene	96		6.147				ND	
43 Chlorobromomethane	128		6.482				ND	
45 Chloroform	83		6.628				ND	
$ 46 Dibromofluoromethane (Surr)	113	6.842	6.848	-0.006	94	469666	9.95	
47 1,1,1-Trichloroethane	97		6.860				ND	
50 Carbon tetrachloride	117		7.073				ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.299	0.006	84	90939	9.84	
54 Benzene	78		7.336				ND	
56 1,2-Dichloroethane	62		7.403				ND	
* 58 Fluorobenzene (IS)	96	7.732	7.732	0.000	99	1877980	10.0	
61 Trichloroethene	95		8.213				ND	
63 1,2-Dichloropropane	63		8.549				ND	
68 Dichlorobromomethane	83		8.890				ND	
73 cis-1,3-Dichloropropene	75		9.433				ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597				ND	7
$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	93	1865638	9.74	
76 Toluene	92		9.811				ND	7
78 trans-1,3-Dichloropropene	75		10.067				ND	
80 1,1,2-Trichloroethane	97		10.274				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
81 Tetrachloroethene	166		10.359				ND	
83 2-Hexanone	43		10.481				ND	
85 Chlorodibromomethane	129		10.652				ND	
86 Ethylene Dibromide	107		10.762				ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	84	1462965	10.0	
90 Chlorobenzene	112		11.213				ND	
S 89 Xylenes, Total	106		11.245				ND	7
91 1,1,1,2-Tetrachloroethane	131		11.292				ND	
92 Ethylbenzene	91		11.298				ND	
93 m-Xylene & p-Xylene	106		11.414				ND	7
94 o-Xylene	106		11.743				ND	
95 Styrene	104		11.755				ND	
96 Bromoform	173		11.920				ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	684708	9.41	
101 1,1,2,2-Tetrachloroethane	83		12.286				ND	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	844510	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

MSV_LLcentISS_00001 Amount Added: 5.00 Units: uL Run Reagent

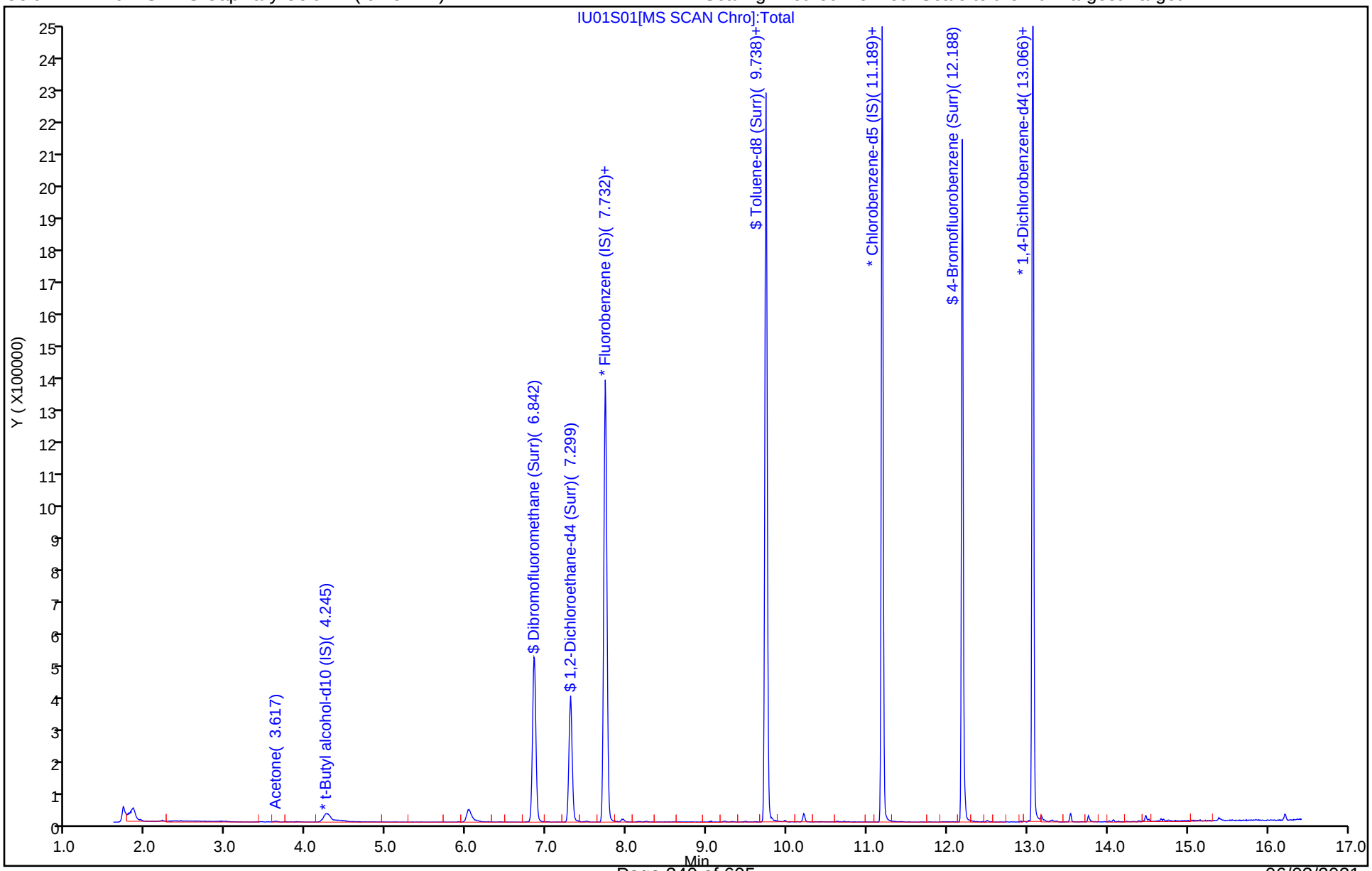
Report Date: 02-Jun-2021 14:18:14 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S01.D

Injection Date:	02-Jun-2021 00:49:30	Instrument ID:	19930	Operator ID:	MEC29284
Lims ID:	410-41319-A-14	Lab Sample ID:	410-41319-14	Worklist Smp#:	7
Client ID:	HD-QC1-0/1-2				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S01.D
Lims ID: 410-41319-A-14
Client ID: HD-QC1-0/1-2
Sample Type: Client
Inject. Date: 02-Jun-2021 00:49:30 ALS Bottle#: 6 Worklist Smp#: 7
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-007
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 14:16:43 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: riehlc Date: 02-Jun-2021 14:01:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	9.95	99.46
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.84	98.39
$ 75 Toluene-d8 (Surr)	10.0	9.74	97.44
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.41	94.13

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1 Analy Batch No.: 107390

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-107390/18	IM25I07.D
Level 2	IC 410-107390/17	IM25I06.D
Level 3	IC 410-107390/16	IM25I05.D
Level 4	IC 410-107390/15	IM25I04.D
Level 5	IC 410-107390/14	IM25I03.D
Level 6	ICIS 410-107390/13	IM25I02.D
Level 7	IC 410-107390/12	IM25I01.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	0.3161 0.3188	0.3055 0.3089	0.3081	0.3049	0.3210	Ave		0.3119			0.1000	2.1		20.0			
Chloromethane	0.4063 0.3755	0.3850 0.3678	0.3758	0.3637	0.3830	Ave		0.3796			0.1000	3.7		20.0			
1,3-Butadiene	0.3406 0.3331	0.3391 0.3190	0.3426	0.3442	0.3340	Ave		0.3361				2.6		20.0			
Vinyl chloride	0.3362 0.3481	0.3339 0.3453	0.3509	0.3361	0.3541	Ave		0.3435			0.1000	2.3		20.0			
Bromomethane	0.2711 0.2451	0.2509 0.2357	0.2428	0.2462	0.2529	Ave		0.2492			0.1000	4.5		20.0			
Chloroethane	0.2202 0.2143	0.2175 0.2087	0.2143	0.2094	0.2223	Ave		0.2152			0.1000	2.4		20.0			
Dichlorofluoromethane	0.4038 0.3434	0.3703 0.3276	0.3415	0.3419	0.3411	Ave		0.3528			0.1000	7.3		20.0			
Trichlorofluoromethane	0.4985 0.4873	0.4671 0.4646	0.4749	0.4838	0.5008	Ave		0.4824			0.1000	3.0		20.0			
Ethyl ether	0.2354 0.2354	0.2269 0.2286	0.2271	0.2339	0.2430	Ave		0.2329				2.5		20.0			
Freon 123a	0.3695 0.3627	0.3318 0.3462	0.3738	0.3787	0.3591	Ave		0.3602				4.6		20.0			
Acrolein	2.3009 2.5895	2.2062 2.4442	2.5487	2.5120	2.6867	Ave		2.4697				6.8		20.0			
1,1-Dichloroethene	0.2431 0.2654	0.2519 0.2531	0.2694	0.2750	0.2607	Ave		0.2598			0.1000	4.3		20.0			
Acetone	3.9095 2.9943	3.3284 2.8785	3.2713	3.1341	3.1611	Ave		3.2396			0.1000	10.3		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.: 410-41319-1 Analy Batch No.: 107390

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

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	0.2697 0.3053	0.2530 0.2959	0.3065	0.3198	0.3008	Ave		0.2930			0.1000	8.0		20.0			
Methyl iodide	0.4934 0.5205	0.5006 0.5043	0.5346	0.5334	0.5210	Ave		0.5154				3.1		20.0			
Carbon disulfide	0.7655 0.7708	0.7577 0.7442	0.7866	0.7952	0.7621	Ave		0.7688			0.1000	2.3		20.0			
Methyl acetate	13.830 10.474	10.262 9.8872	9.5262	9.5918	10.892	Ave		10.638			0.1000	14.0		20.0			
Allyl chloride	0.5864 0.5157	0.5430 0.4996	0.5188	0.5218	0.5313	Ave		0.5310				5.2		20.0			
Methylene Chloride	0.2910 0.2890	0.2970 0.2781	0.2936	0.3011	0.2942	Ave		0.2920			0.1000	2.5		20.0			
t-Butyl alcohol	1.1178 1.1919	1.1795 1.1223	1.1724	1.1769	1.1939	Ave		1.1650				2.7		20.0			
Acrylonitrile	3.4598 4.2222	3.5884 4.0070	4.1514	4.0019	4.4115	Ave		3.9775				8.6		20.0			
Methyl tert-butyl ether	0.7256 0.7653	0.7572 0.7342	0.7775	0.7971	0.7768	Ave		0.7620			0.1000	3.3		20.0			
trans-1,2-Dichloroethene	0.3123 0.2906	0.2898 0.2832	0.2945	0.3060	0.2970	Ave		0.2962			0.1000	3.4		20.0			
n-Hexane	0.4724 0.5031	0.4182 0.4850	0.5091	0.5063	0.4821	Ave		0.4823				6.5		20.0			
1,1-Dichloroethane	0.5539 0.5801	0.5651 0.5547	0.5826	0.5894	0.5801	Ave		0.5723			0.2000	2.5		20.0			
di-Isopropyl ether	1.0584 1.0627	1.0282 1.0334	1.0717	1.0911	1.0804	Ave		1.0608				2.2		20.0			
2-Chloro-1,3-butadiene	0.4921 0.5124	0.4733 0.4949	0.5257	0.5230	0.5048	Ave		0.5038				3.7		20.0			
Ethyl t-butyl ether	0.9546 0.9662	0.9458 0.9307	0.9816	0.9880	0.9858	Ave		0.9647				2.3		20.0			
2-Butanone (MEK)	5.5213 5.9675	5.1246 5.6827	5.7749	5.6922	6.1459	Ave		5.7013			0.1000	5.7		20.0			
cis-1,2-Dichloroethene	0.3323 0.3404	0.3432 0.3291	0.3441	0.3544	0.3485	Ave		0.3417			0.1000	2.6		20.0			
2,2-Dichloropropane	0.4942 0.4990	0.4602 0.4837	0.5173	0.5172	0.4949	Ave		0.4952				4.0		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.: 410-41319-1 Analy Batch No.: 107390

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

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	1.2665 1.3900	1.2587 1.3669	1.3905	1.3624	1.4340	Ave		1.3527				4.9		20.0			
Methacrylonitrile	4.7208 5.5487	4.5326 5.2460	5.3542	5.3742	5.7769	Ave		5.2219				8.5		20.0			
Bromochloromethane	0.1590 0.1514	0.1535 0.1461	0.1483	0.1529	0.1567	Ave		0.1526				2.9		20.0			
Tetrahydrofuran	1.4096 1.5546	1.3763 1.4694	1.5973	1.5120	1.6077	Ave		1.5038				6.0		20.0			
Chloroform	0.5301 0.5438	0.5525 0.5267	0.5542	0.5591	0.5490	Ave		0.5451			0.2000	2.3		20.0			
1,1,1-Trichloroethane	0.4884 0.5005	0.4869 0.4839	0.5071	0.5094	0.4945	Ave		0.4958			0.1000	2.0		20.0			
Cyclohexane	0.5868 0.5873	0.5164 0.5741	0.6044	0.6010	0.5710	Ave		0.5773			0.1000	5.1		20.0			
1,1-Dichloropropene	0.4195 0.4444	0.4211 0.4366	0.4472	0.4552	0.4454	Ave		0.4385				3.1		20.0			
Carbon tetrachloride	0.4027 0.4482	0.4047 0.4420	0.4535	0.4509	0.4408	Ave		0.4347			0.1000	5.0		20.0			
Isobutyl alcohol	0.5089 0.4163	0.3762 0.3899	0.4005	0.4257	0.4241	Ave		0.4202				10.3		20.0			
Benzene	1.2714 1.2905	1.2746 1.2569	1.3107	1.3279	1.2900	Ave		1.2889			0.5000	1.9		20.0			
1,2-Dichloroethane	0.3631 0.3372	0.3502 0.3311	0.3400	0.3507	0.3379	Ave		0.3443			0.1000	3.2		20.0			
t-Amyl methyl ether	0.8236 0.8501	0.8191 0.8247	0.8500	0.8731	0.8695	Ave		0.8443				2.6		20.0			
n-Heptane	0.5528 0.5562	0.5048 0.5427	0.5633	0.5640	0.5403	Ave		0.5463				3.7		20.0			
n-Butanol	0.3470 0.3813	0.3295 0.3484	0.3787	0.3915	0.3782	Ave		0.3649				6.3		20.0			
Trichloroethene	0.3393 0.3366	0.3270 0.3292	0.3326	0.3426	0.3371	Ave		0.3349			0.2000	1.7		20.0			
Methylcyclohexane	0.5546 0.6108	0.5689 0.5961	0.5757	0.6109	0.6180	Ave		0.5907			0.1000	4.1		20.0			
1,2-Dichloropropane	0.3325 0.3358	0.3270 0.3255	0.3340	0.3437	0.3373	Ave		0.3337			0.1000	1.9		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1 Analy Batch No.: 107390

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

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	9.3914 11.497	8.4810 10.809	10.202	10.848	11.206	Ave		10.348				10.4		20.0			
1,4-Dioxane	0.0486 0.0743	0.0709 0.0608	0.0727	0.0831	0.0780	Ave		0.0698			0.0050	16.6		20.0			
Dibromomethane	0.1470 0.1505	0.1545 0.1473	0.1567	0.1516	0.1528	Ave		0.1515				2.4		20.0			
Bromodichloromethane	0.3879 0.4059	0.3729 0.4014	0.4016	0.4031	0.3998	Ave		0.3961			0.2000	3.0		20.0			
2-Nitropropane	2.9434 3.4735	2.8816 3.2975	3.2364	3.2552	3.5424	Ave		3.2329				7.6		20.0			
cis-1,3-Dichloropropene	0.4681 0.5109	0.4688 0.5008	0.4988	0.5084	0.5121	Ave		0.4954			0.2000	3.9		20.0			
4-Methyl-2-pentanone (MIBK)	13.137 15.663	12.919 14.602	14.962	15.019	16.176	Ave		14.640			0.1000	8.3		20.0			
Toluene	1.0817 1.0766	1.0626 1.0526	1.0848	1.1098	1.0718	Ave		1.0771			0.4000	1.7		20.0			
trans-1,3-Dichloropropene	0.4890 0.5475	0.4989 0.5366	0.5114	0.5428	0.5490	Ave		0.5250			0.1000	4.7		20.0			
Ethyl methacrylate	0.4294 0.4618	0.4285 0.4457	0.4378	0.4804	0.4729	Ave		0.4509				4.7		20.0			
1,1,2-Trichloroethane	0.2899 0.2940	0.2781 0.2825	0.2965	0.3013	0.2930	Ave		0.2908			0.1000	2.8		20.0			
Tetrachloroethene	0.4983 0.5290	0.4756 0.5125	0.5145	0.5318	0.5248	Ave		0.5124			0.2000	3.9		20.0			
1,3-Dichloropropane	0.4851 0.5158	0.5034 0.5014	0.5260	0.5275	0.5290	Ave		0.5126				3.2		20.0			
2-Hexanone	8.8540 11.161	8.9822 10.380	10.489	10.603	11.420	Ave		10.270			0.1000	9.7		20.0			
Dibromochloromethane	0.3323 0.3914	0.3522 0.3805	0.3705	0.3809	0.3896	Ave		0.3711				5.8		20.0			
1,2-Dibromoethane (EDB)	0.2593 0.2917	0.2841 0.2808	0.2886	0.2925	0.2951	Ave		0.2846			0.1000	4.3		20.0			
1-Chlorohexane	0.7174 0.6554	0.6316 0.6280	0.6707	0.6668	0.6379	Ave		0.6583				4.7		20.0			
Chlorobenzene	1.1391 1.2048	1.1671 1.1680	1.2143	1.2336	1.2057	Ave		1.1904			0.5000	2.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1 Analy Batch No.: 107390

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

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	0.3971 0.4409	0.4237 0.4330	0.4295	0.4447	0.4474	Ave		0.4309				4.0		20.0			
Ethylbenzene	2.0701 2.1207	2.0650 2.0513	2.1442	2.1705	2.1320	Ave		2.1077			0.1000	2.2		20.0			
m&p-Xylene	0.7760 0.8410	0.8198 0.8130	0.8421	0.8526	0.8398	Ave		0.8263			0.1000	3.2		20.0			
o-Xylene	0.7522 0.8256	0.7744 0.8061	0.8238	0.8447	0.8316	Ave		0.8083			0.3000	4.1		20.0			
Styrene	1.2532 1.3471	1.2521 1.3131	1.3349	1.3807	1.3504	Ave		1.3188			0.3000	3.7		20.0			
Bromoform	0.2144 0.2430	0.2171 0.2443	0.2359	0.2431	0.2440	Ave		0.2345			0.1000	5.6		20.0			
Isopropylbenzene	2.0650 2.2008	2.0547 2.1087	2.2011	2.2323	2.2041	Ave		2.1524			0.1000	3.4		20.0			
1,1,2,2-Tetrachloroethane	0.6159 0.6845	0.6176 0.6677	0.6668	0.6946	0.6961	Ave		0.6633			0.3000	5.1		20.0			
Bromobenzene	0.8677 0.9401	0.8667 0.9194	0.9208	0.9533	0.9313	Ave		0.9142				3.7		20.0			
trans-1,4-Dichloro-2-butene	4.6013 5.5395	4.1321 5.2884	5.0425	5.1470	5.6301	Ave		5.0544				10.5		20.0			
1,2,3-Trichloropropane	0.1546 0.1818	0.1836 0.1755	0.1678	0.1873	0.1854	Ave		0.1766				6.7		20.0			
N-Propylbenzene	4.1812 4.6368	4.3628 4.3963	4.5736	4.6711	4.5843	Ave		4.4866				4.0		20.0			
2-Chlorotoluene	0.8811 0.9453	0.8469 0.9163	0.9198	0.9603	0.9229	Ave		0.9132				4.2		20.0			
1,3,5-Trimethylbenzene	3.0298 3.3579	3.0467 3.2361	3.2498	3.3587	3.3219	Ave		3.2287				4.3		20.0			
4-Chlorotoluene	0.9160 0.9594	0.8882 0.9340	0.9219	0.9611	0.9448	Ave		0.9322				2.8		20.0			
tert-Butylbenzene	0.6831 0.7495	0.6727 0.7351	0.7153	0.7518	0.7343	Ave		0.7203				4.4		20.0			
Pentachloroethane	0.5979 0.6222	0.5420 0.6185	0.5585	0.5945	0.6267	Ave		0.5943				5.5		20.0			
1,2,4-Trimethylbenzene	3.1371 3.4147	3.1745 3.2817	3.3501	3.4169	3.4145	Ave		3.3128				3.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1 Analy Batch No.: 107390

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

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	4.0814 4.3894	4.0243 4.1841	4.2744	4.3911	4.3461	Ave		4.2415				3.5		20.0			
1,3-Dichlorobenzene	1.7705 1.8618	1.7247 1.8321	1.7792	1.8757	1.8591	Ave		1.8147			0.6000	3.1		20.0			
p-Isopropyltoluene	3.3717 3.7614	3.3520 3.6084	3.6499	3.7725	3.7384	Ave		3.6078				4.9		20.0			
1,4-Dichlorobenzene	1.7600 1.8579	1.7375 1.7965	1.8203	1.8637	1.8562	Ave		1.8132			0.5000	2.8		20.0			
1,2,3-Trimethylbenzene	1.4753 1.4583	1.3759 1.4324	1.3862	1.4326	1.4743	Ave		1.4336				2.8		20.0			
Benzyl chloride	0.2445 0.3178	0.2809 0.3217	0.2907	0.3136	0.3186	Ave		0.2983				9.5		20.0			
n-Butylbenzene	1.6664 1.8364	1.6295 1.7805	1.7365	1.8186	1.8102	Ave		1.7540				4.6		20.0			
1,2-Dichlorobenzene	1.5892 1.6835	1.6113 1.6329	1.6555	1.6951	1.6789	Ave		1.6495			0.4000	2.4		20.0			
1,2-Dibromo-3-Chloropropane	0.0909 0.1092	0.1030 0.1094	0.0981	0.1049	0.1092	Ave		0.1036			0.0500	6.7		20.0			
1,3,5-Trichlorobenzene	1.2121 1.3897	1.2360 1.3748	1.3102	1.3465	1.3686	Ave		1.3197				5.3		20.0			
1,2,4-Trichlorobenzene	0.9848 1.1979	1.0053 1.1600	1.0712	1.1215	1.1664	Ave		1.1010			0.2000	7.5		20.0			
Hexachlorobutadiene	0.5581 0.4808	0.4811 0.4846	0.4838	0.4774	0.4759	Ave		0.4917				6.0		20.0			
Naphthalene	1.8385 2.2268	1.9493 2.0743	2.1034	2.1750	2.2187	Ave		2.0837				6.9		20.0			
1,2,3-Trichlorobenzene	0.9224 1.0092	0.8998 0.9435	0.9372	1.0031	0.9952	Ave		0.9586				4.5		20.0			
Dibromofluoromethane (Surr)	0.2515 0.2513	0.2495 0.2524	0.2534	0.2496	0.2524	Ave		0.2514				0.6		20.0			
1,2-Dichloroethane-d4 (Surr)	0.0492 0.0486	0.0497 0.0489	0.0496	0.0495	0.0490	Ave		0.0492				0.8		20.0			
Toluene-d8 (Surr)	1.3009 1.3085	1.3104 1.3080	1.3113	1.3044	1.3175	Ave		1.3087				0.4		20.0			
4-Bromofluorobenzene (Surr)	0.4983 0.4959	0.5011 0.4959	0.4969	0.4949	0.4975	Ave		0.4972				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.: 410-41319-1 Analy Batch No.: 107390

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-107390/18	IM25I07.D
Level 2	IC 410-107390/17	IM25I06.D
Level 3	IC 410-107390/16	IM25I05.D
Level 4	IC 410-107390/15	IM25I04.D
Level 5	IC 410-107390/14	IM25I03.D
Level 6	ICIS 410-107390/13	IM25I02.D
Level 7	IC 410-107390/12	IM25I01.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	13752 684973	33158 1652773	66157	131503	342635	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloromethane	FB	Ave	17674 806634	41785 1968101	80672	156895	408845	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Butadiene	FB	Ave	14817 715678	36799 1706528	73564	148459	356583	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Vinyl chloride	FB	Ave	14627 747762	36238 1847361	75331	144991	377973	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromomethane	FB	Ave	11794 526580	27227 1260967	52121	106174	269988	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloroethane	FB	Ave	9578 460355	23600 1116726	46009	90316	237311	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dichlorofluoromethane	FB	Ave	17565 737652	40189 1753000	73317	147453	364119	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Trichlorofluoromethane	FB	Ave	21686 1046802	50696 2485598	101953	208668	534682	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl ether	FB	Ave	10243 505910	24629 1223300	48765	100901	259473	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Freon 123a	FB	Ave	16074 779116	36009 1852151	80249	163328	383382	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acrolein	TBAd 10	Ave	80784 4019121	206147 9704706	420930	839518	2051424	10.00 500	25.0 1250	50.0	100.0	250
1,1-Dichloroethene	FB	Ave	10577 570227	27336 1354325	57828	118638	278264	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acetone	TBAd 10	Ave	27454	62204	108062	209498	482763	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.: 410-41319-1 Analy Batch No.: 107390

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

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
			929522	2285940				100	250			
Freon 113	FB	Ave	11732 655797	27455 1583141	65806	137933	321103	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl iodide	FB	Ave	21462 1118135	54329 2698334	114765	230064	556247	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon disulfide	FB	Ave	33302 1655816	82229 3981511	168868	342979	813569	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl acetate	TBAd 10	Ave	9712 325151	19178 785174	31468	64116	166334	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Allyl chloride	FB	Ave	25508 1107944	58935 2673144	111386	225080	567178	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylene Chloride	FB	Ave	12659 620780	32234 1487802	63035	129865	314102	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Butyl alcohol	TBAd 10	Ave	15699 740004	44088 1782579	77456	157334	364657	4.00 200	10.0 500	20.0	40.0	100
Acrylonitrile	TBAd 10	Ave	12148 655363	33532 1591064	68567	133754	336861	1.00 50.0	2.50 125	5.00	10.0	25.0
Methyl tert-butyl ether	FB	Ave	31566 1644094	82175 3928149	166927	343815	829305	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,2-Dichloroethene	FB	Ave	13585 624221	31450 1515454	63219	131976	317030	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Hexane	FB	Ave	20550 1080750	45384 2594712	109292	218391	514678	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloroethane	FB	Ave	24094 1246284	61328 2967767	125080	254250	619308	0.200 10.0	0.500 25.0	1.00	2.00	5.00
di-Isopropyl ether	FB	Ave	46041 2282943	111585 5528886	230093	470623	1153419	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chloro-1,3-butadiene	FB	Ave	21409 1100812	51363 2647970	112863	225610	538900	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl t-butyl ether	FB	Ave	41529 2075655	102647 4979385	210732	426180	1052398	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Butanone (MEK)	TBAd 10	Ave	38773	95774	190761	380491	938585	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.: 410-41319-1 Analy Batch No.: 107390

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

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
			1852516	4512811				100	250			
cis-1,2-Dichloroethene	FB	Ave	14457 731328	37242 1761040	73881	152885	372066	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2,2-Dichloropropane	FB	Ave	21501 1072043	49949 2587808	111065	223081	528380	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Propionitrile	TBAd 10	Ave	17788 862982	47048 2170928	91864	182137	438000	4.00 200	10.0 500	20.0	40.0	100
Methacrylonitrile	TBAd 10	Ave	33151 1722490	84710 4166040	176866	359237	882231	2.00 100	5.00 250	10.0	20.0	50.0
Bromochloromethane	FB	Ave	6918 325281	16661 781560	31843	65954	167243	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrahydrofuran	TBAd 10	Ave	9899 482595	25722 1166871	52762	101067	245520	2.00 100	5.00 250	10.0	20.0	50.0
Chloroform	FB	Ave	23062 1168251	59962 2818067	118977	241166	586095	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1-Trichloroethane	FB	Ave	21246 1075219	52840 2588835	108874	219727	527956	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Cyclohexane	FB	Ave	25529 1261698	56046 3071642	129757	259219	609600	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloropropene	FB	Ave	18248 954603	45700 2336173	96006	196323	475475	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon tetrachloride	FB	Ave	17519 962938	43925 2364690	97370	194469	470581	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isobutyl alcohol	TBAd 10	Ave	17870 646193	35158 1548095	66146	142284	323833	10.0 500	25.0 1250	50.0	100	250
Benzene	FB	Ave	55307 2772432	138329 6724662	281402	572779	1377133	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloroethane	FB	Ave	15797 724346	38004 1771645	72998	151288	360703	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Amyl methyl ether	FB	Ave	35829 1826371	88898 4412445	182481	376620	928259	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Heptane	FB	Ave	24047	54789	120942	243269	576846	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.: 410-41319-1 Analy Batch No.: 107390

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

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
			1194850	2903414				10.0	25.0			
n-Butanol	TBAd 10	Ave	24365 1183757	61571 2766855	125106	261716	577630	20.0 1000	50.0 2500	100	200	500
Trichloroethene	FB	Ave	14760 723166	35485 1761390	71417	147779	359914	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylcyclohexane	FB	Ave	24128 1312238	61740 3189381	123593	263506	659798	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloropropane	FB	Ave	14465 721456	35486 1741575	71710	148250	360060	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl methacrylate	TBAd 10	Ave	6595 356900	15850 858374	33700	72515	171139	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,4-Dioxane	TBAd 10	Ave	1706 115387	6622 241329	12008	27783	59547	10.0 500	25.0 1250	50.0	100	250
Dibromomethane	FB	Ave	6393 323321	16764 787975	33652	65371	163136	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromodichloromethane	FB	Ave	16873 872014	40469 2147789	86229	173868	426779	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Nitropropane	TBAd 10	Ave	20670 1078290	53853 2618662	106909	217593	540981	2.00 100	5.00 250	10.0	20.0	50.0
cis-1,3-Dichloropropene	FB	Ave	20362 1097652	50878 2679238	107084	219295	546745	0.200 10.0	0.500 25.0	1.00	2.00	5.00
4-Methyl-2-pentanone (MIBK)	TBAd 10	Ave	92250 4862462	241439 11596289	494241	1003927	2470307	2.00 100	5.00 250	10.0	20.0	50.0
Toluene	CBZd 5	Ave	35687 1764372	87241 4335726	176402	363726	869128	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,3-Dichloropropene	CBZd 5	Ave	16134 897325	40964 2210346	83157	177893	445142	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl methacrylate	CBZd 5	Ave	14167	35178	71189	157462	383451	0.200	0.500	1.00	2.00	5.00

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1 Analy Batch No.: 107390

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

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
			756835	1835713				10.0	25.0			
1,1,2-Trichloroethane	CBZd 5	Ave	9564 481732	22834 1163743	48211	98763	237582	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrachloroethene	CBZd 5	Ave	16441 866923	39052 2110806	83669	174286	425512	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichloropropane	CBZd 5	Ave	16003 845366	41331 2065120	85540	172879	428964	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Hexanone	TBAd 10	Ave	62176 3464716	167867 8242882	346497	708784	1744022	2.00 100	5.00 250	10.0	20.0	50.0
Dibromochloromethane	CBZd 5	Ave	10963 641453	28920 1567134	60243	124832	315923	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromoethane (EDB)	CBZd 5	Ave	8556 478074	23323 1156382	46934	95855	239263	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1-Chlorohexane	CBZd 5	Ave	23669 1074128	51858 2586722	109064	218547	517255	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chlorobenzene	CBZd 5	Ave	37579 1974363	95826 4811071	197457	404331	977663	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1,2-Tetrachloroethane	CBZd 5	Ave	13100 722501	34792 1783600	69838	145750	362752	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethylbenzene	CBZd 5	Ave	68295 3475445	169543 8449113	348677	711404	1728838	0.200 10.0	0.500 25.0	1.00	2.00	5.00
m&p-Xylene	CBZd 5	Ave	51200 2756475	134614 6697468	273866	558858	1362023	0.400 20.0	1.00 50.0	2.00	4.00	10.0
o-Xylene	CBZd 5	Ave	24816	63580	133969	276854	674327	0.200	0.500	1.00	2.00	5.00

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1 Analy Batch No.: 107390

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

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
			1353061	3320234				10.0	25.0			
Styrene	CBZd 5	Ave	41346 2207662	102806 5408522	217070	452528	1095031	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromoform	CBZd 5	Ave	7072 398150	17826 1006142	38357	79664	197838	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isopropylbenzene	CBZd 5	Ave	68127 3606643	168700 8685502	357935	731637	1787241	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	11364 615911	28607 1521486	60797	126655	313169	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromobenzene	DCBd 4	Ave	16009 845880	40145 2095054	83959	173823	418974	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,4-Dichloro-2-butene	TBAd 10	Ave	32312 1719659	77224 4199708	166570	344049	859813	2.00 100	5.00 250	10.0	20.0	50.0
1,2,3-Trichloropropane	DCBd 4	Ave	2852 163606	8504 399964	15297	34148	83391	0.200 10.0	0.500 25.0	1.00	2.00	5.00
N-Propylbenzene	DCBd 4	Ave	77146 4171904	202079 10018099	417034	851752	2062328	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chlorotoluene	DCBd 4	Ave	16257 850537	39228 2087968	83871	175115	415188	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3,5-Trimethylbenzene	DCBd 4	Ave	55902 3021269	141120 7374201	296322	612448	1494397	0.200 10.0	0.500 25.0	1.00	2.00	5.00
4-Chlorotoluene	DCBd 4	Ave	16900 863180	41138 2128307	84059	175246	425054	0.200 10.0	0.500 25.0	1.00	2.00	5.00
tert-Butylbenzene	DCBd 4	Ave	12603	31160	65226	137088	330326	0.200	0.500	1.00	2.00	5.00

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1 Analy Batch No.: 107390

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

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
			674379	1675051				10.0	25.0			
Pentachloroethane	DCBd 4	Ave	11032 559813	25106 1409384	50922	108399	281922	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,4-Trimethylbenzene	DCBd 4	Ave	57882 3072367	147037 7478056	305474	623059	1536046	0.200 10.0	0.500 25.0	1.00	2.00	5.00
sec-Butylbenzene	DCBd 4	Ave	75304 3949288	186398 9534392	389750	800709	1955145	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichlorobenzene	DCBd 4	Ave	32667 1675156	79884 4174846	162228	342026	836365	0.200 10.0	0.500 25.0	1.00	2.00	5.00
p-Isopropyltoluene	DCBd 4	Ave	62210 3384266	155261 8222554	332809	687905	1681791	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,4-Dichlorobenzene	DCBd 4	Ave	32474 1671621	80478 4093737	165981	339830	835031	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,3-Trimethylbenzene	DCBd 4	Ave	27220 1312071	63732 3263963	126397	261226	663242	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Benzyl chloride	DCBd 4	Ave	4512 285981	13013 733152	26506	57189	143338	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Butylbenzene	DCBd 4	Ave	30747 1652234	75474 4057315	158340	331614	814333	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichlorobenzene	DCBd 4	Ave	29321 1514665	74631 3720898	150954	309104	755290	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1678 98219	4773 249387	8946	19137	49133	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3,5-Trichlorobenzene	DCBd 4	Ave	22364	57251	119469	245529	615668	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.: 410-41319-1 Analy Batch No.: 107390

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

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
			1250393	3132791				10.0	25.0			
1,2,4-Trichlorobenzene	DCBd 4	Ave	18170 1077769	46562 2643264	97675	204502	524702	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Hexachlorobutadiene	DCBd 4	Ave	10298 432628	22282 1104366	44110	87060	214097	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Naphthalene	DCBd 4	Ave	33921 2003574	90288 4726811	191794	396601	998124	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,3-Trichlorobenzene	DCBd 4	Ave	17019 907974	41678 2149955	85459	182917	447706	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dibromofluoromethane (Surr)	FB	Ave	547082 539871	541504 540126	544006	538391	538959	10.0 10.0	10.0 10.0	10.0	10.0	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	106960 104409	107831 104628	106557	106715	104722	10.0 10.0	10.0 10.0	10.0	10.0	10.0
Toluene-d8 (Surr)	CBZd 5	Ave	2145909 2144368	2151774 2154955	2132430	2137685	2136606	10.0 10.0	10.0 10.0	10.0	10.0	10.0
4-Bromofluorobenzene (Surr)	CBZd 5	Ave	822001 812680	822933 817055	807959	811047	806855	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.: 410-41319-1 Analy Batch No.: 107390

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-107390/18	IM25I07.D
Level 2	IC 410-107390/17	IM25I06.D
Level 3	IC 410-107390/16	IM25I05.D
Level 4	IC 410-107390/15	IM25I04.D
Level 5	IC 410-107390/14	IM25I03.D
Level 6	ICIS 410-107390/13	IM25I02.D
Level 7	IC 410-107390/12	IM25I01.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 -1.0	-2.0	-1.2	-2.3	2.9	2.2	50 30	30	30	30	30	30
Chloromethane	7.0 -3.1	1.4	-1.0	-4.2	0.9	-1.1	50 30	30	30	30	30	30
1,3-Butadiene	1.3 -5.1	0.9	2.0	2.4	-0.6	-0.9	50 30	30	30	30	30	30
Vinyl chloride	-2.1 0.5	-2.8	2.1	-2.1	3.1	1.3	50 30	30	30	30	30	30
Bromomethane	8.8 -5.4	0.7	-2.6	-1.2	1.5	-1.7	50 30	30	30	30	30	30
Chloroethane	2.3 -3.0	1.0	-0.4	-2.7	3.3	-0.4	50 30	30	30	30	30	30
Dichlorofluoromethane	14.5 -7.1	5.0	-3.2	-3.1	-3.3	-2.7	50 30	30	30	30	30	30
Trichlorofluoromethane	3.3 -3.7	-3.2	-1.6	0.3	3.8	1.0	50 30	30	30	30	30	30
Ethyl ether	1.1 -1.8	-2.6	-2.5	0.4	4.3	1.1	50 30	30	30	30	30	30
Freon 123a	2.6 -3.9	-7.9	3.8	5.1	-0.3	0.7	50 30	30	30	30	30	30
Acrolein	-6.8 -1.0	-10.7	3.2	1.7	8.8	4.8	50 30	30	30	30	30	30
1,1-Dichloroethene	-6.4 -2.6	-3.1	3.7	5.9	0.3	2.2	50 30	30	30	30	30	30
Acetone	20.7 -11.1	2.7	1.0	-3.3	-2.4	-7.6	50 30	30	30	30	30	30
Freon 113	-8.0 1.0	-13.7	4.6	9.1	2.7	4.2	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.: 410-41319-1 Analy Batch No.: 107390

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Methyl iodide	-4.3 -2.1	-2.9	3.7	3.5	1.1	1.0	50 30	30	30	30	30	30
Carbon disulfide	-0.4 -3.2	-1.5	2.3	3.4	-0.9	0.2	50 30	30	30	30	30	30
Methyl acetate	30.0 -7.1	-3.5	-10.4	-9.8	2.4	-1.5	50 30	30	30	30	30	30
Allyl chloride	10.4 -5.9	2.3	-2.3	-1.7	0.1	-2.9	50 30	30	30	30	30	30
Methylene Chloride	-0.3 -4.8	1.7	0.6	3.1	0.8	-1.0	50 30	30	30	30	30	30
t-Butyl alcohol	-4.0 -3.7	1.3	0.6	1.0	2.5	2.3	50 30	30	30	30	30	30
Acrylonitrile	-13.0 0.7	-9.8	4.4	0.6	10.9	6.2	50 30	30	30	30	30	30
Methyl tert-butyl ether	-4.8 -3.6	-0.6	2.0	4.6	2.0	0.4	50 30	30	30	30	30	30
trans-1,2-Dichloroethene	5.4 -4.4	-2.2	-0.6	3.3	0.3	-1.9	50 30	30	30	30	30	30
n-Hexane	-2.1 0.6	-13.3	5.5	5.0	0.0	4.3	50 30	30	30	30	30	30
1,1-Dichloroethane	-3.2 -3.1	-1.3	1.8	3.0	1.4	1.4	50 30	30	30	30	30	30
di-Isopropyl ether	-0.2 -2.6	-3.1	1.0	2.9	1.8	0.2	50 30	30	30	30	30	30
2-Chloro-1,3-butadiene	-2.3 -1.8	-6.1	4.4	3.8	0.2	1.7	50 30	30	30	30	30	30
Ethyl t-butyl ether	-1.0 -3.5	-2.0	1.8	2.4	2.2	0.2	50 30	30	30	30	30	30
2-Butanone (MEK)	-3.2 -0.3	-10.1	1.3	-0.2	7.8	4.7	50 30	30	30	30	30	30
cis-1,2-Dichloroethene	-2.8 -3.7	0.4	0.7	3.7	2.0	-0.4	50 30	30	30	30	30	30
2,2-Dichloropropane	-0.2 -2.3	-7.1	4.5	4.4	-0.1	0.8	50 30	30	30	30	30	30
Propionitrile	-6.4 1.0	-6.9	2.8	0.7	6.0	2.8	50 30	30	30	30	30	30
Methacrylonitrile	-9.6 0.5	-13.2	2.5	2.9	10.6	6.3	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1 Analy Batch No.: 107390

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

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	4.2 -4.2	0.6	-2.8	0.2	2.7	-0.8	50 30	30	30	30	30	30
Tetrahydrofuran	-6.3 -2.3	-8.5	6.2	0.5	6.9	3.4	50 30	30	30	30	30	30
Chloroform	-2.7 -3.4	1.4	1.7	2.6	0.7	-0.2	50 30	30	30	30	30	30
1,1,1-Trichloroethane	-1.5 -2.4	-1.8	2.3	2.7	-0.3	0.9	50 30	30	30	30	30	30
Cyclohexane	1.7 -0.6	-10.5	4.7	4.1	-1.1	1.7	50 30	30	30	30	30	30
1,1-Dichloropropene	-4.3 -0.4	-4.0	2.0	3.8	1.6	1.3	50 30	30	30	30	30	30
Carbon tetrachloride	-7.4 1.7	-6.9	4.3	3.7	1.4	3.1	50 30	30	30	30	30	30
Isobutyl alcohol	21.1 -7.2	-10.5	-4.7	1.3	0.9	-0.9	50 30	30	30	30	30	30
Benzene	-1.4 -2.5	-1.1	1.7	3.0	0.1	0.1	50 30	30	30	30	30	30
1,2-Dichloroethane	5.5 -3.8	1.7	-1.3	1.9	-1.9	-2.1	50 30	30	30	30	30	30
t-Amyl methyl ether	-2.5 -2.3	-3.0	0.7	3.4	3.0	0.7	50 30	30	30	30	30	30
n-Heptane	1.2 -0.7	-7.6	3.1	3.2	-1.1	1.8	50 30	30	30	30	30	30
n-Butanol	-4.9 -4.5	-9.7	3.8	7.3	3.6	4.5	50 30	30	30	30	30	30
Trichloroethene	1.3 -1.7	-2.4	-0.7	2.3	0.7	0.5	50 30	30	30	30	30	30
Methylcyclohexane	-6.1 0.9	-3.7	-2.5	3.4	4.6	3.4	50 30	30	30	30	30	30
1,2-Dichloropropane	-0.4 -2.5	-2.0	0.1	3.0	1.1	0.6	50 30	30	30	30	30	30
Methyl methacrylate	-9.2 4.5	-18.0	-1.4	4.8	8.3	11.1	50 30	30	30	30	30	30
1,4-Dioxane	-30.4 -12.9	1.6	4.2	19.1	11.8	6.6	50 30	30	30	30	30	30
Dibromomethane	-3.0 -2.8	2.0	3.5	0.1	0.9	-0.6	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.: 410-41319-1 Analy Batch No.: 107390

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
Bromodichloromethane	-2.1 1.4	-5.9	1.4	1.8	0.9	2.5	50 30	30	30	30	30	30
2-Nitropropane	-9.0 2.0	-10.9	0.1	0.7	9.6	7.4	50 30	30	30	30	30	30
cis-1,3-Dichloropropene	-5.5 1.1	-5.4	0.7	2.6	3.4	3.1	50 30	30	30	30	30	30
4-Methyl-2-pentanone (MIBK)	-10.3 -0.3	-11.8	2.2	2.6	10.5	7.0	50 30	30	30	30	30	30
Toluene	0.4 -2.3	-1.4	0.7	3.0	-0.5	0.0	50 30	30	30	30	30	30
trans-1,3-Dichloropropene	-6.9 2.2	-5.0	-2.6	3.4	4.6	4.3	50 30	30	30	30	30	30
Ethyl methacrylate	-4.8 -1.2	-5.0	-2.9	6.5	4.9	2.4	50 30	30	30	30	30	30
1,1,2-Trichloroethane	-0.3 -2.8	-4.4	2.0	3.6	0.8	1.1	50 30	30	30	30	30	30
Tetrachloroethene	-2.7 0.0	-7.2	0.4	3.8	2.4	3.2	50 30	30	30	30	30	30
1,3-Dichloropropane	-5.4 -2.2	-1.8	2.6	2.9	3.2	0.6	50 30	30	30	30	30	30
2-Hexanone	-13.8 1.1	-12.5	2.1	3.2	11.2	8.7	50 30	30	30	30	30	30
Dibromochloromethane	-10.4 2.5	-5.1	-0.2	2.6	5.0	5.5	50 30	30	30	30	30	30
1,2-Dibromoethane (EDB)	-8.9 -1.3	-0.2	1.4	2.8	3.7	2.5	50 30	30	30	30	30	30
1-Chlorohexane	9.0 -4.6	-4.1	1.9	1.3	-3.1	-0.4	50 30	30	30	30	30	30
Chlorobenzene	-4.3 -1.9	-2.0	2.0	3.6	1.3	1.2	50 30	30	30	30	30	30
1,1,1,2-Tetrachloroethane	-7.8 0.5	-1.7	-0.3	3.2	3.8	2.3	50 30	30	30	30	30	30
Ethylbenzene	-1.8 -2.7	-2.0	1.7	3.0	1.2	0.6	50 30	30	30	30	30	30
m&p-Xylene	-6.1 -1.6	-0.8	1.9	3.2	1.6	1.8	50 30	30	30	30	30	30
o-Xylene	-6.9 -0.3	-4.2	1.9	4.5	2.9	2.1	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1 Analy Batch No.: 107390

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

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	-5.0 -0.4	-5.1	1.2	4.7	2.4	2.1	50 30	30	30	30	30	30
Bromoform	-8.6 4.2	-7.4	0.6	3.6	4.0	3.6	50 30	30	30	30	30	30
Isopropylbenzene	-4.1 -2.0	-4.5	2.3	3.7	2.4	2.2	50 30	30	30	30	30	30
1,1,2,2-Tetrachloroethane	-7.1 0.7	-6.9	0.5	4.7	4.9	3.2	50 30	30	30	30	30	30
Bromobenzene	-5.1 0.6	-5.2	0.7	4.3	1.9	2.8	50 30	30	30	30	30	30
trans-1,4-Dichloro-2-butene	-9.0 4.6	-18.2	-0.2	1.8	11.4	9.6	50 30	30	30	30	30	30
1,2,3-Trichloropropane	-12.5 -0.6	4.0	-5.0	6.1	5.0	3.0	50 30	30	30	30	30	30
N-Propylbenzene	-6.8 -2.0	-2.8	1.9	4.1	2.2	3.3	50 30	30	30	30	30	30
2-Chlorotoluene	-3.5 0.3	-7.3	0.7	5.2	1.1	3.5	50 30	30	30	30	30	30
1,3,5-Trimethylbenzene	-6.2 0.2	-5.6	0.7	4.0	2.9	4.0	50 30	30	30	30	30	30
4-Chlorotoluene	-1.7 0.2	-4.7	-1.1	3.1	1.4	2.9	50 30	30	30	30	30	30
tert-Butylbenzene	-5.2 2.1	-6.6	-0.7	4.4	1.9	4.1	50 30	30	30	30	30	30
Pentachloroethane	0.6 4.1	-8.8	-6.0	0.0	5.4	4.7	50 30	30	30	30	30	30
1,2,4-Trimethylbenzene	-5.3 -0.9	-4.2	1.1	3.1	3.1	3.1	50 30	30	30	30	30	30
sec-Butylbenzene	-3.8 -1.4	-5.1	0.8	3.5	2.5	3.5	50 30	30	30	30	30	30
1,3-Dichlorobenzene	-2.4 1.0	-5.0	-2.0	3.4	2.4	2.6	50 30	30	30	30	30	30
p-Isopropyltoluene	-6.5 0.0	-7.1	1.2	4.6	3.6	4.3	50 30	30	30	30	30	30
1,4-Dichlorobenzene	-2.9 -0.9	-4.2	0.4	2.8	2.4	2.5	50 30	30	30	30	30	30
1,2,3-Trimethylbenzene	2.9 -0.1	-4.0	-3.3	-0.1	2.8	1.7	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-41319-1 Analy Batch No.: 107390

SDG No.:

Instrument ID: 19930 GC Column: R-624SilMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2021 23:19 Calibration End Date: 03/26/2021 01:26 Calibration ID: 22087

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	-18.0 7.9	-5.8	-2.5	5.1	6.8	6.6	50 30	30	30	30	30	30
n-Butylbenzene	-5.0 1.5	-7.1	-1.0	3.7	3.2	4.7	50 30	30	30	30	30	30
1,2-Dichlorobenzene	-3.7 -1.0	-2.3	0.4	2.8	1.8	2.1	50 30	30	30	30	30	30
1,2-Dibromo-3-Chloropropane	-12.2 5.7	-0.5	-5.3	1.3	5.5	5.4	50 30	30	30	30	30	30
1,3,5-Trichlorobenzene	-8.2 4.2	-6.3	-0.7	2.0	3.7	5.3	50 30	30	30	30	30	30
1,2,4-Trichlorobenzene	-10.6 5.4	-8.7	-2.7	1.9	5.9	8.8	50 30	30	30	30	30	30
Hexachlorobutadiene	13.5 -1.4	-2.2	-1.6	-2.9	-3.2	-2.2	50 30	30	30	30	30	30
Naphthalene	-11.8 -0.5	-6.5	0.9	4.4	6.5	6.9	50 30	30	30	30	30	30
1,2,3-Trichlorobenzene	-3.8 -1.6	-6.1	-2.2	4.6	3.8	5.3	50 30	30	30	30	30	30
Dibromofluoromethane (Surr)	0.0 0.4	-0.8	0.8	-0.7	0.4	-0.1	50 30	30	30	30	30	30
1,2-Dichloroethane-d4 (Surr)	-0.1 -0.7	0.9	0.8	0.5	-0.3	-1.2	50 30	30	30	30	30	30
Toluene-d8 (Surr)	-0.6 -0.1	0.1	0.2	-0.3	0.7	0.0	50 30	30	30	30	30	30
4-Bromofluorobenzene (Surr)	0.2 -0.3	0.8	-0.1	-0.5	0.1	-0.3	50 30	30	30	30	30	30

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I01.D
Lims ID: IC std7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 25-Mar-2021 23:19:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0025078-012
Misc. Info.: IC STD7
Operator ID: mec29284 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 26-Mar-2021 17:09:26 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1605

First Level Reviewer: campbellme Date: 26-Mar-2021 16:42:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.971	1.983	-0.012	99	1652773	25.0	24.8	
4 Chloromethane	50	2.172	2.178	-0.006	99	1968101	25.0	24.2	
6 Butadiene	39	2.282	2.294	-0.012	93	1706528	25.0	23.7	
5 Vinyl chloride	62	2.288	2.300	-0.012	98	1847361	25.0	25.1	
7 Bromomethane	94	2.611	2.629	-0.018	90	1260967	25.0	23.6	
8 Chloroethane	64	2.702	2.715	-0.012	100	1116726	25.0	24.2	
9 Dichlorofluoromethane	67	2.940	2.952	-0.012	97	1753000	25.0	23.2	
10 Trichlorofluoromethane	101	3.013	3.019	-0.006	98	2485598	25.0	24.1	
11 Ethyl ether	59	3.263	3.275	-0.012	92	1223300	25.0	24.5	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.343	3.342	0.001	92	1852151	25.0	24.0	
13 Acrolein	56	3.434	3.446	-0.012	99	9704706	1249.9	1237.0	
14 1,1-Dichloroethene	96	3.574	3.586	-0.012	98	1354325	25.0	24.4	
15 Acetone	43	3.605	3.617	-0.012	99	2285940	250.0	222.1	
16 112TCTFE	101	3.611	3.623	-0.012	91	1583141	25.0	25.2	
17 Iodomethane	142	3.775	3.787	-0.012	98	2698334	25.0	24.5	
18 Ethyl bromide	108	3.800	3.812	-0.012	98	1220358	25.0	24.3	
19 Carbon disulfide	76	3.879	3.897	-0.018	99	3981511	25.0	24.2	
21 Methyl acetate	43	4.031	4.050	-0.019	98	785174	25.0	23.2	
22 3-Chloro-1-propene	41	4.056	4.074	-0.018	92	2673144	25.0	23.5	
23 Methylene Chloride	84	4.245	4.257	-0.012	94	1487802	25.0	23.8	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.269	0.000	0	158827	50.0	50.0	
25 2-Methyl-2-propanol	59	4.397	4.391	0.006	99	1782579	500.0	481.7	
26 Acrylonitrile	53	4.586	4.604	-0.018	99	1591064	125.0	125.9	
27 Methyl tert-butyl ether	73	4.653	4.659	-0.006	96	3928149	25.0	24.1	
28 trans-1,2-Dichloroethene	96	4.672	4.684	-0.012	98	1515454	25.0	23.9	
29 Hexane	57	5.092	5.104	-0.012	94	2594712	25.0	25.1	
31 1,1-Dichloroethane	63	5.330	5.342	-0.012	96	2967767	25.0	24.2	
32 Isopropyl ether	45	5.385	5.397	-0.012	95	5528886	25.0	24.4	
33 2-Chloro-1,3-butadiene	53	5.440	5.446	-0.006	91	2647970	25.0	24.6	
34 Tert-butyl ethyl ether	59	5.921	5.927	-0.006	98	4979385	25.0	24.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.129	6.122	0.007	100	4512811	250.0	249.2	
S 35 1,2-Dichloroethene, Total	100				0			48.0	
37 cis-1,2-Dichloroethene	96	6.159	6.165	-0.006	82	1761040	25.0	24.1	
38 2,2-Dichloropropane	77	6.177	6.183	-0.006	89	2587808	25.0	24.4	
40 Propionitrile	54	6.214	6.214	0.000	99	2170928	500.0	505.2	
42 Methacrylonitrile	67	6.433	6.427	0.006	94	4166040	250.0	251.2	
43 Chlorobromomethane	128	6.488	6.488	0.000	94	781560	25.0	23.9	
44 Tetrahydrofuran	71	6.507	6.500	0.007	90	1166871	250.0	244.3	
45 Chloroform	83	6.641	6.647	-0.006	93	2818067	25.0	24.2	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.860	-0.006	94	540126	10.0	10.0	
47 1,1,1-Trichloroethane	97	6.866	6.872	-0.006	99	2588835	25.0	24.4	
48 Cyclohexane	56	6.964	6.964	0.000	91	3071642	25.0	24.9	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	95	2336173	25.0	24.9	
50 Carbon tetrachloride	117	7.080	7.086	-0.006	96	2364690	25.0	25.4	
52 Isobutyl alcohol	41	7.214	7.220	-0.006	96	1548095	1250.0	1159.7	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.305	0.006	0	104628	10.0	9.93	
54 Benzene	78	7.342	7.342	0.000	96	6724662	25.0	24.4	
56 1,2-Dichloroethane	62	7.409	7.415	-0.006	97	1771645	25.0	24.0	
57 Tert-amyl methyl ether	73	7.525	7.531	-0.006	98	4412445	25.0	24.4	
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	99	2140113	10.0	10.0	
59 n-Heptane	43	7.750	7.756	-0.006	94	2903414	25.0	24.8	
60 n-Butanol	56	8.092	8.092	0.000	89	2766855	2500.0	2386.7	
61 Trichloroethene	95	8.220	8.220	0.000	98	1761390	25.0	24.6	
62 Methylcyclohexane	83	8.525	8.530	-0.005	94	3189381	25.0	25.2	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	94	1741575	25.0	24.4	
64 Methyl methacrylate	69	8.628	8.628	0.000	92	858374	25.0	26.1	
65 1,4-Dioxane	88	8.634	8.634	0.000	33	241329	1250.0	1088.9	M
66 Dibromomethane	93	8.659	8.665	-0.006	94	787975	25.0	24.3	
68 Dichlorobromomethane	83	8.896	8.890	0.006	99	2147789	25.0	25.3	
69 2-Nitropropane	41	9.159	9.158	0.001	96	2618662	250.0	255.0	
72 1-Bromo-2-chloroethane	63	9.280	9.286	-0.006	98	1670744	25.0	25.1	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	96	2679238	25.0	25.3	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.603	0.001	97	11596289	250.0	249.4	
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	2154955	10.0	10.0	
76 Toluene	92	9.817	9.817	0.000	98	4335726	25.0	24.4	
S 77 1,3-Dichloropropene, Total	100				0			50.8	
78 trans-1,3-Dichloropropene	75	10.067	10.073	-0.006	93	2210346	25.0	25.6	
79 Ethyl methacrylate	69	10.128	10.128	0.000	90	1835713	25.0	24.7	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	1163743	25.0	24.3	
81 Tetrachloroethene	166	10.366	10.359	0.007	98	2110806	25.0	25.0	
82 1,3-Dichloropropane	76	10.433	10.439	-0.006	91	2065120	25.0	24.5	
83 2-Hexanone	43	10.481	10.481	0.000	98	8242882	250.0	252.7	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	1567134	25.0	25.6	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	1156382	25.0	24.7	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	86	1647559	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	99	2586722	25.0	23.9	
90 Chlorobenzene	112	11.213	11.213	0.000	95	4811071	25.0	24.5	
S 89 Xylenes, Total	106				0			74.1	
92 Ethylbenzene	91	11.298	11.298	0.000	98	8449113	25.0	24.3	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	97	1783600	25.0	25.1	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	6697468	50.0	49.2	
94 o-Xylene	106	11.743	11.743	0.000	96	3320234	25.0	24.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.756	11.755	0.001	94	5408522	25.0	24.9	
96 Bromoform	173	11.914	11.914	0.000	98	1006142	25.0	26.0	
97 Isopropylbenzene	105	12.042	12.042	0.000	96	8685502	25.0	24.5	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	817055	10.0	9.97	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	92	1521486	25.0	25.2	
102 Bromobenzene	156	12.304	12.304	0.000	96	2095054	25.0	25.1	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	92	4199708	250.0	261.6	
104 1,2,3-Trichloropropane	110	12.329	12.328	0.001	81	399964	25.0	24.9	
105 N-Propylbenzene	91	12.371	12.371	0.000	98	10018099	25.0	24.5	
106 2-Chlorotoluene	126	12.451	12.444	0.007	97	2087968	25.0	25.1	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	7374201	25.0	25.1	
108 4-Chlorotoluene	126	12.536	12.542	-0.006	97	2128307	25.0	25.0	
109 tert-Butylbenzene	134	12.749	12.743	0.006	93	1675051	25.0	25.5	
110 Pentachloroethane	167	12.780	12.780	0.000	93	1409384	25.0	26.0	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	97	7478056	25.0	24.8	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	9534392	25.0	24.7	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	4174846	25.0	25.2	
114 4-Isopropyltoluene	119	13.018	13.017	0.001	97	8222554	25.0	25.0	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	911496	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.084	0.001	94	4093737	25.0	24.8	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	98	3263963	25.0	25.0	
118 Benzyl chloride	126	13.158	13.158	0.000	98	733152	25.0	27.0	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	4057315	25.0	25.4	
120 1,2-Dichlorobenzene	146	13.341	13.340	0.001	99	3720898	25.0	24.7	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	88	249387	25.0	26.4	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	3132791	25.0	26.0	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	2643264	25.0	26.3	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	1104366	25.0	24.6	
126 Naphthalene	128	14.615	14.615	0.000	97	4726811	25.0	24.9	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	2149955	25.0	24.6	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00042	Amount Added: 25.00	Units: uL	
MSV_RV4_826_00048	Amount Added: 25.00	Units: uL	
MSV_RV4GAS826_00121	Amount Added: 25.00	Units: uL	
MSV_31_826ISS_00004	Amount Added: 5.00	Units: uL	Run Reagent

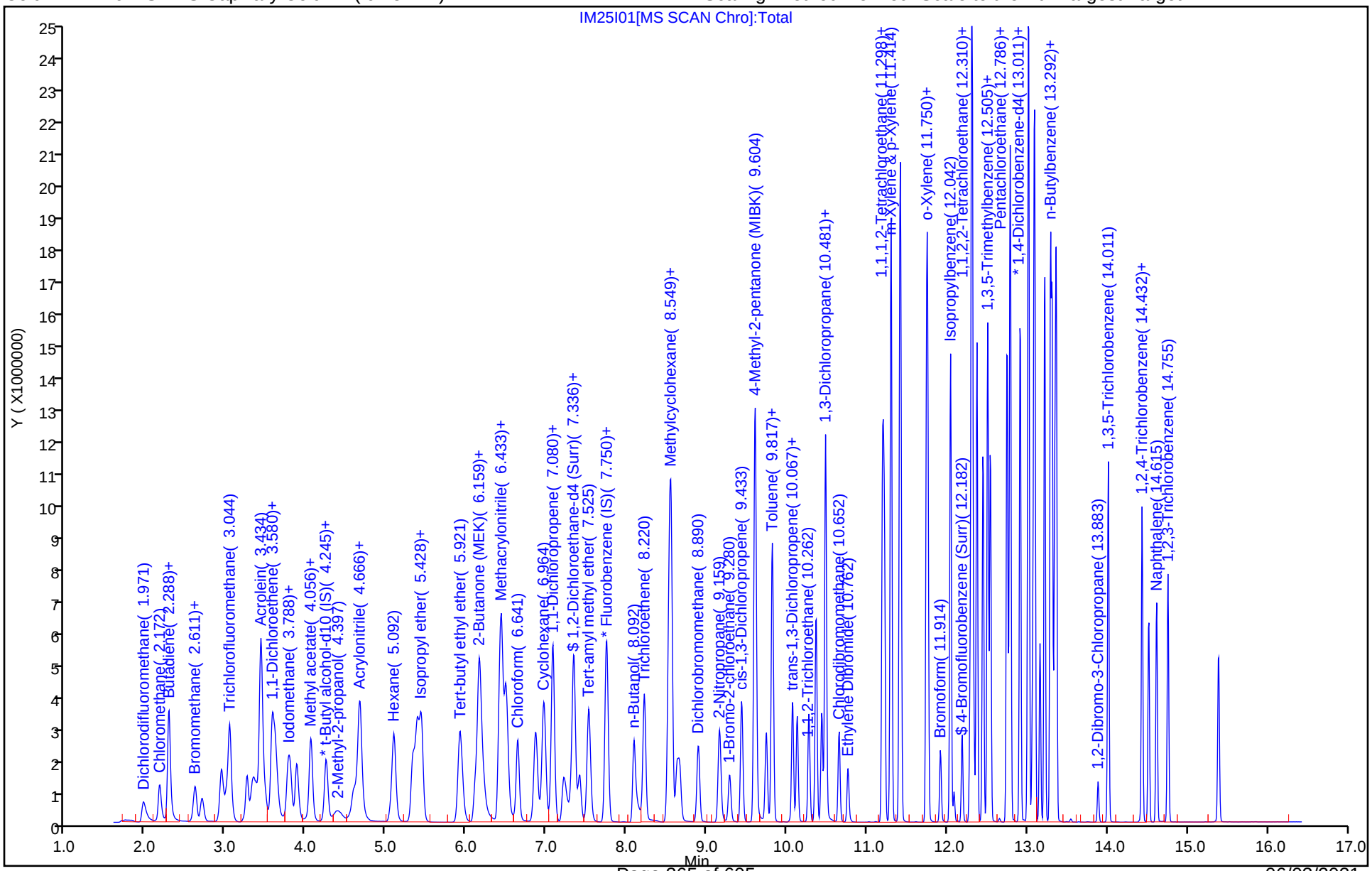
Report Date: 26-Mar-2021 17:09:28 Chrom Revision: 2.3 19-Mar-2021 08:24:58

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I01.D

Injection Date:	25-Mar-2021 23:19:30	Instrument ID:	19930	Operator ID:	mec29284
Lims ID:	IC std7			Worklist Smp#:	12
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

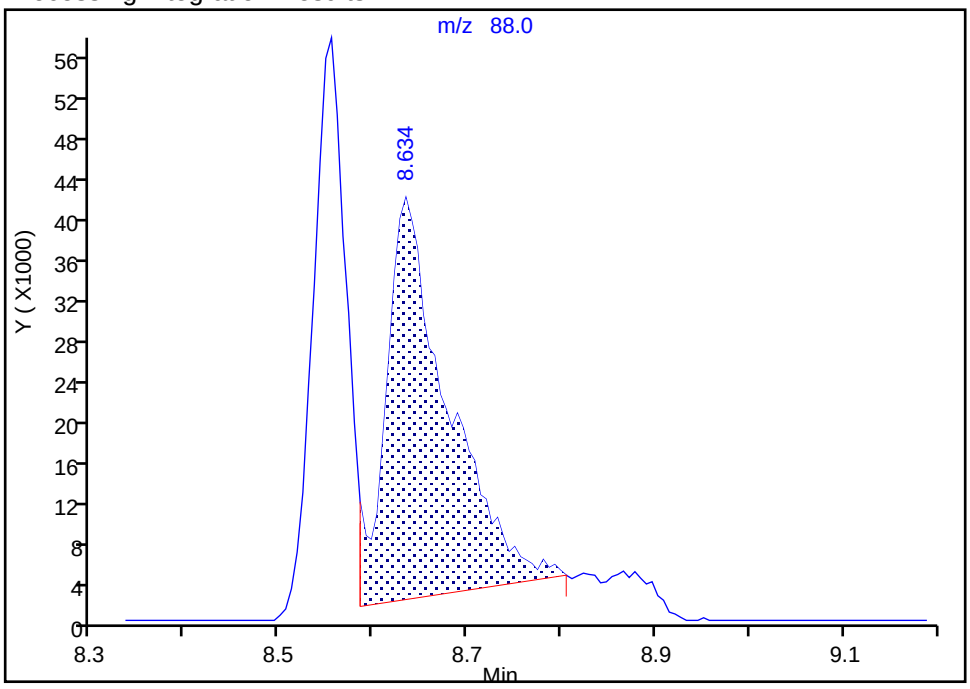
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I01.D
Injection Date: 25-Mar-2021 23:19:30 Instrument ID: 19930
Lims ID: IC std7
Client ID:
Operator ID: mec29284 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

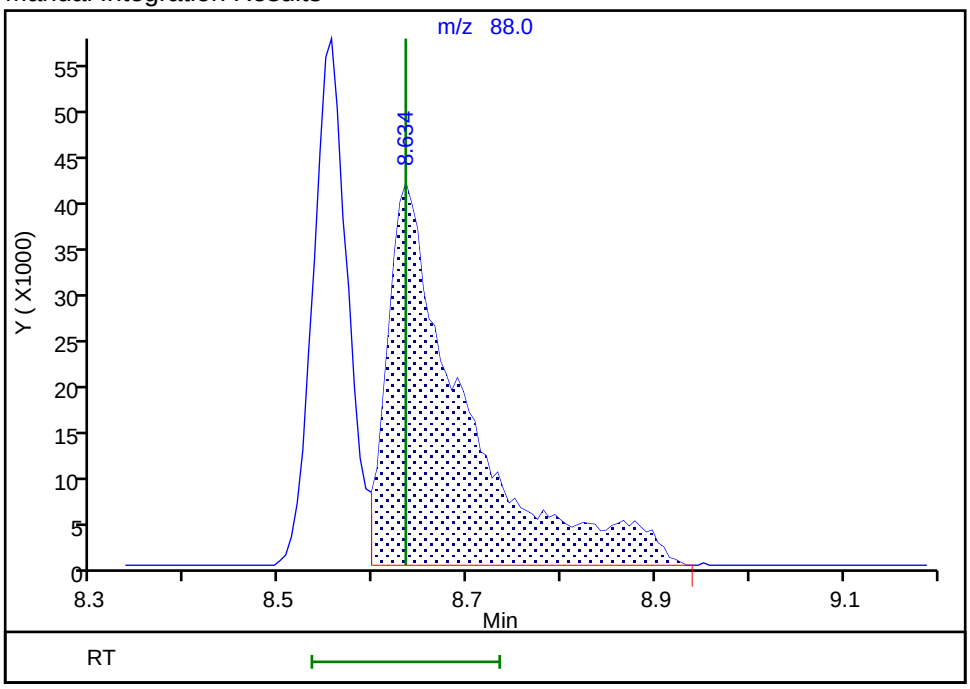
Processing Integration Results

RT: 8.63
Area: 183223
Amount: 1179.6899
Amount Units: ug/l



Manual Integration Results

RT: 8.63
Area: 241329
Amount: 1088.9121
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:41:41
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I02.D
Lims ID: ICIS - LG
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 25-Mar-2021 23:41:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0025078-013
Misc. Info.: ICIS - LG
Operator ID: mec29284 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 26-Mar-2021 17:09:38 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1605

First Level Reviewer: campbellme Date: 26-Mar-2021 16:43:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.971	1.971	0.000	99	684973	10.0	10.2	M
4 Chloromethane	50	2.172	2.172	0.000	99	806634	10.0	9.89	
6 Butadiene	39	2.288	2.288	0.000	94	715678	10.0	9.91	
5 Vinyl chloride	62	2.294	2.294	0.000	98	747762	10.0	10.1	
7 Bromomethane	94	2.617	2.617	0.000	89	526580	10.0	9.83	M
8 Chloroethane	64	2.702	2.702	0.000	100	460355	10.0	9.96	
9 Dichlorofluoromethane	67	2.940	2.940	0.000	97	737652	10.0	9.73	
10 Trichlorofluoromethane	101	3.013	3.013	0.000	97	1046802	10.0	10.1	
11 Ethyl ether	59	3.263	3.263	0.000	93	505910	10.0	10.1	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.343	3.343	0.000	93	779116	10.0	10.1	
13 Acrolein	56	3.434	3.434	0.000	99	4019121	500.0	524.2	
14 1,1-Dichloroethene	96	3.574	3.574	0.000	98	570227	10.0	10.2	
15 Acetone	43	3.599	3.599	0.000	100	929522	100.0	92.4	
16 112TCTFE	101	3.611	3.611	0.000	91	655797	10.0	10.4	
17 Iodomethane	142	3.775	3.775	0.000	98	1118135	10.0	10.1	
18 Ethyl bromide	108	3.806	3.806	0.000	98	505630	10.0	10.0	
19 Carbon disulfide	76	3.879	3.879	0.000	99	1655816	10.0	10.0	
21 Methyl acetate	43	4.031	4.031	0.000	98	325151	10.0	9.85	
22 3-Chloro-1-propene	41	4.062	4.062	0.000	92	1107944	10.0	9.71	
23 Methylene Chloride	84	4.251	4.251	0.000	94	620780	10.0	9.90	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.269	0.000	0	155217	50.0	50.0	
25 2-Methyl-2-propanol	59	4.379	4.379	0.000	100	740004	200.0	204.6	
26 Acrylonitrile	53	4.592	4.592	0.000	98	655363	50.0	53.1	
27 Methyl tert-butyl ether	73	4.653	4.653	0.000	95	1644094	10.0	10.0	
28 trans-1,2-Dichloroethene	96	4.672	4.672	0.000	98	624221	10.0	9.81	
29 Hexane	57	5.098	5.098	0.000	94	1080750	10.0	10.4	
31 1,1-Dichloroethane	63	5.330	5.330	0.000	96	1246284	10.0	10.1	
32 Isopropyl ether	45	5.391	5.391	0.000	95	2282943	10.0	10.0	
33 2-Chloro-1,3-butadiene	53	5.440	5.440	0.000	91	1100812	10.0	10.2	
34 Tert-butyl ethyl ether	59	5.921	5.921	0.000	98	2075655	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
36 2-Butanone (MEK)	43	6.116	6.116	0.000	100	1852516	100.0	104.7	
37 cis-1,2-Dichloroethene	96	6.159	6.159	0.000	83	731328	10.0	9.96	
38 2,2-Dichloropropane	77	6.171	6.171	0.000	87	1072043	10.0	10.1	
40 Propionitrile	54	6.208	6.208	0.000	99	862982	200.0	205.5	
42 Methacrylonitrile	67	6.427	6.427	0.000	94	1722490	100.0	106.3	
43 Chlorobromomethane	128	6.488	6.488	0.000	96	325281	10.0	9.92	
44 Tetrahydrofuran	71	6.500	6.500	0.000	90	482595	100.0	103.4	
45 Chloroform	83	6.641	6.641	0.000	93	1168251	10.0	9.98	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	539871	10.0	10.0	
47 1,1,1-Trichloroethane	97	6.866	6.866	0.000	99	1075219	10.0	10.1	
48 Cyclohexane	56	6.964	6.964	0.000	91	1261698	10.0	10.2	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	95	954603	10.0	10.1	
50 Carbon tetrachloride	117	7.080	7.080	0.000	96	962938	10.0	10.3	
52 Isobutyl alcohol	41	7.214	7.214	0.000	96	646193	500.0	495.3	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	104409	10.0	9.88	
54 Benzene	78	7.342	7.342	0.000	97	2772432	10.0	10.0	
56 1,2-Dichloroethane	62	7.409	7.409	0.000	97	724346	10.0	9.79	
57 Tert-amyl methyl ether	73	7.525	7.525	0.000	98	1826371	10.0	10.1	
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	98	2148304	10.0	10.0	
59 n-Heptane	43	7.750	7.750	0.000	94	1194850	10.0	10.2	
60 n-Butanol	56	8.092	8.092	0.000	89	1183757	1000.0	1044.9	
61 Trichloroethene	95	8.220	8.220	0.000	98	723166	10.0	10.1	
62 Methylcyclohexane	83	8.524	8.524	0.000	94	1312238	10.0	10.3	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	83	721456	10.0	10.1	
64 Methyl methacrylate	69	8.628	8.628	0.000	92	356900	10.0	11.1	
65 1,4-Dioxane	88	8.634	8.634	0.000	68	115387	500.0	532.8	M
66 Dibromomethane	93	8.659	8.659	0.000	96	323321	10.0	9.94	
68 Dichlorobromomethane	83	8.890	8.890	0.000	99	872014	10.0	10.2	
69 2-Nitropropane	41	9.158	9.158	0.000	97	1078290	100.0	107.4	
72 1-Bromo-2-chloroethane	63	9.286	9.286	0.000	98	693715	10.0	10.4	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	96	1097652	10.0	10.3	
74 4-Methyl-2-pentanone (MIBK)	43	9.603	9.603	0.000	97	4862462	100.0	107.0	
$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	94	2144368	10.0	10.0	
76 Toluene	92	9.817	9.817	0.000	98	1764372	10.0	10.0	
78 trans-1,3-Dichloropropene	75	10.067	10.067	0.000	93	897325	10.0	10.4	
79 Ethyl methacrylate	69	10.128	10.128	0.000	91	756835	10.0	10.2	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	481732	10.0	10.1	
81 Tetrachloroethene	166	10.366	10.366	0.000	98	866923	10.0	10.3	
82 1,3-Dichloropropane	76	10.433	10.433	0.000	91	845366	10.0	10.1	
83 2-Hexanone	43	10.481	10.481	0.000	98	3464716	100.0	108.7	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	641453	10.0	10.5	
86 Ethylene Dibromide	107	10.762	10.762	0.000	98	478074	10.0	10.3	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	85	1638803	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	98	1074128	10.0	9.96	
90 Chlorobenzene	112	11.213	11.213	0.000	95	1974363	10.0	10.1	
92 Ethylbenzene	91	11.298	11.298	0.000	98	3475445	10.0	10.1	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	97	722501	10.0	10.2	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	2756475	20.0	20.4	
94 o-Xylene	106	11.743	11.743	0.000	96	1353061	10.0	10.2	
95 Styrene	104	11.755	11.755	0.000	94	2207662	10.0	10.2	
96 Bromoform	173	11.914	11.914	0.000	98	398150	10.0	10.4	
97 Isopropylbenzene	105	12.042	12.042	0.000	96	3606643	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
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	812680	10.0	9.97	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	92	615911	10.0	10.3	
102 Bromobenzene	156	12.304	12.304	0.000	93	845880	10.0	10.3	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	92	1719659	100.0	109.6	
104 1,2,3-Trichloropropane	110	12.335	12.335	0.000	83	163606	10.0	10.3	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	4171904	10.0	10.3	
106 2-Chlorotoluene	126	12.444	12.444	0.000	97	850537	10.0	10.4	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	3021269	10.0	10.4	
108 4-Chlorotoluene	126	12.536	12.536	0.000	98	863180	10.0	10.3	
109 tert-Butylbenzene	134	12.749	12.749	0.000	93	674379	10.0	10.4	
110 Pentachloroethane	167	12.780	12.780	0.000	94	559813	10.0	10.5	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	97	3072367	10.0	10.3	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	3949288	10.0	10.3	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	1675156	10.0	10.3	
114 4-Isopropyltoluene	119	13.017	13.017	0.000	97	3384266	10.0	10.4	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	899738	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.000	94	1671621	10.0	10.2	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	99	1312071	10.0	10.2	
118 Benzyl chloride	126	13.158	13.158	0.000	98	285981	10.0	10.7	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	1652234	10.0	10.5	
120 1,2-Dichlorobenzene	146	13.341	13.341	0.000	99	1514665	10.0	10.2	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	88	98219	10.0	10.5	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	1250393	10.0	10.5	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	1077769	10.0	10.9	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	432628	10.0	9.78	
126 Naphthalene	128	14.615	14.615	0.000	97	2003574	10.0	10.7	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	907974	10.0	10.5	
204 Pentane	43		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00042	Amount Added: 10.00	Units: uL	
MSV_RV4_826_00048	Amount Added: 10.00	Units: uL	
MSV_RV4GAS826_00121	Amount Added: 10.00	Units: uL	
MSV_31_826ISS_00004	Amount Added: 5.00	Units: uL	Run Reagent

Report Date: 26-Mar-2021 17:09:39 Chrom Revision: 2.3 19-Mar-2021 08:24:58

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I02.D

Injection Date: 25-Mar-2021 23:41:30 Instrument ID: 19930 Operator ID: mec29284

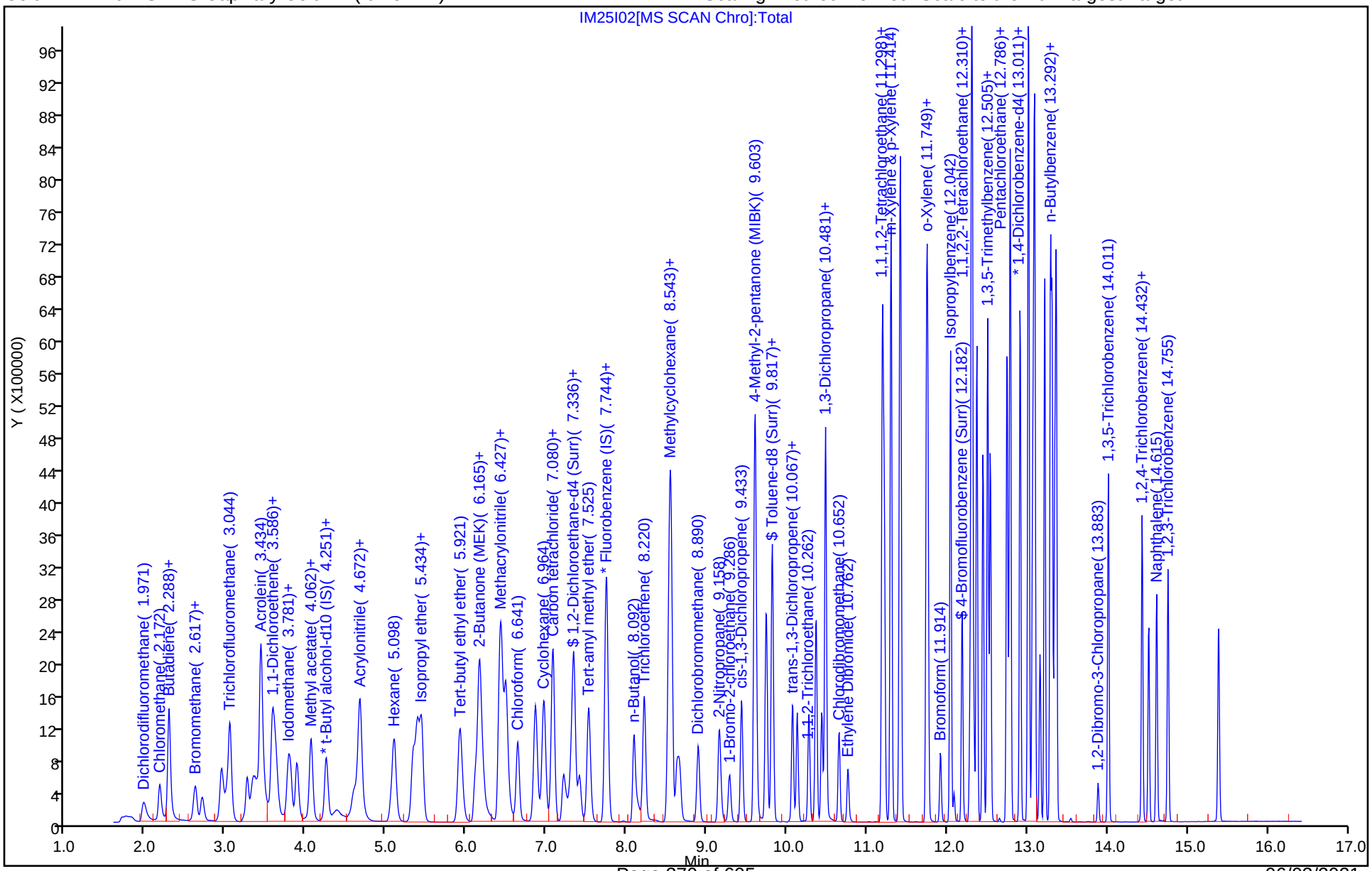
Lims ID: ICIS - LG Worklist Smp#: 13

Client ID:

Purge Vol: 25.000 mL Dil. Factor: 1.0000 ALS Bottle#: 12

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

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

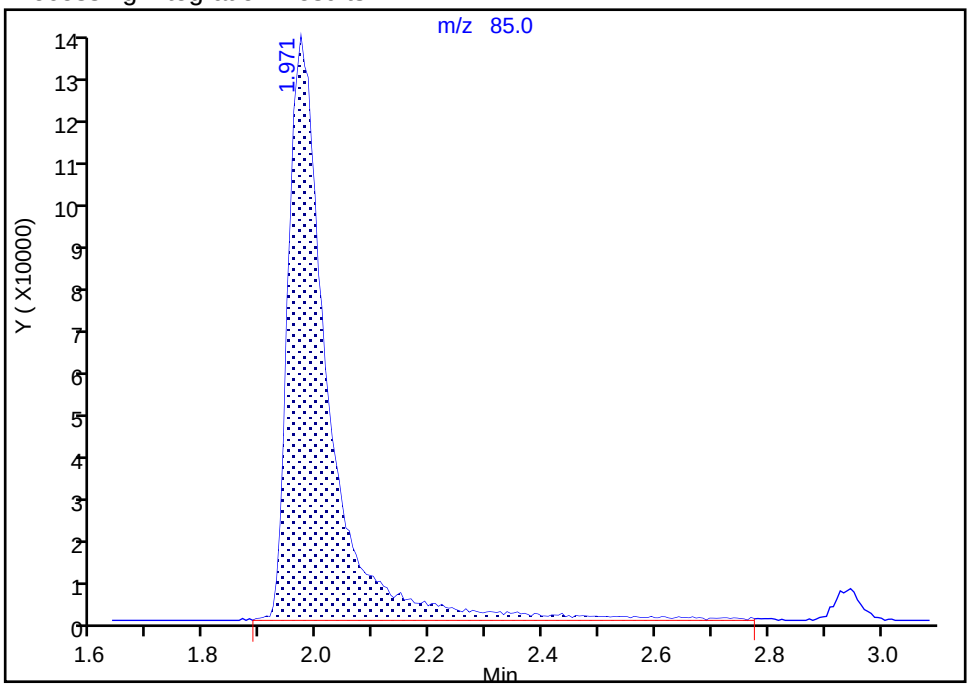
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I02.D
Injection Date: 25-Mar-2021 23:41:30 Instrument ID: 19930
Lims ID: ICIS - LG
Client ID:
Operator ID: mec29284 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

1 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

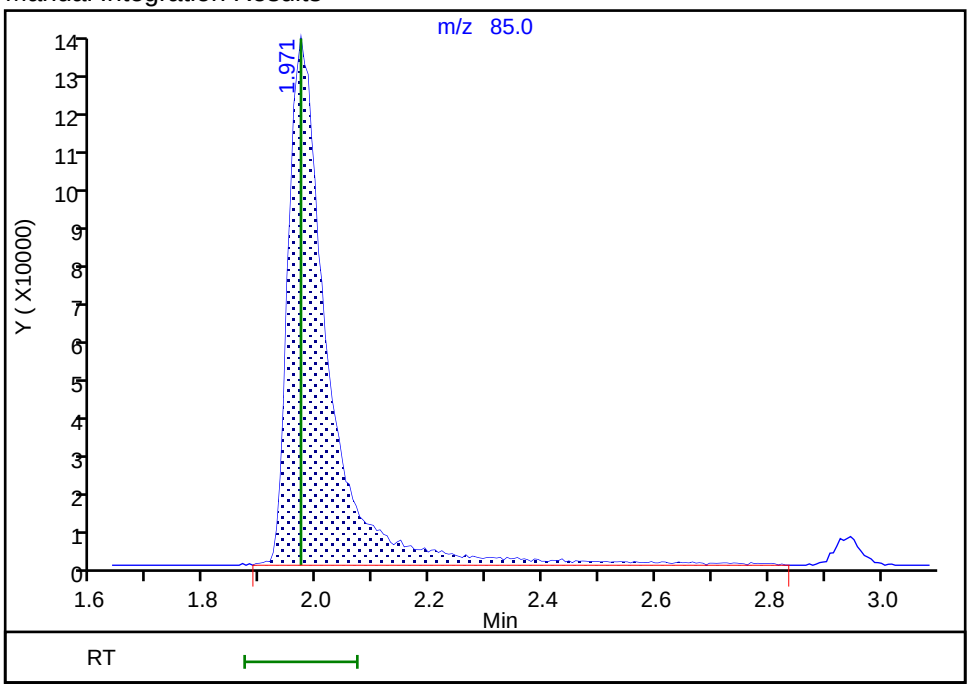
Processing Integration Results

RT: 1.97
Area: 684017
Amount: 10.340664
Amount Units: ug/l



Manual Integration Results

RT: 1.97
Area: 684973
Amount: 10.222260
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:42:45
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

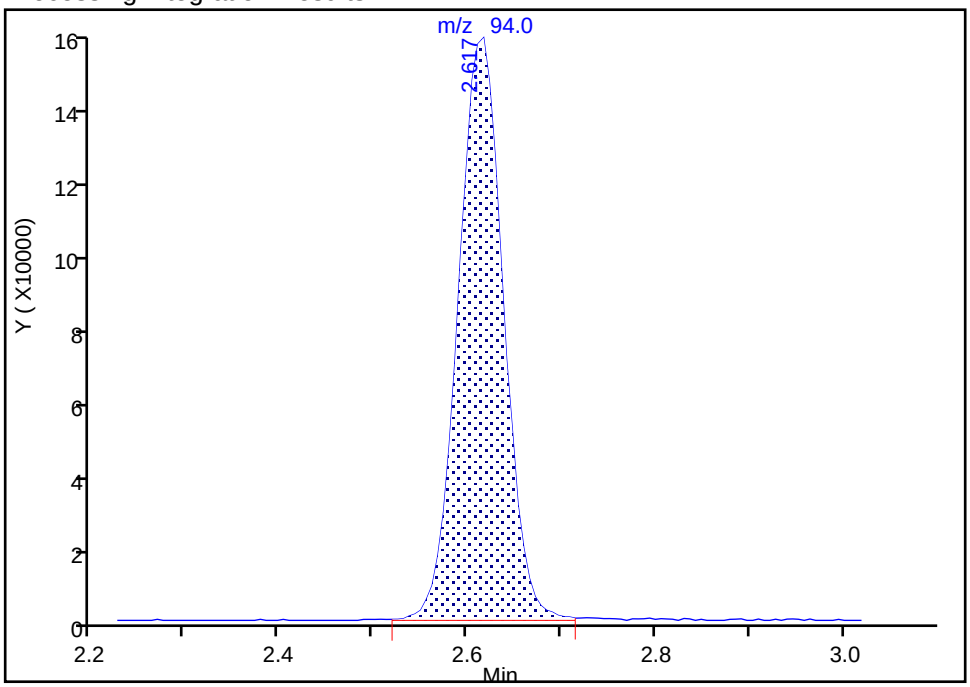
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I02.D
Injection Date: 25-Mar-2021 23:41:30 Instrument ID: 19930
Lims ID: ICIS - LG
Client ID:
Operator ID: mec29284 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

7 Bromomethane, CAS: 74-83-9

Signal: 1

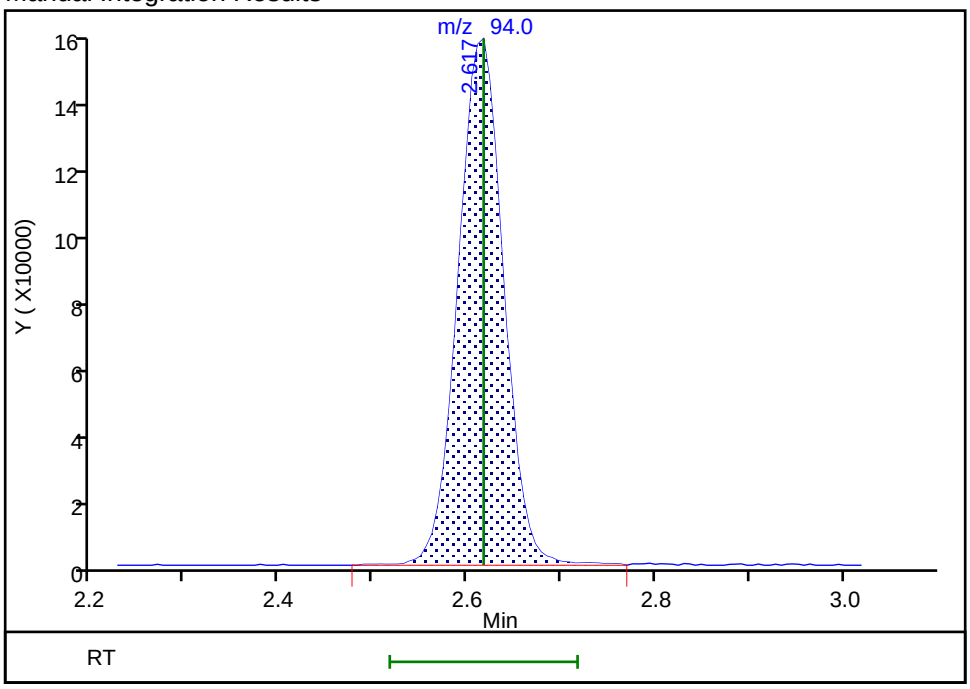
Processing Integration Results

RT: 2.62
Area: 524521
Amount: 9.972578
Amount Units: ug/l



Manual Integration Results

RT: 2.62
Area: 526580
Amount: 9.834867
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:42:55
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

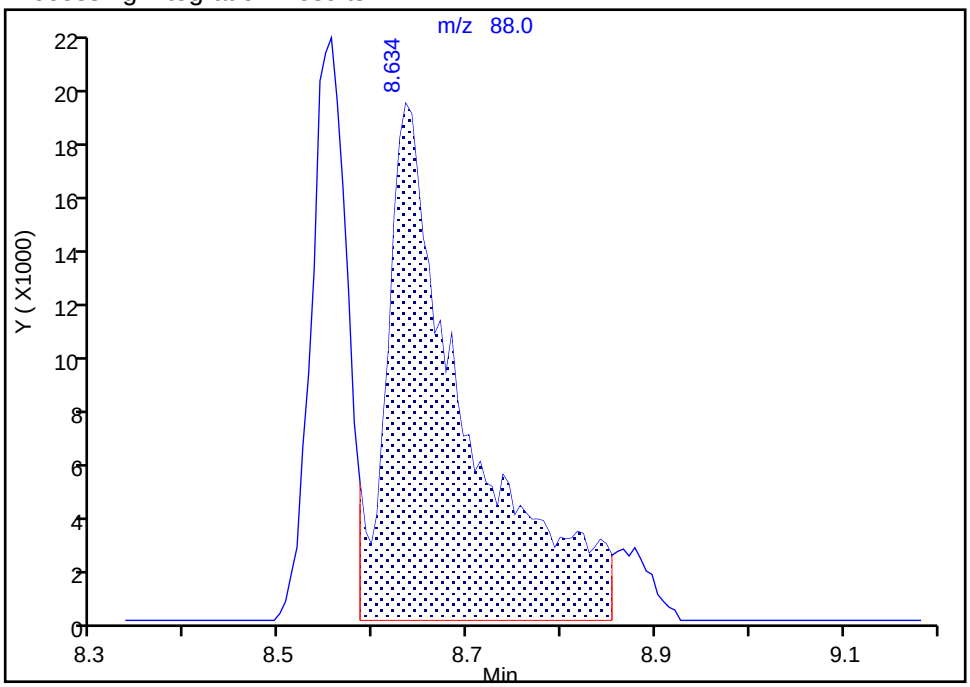
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I02.D
Injection Date: 25-Mar-2021 23:41:30 Instrument ID: 19930
Lims ID: ICIS - LG
Client ID:
Operator ID: mec29284 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

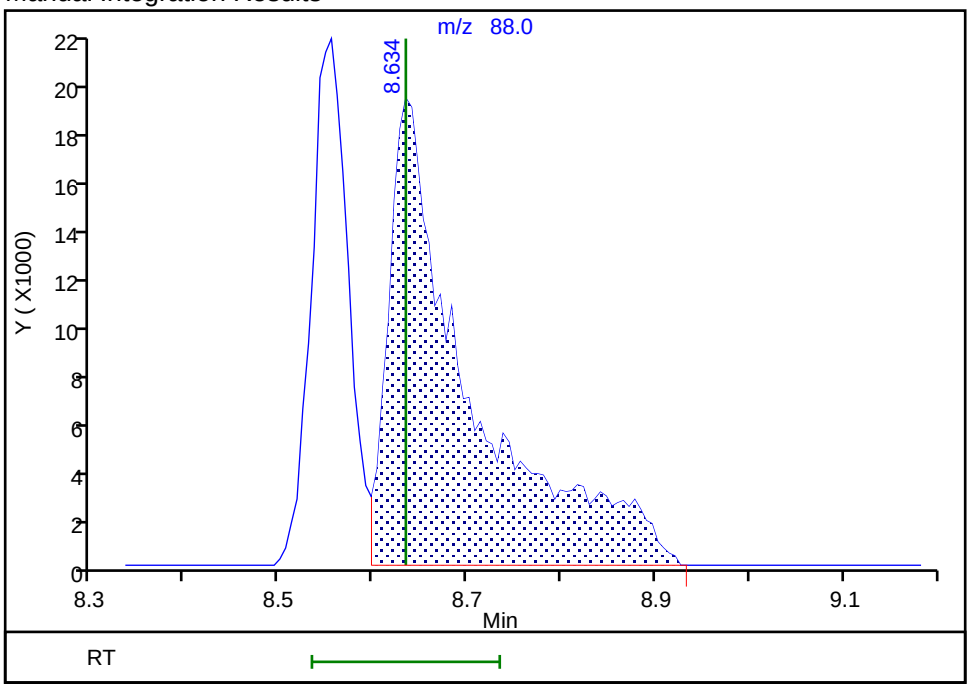
Processing Integration Results

RT: 8.63
Area: 111627
Amount: 705.2763
Amount Units: ug/l



Manual Integration Results

RT: 8.63
Area: 115387
Amount: 532.7522
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:43:31
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I03.D
Lims ID: IC std5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 26-Mar-2021 00:02:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0025078-014
Misc. Info.: IC STD5
Operator ID: mec29284 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 26-Mar-2021 17:09:50 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1605

First Level Reviewer: campbellme Date: 26-Mar-2021 16:46:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.965	1.971	-0.006	99	342635	5.00	5.14	
4 Chloromethane	50	2.166	2.172	-0.006	99	408845	5.00	5.04	
6 Butadiene	39	2.282	2.288	-0.006	96	356583	5.00	4.97	
5 Vinyl chloride	62	2.288	2.294	-0.006	98	377973	5.00	5.15	
7 Bromomethane	94	2.617	2.617	0.000	90	269988	5.00	5.07	
8 Chloroethane	64	2.696	2.702	-0.006	100	237311	5.00	5.16	
9 Dichlorofluoromethane	67	2.940	2.940	0.000	96	364119	5.00	4.83	
10 Trichlorofluoromethane	101	3.007	3.013	-0.006	97	534682	5.00	5.19	
11 Ethyl ether	59	3.257	3.263	-0.006	93	259473	5.00	5.22	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.343	3.343	0.001	92	383382	5.00	4.98	
13 Acrolein	56	3.434	3.434	0.000	99	2051424	250.0	271.9	
14 1,1-Dichloroethene	96	3.574	3.574	0.000	98	278264	5.00	5.02	
15 Acetone	43	3.605	3.599	0.006	100	482763	50.0	48.8	M
16 112TCTFE	101	3.611	3.611	0.000	92	321103	5.00	5.13	
17 Iodomethane	142	3.776	3.775	0.001	98	556247	5.00	5.05	
18 Ethyl bromide	108	3.800	3.806	-0.006	98	260354	5.00	5.19	
19 Carbon disulfide	76	3.879	3.879	0.000	99	813569	5.00	4.96	
21 Methyl acetate	43	4.038	4.031	0.007	99	166334	5.00	5.12	M
22 3-Chloro-1-propene	41	4.056	4.062	-0.006	92	567178	5.00	5.00	
23 Methylene Chloride	84	4.245	4.251	-0.006	94	314102	5.00	5.04	
* 24 t-Butyl alcohol-d10 (IS)	65	4.245	4.269	-0.024	0	152718	50.0	50.0	
25 2-Methyl-2-propanol	59	4.397	4.379	0.018	99	364657	100.0	102.5	
26 Acrylonitrile	53	4.592	4.592	0.000	99	336861	25.0	27.7	
27 Methyl tert-butyl ether	73	4.659	4.653	0.006	96	829305	5.00	5.10	
28 trans-1,2-Dichloroethene	96	4.672	4.672	0.000	98	317030	5.00	5.01	
29 Hexane	57	5.092	5.098	-0.006	94	514678	5.00	5.00	
31 1,1-Dichloroethane	63	5.330	5.330	0.000	96	619308	5.00	5.07	
32 Isopropyl ether	45	5.385	5.391	-0.006	95	1153419	5.00	5.09	
33 2-Chloro-1,3-butadiene	53	5.440	5.440	0.000	91	538900	5.00	5.01	
34 Tert-butyl ethyl ether	59	5.915	5.921	-0.006	98	1052398	5.00	5.11	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.117	6.116	0.001	100	938585	50.0	53.9	
S 35 1,2-Dichloroethene, Total	100				0			10.1	
37 cis-1,2-Dichloroethene	96	6.159	6.159	0.000	83	372066	5.00	5.10	
38 2,2-Dichloropropane	77	6.171	6.171	0.000	90	528380	5.00	5.00	
40 Propionitrile	54	6.208	6.208	0.000	99	438000	100.0	106.0	
42 Methacrylonitrile	67	6.427	6.427	0.000	93	882231	50.0	55.3	
43 Chlorobromomethane	128	6.488	6.488	0.000	96	167243	5.00	5.13	
44 Tetrahydrofuran	71	6.501	6.500	0.001	89	245520	50.0	53.5	
45 Chloroform	83	6.641	6.641	0.000	93	586095	5.00	5.04	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.854	0.000	94	538959	10.0	10.0	
47 1,1,1-Trichloroethane	97	6.866	6.866	0.000	98	527956	5.00	4.99	
48 Cyclohexane	56	6.964	6.964	0.000	92	609600	5.00	4.95	
51 1,1-Dichloropropene	75	7.074	7.080	-0.006	95	475475	5.00	5.08	
50 Carbon tetrachloride	117	7.074	7.080	-0.006	86	470581	5.00	5.07	
52 Isobutyl alcohol	41	7.214	7.214	0.000	94	323833	250.0	252.3	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	104722	10.0	9.97	
54 Benzene	78	7.336	7.342	-0.006	97	1377133	5.00	5.00	
56 1,2-Dichloroethane	62	7.409	7.409	0.000	97	360703	5.00	4.91	
57 Tert-amyl methyl ether	73	7.525	7.525	0.000	98	928259	5.00	5.15	
* 58 Fluorobenzene (IS)	96	7.738	7.738	0.000	98	2135112	10.0	10.0	
59 n-Heptane	43	7.750	7.750	0.000	93	576846	5.00	4.95	
60 n-Butanol	56	8.092	8.092	0.000	89	577630	500.0	518.2	M
61 Trichloroethene	95	8.214	8.220	-0.006	97	359914	5.00	5.03	
62 Methylcyclohexane	83	8.525	8.524	0.001	94	659798	5.00	5.23	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	88	360060	5.00	5.05	
64 Methyl methacrylate	69	8.628	8.628	0.000	91	171139	5.00	5.41	
65 1,4-Dioxane	88	8.640	8.634	0.006	34	59547	250.0	279.4	M
66 Dibromomethane	93	8.659	8.659	0.000	95	163136	5.00	5.04	
68 Dichlorobromomethane	83	8.890	8.890	0.000	99	426779	5.00	5.05	
69 2-Nitropropane	41	9.159	9.158	0.001	98	540981	50.0	54.8	
72 1-Bromo-2-chloroethane	63	9.281	9.286	-0.005	98	345481	5.00	5.21	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	96	546745	5.00	5.17	
74 4-Methyl-2-pentanone (MIBK)	43	9.598	9.603	-0.005	97	2470307	50.0	55.2	
$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	93	2136606	10.0	10.1	
76 Toluene	92	9.817	9.817	0.000	98	869128	5.00	4.98	
S 77 1,3-Dichloropropene, Total	100				0			10.4	
78 trans-1,3-Dichloropropene	75	10.067	10.067	0.000	93	445142	5.00	5.23	
79 Ethyl methacrylate	69	10.128	10.128	0.000	90	383451	5.00	5.24	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	237582	5.00	5.04	
81 Tetrachloroethene	166	10.366	10.366	0.000	98	425512	5.00	5.12	
82 1,3-Dichloropropane	76	10.433	10.433	0.000	91	428964	5.00	5.16	
83 2-Hexanone	43	10.482	10.481	0.001	98	1744022	50.0	55.6	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	315923	5.00	5.25	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	239263	5.00	5.18	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	86	1621764	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	99	517255	5.00	4.85	
90 Chlorobenzene	112	11.213	11.213	0.000	96	977663	5.00	5.06	
S 89 Xylenes, Total	106				0			15.3	
92 Ethylbenzene	91	11.298	11.298	0.000	98	1728838	5.00	5.06	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	97	362752	5.00	5.19	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	1362023	10.0	10.2	
94 o-Xylene	106	11.743	11.743	0.000	96	674327	5.00	5.14	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.756	11.755	0.001	95	1095031	5.00	5.12	
96 Bromoform	173	11.914	11.914	0.000	98	197838	5.00	5.20	
97 Isopropylbenzene	105	12.042	12.042	0.000	96	1787241	5.00	5.12	
$ 100 4-Bromofluorobenzene (Surr)	95	12.182	12.188	-0.006	92	806855	10.0	10.0	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	313169	5.00	5.25	
102 Bromobenzene	156	12.304	12.304	0.000	92	418974	5.00	5.09	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	92	859813	50.0	55.7	
104 1,2,3-Trichloropropane	110	12.329	12.335	-0.006	80	83391	5.00	5.25	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	2062328	5.00	5.11	
106 2-Chlorotoluene	126	12.445	12.444	0.001	97	415188	5.00	5.05	
107 1,3,5-Trimethylbenzene	105	12.506	12.505	0.001	94	1494397	5.00	5.14	
108 4-Chlorotoluene	126	12.536	12.536	0.000	98	425054	5.00	5.07	
109 tert-Butylbenzene	134	12.749	12.749	0.000	93	330326	5.00	5.10	
110 Pentachloroethane	167	12.780	12.780	0.000	94	281922	5.00	5.27	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	97	1536046	5.00	5.15	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	1955145	5.00	5.12	
113 1,3-Dichlorobenzene	146	13.012	13.011	0.001	98	836365	5.00	5.12	
114 4-Isopropyltoluene	119	13.018	13.017	0.001	97	1681791	5.00	5.18	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	899730	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.085	0.001	95	835031	5.00	5.12	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	98	663242	5.00	5.14	
118 Benzyl chloride	126	13.158	13.158	0.000	98	143338	5.00	5.34	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	814333	5.00	5.16	
120 1,2-Dichlorobenzene	146	13.341	13.341	0.000	99	755290	5.00	5.09	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	87	49133	5.00	5.27	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	615668	5.00	5.19	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	524702	5.00	5.30	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	214097	5.00	4.84	
126 Naphthalene	128	14.615	14.615	0.000	97	998124	5.00	5.32	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	447706	5.00	5.19	
204 Pentane	43		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00042	Amount Added:	5.00	Units: uL	
MSV_RV4_826_00048	Amount Added:	5.00	Units: uL	
MSV_RV4GAS826_00121	Amount Added:	5.00	Units: uL	
MSV_31_826ISS_00004	Amount Added:	5.00	Units: uL	Run Reagent

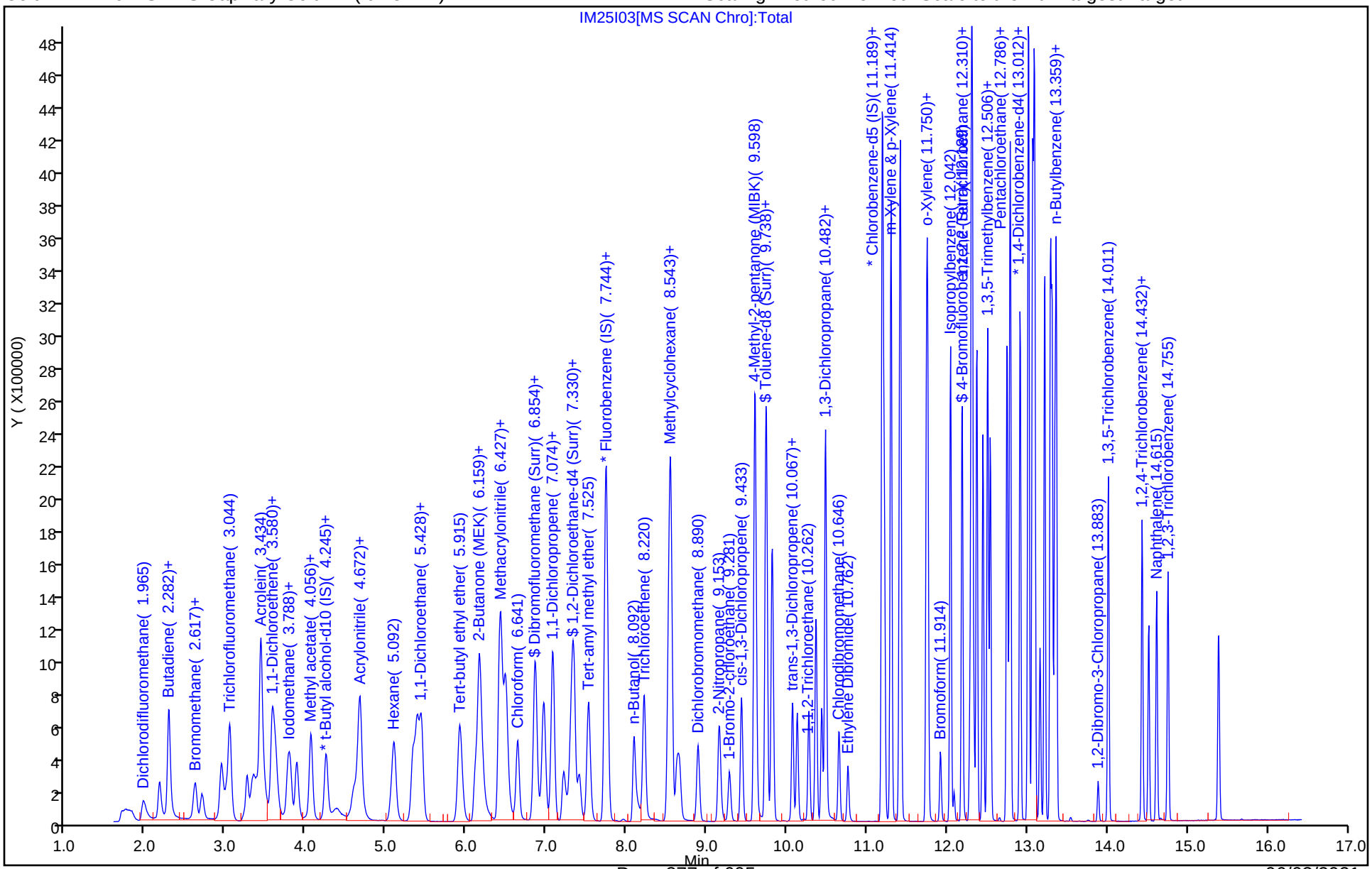
Report Date: 26-Mar-2021 17:09:51 Chrom Revision: 2.3 19-Mar-2021 08:24:58

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I03.D

Injection Date:	26-Mar-2021 00:02:30	Instrument ID:	19930	Operator ID:	mec29284
Lims ID:	IC std5			Worklist Smp#:	14
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

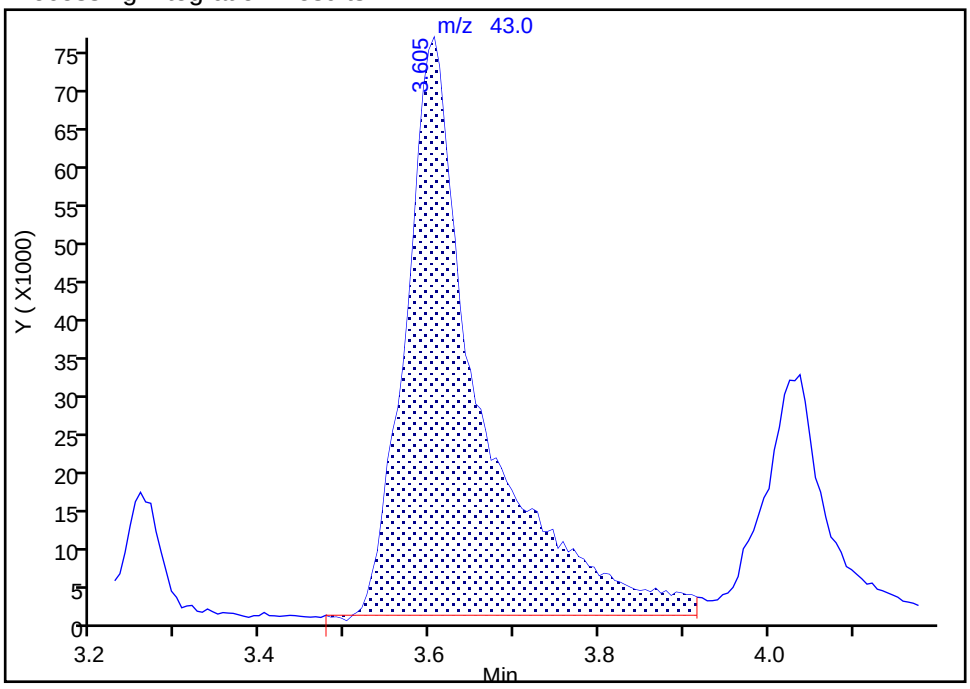
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I03.D
Injection Date: 26-Mar-2021 00:02:30 Instrument ID: 19930
Lims ID: IC std5
Client ID:
Operator ID: mec29284 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

15 Acetone, CAS: 67-64-1

Signal: 1

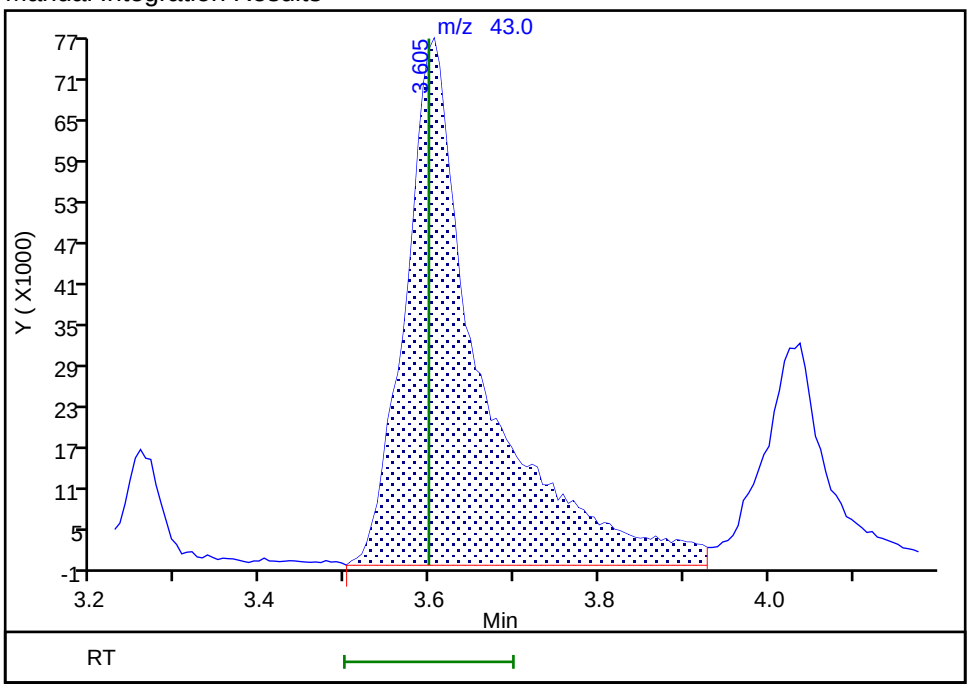
Processing Integration Results

RT: 3.60
Area: 463346
Amount: 49.960262
Amount Units: ug/l



Manual Integration Results

RT: 3.60
Area: 482763
Amount: 48.788948
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:44:48
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

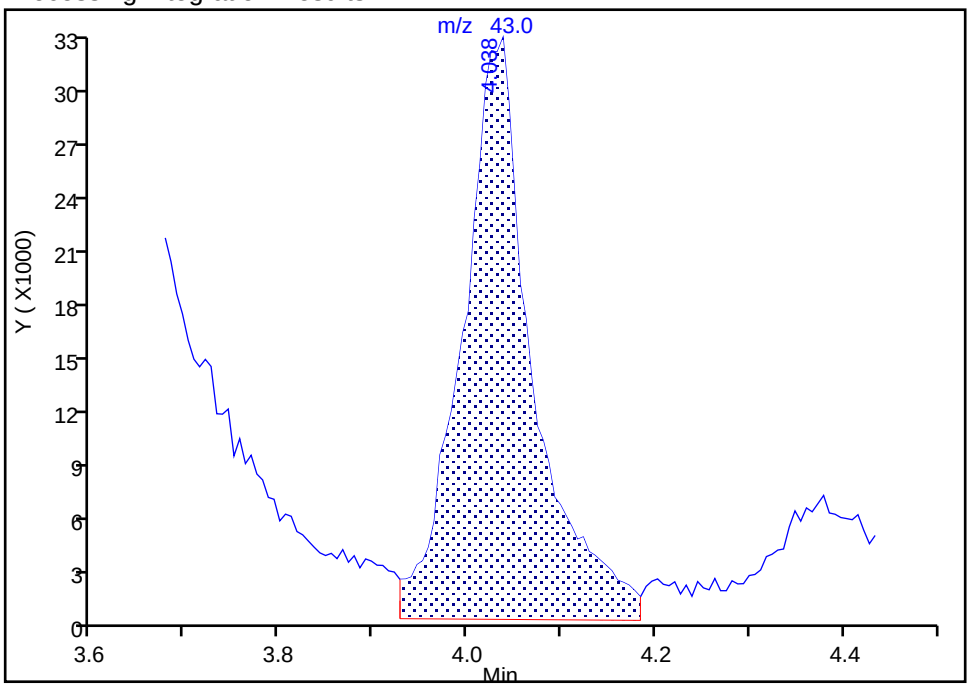
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I03.D
Injection Date: 26-Mar-2021 00:02:30 Instrument ID: 19930
Lims ID: IC std5
Client ID:
Operator ID: mec29284 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

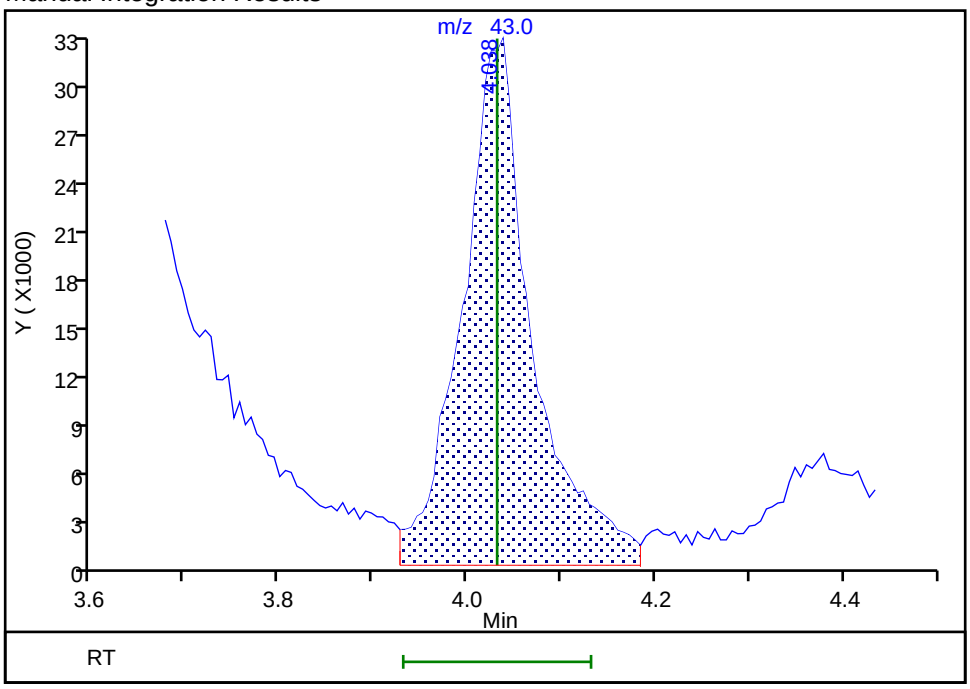
Processing Integration Results

RT: 4.04
Area: 167058
Amount: 5.297672
Amount Units: ug/l



Manual Integration Results

RT: 4.04
Area: 166334
Amount: 5.119422
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:45:12
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

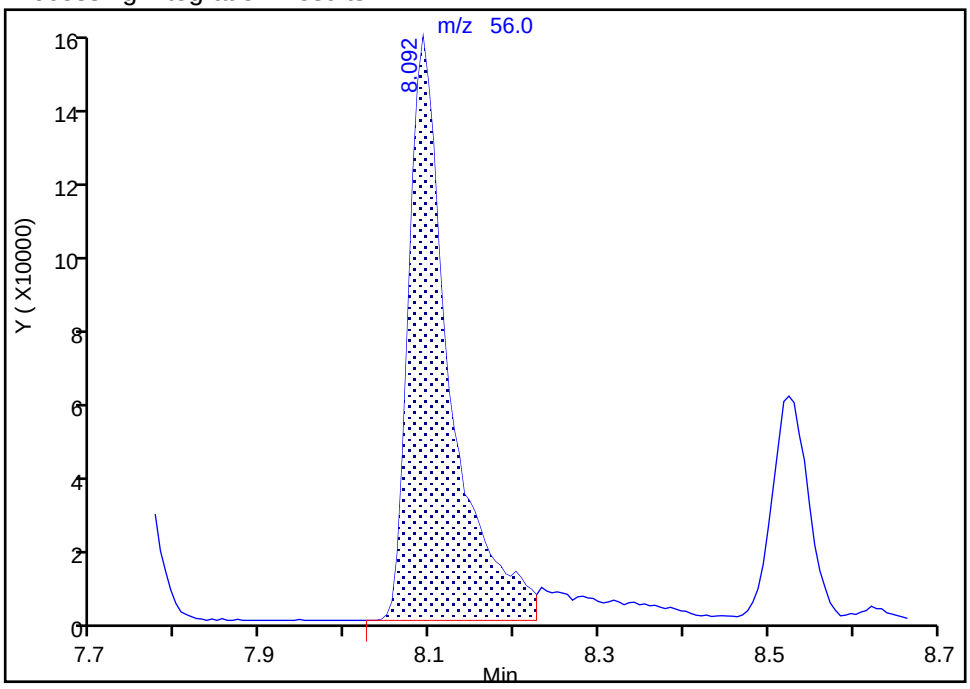
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I03.D
Injection Date: 26-Mar-2021 00:02:30 Instrument ID: 19930
Lims ID: IC std5
Client ID:
Operator ID: mec29284 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

60 n-Butanol, CAS: 71-36-3

Signal: 1

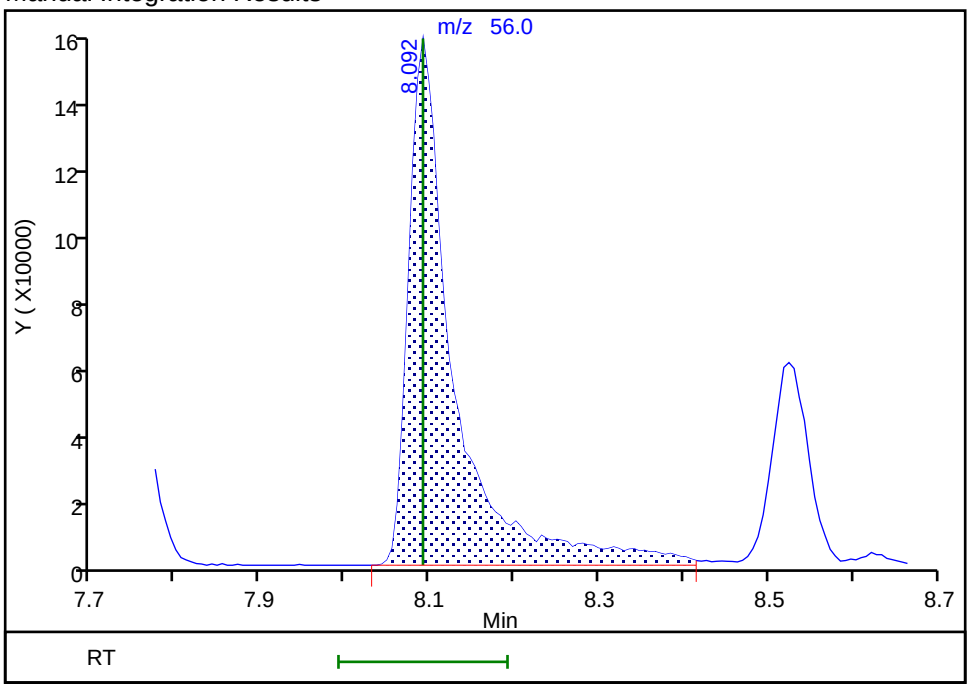
Processing Integration Results

RT: 8.09
Area: 522500
Amount: 505.7200
Amount Units: ug/l



Manual Integration Results

RT: 8.09
Area: 577630
Amount: 518.2007
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:45:43
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

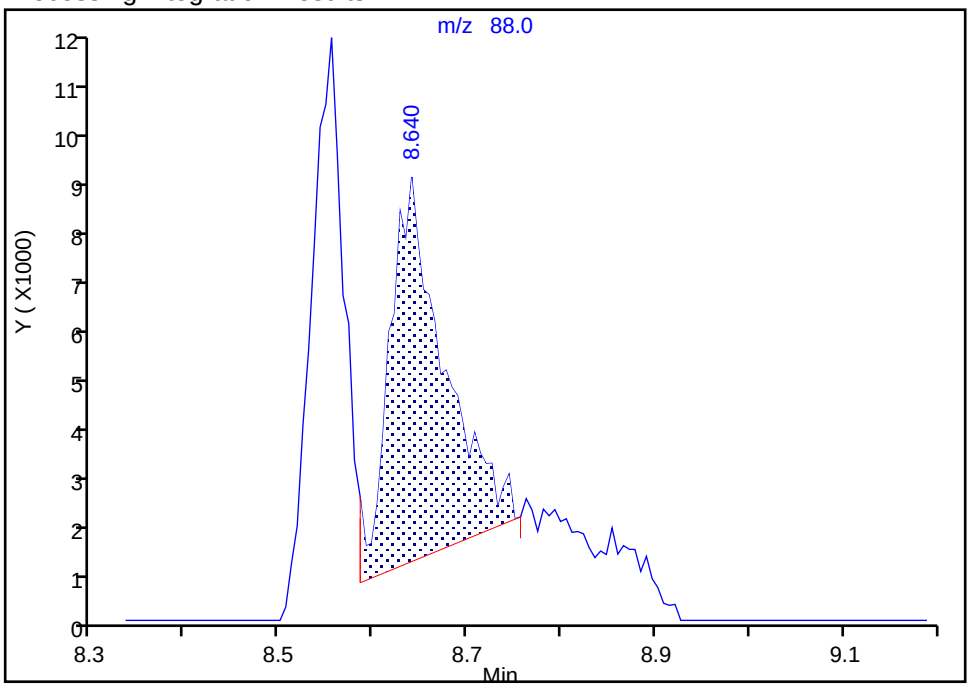
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I03.D
Injection Date: 26-Mar-2021 00:02:30 Instrument ID: 19930
Lims ID: IC std5
Client ID:
Operator ID: mec29284 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

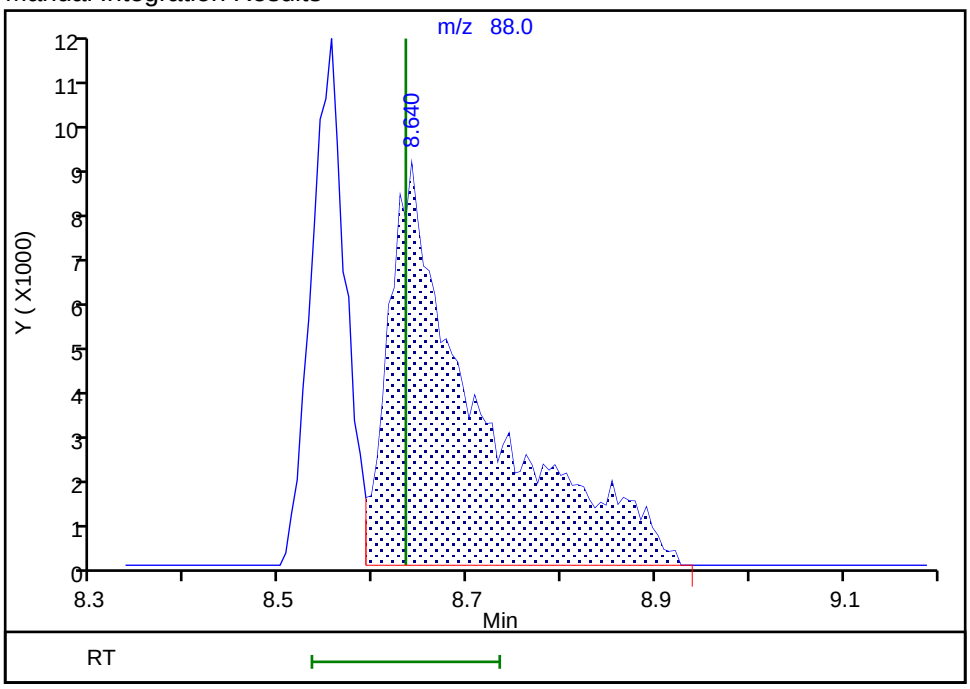
Processing Integration Results

RT: 8.64
Area: 31067
Amount: 198.1530
Amount Units: ug/l



Manual Integration Results

RT: 8.64
Area: 59547
Amount: 279.4328
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:46:14
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I04.D
Lims ID: IC std4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 26-Mar-2021 00:23:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0025078-015
Misc. Info.: IC STD4
Operator ID: mec29284 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 26-Mar-2021 17:10:01 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1605

First Level Reviewer: campbellme Date: 26-Mar-2021 16:49:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.983	1.983	0.000	99	131503	2.00	1.95	M
4 Chloromethane	50	2.178	2.178	0.000	99	156895	2.00	1.92	M
6 Butadiene	39	2.294	2.294	0.000	93	148459	2.00	2.05	
5 Vinyl chloride	62	2.300	2.300	0.000	77	144991	2.00	1.96	
7 Bromomethane	94	2.629	2.629	0.000	90	106174	2.00	1.98	
8 Chloroethane	64	2.715	2.715	0.000	100	90316	2.00	1.95	
9 Dichlorofluoromethane	67	2.952	2.952	0.000	97	147453	2.00	1.94	
10 Trichlorofluoromethane	101	3.019	3.019	0.000	97	208668	2.00	2.01	
11 Ethyl ether	59	3.275	3.275	0.000	92	100901	2.00	2.01	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.342	3.342	0.000	92	163328	2.00	2.10	
13 Acrolein	56	3.446	3.446	0.000	100	839518	100.0	101.7	
14 1,1-Dichloroethene	96	3.586	3.586	0.000	98	118638	2.00	2.12	
15 Acetone	43	3.617	3.617	0.000	98	209498	20.0	19.3	
16 112TCTFE	101	3.623	3.623	0.000	90	137933	2.00	2.18	
17 Iodomethane	142	3.787	3.787	0.000	98	230064	2.00	2.07	
18 Ethyl bromide	108	3.812	3.812	0.000	97	103933	2.00	2.05	
19 Carbon disulfide	76	3.897	3.897	0.000	99	342979	2.00	2.07	
21 Methyl acetate	43	4.050	4.050	0.000	98	64116	2.00	1.80	M
22 3-Chloro-1-propene	41	4.074	4.074	0.000	93	225080	2.00	1.97	
23 Methylene Chloride	84	4.257	4.257	0.000	97	129865	2.00	2.06	
* 24 t-Butyl alcohol-d10 (IS)	65	4.263	4.263	0.000	0	167112	50.0	50.0	
25 2-Methyl-2-propanol	59	4.391	4.391	0.000	99	157334	40.0	40.4	
26 Acrylonitrile	53	4.604	4.604	0.000	99	133754	10.0	10.1	
27 Methyl tert-butyl ether	73	4.659	4.659	0.000	94	343815	2.00	2.09	
28 trans-1,2-Dichloroethene	96	4.684	4.684	0.000	97	131976	2.00	2.07	
29 Hexane	57	5.104	5.104	0.000	94	218391	2.00	2.10	
31 1,1-Dichloroethane	63	5.342	5.342	0.000	96	254250	2.00	2.06	
32 Isopropyl ether	45	5.397	5.397	0.000	95	470623	2.00	2.06	
33 2-Chloro-1,3-butadiene	53	5.446	5.446	0.000	91	225610	2.00	2.08	
34 Tert-butyl ethyl ether	59	5.927	5.927	0.000	99	426180	2.00	2.05	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.122	6.122	0.000	100	380491	20.0	20.0	
S 35 1,2-Dichloroethene, Total	100				0			4.14	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	82	152885	2.00	2.07	
38 2,2-Dichloropropane	77	6.183	6.183	0.000	89	223081	2.00	2.09	
40 Propionitrile	54	6.214	6.214	0.000	99	182137	40.0	40.3	
42 Methacrylonitrile	67	6.427	6.427	0.000	94	359237	20.0	20.6	
43 Chlorobromomethane	128	6.488	6.488	0.000	82	65954	2.00	2.00	a
44 Tetrahydrofuran	71	6.500	6.500	0.000	81	101067	20.0	20.1	
45 Chloroform	83	6.647	6.647	0.000	93	241166	2.00	2.05	
$ 46 Dibromofluoromethane (Surr)	113	6.860	6.860	0.000	94	538391	10.0	9.93	
47 1,1,1-Trichloroethane	97	6.872	6.872	0.000	98	219727	2.00	2.05	
48 Cyclohexane	56	6.964	6.964	0.000	92	259219	2.00	2.08	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	95	196323	2.00	2.08	
50 Carbon tetrachloride	117	7.086	7.086	0.000	88	194469	2.00	2.07	
52 Isobutyl alcohol	41	7.220	7.220	0.000	93	142284	100.0	101.3	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	106715	10.0	10.1	
54 Benzene	78	7.342	7.342	0.000	97	572779	2.00	2.06	
56 1,2-Dichloroethane	62	7.415	7.415	0.000	97	151288	2.00	2.04	
57 Tert-amyl methyl ether	73	7.531	7.531	0.000	98	376620	2.00	2.07	
* 58 Fluorobenzene (IS)	96	7.744	7.744	0.000	99	2156681	10.0	10.0	
59 n-Heptane	43	7.756	7.756	0.000	92	243269	2.00	2.06	
60 n-Butanol	56	8.092	8.092	0.000	88	261716	200.0	214.6	M
61 Trichloroethene	95	8.220	8.220	0.000	98	147779	2.00	2.05	
62 Methylcyclohexane	83	8.530	8.530	0.000	93	263506	2.00	2.07	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	82	148250	2.00	2.06	
64 Methyl methacrylate	69	8.628	8.628	0.000	91	72515	2.00	2.10	
65 1,4-Dioxane	88	8.634	8.634	0.000	35	27783	100.0	119.1	M
66 Dibromomethane	93	8.665	8.665	0.000	94	65371	2.00	2.00	
68 Dichlorobromomethane	83	8.890	8.890	0.000	99	173868	2.00	2.04	
69 2-Nitropropane	41	9.158	9.158	0.000	96	217593	20.0	20.1	
72 1-Bromo-2-chloroethane	63	9.286	9.286	0.000	98	133773	2.00	2.00	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	95	219295	2.00	2.05	
74 4-Methyl-2-pentanone (MIBK)	43	9.603	9.603	0.000	97	1003927	20.0	20.5	
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	94	2137685	10.0	9.97	
76 Toluene	92	9.817	9.817	0.000	98	363726	2.00	2.06	
S 77 1,3-Dichloropropene, Total	100				0			4.12	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	94	177893	2.00	2.07	
79 Ethyl methacrylate	69	10.128	10.128	0.000	90	157462	2.00	2.13	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	98763	2.00	2.07	
81 Tetrachloroethene	166	10.359	10.359	0.000	96	174286	2.00	2.08	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	91	172879	2.00	2.06	
83 2-Hexanone	43	10.481	10.481	0.000	98	708784	20.0	20.6	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	124832	2.00	2.05	
86 Ethylene Dibromide	107	10.762	10.762	0.000	98	95855	2.00	2.06	
* 87 Chlorobenzene-d5 (IS)	117	11.188	11.188	0.000	86	1638769	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	98	218547	2.00	2.03	
90 Chlorobenzene	112	11.213	11.213	0.000	95	404331	2.00	2.07	
S 89 Xylenes, Total	106				0			6.22	
92 Ethylbenzene	91	11.298	11.298	0.000	98	711404	2.00	2.06	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	96	145750	2.00	2.06	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	558858	4.00	4.13	
94 o-Xylene	106	11.743	11.743	0.000	96	276854	2.00	2.09	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.755	11.755	0.000	95	452528	2.00	2.09	
96 Bromoform	173	11.914	11.914	0.000	97	79664	2.00	2.07	
97 Isopropylbenzene	105	12.042	12.042	0.000	96	731637	2.00	2.07	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	93	811047	10.0	9.95	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	126655	2.00	2.09	
102 Bromobenzene	156	12.304	12.304	0.000	93	173823	2.00	2.09	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	93	344049	20.0	20.4	
104 1,2,3-Trichloropropane	110	12.328	12.328	0.000	80	34148	2.00	2.12	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	851752	2.00	2.08	
106 2-Chlorotoluene	126	12.444	12.444	0.000	97	175115	2.00	2.10	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	95	612448	2.00	2.08	
108 4-Chlorotoluene	126	12.542	12.542	0.000	97	175246	2.00	2.06	
109 tert-Butylbenzene	134	12.743	12.743	0.000	93	137088	2.00	2.09	
110 Pentachloroethane	167	12.780	12.780	0.000	91	108399	2.00	2.00	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	97	623059	2.00	2.06	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	800709	2.00	2.07	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	342026	2.00	2.07	
114 4-Isopropyltoluene	119	13.017	13.017	0.000	97	687905	2.00	2.09	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	95	911732	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.084	13.084	0.000	96	339830	2.00	2.06	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	97	261226	2.00	2.00	
118 Benzyl chloride	126	13.158	13.158	0.000	98	57189	2.00	2.10	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	331614	2.00	2.07	
120 1,2-Dichlorobenzene	146	13.340	13.340	0.000	99	309104	2.00	2.06	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	87	19137	2.00	2.03	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	245529	2.00	2.04	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	204502	2.00	2.04	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	97	87060	2.00	1.94	
126 Naphthalene	128	14.615	14.615	0.000	97	396601	2.00	2.09	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	182917	2.00	2.09	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_RV1_826_00042	Amount Added:	2.00	Units: uL	
MSV_RV4_826_00048	Amount Added:	2.00	Units: uL	
MSV_RV4GAS826_00121	Amount Added:	2.00	Units: uL	
MSV_31_826ISS_00004	Amount Added:	5.00	Units: uL	Run Reagent

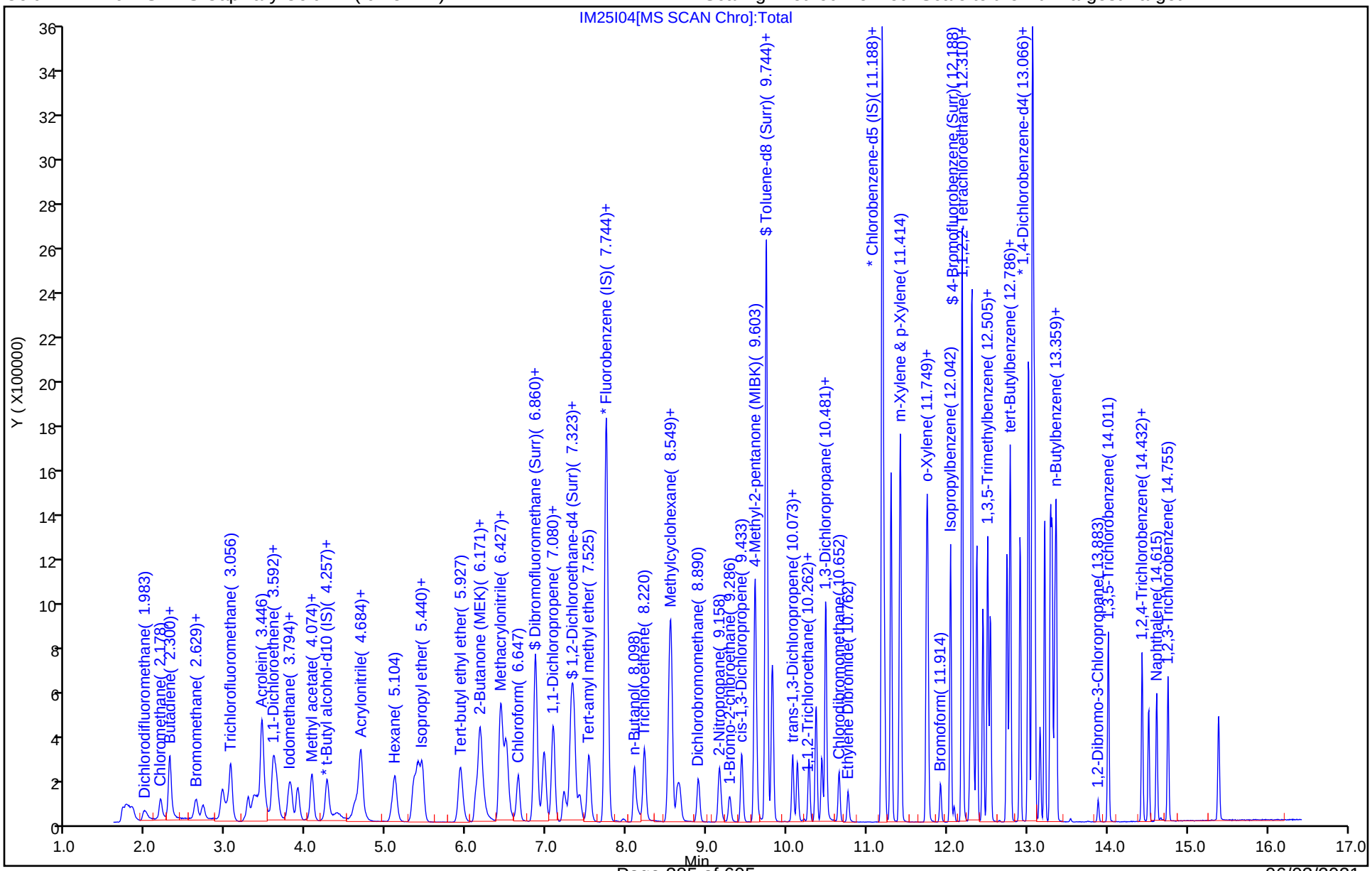
Report Date: 26-Mar-2021 17:10:03 Chrom Revision: 2.3 19-Mar-2021 08:24:58

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I04.D

Injection Date:	26-Mar-2021 00:23:30	Instrument ID:	19930	Operator ID:	mec29284
Lims ID:	IC std4			Worklist Smp#:	15
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

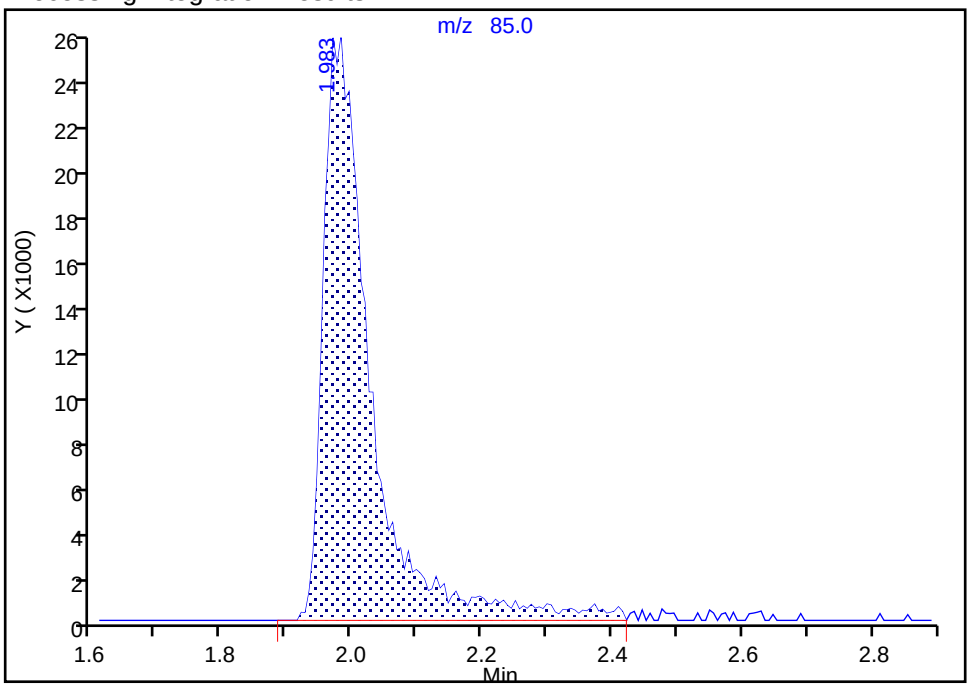
Data File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I04.D				
Injection Date:	26-Mar-2021 00:23:30	Instrument ID:	19930		
Lims ID:	IC std4				
Client ID:					
Operator ID:	mec29284	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

1 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

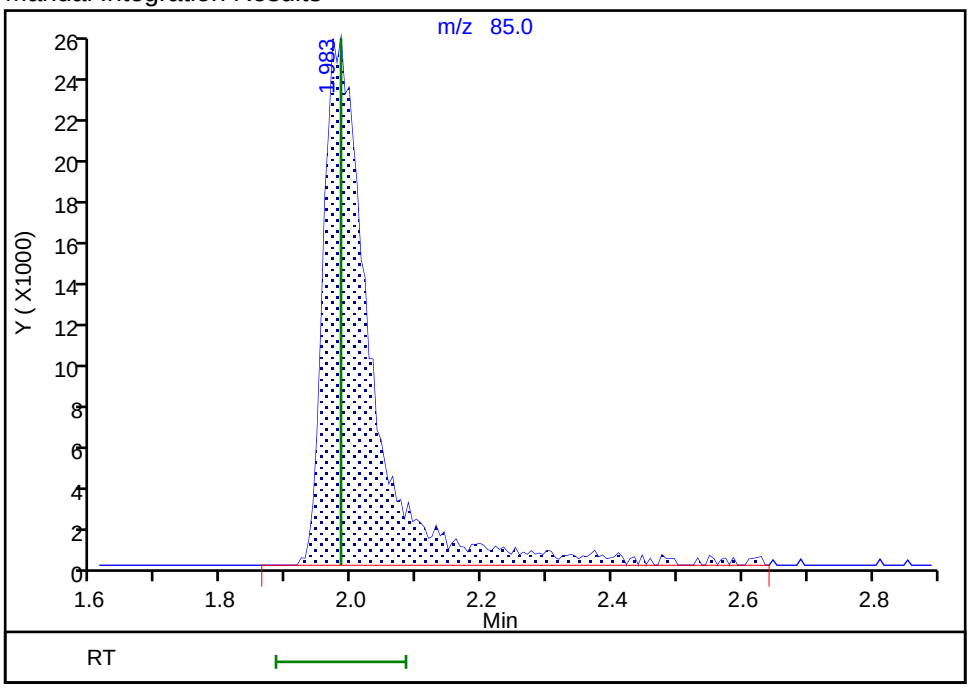
Processing Integration Results

RT: 1.98
Area: 129177
Amount: 1.944853
Amount Units: ug/l



Manual Integration Results

RT: 1.98
Area: 131503
Amount: 1.954875
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:46:58

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

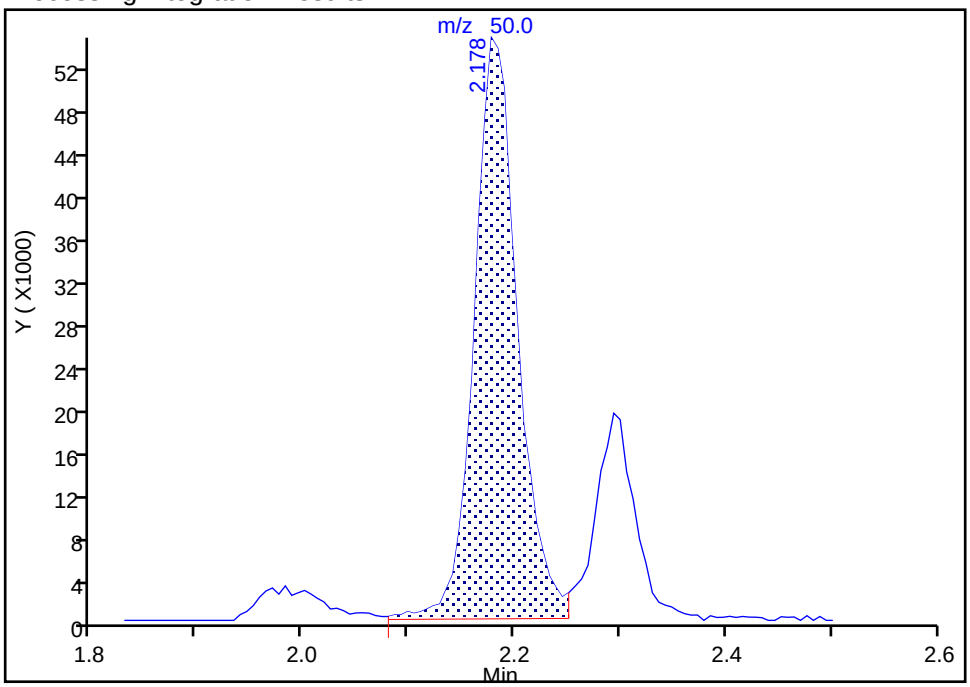
Data File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I04.D				
Injection Date:	26-Mar-2021 00:23:30	Instrument ID:	19930		
Lims ID:	IC std4				
Client ID:					
Operator ID:	mec29284	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

4 Chloromethane, CAS: 74-87-3

Signal: 1

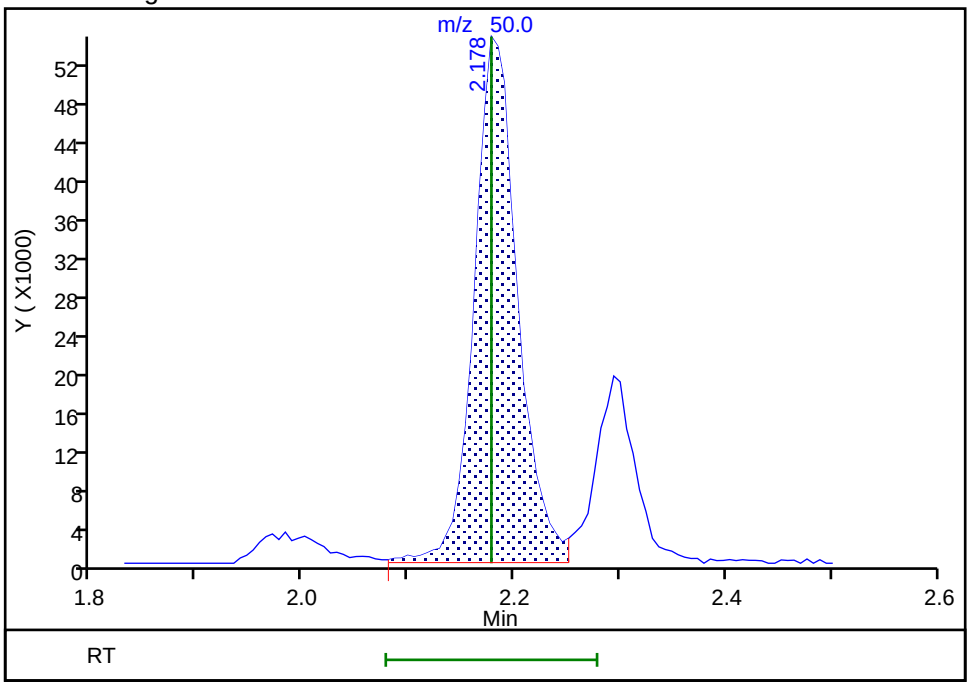
Processing Integration Results

RT: 2.18
Area: 156168
Amount: 1.908858
Amount Units: ug/l



Manual Integration Results

RT: 2.18
Area: 156895
Amount: 1.916528
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:47:11

Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

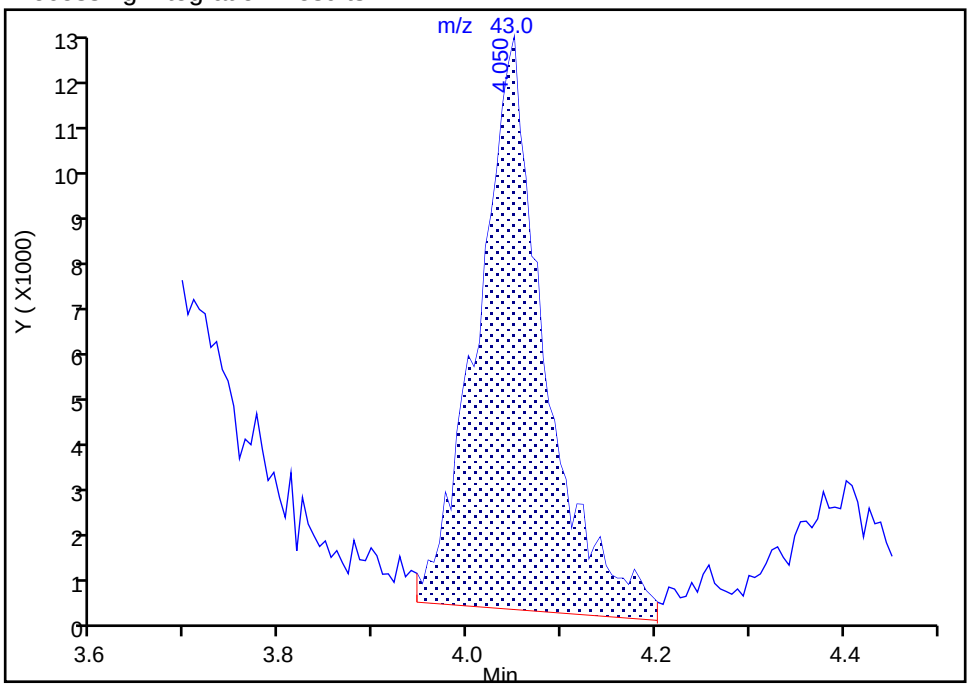
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I04.D
Injection Date: 26-Mar-2021 00:23:30 Instrument ID: 19930
Lims ID: IC std4
Client ID:
Operator ID: mec29284 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

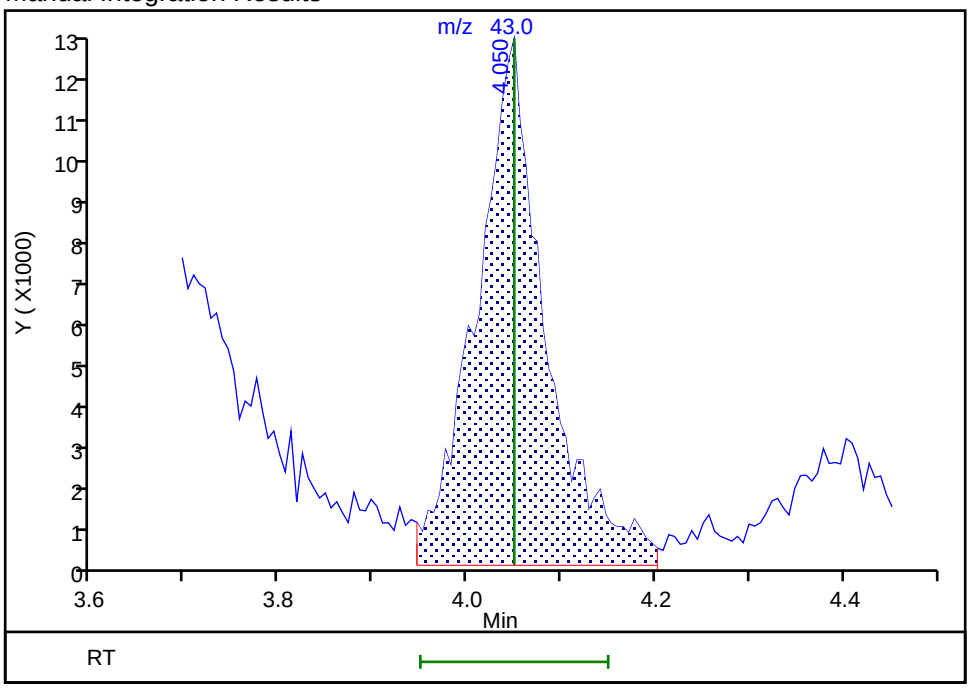
Processing Integration Results

RT: 4.05
Area: 60861
Amount: 1.764918
Amount Units: ug/l



Manual Integration Results

RT: 4.05
Area: 64116
Amount: 1.803387
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:47:41
Audit Action: Assigned New Baseline Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

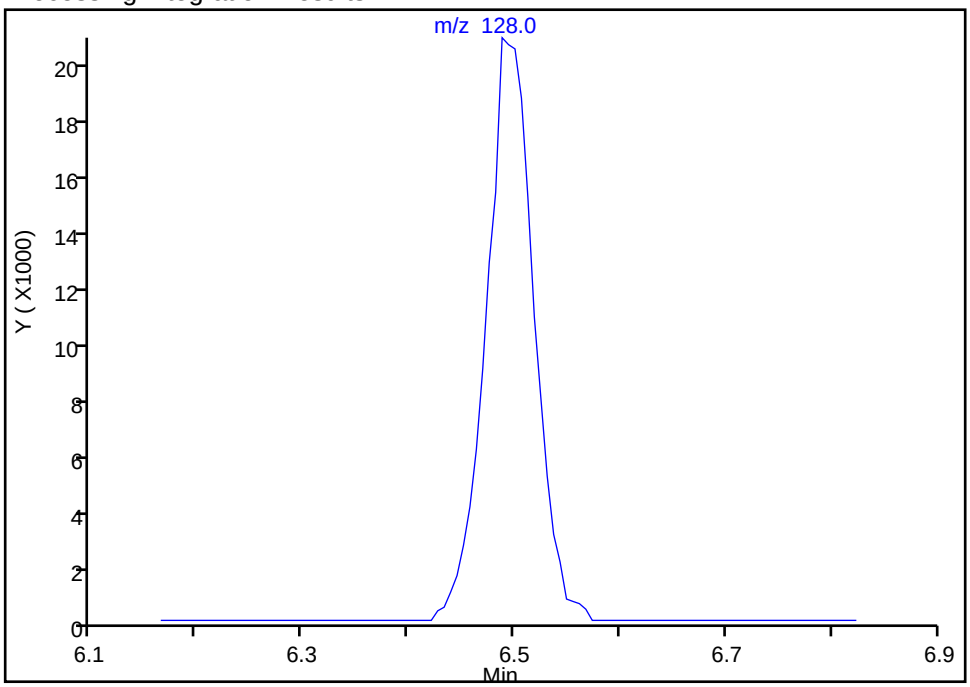
Data File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I04.D				
Injection Date:	26-Mar-2021 00:23:30	Instrument ID:	19930		
Lims ID:	IC std4				
Client ID:					
Operator ID:	mec29284	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

43 Chlorobromomethane, CAS: 74-97-5

Signal: 1

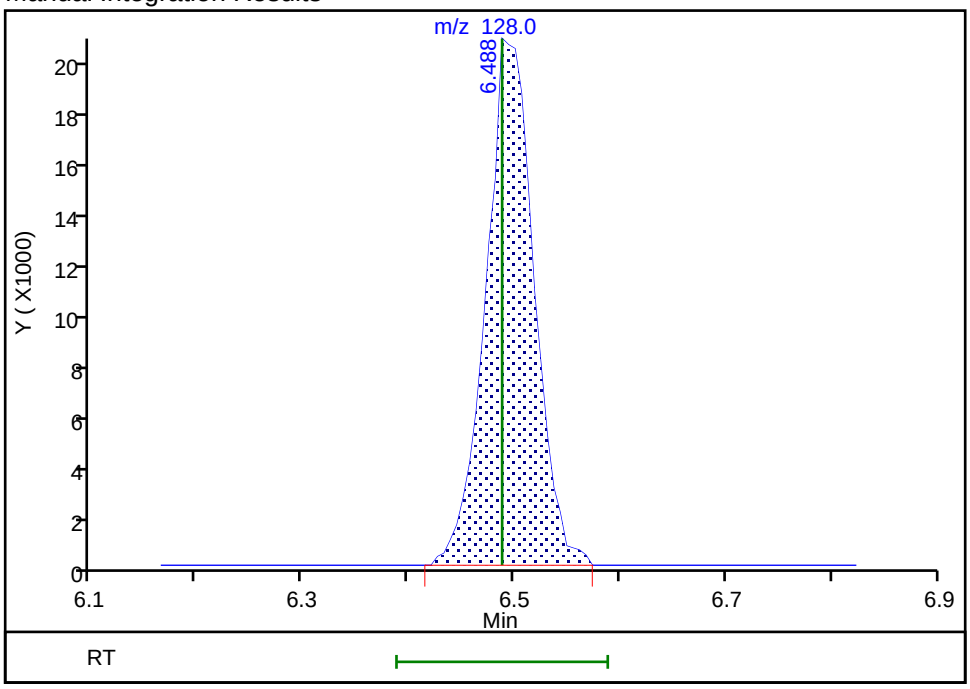
Not Detected
Expected RT: 6.49

Processing Integration Results



Manual Integration Results

RT: 6.49
Area: 65954
Amount: 2.004538
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:47:53
Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

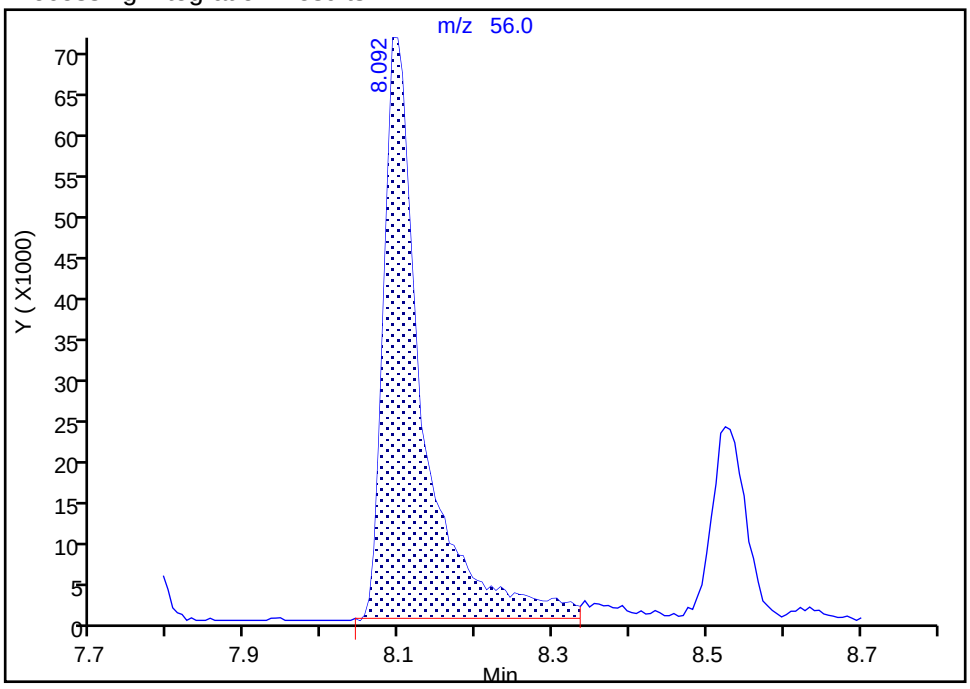
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I04.D
Injection Date: 26-Mar-2021 00:23:30 Instrument ID: 19930
Lims ID: IC std4
Client ID:
Operator ID: mec29284 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

60 n-Butanol, CAS: 71-36-3

Signal: 1

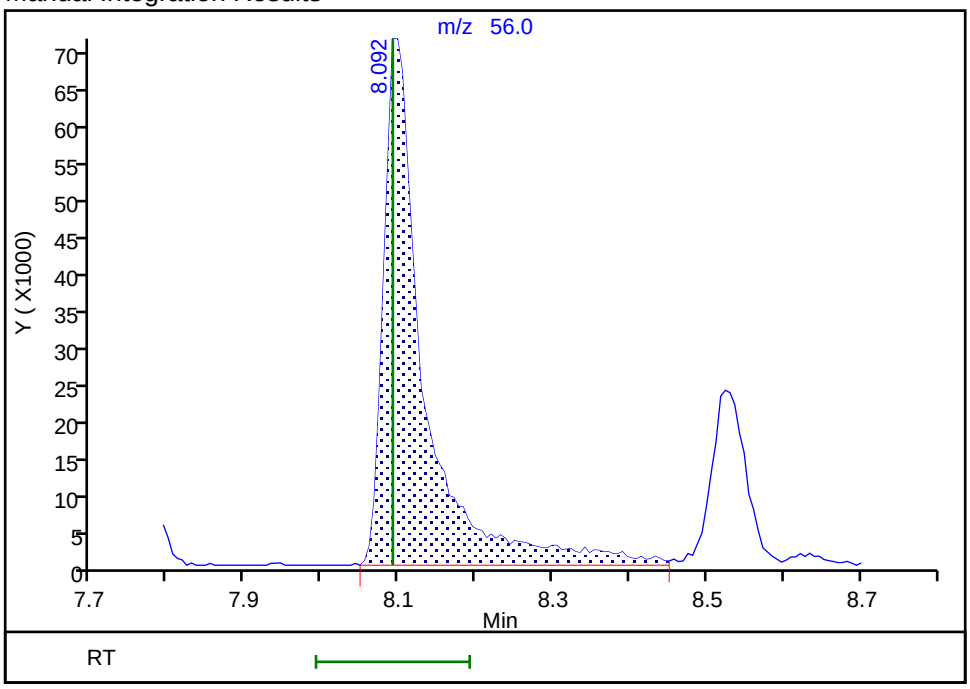
Processing Integration Results

RT: 8.09
Area: 248125
Amount: 216.1752
Amount Units: ug/l



Manual Integration Results

RT: 8.09
Area: 261716
Amount: 214.5661
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:48:30
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

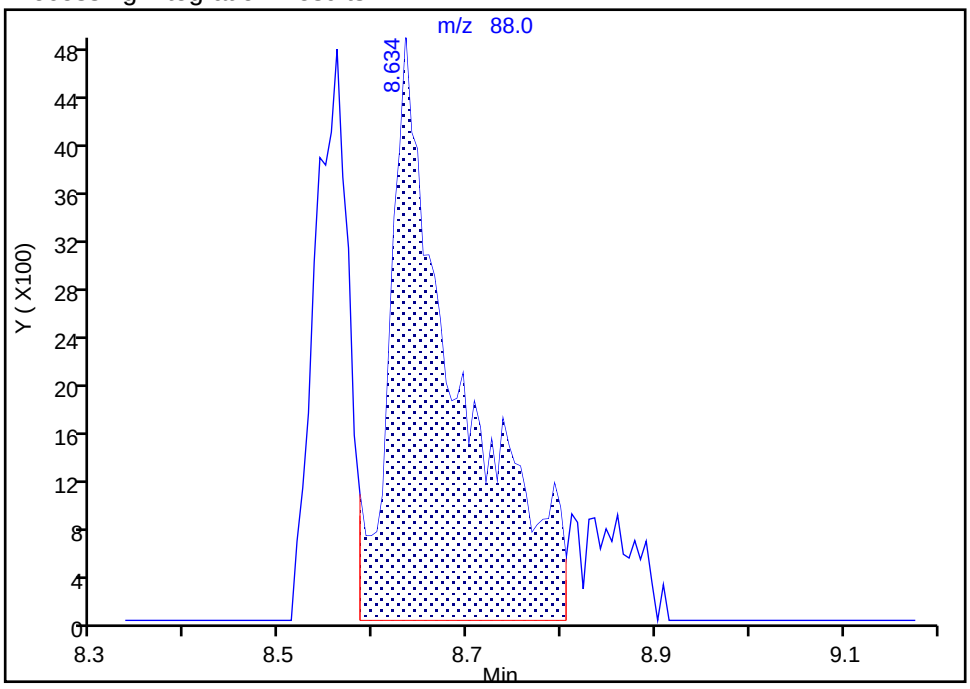
Data File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I04.D				
Injection Date:	26-Mar-2021 00:23:30	Instrument ID:	19930		
Lims ID:	IC std4				
Client ID:					
Operator ID:	mec29284	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

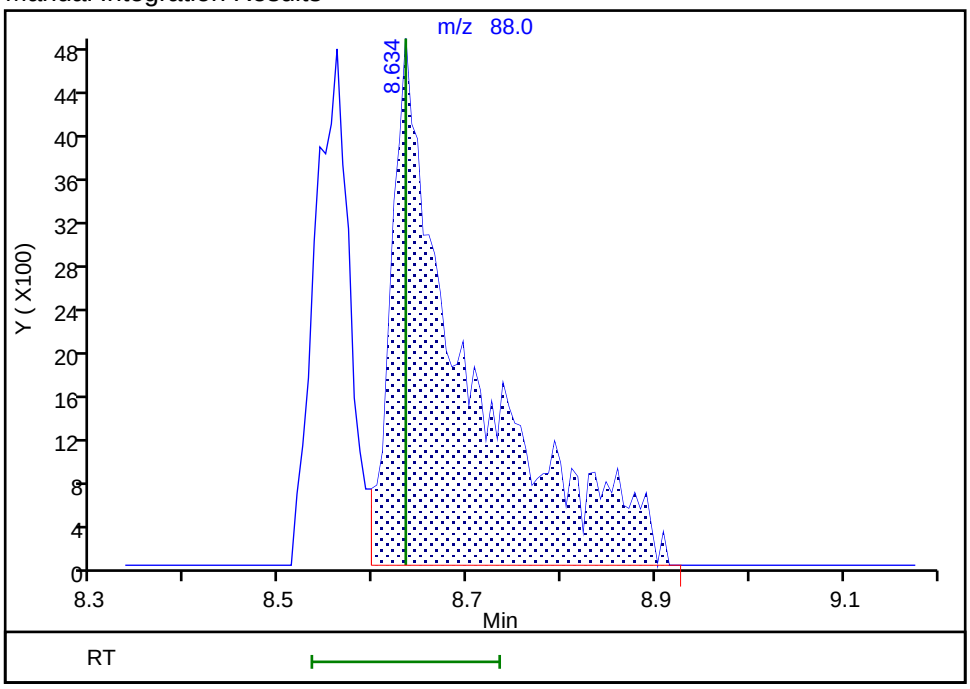
Processing Integration Results

RT: 8.63
Area: 24710
Amount: 130.4865
Amount Units: ug/l



Manual Integration Results

RT: 8.63
Area: 27783
Amount: 119.1459
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:48:47

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

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I05.D
Lims ID: IC std3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 26-Mar-2021 00:44:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0025078-016
Misc. Info.: IC STD3
Operator ID: mec29284 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 26-Mar-2021 17:10:12 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1605

First Level Reviewer: campbellme Date: 26-Mar-2021 16:51:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.965	1.983	-0.018	99	66157	1.00	0.9879	M
4 Chloromethane	50	2.178	2.178	0.000	99	80672	1.00	0.9899	
6 Butadiene	39	2.288	2.294	-0.006	91	73564	1.00	1.02	
5 Vinyl chloride	62	2.300	2.300	0.000	82	75331	1.00	1.02	
7 Bromomethane	94	2.617	2.629	-0.012	89	52121	1.00	0.9741	
8 Chloroethane	64	2.709	2.715	-0.005	99	46009	1.00	1.00	
9 Dichlorofluoromethane	67	2.940	2.952	-0.012	96	73317	1.00	0.9680	
10 Trichlorofluoromethane	101	3.020	3.019	0.001	95	101953	1.00	0.9844	
11 Ethyl ether	59	3.276	3.275	0.001	92	48765	1.00	0.9753	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.349	3.342	0.007	94	80249	1.00	1.04	
13 Acrolein	56	3.440	3.446	-0.006	99	420930	50.0	51.6	
14 1,1-Dichloroethene	96	3.580	3.586	-0.006	97	57828	1.00	1.04	
15 Acetone	43	3.617	3.617	0.000	99	108062	10.0	10.1	
16 112TCTFE	101	3.623	3.623	0.000	92	65806	1.00	1.05	
17 Iodomethane	142	3.775	3.787	-0.012	98	114765	1.00	1.04	
18 Ethyl bromide	108	3.806	3.812	-0.006	96	49021	1.00	0.9716	
19 Carbon disulfide	76	3.885	3.897	-0.012	99	168868	1.00	1.02	
21 Methyl acetate	43	4.038	4.050	-0.012	20	31468	1.00	0.8955	M
22 3-Chloro-1-propene	41	4.062	4.074	-0.012	93	111386	1.00	0.9771	
23 Methylene Chloride	84	4.251	4.257	-0.006	95	63035	1.00	1.01	
* 24 t-Butyl alcohol-d10 (IS)	65	4.257	4.263	-0.006	0	165165	50.0	50.0	
25 2-Methyl-2-propanol	59	4.403	4.391	0.012	99	77456	20.0	20.1	
26 Acrylonitrile	53	4.605	4.604	0.001	99	68567	5.00	5.22	
27 Methyl tert-butyl ether	73	4.666	4.659	0.007	90	166927	1.00	1.02	
28 trans-1,2-Dichloroethene	96	4.678	4.684	-0.006	97	63219	1.00	0.99	
29 Hexane	57	5.098	5.104	-0.006	94	109292	1.00	1.06	
31 1,1-Dichloroethane	63	5.336	5.342	-0.006	96	125080	1.00	1.02	
32 Isopropyl ether	45	5.391	5.397	-0.006	95	230093	1.00	1.01	
33 2-Chloro-1,3-butadiene	53	5.446	5.446	0.000	91	112863	1.00	1.04	
34 Tert-butyl ethyl ether	59	5.921	5.927	-0.006	98	210732	1.00	1.02	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.123	6.122	0.001	100	190761	10.0	10.1	M
S 35 1,2-Dichloroethene, Total	100				0			2.00	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	83	73881	1.00	1.01	
38 2,2-Dichloropropane	77	6.171	6.183	-0.012	86	111065	1.00	1.04	
40 Propionitrile	54	6.220	6.214	0.006	99	91864	20.0	20.6	
42 Methacrylonitrile	67	6.434	6.427	0.007	93	176866	10.0	10.3	
43 Chlorobromomethane	128	6.488	6.488	0.000	78	31843	1.00	0.9722	
44 Tetrahydrofuran	71	6.507	6.500	0.007	83	52762	10.0	10.6	
45 Chloroform	83	6.641	6.647	-0.006	93	118977	1.00	1.02	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.860	-0.006	94	544006	10.0	10.1	
47 1,1,1-Trichloroethane	97	6.872	6.872	0.000	45	108874	1.00	1.02	
48 Cyclohexane	56	6.970	6.964	0.006	92	129757	1.00	1.05	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	94	96006	1.00	1.02	
50 Carbon tetrachloride	117	7.080	7.086	-0.006	89	97370	1.00	1.04	
52 Isobutyl alcohol	41	7.208	7.220	-0.012	94	66146	50.0	47.6	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.311	7.305	0.006	0	106557	10.0	10.1	
54 Benzene	78	7.336	7.342	-0.006	93	281402	1.00	1.02	
56 1,2-Dichloroethane	62	7.409	7.415	-0.006	98	72998	1.00	0.9875	
57 Tert-amyl methyl ether	73	7.525	7.531	-0.006	98	182481	1.00	1.01	
* 58 Fluorobenzene (IS)	96	7.738	7.744	-0.006	99	2146917	10.0	10.0	
59 n-Heptane	43	7.750	7.756	-0.006	82	120942	1.00	1.03	
60 n-Butanol	56	8.092	8.092	0.000	88	125106	100.0	103.8	M
61 Trichloroethene	95	8.220	8.220	0.000	97	71417	1.00	0.99	
62 Methylcyclohexane	83	8.531	8.530	0.001	93	123593	1.00	0.9745	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	71	71710	1.00	1.00	
64 Methyl methacrylate	69	8.634	8.628	0.006	92	33700	1.00	0.9859	
65 1,4-Dioxane	88	8.646	8.634	0.012	35	12008	50.0	52.1	M
66 Dibromomethane	93	8.653	8.665	-0.012	96	33652	1.00	1.03	
68 Dichlorobromomethane	83	8.890	8.890	0.000	99	86229	1.00	1.01	
69 2-Nitropropane	41	9.159	9.158	0.001	98	106909	10.0	10.0	
72 1-Bromo-2-chloroethane	63	9.281	9.286	-0.005	98	64382	1.00	0.9649	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	95	107084	1.00	1.01	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.603	0.001	97	494241	10.0	10.2	
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	2132430	10.0	10.0	
76 Toluene	92	9.817	9.817	0.000	98	176402	1.00	1.01	
S 77 1,3-Dichloropropene, Total	100				0			1.98	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	94	83157	1.00	0.9740	
79 Ethyl methacrylate	69	10.128	10.128	0.000	92	71189	1.00	0.9708	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	92	48211	1.00	1.02	
81 Tetrachloroethene	166	10.366	10.359	0.007	98	83669	1.00	1.00	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	91	85540	1.00	1.03	
83 2-Hexanone	43	10.482	10.481	0.001	98	346497	10.0	10.2	
85 Chlorodibromomethane	129	10.652	10.652	0.000	91	60243	1.00	1.00	
86 Ethylene Dibromide	107	10.762	10.762	0.000	100	46934	1.00	1.01	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.188	0.001	87	1626155	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	98	109064	1.00	1.02	
90 Chlorobenzene	112	11.213	11.213	0.000	96	197457	1.00	1.02	
S 89 Xylenes, Total	106				0			3.06	
92 Ethylbenzene	91	11.298	11.298	0.000	98	348677	1.00	1.02	
91 1,1,1,2-Tetrachloroethane	131	11.292	11.298	-0.006	96	69838	1.00	1.00	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	273866	2.00	2.04	
94 o-Xylene	106	11.743	11.743	0.000	96	133969	1.00	1.02	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.762	11.755	0.007	95	217070	1.00	1.01	
96 Bromoform	173	11.914	11.914	0.000	97	38357	1.00	1.01	
97 Isopropylbenzene	105	12.042	12.042	0.000	96	357935	1.00	1.02	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	807959	10.0	10.0	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	60797	1.00	1.01	
102 Bromobenzene	156	12.304	12.304	0.000	93	83959	1.00	1.01	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	92	166570	10.0	9.98	
104 1,2,3-Trichloropropane	110	12.335	12.328	0.007	83	15297	1.00	0.9502	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	417034	1.00	1.02	
106 2-Chlorotoluene	126	12.445	12.444	0.001	97	83871	1.00	1.01	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	95	296322	1.00	1.01	
108 4-Chlorotoluene	126	12.542	12.542	0.000	97	84059	1.00	0.9889	
109 tert-Butylbenzene	134	12.749	12.743	0.006	93	65226	1.00	0.99	
110 Pentachloroethane	167	12.780	12.780	0.000	90	50922	1.00	0.9397	
111 1,2,4-Trimethylbenzene	105	12.792	12.786	0.006	97	305474	1.00	1.01	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	389750	1.00	1.01	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	162228	1.00	0.9804	
114 4-Isopropyltoluene	119	13.018	13.017	0.001	97	332809	1.00	1.01	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	911826	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.084	0.001	95	165981	1.00	1.00	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	97	126397	1.00	0.9670	
118 Benzyl chloride	126	13.164	13.158	0.006	98	26506	1.00	0.9745	
119 n-Butylbenzene	92	13.310	13.310	0.000	98	158340	1.00	0.99	
120 1,2-Dichlorobenzene	146	13.341	13.340	0.001	98	150954	1.00	1.00	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	86	8946	1.00	0.9474	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	97	119469	1.00	0.99	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	97675	1.00	0.9729	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	97	44110	1.00	0.9839	
126 Naphthalene	128	14.615	14.615	0.000	97	191794	1.00	1.01	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	85459	1.00	0.9777	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_RV1_826_00042	Amount Added:	2.00	Units: uL	
MSV_RV4_826_00048	Amount Added:	2.00	Units: uL	
MSV_RV4GAS826_00121	Amount Added:	2.00	Units: uL	
MSV_31_826ISS_00004	Amount Added:	5.00	Units: uL	Run Reagent

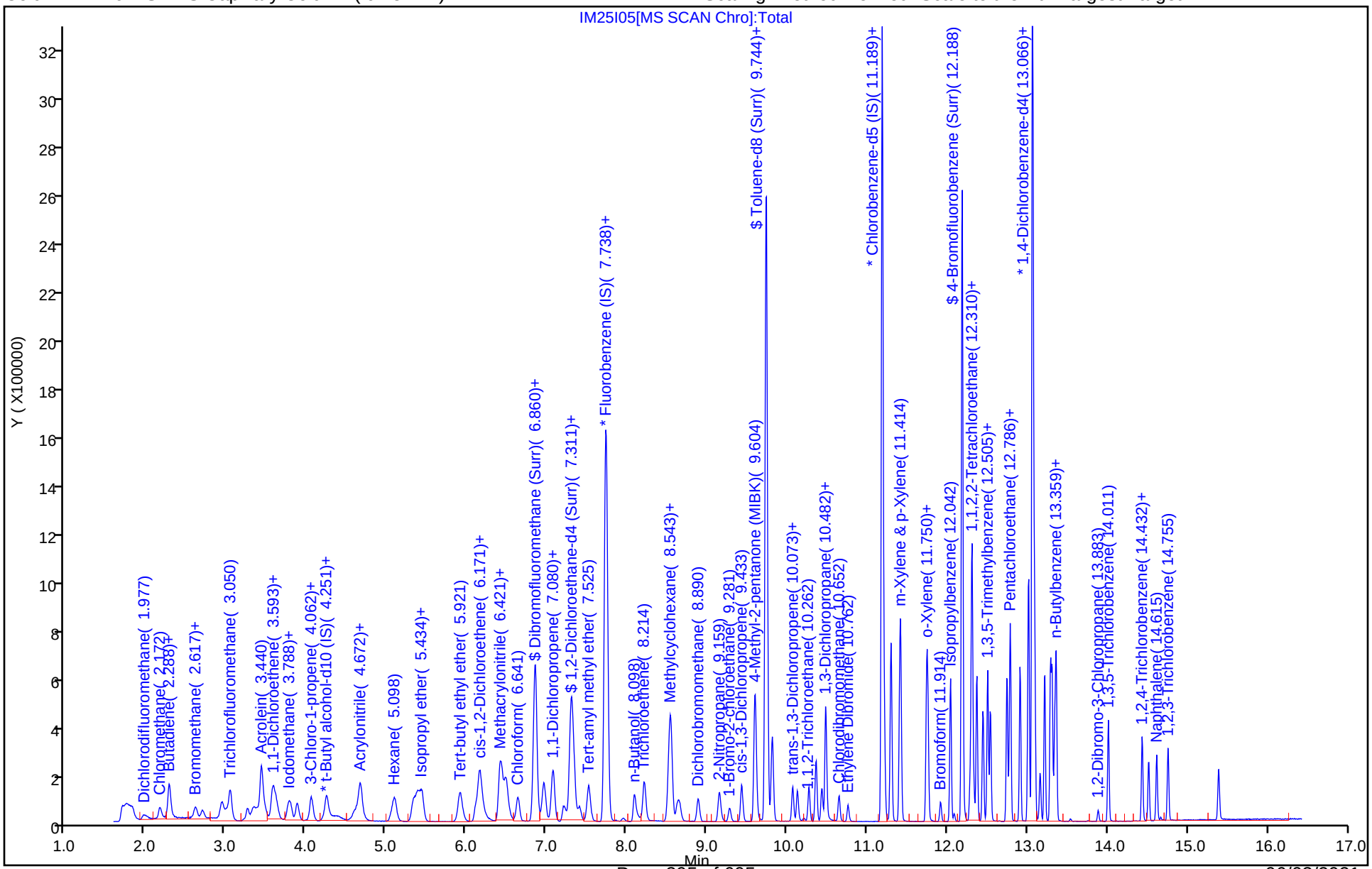
Report Date: 26-Mar-2021 17:10:14 Chrom Revision: 2.3 19-Mar-2021 08:24:58

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I05.D

Injection Date:	26-Mar-2021 00:44:30	Instrument ID:	19930	Operator ID:	mec29284
Lims ID:	IC std3			Worklist Smp#:	16
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

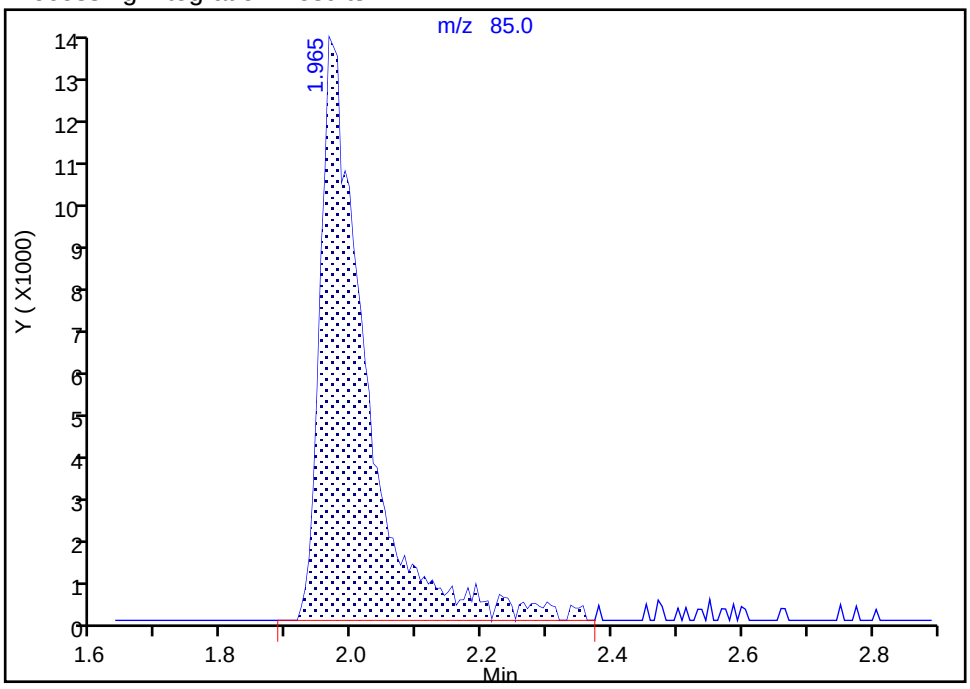
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I05.D
Injection Date: 26-Mar-2021 00:44:30 Instrument ID: 19930
Lims ID: IC std3
Client ID:
Operator ID: mec29284 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

1 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

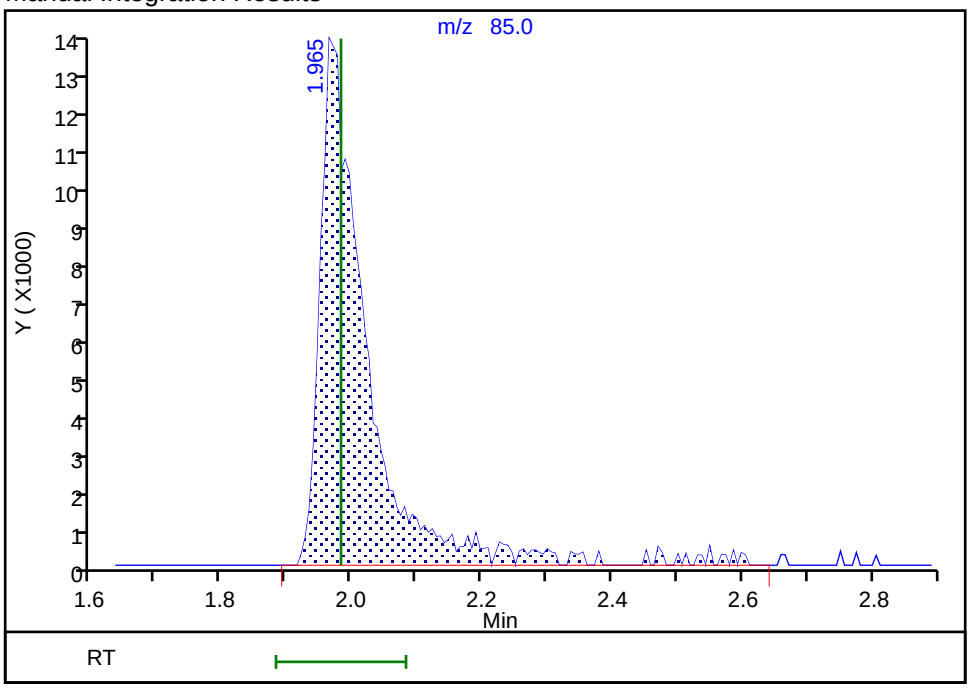
Processing Integration Results

RT: 1.96
Area: 64500
Amount: 0.973077
Amount Units: ug/l



Manual Integration Results

RT: 1.96
Area: 66157
Amount: 0.987938
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:49:30
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

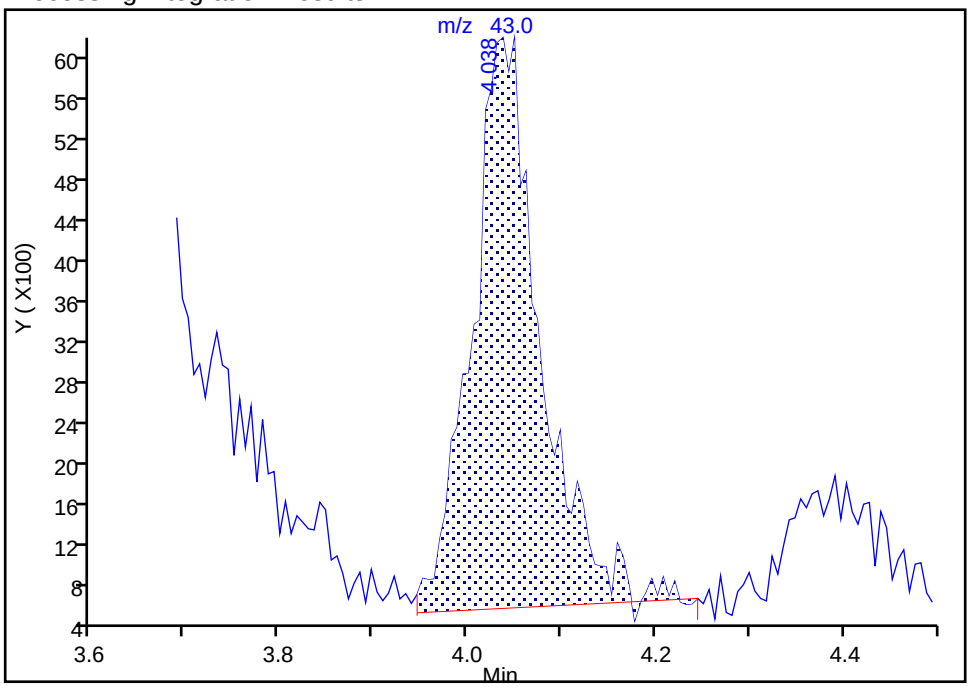
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I05.D
Injection Date: 26-Mar-2021 00:44:30 Instrument ID: 19930
Lims ID: IC std3
Client ID:
Operator ID: mec29284 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

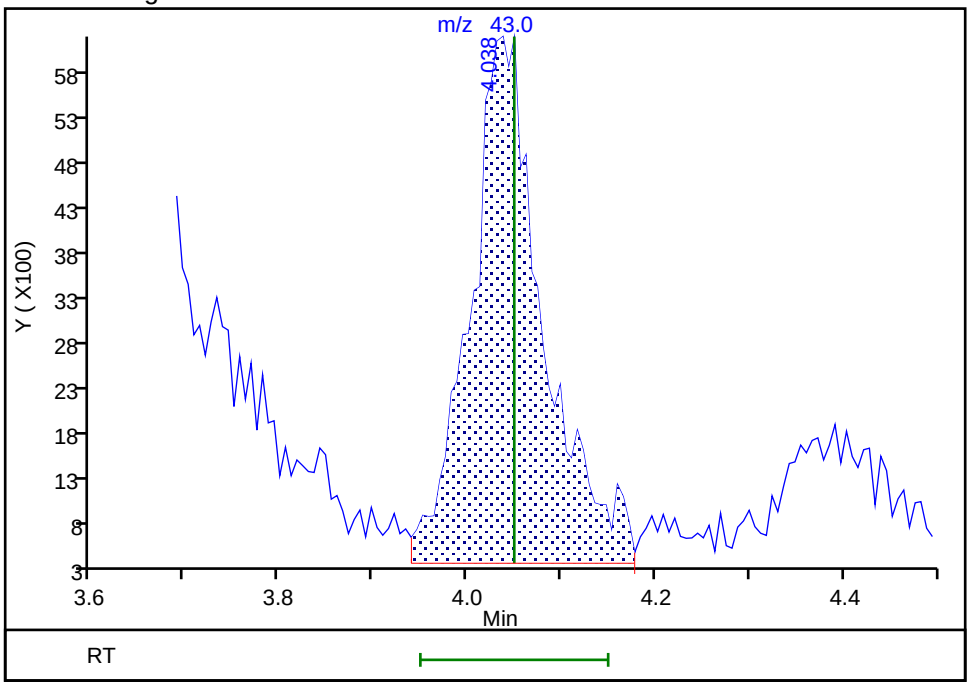
Processing Integration Results

RT: 4.04
Area: 28091
Amount: 0.818698
Amount Units: ug/l



Manual Integration Results

RT: 4.04
Area: 31468
Amount: 0.895532
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:49:58
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

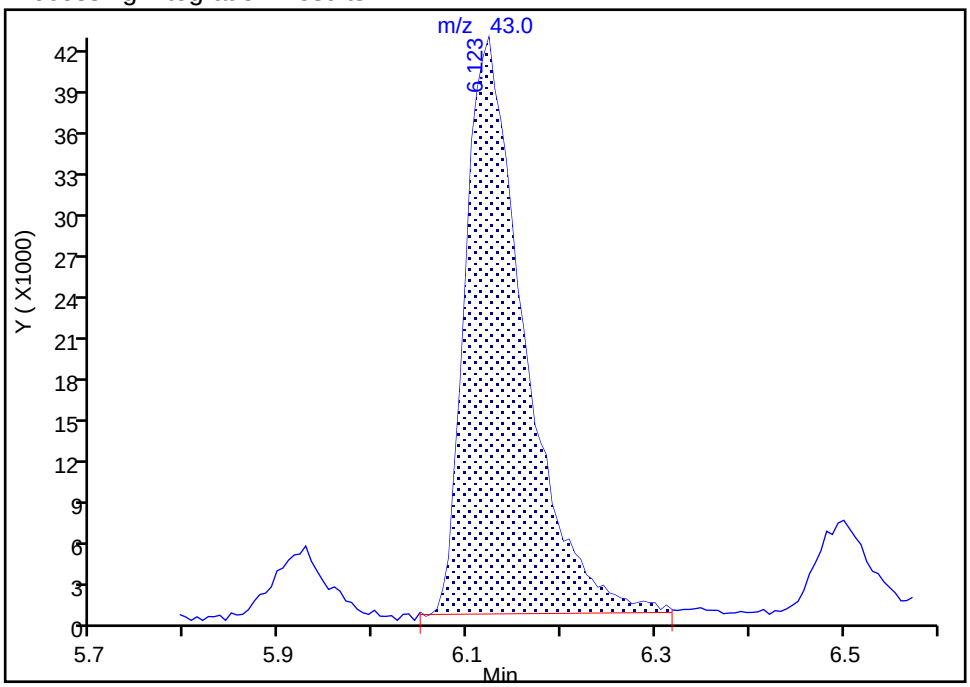
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I05.D
Injection Date: 26-Mar-2021 00:44:30 Instrument ID: 19930
Lims ID: IC std3
Client ID:
Operator ID: mec29284 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

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

Signal: 1

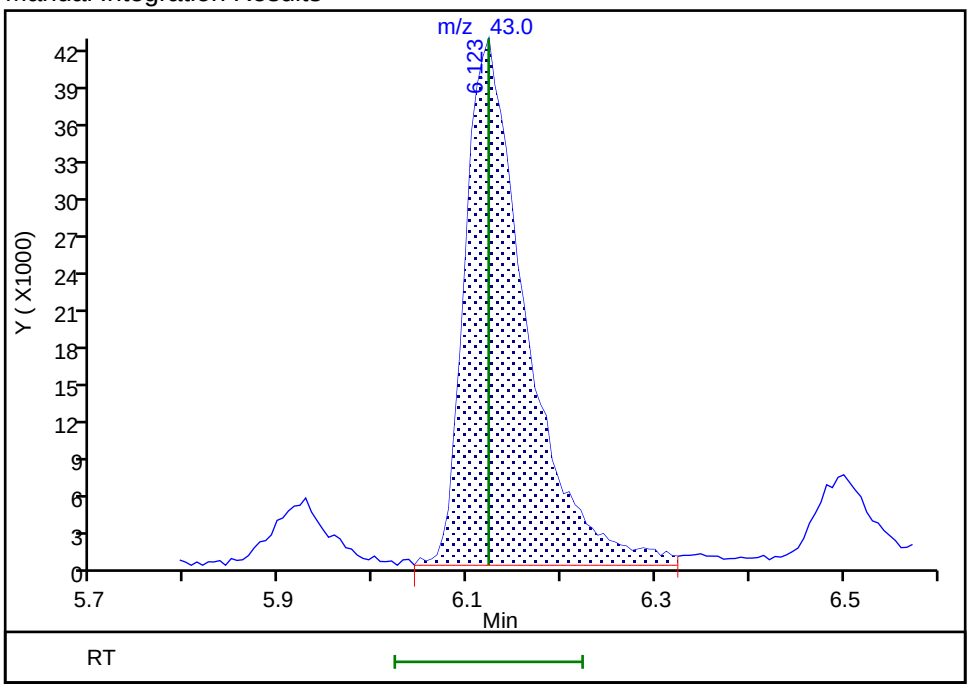
Processing Integration Results

RT: 6.12
Area: 182296
Amount: 9.742120
Amount Units: ug/l



Manual Integration Results

RT: 6.12
Area: 190761
Amount: 10.129040
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:50:22
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

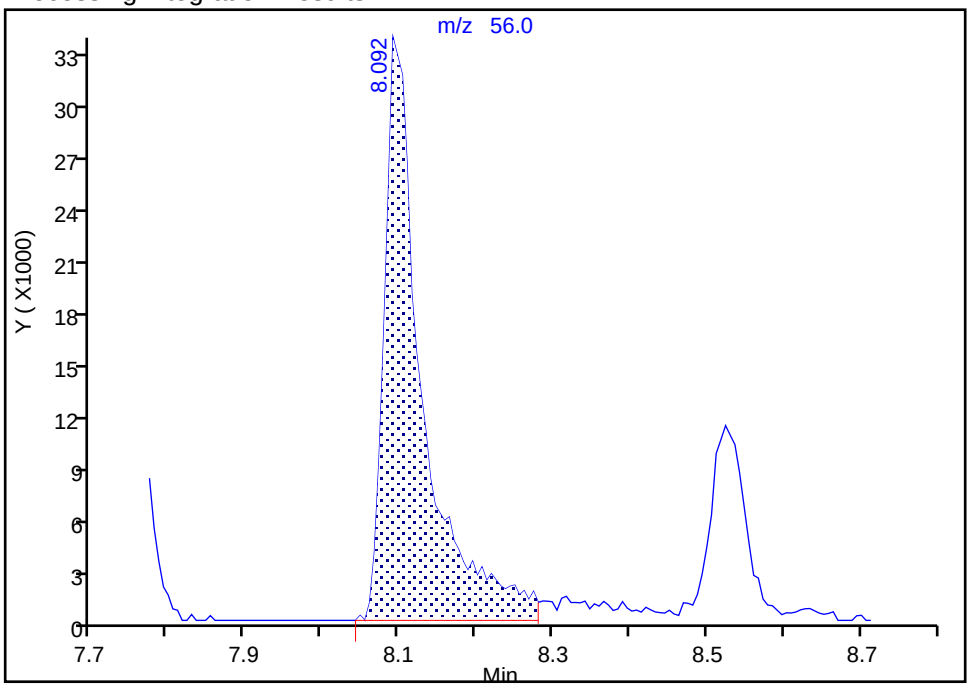
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I05.D
Injection Date: 26-Mar-2021 00:44:30 Instrument ID: 19930
Lims ID: IC std3
Client ID:
Operator ID: mec29284 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

60 n-Butanol, CAS: 71-36-3

Signal: 1

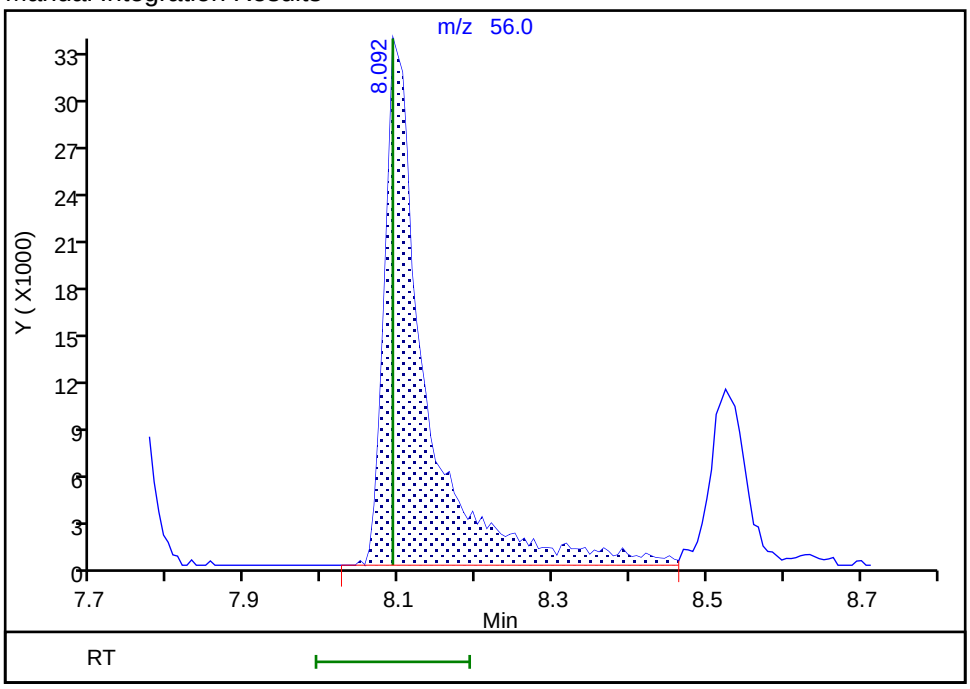
Processing Integration Results

RT: 8.09
Area: 116465
Amount: 101.8035
Amount Units: ug/l



Manual Integration Results

RT: 8.09
Area: 125106
Amount: 103.7764
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:50:44
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

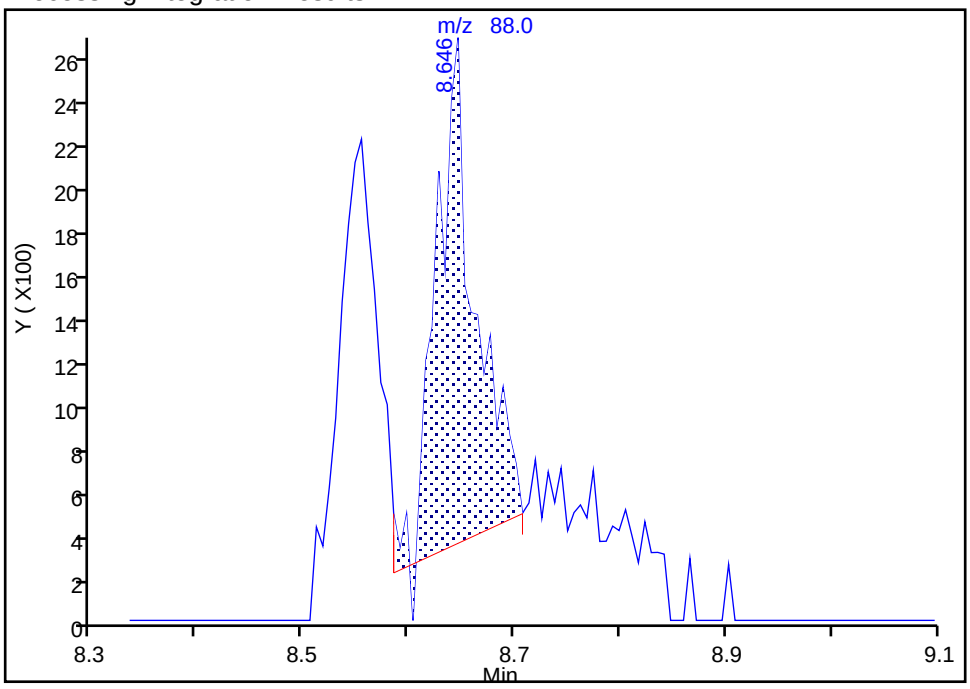
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I05.D
Injection Date: 26-Mar-2021 00:44:30 Instrument ID: 19930
Lims ID: IC std3
Client ID:
Operator ID: mec29284 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

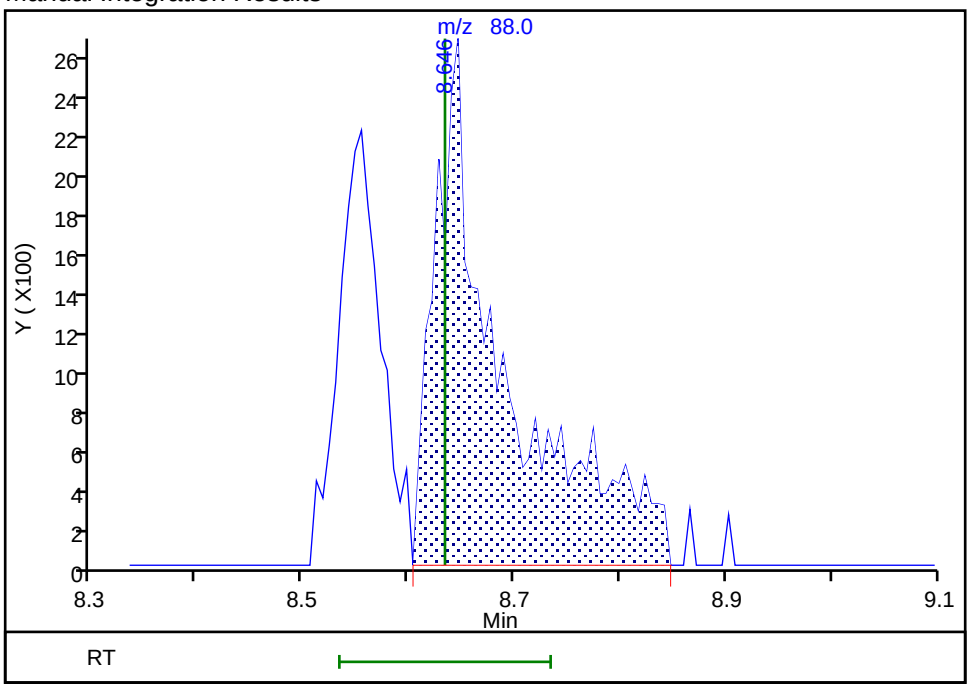
Processing Integration Results

RT: 8.65
Area: 5993
Amount: 31.294917
Amount Units: ug/l



Manual Integration Results

RT: 8.65
Area: 12008
Amount: 52.102709
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:50:55
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I06.D
Lims ID: IC std2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 26-Mar-2021 01:05:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0025078-017
Misc. Info.: IC STD2
Operator ID: mec29284 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 26-Mar-2021 17:10:23 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1605

First Level Reviewer: campbellme Date: 26-Mar-2021 16:53:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.965	1.983	-0.018	99	33158	0.5000	0.4898	M
4 Chloromethane	50	2.166	2.178	-0.012	99	41785	0.5000	0.5072	
6 Butadiene	39	2.288	2.294	-0.006	93	36799	0.5000	0.5044	M
5 Vinyl chloride	62	2.288	2.300	-0.012	89	36238	0.5000	0.4860	
7 Bromomethane	94	2.611	2.629	-0.018	90	27227	0.5000	0.5033	
8 Chloroethane	64	2.696	2.715	-0.018	99	23600	0.5000	0.5052	
9 Dichlorofluoromethane	67	2.940	2.952	-0.012	96	40189	0.5000	0.5248	
10 Trichlorofluoromethane	101	3.013	3.019	-0.006	94	50696	0.5000	0.4841	
11 Ethyl ether	59	3.263	3.275	-0.012	94	24629	0.5001	0.4872	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.337	3.342	-0.005	93	36009	0.5000	0.4605	
13 Acrolein	56	3.434	3.446	-0.012	99	206147	25.0	22.3	
14 1,1-Dichloroethene	96	3.574	3.586	-0.012	98	27336	0.5000	0.4847	
15 Acetone	43	3.605	3.617	-0.012	94	62204	5.00	5.14	M
16 112TCTFE	101	3.599	3.623	-0.024	89	27455	0.5000	0.4317	
17 Iodomethane	142	3.776	3.787	-0.011	100	54329	0.5000	0.4857	
18 Ethyl bromide	108	3.812	3.812	0.000	98	25320	0.5002	0.4964	
19 Carbon disulfide	76	3.885	3.897	-0.012	99	82229	0.5000	0.4927	
21 Methyl acetate	43	4.044	4.050	-0.006	23	19178	0.5000	0.4823	M
22 3-Chloro-1-propene	41	4.068	4.074	-0.006	92	58935	0.5000	0.5114	
23 Methylene Chloride	84	4.245	4.257	-0.012	91	32234	0.5000	0.5086	
* 24 t-Butyl alcohol-d10 (IS)	65	4.275	4.263	0.012	0	186889	50.0	50.0	
25 2-Methyl-2-propanol	59	4.397	4.391	0.006	97	44088	10.0	10.1	
26 Acrylonitrile	53	4.617	4.604	0.013	99	33532	2.50	2.26	a
27 Methyl tert-butyl ether	73	4.647	4.659	-0.012	94	82175	0.5000	0.4969	
28 trans-1,2-Dichloroethene	96	4.672	4.684	-0.012	97	31450	0.5000	0.4892	M
29 Hexane	57	5.098	5.104	-0.006	95	45384	0.5000	0.4335	
31 1,1-Dichloroethane	63	5.330	5.342	-0.012	96	61328	0.5000	0.4937	
32 Isopropyl ether	45	5.385	5.397	-0.012	94	111585	0.5000	0.4846	
33 2-Chloro-1,3-butadiene	53	5.446	5.446	0.000	92	51363	0.5000	0.4697	
34 Tert-butyl ethyl ether	59	5.909	5.927	-0.018	98	102647	0.5000	0.4902	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.117	6.122	-0.005	100	95774	5.00	4.49	
S 35 1,2-Dichloroethene, Total	100				0			0.99	
37 cis-1,2-Dichloroethene	96	6.165	6.165	0.000	82	37242	0.5000	0.5021	
38 2,2-Dichloropropane	77	6.165	6.183	-0.018	66	49949	0.5000	0.4647	
40 Propionitrile	54	6.214	6.214	0.000	98	47048	10.0	9.31	
42 Methacrylonitrile	67	6.415	6.427	-0.012	93	84710	5.00	4.34	
43 Chlorobromomethane	128	6.482	6.488	-0.006	84	16661	0.5000	0.5031	
44 Tetrahydrofuran	71	6.501	6.500	0.001	81	25722	5.00	4.58	
45 Chloroform	83	6.641	6.647	-0.006	93	59962	0.5000	0.5068	
$ 46 Dibromofluoromethane (Surr)	113	6.848	6.860	-0.012	94	541504	10.0	9.92	
47 1,1,1-Trichloroethane	97	6.860	6.872	-0.012	39	52840	0.5000	0.4910	
48 Cyclohexane	56	6.964	6.964	0.000	91	56046	0.5000	0.4473	Ma
51 1,1-Dichloropropene	75	7.074	7.080	-0.006	94	45700	0.5000	0.4802	
50 Carbon tetrachloride	117	7.080	7.086	-0.006	90	43925	0.5000	0.4655	
52 Isobutyl alcohol	41	7.208	7.220	-0.012	95	35158	25.0	22.4	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.299	7.305	-0.006	0	107831	10.0	10.1	
54 Benzene	78	7.342	7.342	0.000	94	138329	0.5000	0.4945	
56 1,2-Dichloroethane	62	7.409	7.415	-0.006	96	38004	0.5000	0.5085	
57 Tert-amyl methyl ether	73	7.525	7.531	-0.006	97	88898	0.5000	0.4851	
* 58 Fluorobenzene (IS)	96	7.738	7.744	-0.006	98	2170550	10.0	10.0	
59 n-Heptane	43	7.750	7.756	-0.006	61	54789	0.5000	0.4621	
60 n-Butanol	56	8.098	8.092	0.006	90	61571	50.0	45.1	M
61 Trichloroethene	95	8.220	8.220	0.000	98	35485	0.5000	0.4881	
62 Methylcyclohexane	83	8.525	8.530	-0.005	94	61740	0.5000	0.4815	
63 1,2-Dichloropropane	63	8.543	8.549	-0.006	85	35486	0.5000	0.4899	
64 Methyl methacrylate	69	8.628	8.628	0.000	93	15850	0.5000	0.4098	M
65 1,4-Dioxane	88	8.640	8.634	0.006	34	6622	25.0	25.4	M
66 Dibromomethane	93	8.659	8.665	-0.006	95	16764	0.5000	0.5099	
68 Dichlorobromomethane	83	8.890	8.890	0.000	97	40469	0.5000	0.4707	
69 2-Nitropropane	41	9.159	9.158	0.001	99	53853	5.00	4.46	
72 1-Bromo-2-chloroethane	63	9.287	9.286	0.001	98	32672	0.5000	0.4843	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	95	50878	0.5000	0.4731	
74 4-Methyl-2-pentanone (MIBK)	43	9.598	9.603	-0.005	97	241439	5.00	4.41	
$ 75 Toluene-d8 (Surr)	98	9.738	9.744	-0.006	94	2151774	10.0	10.0	
76 Toluene	92	9.817	9.817	0.000	99	87241	0.5000	0.4932	
S 77 1,3-Dichloropropene, Total	100				0			0.9483	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	93	40964	0.5000	0.4751	
79 Ethyl methacrylate	69	10.128	10.128	0.000	92	35178	0.5000	0.4751	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	91	22834	0.5000	0.4782	
81 Tetrachloroethene	166	10.366	10.359	0.007	96	39052	0.5000	0.4642	
82 1,3-Dichloropropane	76	10.433	10.439	-0.006	91	41331	0.5000	0.4910	
83 2-Hexanone	43	10.482	10.481	0.001	98	167867	5.00	4.37	
85 Chlorodibromomethane	129	10.646	10.652	-0.006	90	28920	0.5000	0.4746	
86 Ethylene Dibromide	107	10.762	10.762	0.000	96	23323	0.5000	0.4991	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.188	0.001	86	1642102	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	93	51858	0.5000	0.4797	
90 Chlorobenzene	112	11.213	11.213	0.000	95	95826	0.5000	0.4902	
S 89 Xylenes, Total	106				0			1.47	
92 Ethylbenzene	91	11.298	11.298	0.000	98	169543	0.5000	0.4899	
91 1,1,1,2-Tetrachloroethane	131	11.292	11.298	-0.006	95	34792	0.5000	0.4917	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	134614	1.00	0.99	
94 o-Xylene	106	11.743	11.743	0.000	97	63580	0.5000	0.4790	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.762	11.755	0.007	96	102806	0.5000	0.4747	
96 Bromoform	173	11.920	11.914	0.006	95	17826	0.5000	0.4629	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	168700	0.5000	0.4773	
$ 100 4-Bromofluorobenzene (Surr)	95	12.182	12.188	-0.006	92	822933	10.0	10.1	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	28607	0.5000	0.4655	
102 Bromobenzene	156	12.304	12.304	0.000	94	40145	0.5000	0.4740	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	92	77224	5.00	4.09	
104 1,2,3-Trichloropropane	110	12.329	12.328	0.001	82	8504	0.5000	0.5199	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	202079	0.5000	0.4862	
106 2-Chlorotoluene	126	12.451	12.444	0.007	97	39228	0.5000	0.4637	
107 1,3,5-Trimethylbenzene	105	12.506	12.505	0.001	94	141120	0.5000	0.4718	
108 4-Chlorotoluene	126	12.542	12.542	0.000	97	41138	0.5000	0.4764	
109 tert-Butylbenzene	134	12.743	12.743	0.000	94	31160	0.5000	0.4670	
110 Pentachloroethane	167	12.780	12.780	0.000	80	25106	0.5000	0.4560	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	97	147037	0.5000	0.4791	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	186398	0.5000	0.4744	
113 1,3-Dichlorobenzene	146	13.012	13.011	0.001	98	79884	0.5000	0.4752	
114 4-Isopropyltoluene	119	13.018	13.017	0.001	97	155261	0.5000	0.4646	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	926371	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.084	0.001	94	80478	0.5000	0.4791	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	97	63732	0.5000	0.4799	
118 Benzyl chloride	126	13.164	13.158	0.006	98	13013	0.5000	0.4709	
119 n-Butylbenzene	92	13.310	13.310	0.000	98	75474	0.5000	0.4645	
120 1,2-Dichlorobenzene	146	13.341	13.340	0.001	98	74631	0.5000	0.4884	
122 1,2-Dibromo-3-Chloropropane	155	13.889	13.883	0.006	83	4773	0.5000	0.4976	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	97	57251	0.5000	0.4683	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	46562	0.5000	0.4565	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	95	22282	0.5000	0.4892	
126 Naphthalene	128	14.615	14.615	0.000	97	90288	0.5000	0.4677	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	95	41678	0.5000	0.4693	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_RV1_826_00042	Amount Added:	2.00	Units: uL	
MSV_RV4_826_00048	Amount Added:	2.00	Units: uL	
MSV_RV4GAS826_00121	Amount Added:	2.00	Units: uL	
MSV_31_826ISS_00004	Amount Added:	5.00	Units: uL	Run Reagent

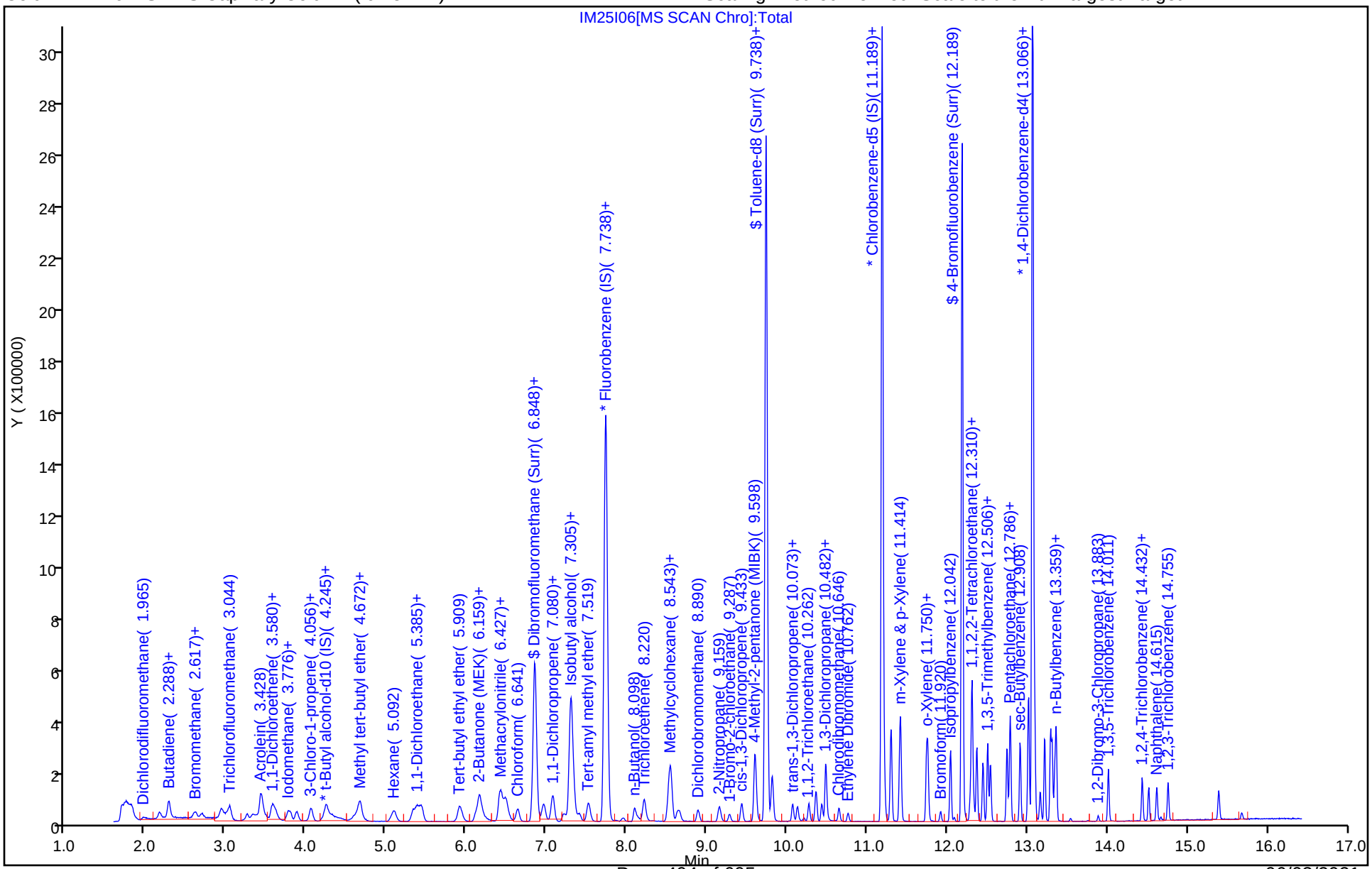
Report Date: 26-Mar-2021 17:10:24 Chrom Revision: 2.3 19-Mar-2021 08:24:58

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I06.D

Injection Date:	26-Mar-2021 01:05:30	Instrument ID:	19930	Operator ID:	mec29284
Lims ID:	IC std2			Worklist Smp#:	17
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

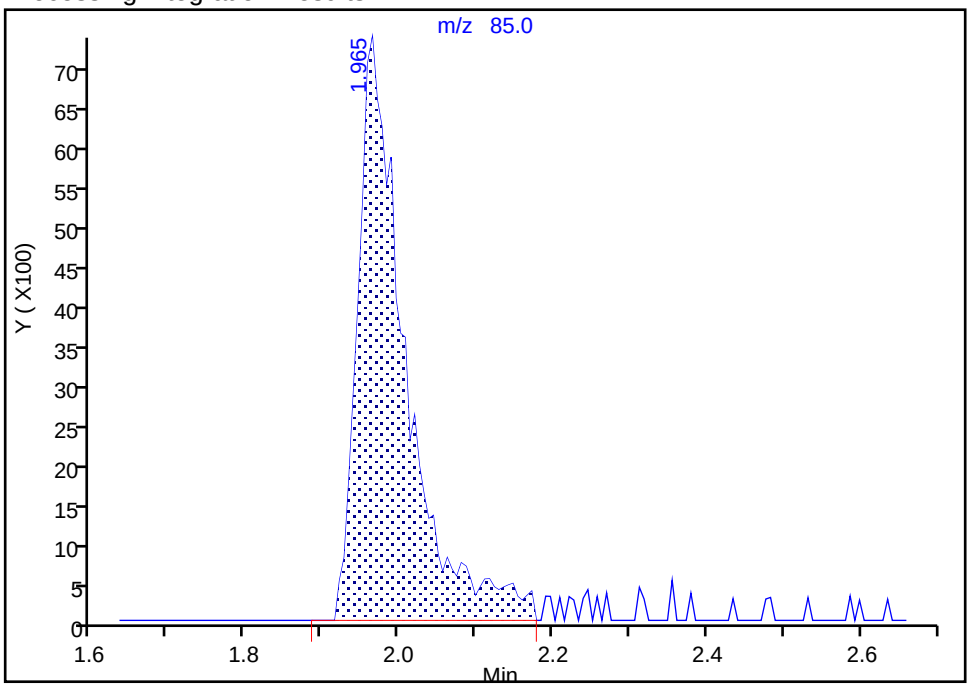
Data File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I06.D				
Injection Date:	26-Mar-2021 01:05:30	Instrument ID:	19930		
Lims ID:	IC std2				
Client ID:					
Operator ID:	mec29284	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

1 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

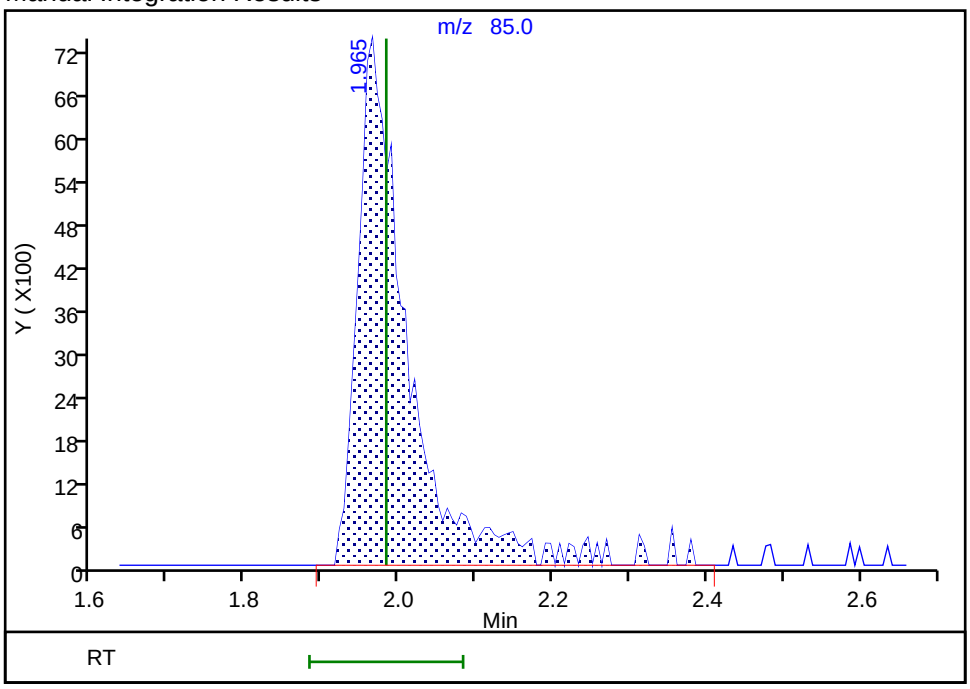
Processing Integration Results

RT: 1.96
Area: 31589
Amount: 0.469700
Amount Units: ug/l



Manual Integration Results

RT: 1.96
Area: 33158
Amount: 0.489765
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:51:38

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

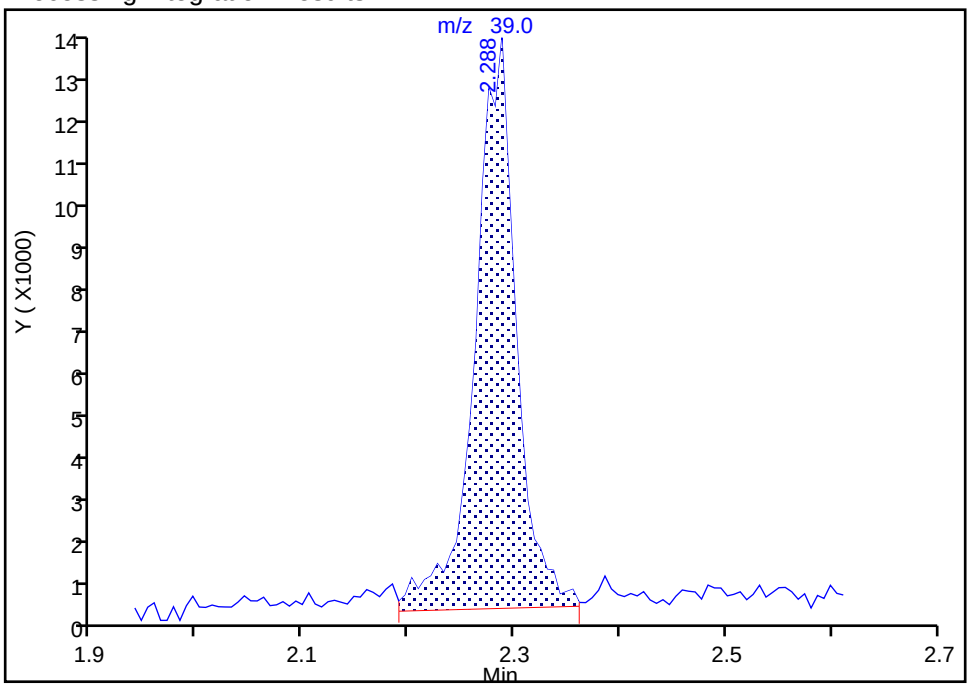
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I06.D
Injection Date: 26-Mar-2021 01:05:30 Instrument ID: 19930
Lims ID: IC std2
Client ID:
Operator ID: mec29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25 mm) Detector MS Quad

6 Butadiene, CAS: 106-99-0

Signal: 1

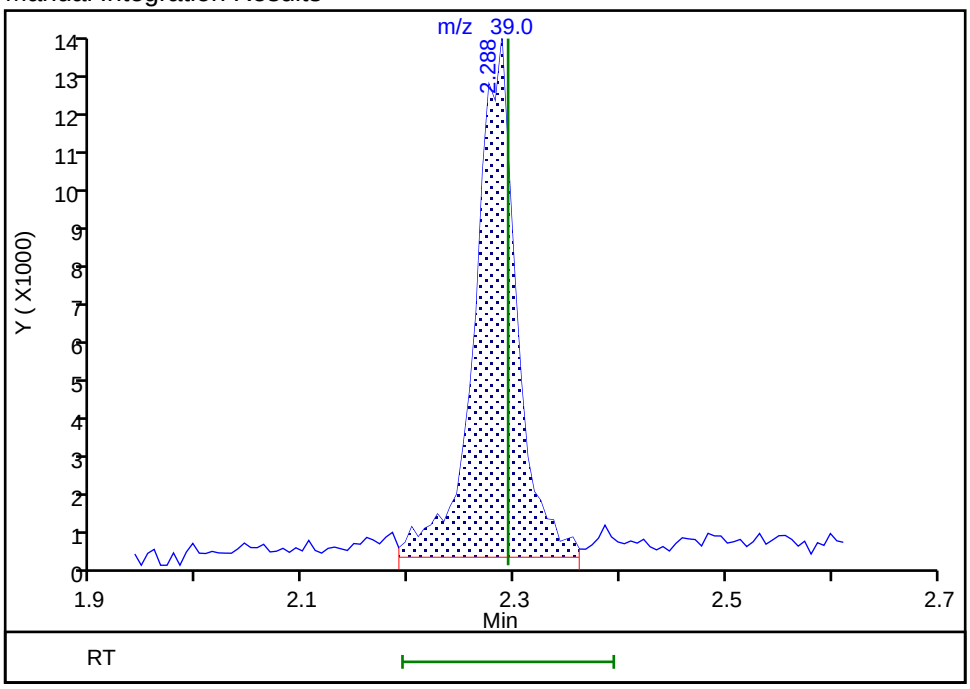
Processing Integration Results

RT: 2.29
Area: 36109
Amount: 0.496325
Amount Units: ug/l



Manual Integration Results

RT: 2.29
Area: 36799
Amount: 0.504443
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:51:48
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

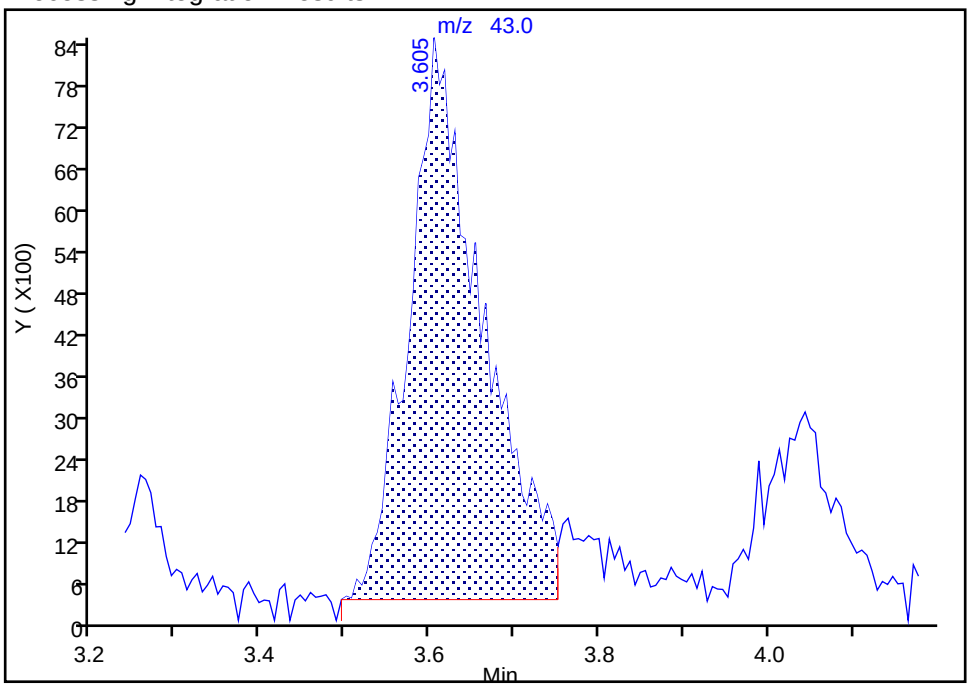
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I06.D
Injection Date: 26-Mar-2021 01:05:30 Instrument ID: 19930
Lims ID: IC std2
Client ID:
Operator ID: mec29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

15 Acetone, CAS: 67-64-1

Signal: 1

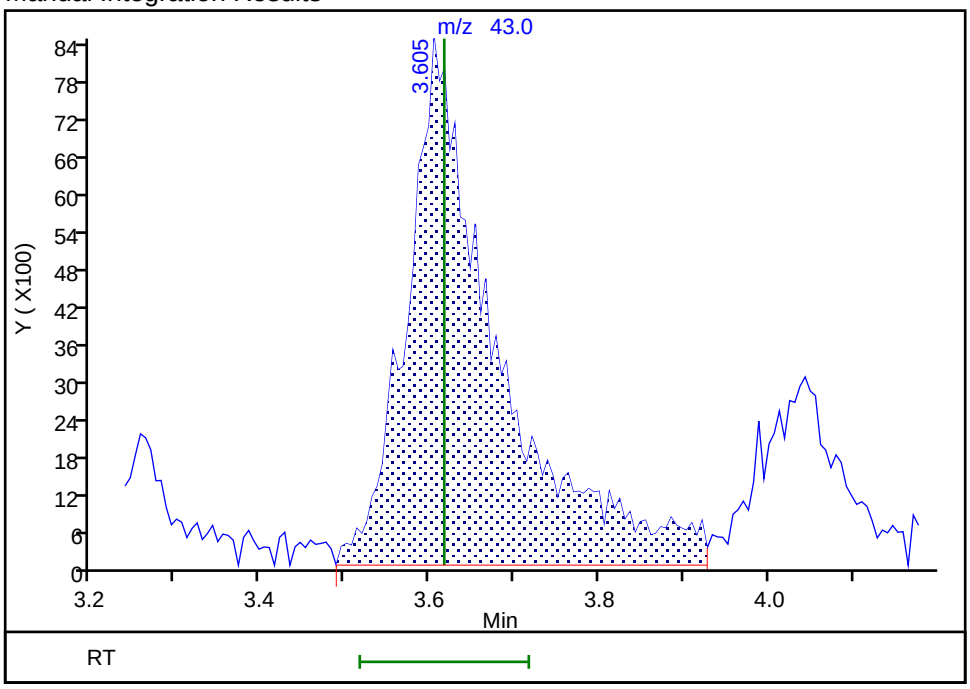
Processing Integration Results

RT: 3.60
Area: 48744
Amount: 4.269301
Amount Units: ug/l



Manual Integration Results

RT: 3.60
Area: 62204
Amount: 5.137032
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:52:10
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

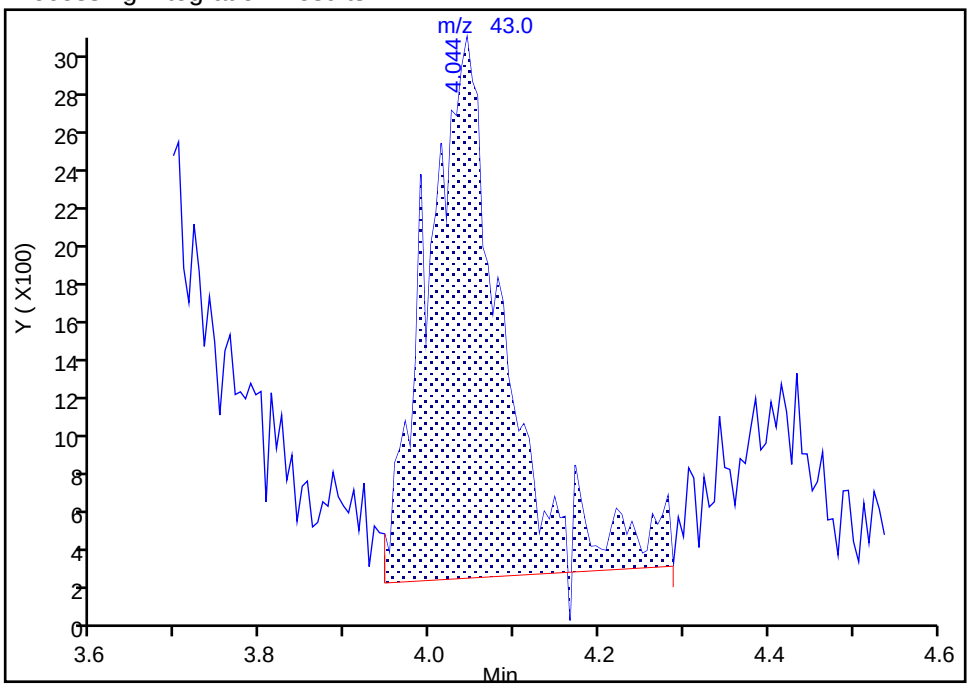
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I06.D
Injection Date: 26-Mar-2021 01:05:30 Instrument ID: 19930
Lims ID: IC std2
Client ID:
Operator ID: mec29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

21 Methyl acetate, CAS: 79-20-9

Signal: 1

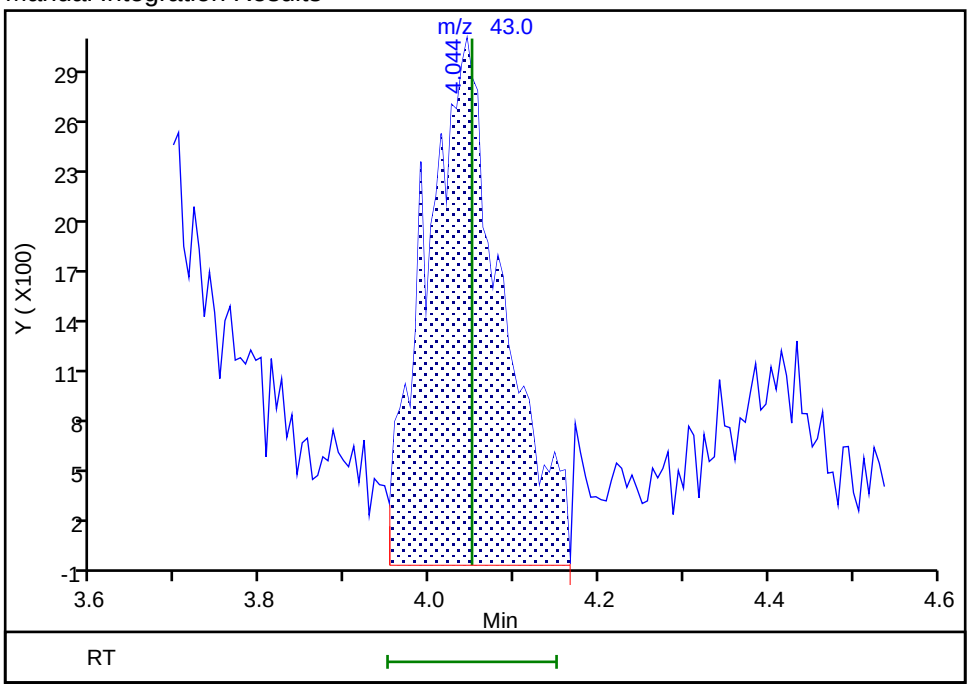
Processing Integration Results

RT: 4.04
Area: 17813
Amount: 0.452443
Amount Units: ug/l



Manual Integration Results

RT: 4.04
Area: 19178
Amount: 0.482336
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:52:27
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

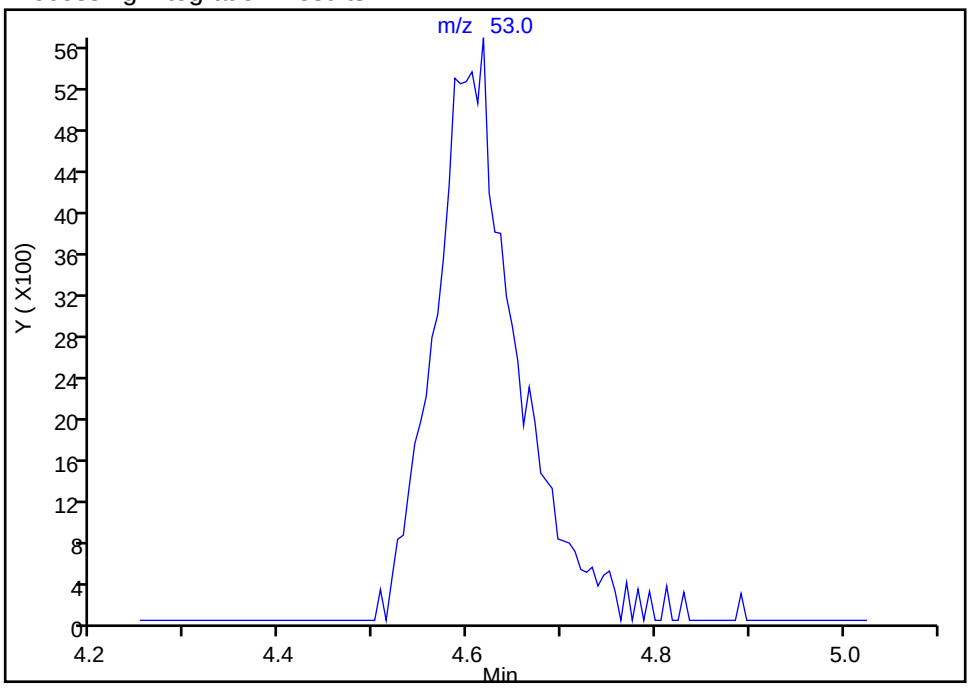
Data File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I06.D				
Injection Date:	26-Mar-2021 01:05:30	Instrument ID:	19930		
Lims ID:	IC std2				
Client ID:					
Operator ID:	mec29284	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

26 Acrylonitrile, CAS: 107-13-1

Signal: 1

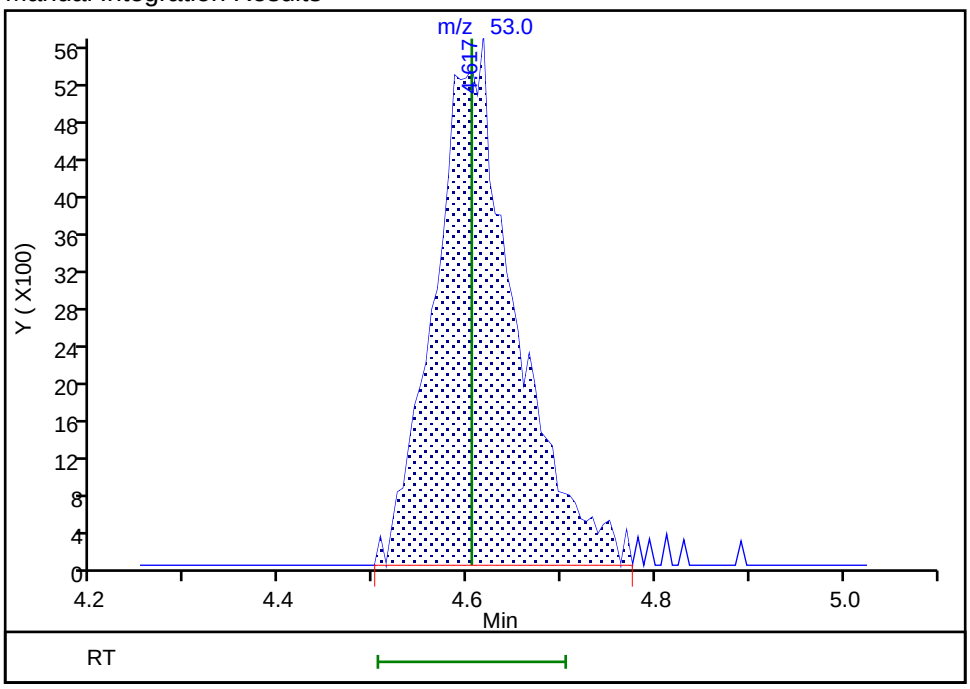
Not Detected
Expected RT: 4.60

Processing Integration Results



Manual Integration Results

RT: 4.62
Area: 33532
Amount: 2.255471
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:52:38
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

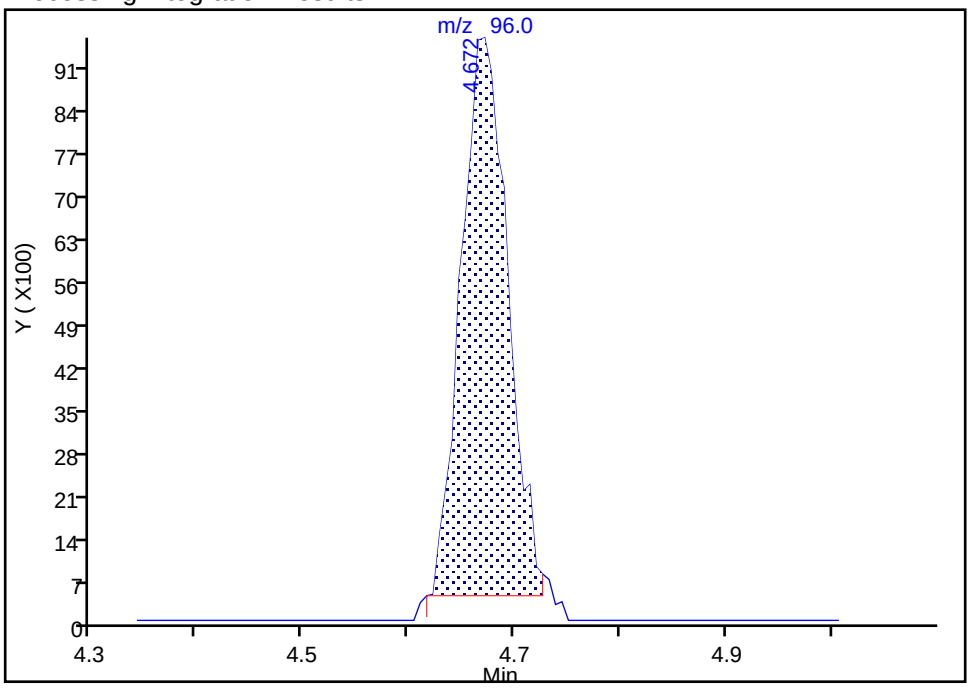
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I06.D
Injection Date: 26-Mar-2021 01:05:30 Instrument ID: 19930
Lims ID: IC std2
Client ID:
Operator ID: mec29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

28 trans-1,2-Dichloroethene, CAS: 156-60-5

Signal: 1

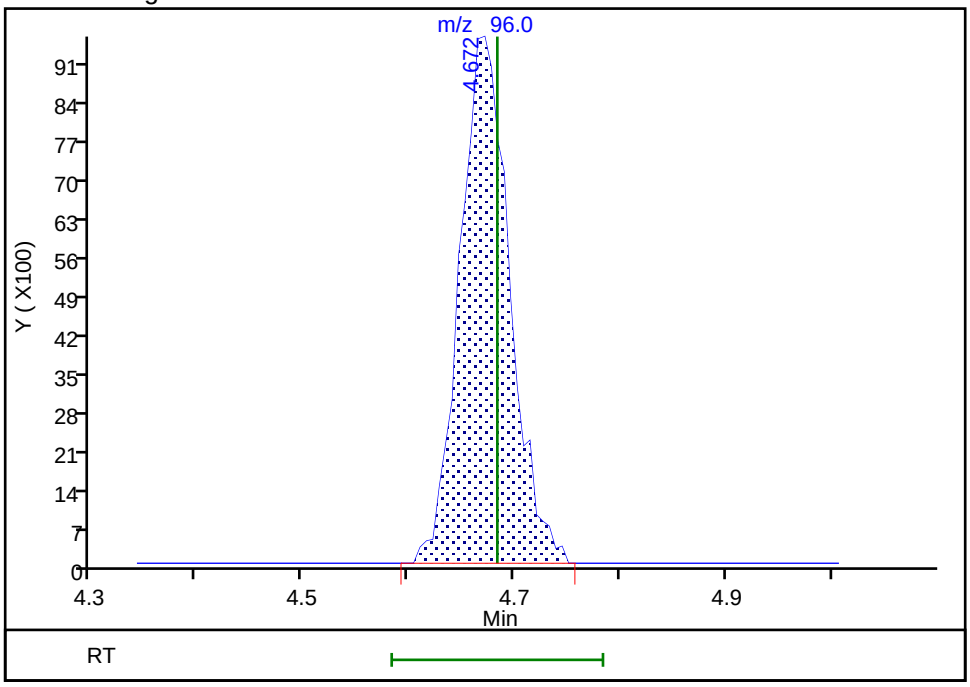
Processing Integration Results

RT: 4.67
Area: 28076
Amount: 0.443370
Amount Units: ug/l



Manual Integration Results

RT: 4.67
Area: 31450
Amount: 0.489204
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:52:45
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

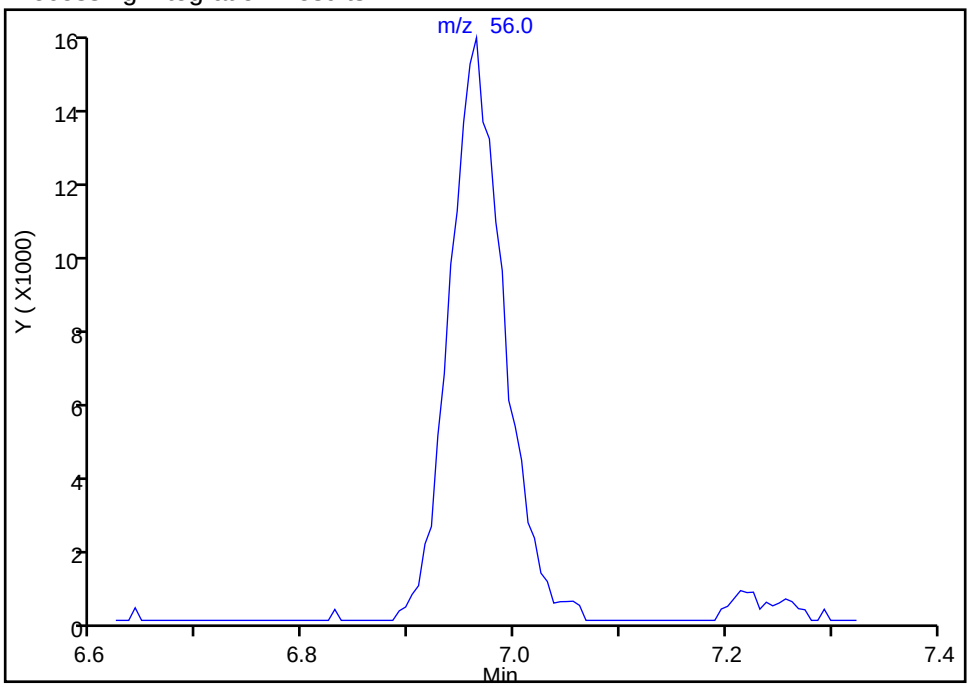
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I06.D
Injection Date: 26-Mar-2021 01:05:30 Instrument ID: 19930
Lims ID: IC std2
Client ID:
Operator ID: mec29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

48 Cyclohexane, CAS: 110-82-7

Signal: 1

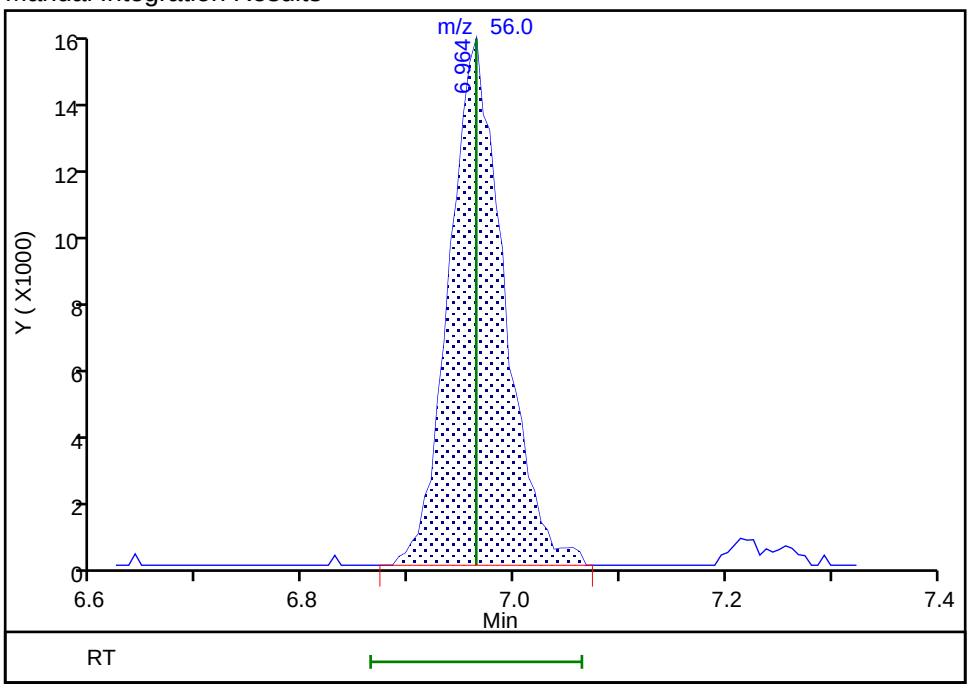
Not Detected
Expected RT: 6.96

Processing Integration Results



Manual Integration Results

RT: 6.96
Area: 56046
Amount: 0.447279
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:53:03
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

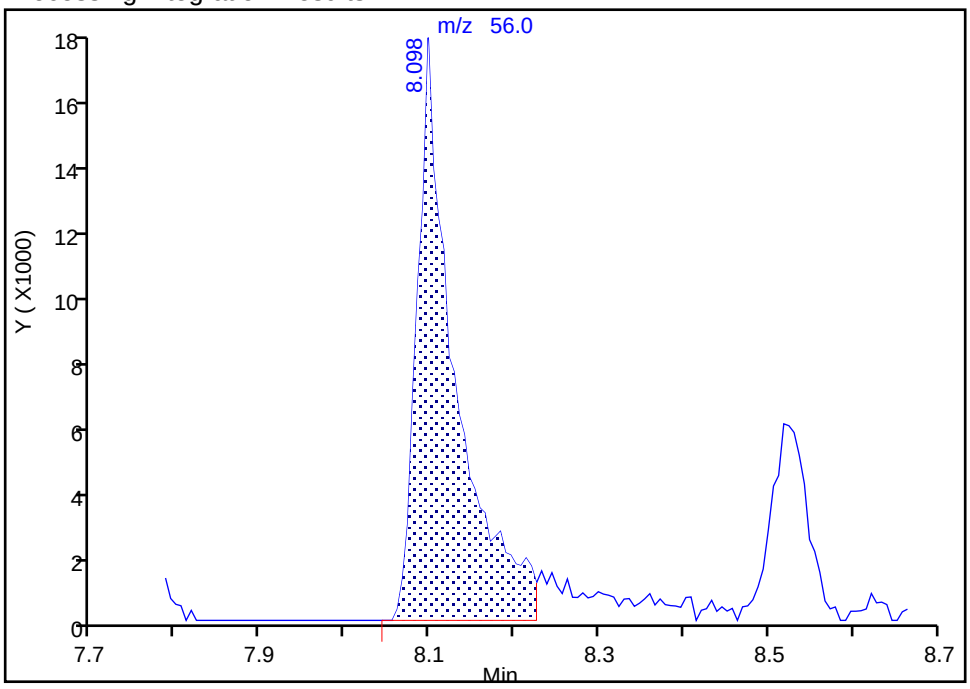
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I06.D
Injection Date: 26-Mar-2021 01:05:30 Instrument ID: 19930
Lims ID: IC std2
Client ID:
Operator ID: mec29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

60 n-Butanol, CAS: 71-36-3

Signal: 1

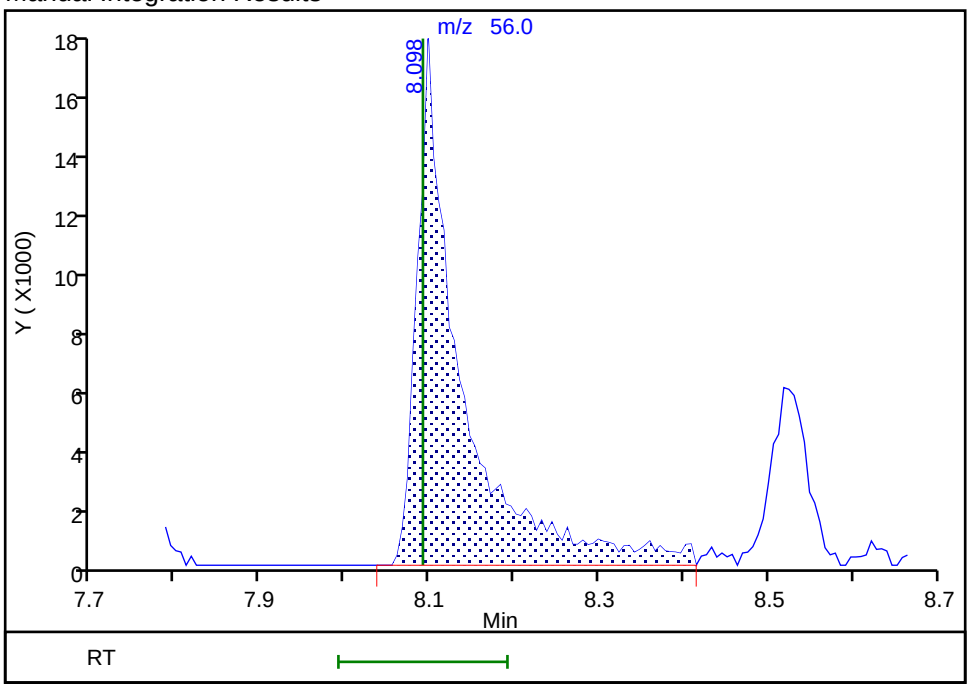
Processing Integration Results

RT: 8.10
Area: 53650
Amount: 41.002478
Amount Units: ug/l



Manual Integration Results

RT: 8.10
Area: 61571
Amount: 45.136820
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:53:17
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC

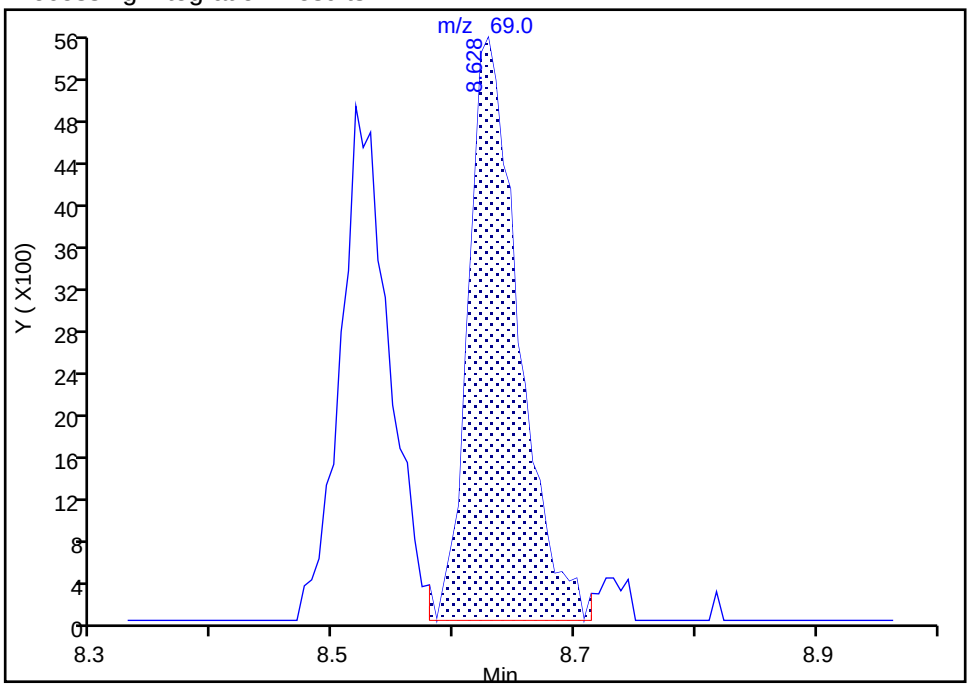
Data File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I06.D				
Injection Date:	26-Mar-2021 01:05:30	Instrument ID:	19930		
Lims ID:	IC std2				
Client ID:					
Operator ID:	mec29284	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

64 Methyl methacrylate, CAS: 80-62-6

Signal: 1

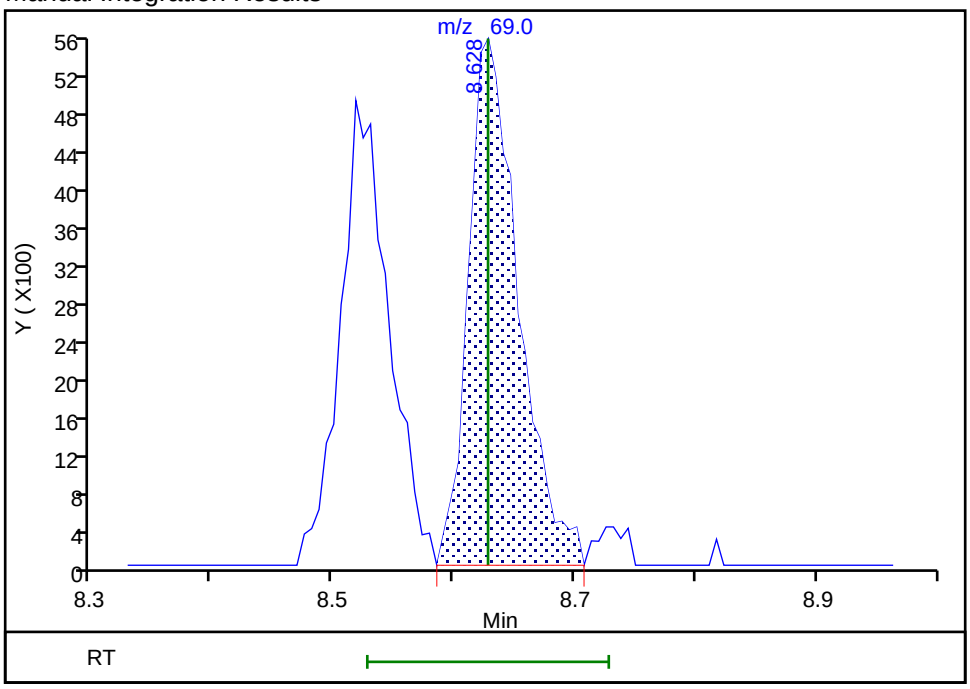
Processing Integration Results

RT: 8.63
Area: 16067
Amount: 0.414742
Amount Units: ug/l



Manual Integration Results

RT: 8.63
Area: 15850
Amount: 0.409797
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:53:27
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

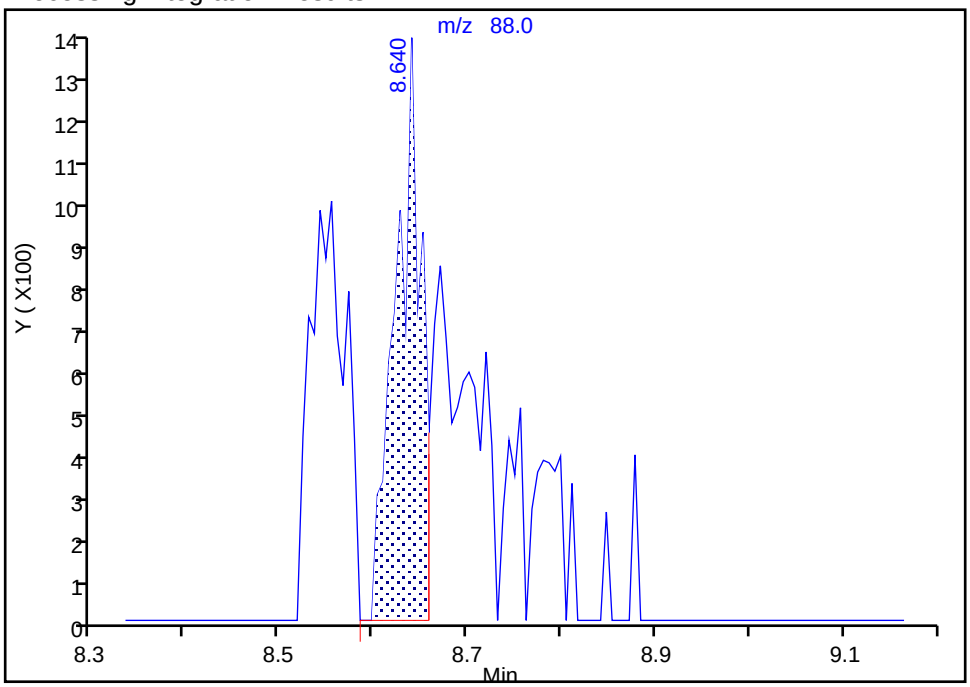
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I06.D
Injection Date: 26-Mar-2021 01:05:30 Instrument ID: 19930
Lims ID: IC std2
Client ID:
Operator ID: mec29284 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

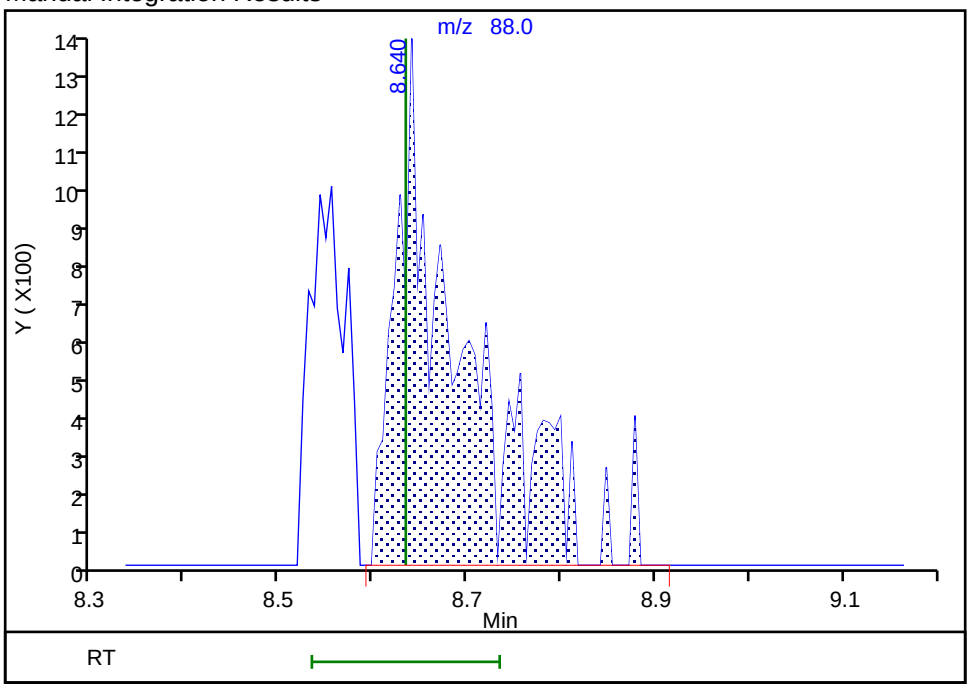
Processing Integration Results

RT: 8.64
Area: 2591
Amount: 10.972546
Amount Units: ug/l



Manual Integration Results

RT: 8.64
Area: 6622
Amount: 25.392946
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:53:33
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D
Lims ID: IC std1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 26-Mar-2021 01:26:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0025078-018
Misc. Info.: IC STD1
Operator ID: mec29284 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 26-Mar-2021 17:10:34 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1605

First Level Reviewer: campbellme Date: 26-Mar-2021 17:01:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.977	1.983	-0.006	97	13752	0.2000	0.2027	
4 Chloromethane	50	2.184	2.178	0.006	98	17674	0.2000	0.2141	
6 Butadiene	39	2.288	2.294	-0.006	94	14817	0.2000	0.2027	
5 Vinyl chloride	62	2.294	2.300	-0.006	90	14627	0.2000	0.1958	
7 Bromomethane	94	2.623	2.629	-0.006	90	11794	0.2000	0.2176	M
8 Chloroethane	64	2.708	2.715	-0.006	94	9578	0.2000	0.2046	
9 Dichlorofluoromethane	67	2.946	2.952	-0.006	96	17565	0.2000	0.2289	
10 Trichlorofluoromethane	101	3.013	3.019	-0.006	91	21686	0.2000	0.2067	
11 Ethyl ether	59	3.269	3.275	-0.006	96	10243	0.2000	0.2022	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.336	3.342	-0.006	84	16074	0.2000	0.2051	
13 Acrolein	56	3.452	3.446	0.006	98	80784	10.0	9.32	
14 1,1-Dichloroethene	96	3.586	3.586	0.000	97	10577	0.2000	0.1872	
15 Acetone	43	3.617	3.617	0.000	99	27454	2.00	2.41	M
16 112TCTFE	101	3.629	3.623	0.006	87	11732	0.2000	0.1841	
17 Iodomethane	142	3.794	3.787	0.007	99	21462	0.2000	0.1914	M
18 Ethyl bromide	108	3.812	3.812	0.000	90	10262	0.2001	0.2008	
19 Carbon disulfide	76	3.891	3.897	-0.006	98	33302	0.2000	0.1991	
21 Methyl acetate	43	4.062	4.050	0.012	25	9712	0.2000	0.2600	
22 3-Chloro-1-propene	41	4.074	4.074	0.000	93	25508	0.2000	0.2209	
23 Methylene Chloride	84	4.269	4.257	0.012	89	12659	0.2000	0.1993	
* 24 t-Butyl alcohol-d10 (IS)	65	4.263	4.263	0.000	0	175560	50.0	50.0	
25 2-Methyl-2-propanol	59	4.403	4.391	0.012	28	15699	4.00	3.84	M
26 Acrylonitrile	53	4.610	4.604	0.006	81	12148	1.00	0.8698	
27 Methyl tert-butyl ether	73	4.671	4.659	0.012	79	31566	0.2000	0.1905	
28 trans-1,2-Dichloroethene	96	4.678	4.684	-0.006	97	13585	0.2000	0.2109	
29 Hexane	57	5.110	5.104	0.006	94	20550	0.2000	0.1959	
31 1,1-Dichloroethane	63	5.336	5.342	-0.006	92	24094	0.2000	0.1936	
32 Isopropyl ether	45	5.391	5.397	-0.006	97	46041	0.2000	0.1995	
33 2-Chloro-1,3-butadiene	53	5.446	5.446	0.000	91	21409	0.2000	0.1954	
34 Tert-butyl ethyl ether	59	5.927	5.927	0.000	99	41529	0.2000	0.1979	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.122	6.122	0.000	97	38773	2.00	1.94	
S 35 1,2-Dichloroethene, Total	100				0			0.4054	
37 cis-1,2-Dichloroethene	96	6.171	6.165	0.006	82	14457	0.2000	0.1945	
38 2,2-Dichloropropane	77	6.183	6.183	0.000	66	21501	0.2000	0.1996	
40 Propionitrile	54	6.220	6.214	0.006	67	17788	4.00	3.75	
42 Methacrylonitrile	67	6.439	6.427	0.012	91	33151	2.00	1.81	
43 Chlorobromomethane	128	6.494	6.488	0.006	92	6918	0.2000	0.2085	
44 Tetrahydrofuran	71	6.500	6.500	0.000	80	9899	2.00	1.87	
45 Chloroform	83	6.647	6.647	0.000	93	23062	0.2000	0.1945	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.860	-0.006	94	547082	10.0	10.0	
47 1,1,1-Trichloroethane	97	6.872	6.872	0.000	36	21246	0.2000	0.1970	
48 Cyclohexane	56	6.964	6.964	0.000	88	25529	0.2000	0.2033	M
51 1,1-Dichloropropene	75	7.086	7.080	0.006	93	18248	0.2000	0.1913	
50 Carbon tetrachloride	117	7.092	7.086	0.006	91	17519	0.2000	0.1853	
52 Isobutyl alcohol	41	7.226	7.220	0.006	94	17870	10.0	12.1	M
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	106960	10.0	10.0	
54 Benzene	78	7.342	7.342	0.000	92	55307	0.2000	0.1973	
56 1,2-Dichloroethane	62	7.409	7.415	-0.006	95	15797	0.2000	0.2109	
57 Tert-amyl methyl ether	73	7.531	7.531	0.000	98	35829	0.2000	0.1951	
* 58 Fluorobenzene (IS)	96	7.744	7.744	0.000	99	2175128	10.0	10.0	
59 n-Heptane	43	7.744	7.756	-0.012	60	24047	0.2000	0.2024	
60 n-Butanol	56	8.110	8.092	0.018	90	24365	20.0	19.0	M
61 Trichloroethene	95	8.220	8.220	0.000	97	14760	0.2000	0.2026	
62 Methylcyclohexane	83	8.530	8.530	0.000	93	24128	0.2000	0.1878	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	70	14465	0.2000	0.1993	
64 Methyl methacrylate	69	8.640	8.628	0.012	90	6595	0.2000	0.1815	
65 1,4-Dioxane	88	8.628	8.634	-0.006	36	1706	10.0	6.96	M
66 Dibromomethane	93	8.658	8.665	-0.007	95	6393	0.2000	0.1940	
68 Dichlorobromomethane	83	8.890	8.890	0.000	96	16873	0.2000	0.1958	
69 2-Nitropropane	41	9.158	9.158	0.000	98	20670	2.00	1.82	
72 1-Bromo-2-chloroethane	63	9.286	9.286	0.000	96	13297	0.2000	0.1967	
73 cis-1,3-Dichloropropene	75	9.439	9.433	0.006	94	20362	0.2000	0.1890	
74 4-Methyl-2-pentanone (MIBK)	43	9.603	9.603	0.000	98	92250	2.00	1.79	
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	2145909	10.0	9.94	
76 Toluene	92	9.817	9.817	0.000	97	35687	0.2000	0.2008	
S 77 1,3-Dichloropropene, Total	100				0			0.3752	
78 trans-1,3-Dichloropropene	75	10.079	10.073	0.006	94	16134	0.2000	0.1863	
79 Ethyl methacrylate	69	10.134	10.128	0.006	89	14167	0.2000	0.1905	
80 1,1,2-Trichloroethane	97	10.280	10.274	0.006	90	9564	0.2000	0.1994	
81 Tetrachloroethene	166	10.365	10.359	0.006	96	16441	0.2000	0.1945	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	88	16003	0.2000	0.1893	
83 2-Hexanone	43	10.487	10.481	0.006	98	62176	2.00	1.72	
85 Chlorodibromomethane	129	10.646	10.652	-0.006	90	10963	0.2000	0.1791	
86 Ethylene Dibromide	107	10.762	10.762	0.000	97	8556	0.2000	0.1823	
* 87 Chlorobenzene-d5 (IS)	117	11.188	11.188	0.000	86	1649576	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	72	23669	0.2000	0.2180	
90 Chlorobenzene	112	11.213	11.213	0.000	96	37579	0.2000	0.1914	
S 89 Xylenes, Total	106				0			0.5617	
92 Ethylbenzene	91	11.304	11.298	0.006	99	68295	0.2000	0.1964	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	92	13100	0.2000	0.1843	
93 m-Xylene & p-Xylene	106	11.420	11.414	0.006	99	51200	0.4000	0.3756	
94 o-Xylene	106	11.743	11.743	0.000	96	24816	0.2000	0.1861	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 Styrene	104	11.762	11.755	0.007	96	41346	0.2000	0.1901	
96 Bromoform	173	11.920	11.914	0.006	95	7072	0.2000	0.1828	
97 Isopropylbenzene	105	12.042	12.042	0.000	96	68127	0.2000	0.1919	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	93	822001	10.0	10.0	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	91	11364	0.2000	0.1857	a
102 Bromobenzene	156	12.304	12.304	0.000	91	16009	0.2000	0.1898	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	94	32312	2.00	1.82	
104 1,2,3-Trichloropropane	110	12.335	12.328	0.007	74	2852	0.2000	0.1751	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	77146	0.2000	0.1864	
106 2-Chlorotoluene	126	12.450	12.444	0.006	97	16257	0.2000	0.1930	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	93	55902	0.2000	0.1877	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	16900	0.2000	0.1965	
109 tert-Butylbenzene	134	12.749	12.743	0.006	94	12603	0.2000	0.1897	
110 Pentachloroethane	167	12.780	12.780	0.000	78	11032	0.2000	0.2012	
111 1,2,4-Trimethylbenzene	105	12.792	12.786	0.006	97	57882	0.2000	0.1894	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	75304	0.2000	0.1924	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	32667	0.2000	0.1951	
114 4-Isopropyltoluene	119	13.017	13.017	0.000	97	62210	0.2000	0.1869	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	922535	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.084	13.084	0.000	94	32474	0.2000	0.1941	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	96	27220	0.2000	0.2058	
118 Benzyl chloride	126	13.158	13.158	0.000	98	4512	0.2000	0.1640	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	30747	0.2000	0.1900	
120 1,2-Dichlorobenzene	146	13.347	13.340	0.007	98	29321	0.2000	0.1927	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	90	1678	0.2000	0.1756	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	96	22364	0.2000	0.1837	
124 1,2,4-Trichlorobenzene	180	14.438	14.432	0.006	95	18170	0.2000	0.1789	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	10298	0.2000	0.2270	
126 Naphthalene	128	14.615	14.615	0.000	97	33921	0.2000	0.1765	
127 1,2,3-Trichlorobenzene	180	14.761	14.755	0.006	94	17019	0.2000	0.1924	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_RV1_826_00042	Amount Added:	2.00	Units: uL	
MSV_RV4_826_00048	Amount Added:	2.00	Units: uL	
MSV_RV4GAS826_00121	Amount Added:	2.00	Units: uL	
MSV_31_826ISS_00004	Amount Added:	5.00	Units: uL	Run Reagent

Report Date: 26-Mar-2021 17:10:35 Chrom Revision: 2.3 19-Mar-2021 08:24:58

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Injection Date: 26-Mar-2021 01:26:30 Instrument ID: 19930 Operator ID: mec29284

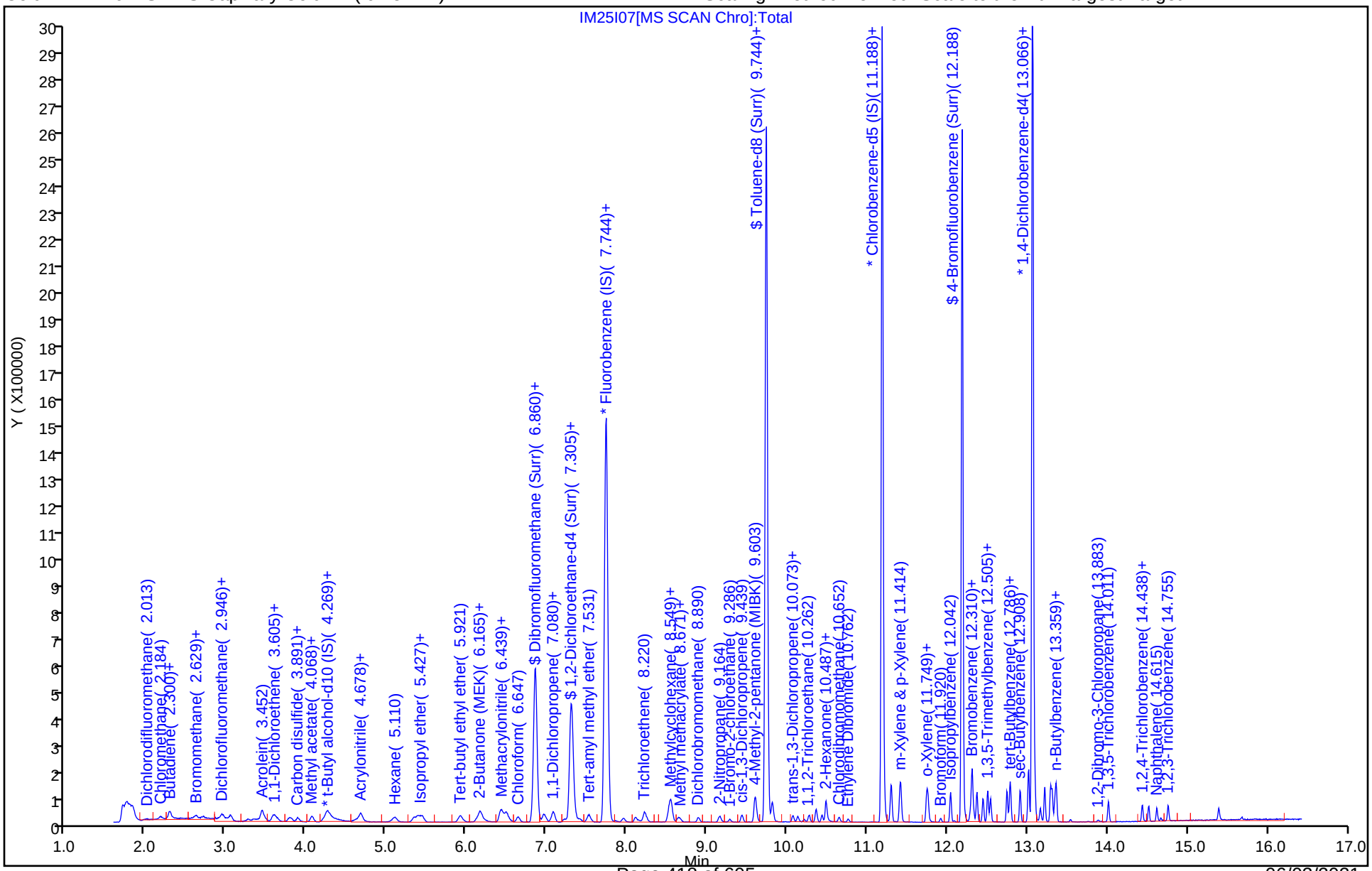
Lims ID: IC std1 Worklist Smp#: 18

Client ID:

Purge Vol: 25.000 mL Dil. Factor: 1.0000 ALS Bottle#: 17

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

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

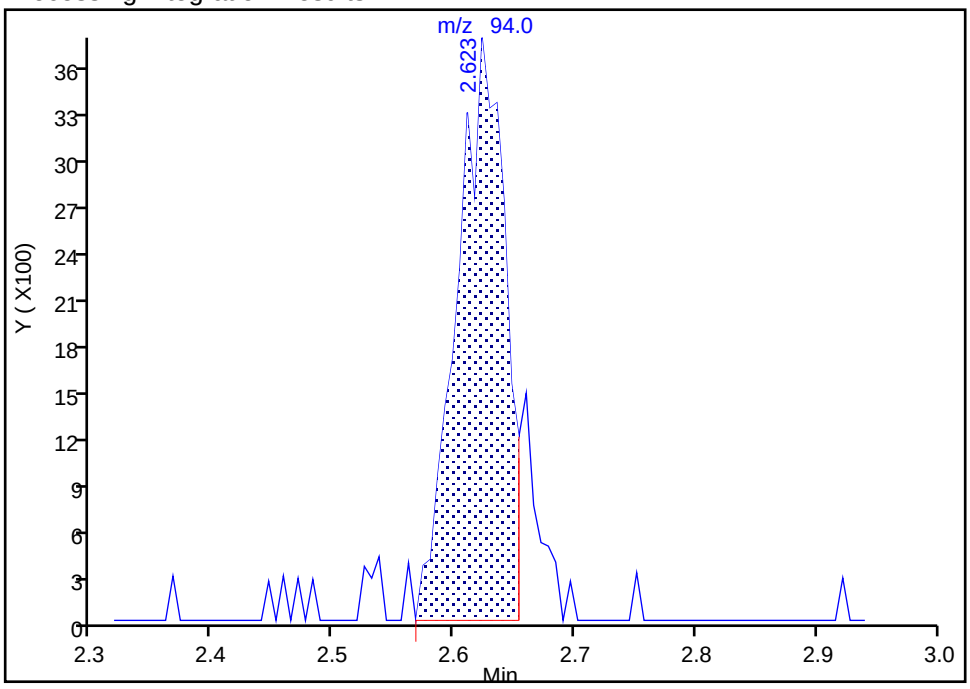
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D
Injection Date: 26-Mar-2021 01:26:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: mec29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

7 Bromomethane, CAS: 74-83-9

Signal: 1

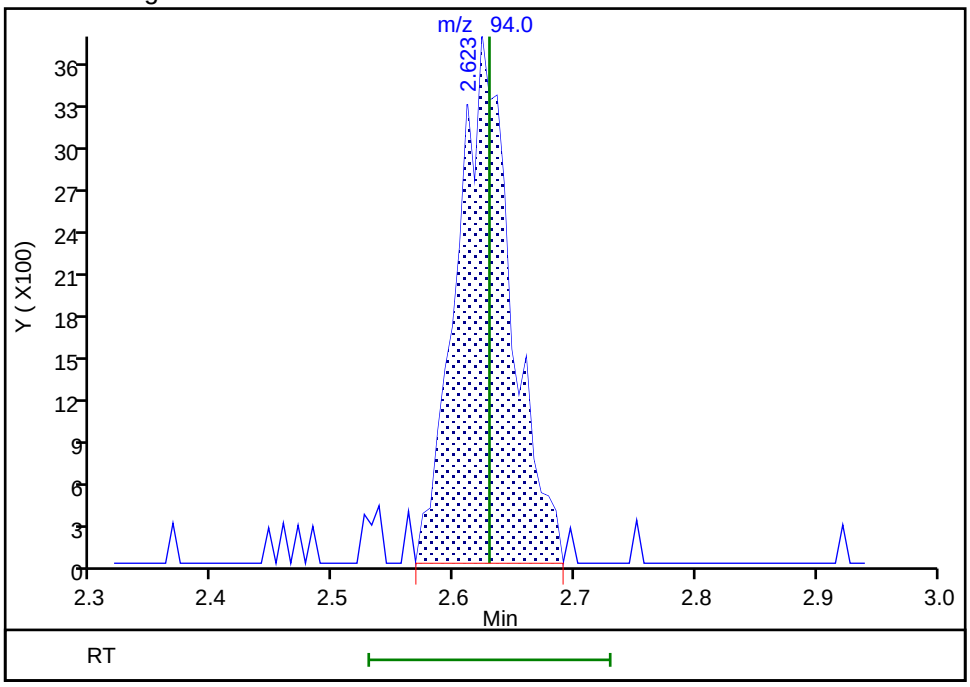
Processing Integration Results

RT: 2.62
Area: 10495
Amount: 0.196968
Amount Units: ug/l



Manual Integration Results

RT: 2.62
Area: 11794
Amount: 0.217559
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:54:29
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

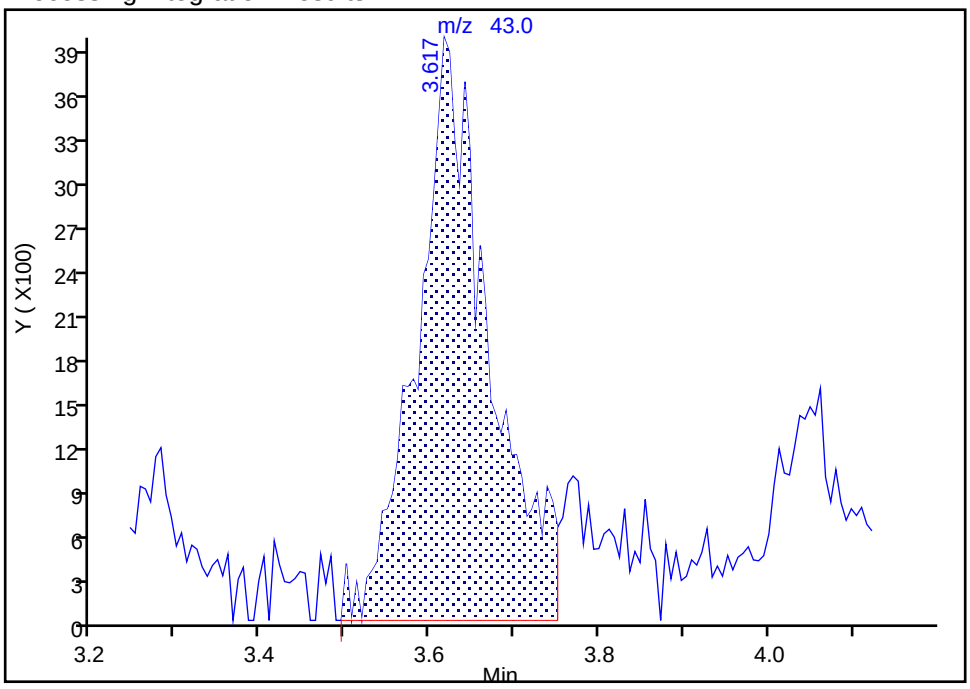
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D
Injection Date: 26-Mar-2021 01:26:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: mec29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

15 Acetone, CAS: 67-64-1

Signal: 1

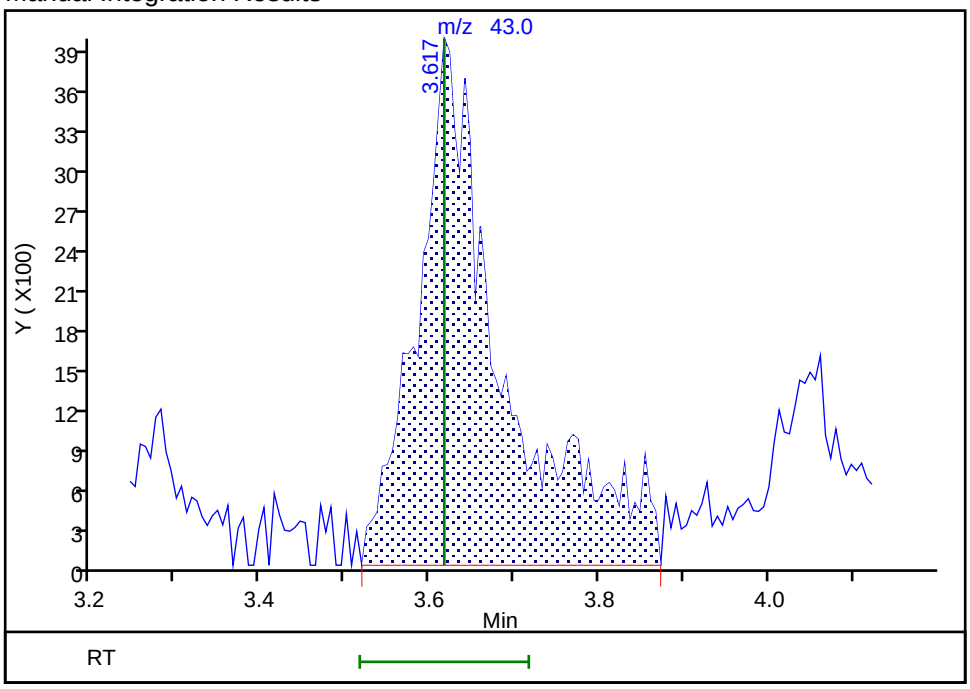
Processing Integration Results

RT: 3.62
Area: 23416
Amount: 2.112122
Amount Units: ug/l



Manual Integration Results

RT: 3.62
Area: 27454
Amount: 2.413558
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:54:44
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

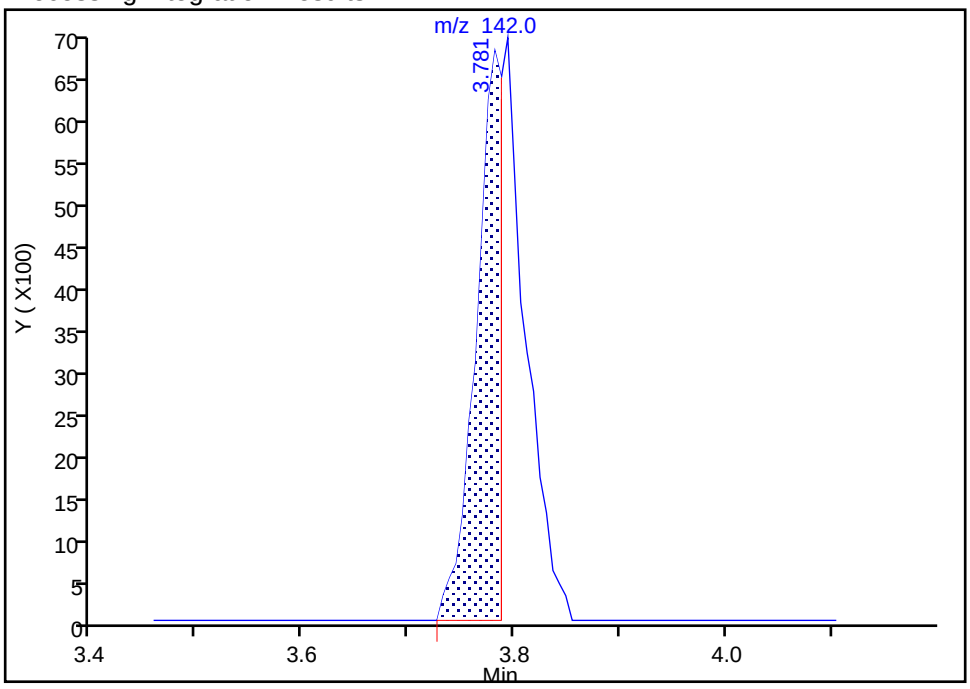
Data File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D				
Injection Date:	26-Mar-2021 01:26:30	Instrument ID:	19930		
Lims ID:	IC std1				
Client ID:					
Operator ID:	mec29284	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

17 Iodomethane, CAS: 74-88-4

Signal: 1

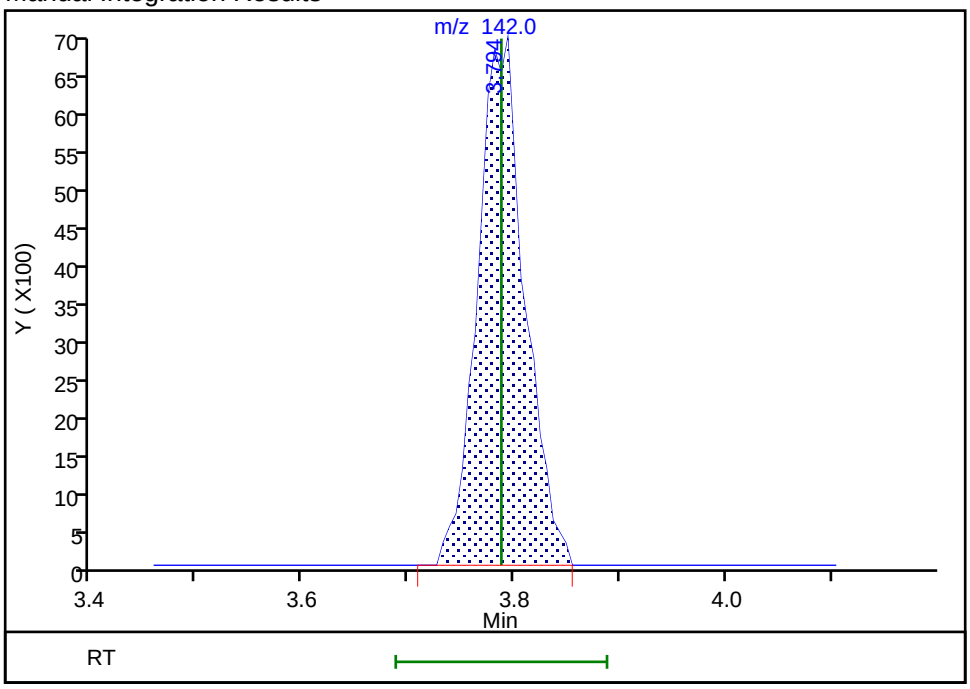
Processing Integration Results

RT: 3.78
Area: 11819
Amount: 0.112330
Amount Units: ug/l



Manual Integration Results

RT: 3.79
Area: 21462
Amount: 0.191447
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:54:49

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

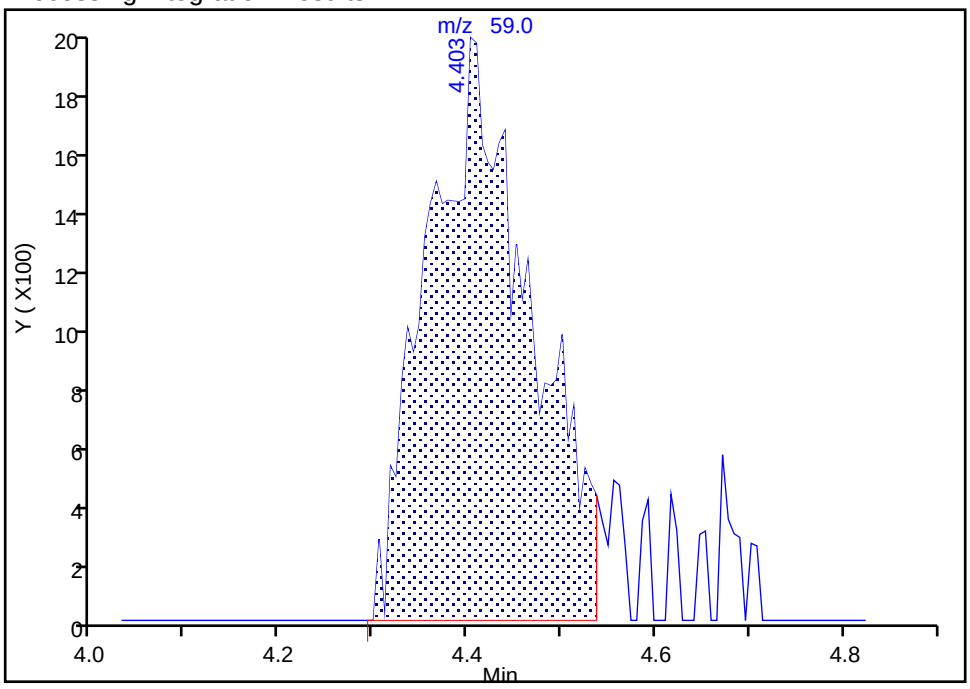
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D
Injection Date: 26-Mar-2021 01:26:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: mec29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

25 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

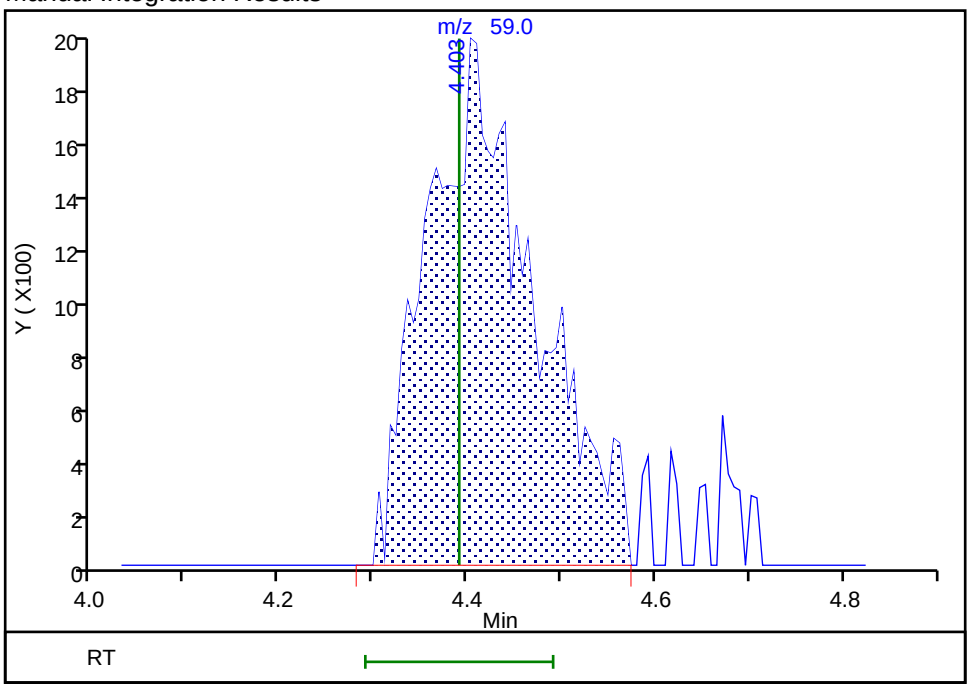
Processing Integration Results

RT: 4.40
Area: 15048
Amount: 3.699898
Amount Units: ug/l



Manual Integration Results

RT: 4.40
Area: 15699
Amount: 3.838021
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:55:00
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

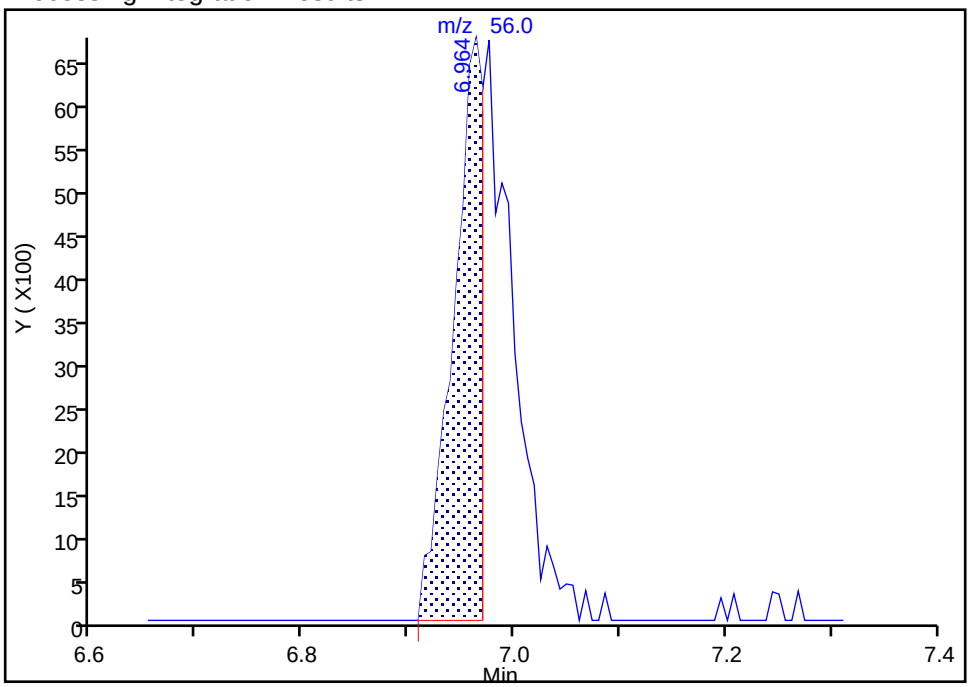
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D
Injection Date: 26-Mar-2021 01:26:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: mec29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

48 Cyclohexane, CAS: 110-82-7

Signal: 1

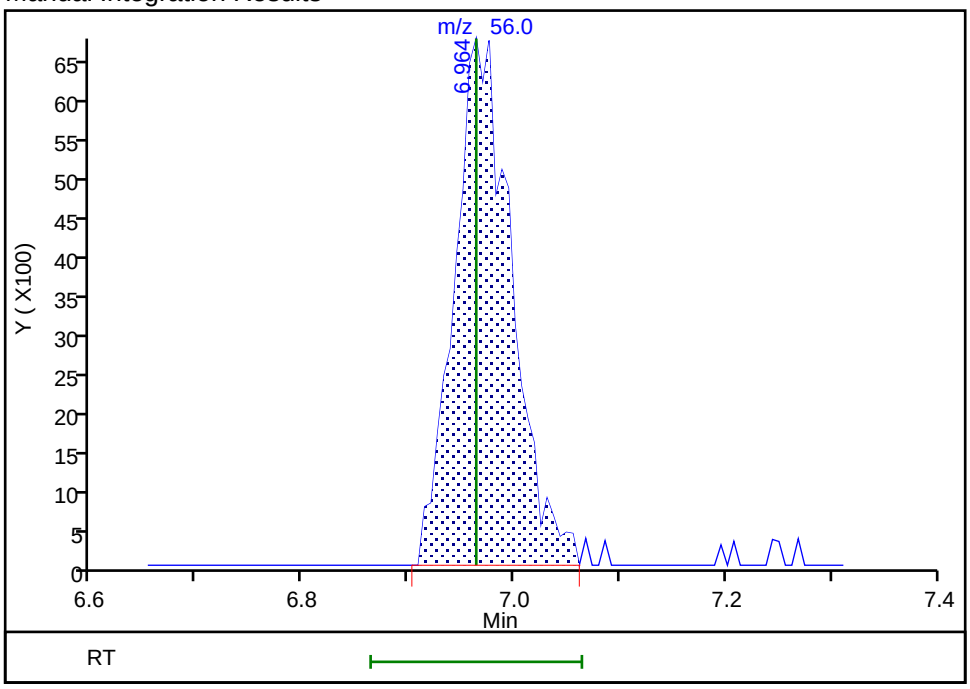
Processing Integration Results

RT: 6.96
Area: 13360
Amount: 0.114309
Amount Units: ug/l



Manual Integration Results

RT: 6.96
Area: 25529
Amount: 0.203307
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:55:15
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

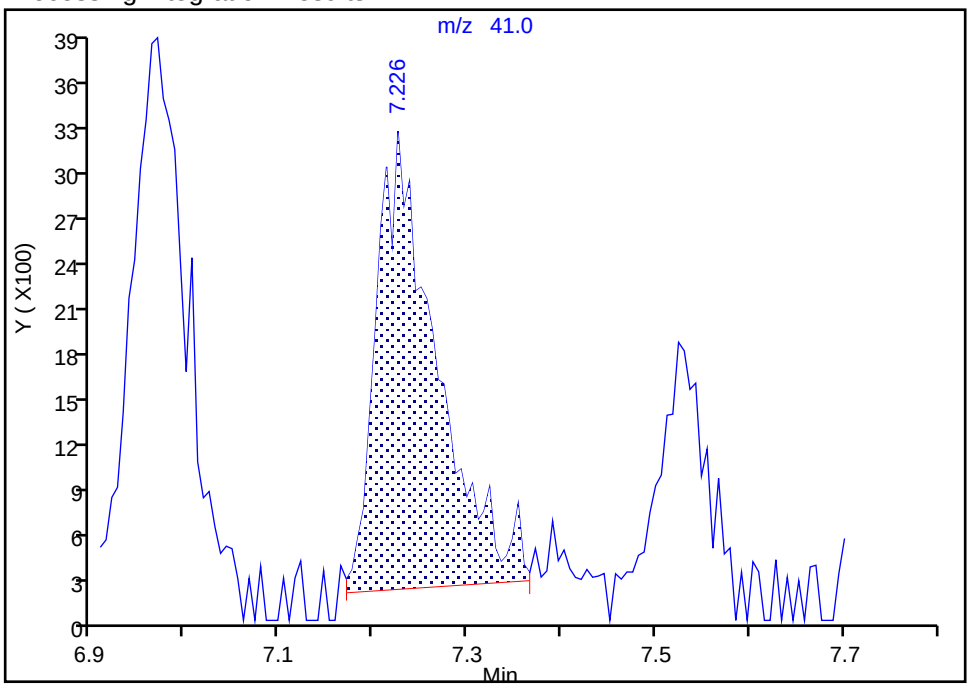
Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D
Injection Date: 26-Mar-2021 01:26:30 Instrument ID: 19930
Lims ID: IC std1
Client ID:
Operator ID: mec29284 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

52 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

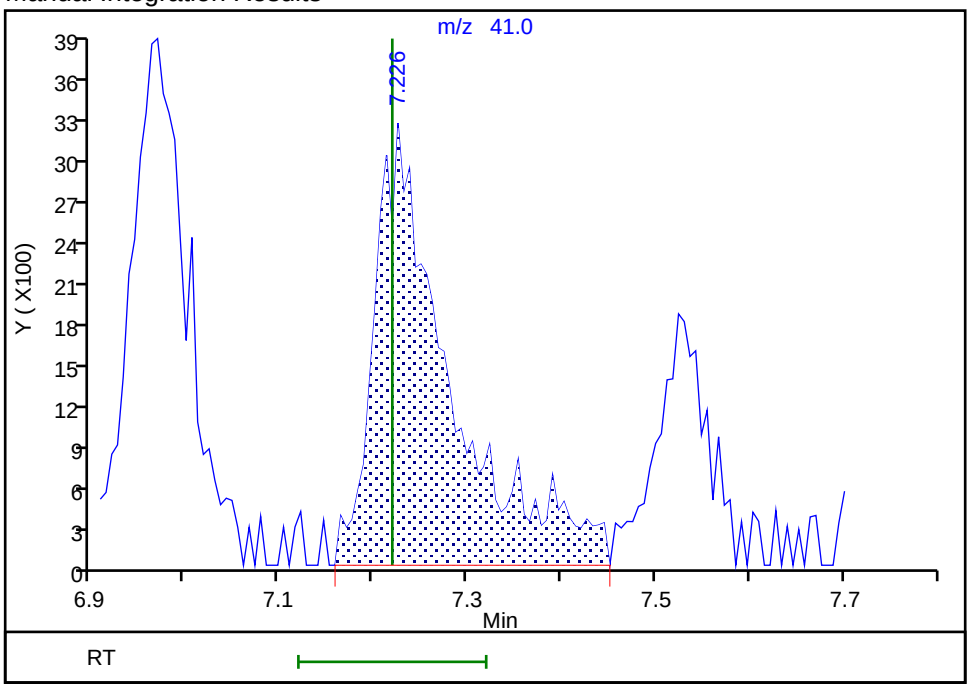
Processing Integration Results

RT: 7.23
Area: 13353
Amount: 9.463389
Amount Units: ug/l



Manual Integration Results

RT: 7.23
Area: 17870
Amount: 12.110777
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:55:22
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

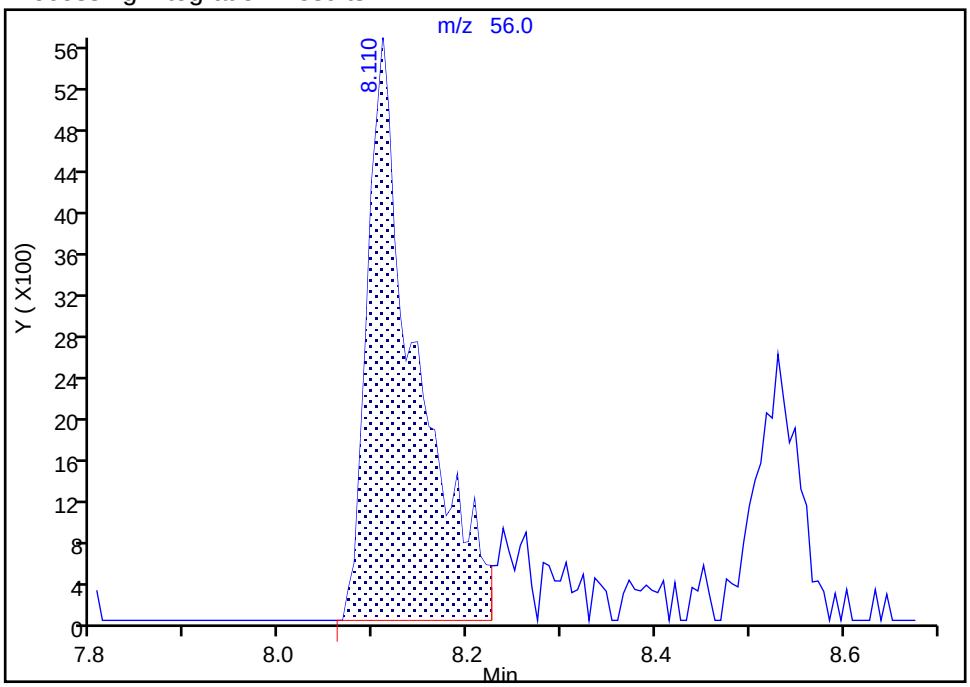
Data File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D				
Injection Date:	26-Mar-2021 01:26:30	Instrument ID:	19930		
Lims ID:	IC std1				
Client ID:					
Operator ID:	mec29284	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

60 n-Butanol, CAS: 71-36-3

Signal: 1

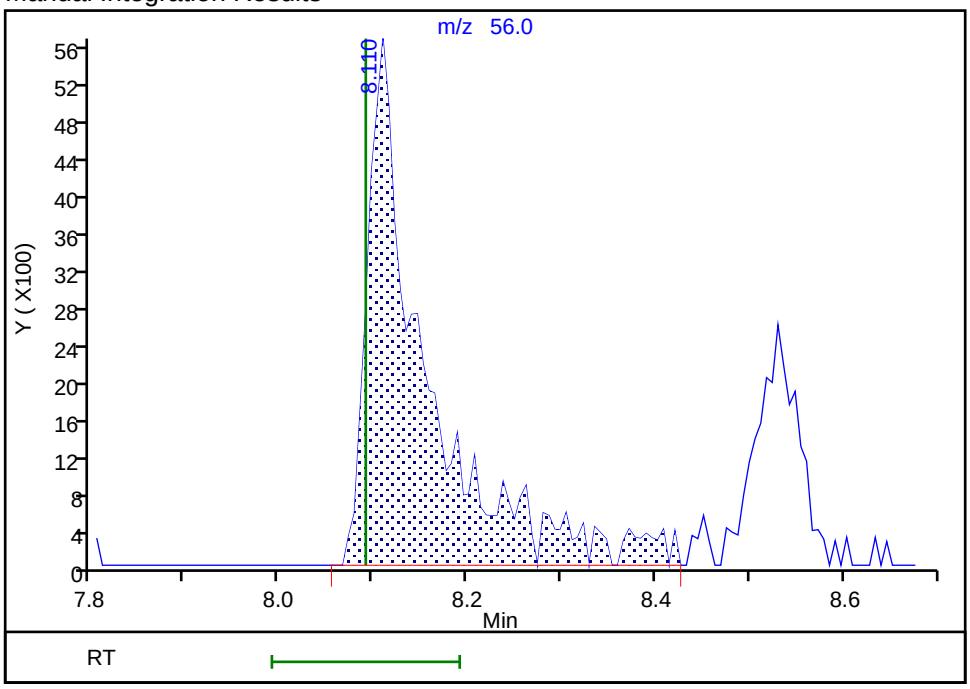
Processing Integration Results

RT: 8.11
Area: 20024
Amount: 16.014078
Amount Units: ug/l



Manual Integration Results

RT: 8.11
Area: 24365
Amount: 19.014256
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:55:33

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

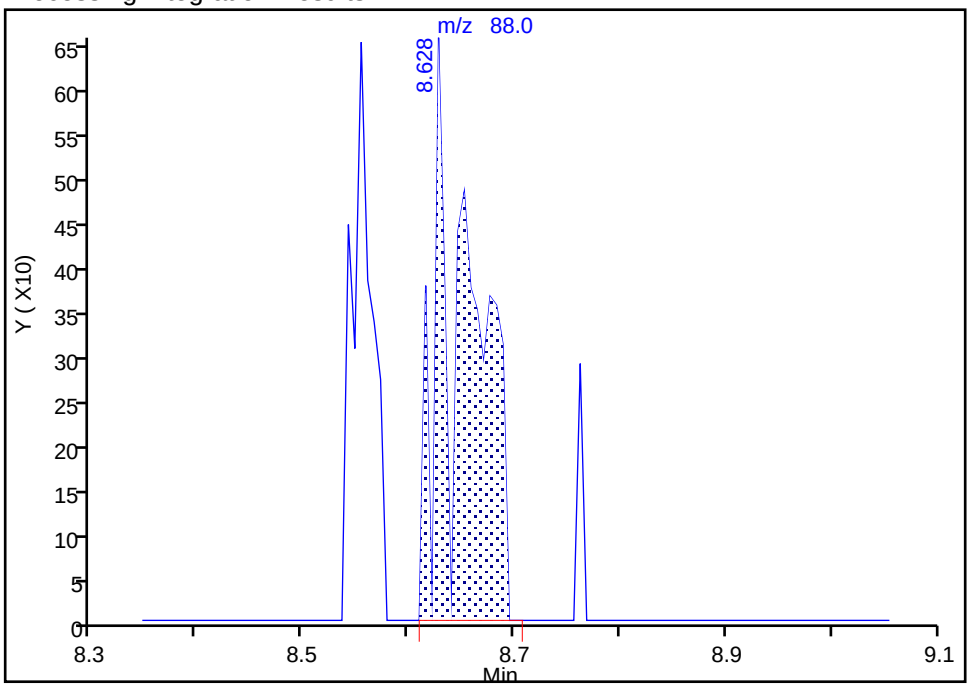
Data File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D				
Injection Date:	26-Mar-2021 01:26:30	Instrument ID:	19930		
Lims ID:	IC std1				
Client ID:					
Operator ID:	mec29284	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

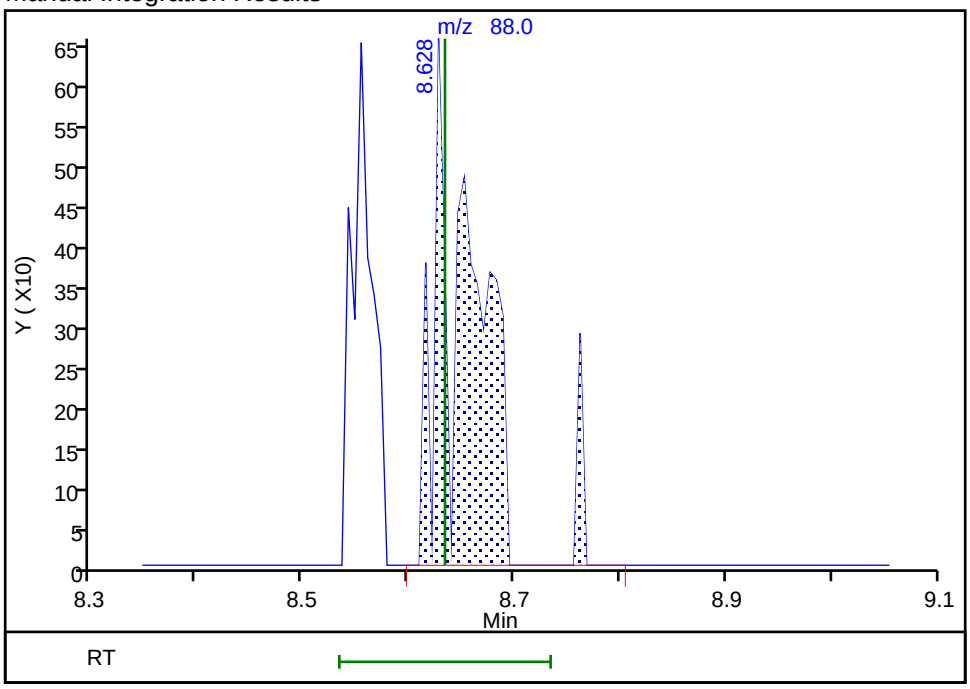
Processing Integration Results

RT: 8.63
Area: 1600
Amount: 6.571961
Amount Units: ug/l



Manual Integration Results

RT: 8.63
Area: 1706
Amount: 6.964038
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:55:41

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

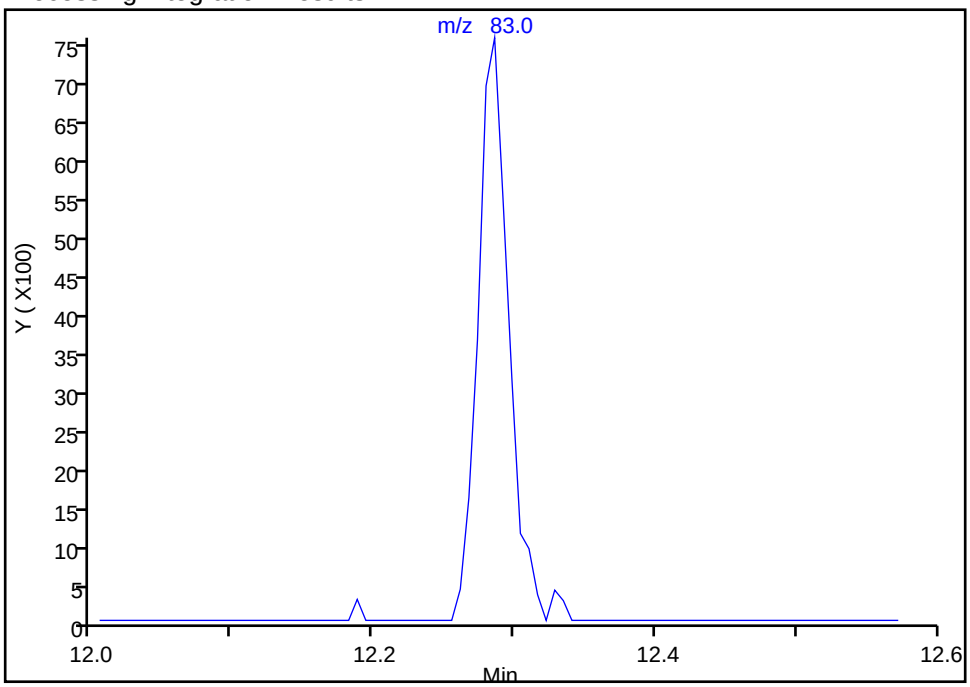
Data File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D				
Injection Date:	26-Mar-2021 01:26:30	Instrument ID:	19930		
Lims ID:	IC std1				
Client ID:					
Operator ID:	mec29284	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

101 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Signal: 1

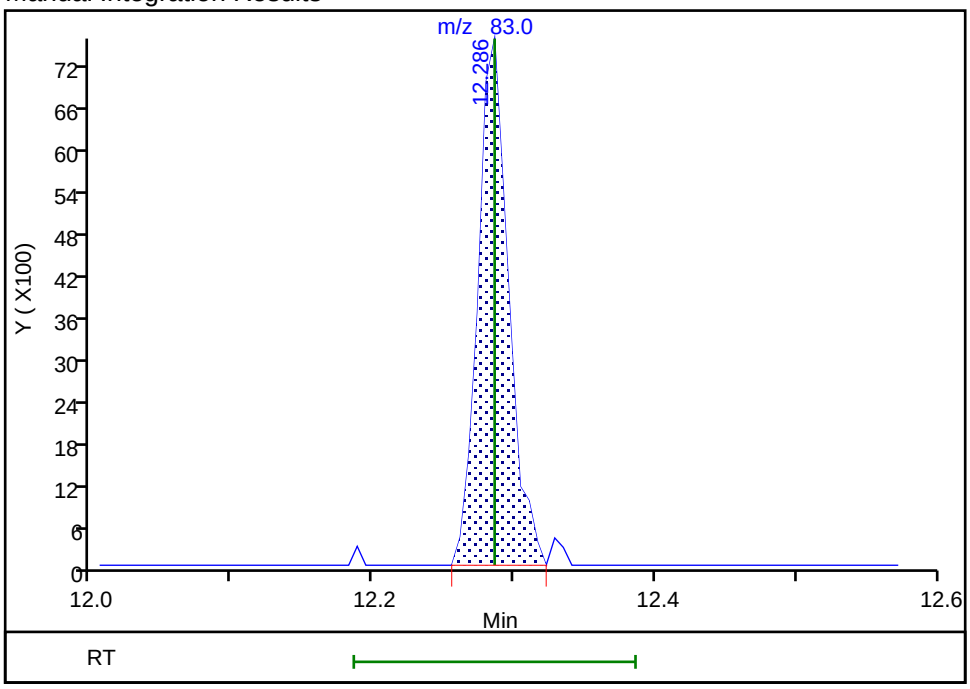
Not Detected
Expected RT: 12.29

Processing Integration Results



Manual Integration Results

RT: 12.29
Area: 11364
Amount: 0.185706
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 16:55:58
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

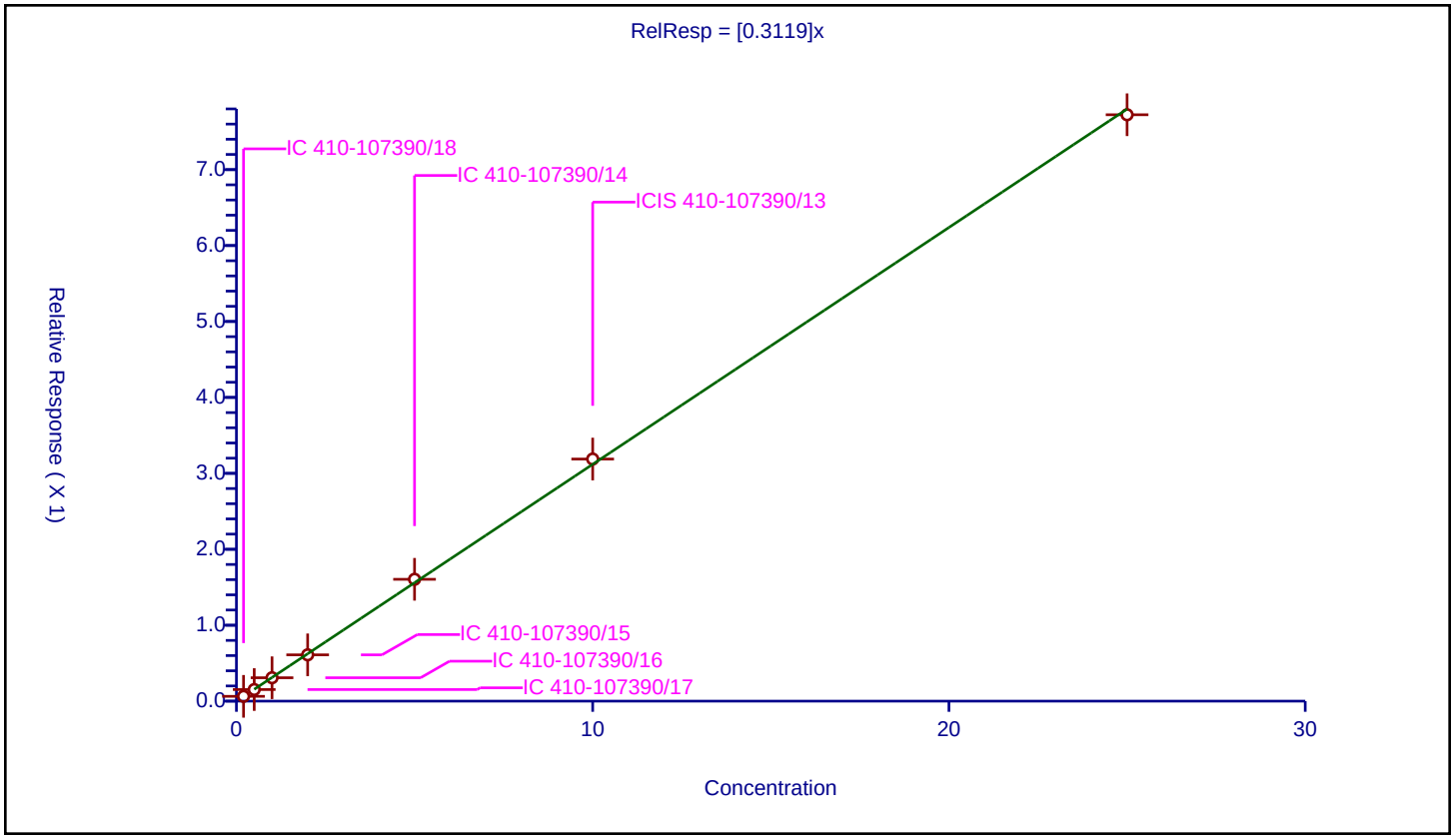
Curve Coefficients

Intercept:	0
Slope:	0.3119

Error Coefficients

Standard Error:	746000
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 410-107390/18	0.2	0.063224	10.0	2175128.0	0.316119	Y
2	IC 410-107390/17	0.5	0.152763	10.0	2170550.0	0.305526	Y
3	IC 410-107390/16	1.0	0.308149	10.0	2146917.0	0.308149	Y
4	IC 410-107390/15	2.0	0.609747	10.0	2156681.0	0.304874	Y
5	IC 410-107390/14	5.0	1.604764	10.0	2135112.0	0.320953	Y
6	ICIS 410-107390/13	10.0	3.188436	10.0	2148304.0	0.318844	Y
7	IC 410-107390/12	25.0	7.722831	10.0	2140113.0	0.308913	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

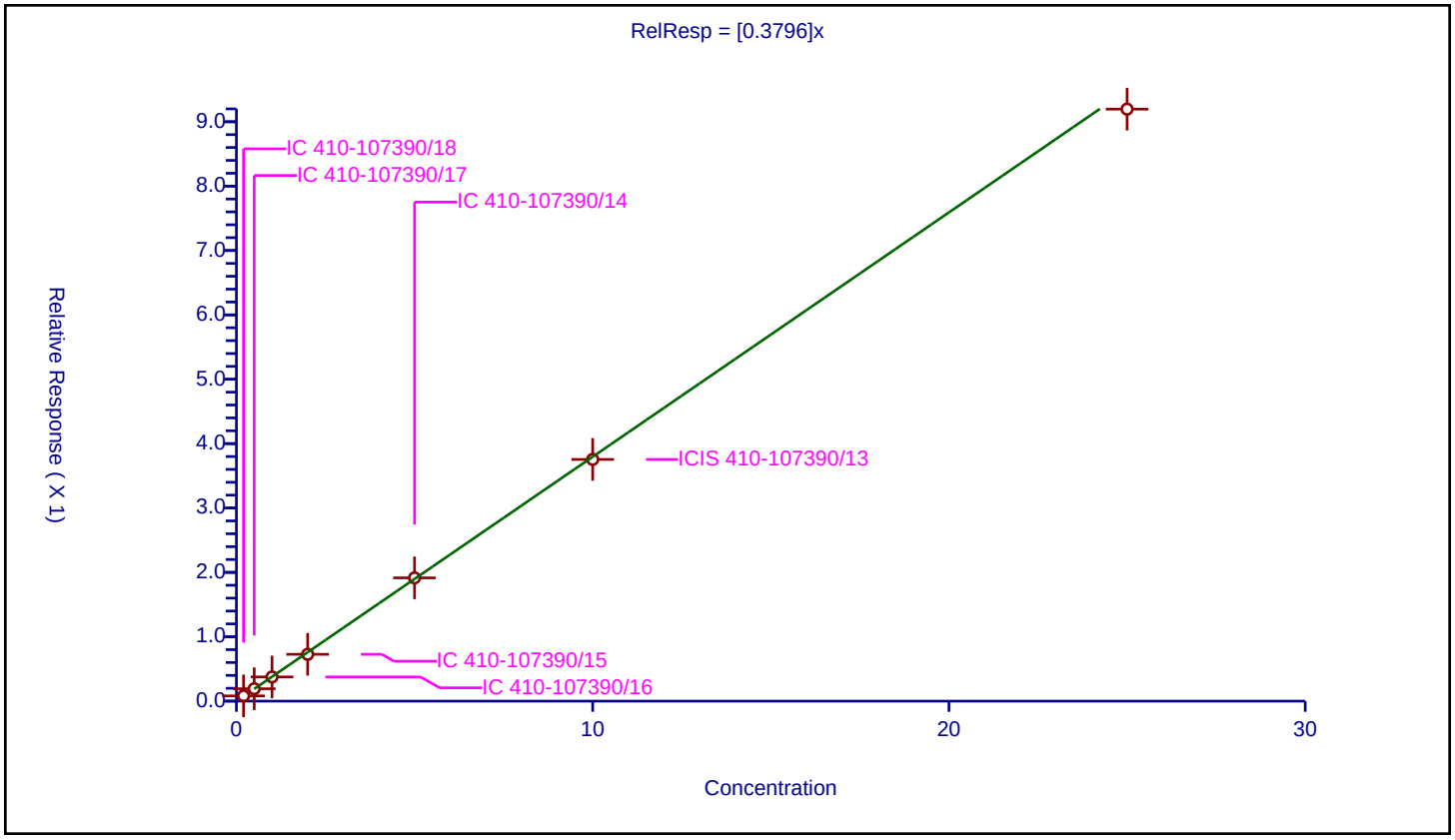
Curve Coefficients

Intercept:	0
Slope:	0.3796

Error Coefficients

Standard Error:	887000
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 410-107390/18	0.2	0.081255	10.0	2175128.0	0.406275	Y
2	IC 410-107390/17	0.5	0.192509	10.0	2170550.0	0.385018	Y
3	IC 410-107390/16	1.0	0.375757	10.0	2146917.0	0.375757	Y
4	IC 410-107390/15	2.0	0.727484	10.0	2156681.0	0.363742	Y
5	IC 410-107390/14	5.0	1.914864	10.0	2135112.0	0.382973	Y
6	ICIS 410-107390/13	10.0	3.754748	10.0	2148304.0	0.375475	Y
7	IC 410-107390/12	25.0	9.196248	10.0	2140113.0	0.36785	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

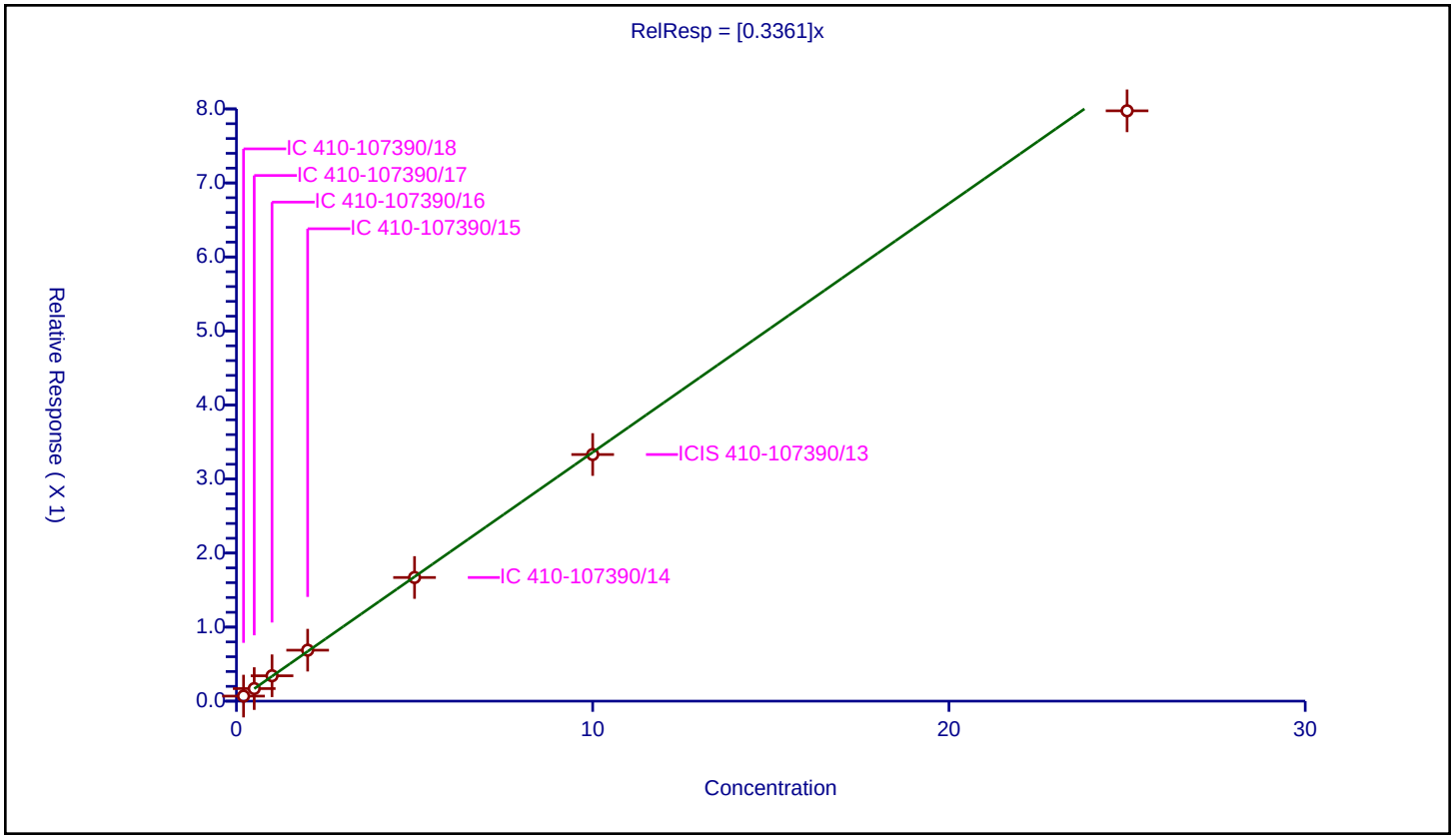
Curve Coefficients

Intercept:	0
Slope:	0.3361

Error Coefficients

Standard Error:	773000
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 410-107390/18	0.2	0.06812	10.0	2175128.0	0.340601	Y
2	IC 410-107390/17	0.5	0.169538	10.0	2170550.0	0.339075	Y
3	IC 410-107390/16	1.0	0.342649	10.0	2146917.0	0.342649	Y
4	IC 410-107390/15	2.0	0.688368	10.0	2156681.0	0.344184	Y
5	IC 410-107390/14	5.0	1.67009	10.0	2135112.0	0.334018	Y
6	ICIS 410-107390/13	10.0	3.331363	10.0	2148304.0	0.333136	Y
7	IC 410-107390/12	25.0	7.974009	10.0	2140113.0	0.31896	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

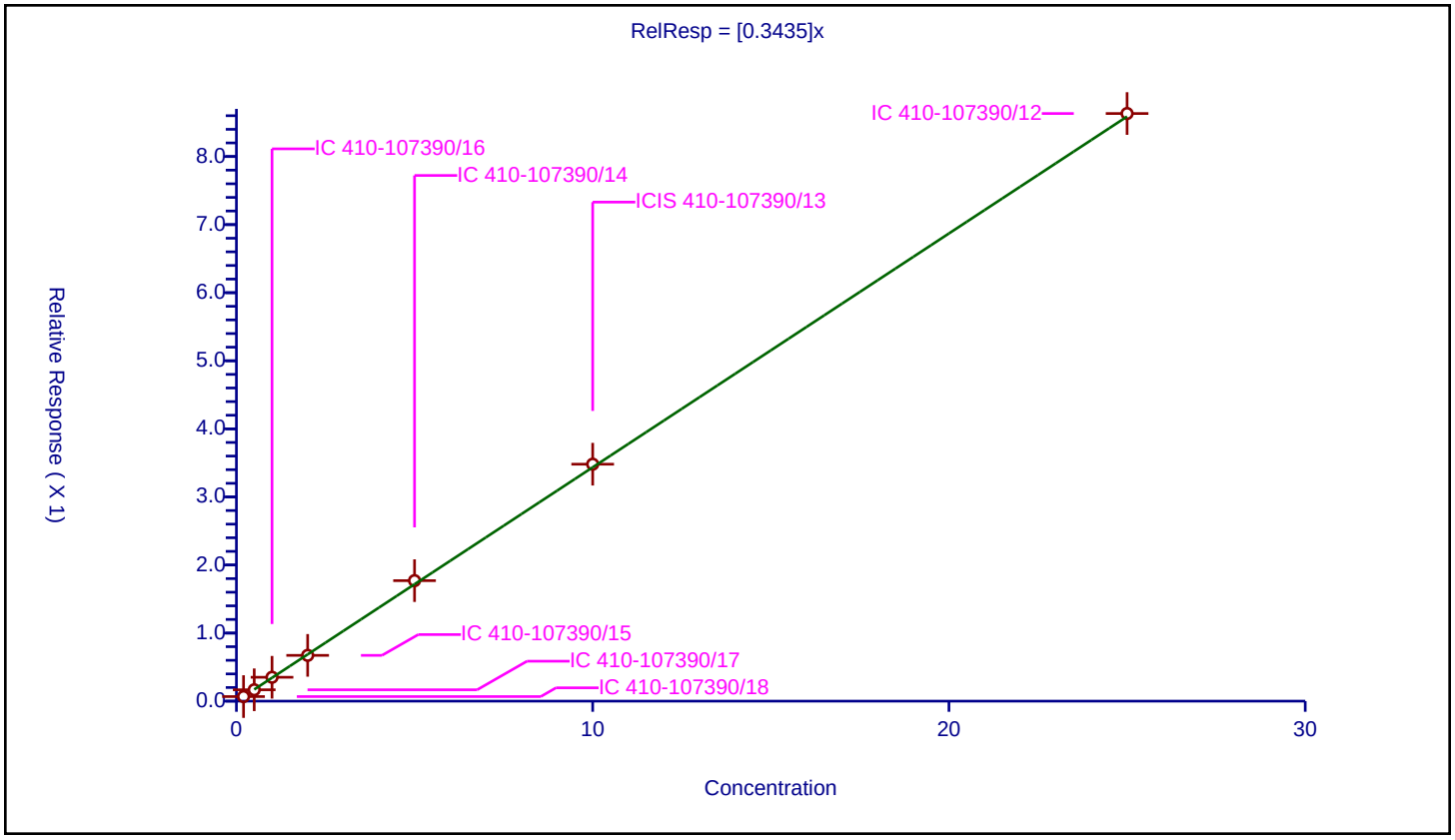
Curve Coefficients

Intercept:	0
Slope:	0.3435

Error Coefficients

Standard Error:	831000
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 410-107390/18	0.2	0.067247	10.0	2175128.0	0.336233	Y
2	IC 410-107390/17	0.5	0.166953	10.0	2170550.0	0.333906	Y
3	IC 410-107390/16	1.0	0.35088	10.0	2146917.0	0.35088	Y
4	IC 410-107390/15	2.0	0.672288	10.0	2156681.0	0.336144	Y
5	IC 410-107390/14	5.0	1.770272	10.0	2135112.0	0.354054	Y
6	ICIS 410-107390/13	10.0	3.480709	10.0	2148304.0	0.348071	Y
7	IC 410-107390/12	25.0	8.632072	10.0	2140113.0	0.345283	Y



Calibration / Bromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

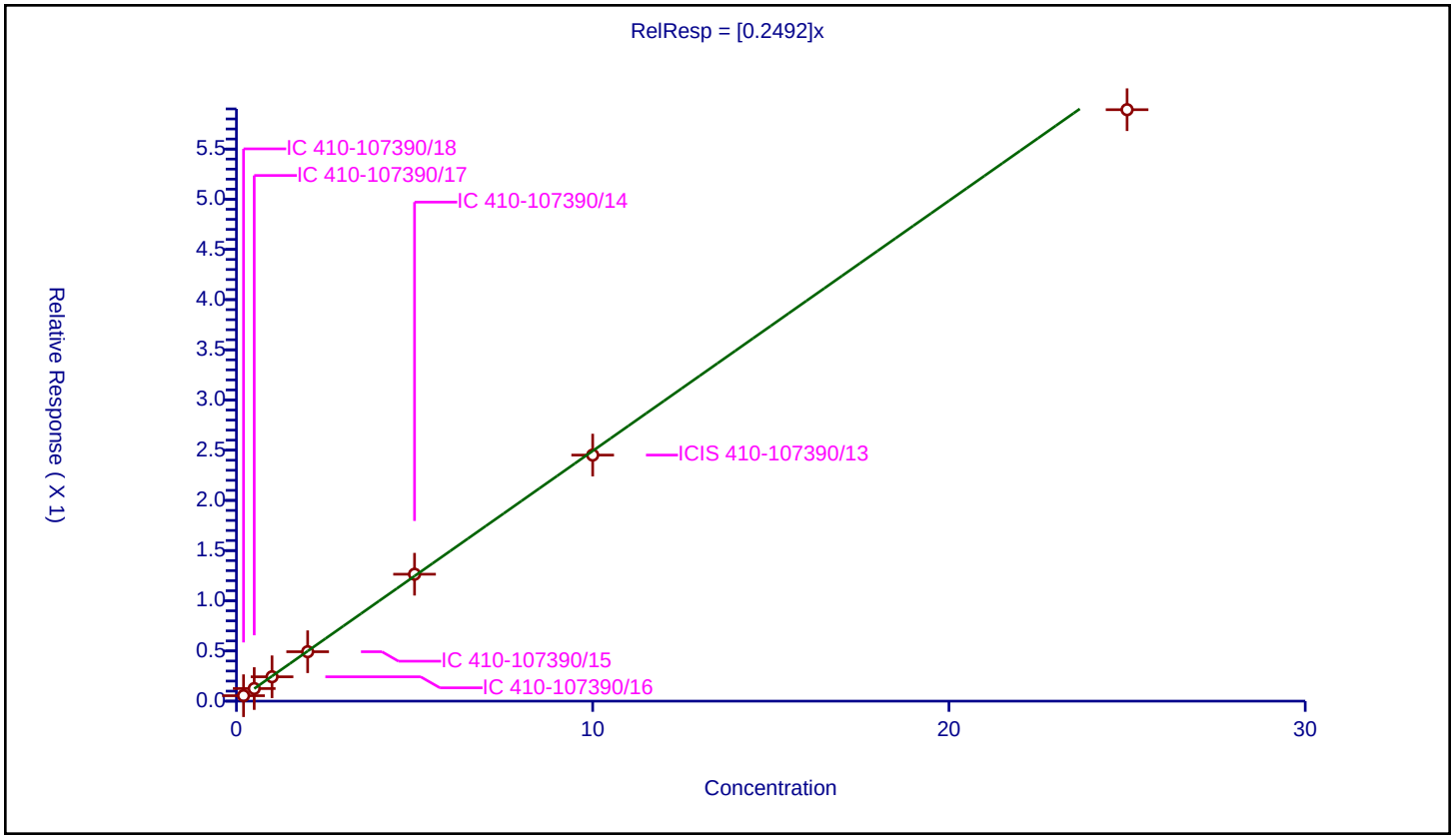
Curve Coefficients

Intercept:	0
Slope:	0.2492

Error Coefficients

Standard Error:	571000
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 410-107390/18	0.2	0.054222	10.0	2175128.0	0.27111	Y
2	IC 410-107390/17	0.5	0.125438	10.0	2170550.0	0.250877	Y
3	IC 410-107390/16	1.0	0.242771	10.0	2146917.0	0.242771	Y
4	IC 410-107390/15	2.0	0.492303	10.0	2156681.0	0.246151	Y
5	IC 410-107390/14	5.0	1.264514	10.0	2135112.0	0.252903	Y
6	ICIS 410-107390/13	10.0	2.451143	10.0	2148304.0	0.245114	Y
7	IC 410-107390/12	25.0	5.892058	10.0	2140113.0	0.235682	Y



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

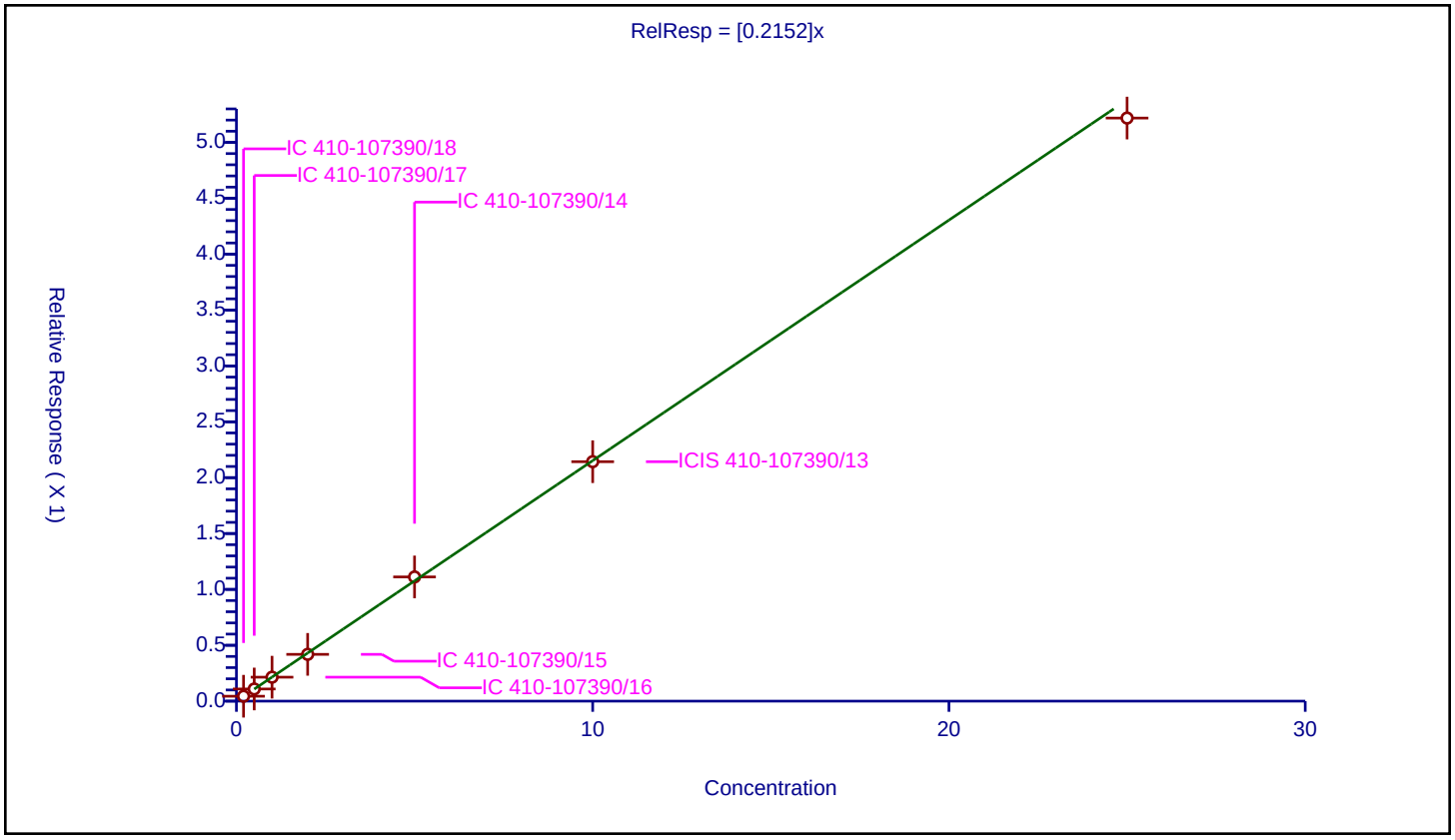
Curve Coefficients

Intercept:	0
Slope:	0.2152

Error Coefficients

Standard Error:	504000
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 410-107390/18	0.2	0.044034	10.0	2175128.0	0.220171	Y
2	IC 410-107390/17	0.5	0.108728	10.0	2170550.0	0.217456	Y
3	IC 410-107390/16	1.0	0.214303	10.0	2146917.0	0.214303	Y
4	IC 410-107390/15	2.0	0.418773	10.0	2156681.0	0.209387	Y
5	IC 410-107390/14	5.0	1.111469	10.0	2135112.0	0.222294	Y
6	ICIS 410-107390/13	10.0	2.142876	10.0	2148304.0	0.214288	Y
7	IC 410-107390/12	25.0	5.21807	10.0	2140113.0	0.208723	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

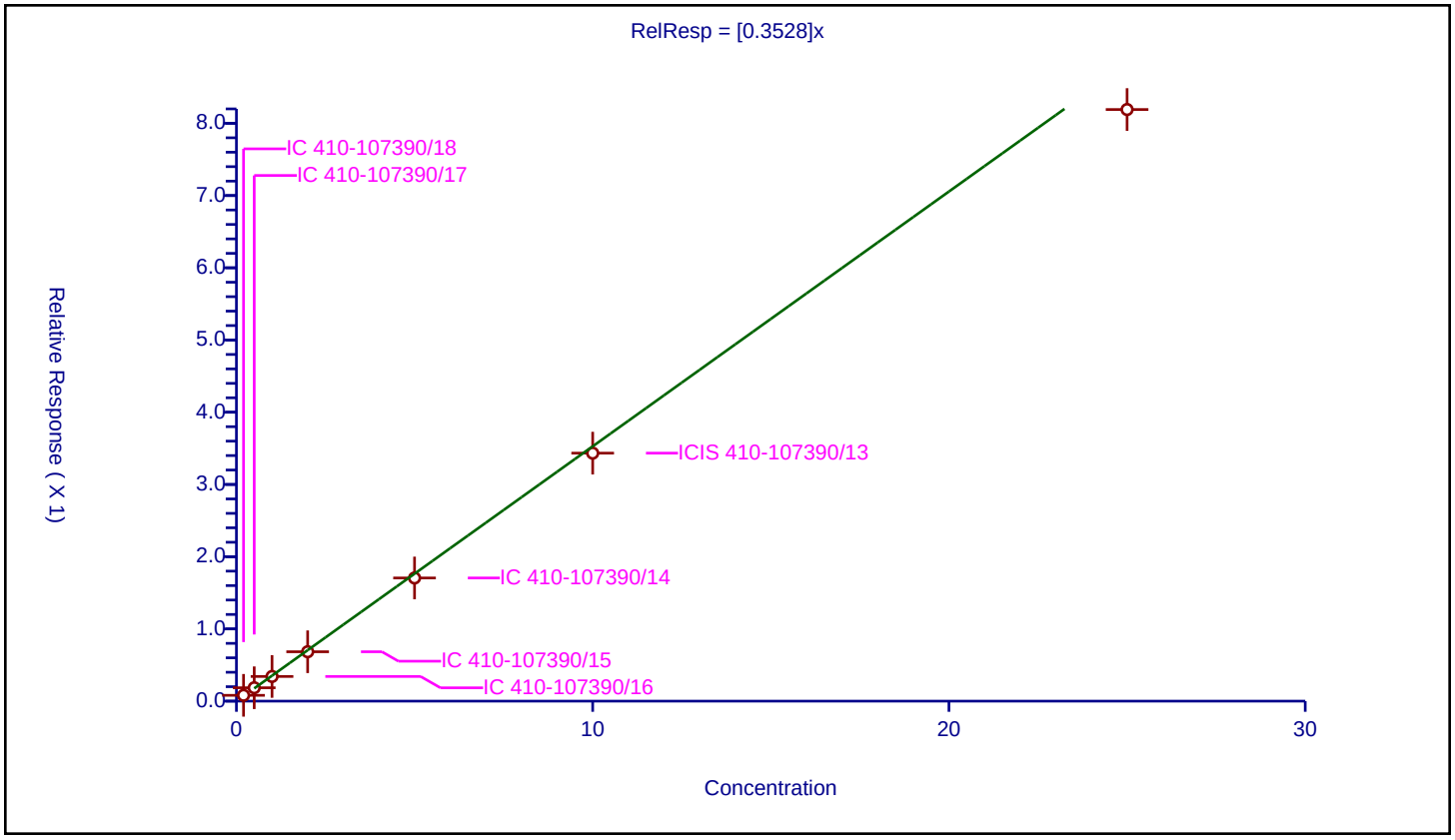
Curve Coefficients

Intercept:	0
Slope:	0.3528

Error Coefficients

Standard Error:	794000
Relative Standard Error:	7.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.080754	10.0	2175128.0	0.403769	Y
2	IC 410-107390/17	0.5	0.185156	10.0	2170550.0	0.370312	Y
3	IC 410-107390/16	1.0	0.341499	10.0	2146917.0	0.341499	Y
4	IC 410-107390/15	2.0	0.683703	10.0	2156681.0	0.341852	Y
5	IC 410-107390/14	5.0	1.705386	10.0	2135112.0	0.341077	Y
6	ICIS 410-107390/13	10.0	3.433648	10.0	2148304.0	0.343365	Y
7	IC 410-107390/12	25.0	8.191156	10.0	2140113.0	0.327646	Y



Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

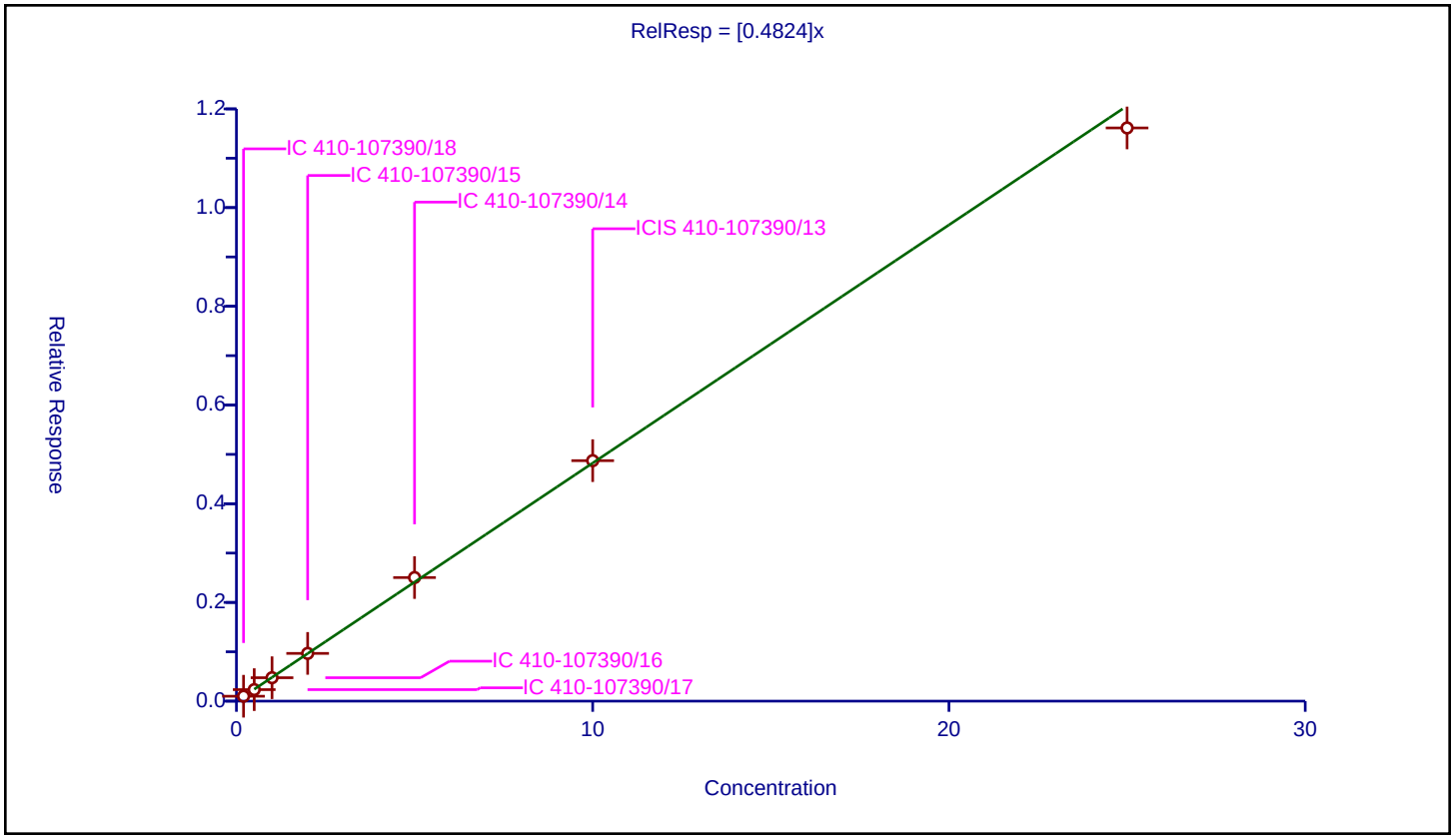
Curve Coefficients

Intercept:	0
Slope:	0.4824

Error Coefficients

Standard Error:	1130000
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 410-107390/18	0.2	0.0997	10.0	2175128.0	0.498499	Y
2	IC 410-107390/17	0.5	0.233563	10.0	2170550.0	0.467126	Y
3	IC 410-107390/16	1.0	0.474881	10.0	2146917.0	0.474881	Y
4	IC 410-107390/15	2.0	0.967542	10.0	2156681.0	0.483771	Y
5	IC 410-107390/14	5.0	2.504234	10.0	2135112.0	0.500847	Y
6	ICIS 410-107390/13	10.0	4.87269	10.0	2148304.0	0.487269	Y
7	IC 410-107390/12	25.0	11.614331	10.0	2140113.0	0.464573	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

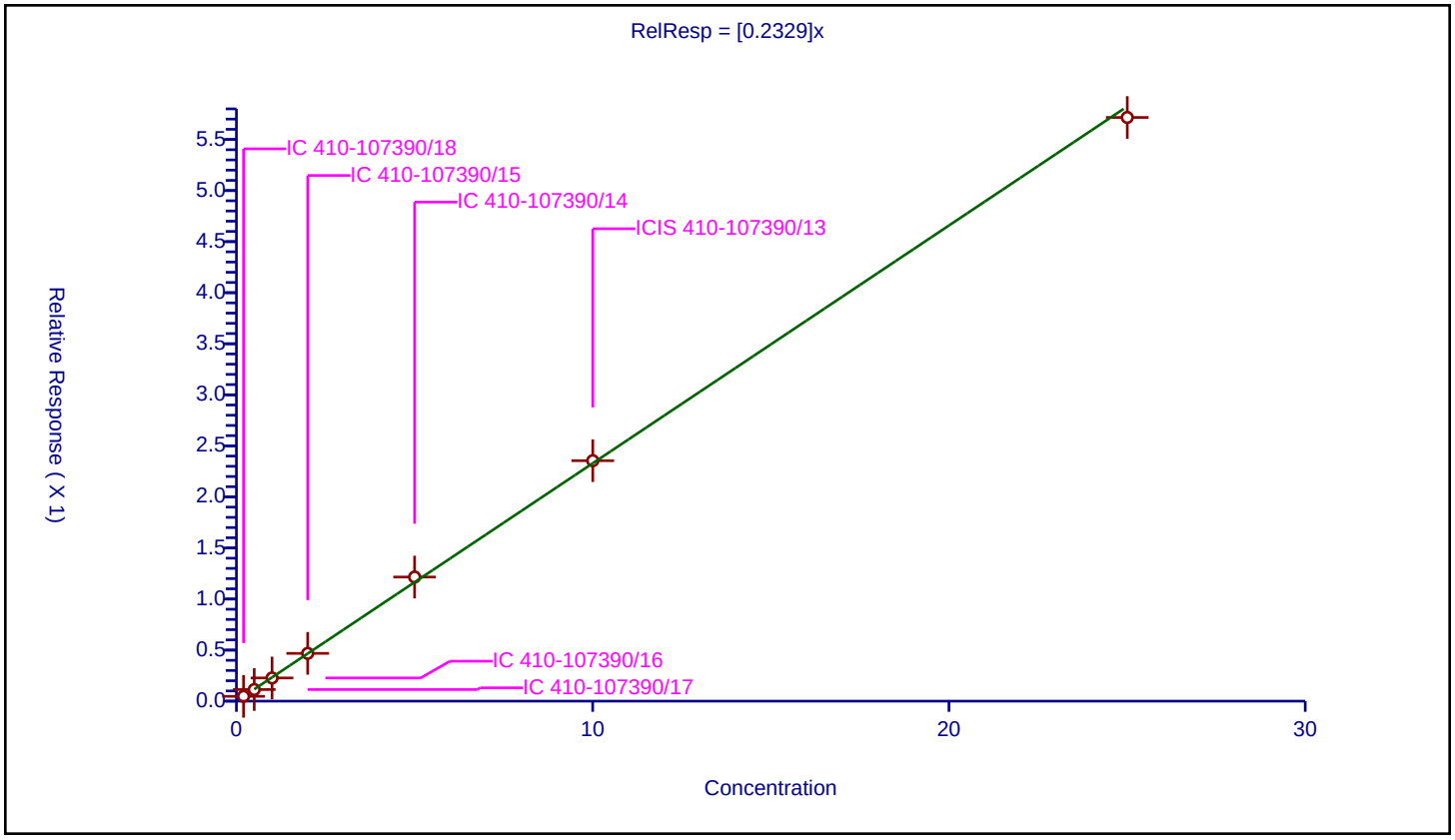
Curve Coefficients

Intercept:	0
Slope:	0.2329

Error Coefficients

Standard Error:	553000
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 410-107390/18	0.200043	0.047091	10.0	2175128.0	0.235407	Y
2	IC 410-107390/17	0.500108	0.113469	10.0	2170550.0	0.226889	Y
3	IC 410-107390/16	1.000215	0.22714	10.0	2146917.0	0.227091	Y
4	IC 410-107390/15	2.00043	0.467853	10.0	2156681.0	0.233876	Y
5	IC 410-107390/14	5.001075	1.215266	10.0	2135112.0	0.243001	Y
6	ICIS 410-107390/13	10.00215	2.354927	10.0	2148304.0	0.235442	Y
7	IC 410-107390/12	25.005375	5.716053	10.0	2140113.0	0.228593	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

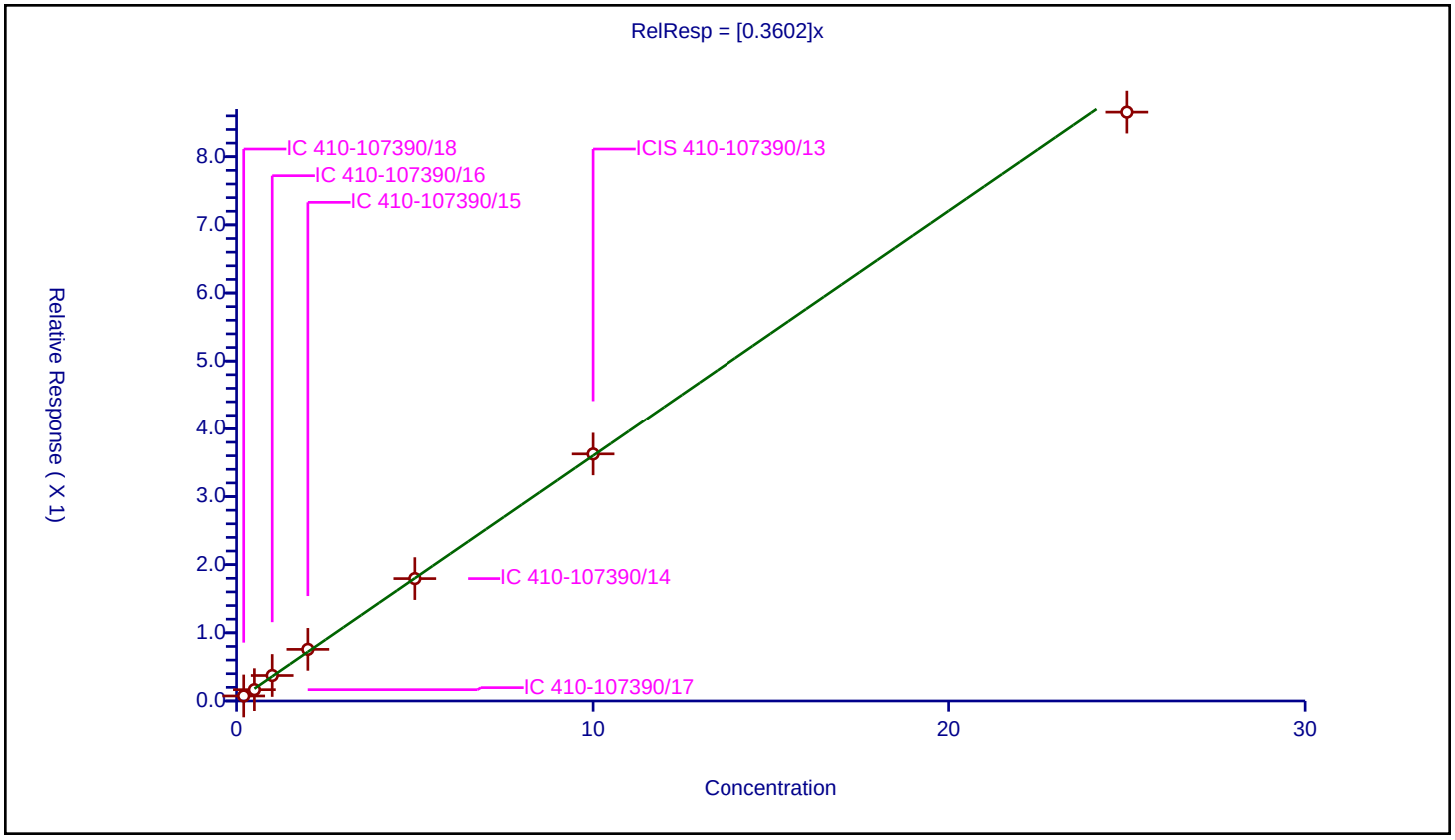
Curve Coefficients

Intercept:	0
Slope:	0.3602

Error Coefficients

Standard Error:	839000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.073899	10.0	2175128.0	0.369495	Y
2	IC 410-107390/17	0.5	0.165898	10.0	2170550.0	0.331796	Y
3	IC 410-107390/16	1.0	0.373787	10.0	2146917.0	0.373787	Y
4	IC 410-107390/15	2.0	0.757312	10.0	2156681.0	0.378656	Y
5	IC 410-107390/14	5.0	1.795606	10.0	2135112.0	0.359121	Y
6	ICIS 410-107390/13	10.0	3.626656	10.0	2148304.0	0.362666	Y
7	IC 410-107390/12	25.0	8.654454	10.0	2140113.0	0.346178	Y



Calibration / Acrolein

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

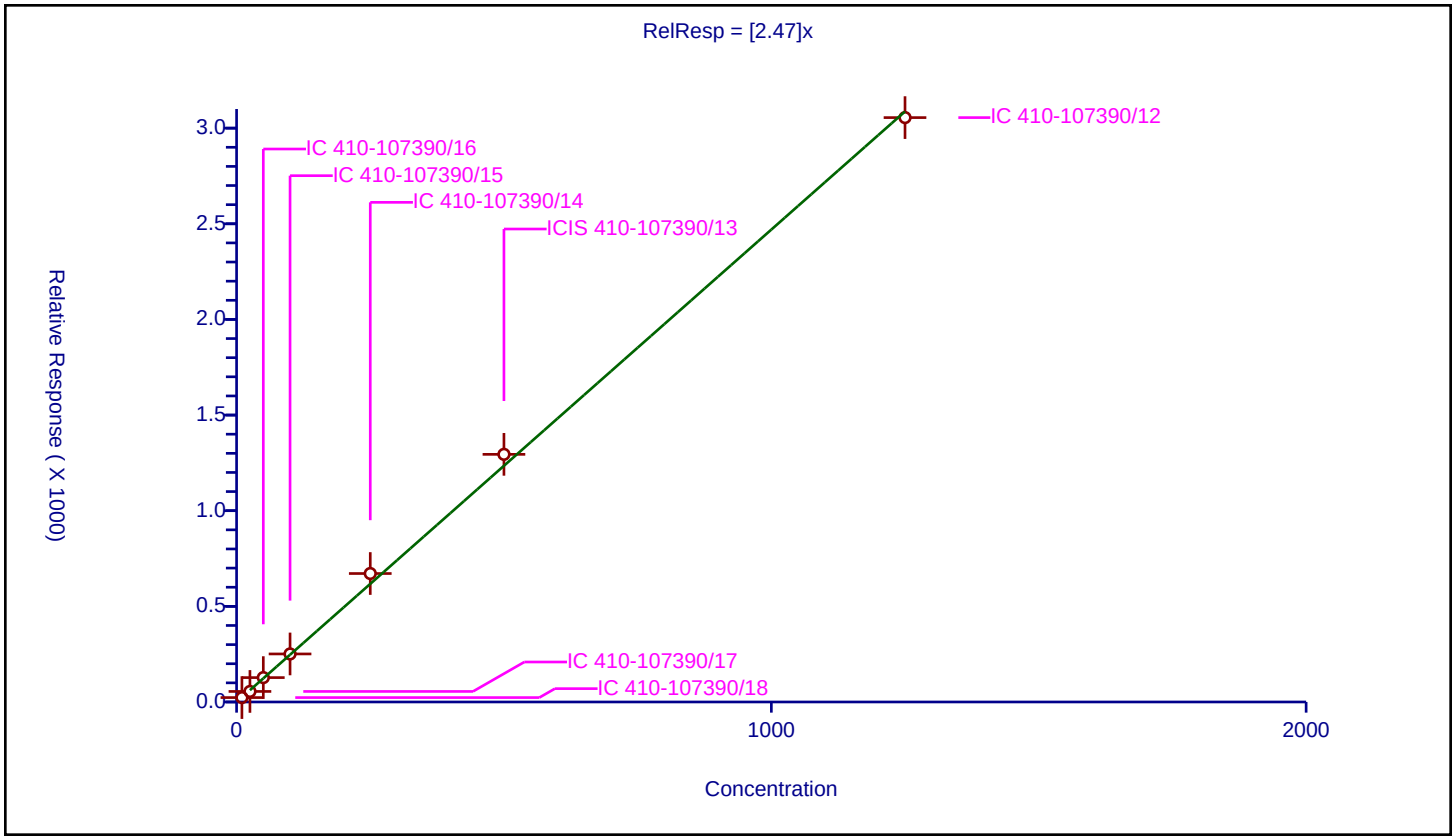
Curve Coefficients

Intercept:	0
Slope:	2.47

Error Coefficients

Standard Error:	4390000
Relative Standard Error:	6.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	9.999544	23.007519	50.0	175560.0	2.300857	Y
2	IC 410-107390/17	24.998861	55.152256	50.0	186889.0	2.206191	Y
3	IC 410-107390/16	49.997722	127.427118	50.0	165165.0	2.548658	Y
4	IC 410-107390/15	99.995444	251.184236	50.0	167112.0	2.511957	Y
5	IC 410-107390/14	249.988611	671.637921	50.0	152718.0	2.686674	Y
6	ICIS 410-107390/13	499.977222	1294.678096	50.0	155217.0	2.589474	Y
7	IC 410-107390/12	1249.943055	3055.118462	50.0	158827.0	2.444206	Y



Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

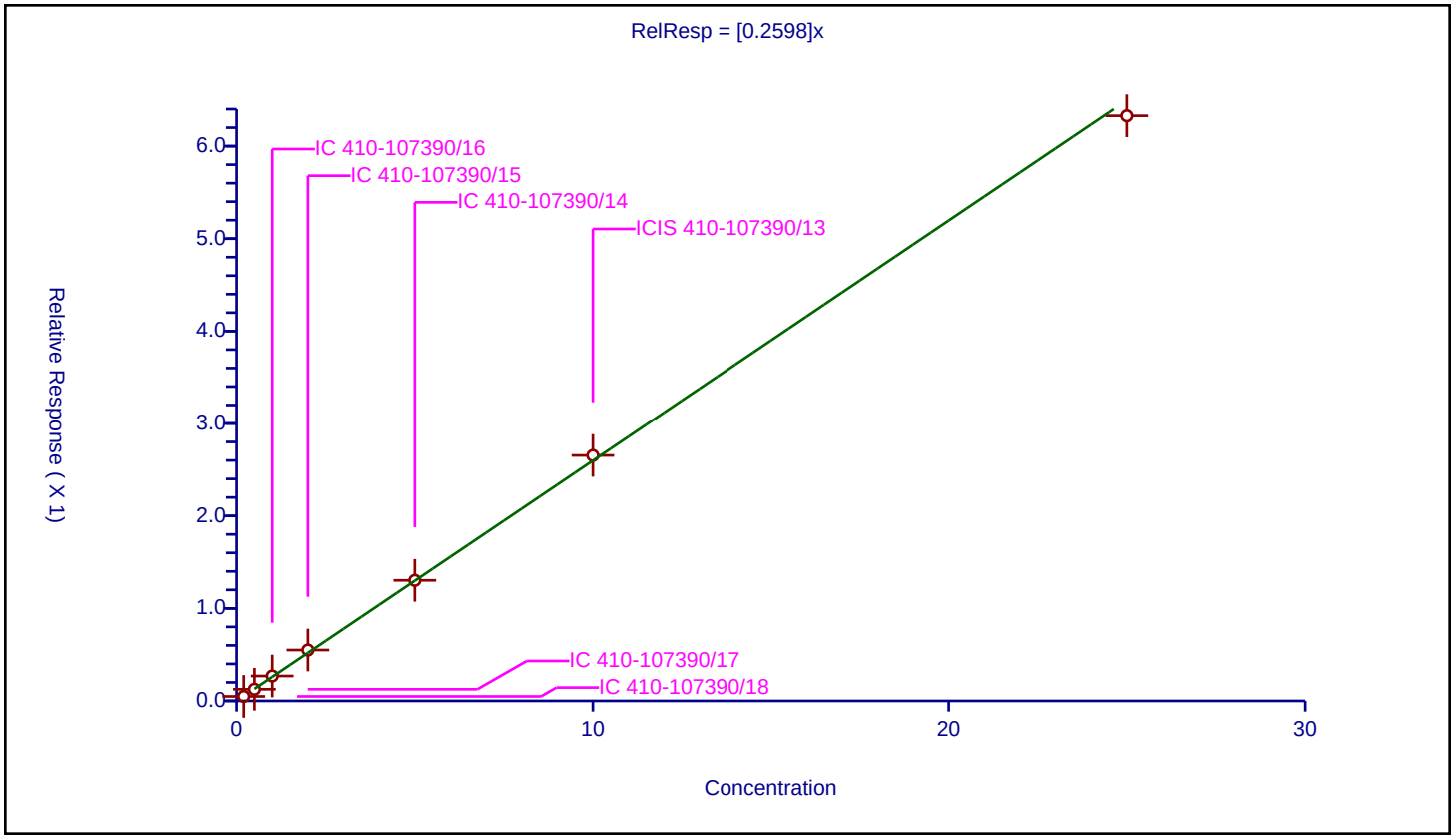
Curve Coefficients

Intercept:	0
Slope:	0.2598

Error Coefficients

Standard Error:	613000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.048627	10.0	2175128.0	0.243135	Y
2	IC 410-107390/17	0.5	0.12594	10.0	2170550.0	0.251881	Y
3	IC 410-107390/16	1.0	0.269354	10.0	2146917.0	0.269354	Y
4	IC 410-107390/15	2.0	0.550095	10.0	2156681.0	0.275048	Y
5	IC 410-107390/14	5.0	1.303276	10.0	2135112.0	0.260655	Y
6	ICIS 410-107390/13	10.0	2.654312	10.0	2148304.0	0.265431	Y
7	IC 410-107390/12	25.0	6.328287	10.0	2140113.0	0.253131	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

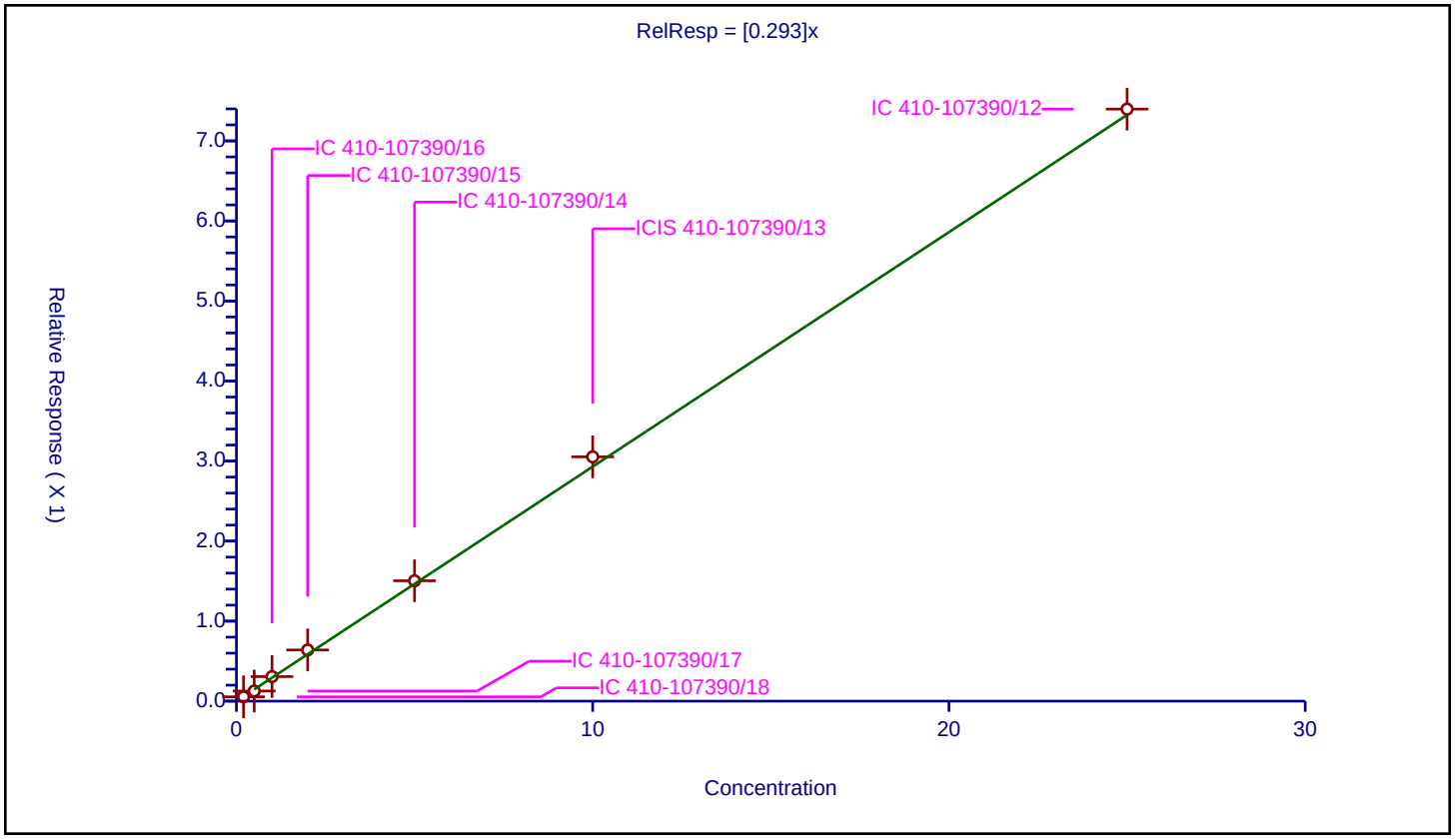
Curve Coefficients

Intercept:	0
Slope:	0.293

Error Coefficients

Standard Error:	715000
Relative Standard Error:	8.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.053937	10.0	2175128.0	0.269685	Y
2	IC 410-107390/17	0.5	0.126489	10.0	2170550.0	0.252977	Y
3	IC 410-107390/16	1.0	0.306514	10.0	2146917.0	0.306514	Y
4	IC 410-107390/15	2.0	0.639561	10.0	2156681.0	0.319781	Y
5	IC 410-107390/14	5.0	1.503916	10.0	2135112.0	0.300783	Y
6	ICIS 410-107390/13	10.0	3.052627	10.0	2148304.0	0.305263	Y
7	IC 410-107390/12	25.0	7.397465	10.0	2140113.0	0.295899	Y



Calibration / Acetone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

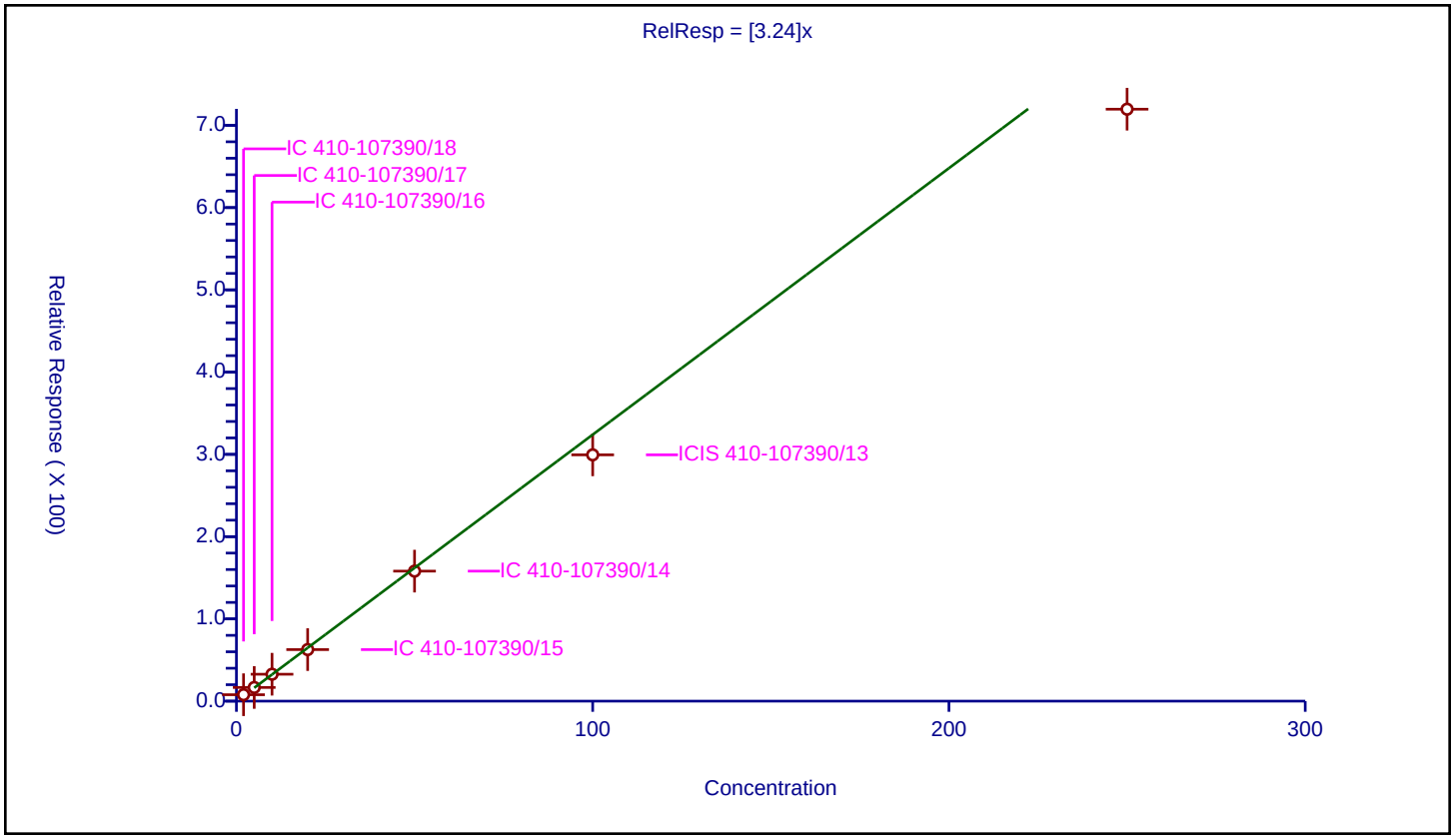
Curve Coefficients

Intercept:	0
Slope:	3.24

Error Coefficients

Standard Error:	1030000
Relative Standard Error:	10.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.983

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	2.0	7.818979	50.0	175560.0	3.90949	Y
2	IC 410-107390/17	5.0	16.641964	50.0	186889.0	3.328393	Y
3	IC 410-107390/16	10.0	32.713347	50.0	165165.0	3.271335	Y
4	IC 410-107390/15	20.0	62.681914	50.0	167112.0	3.134096	Y
5	IC 410-107390/14	50.0	158.057007	50.0	152718.0	3.16114	Y
6	ICIS 410-107390/13	100.0	299.426609	50.0	155217.0	2.994266	Y
7	IC 410-107390/12	250.0	719.632052	50.0	158827.0	2.878528	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

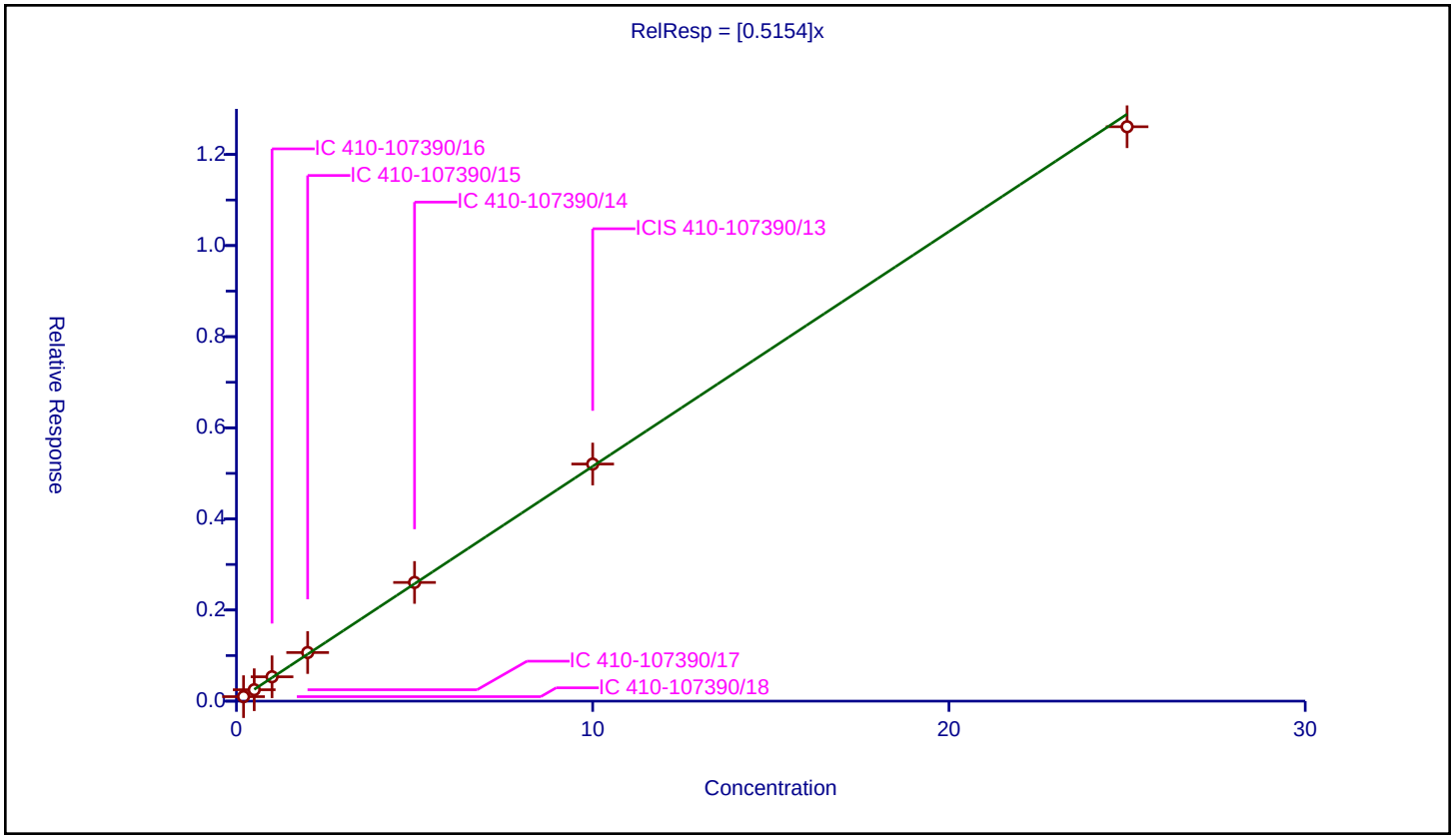
Curve Coefficients

Intercept:	0
Slope:	0.5154

Error Coefficients

Standard Error:	1220000
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 410-107390/18	0.2	0.09867	10.0	2175128.0	0.49335	Y
2	IC 410-107390/17	0.5	0.250301	10.0	2170550.0	0.500601	Y
3	IC 410-107390/16	1.0	0.534557	10.0	2146917.0	0.534557	Y
4	IC 410-107390/15	2.0	1.06675	10.0	2156681.0	0.533375	Y
5	IC 410-107390/14	5.0	2.605236	10.0	2135112.0	0.521047	Y
6	ICIS 410-107390/13	10.0	5.204734	10.0	2148304.0	0.520473	Y
7	IC 410-107390/12	25.0	12.608372	10.0	2140113.0	0.504335	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

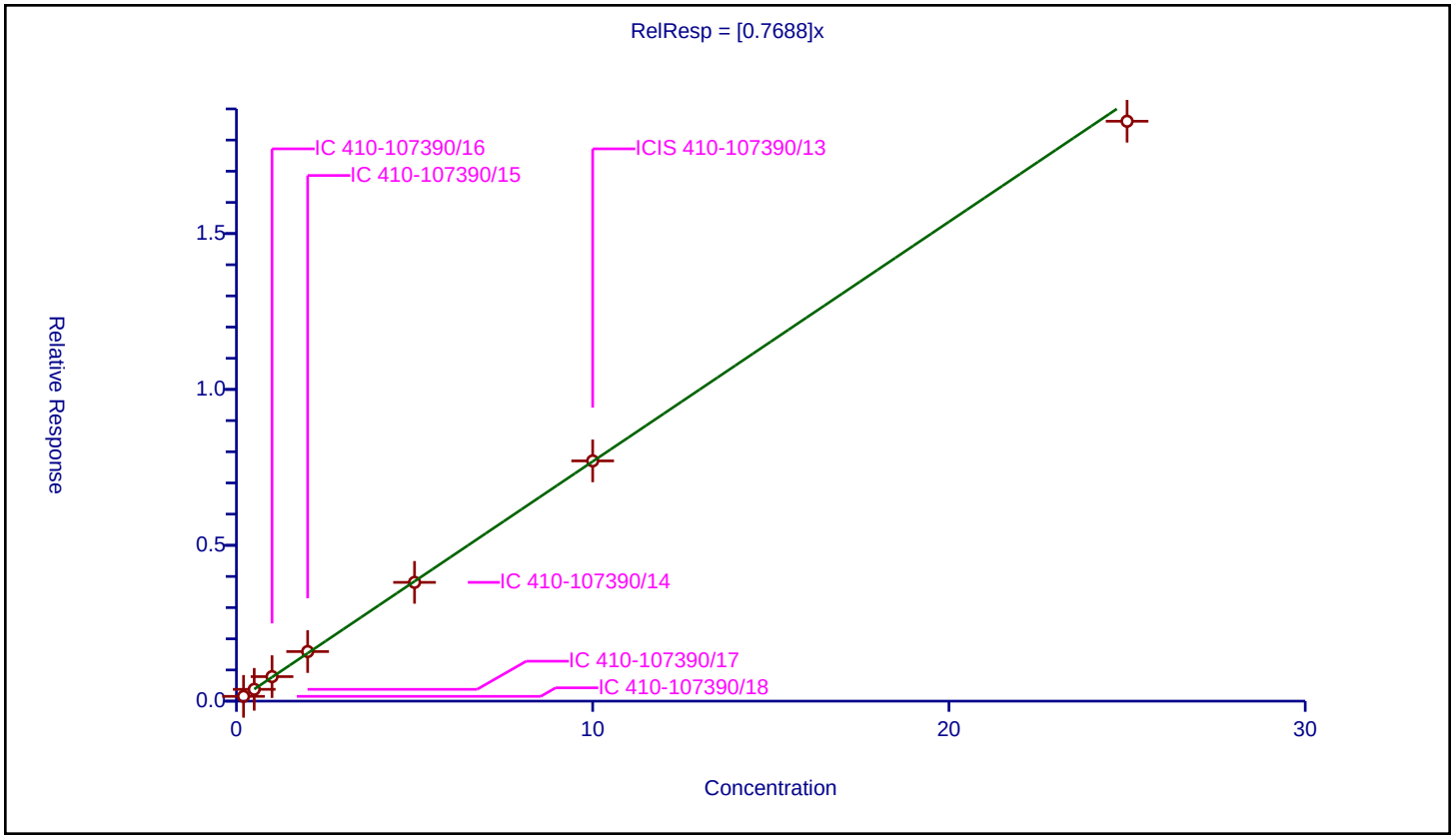
Curve Coefficients

Intercept:	0
Slope:	0.7688

Error Coefficients

Standard Error:	1800000
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 410-107390/18	0.2	0.153104	10.0	2175128.0	0.765518	Y
2	IC 410-107390/17	0.5	0.378839	10.0	2170550.0	0.757679	Y
3	IC 410-107390/16	1.0	0.78656	10.0	2146917.0	0.78656	Y
4	IC 410-107390/15	2.0	1.590309	10.0	2156681.0	0.795155	Y
5	IC 410-107390/14	5.0	3.810428	10.0	2135112.0	0.762086	Y
6	ICIS 410-107390/13	10.0	7.70755	10.0	2148304.0	0.770755	Y
7	IC 410-107390/12	25.0	18.604209	10.0	2140113.0	0.744168	Y



Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

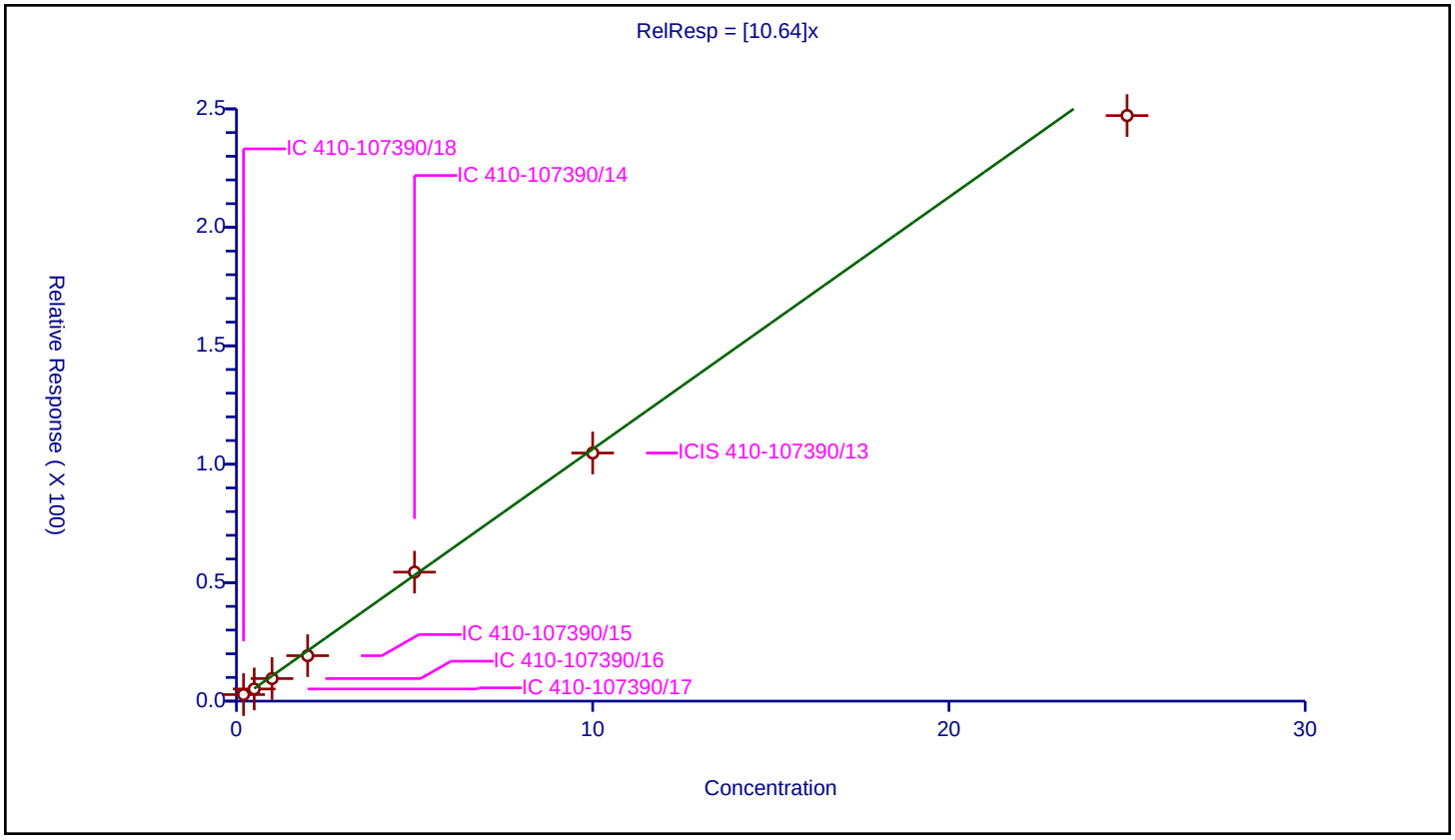
Curve Coefficients

Intercept:	0
Slope:	10.64

Error Coefficients

Standard Error:	355000
Relative Standard Error:	14.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.969

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	2.766006	50.0	175560.0	13.83003	Y
2	IC 410-107390/17	0.5	5.130853	50.0	186889.0	10.261706	Y
3	IC 410-107390/16	1.0	9.526231	50.0	165165.0	9.526231	Y
4	IC 410-107390/15	2.0	19.183542	50.0	167112.0	9.591771	Y
5	IC 410-107390/14	5.0	54.45789	50.0	152718.0	10.891578	Y
6	ICIS 410-107390/13	10.0	104.740782	50.0	155217.0	10.474078	Y
7	IC 410-107390/12	25.0	247.179006	50.0	158827.0	9.88716	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

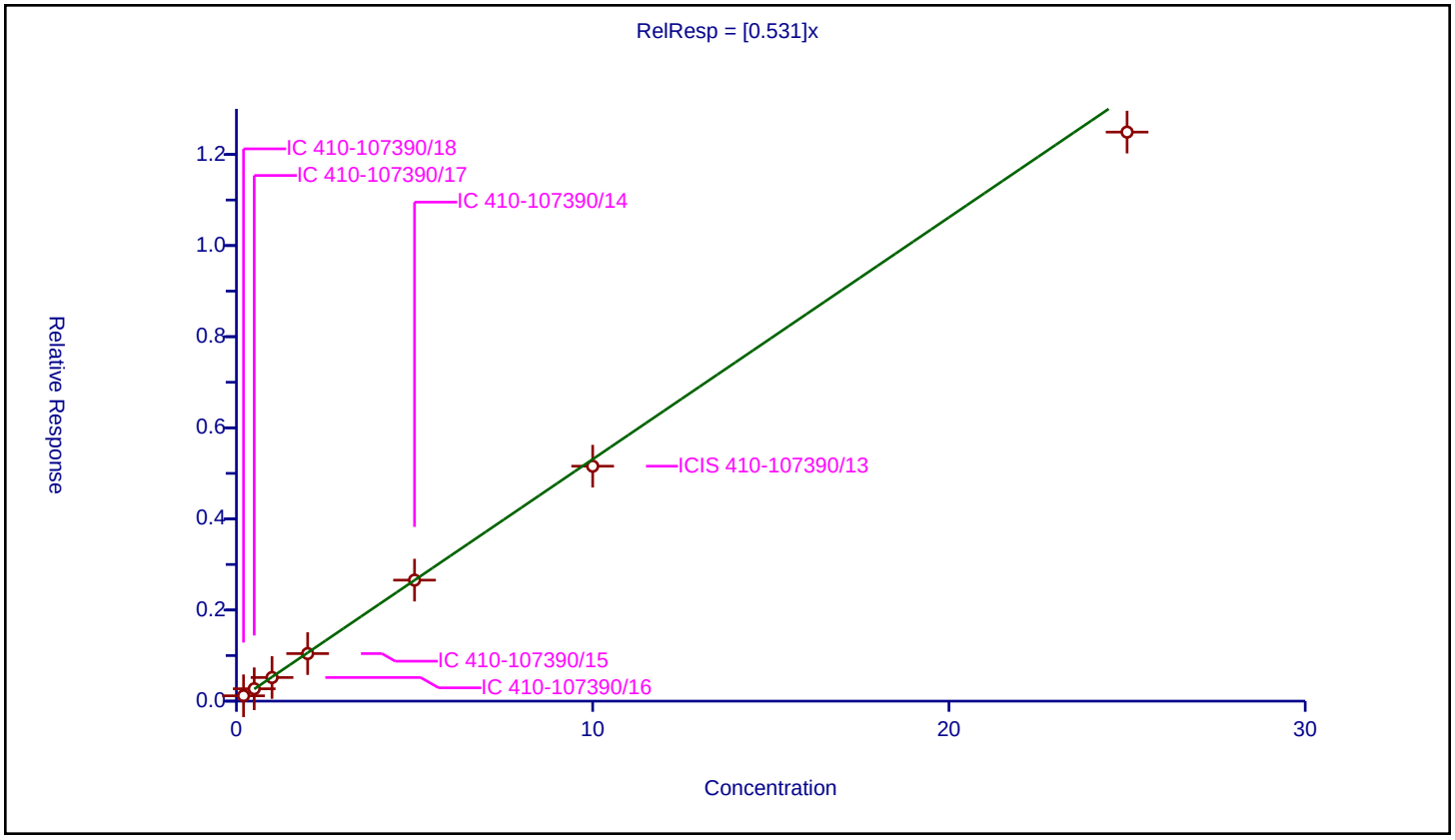
Curve Coefficients

Intercept:	0
Slope:	0.531

Error Coefficients

Standard Error:	1210000
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 410-107390/18	0.2	0.117271	10.0	2175128.0	0.586356	Y
2	IC 410-107390/17	0.5	0.271521	10.0	2170550.0	0.543042	Y
3	IC 410-107390/16	1.0	0.518818	10.0	2146917.0	0.518818	Y
4	IC 410-107390/15	2.0	1.043641	10.0	2156681.0	0.52182	Y
5	IC 410-107390/14	5.0	2.656432	10.0	2135112.0	0.531286	Y
6	ICIS 410-107390/13	10.0	5.157296	10.0	2148304.0	0.51573	Y
7	IC 410-107390/12	25.0	12.490668	10.0	2140113.0	0.499627	Y



Calibration / Methylene Chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

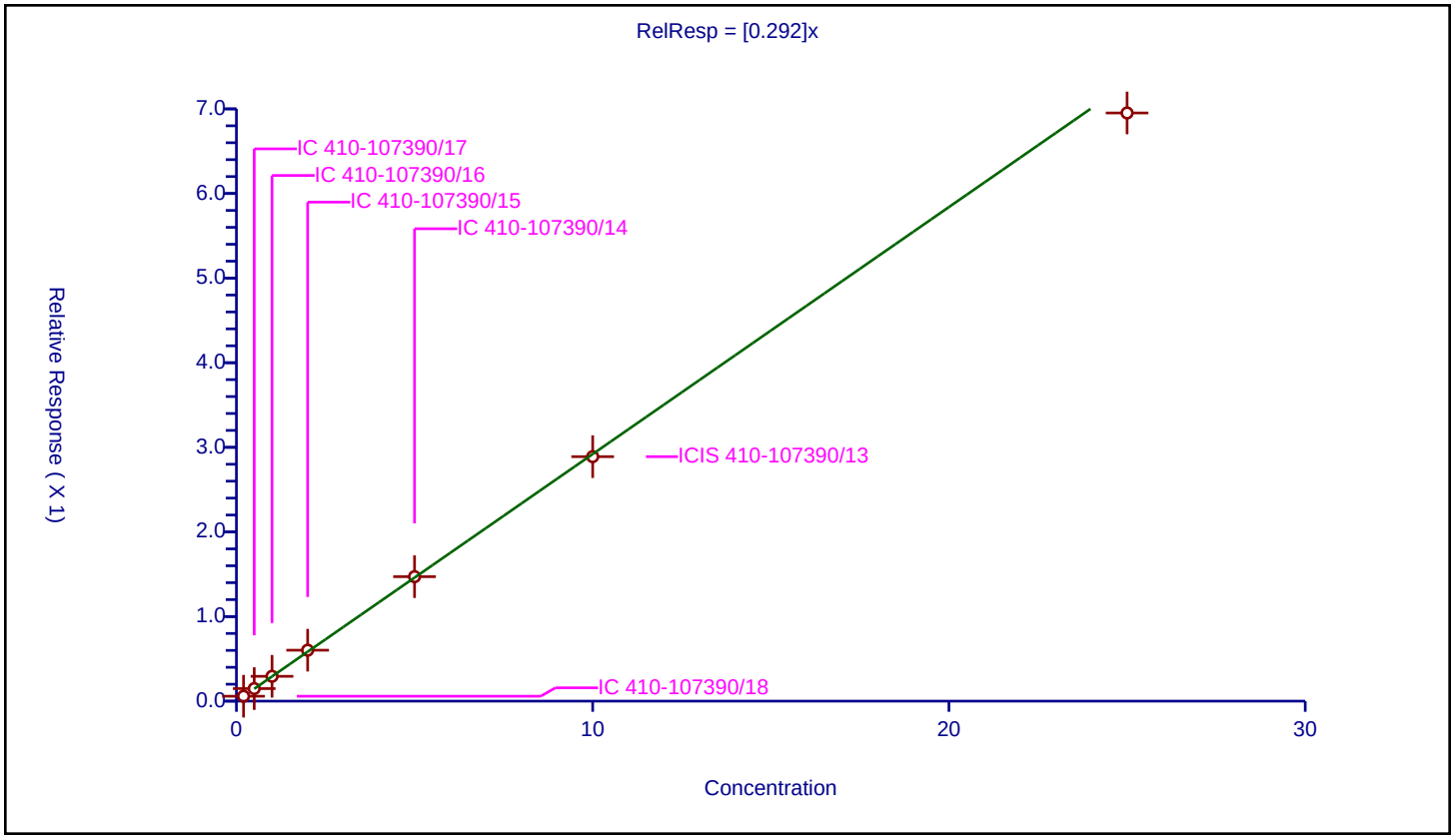
Curve Coefficients

Intercept:	0
Slope:	0.292

Error Coefficients

Standard Error:	673000
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 410-107390/18	0.2	0.058199	10.0	2175128.0	0.290994	Y
2	IC 410-107390/17	0.5	0.148506	10.0	2170550.0	0.297012	Y
3	IC 410-107390/16	1.0	0.293607	10.0	2146917.0	0.293607	Y
4	IC 410-107390/15	2.0	0.602152	10.0	2156681.0	0.301076	Y
5	IC 410-107390/14	5.0	1.471127	10.0	2135112.0	0.294225	Y
6	ICIS 410-107390/13	10.0	2.889628	10.0	2148304.0	0.288963	Y
7	IC 410-107390/12	25.0	6.951979	10.0	2140113.0	0.278079	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

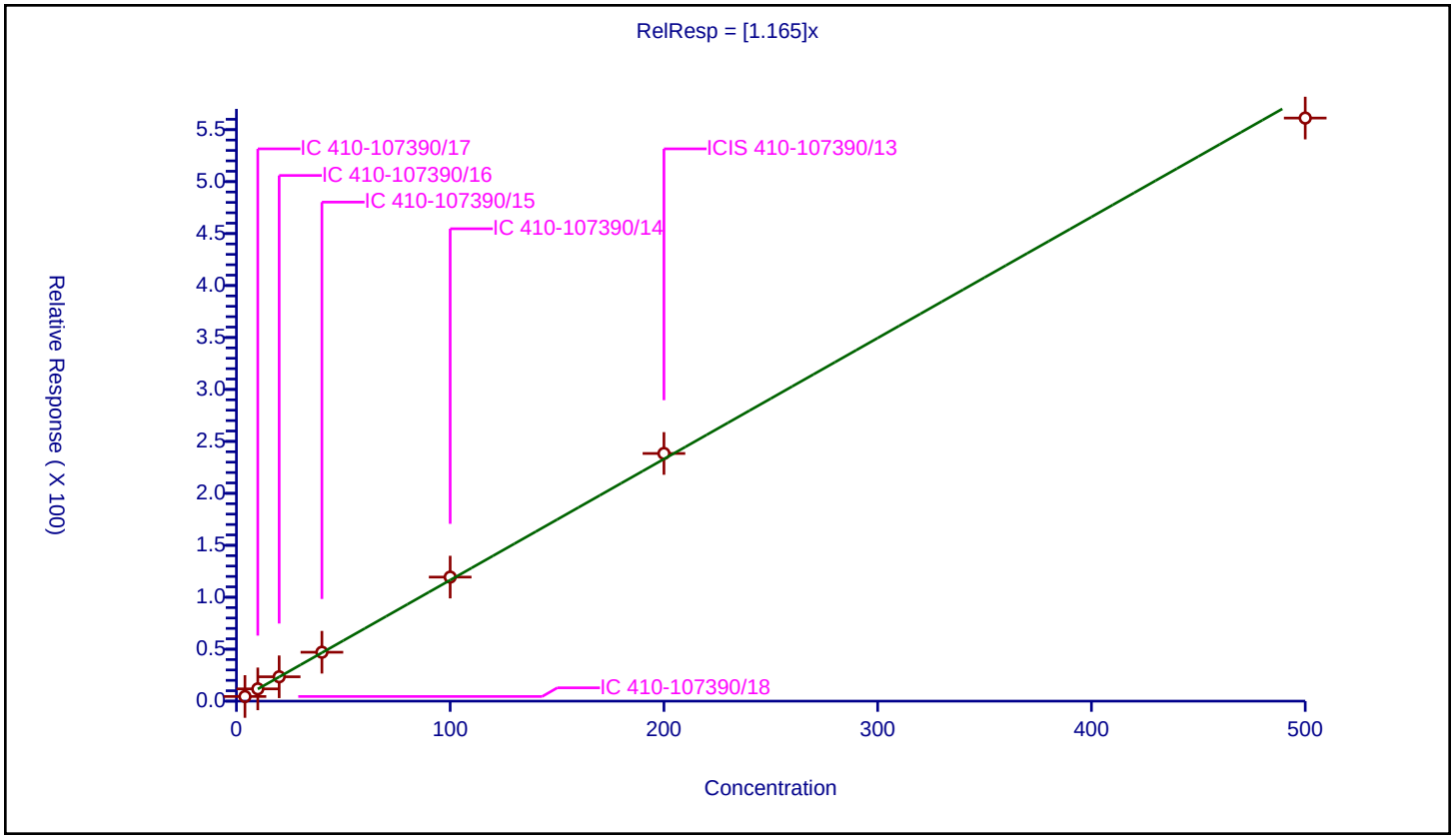
Curve Coefficients

Intercept:	0
Slope:	1.165

Error Coefficients

Standard Error:	805000
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 410-107390/18	4.0	4.471121	50.0	175560.0	1.11778	Y
2	IC 410-107390/17	10.0	11.795237	50.0	186889.0	1.179524	Y
3	IC 410-107390/16	20.0	23.448067	50.0	165165.0	1.172403	Y
4	IC 410-107390/15	40.0	47.074417	50.0	167112.0	1.17686	Y
5	IC 410-107390/14	100.0	119.389005	50.0	152718.0	1.19389	Y
6	ICIS 410-107390/13	200.0	238.37724	50.0	155217.0	1.191886	Y
7	IC 410-107390/12	500.0	561.170015	50.0	158827.0	1.12234	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

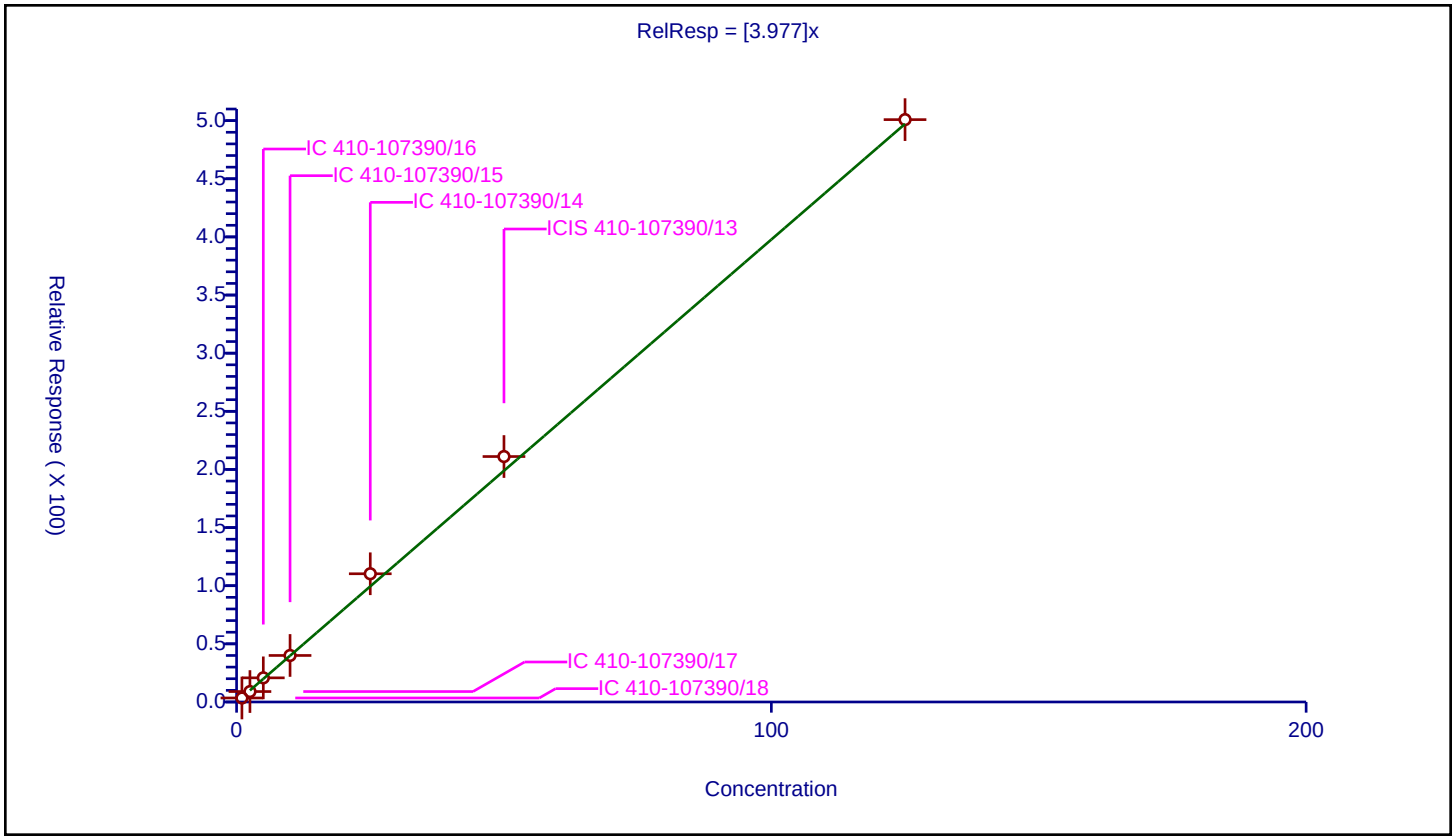
Curve Coefficients

Intercept:	0
Slope:	3.977

Error Coefficients

Standard Error:	718000
Relative Standard Error:	8.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	1.0	3.459786	50.0	175560.0	3.459786	Y
2	IC 410-107390/17	2.5	8.9711	50.0	186889.0	3.58844	Y
3	IC 410-107390/16	5.0	20.757122	50.0	165165.0	4.151424	Y
4	IC 410-107390/15	10.0	40.019269	50.0	167112.0	4.001927	Y
5	IC 410-107390/14	25.0	110.288571	50.0	152718.0	4.411543	Y
6	ICIS 410-107390/13	50.0	211.111863	50.0	155217.0	4.222237	Y
7	IC 410-107390/12	125.0	500.879573	50.0	158827.0	4.007037	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

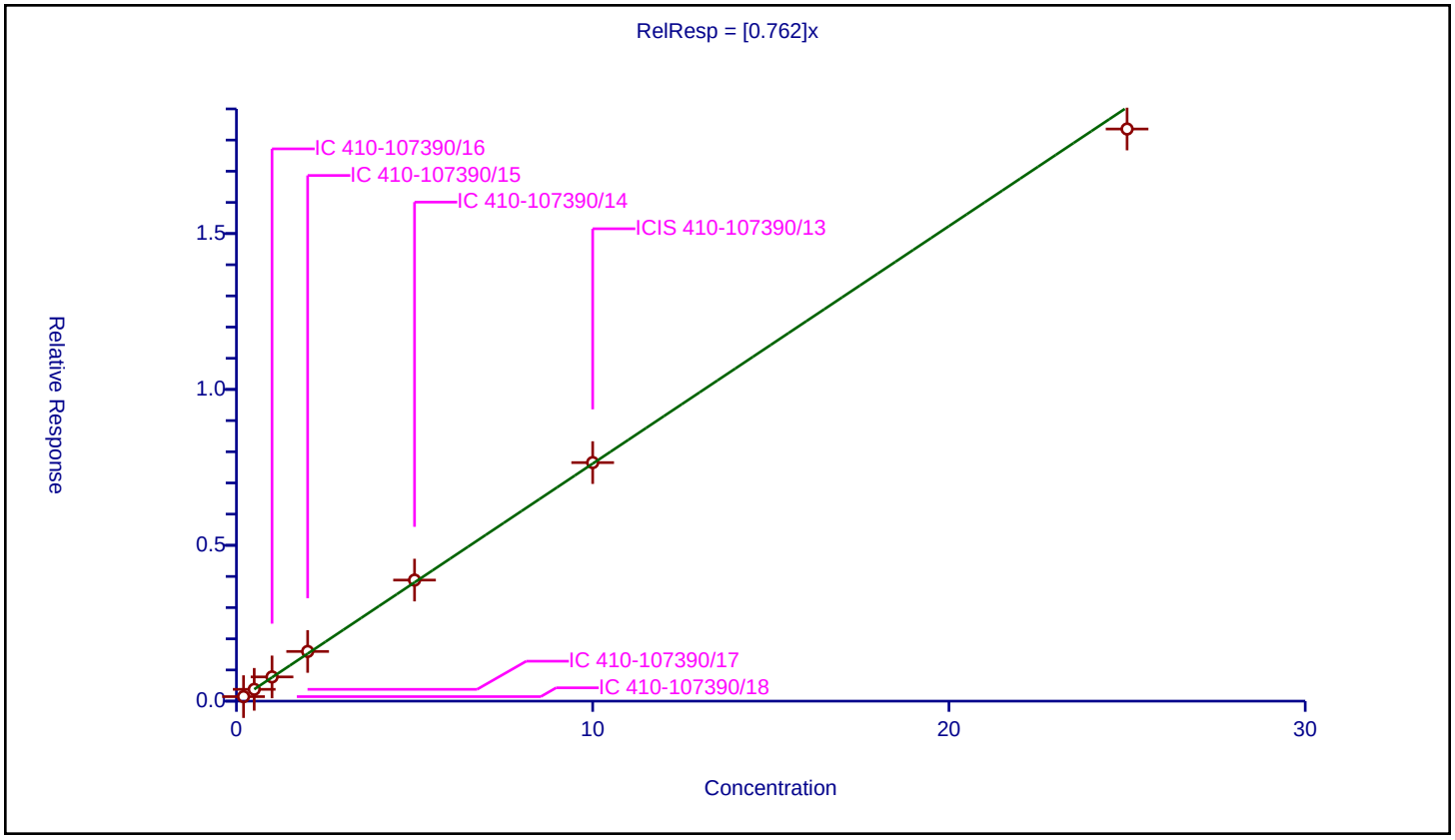
Curve Coefficients

Intercept:	0
Slope:	0.762

Error Coefficients

Standard Error:	1780000
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 410-107390/18	0.2	0.145122	10.0	2175128.0	0.725612	Y
2	IC 410-107390/17	0.5	0.378591	10.0	2170550.0	0.757181	Y
3	IC 410-107390/16	1.0	0.77752	10.0	2146917.0	0.77752	Y
4	IC 410-107390/15	2.0	1.594186	10.0	2156681.0	0.797093	Y
5	IC 410-107390/14	5.0	3.884129	10.0	2135112.0	0.776826	Y
6	ICIS 410-107390/13	10.0	7.652986	10.0	2148304.0	0.765299	Y
7	IC 410-107390/12	25.0	18.354867	10.0	2140113.0	0.734195	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

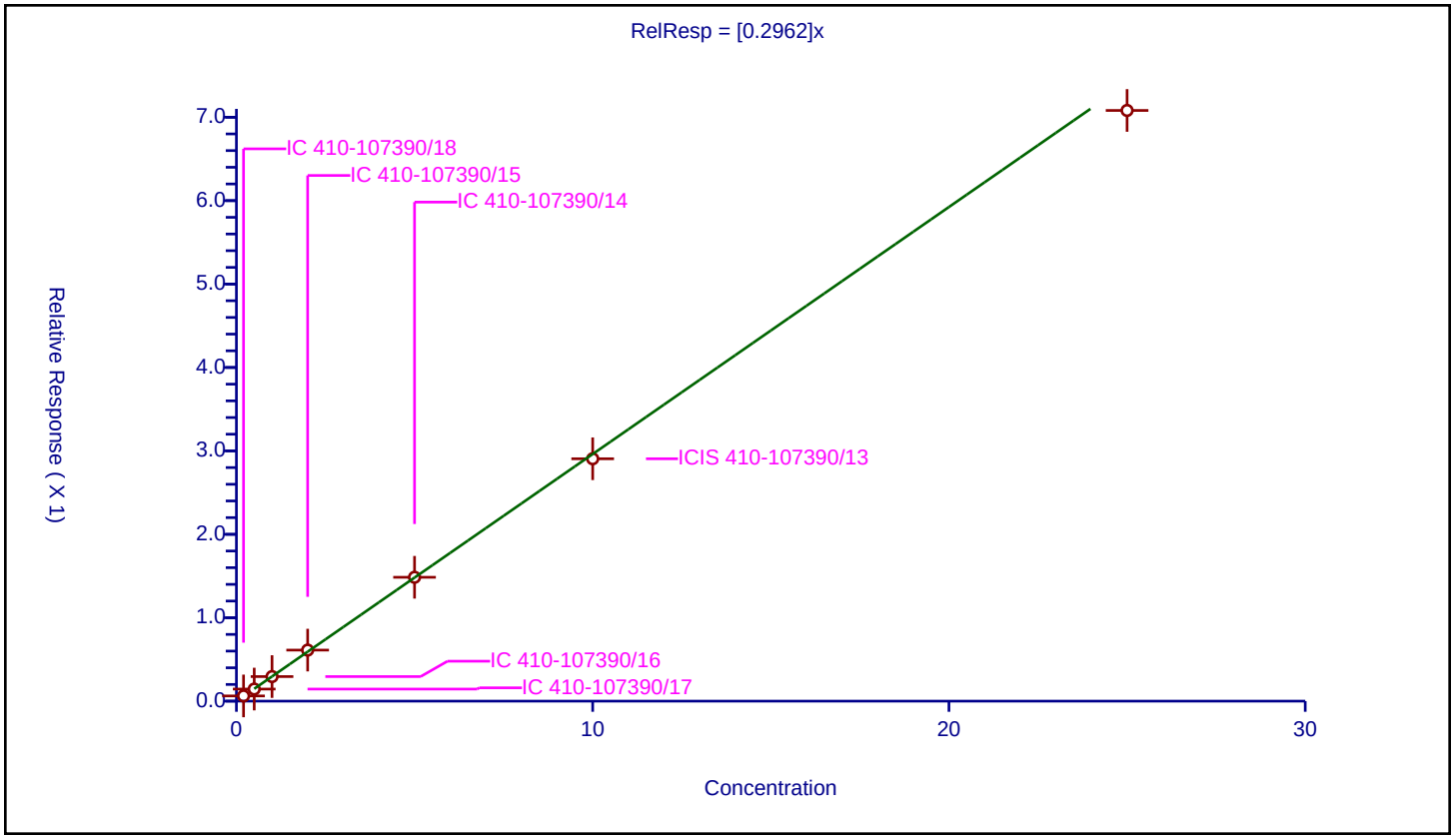
Curve Coefficients

Intercept:	0
Slope:	0.2962

Error Coefficients

Standard Error:	684000
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 410-107390/18	0.2	0.062456	10.0	2175128.0	0.31228	Y
2	IC 410-107390/17	0.5	0.144894	10.0	2170550.0	0.289788	Y
3	IC 410-107390/16	1.0	0.294464	10.0	2146917.0	0.294464	Y
4	IC 410-107390/15	2.0	0.61194	10.0	2156681.0	0.30597	Y
5	IC 410-107390/14	5.0	1.48484	10.0	2135112.0	0.296968	Y
6	ICIS 410-107390/13	10.0	2.905646	10.0	2148304.0	0.290565	Y
7	IC 410-107390/12	25.0	7.081187	10.0	2140113.0	0.283247	Y



Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

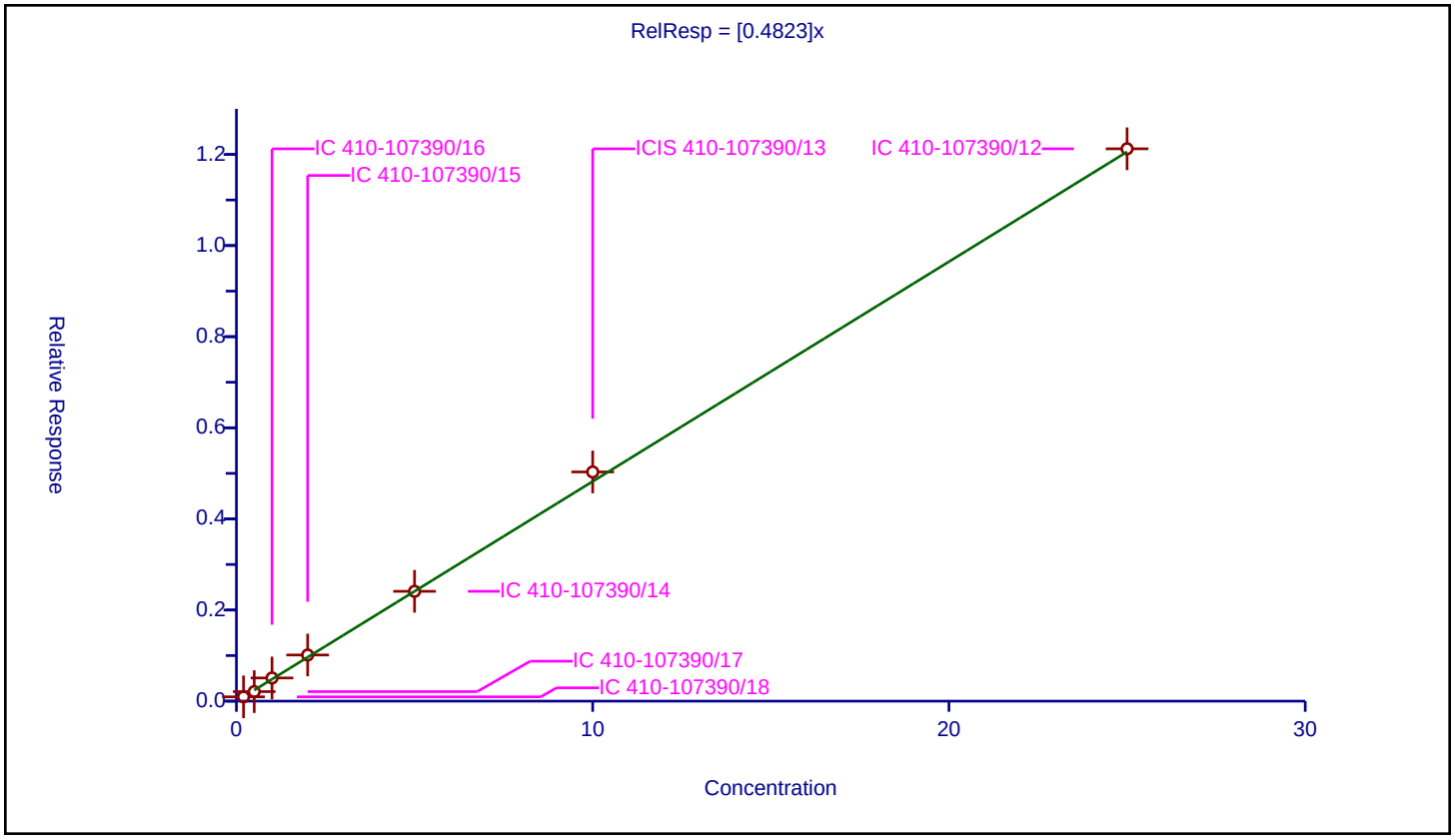
Curve Coefficients

Intercept:	0
Slope:	0.4823

Error Coefficients

Standard Error:	1170000
Relative Standard Error:	6.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.094477	10.0	2175128.0	0.472386	Y
2	IC 410-107390/17	0.5	0.20909	10.0	2170550.0	0.41818	Y
3	IC 410-107390/16	1.0	0.509065	10.0	2146917.0	0.509065	Y
4	IC 410-107390/15	2.0	1.012625	10.0	2156681.0	0.506313	Y
5	IC 410-107390/14	5.0	2.410543	10.0	2135112.0	0.482109	Y
6	ICIS 410-107390/13	10.0	5.030713	10.0	2148304.0	0.503071	Y
7	IC 410-107390/12	25.0	12.124182	10.0	2140113.0	0.484967	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

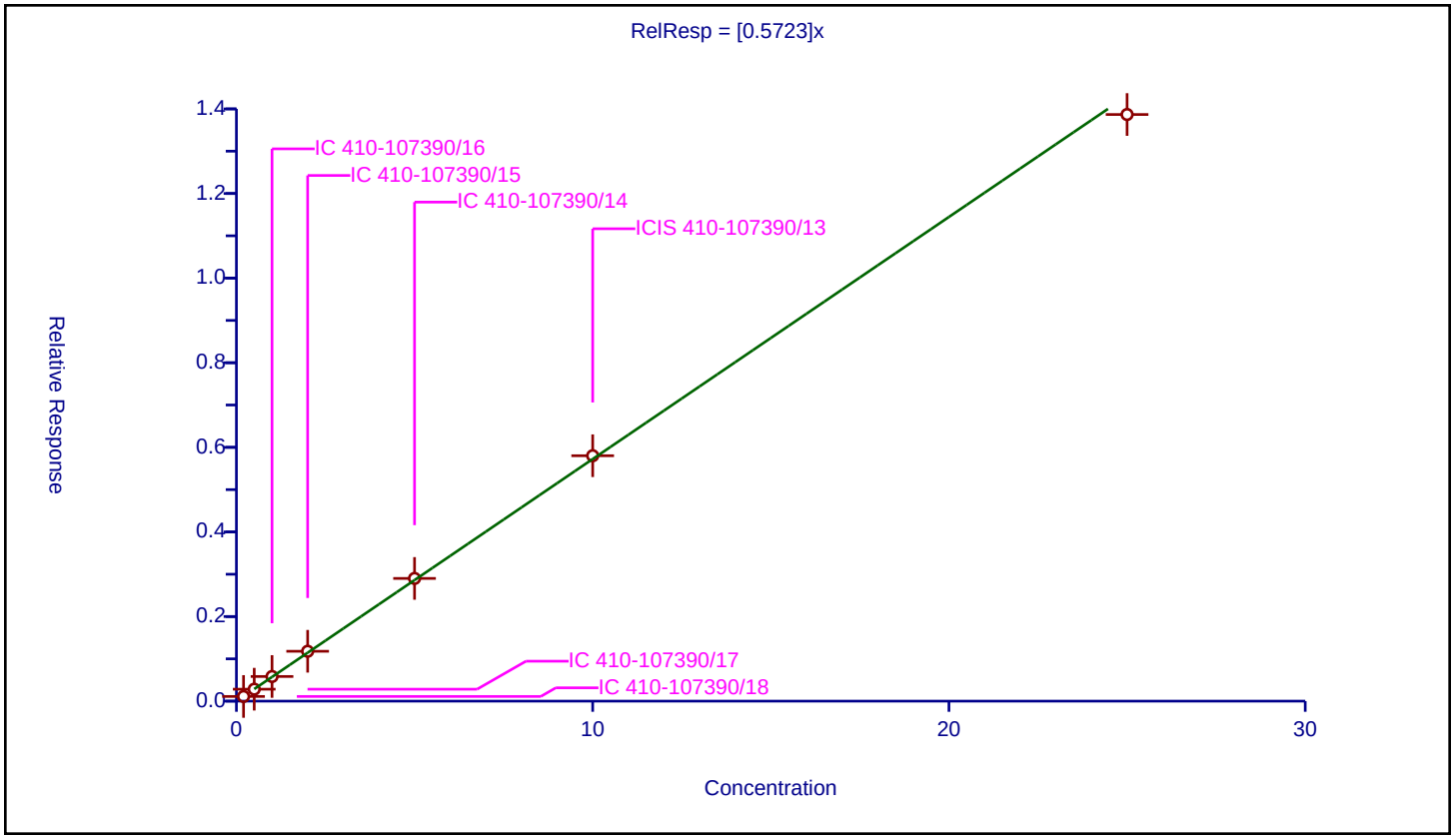
Curve Coefficients

Intercept:	0
Slope:	0.5723

Error Coefficients

Standard Error:	1340000
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 410-107390/18	0.2	0.11077	10.0	2175128.0	0.553852	Y
2	IC 410-107390/17	0.5	0.282546	10.0	2170550.0	0.565092	Y
3	IC 410-107390/16	1.0	0.582603	10.0	2146917.0	0.582603	Y
4	IC 410-107390/15	2.0	1.178895	10.0	2156681.0	0.589447	Y
5	IC 410-107390/14	5.0	2.900588	10.0	2135112.0	0.580118	Y
6	ICIS 410-107390/13	10.0	5.801246	10.0	2148304.0	0.580125	Y
7	IC 410-107390/12	25.0	13.867338	10.0	2140113.0	0.554694	Y



Calibration / Isopropyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

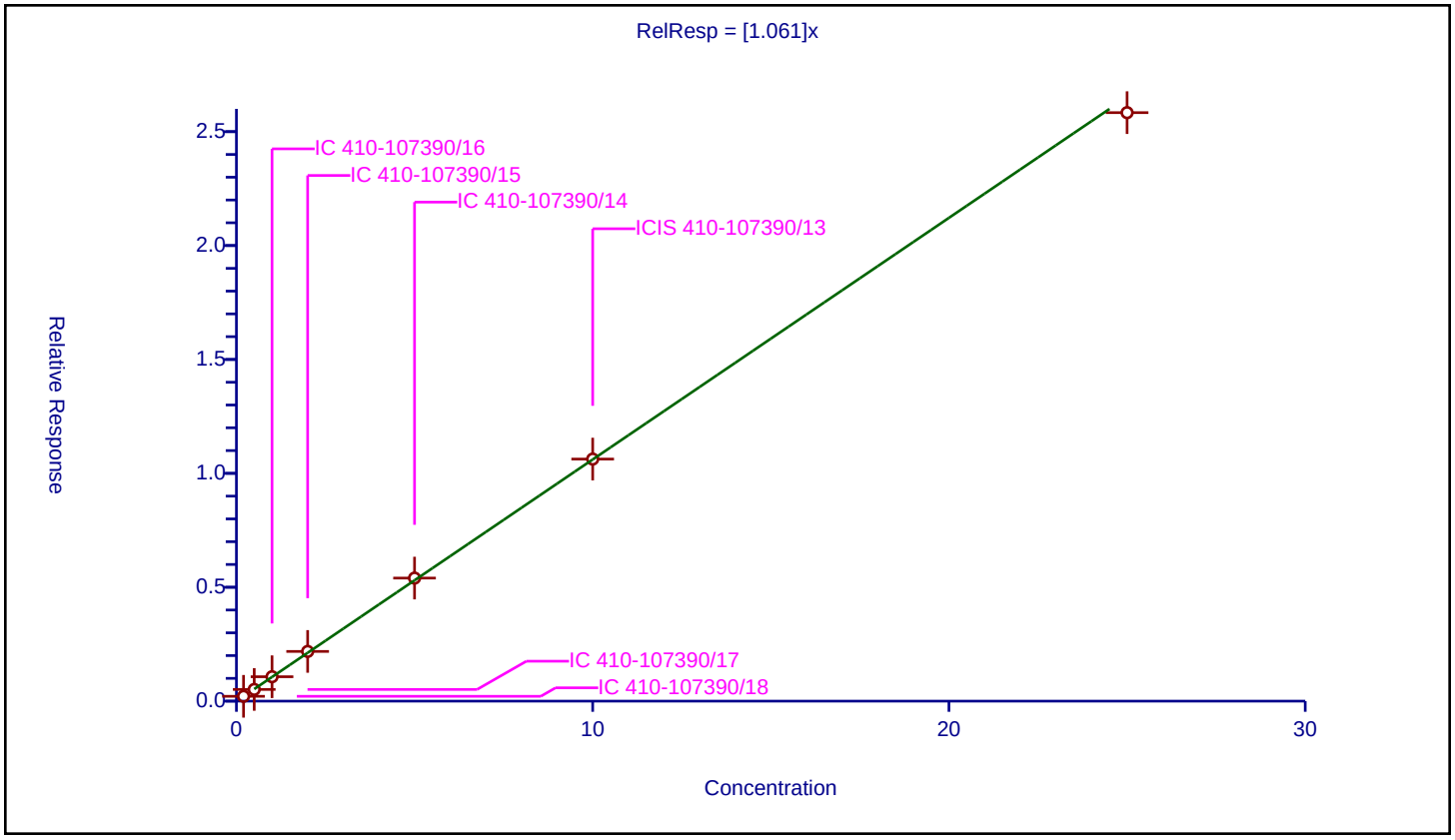
Curve Coefficients

Intercept:	0
Slope:	1.061

Error Coefficients

Standard Error:	2500000
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 410-107390/18	0.2	0.21167	10.0	2175128.0	1.058352	Y
2	IC 410-107390/17	0.5	0.514086	10.0	2170550.0	1.028173	Y
3	IC 410-107390/16	1.0	1.071737	10.0	2146917.0	1.071737	Y
4	IC 410-107390/15	2.0	2.182163	10.0	2156681.0	1.091082	Y
5	IC 410-107390/14	5.0	5.402148	10.0	2135112.0	1.08043	Y
6	ICIS 410-107390/13	10.0	10.626722	10.0	2148304.0	1.062672	Y
7	IC 410-107390/12	25.0	25.834552	10.0	2140113.0	1.033382	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

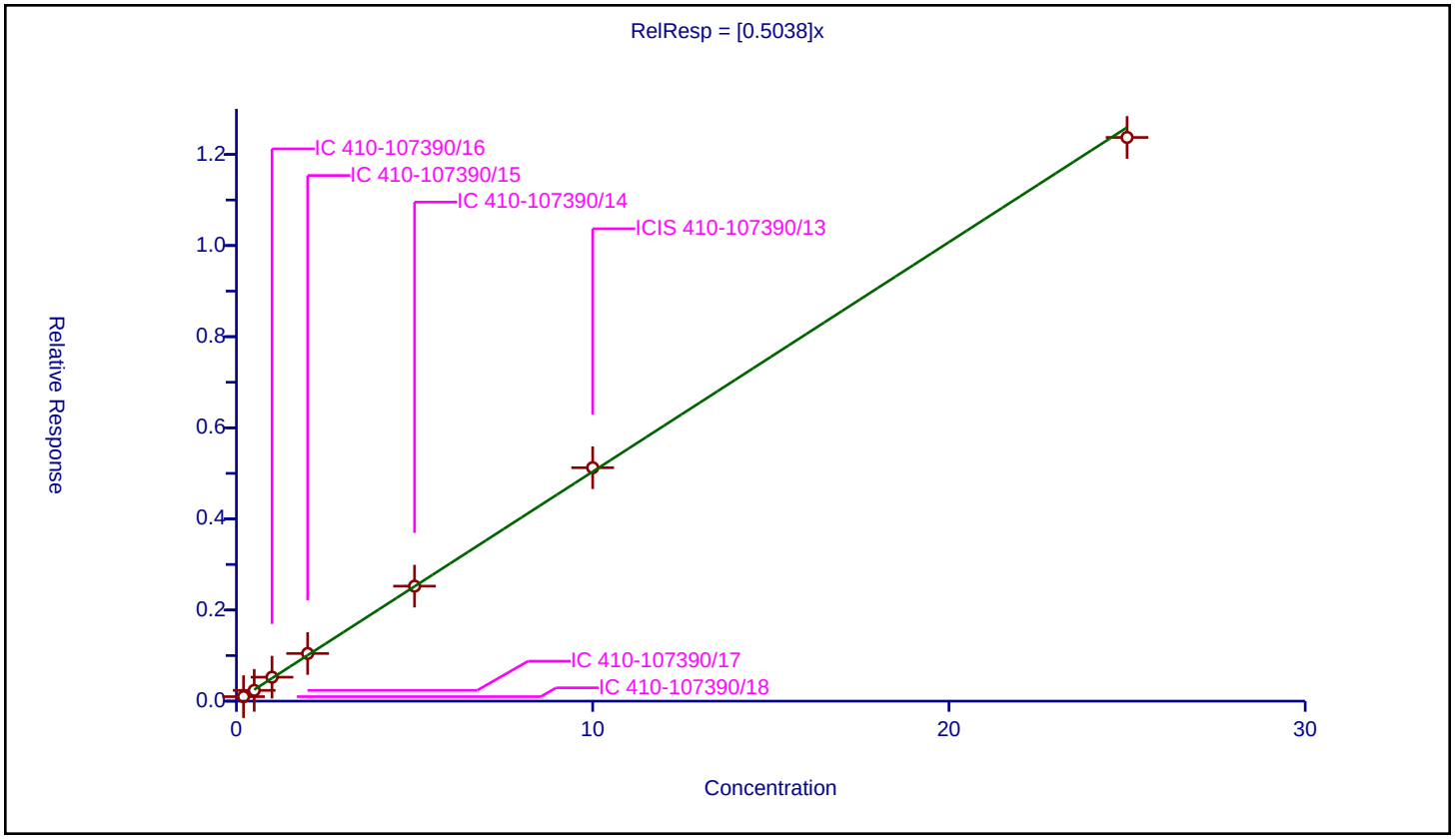
Curve Coefficients

Intercept:	0
Slope:	0.5038

Error Coefficients

Standard Error:	1200000
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 410-107390/18	0.2	0.098426	10.0	2175128.0	0.492132	Y
2	IC 410-107390/17	0.5	0.236636	10.0	2170550.0	0.473272	Y
3	IC 410-107390/16	1.0	0.525698	10.0	2146917.0	0.525698	Y
4	IC 410-107390/15	2.0	1.046098	10.0	2156681.0	0.523049	Y
5	IC 410-107390/14	5.0	2.523989	10.0	2135112.0	0.504798	Y
6	ICIS 410-107390/13	10.0	5.124098	10.0	2148304.0	0.51241	Y
7	IC 410-107390/12	25.0	12.373038	10.0	2140113.0	0.494922	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

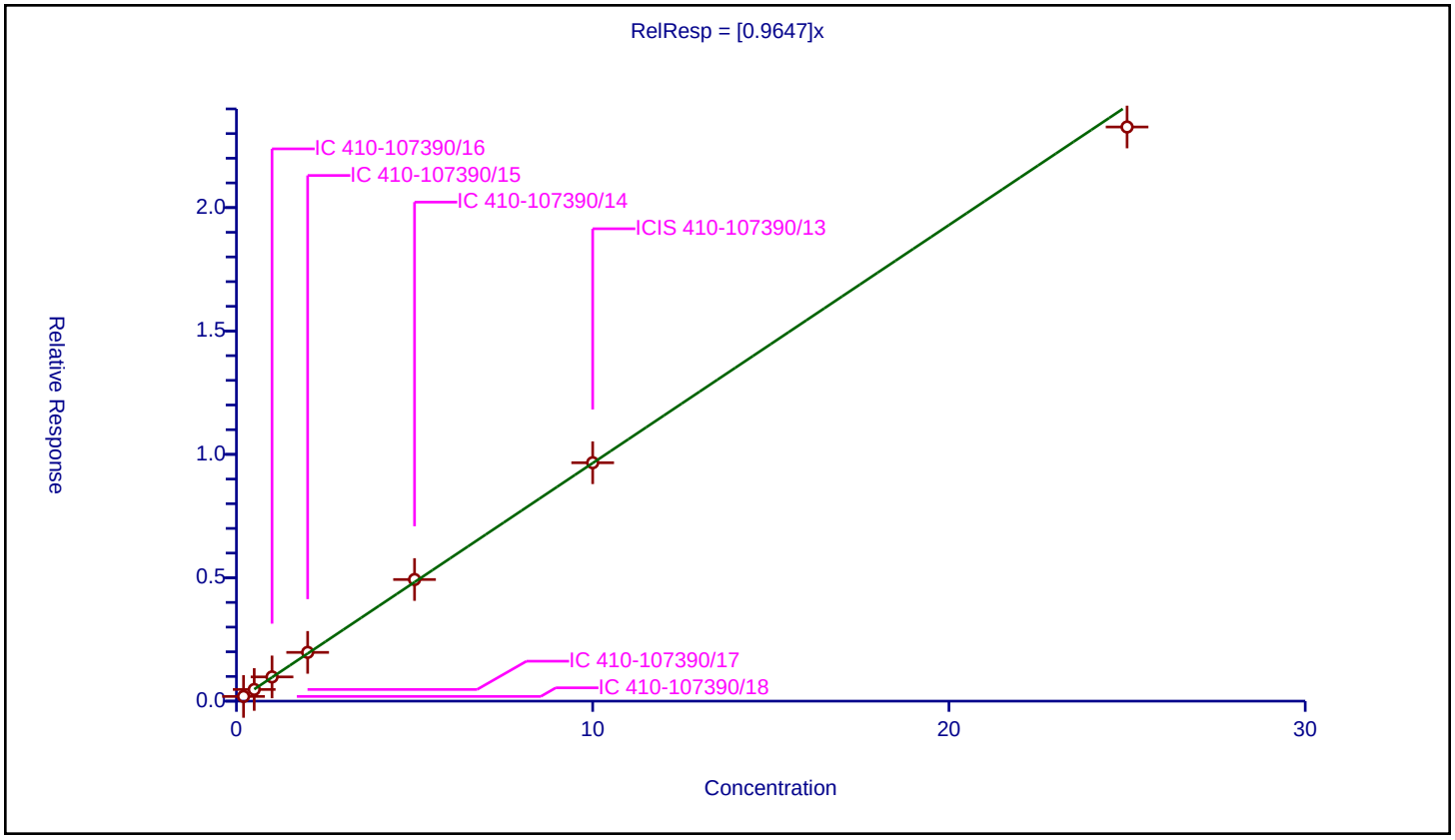
Curve Coefficients

Intercept:	0
Slope:	0.9647

Error Coefficients

Standard Error:	2250000
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 410-107390/18	0.2	0.190927	10.0	2175128.0	0.954633	Y
2	IC 410-107390/17	0.5	0.472908	10.0	2170550.0	0.945816	Y
3	IC 410-107390/16	1.0	0.981556	10.0	2146917.0	0.981556	Y
4	IC 410-107390/15	2.0	1.976092	10.0	2156681.0	0.988046	Y
5	IC 410-107390/14	5.0	4.929006	10.0	2135112.0	0.985801	Y
6	ICIS 410-107390/13	10.0	9.661831	10.0	2148304.0	0.966183	Y
7	IC 410-107390/12	25.0	23.266926	10.0	2140113.0	0.930677	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

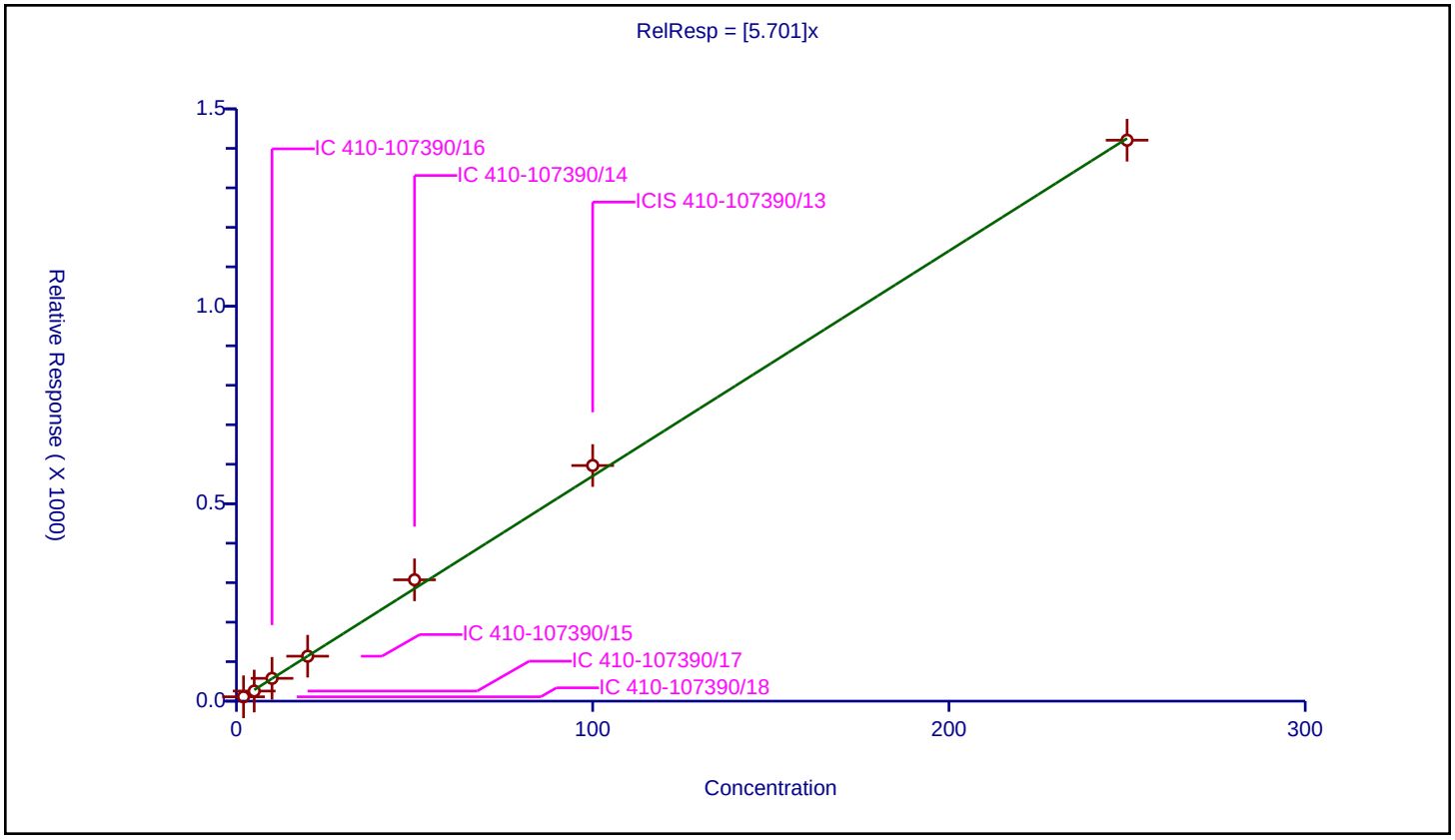
Curve Coefficients

Intercept:	0
Slope:	5.701

Error Coefficients

Standard Error:	2040000
Relative Standard Error:	5.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	2.0	11.042663	50.0	175560.0	5.521332	Y
2	IC 410-107390/17	5.0	25.623231	50.0	186889.0	5.124646	Y
3	IC 410-107390/16	10.0	57.748615	50.0	165165.0	5.774862	Y
4	IC 410-107390/15	20.0	113.843111	50.0	167112.0	5.692156	Y
5	IC 410-107390/14	50.0	307.293508	50.0	152718.0	6.14587	Y
6	ICIS 410-107390/13	100.0	596.750356	50.0	155217.0	5.967504	Y
7	IC 410-107390/12	250.0	1420.668715	50.0	158827.0	5.682675	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

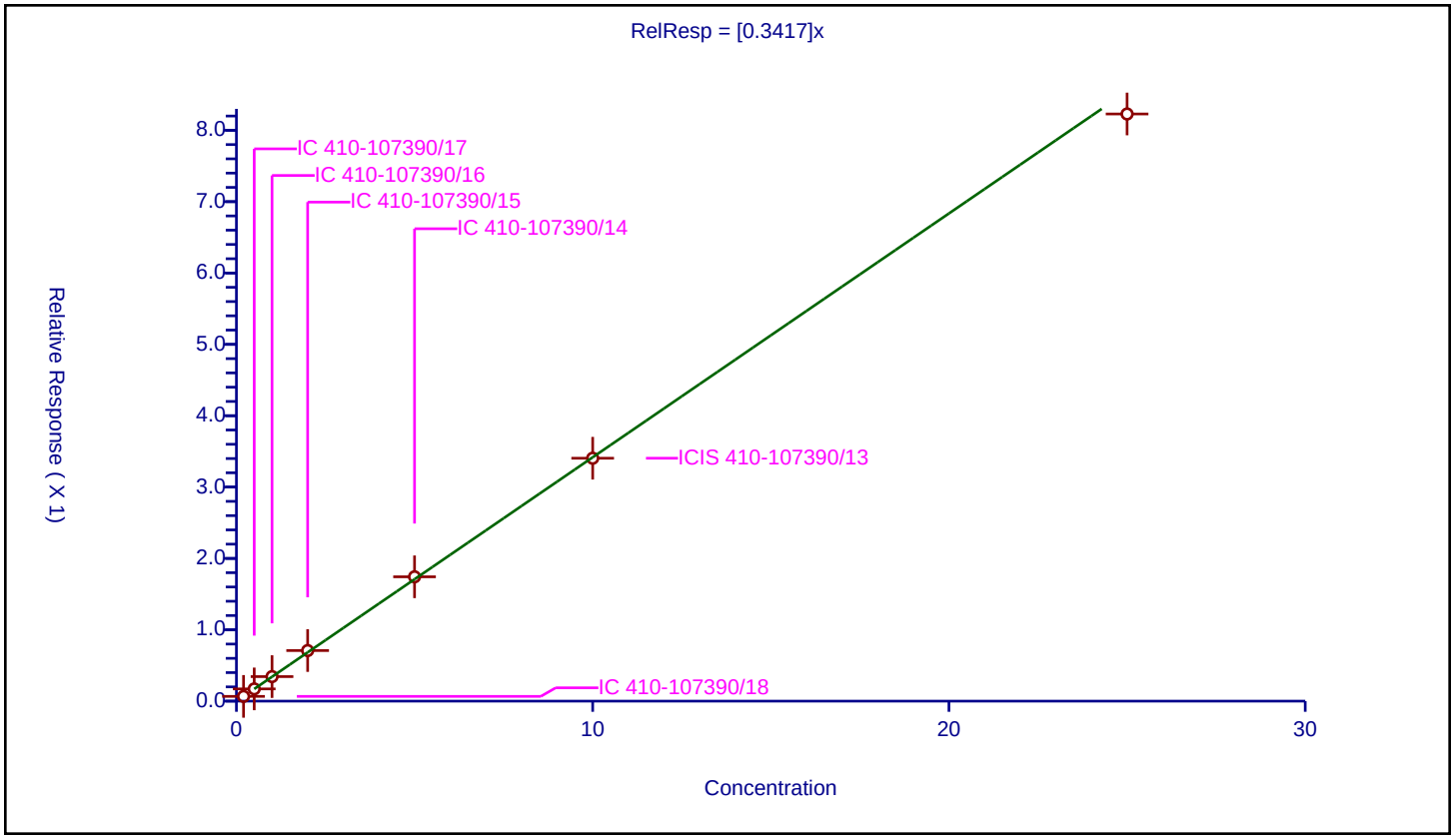
Curve Coefficients

Intercept:	0
Slope:	0.3417

Error Coefficients

Standard Error:	796000
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 410-107390/18	0.2	0.066465	10.0	2175128.0	0.332325	Y
2	IC 410-107390/17	0.5	0.171579	10.0	2170550.0	0.343157	Y
3	IC 410-107390/16	1.0	0.344126	10.0	2146917.0	0.344126	Y
4	IC 410-107390/15	2.0	0.70889	10.0	2156681.0	0.354445	Y
5	IC 410-107390/14	5.0	1.742606	10.0	2135112.0	0.348521	Y
6	ICIS 410-107390/13	10.0	3.404211	10.0	2148304.0	0.340421	Y
7	IC 410-107390/12	25.0	8.228724	10.0	2140113.0	0.329149	Y



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

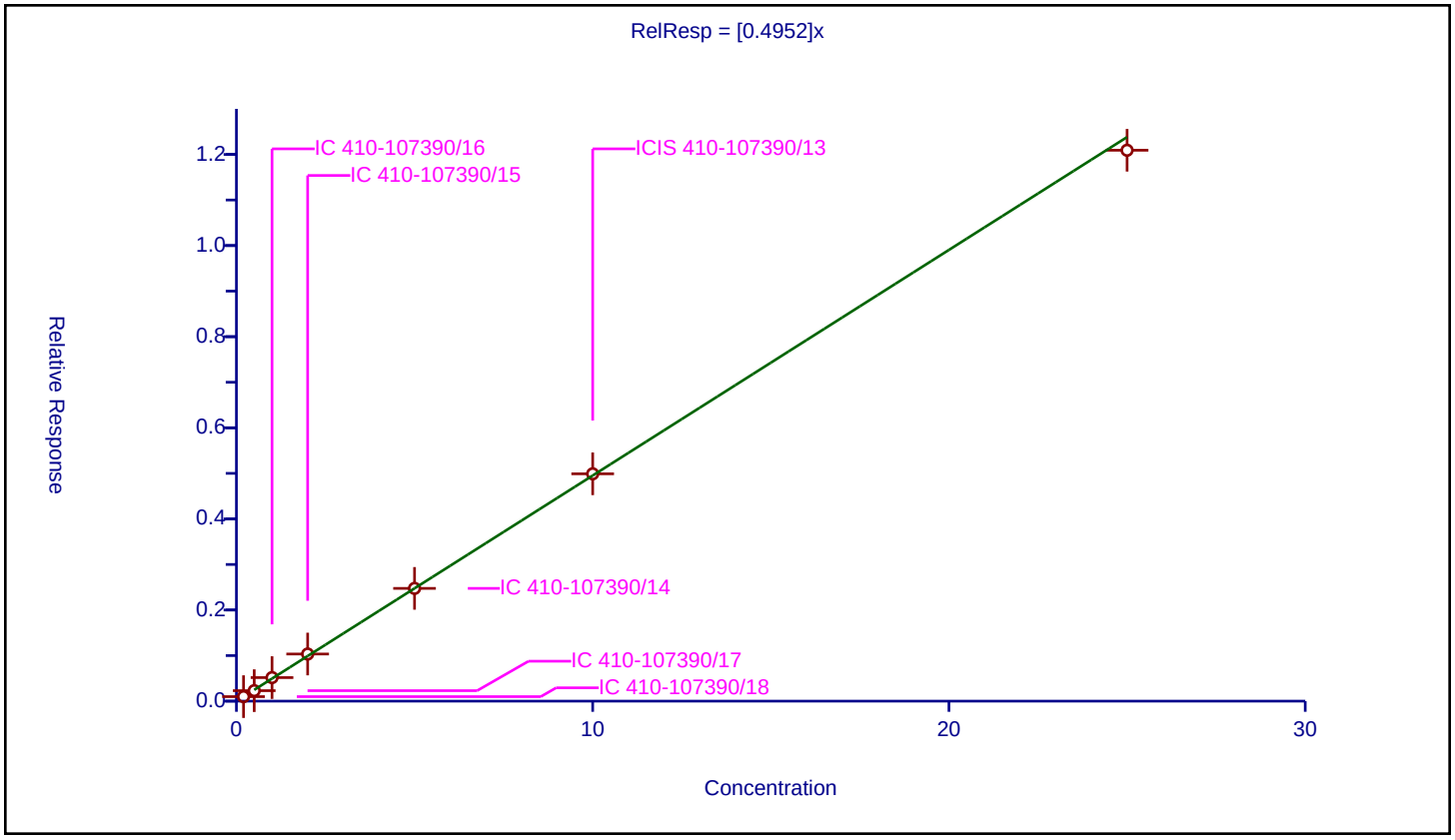
Curve Coefficients

Intercept:	0
Slope:	0.4952

Error Coefficients

Standard Error:	1170000
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 410-107390/18	0.2	0.098849	10.0	2175128.0	0.494247	Y
2	IC 410-107390/17	0.5	0.230121	10.0	2170550.0	0.460243	Y
3	IC 410-107390/16	1.0	0.517323	10.0	2146917.0	0.517323	Y
4	IC 410-107390/15	2.0	1.034372	10.0	2156681.0	0.517186	Y
5	IC 410-107390/14	5.0	2.474718	10.0	2135112.0	0.494944	Y
6	ICIS 410-107390/13	10.0	4.990183	10.0	2148304.0	0.499018	Y
7	IC 410-107390/12	25.0	12.091922	10.0	2140113.0	0.483677	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

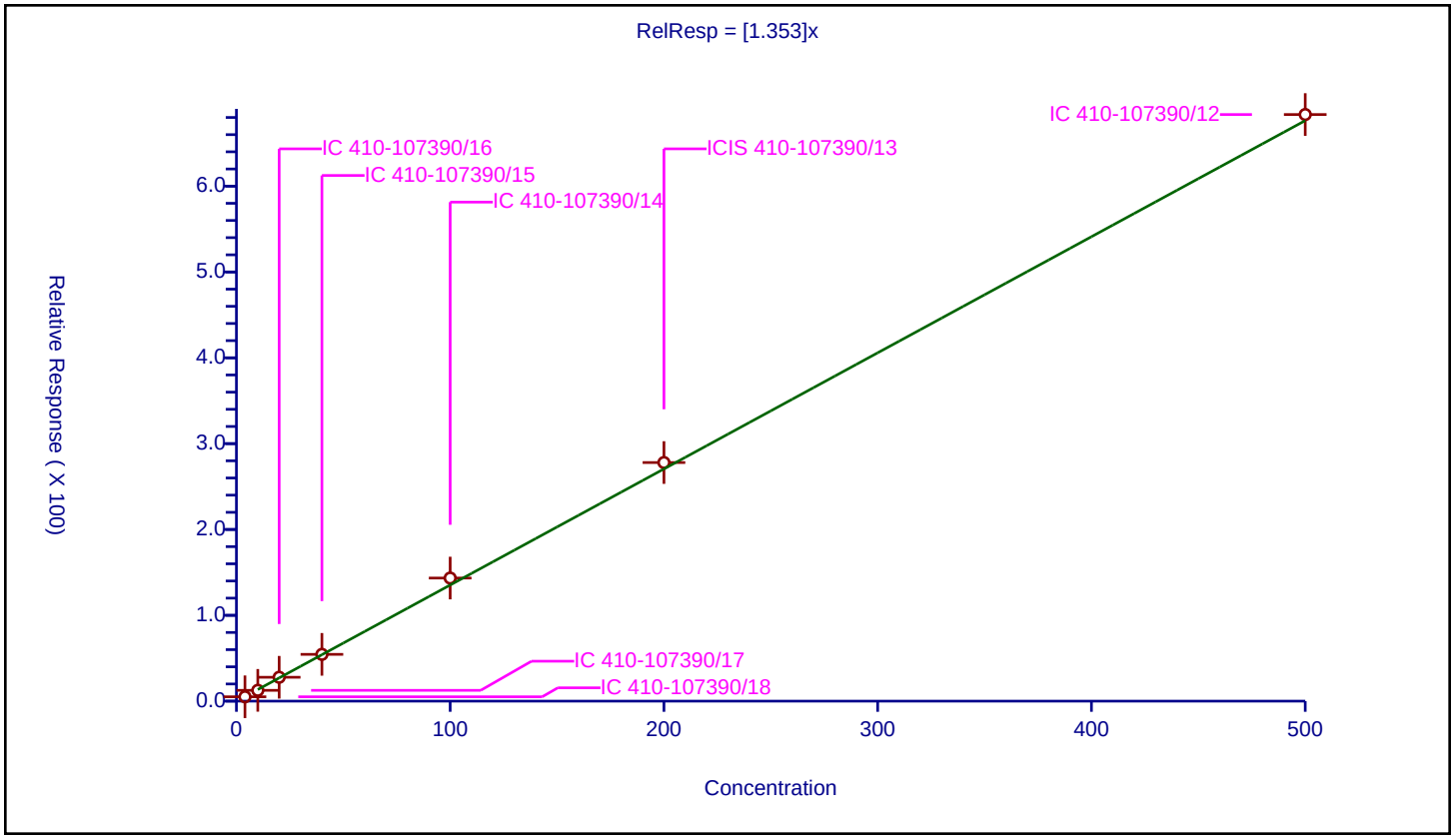
Curve Coefficients

Intercept:	0
Slope:	1.353

Error Coefficients

Standard Error:	974000
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 410-107390/18	4.0	5.066074	50.0	175560.0	1.266519	Y
2	IC 410-107390/17	10.0	12.587151	50.0	186889.0	1.258715	Y
3	IC 410-107390/16	20.0	27.809766	50.0	165165.0	1.390488	Y
4	IC 410-107390/15	40.0	54.495488	50.0	167112.0	1.362387	Y
5	IC 410-107390/14	100.0	143.401564	50.0	152718.0	1.434016	Y
6	ICIS 410-107390/13	200.0	277.992101	50.0	155217.0	1.389961	Y
7	IC 410-107390/12	500.0	683.425362	50.0	158827.0	1.366851	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

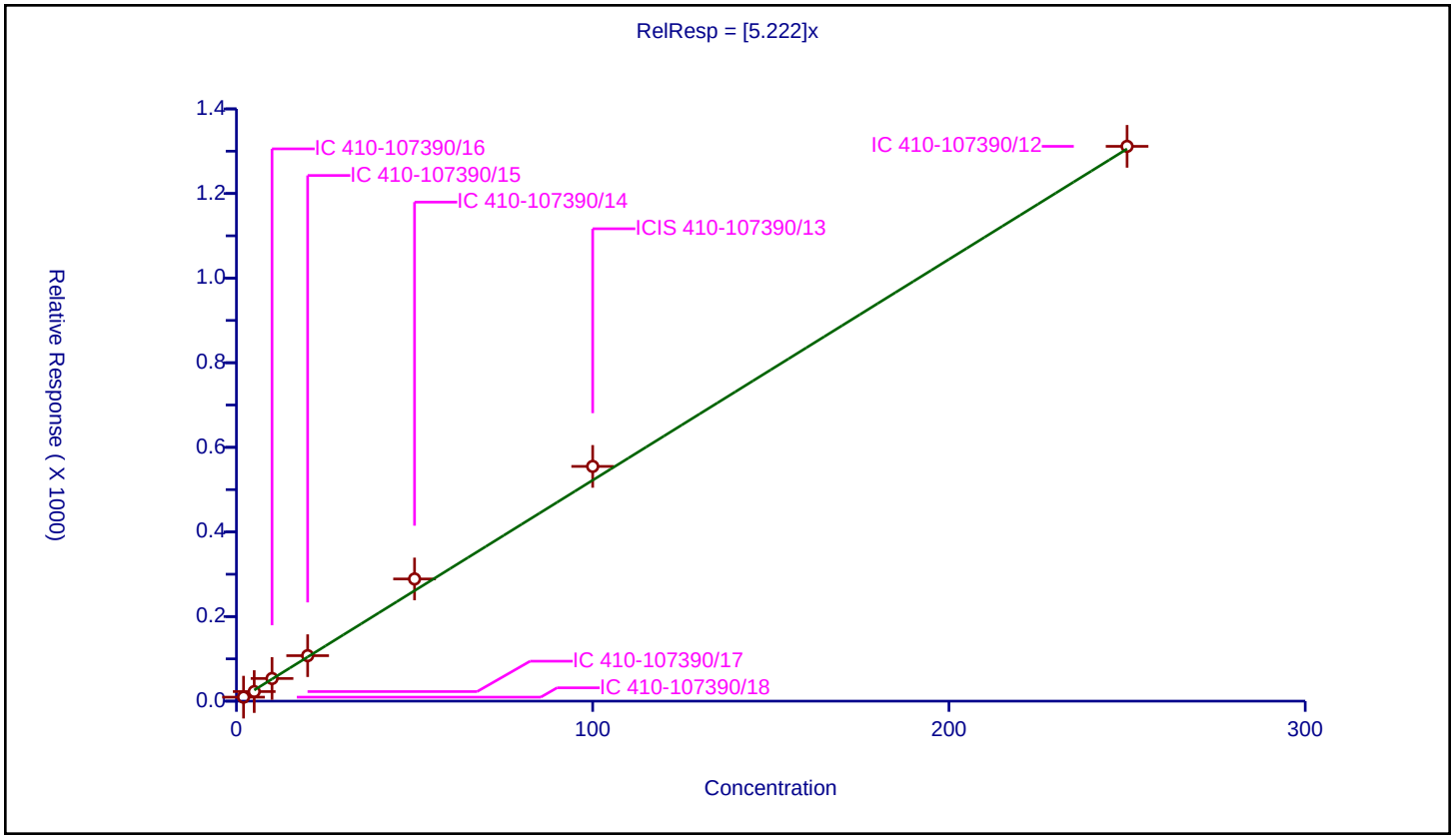
Curve Coefficients

Intercept:	0
Slope:	5.222

Error Coefficients

Standard Error:	1880000
Relative Standard Error:	8.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	2.0	9.441501	50.0	175560.0	4.720751	Y
2	IC 410-107390/17	5.0	22.663185	50.0	186889.0	4.532637	Y
3	IC 410-107390/16	10.0	53.542215	50.0	165165.0	5.354222	Y
4	IC 410-107390/15	20.0	107.483903	50.0	167112.0	5.374195	Y
5	IC 410-107390/14	50.0	288.843162	50.0	152718.0	5.776863	Y
6	ICIS 410-107390/13	100.0	554.865124	50.0	155217.0	5.548651	Y
7	IC 410-107390/12	250.0	1311.502452	50.0	158827.0	5.24601	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

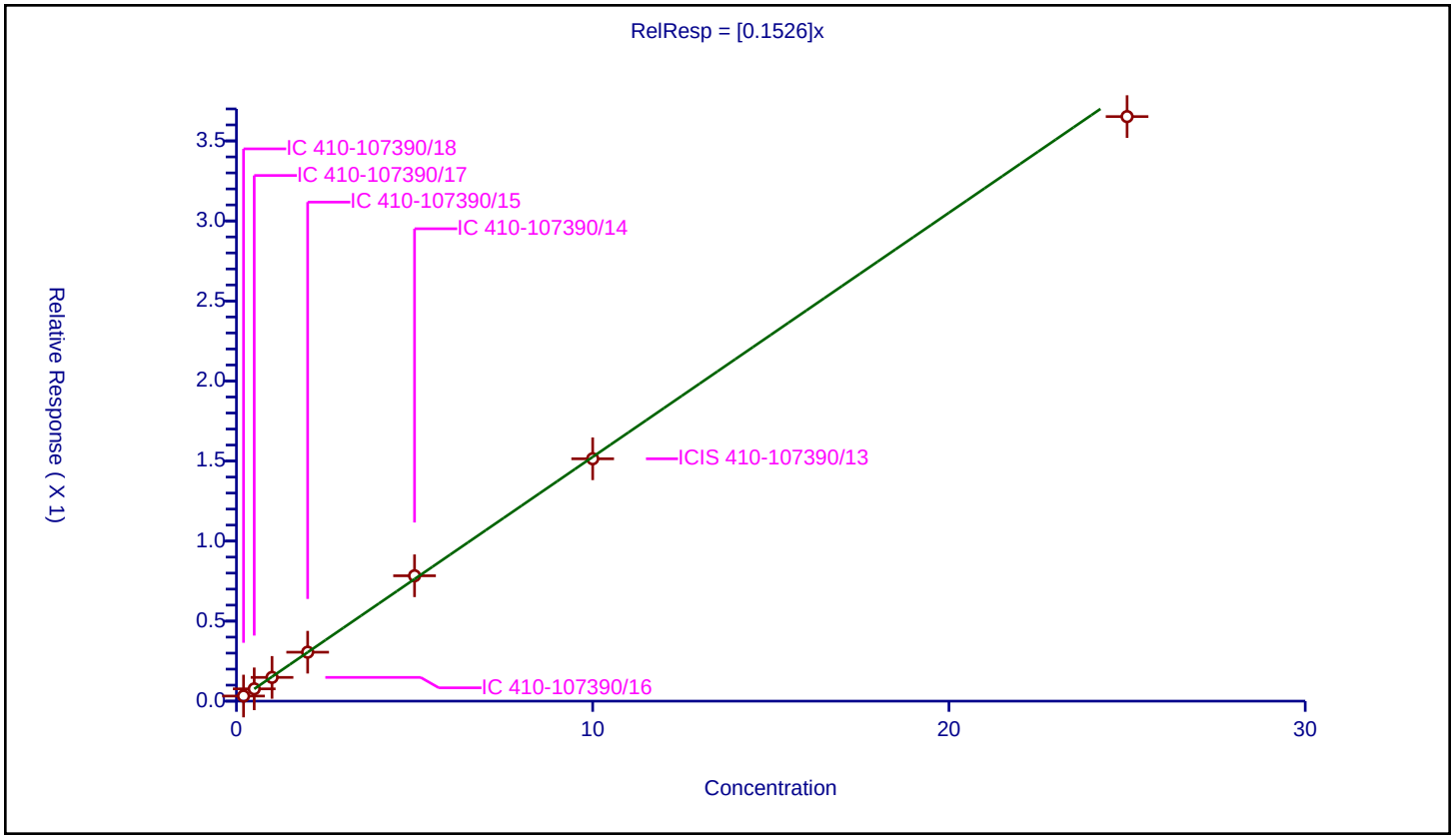
Curve Coefficients

Intercept:	0
Slope:	0.1526

Error Coefficients

Standard Error:	354000
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 410-107390/18	0.2	0.031805	10.0	2175128.0	0.159025	Y
2	IC 410-107390/17	0.5	0.076759	10.0	2170550.0	0.153519	Y
3	IC 410-107390/16	1.0	0.14832	10.0	2146917.0	0.14832	Y
4	IC 410-107390/15	2.0	0.305812	10.0	2156681.0	0.152906	Y
5	IC 410-107390/14	5.0	0.783298	10.0	2135112.0	0.15666	Y
6	ICIS 410-107390/13	10.0	1.514129	10.0	2148304.0	0.151413	Y
7	IC 410-107390/12	25.0	3.651957	10.0	2140113.0	0.146078	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

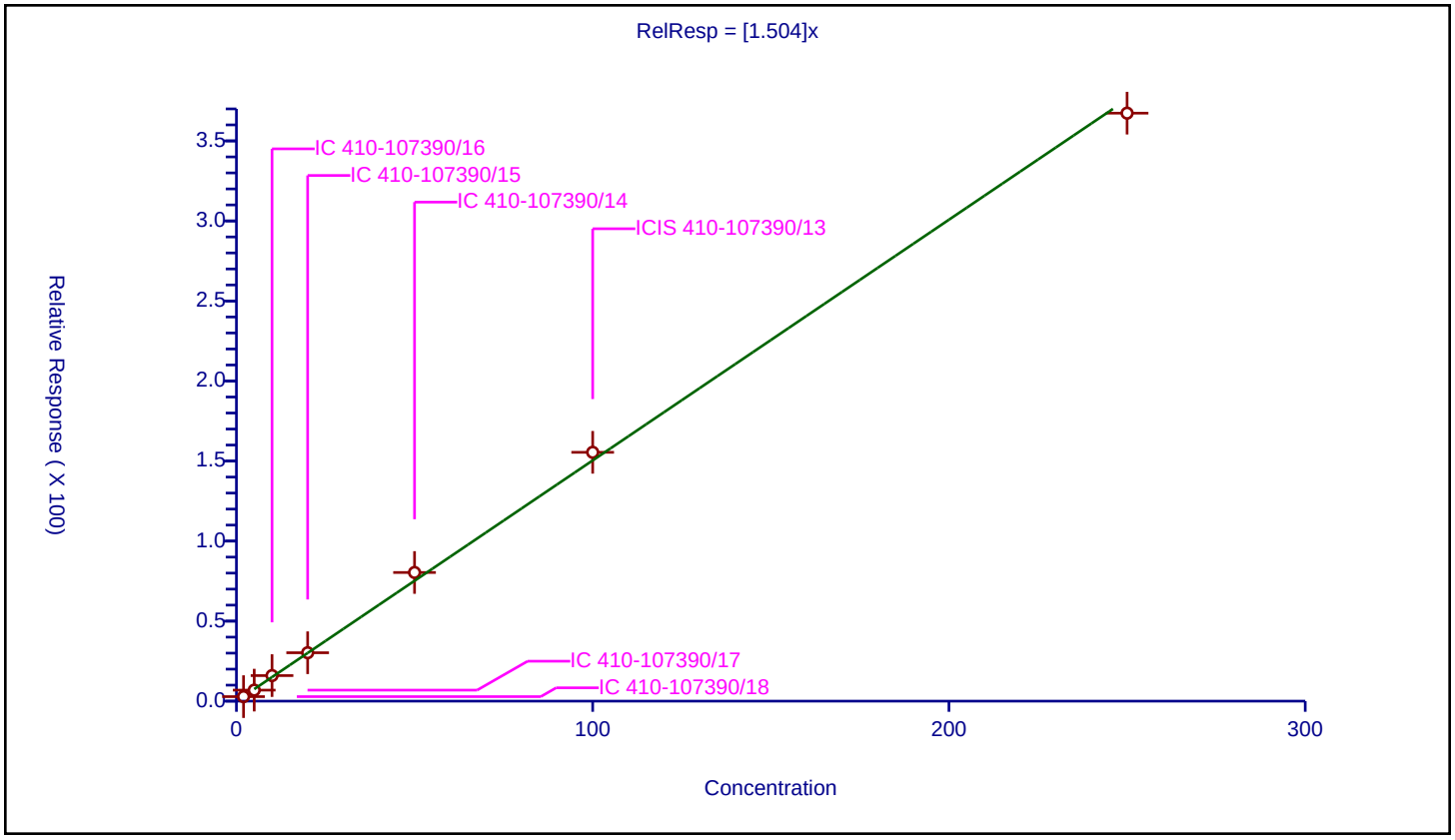
Curve Coefficients

Intercept:	0
Slope:	1.504

Error Coefficients

Standard Error:	527000
Relative Standard Error:	6.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	2.0	2.819264	50.0	175560.0	1.409632	Y
2	IC 410-107390/17	5.0	6.881625	50.0	186889.0	1.376325	Y
3	IC 410-107390/16	10.0	15.972512	50.0	165165.0	1.597251	Y
4	IC 410-107390/15	20.0	30.239301	50.0	167112.0	1.511965	Y
5	IC 410-107390/14	50.0	80.383452	50.0	152718.0	1.607669	Y
6	ICIS 410-107390/13	100.0	155.458165	50.0	155217.0	1.554582	Y
7	IC 410-107390/12	250.0	367.340251	50.0	158827.0	1.469361	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

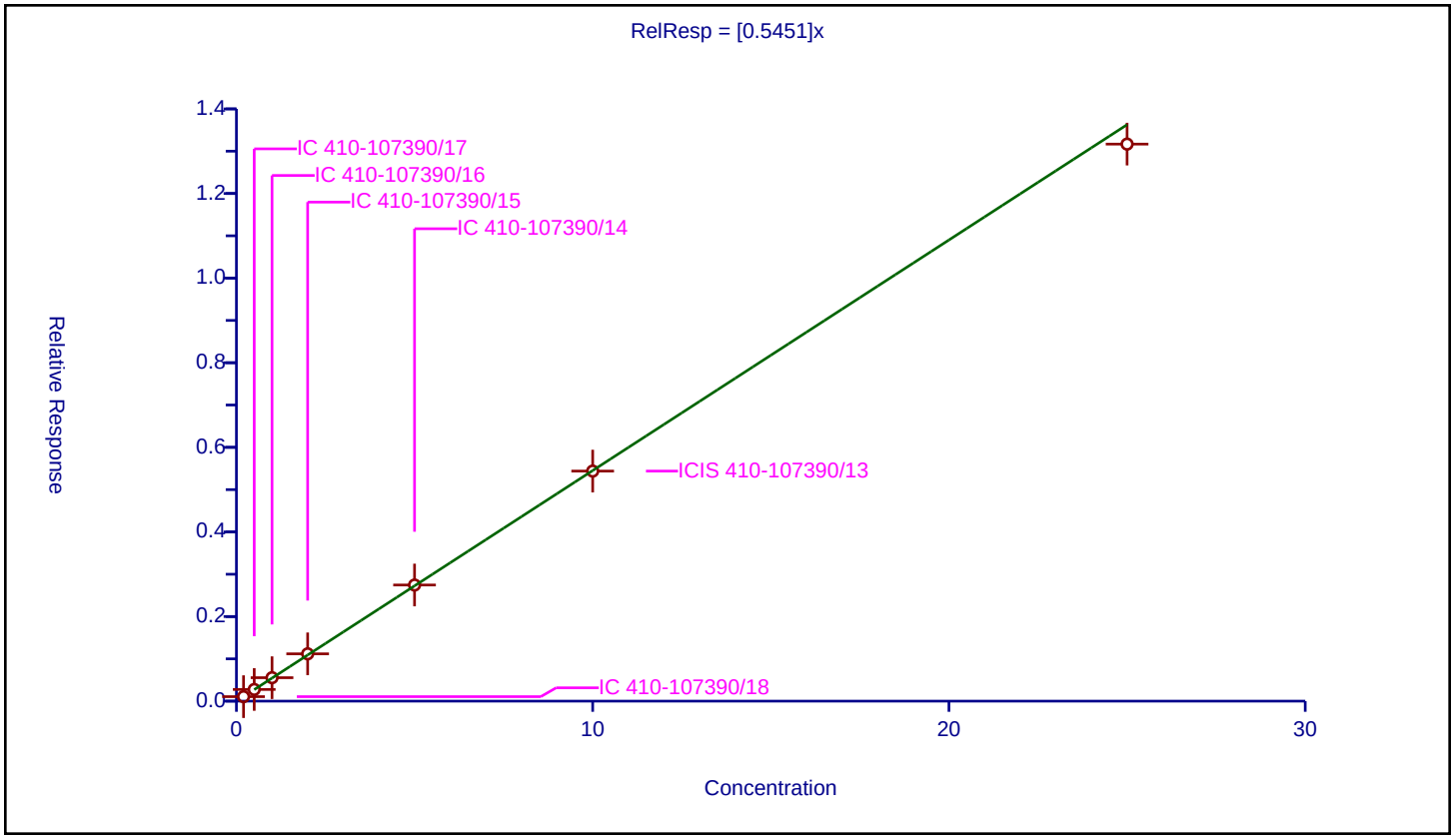
Curve Coefficients

Intercept:	0
Slope:	0.5451

Error Coefficients

Standard Error:	1270000
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 410-107390/18	0.2	0.106026	10.0	2175128.0	0.53013	Y
2	IC 410-107390/17	0.5	0.276253	10.0	2170550.0	0.552505	Y
3	IC 410-107390/16	1.0	0.554176	10.0	2146917.0	0.554176	Y
4	IC 410-107390/15	2.0	1.118227	10.0	2156681.0	0.559114	Y
5	IC 410-107390/14	5.0	2.745032	10.0	2135112.0	0.549006	Y
6	ICIS 410-107390/13	10.0	5.438015	10.0	2148304.0	0.543802	Y
7	IC 410-107390/12	25.0	13.167842	10.0	2140113.0	0.526714	Y



Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

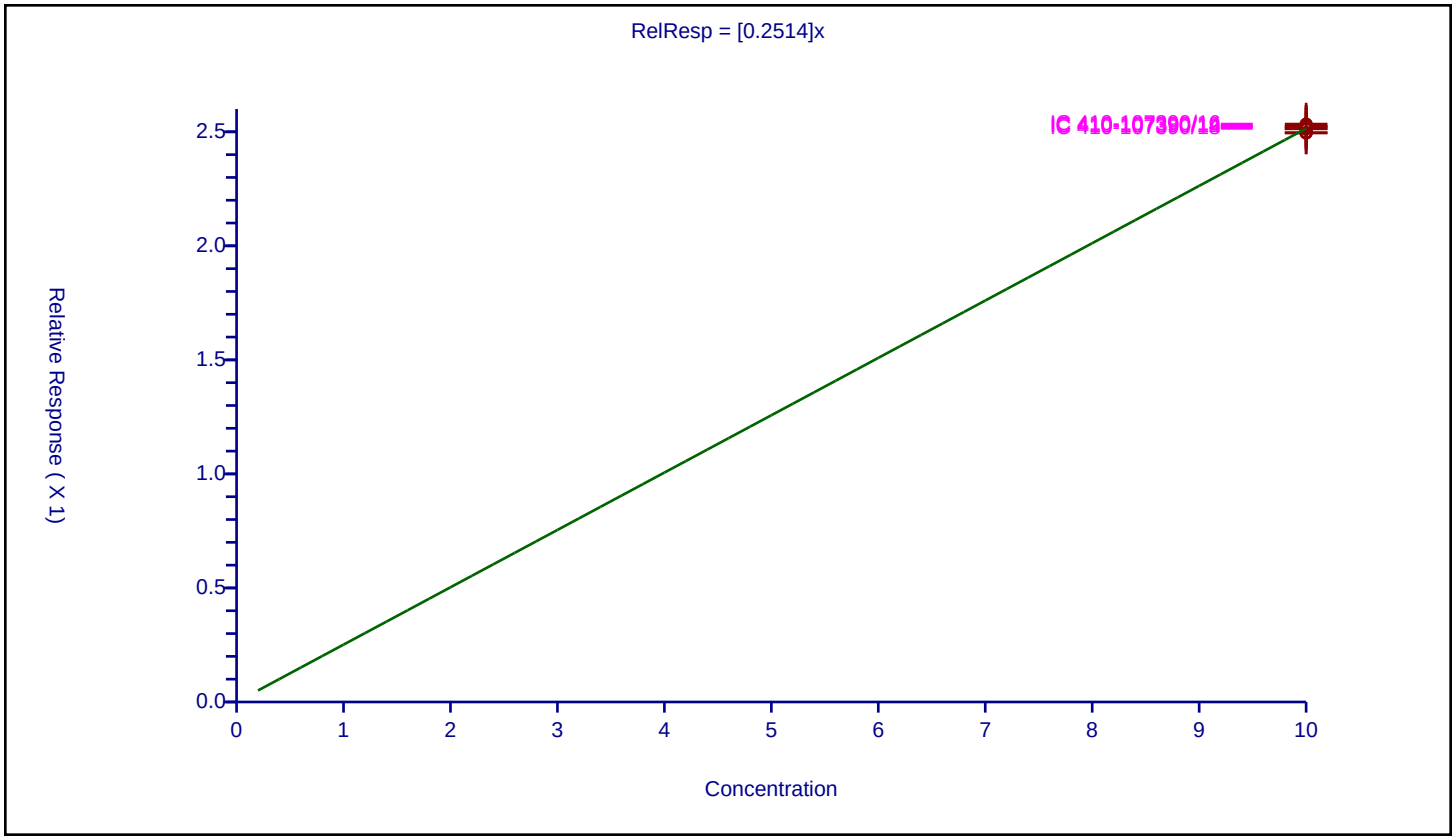
Curve Coefficients

Intercept:	0
Slope:	0.2514

Error Coefficients

Standard Error:	585000
Relative Standard Error:	0.6
Correlation Coefficient:	NA
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/12	10.0	2.52382	10.0	2140113.0	0.252382	Y
2	ICIS 410-107390/13	10.0	2.51301	10.0	2148304.0	0.251301	Y
3	IC 410-107390/14	10.0	2.524266	10.0	2135112.0	0.252427	Y
4	IC 410-107390/15	10.0	2.496387	10.0	2156681.0	0.249639	Y
5	IC 410-107390/16	10.0	2.533894	10.0	2146917.0	0.253389	Y
6	IC 410-107390/17	10.0	2.494778	10.0	2170550.0	0.249478	Y
7	IC 410-107390/18	10.0	2.515172	10.0	2175128.0	0.251517	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

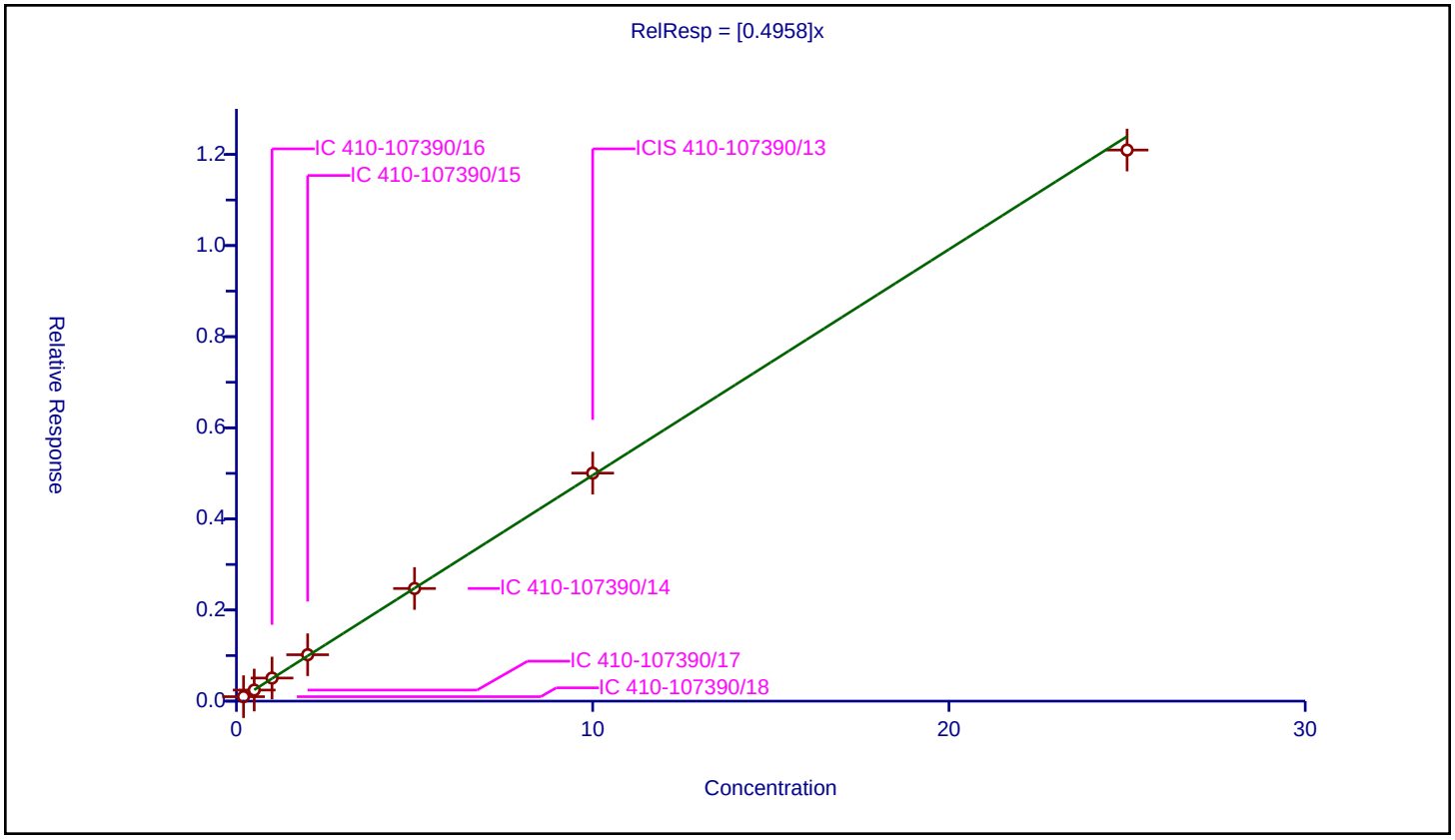
Curve Coefficients

Intercept:	0
Slope:	0.4958

Error Coefficients

Standard Error:	1170000
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 410-107390/18	0.2	0.097677	10.0	2175128.0	0.488385	Y
2	IC 410-107390/17	0.5	0.243441	10.0	2170550.0	0.486881	Y
3	IC 410-107390/16	1.0	0.507118	10.0	2146917.0	0.507118	Y
4	IC 410-107390/15	2.0	1.01882	10.0	2156681.0	0.50941	Y
5	IC 410-107390/14	5.0	2.472732	10.0	2135112.0	0.494546	Y
6	ICIS 410-107390/13	10.0	5.004967	10.0	2148304.0	0.500497	Y
7	IC 410-107390/12	25.0	12.096721	10.0	2140113.0	0.483869	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

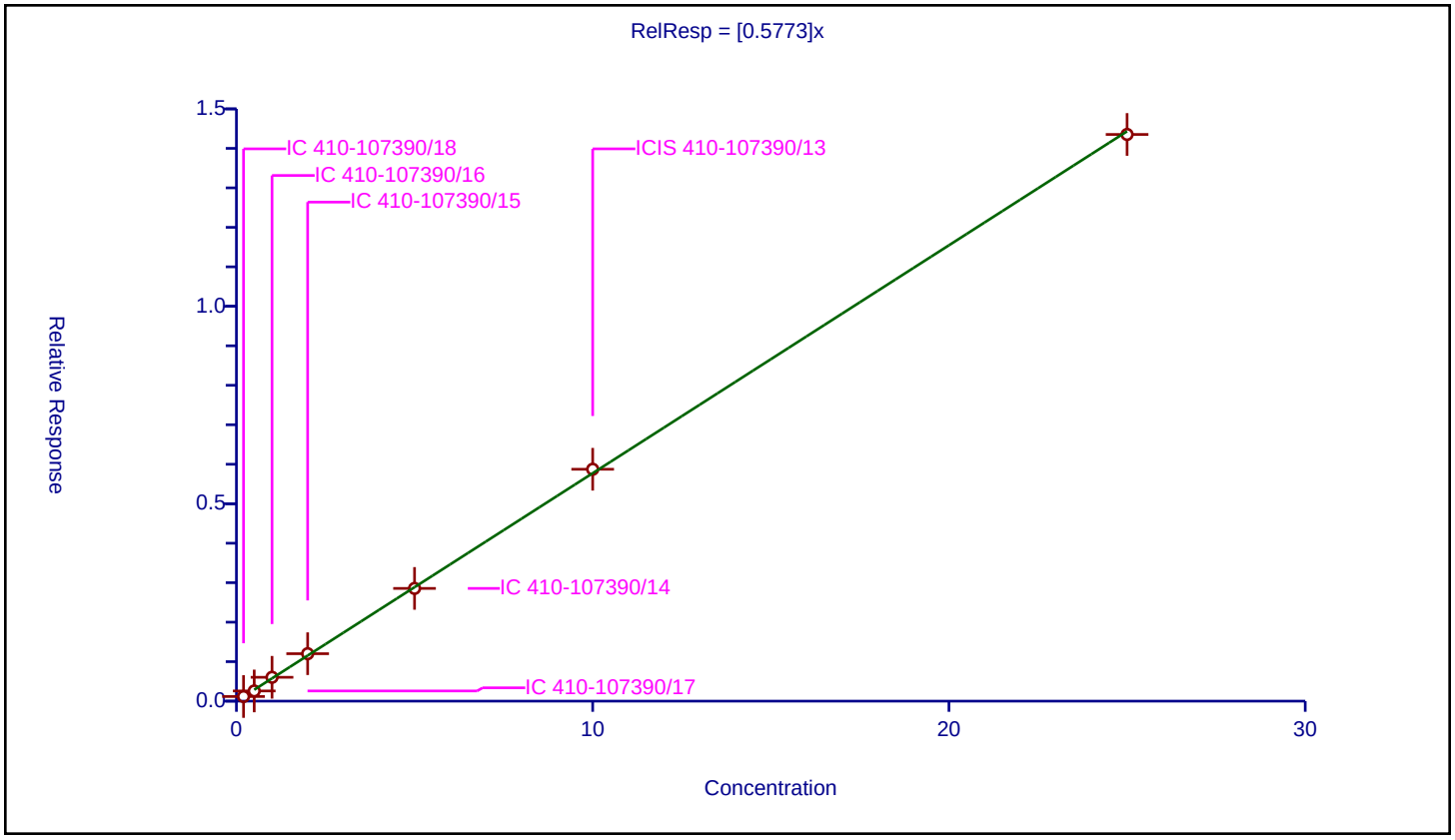
Curve Coefficients

Intercept:	0
Slope:	0.5773

Error Coefficients

Standard Error:	1380000
Relative Standard Error:	5.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.117368	10.0	2175128.0	0.586839	Y
2	IC 410-107390/17	0.5	0.258211	10.0	2170550.0	0.516422	Y
3	IC 410-107390/16	1.0	0.604388	10.0	2146917.0	0.604388	Y
4	IC 410-107390/15	2.0	1.201935	10.0	2156681.0	0.600967	Y
5	IC 410-107390/14	5.0	2.85512	10.0	2135112.0	0.571024	Y
6	ICIS 410-107390/13	10.0	5.872996	10.0	2148304.0	0.5873	Y
7	IC 410-107390/12	25.0	14.352709	10.0	2140113.0	0.574108	Y



Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

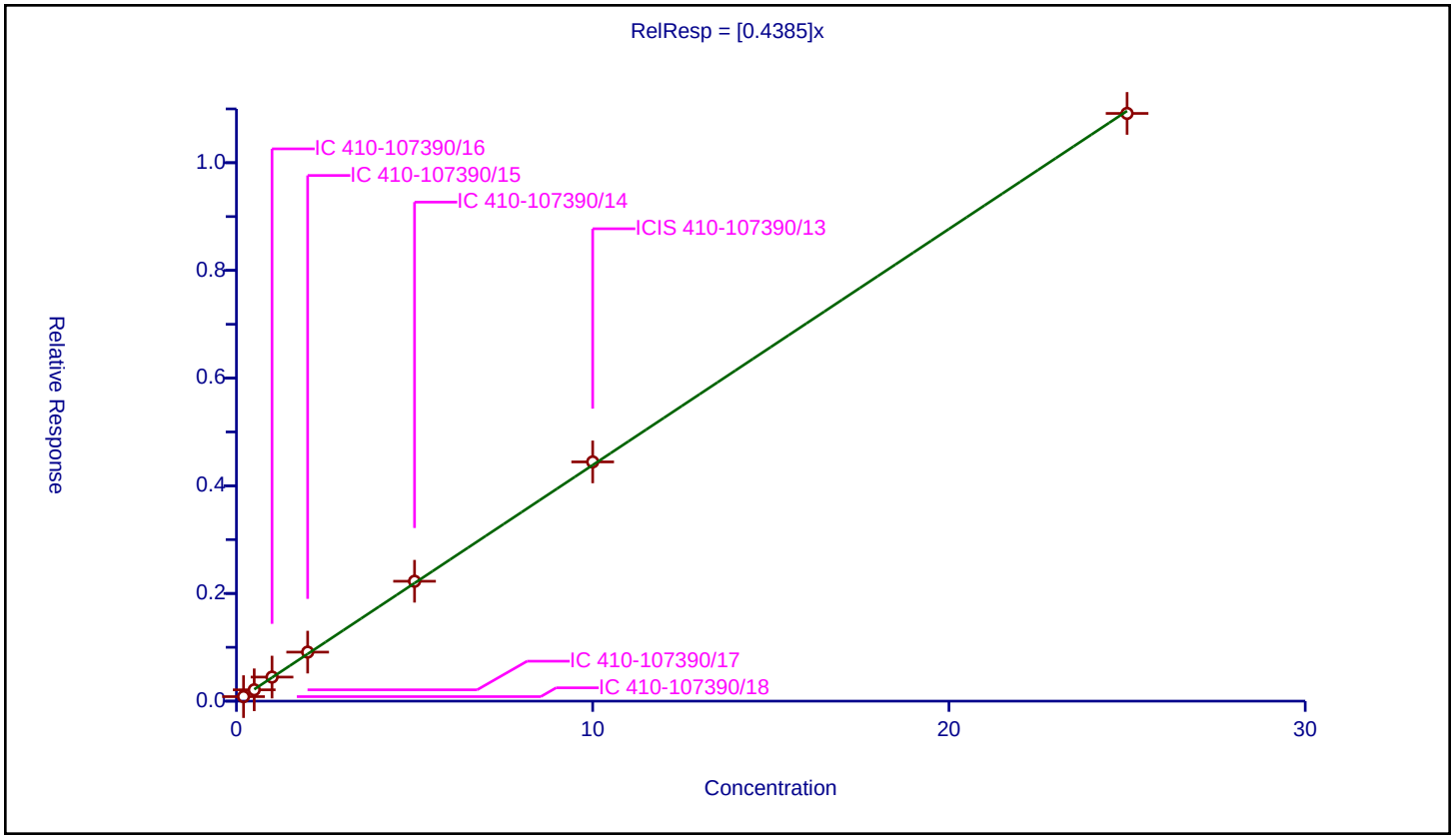
Curve Coefficients

Intercept:	0
Slope:	0.4385

Error Coefficients

Standard Error:	1050000
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 410-107390/18	0.2	0.083894	10.0	2175128.0	0.41947	Y
2	IC 410-107390/17	0.5	0.210546	10.0	2170550.0	0.421091	Y
3	IC 410-107390/16	1.0	0.447181	10.0	2146917.0	0.447181	Y
4	IC 410-107390/15	2.0	0.910302	10.0	2156681.0	0.455151	Y
5	IC 410-107390/14	5.0	2.226932	10.0	2135112.0	0.445386	Y
6	ICIS 410-107390/13	10.0	4.443519	10.0	2148304.0	0.444352	Y
7	IC 410-107390/12	25.0	10.91612	10.0	2140113.0	0.436645	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

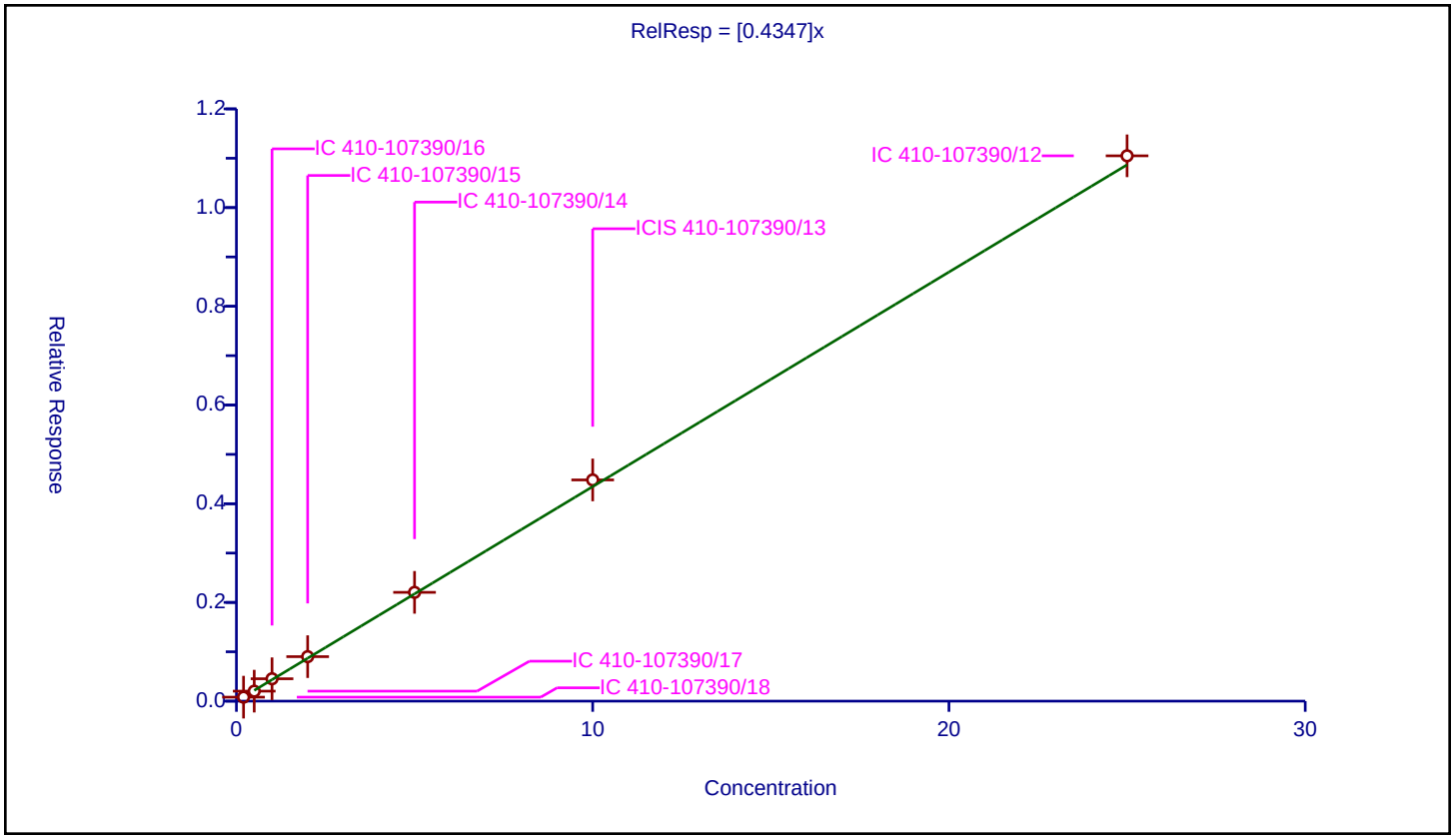
Curve Coefficients

Intercept:	0
Slope:	0.4347

Error Coefficients

Standard Error:	1060000
Relative Standard Error:	5.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.080542	10.0	2175128.0	0.402712	Y
2	IC 410-107390/17	0.5	0.202368	10.0	2170550.0	0.404736	Y
3	IC 410-107390/16	1.0	0.453534	10.0	2146917.0	0.453534	Y
4	IC 410-107390/15	2.0	0.901705	10.0	2156681.0	0.450852	Y
5	IC 410-107390/14	5.0	2.204011	10.0	2135112.0	0.440802	Y
6	ICIS 410-107390/13	10.0	4.482317	10.0	2148304.0	0.448232	Y
7	IC 410-107390/12	25.0	11.04937	10.0	2140113.0	0.441975	Y



Calibration / Isobutyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

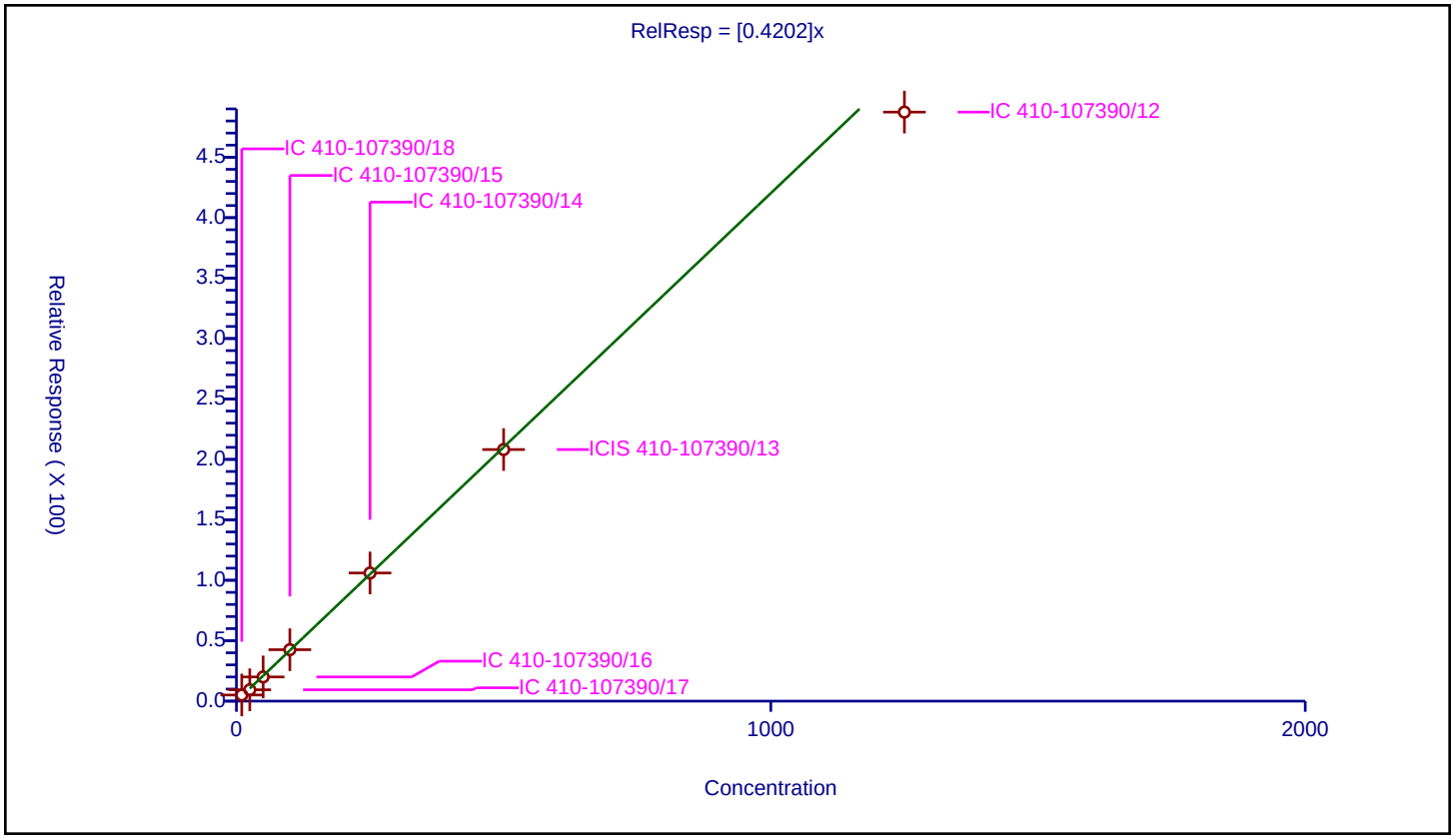
Curve Coefficients

Intercept:	0
Slope:	0.4202

Error Coefficients

Standard Error:	700000
Relative Standard Error:	10.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	10.0	5.089428	50.0	175560.0	0.508943	Y
2	IC 410-107390/17	25.0	9.406118	50.0	186889.0	0.376245	Y
3	IC 410-107390/16	50.0	20.024218	50.0	165165.0	0.400484	Y
4	IC 410-107390/15	100.0	42.571449	50.0	167112.0	0.425714	Y
5	IC 410-107390/14	250.0	106.023193	50.0	152718.0	0.424093	Y
6	ICIS 410-107390/13	500.0	208.157934	50.0	155217.0	0.416316	Y
7	IC 410-107390/12	1250.0	487.352591	50.0	158827.0	0.389882	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

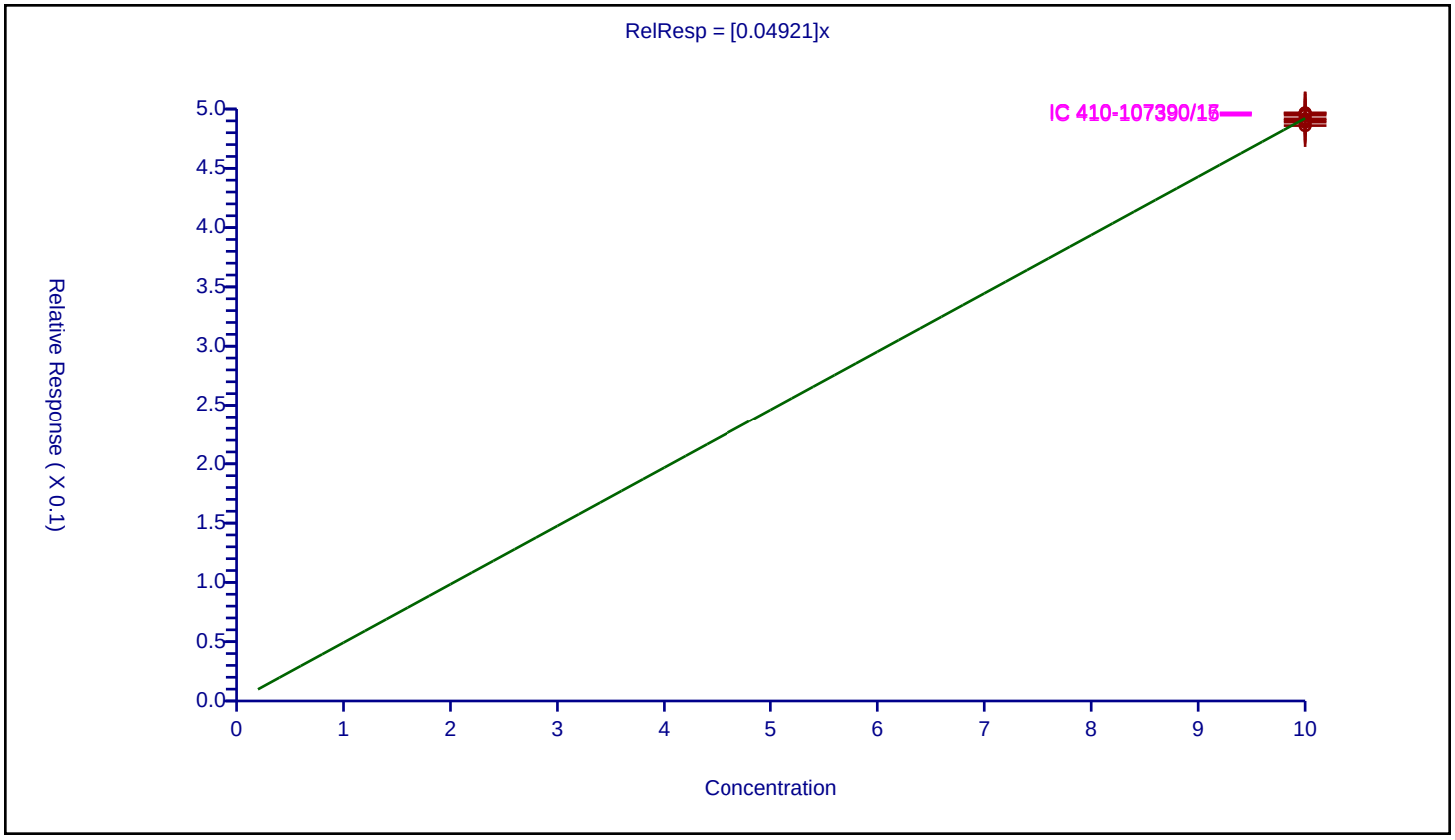
Curve Coefficients

Intercept:	0
Slope:	0.04921

Error Coefficients

Standard Error:	114000
Relative Standard Error:	0.8
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0.000000000000000444

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/12	10.0	0.48889	10.0	2140113.0	0.048889	Y
2	ICIS 410-107390/13	10.0	0.486007	10.0	2148304.0	0.048601	Y
3	IC 410-107390/14	10.0	0.490475	10.0	2135112.0	0.049048	Y
4	IC 410-107390/15	10.0	0.494811	10.0	2156681.0	0.049481	Y
5	IC 410-107390/16	10.0	0.496326	10.0	2146917.0	0.049633	Y
6	IC 410-107390/17	10.0	0.496791	10.0	2170550.0	0.049679	Y
7	IC 410-107390/18	10.0	0.491741	10.0	2175128.0	0.049174	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

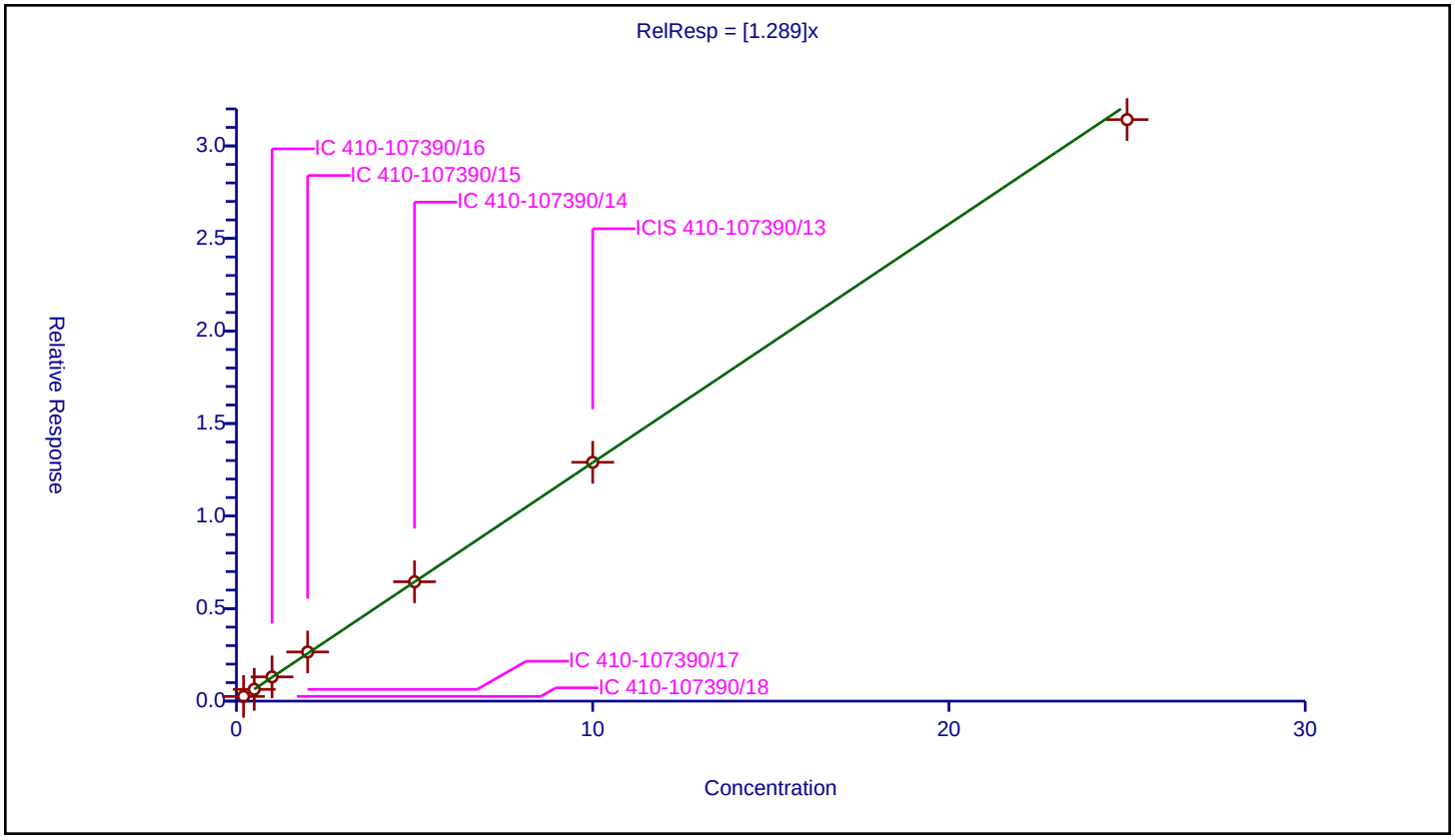
Curve Coefficients

Intercept:	0
Slope:	1.289

Error Coefficients

Standard Error:	3030000
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 410-107390/18	0.2	0.25427	10.0	2175128.0	1.27135	Y
2	IC 410-107390/17	0.5	0.637299	10.0	2170550.0	1.274599	Y
3	IC 410-107390/16	1.0	1.310726	10.0	2146917.0	1.310726	Y
4	IC 410-107390/15	2.0	2.655836	10.0	2156681.0	1.327918	Y
5	IC 410-107390/14	5.0	6.449933	10.0	2135112.0	1.289987	Y
6	ICIS 410-107390/13	10.0	12.905213	10.0	2148304.0	1.290521	Y
7	IC 410-107390/12	25.0	31.421995	10.0	2140113.0	1.25688	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

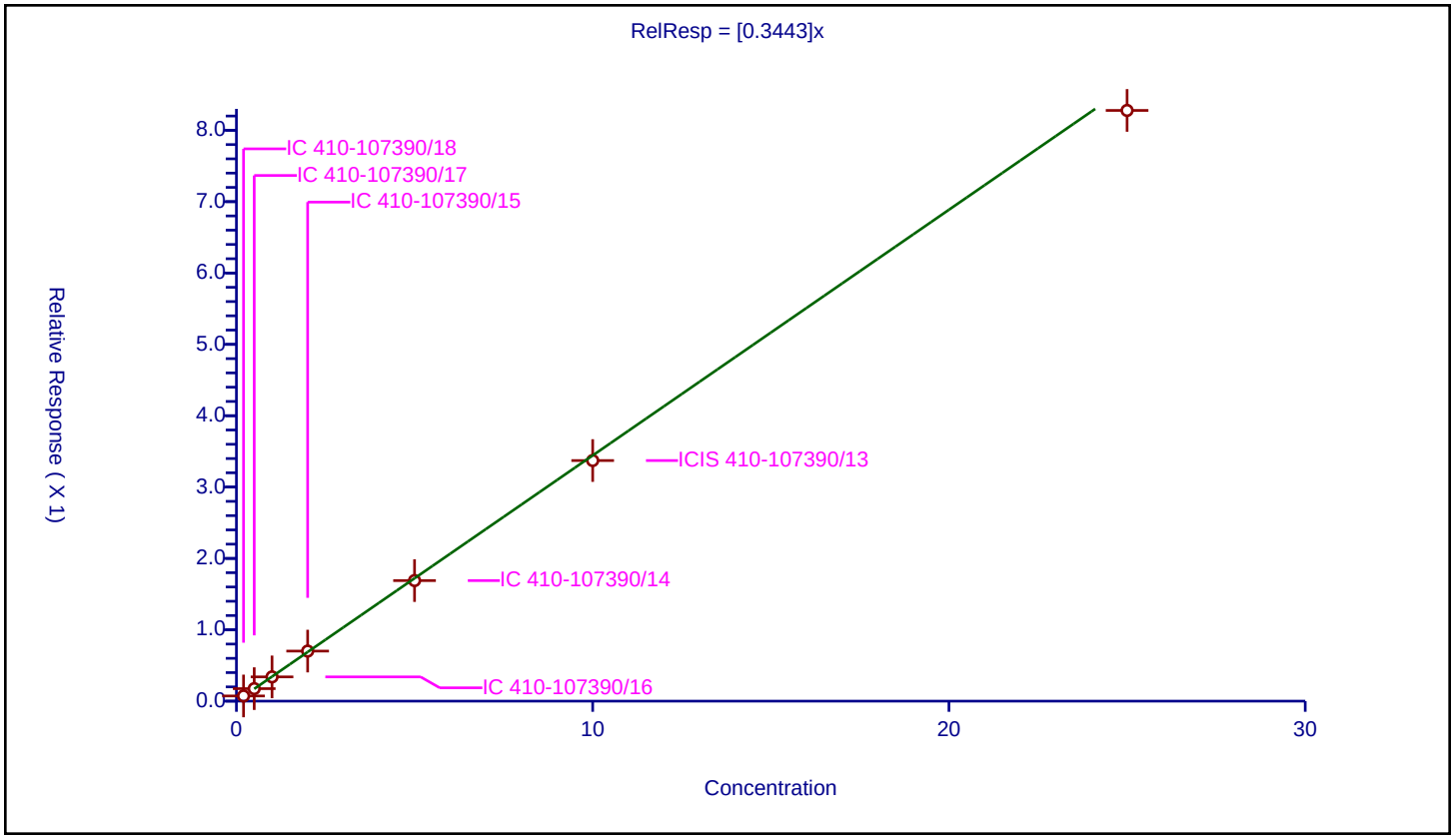
Curve Coefficients

Intercept:	0
Slope:	0.3443

Error Coefficients

Standard Error:	798000
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 410-107390/18	0.2	0.072626	10.0	2175128.0	0.363128	Y
2	IC 410-107390/17	0.5	0.175089	10.0	2170550.0	0.350179	Y
3	IC 410-107390/16	1.0	0.340013	10.0	2146917.0	0.340013	Y
4	IC 410-107390/15	2.0	0.701485	10.0	2156681.0	0.350743	Y
5	IC 410-107390/14	5.0	1.689387	10.0	2135112.0	0.337877	Y
6	ICIS 410-107390/13	10.0	3.371711	10.0	2148304.0	0.337171	Y
7	IC 410-107390/12	25.0	8.278278	10.0	2140113.0	0.331131	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

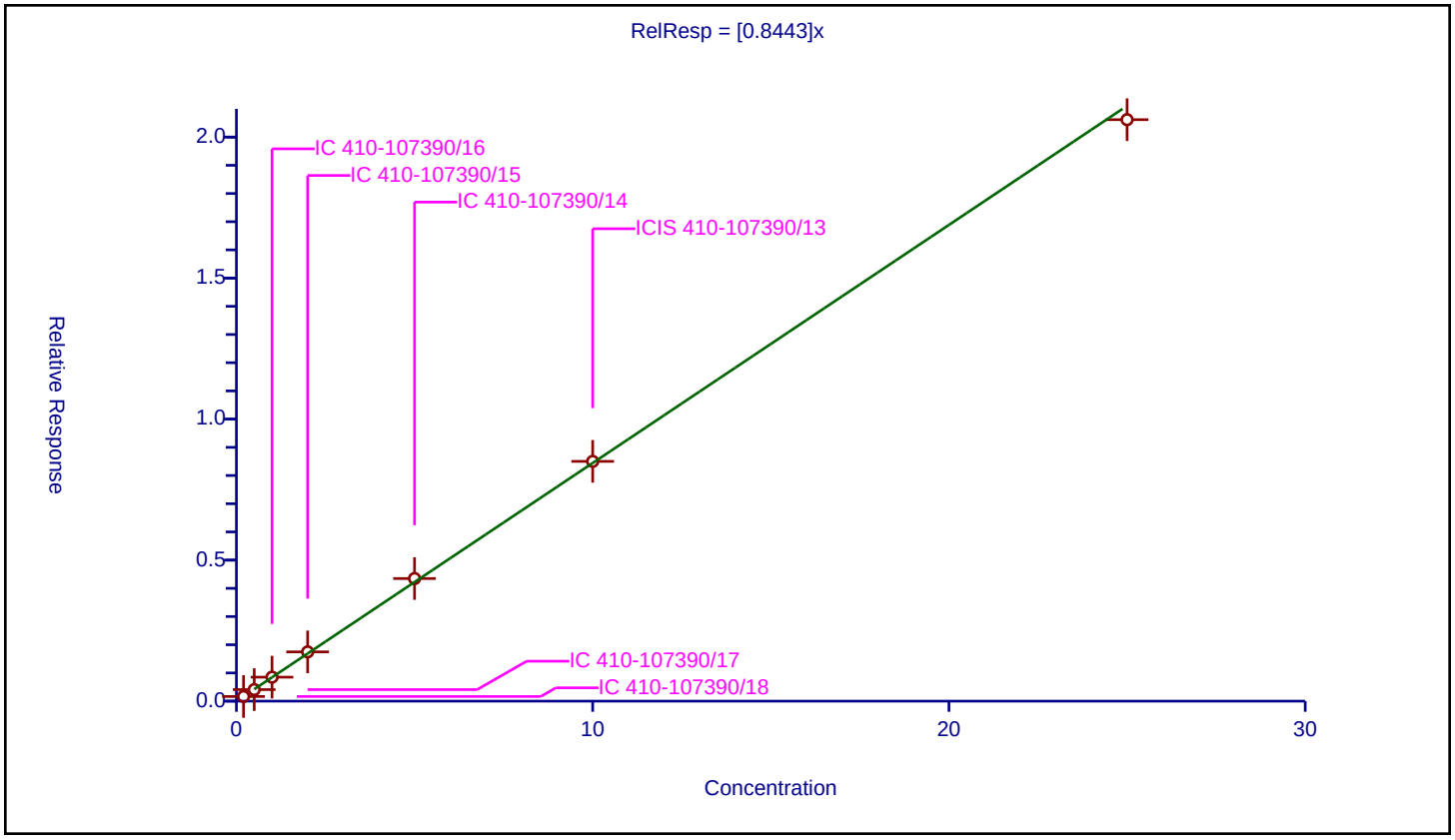
Curve Coefficients

Intercept:	0
Slope:	0.8443

Error Coefficients

Standard Error:	1990000
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 410-107390/18	0.2	0.164721	10.0	2175128.0	0.823607	Y
2	IC 410-107390/17	0.5	0.409564	10.0	2170550.0	0.819129	Y
3	IC 410-107390/16	1.0	0.849968	10.0	2146917.0	0.849968	Y
4	IC 410-107390/15	2.0	1.746294	10.0	2156681.0	0.873147	Y
5	IC 410-107390/14	5.0	4.347589	10.0	2135112.0	0.869518	Y
6	ICIS 410-107390/13	10.0	8.501455	10.0	2148304.0	0.850146	Y
7	IC 410-107390/12	25.0	20.617813	10.0	2140113.0	0.824713	Y



Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

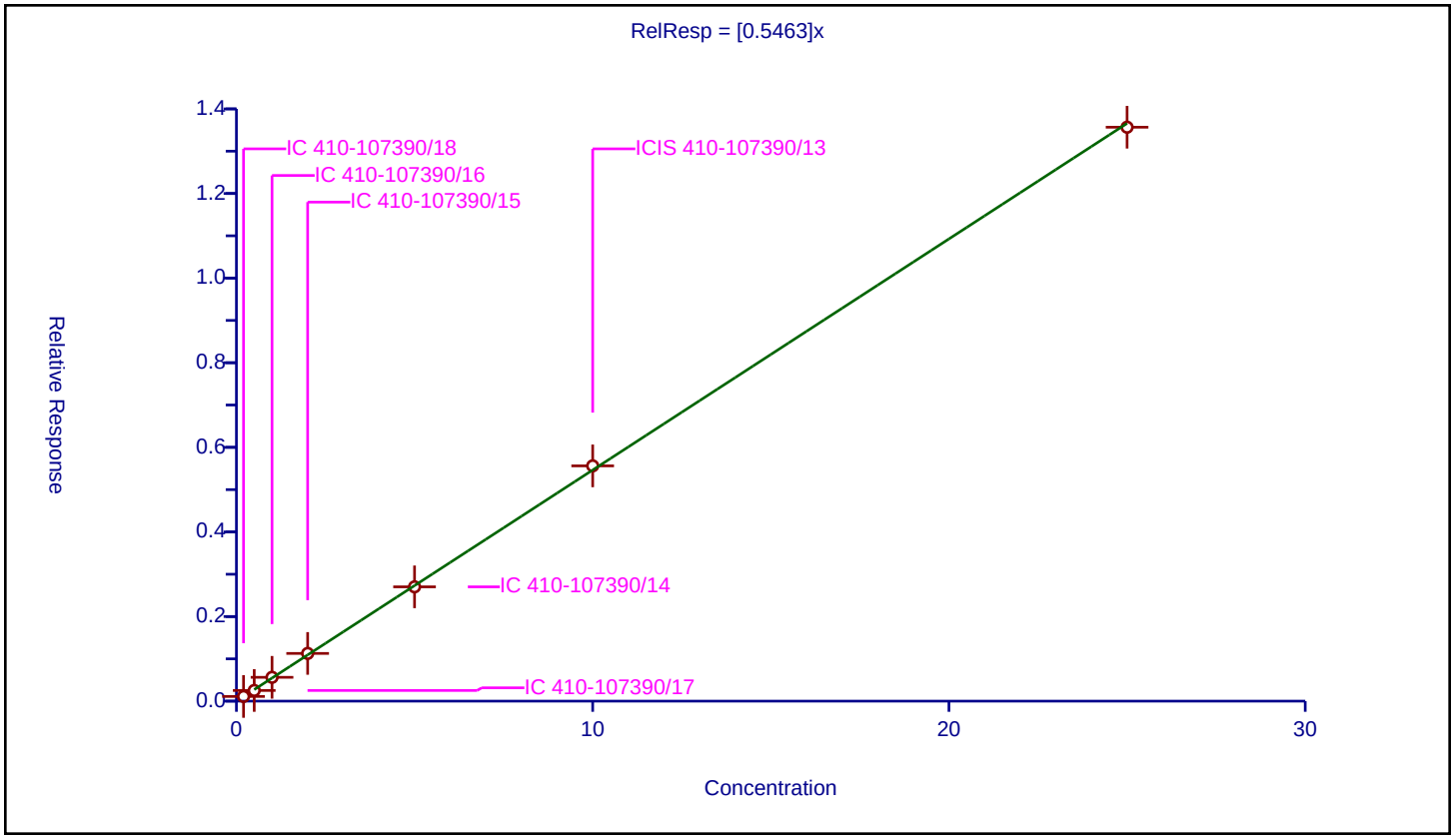
Curve Coefficients

Intercept:	0
Slope:	0.5463

Error Coefficients

Standard Error:	1310000
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 410-107390/18	0.2	0.110554	10.0	2175128.0	0.552772	Y
2	IC 410-107390/17	0.5	0.25242	10.0	2170550.0	0.50484	Y
3	IC 410-107390/16	1.0	0.563329	10.0	2146917.0	0.563329	Y
4	IC 410-107390/15	2.0	1.127979	10.0	2156681.0	0.563989	Y
5	IC 410-107390/14	5.0	2.701713	10.0	2135112.0	0.540343	Y
6	ICIS 410-107390/13	10.0	5.561829	10.0	2148304.0	0.556183	Y
7	IC 410-107390/12	25.0	13.566639	10.0	2140113.0	0.542666	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

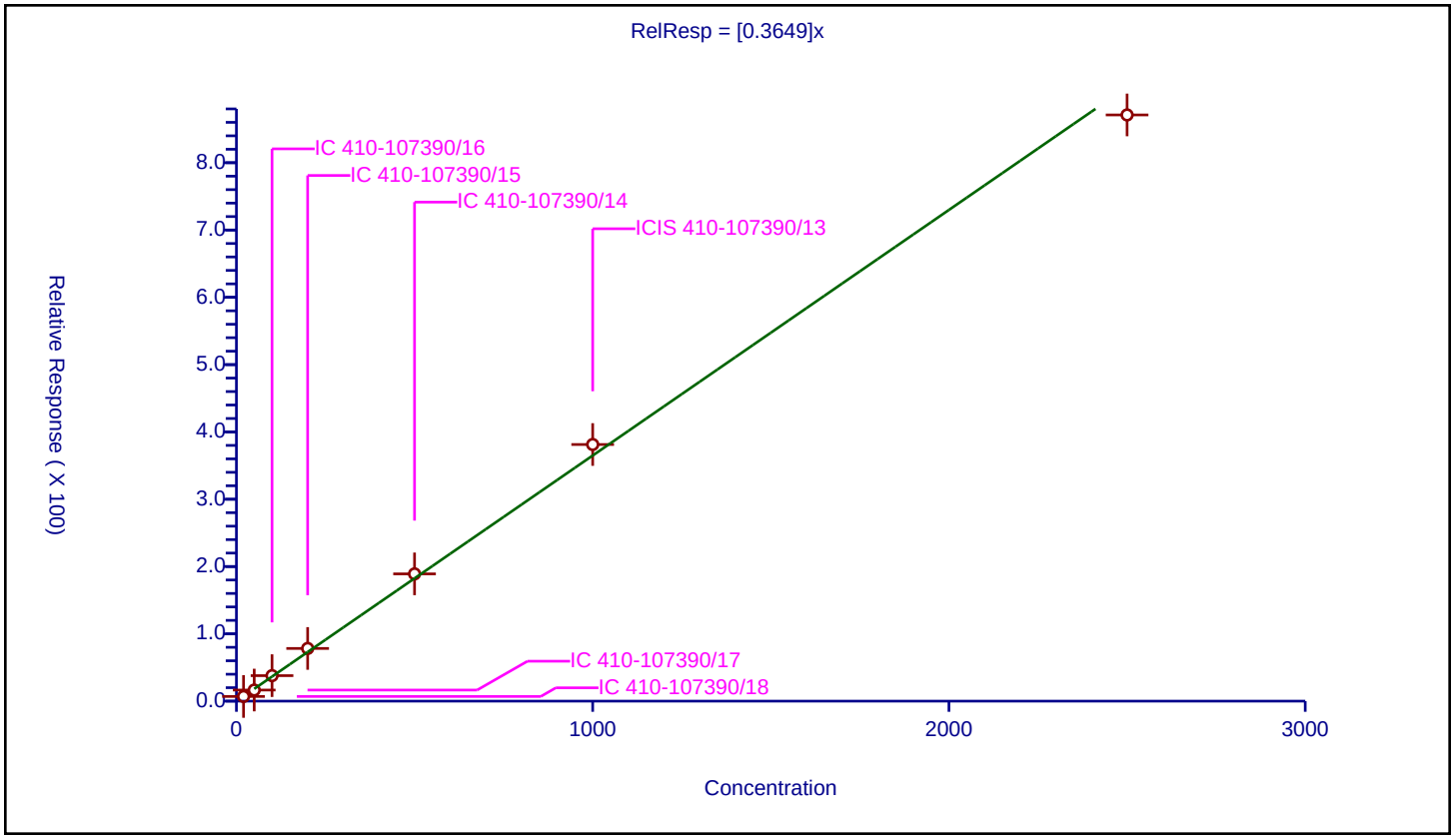
Curve Coefficients

Intercept:	0
Slope:	0.3649

Error Coefficients

Standard Error:	1260000
Relative Standard Error:	6.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	20.0	6.939223	50.0	175560.0	0.346961	Y
2	IC 410-107390/17	50.0	16.472612	50.0	186889.0	0.329452	Y
3	IC 410-107390/16	100.0	37.873036	50.0	165165.0	0.37873	Y
4	IC 410-107390/15	200.0	78.305568	50.0	167112.0	0.391528	Y
5	IC 410-107390/14	500.0	189.116542	50.0	152718.0	0.378233	Y
6	ICIS 410-107390/13	1000.0	381.323244	50.0	155217.0	0.381323	Y
7	IC 410-107390/12	2500.0	871.027911	50.0	158827.0	0.348411	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

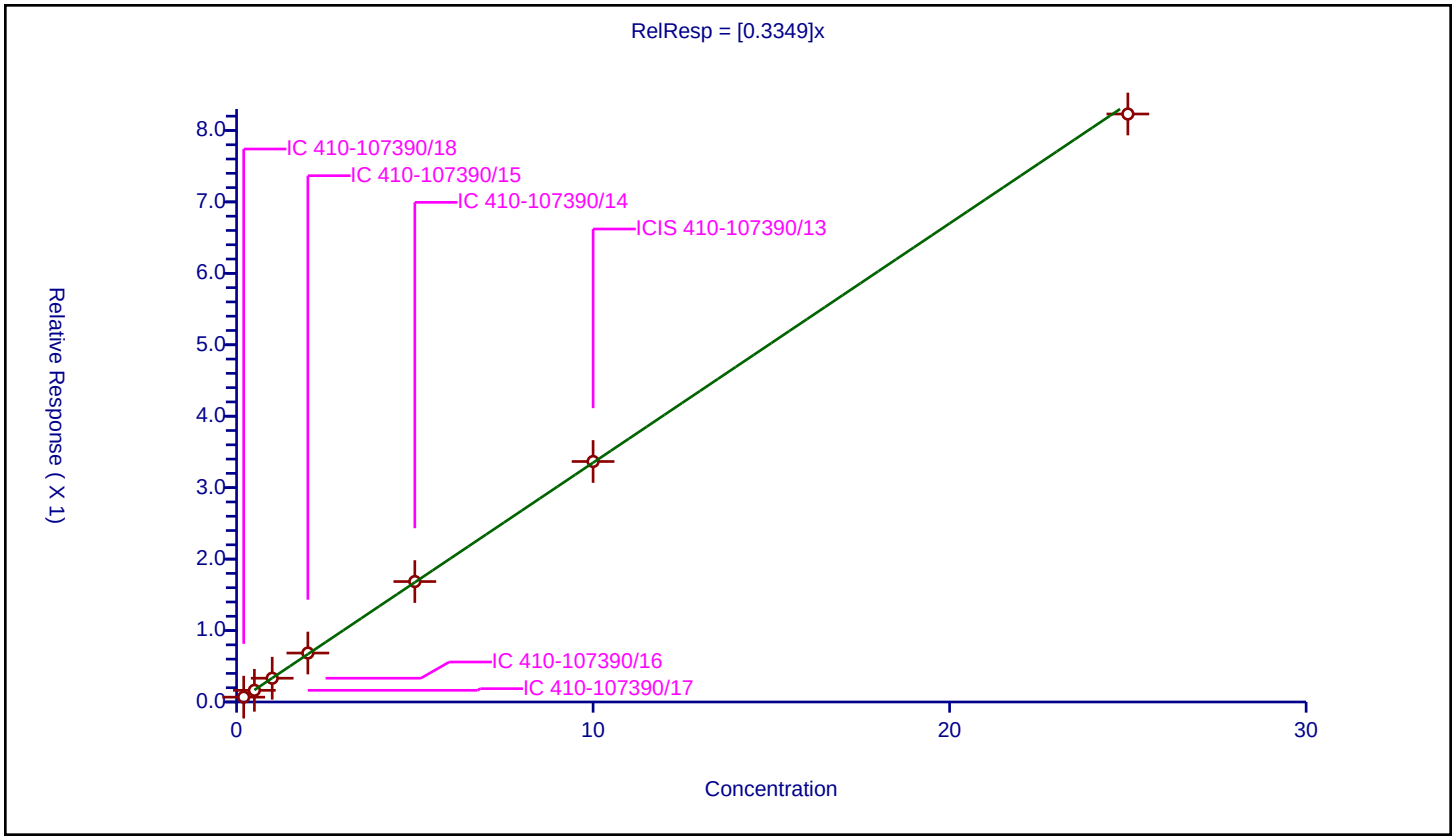
Curve Coefficients

Intercept:	0
Slope:	0.3349

Error Coefficients

Standard Error:	794000
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 410-107390/18	0.2	0.067858	10.0	2175128.0	0.33929	Y
2	IC 410-107390/17	0.5	0.163484	10.0	2170550.0	0.326968	Y
3	IC 410-107390/16	1.0	0.332649	10.0	2146917.0	0.332649	Y
4	IC 410-107390/15	2.0	0.685215	10.0	2156681.0	0.342607	Y
5	IC 410-107390/14	5.0	1.685691	10.0	2135112.0	0.337138	Y
6	ICIS 410-107390/13	10.0	3.366218	10.0	2148304.0	0.336622	Y
7	IC 410-107390/12	25.0	8.23036	10.0	2140113.0	0.329214	Y



Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

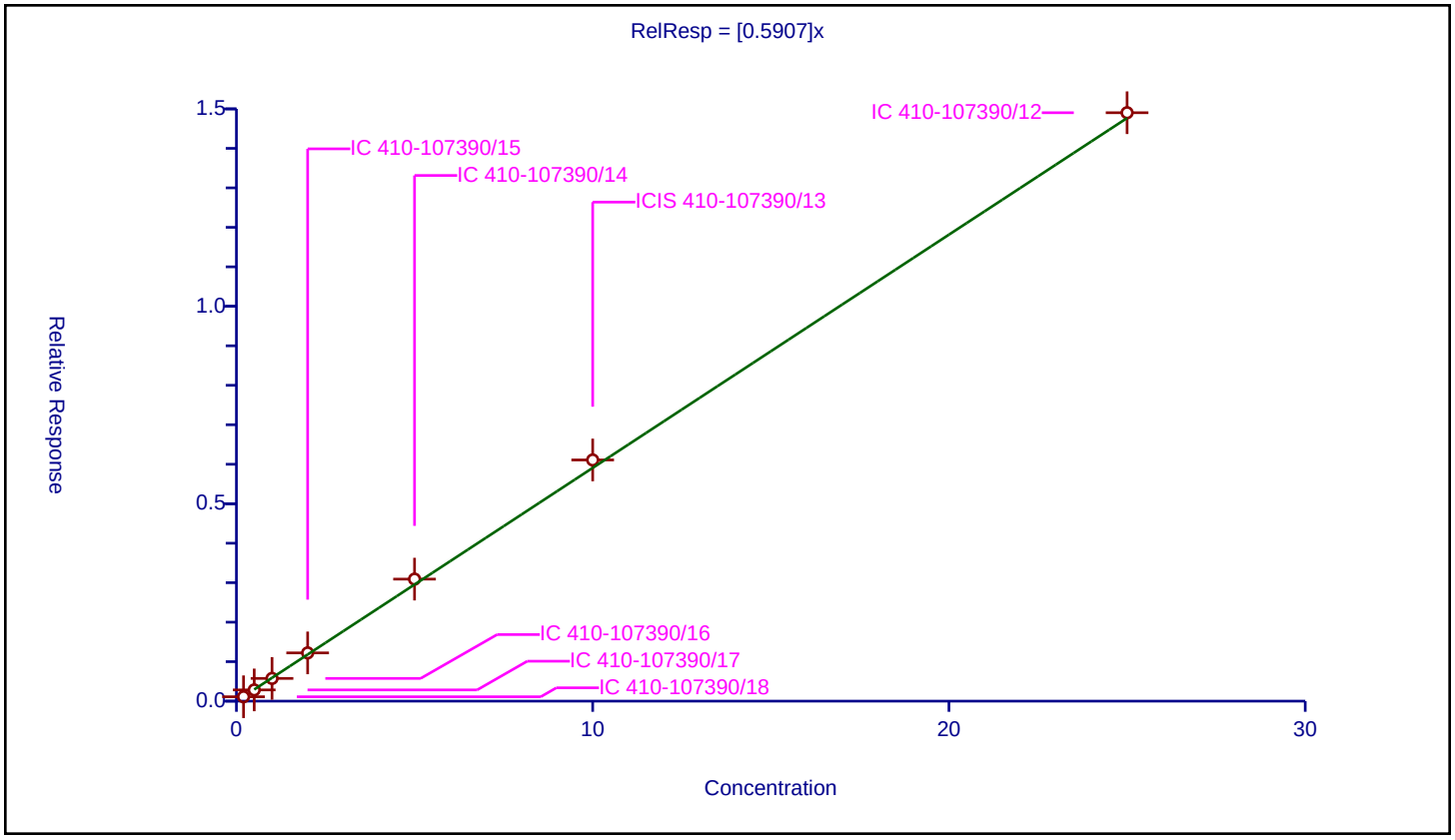
Curve Coefficients

Intercept:	0
Slope:	0.5907

Error Coefficients

Standard Error:	1440000
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 410-107390/18	0.2	0.110927	10.0	2175128.0	0.554634	Y
2	IC 410-107390/17	0.5	0.284444	10.0	2170550.0	0.568888	Y
3	IC 410-107390/16	1.0	0.575677	10.0	2146917.0	0.575677	Y
4	IC 410-107390/15	2.0	1.221813	10.0	2156681.0	0.610906	Y
5	IC 410-107390/14	5.0	3.090227	10.0	2135112.0	0.618045	Y
6	ICIS 410-107390/13	10.0	6.108251	10.0	2148304.0	0.610825	Y
7	IC 410-107390/12	25.0	14.902863	10.0	2140113.0	0.596115	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

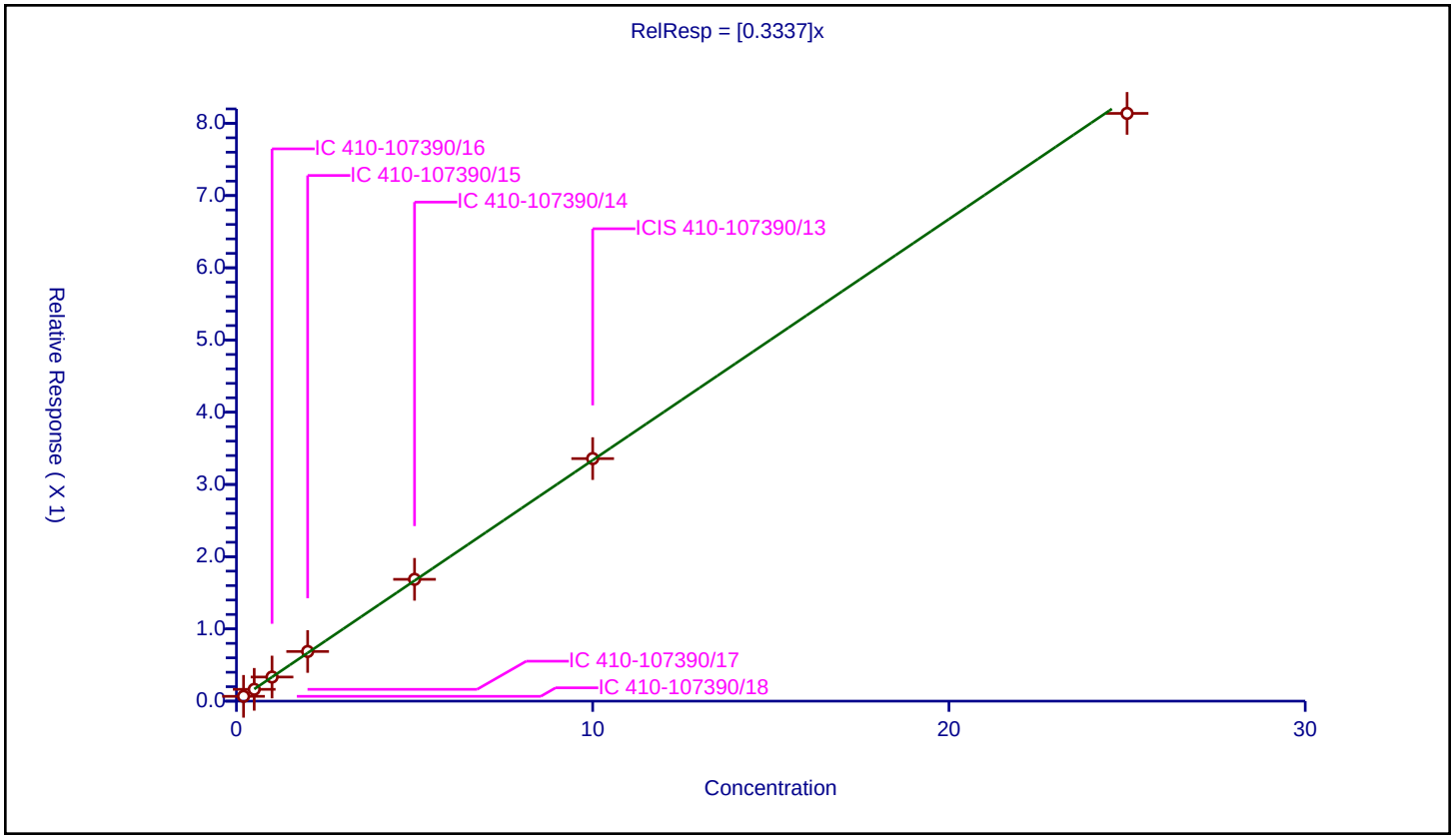
Curve Coefficients

Intercept:	0
Slope:	0.3337

Error Coefficients

Standard Error:	787000
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 410-107390/18	0.2	0.066502	10.0	2175128.0	0.332509	Y
2	IC 410-107390/17	0.5	0.163489	10.0	2170550.0	0.326977	Y
3	IC 410-107390/16	1.0	0.334014	10.0	2146917.0	0.334014	Y
4	IC 410-107390/15	2.0	0.687399	10.0	2156681.0	0.343699	Y
5	IC 410-107390/14	5.0	1.686375	10.0	2135112.0	0.337275	Y
6	ICIS 410-107390/13	10.0	3.358258	10.0	2148304.0	0.335826	Y
7	IC 410-107390/12	25.0	8.137771	10.0	2140113.0	0.325511	Y



Calibration / 1,4-Dioxane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

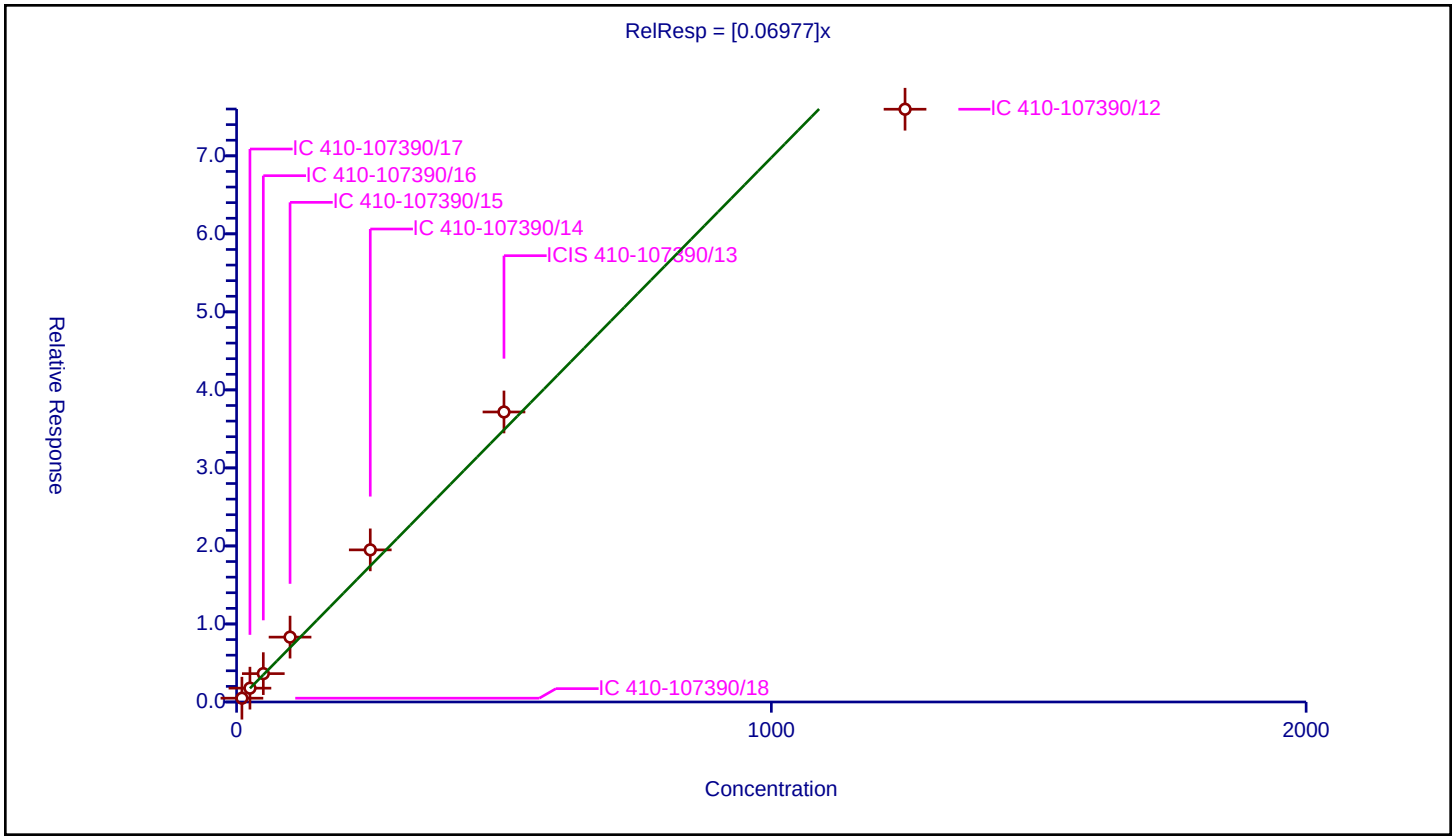
Curve Coefficients

Intercept:	0
Slope:	0.06977

Error Coefficients

Standard Error:	113000
Relative Standard Error:	16.6
Correlation Coefficient:	0.993
Coefficient of Determination (Adjusted):	0.969

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	10.0	0.485874	50.0	175560.0	0.048587	Y
2	IC 410-107390/17	25.0	1.77164	50.0	186889.0	0.070866	Y
3	IC 410-107390/16	50.0	3.635153	50.0	165165.0	0.072703	Y
4	IC 410-107390/15	100.0	8.312688	50.0	167112.0	0.083127	Y
5	IC 410-107390/14	250.0	19.495737	50.0	152718.0	0.077983	Y
6	ICIS 410-107390/13	500.0	37.169575	50.0	155217.0	0.074339	Y
7	IC 410-107390/12	1250.0	75.972284	50.0	158827.0	0.060778	Y



Calibration / Methyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

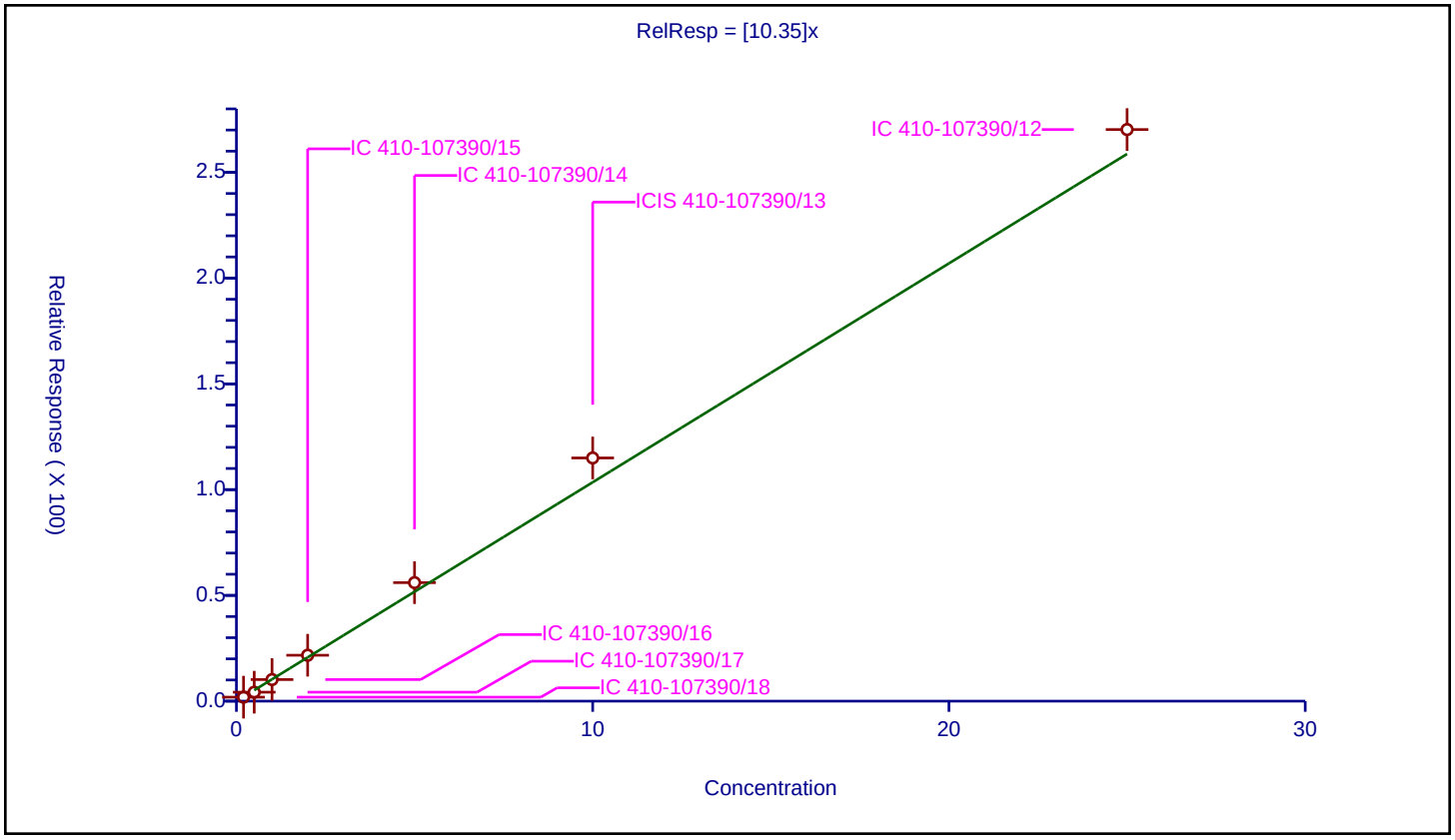
Curve Coefficients

Intercept:	0
Slope:	10.35

Error Coefficients

Standard Error:	387000
Relative Standard Error:	10.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	1.878275	50.0	175560.0	9.391376	Y
2	IC 410-107390/17	0.5	4.240485	50.0	186889.0	8.48097	Y
3	IC 410-107390/16	1.0	10.201919	50.0	165165.0	10.201919	Y
4	IC 410-107390/15	2.0	21.696527	50.0	167112.0	10.848263	Y
5	IC 410-107390/14	5.0	56.031051	50.0	152718.0	11.20621	Y
6	ICIS 410-107390/13	10.0	114.968077	50.0	155217.0	11.496808	Y
7	IC 410-107390/12	25.0	270.222947	50.0	158827.0	10.808918	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

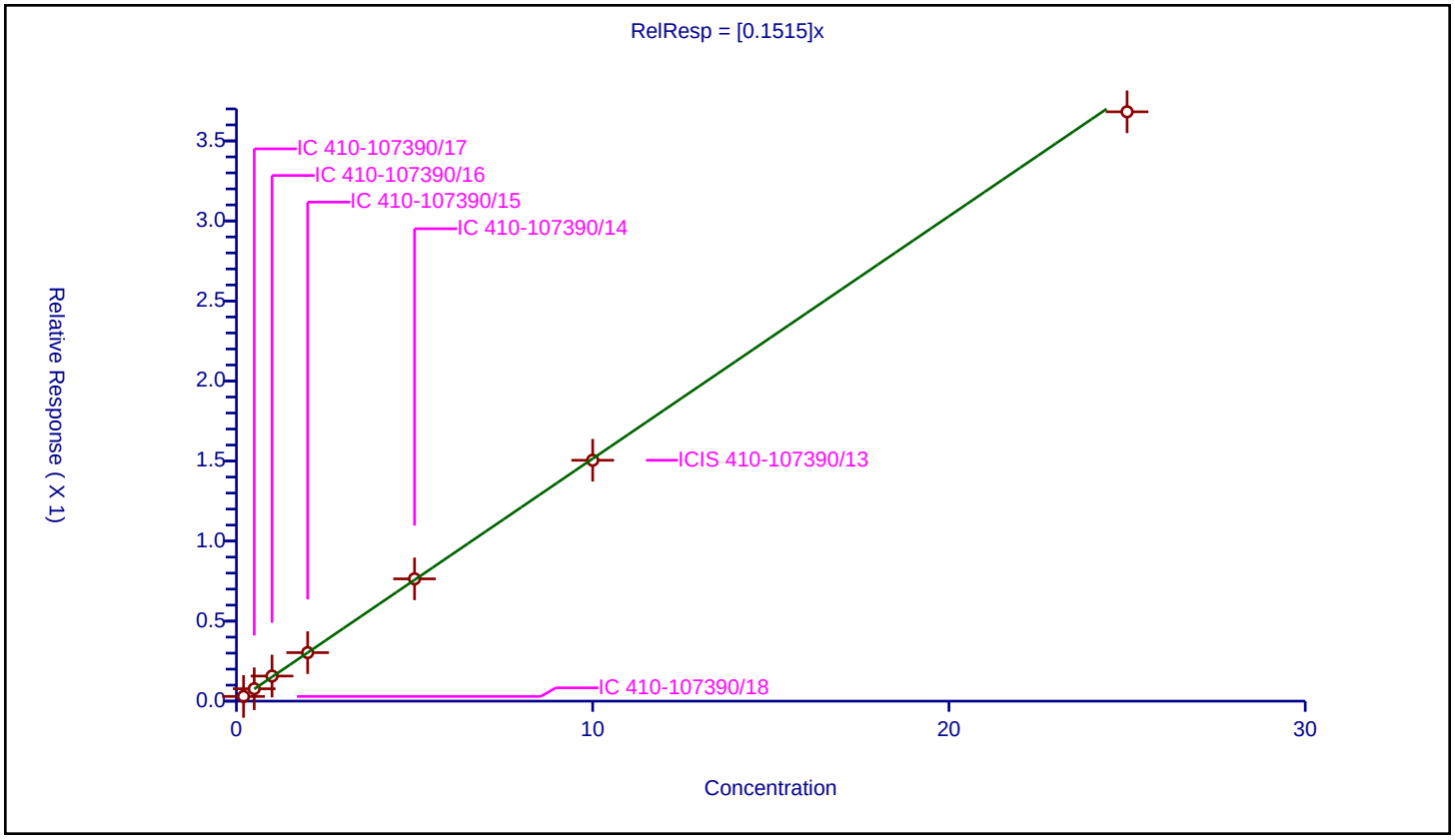
Curve Coefficients

Intercept:	0
Slope:	0.1515

Error Coefficients

Standard Error:	355000
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 410-107390/18	0.2	0.029391	10.0	2175128.0	0.146957	Y
2	IC 410-107390/17	0.5	0.077234	10.0	2170550.0	0.154468	Y
3	IC 410-107390/16	1.0	0.156746	10.0	2146917.0	0.156746	Y
4	IC 410-107390/15	2.0	0.303109	10.0	2156681.0	0.151555	Y
5	IC 410-107390/14	5.0	0.764063	10.0	2135112.0	0.152813	Y
6	ICIS 410-107390/13	10.0	1.505006	10.0	2148304.0	0.150501	Y
7	IC 410-107390/12	25.0	3.681932	10.0	2140113.0	0.147277	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

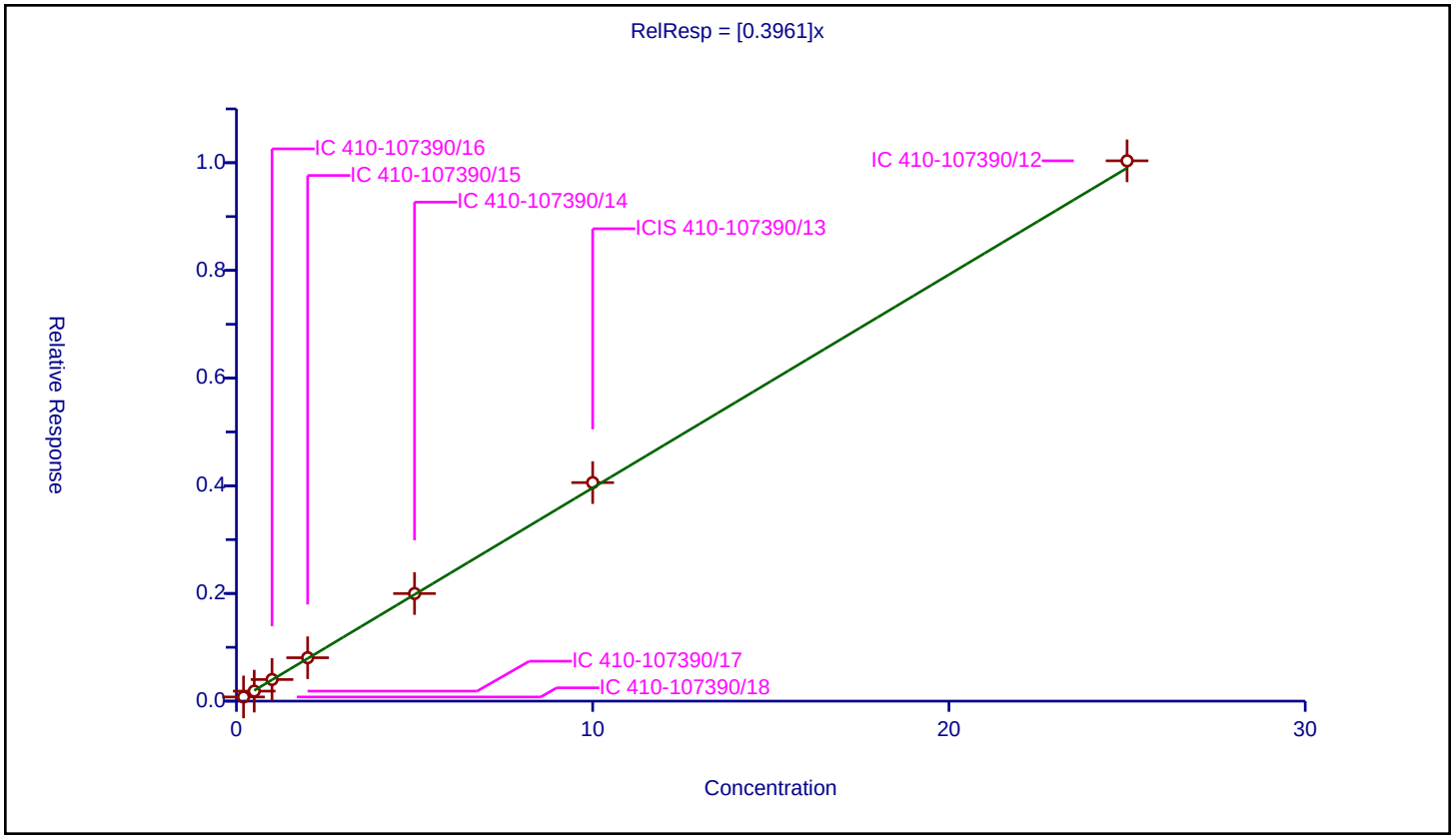
Curve Coefficients

Intercept:	0
Slope:	0.3961

Error Coefficients

Standard Error:	966000
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 410-107390/18	0.2	0.077572	10.0	2175128.0	0.387862	Y
2	IC 410-107390/17	0.5	0.186446	10.0	2170550.0	0.372892	Y
3	IC 410-107390/16	1.0	0.401641	10.0	2146917.0	0.401641	Y
4	IC 410-107390/15	2.0	0.806183	10.0	2156681.0	0.403092	Y
5	IC 410-107390/14	5.0	1.99886	10.0	2135112.0	0.399772	Y
6	ICIS 410-107390/13	10.0	4.059081	10.0	2148304.0	0.405908	Y
7	IC 410-107390/12	25.0	10.035867	10.0	2140113.0	0.401435	Y



Calibration / 2-Nitropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

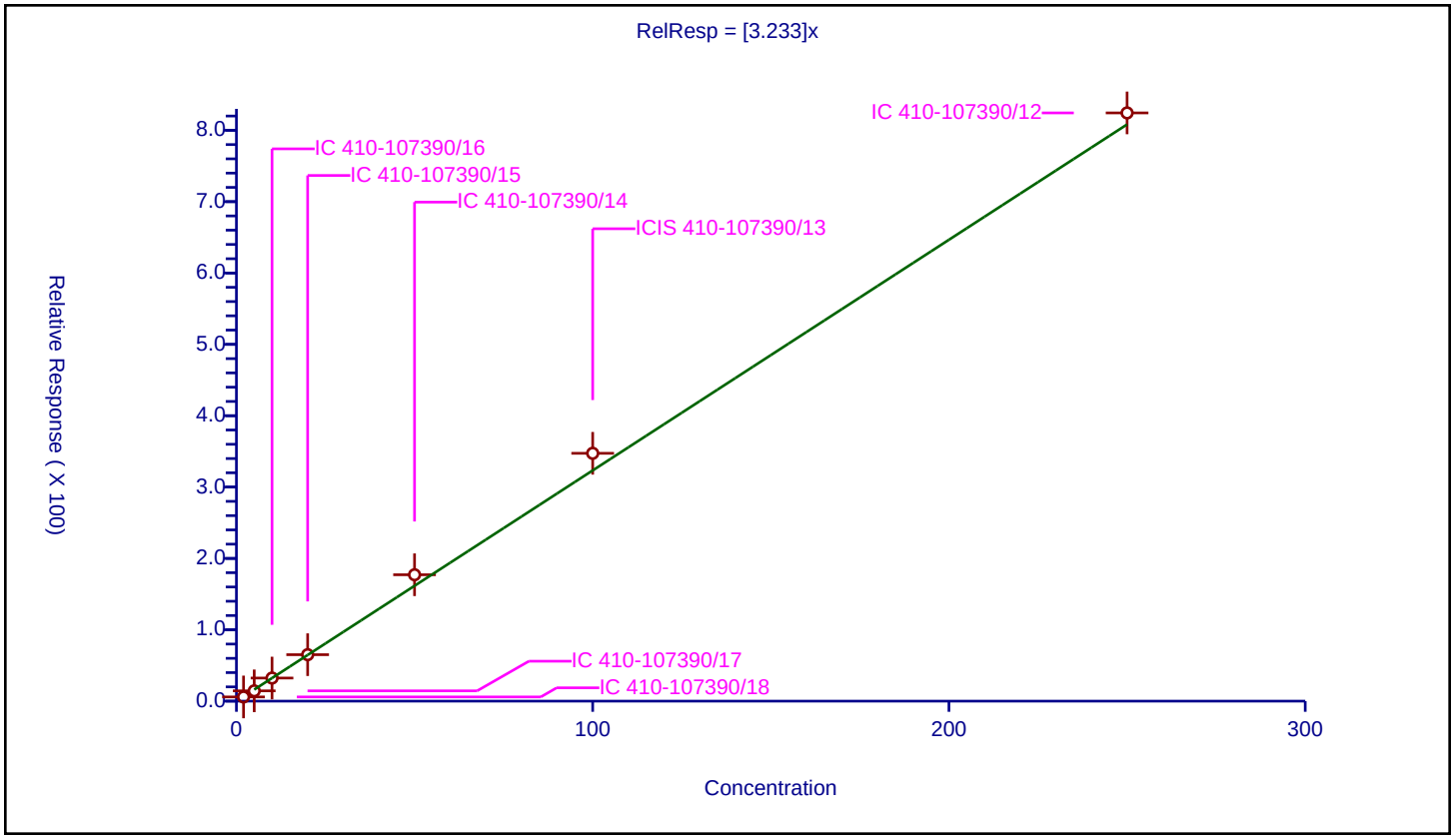
Curve Coefficients

Intercept:	0
Slope:	3.233

Error Coefficients

Standard Error:	1180000
Relative Standard Error:	7.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	2.0	5.886876	50.0	175560.0	2.943438	Y
2	IC 410-107390/17	5.0	14.40775	50.0	186889.0	2.88155	Y
3	IC 410-107390/16	10.0	32.364302	50.0	165165.0	3.23643	Y
4	IC 410-107390/15	20.0	65.103942	50.0	167112.0	3.255197	Y
5	IC 410-107390/14	50.0	177.117629	50.0	152718.0	3.542353	Y
6	ICIS 410-107390/13	100.0	347.349195	50.0	155217.0	3.473492	Y
7	IC 410-107390/12	250.0	824.375578	50.0	158827.0	3.297502	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

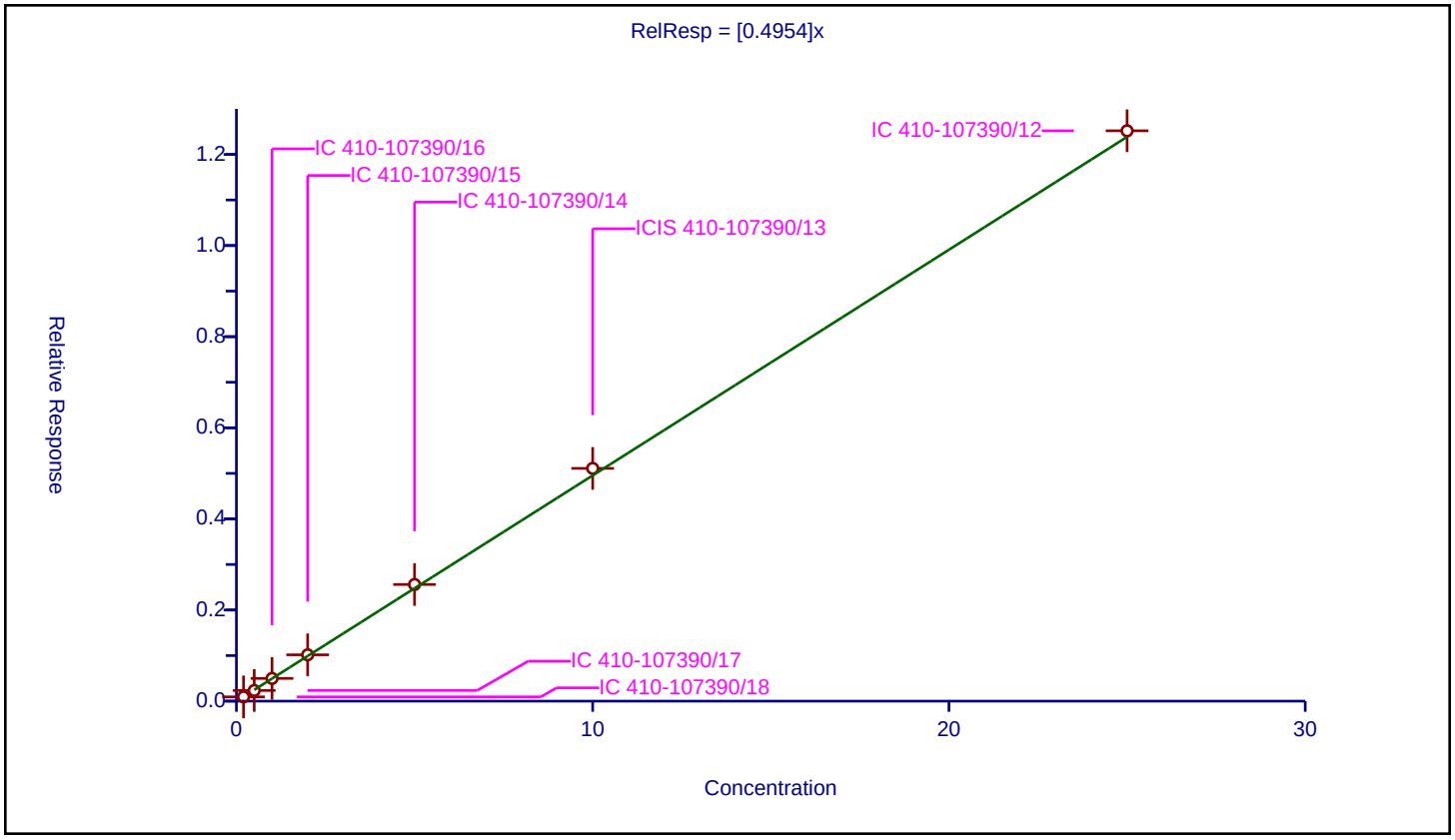
Curve Coefficients

Intercept:	0
Slope:	0.4954

Error Coefficients

Standard Error:	1210000
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 410-107390/18	0.2	0.093613	10.0	2175128.0	0.468064	Y
2	IC 410-107390/17	0.5	0.234401	10.0	2170550.0	0.468803	Y
3	IC 410-107390/16	1.0	0.49878	10.0	2146917.0	0.49878	Y
4	IC 410-107390/15	2.0	1.016817	10.0	2156681.0	0.508409	Y
5	IC 410-107390/14	5.0	2.560732	10.0	2135112.0	0.512146	Y
6	ICIS 410-107390/13	10.0	5.109389	10.0	2148304.0	0.510939	Y
7	IC 410-107390/12	25.0	12.519143	10.0	2140113.0	0.500766	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

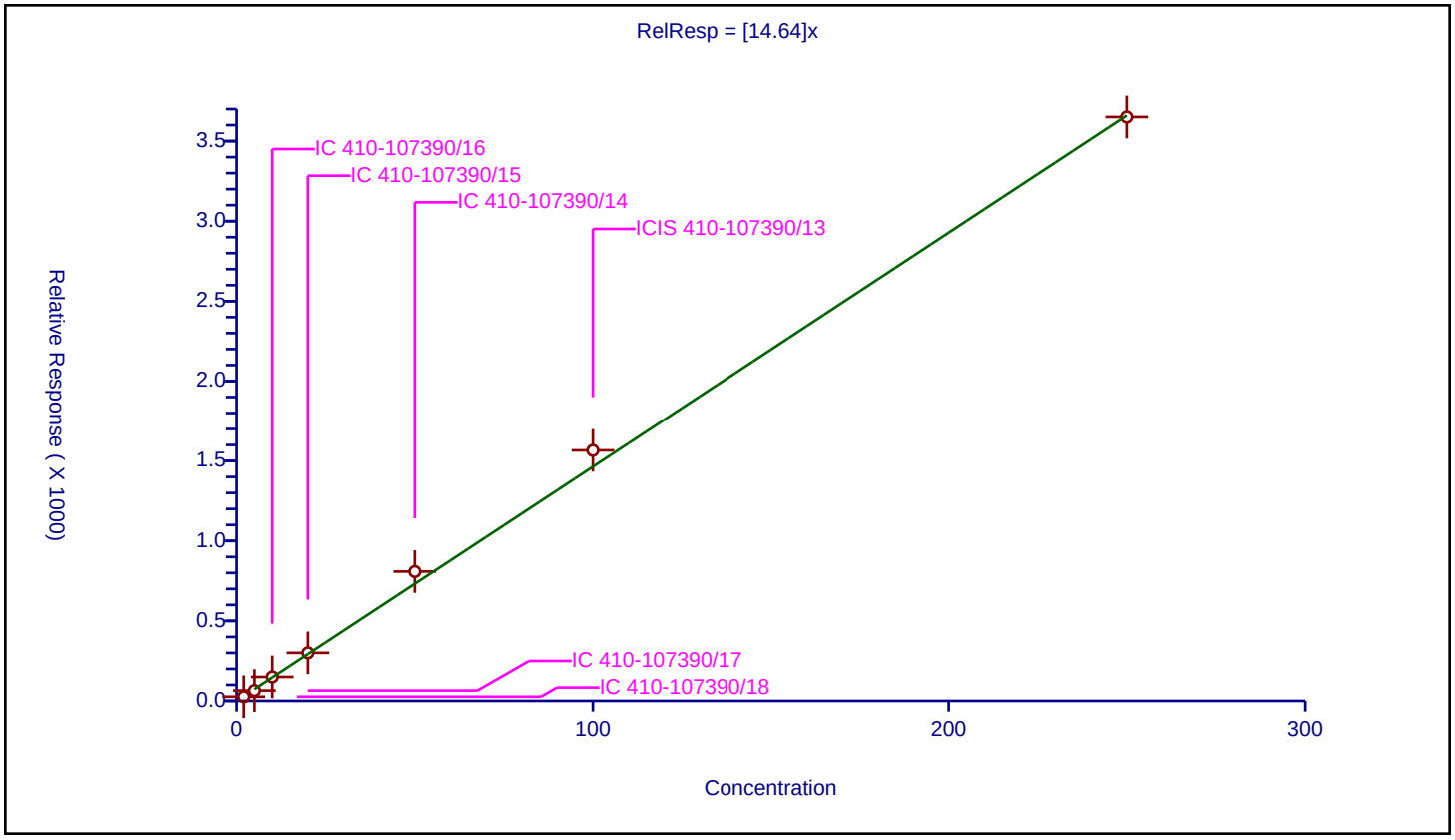
Curve Coefficients

Intercept:	0
Slope:	14.64

Error Coefficients

Standard Error:	5250000
Relative Standard Error:	8.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.991

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	2.0	26.273069	50.0	175560.0	13.136535	Y
2	IC 410-107390/17	5.0	64.594224	50.0	186889.0	12.918845	Y
3	IC 410-107390/16	10.0	149.62038	50.0	165165.0	14.962038	Y
4	IC 410-107390/15	20.0	300.375497	50.0	167112.0	15.018775	Y
5	IC 410-107390/14	50.0	808.780563	50.0	152718.0	16.175611	Y
6	ICIS 410-107390/13	100.0	1566.343248	50.0	155217.0	15.663432	Y
7	IC 410-107390/12	250.0	3650.603802	50.0	158827.0	14.602415	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

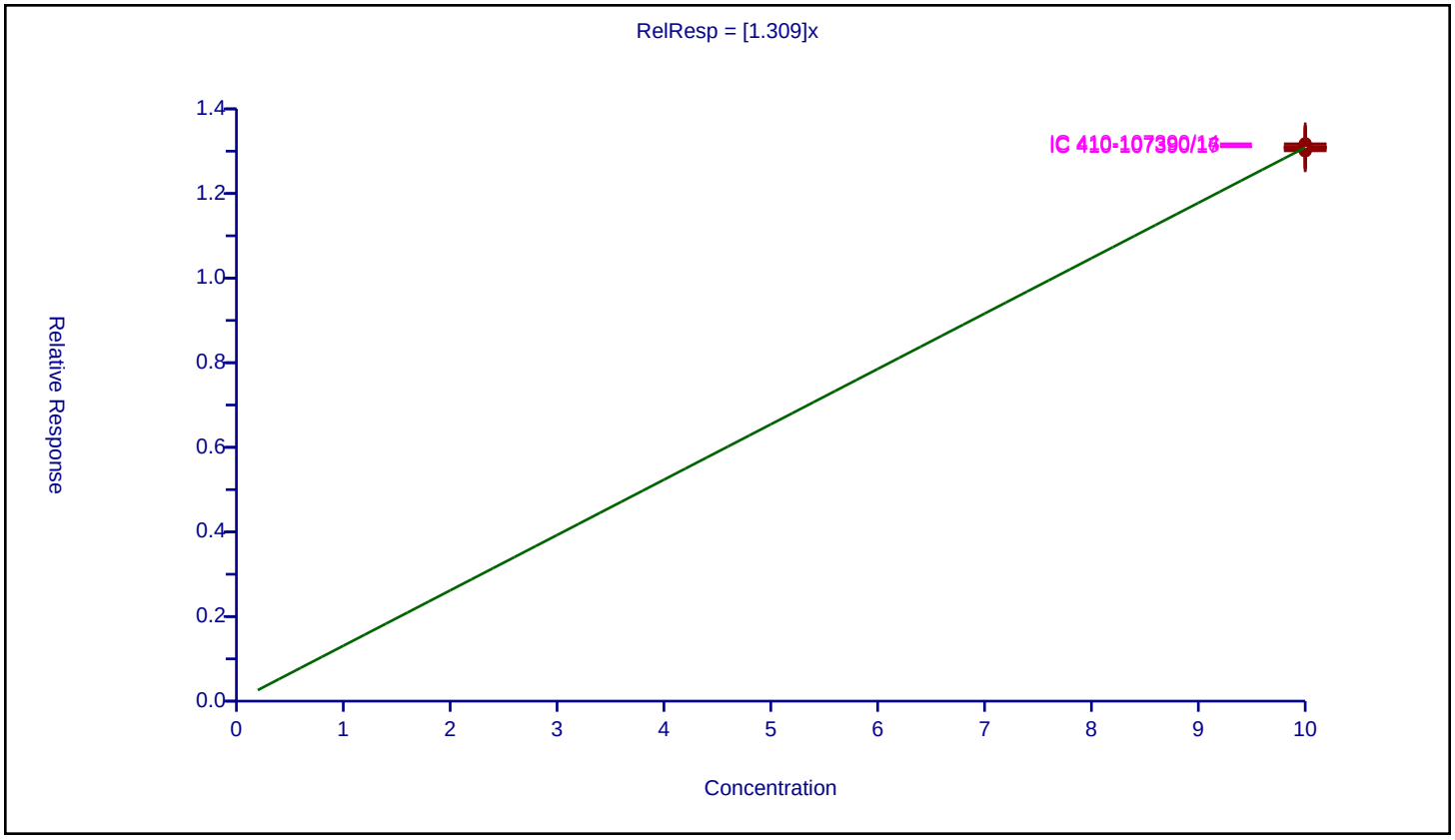
Curve Coefficients

Intercept:	0
Slope:	1.309

Error Coefficients

Standard Error:	2320000
Relative Standard Error:	0.4
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/14	10.0	13.17458	10.0	1621764.0	1.317458	Y
2	IC 410-107390/12	10.0	13.079683	10.0	1647559.0	1.307968	Y
3	ICIS 410-107390/13	10.0	13.084965	10.0	1638803.0	1.308497	Y
4	IC 410-107390/15	10.0	13.044456	10.0	1638769.0	1.304446	Y
5	IC 410-107390/16	10.0	13.113326	10.0	1626155.0	1.311333	Y
6	IC 410-107390/17	10.0	13.103778	10.0	1642102.0	1.310378	Y
7	IC 410-107390/18	10.0	13.008852	10.0	1649576.0	1.300885	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

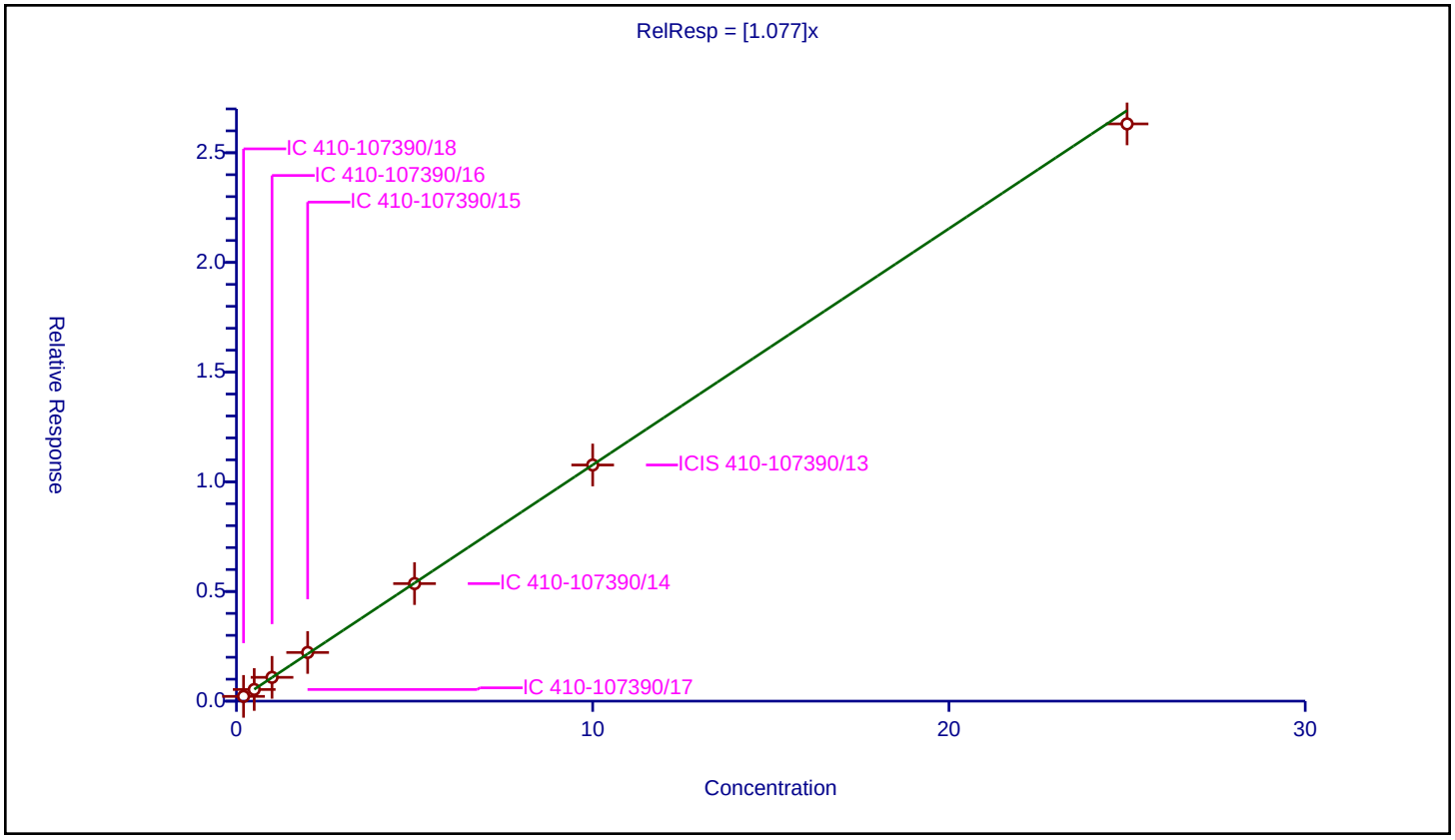
Curve Coefficients

Intercept:	0
Slope:	1.077

Error Coefficients

Standard Error:	1950000
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 410-107390/18	0.2	0.21634	10.0	1649576.0	1.081702	Y
2	IC 410-107390/17	0.5	0.531276	10.0	1642102.0	1.062553	Y
3	IC 410-107390/16	1.0	1.08478	10.0	1626155.0	1.08478	Y
4	IC 410-107390/15	2.0	2.219507	10.0	1638769.0	1.109754	Y
5	IC 410-107390/14	5.0	5.359152	10.0	1621764.0	1.07183	Y
6	ICIS 410-107390/13	10.0	10.766224	10.0	1638803.0	1.076622	Y
7	IC 410-107390/12	25.0	26.316059	10.0	1647559.0	1.052642	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

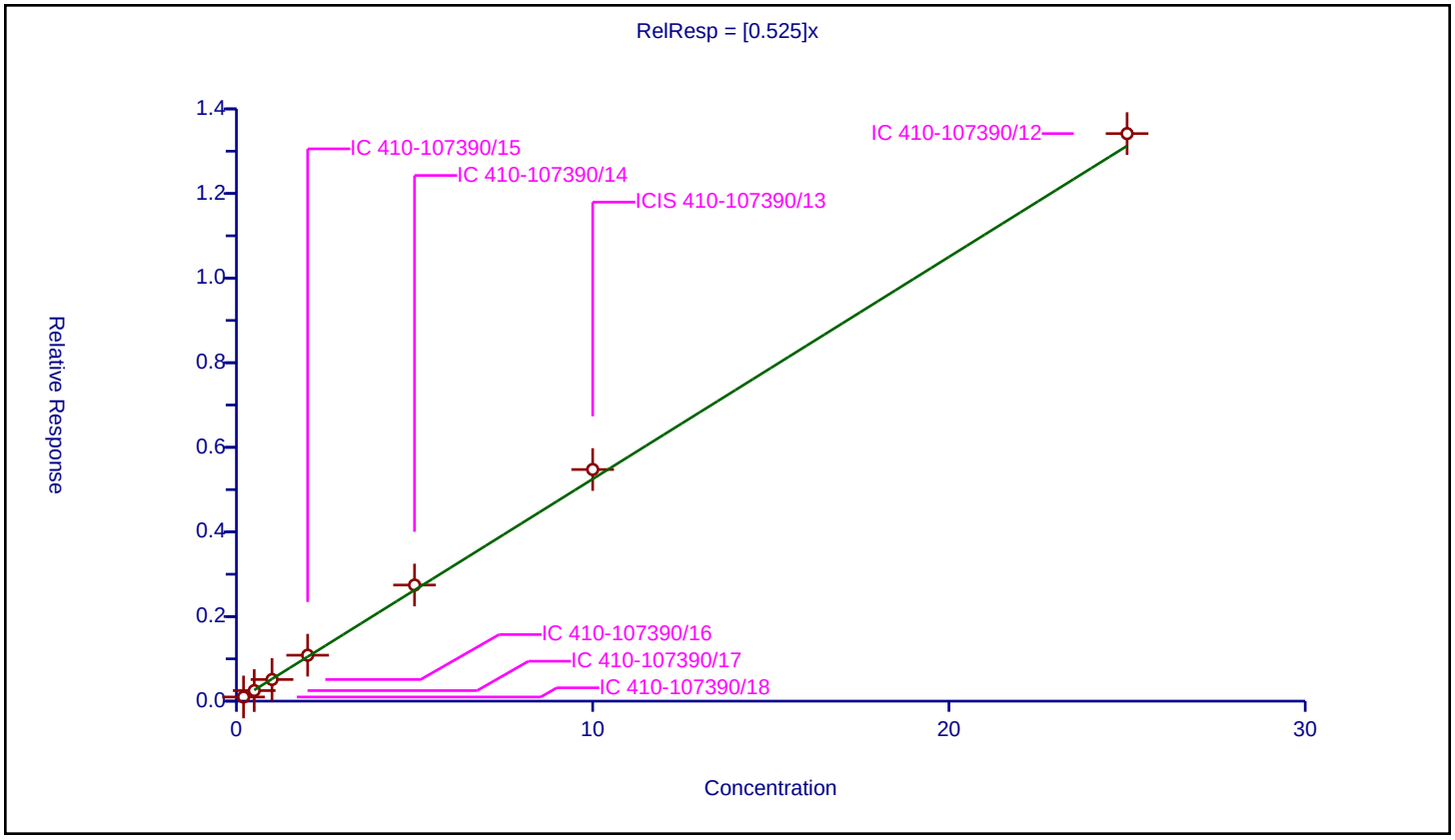
Curve Coefficients

Intercept:	0
Slope:	0.525

Error Coefficients

Standard Error:	994000
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 410-107390/18	0.2	0.097807	10.0	1649576.0	0.489035	Y
2	IC 410-107390/17	0.5	0.249461	10.0	1642102.0	0.498922	Y
3	IC 410-107390/16	1.0	0.511372	10.0	1626155.0	0.511372	Y
4	IC 410-107390/15	2.0	1.085528	10.0	1638769.0	0.542764	Y
5	IC 410-107390/14	5.0	2.744801	10.0	1621764.0	0.54896	Y
6	ICIS 410-107390/13	10.0	5.47549	10.0	1638803.0	0.547549	Y
7	IC 410-107390/12	25.0	13.415884	10.0	1647559.0	0.536635	Y



Calibration / Ethyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

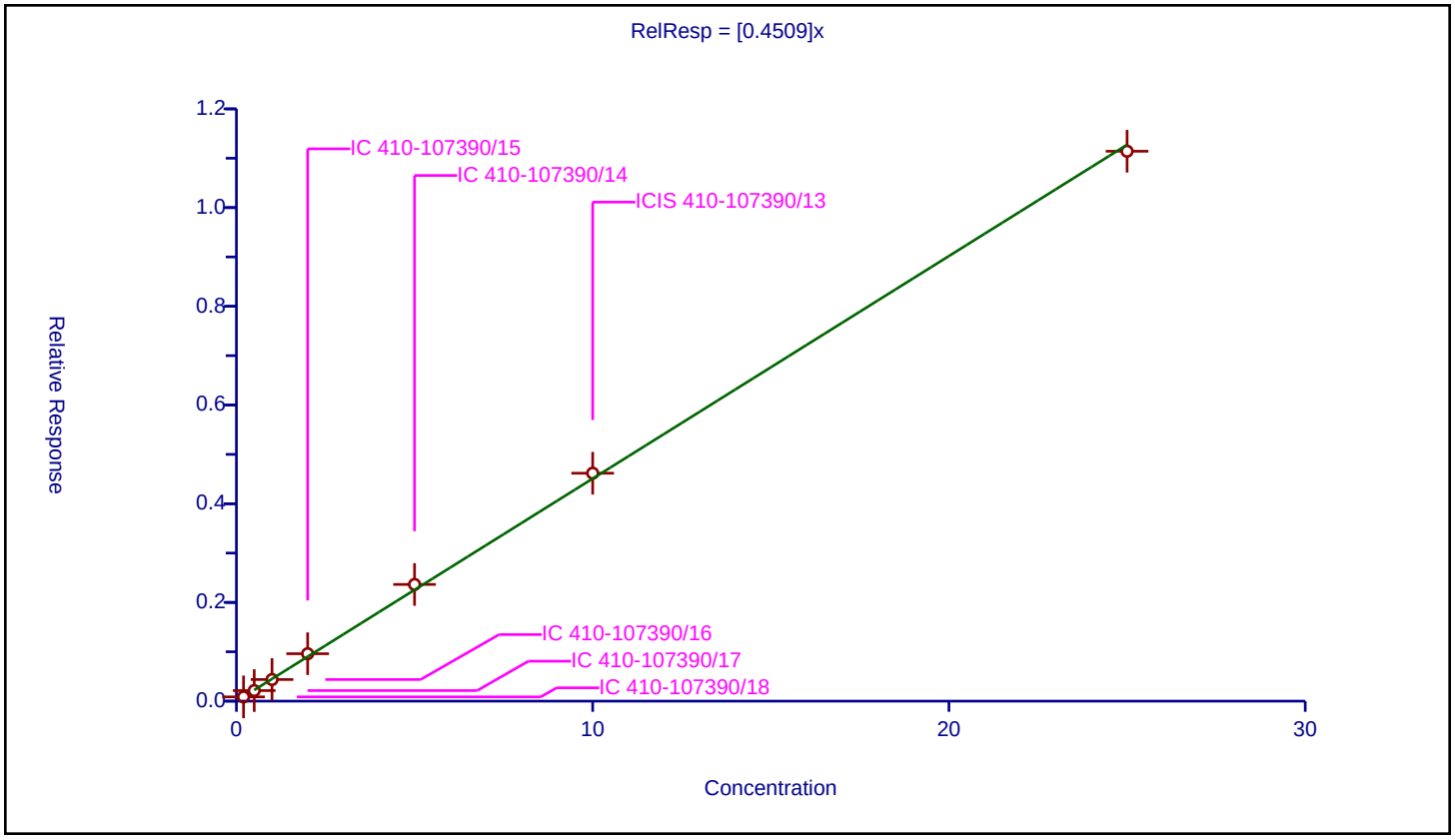
Curve Coefficients

Intercept:	0
Slope:	0.4509

Error Coefficients

Standard Error:	829000
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 410-107390/18	0.2	0.085883	10.0	1649576.0	0.429413	Y
2	IC 410-107390/17	0.5	0.214225	10.0	1642102.0	0.428451	Y
3	IC 410-107390/16	1.0	0.437775	10.0	1626155.0	0.437775	Y
4	IC 410-107390/15	2.0	0.960855	10.0	1638769.0	0.480428	Y
5	IC 410-107390/14	5.0	2.364407	10.0	1621764.0	0.472881	Y
6	ICIS 410-107390/13	10.0	4.618218	10.0	1638803.0	0.461822	Y
7	IC 410-107390/12	25.0	11.142017	10.0	1647559.0	0.445681	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

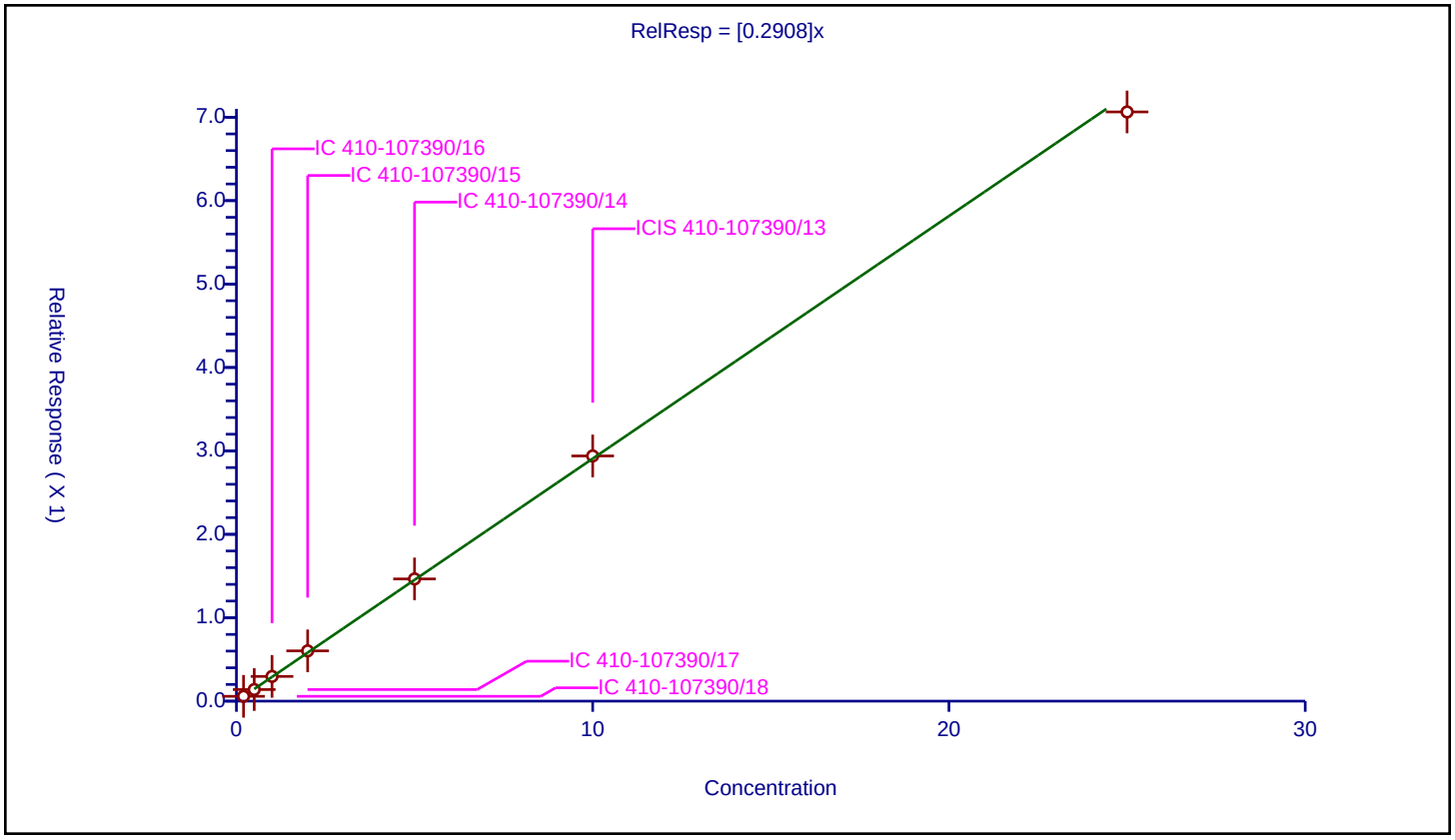
Curve Coefficients

Intercept:	0
Slope:	0.2908

Error Coefficients

Standard Error:	525000
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 410-107390/18	0.2	0.057979	10.0	1649576.0	0.289893	Y
2	IC 410-107390/17	0.5	0.139053	10.0	1642102.0	0.278107	Y
3	IC 410-107390/16	1.0	0.296472	10.0	1626155.0	0.296472	Y
4	IC 410-107390/15	2.0	0.602666	10.0	1638769.0	0.301333	Y
5	IC 410-107390/14	5.0	1.46496	10.0	1621764.0	0.292992	Y
6	ICIS 410-107390/13	10.0	2.939536	10.0	1638803.0	0.293954	Y
7	IC 410-107390/12	25.0	7.063437	10.0	1647559.0	0.282537	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

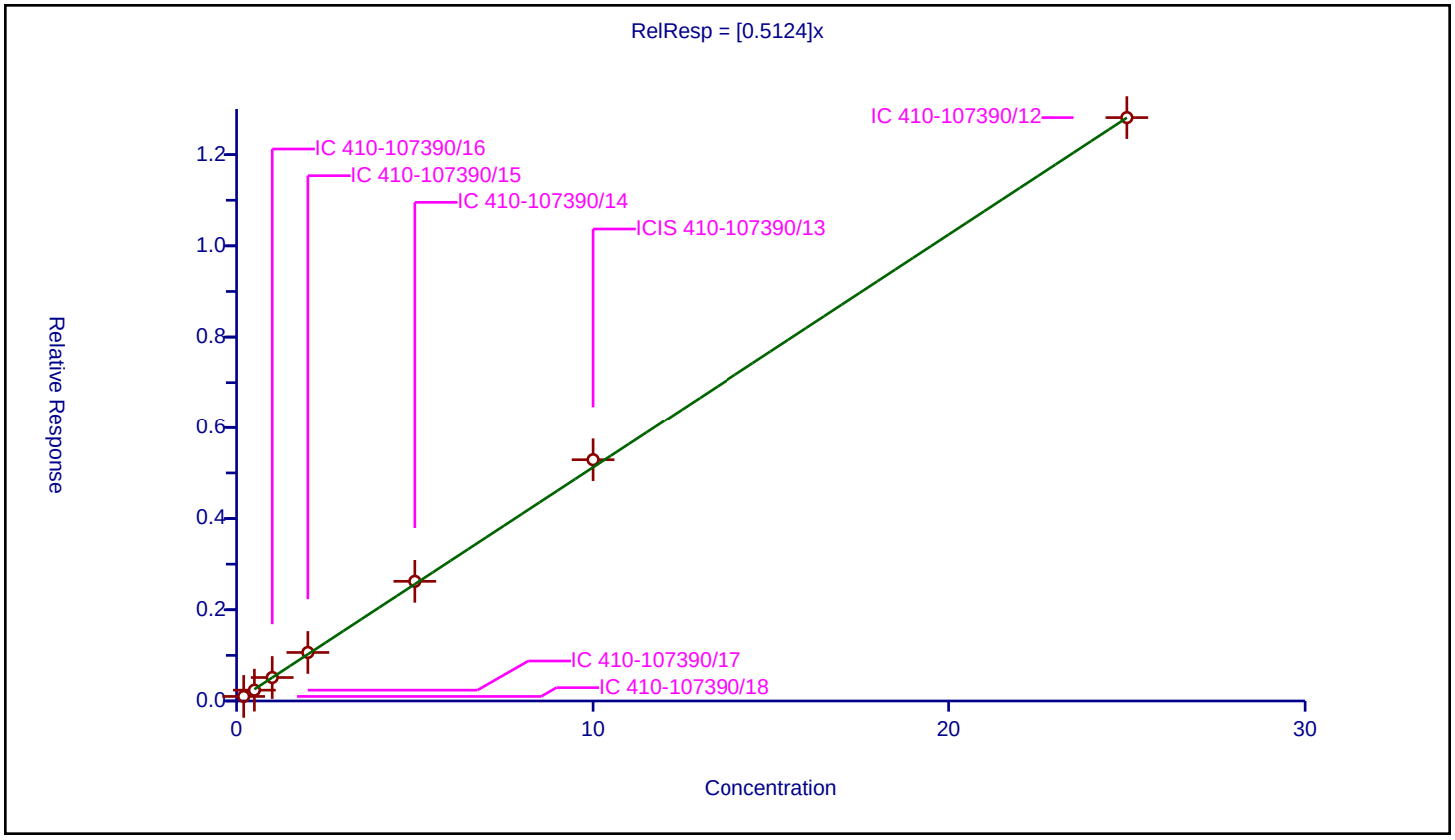
Curve Coefficients

Intercept:	0
Slope:	0.5124

Error Coefficients

Standard Error:	951000
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 410-107390/18	0.2	0.099668	10.0	1649576.0	0.49834	Y
2	IC 410-107390/17	0.5	0.237817	10.0	1642102.0	0.475634	Y
3	IC 410-107390/16	1.0	0.51452	10.0	1626155.0	0.51452	Y
4	IC 410-107390/15	2.0	1.063518	10.0	1638769.0	0.531759	Y
5	IC 410-107390/14	5.0	2.62376	10.0	1621764.0	0.524752	Y
6	ICIS 410-107390/13	10.0	5.289977	10.0	1638803.0	0.528998	Y
7	IC 410-107390/12	25.0	12.811717	10.0	1647559.0	0.512469	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

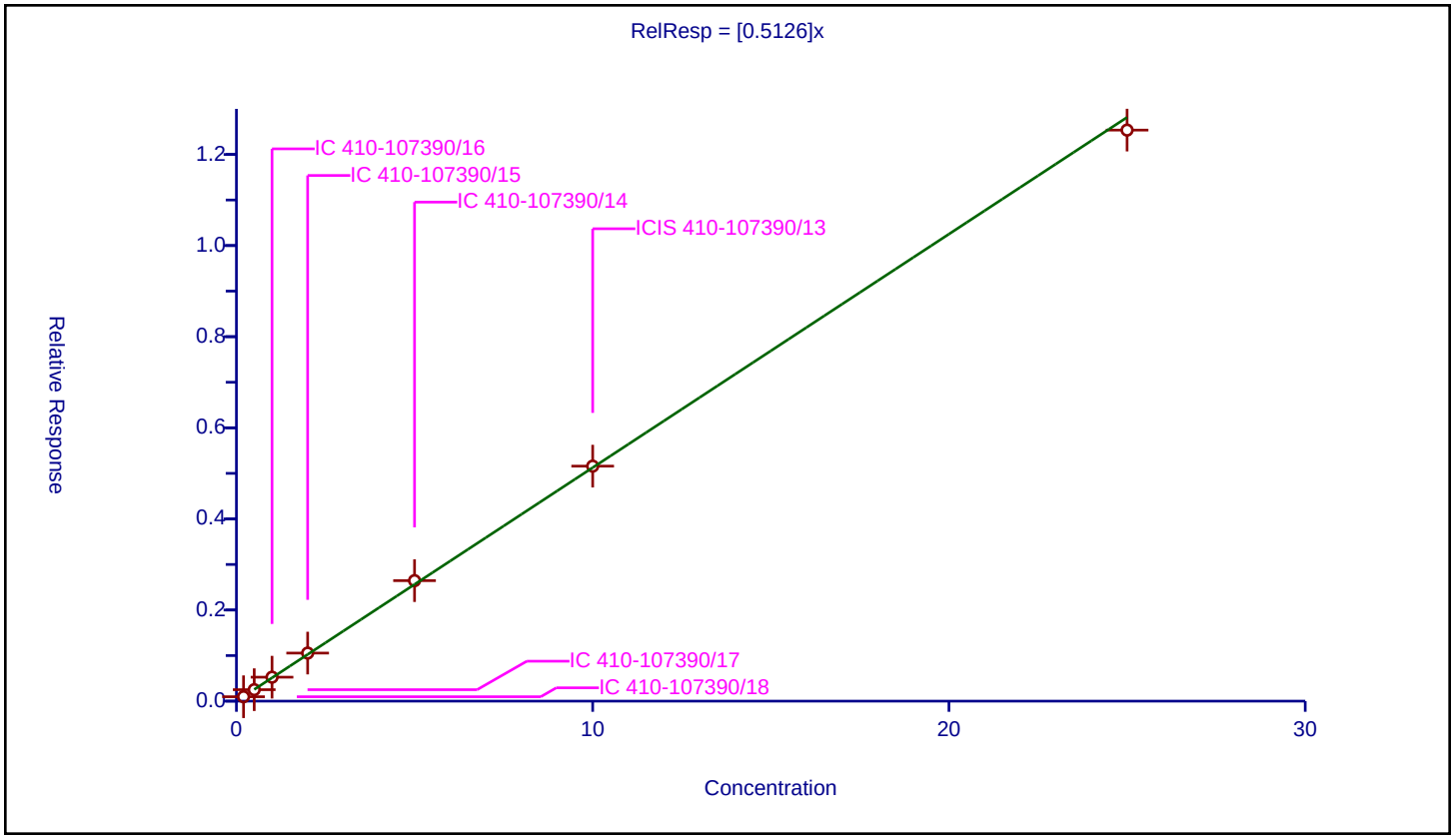
Curve Coefficients

Intercept:	0
Slope:	0.5126

Error Coefficients

Standard Error:	931000
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 410-107390/18	0.2	0.097013	10.0	1649576.0	0.485064	Y
2	IC 410-107390/17	0.5	0.251696	10.0	1642102.0	0.503391	Y
3	IC 410-107390/16	1.0	0.526026	10.0	1626155.0	0.526026	Y
4	IC 410-107390/15	2.0	1.054932	10.0	1638769.0	0.527466	Y
5	IC 410-107390/14	5.0	2.645046	10.0	1621764.0	0.529009	Y
6	ICIS 410-107390/13	10.0	5.158436	10.0	1638803.0	0.515844	Y
7	IC 410-107390/12	25.0	12.534422	10.0	1647559.0	0.501377	Y



Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

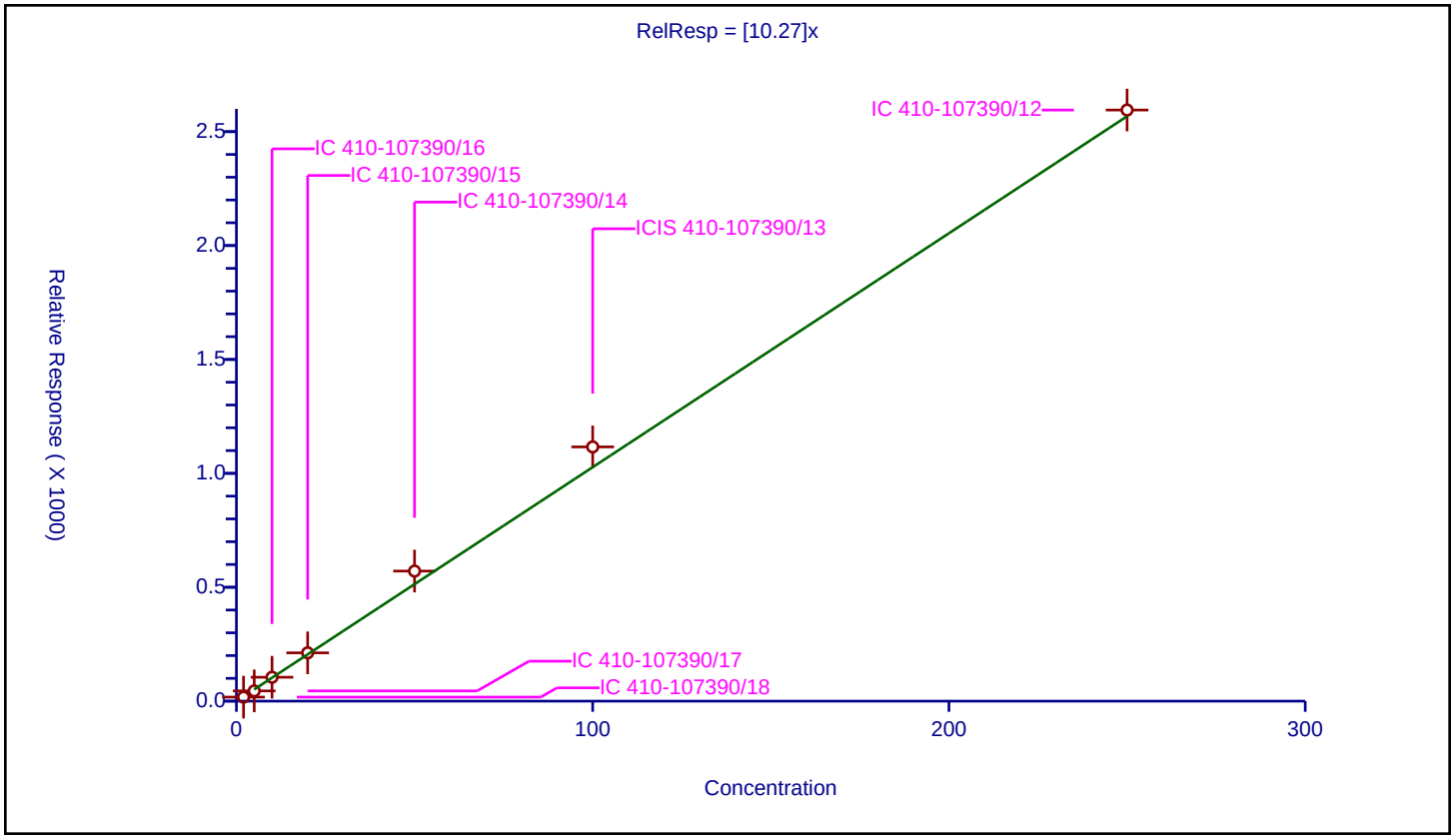
Curve Coefficients

Intercept:	0
Slope:	10.27

Error Coefficients

Standard Error:	3730000
Relative Standard Error:	9.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	2.0	17.707906	50.0	175560.0	8.853953	Y
2	IC 410-107390/17	5.0	44.910883	50.0	186889.0	8.982177	Y
3	IC 410-107390/16	10.0	104.894197	50.0	165165.0	10.48942	Y
4	IC 410-107390/15	20.0	212.068553	50.0	167112.0	10.603428	Y
5	IC 410-107390/14	50.0	570.994251	50.0	152718.0	11.419885	Y
6	ICIS 410-107390/13	100.0	1116.0878	50.0	155217.0	11.160878	Y
7	IC 410-107390/12	250.0	2594.924666	50.0	158827.0	10.379699	Y



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

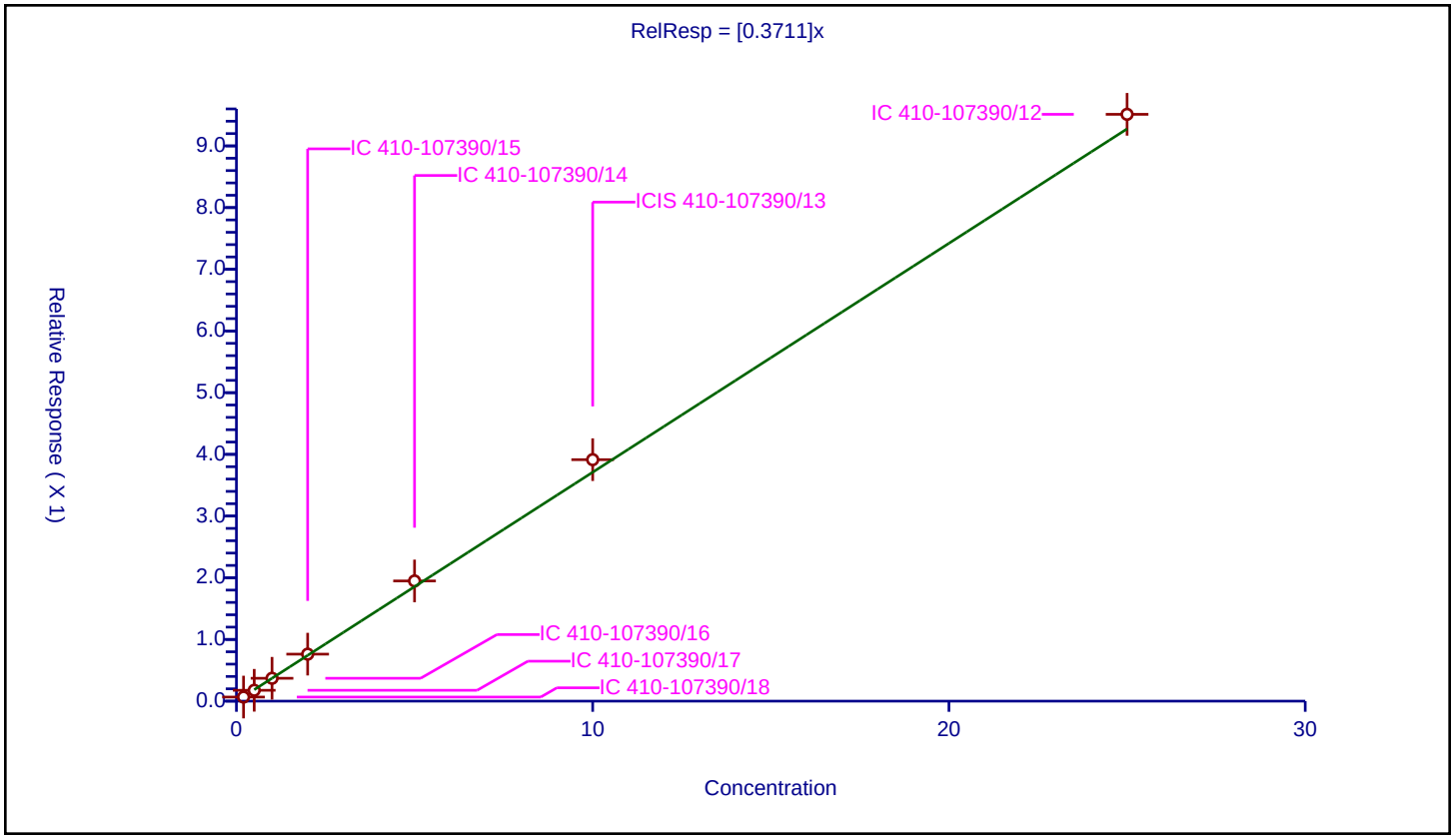
Curve Coefficients

Intercept:	0
Slope:	0.3711

Error Coefficients

Standard Error:	706000
Relative Standard Error:	5.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.06646	10.0	1649576.0	0.332298	Y
2	IC 410-107390/17	0.5	0.176116	10.0	1642102.0	0.352231	Y
3	IC 410-107390/16	1.0	0.370463	10.0	1626155.0	0.370463	Y
4	IC 410-107390/15	2.0	0.761743	10.0	1638769.0	0.380871	Y
5	IC 410-107390/14	5.0	1.948021	10.0	1621764.0	0.389604	Y
6	ICIS 410-107390/13	10.0	3.914156	10.0	1638803.0	0.391416	Y
7	IC 410-107390/12	25.0	9.511854	10.0	1647559.0	0.380474	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

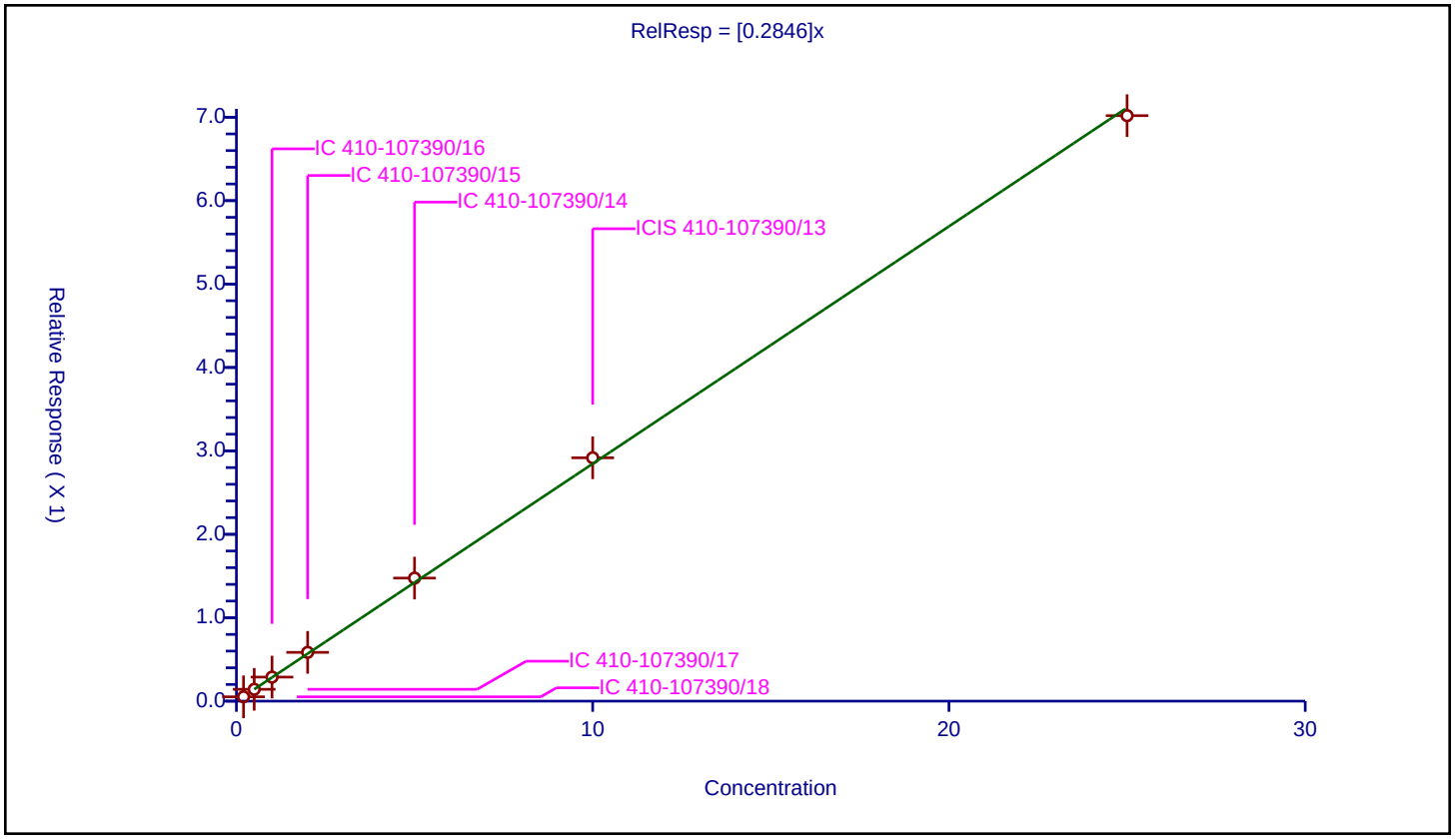
Curve Coefficients

Intercept:	0
Slope:	0.2846

Error Coefficients

Standard Error:	522000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.051868	10.0	1649576.0	0.259339	Y
2	IC 410-107390/17	0.5	0.142031	10.0	1642102.0	0.284063	Y
3	IC 410-107390/16	1.0	0.288619	10.0	1626155.0	0.288619	Y
4	IC 410-107390/15	2.0	0.584921	10.0	1638769.0	0.29246	Y
5	IC 410-107390/14	5.0	1.475326	10.0	1621764.0	0.295065	Y
6	ICIS 410-107390/13	10.0	2.917215	10.0	1638803.0	0.291721	Y
7	IC 410-107390/12	25.0	7.018759	10.0	1647559.0	0.28075	Y



Calibration / 1-Chlorohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

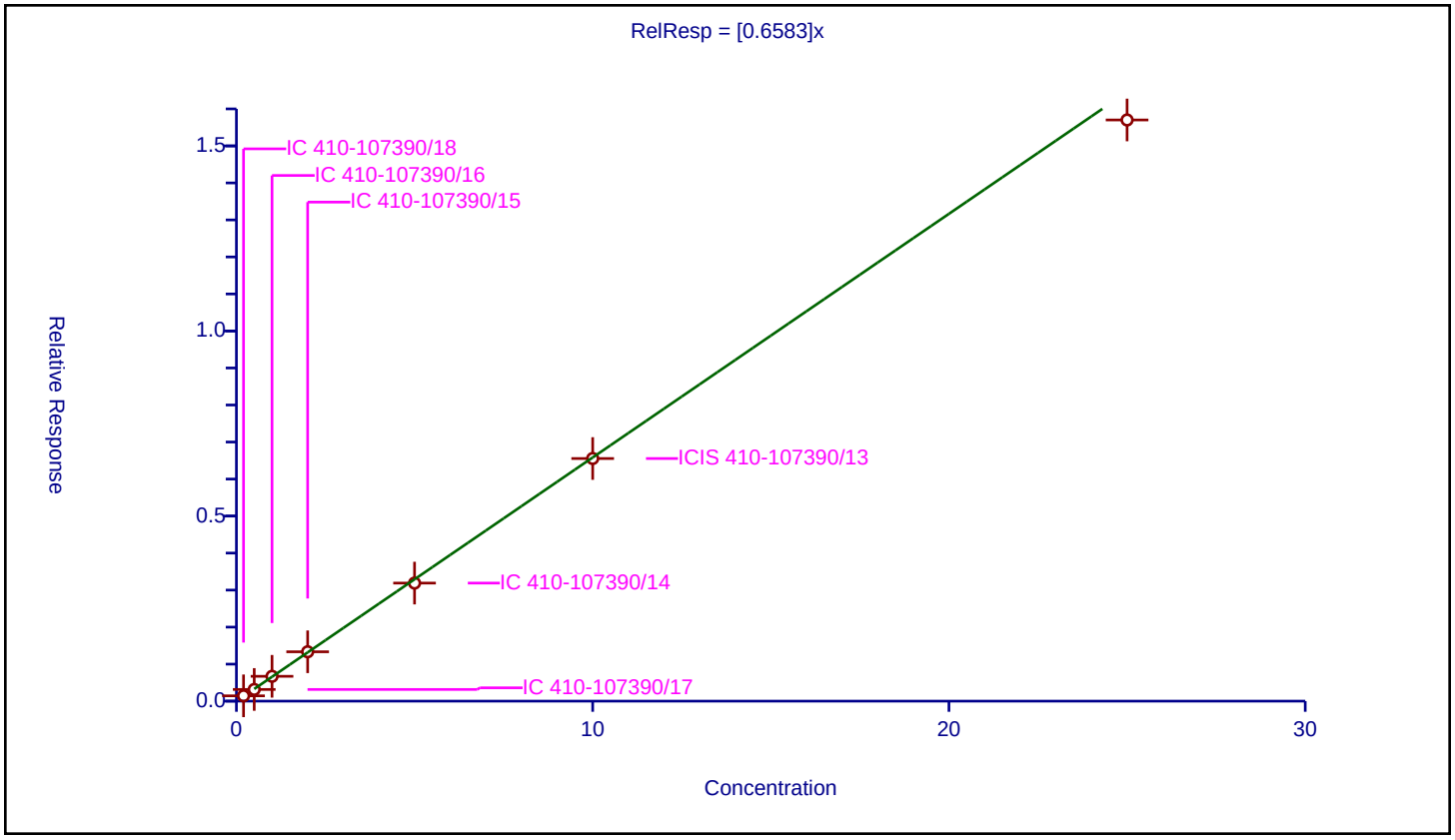
Curve Coefficients

Intercept:	0
Slope:	0.6583

Error Coefficients

Standard Error:	1170000
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 410-107390/18	0.2	0.143485	10.0	1649576.0	0.717427	Y
2	IC 410-107390/17	0.5	0.315803	10.0	1642102.0	0.631605	Y
3	IC 410-107390/16	1.0	0.670686	10.0	1626155.0	0.670686	Y
4	IC 410-107390/15	2.0	1.333605	10.0	1638769.0	0.666802	Y
5	IC 410-107390/14	5.0	3.189459	10.0	1621764.0	0.637892	Y
6	ICIS 410-107390/13	10.0	6.554345	10.0	1638803.0	0.655434	Y
7	IC 410-107390/12	25.0	15.70033	10.0	1647559.0	0.628013	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

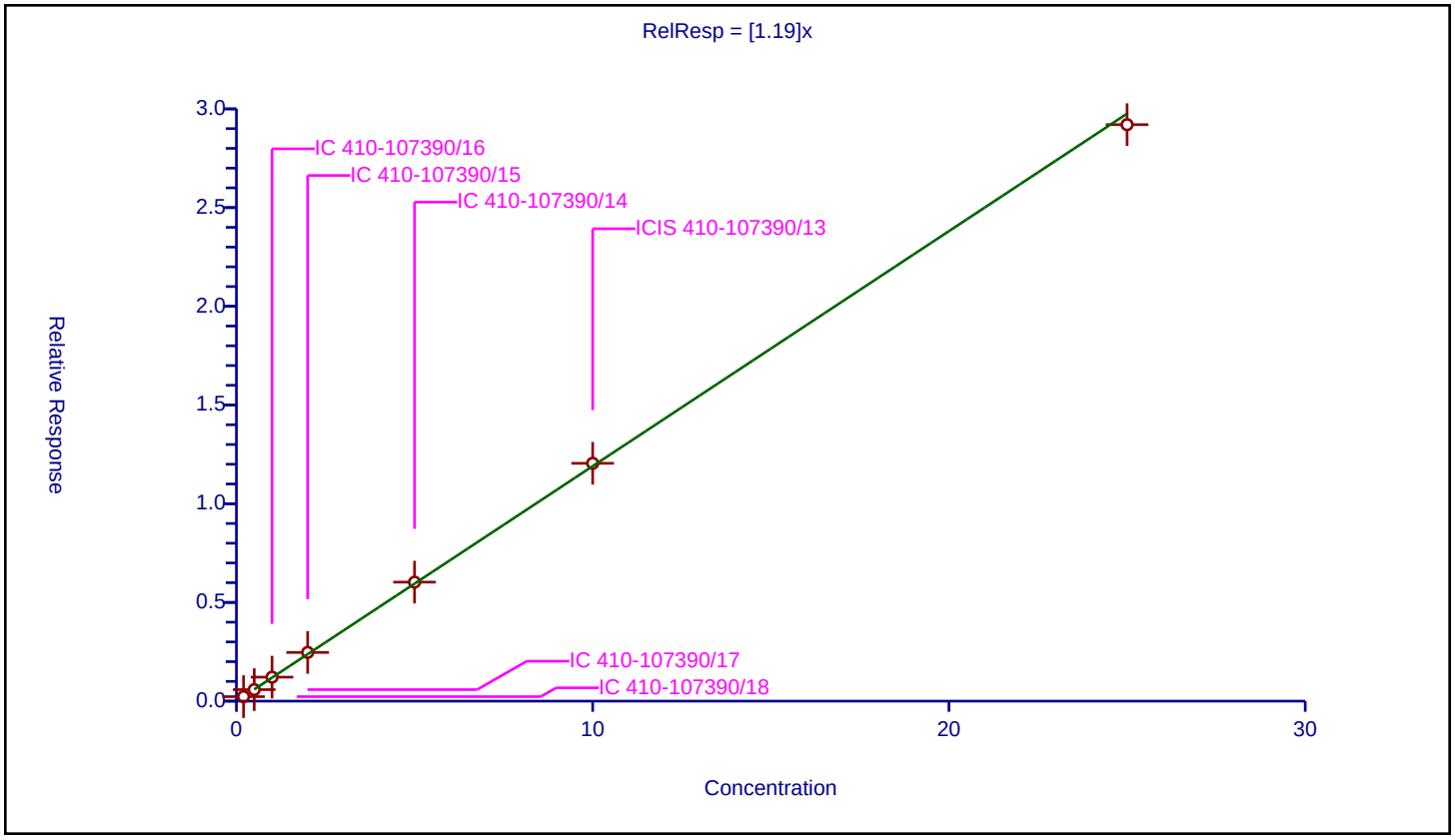
Curve Coefficients

Intercept:	0
Slope:	1.19

Error Coefficients

Standard Error:	2170000
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 410-107390/18	0.2	0.22781	10.0	1649576.0	1.13905	Y
2	IC 410-107390/17	0.5	0.583557	10.0	1642102.0	1.167114	Y
3	IC 410-107390/16	1.0	1.214257	10.0	1626155.0	1.214257	Y
4	IC 410-107390/15	2.0	2.467285	10.0	1638769.0	1.233642	Y
5	IC 410-107390/14	5.0	6.028393	10.0	1621764.0	1.205679	Y
6	ICIS 410-107390/13	10.0	12.047592	10.0	1638803.0	1.204759	Y
7	IC 410-107390/12	25.0	29.201206	10.0	1647559.0	1.168048	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

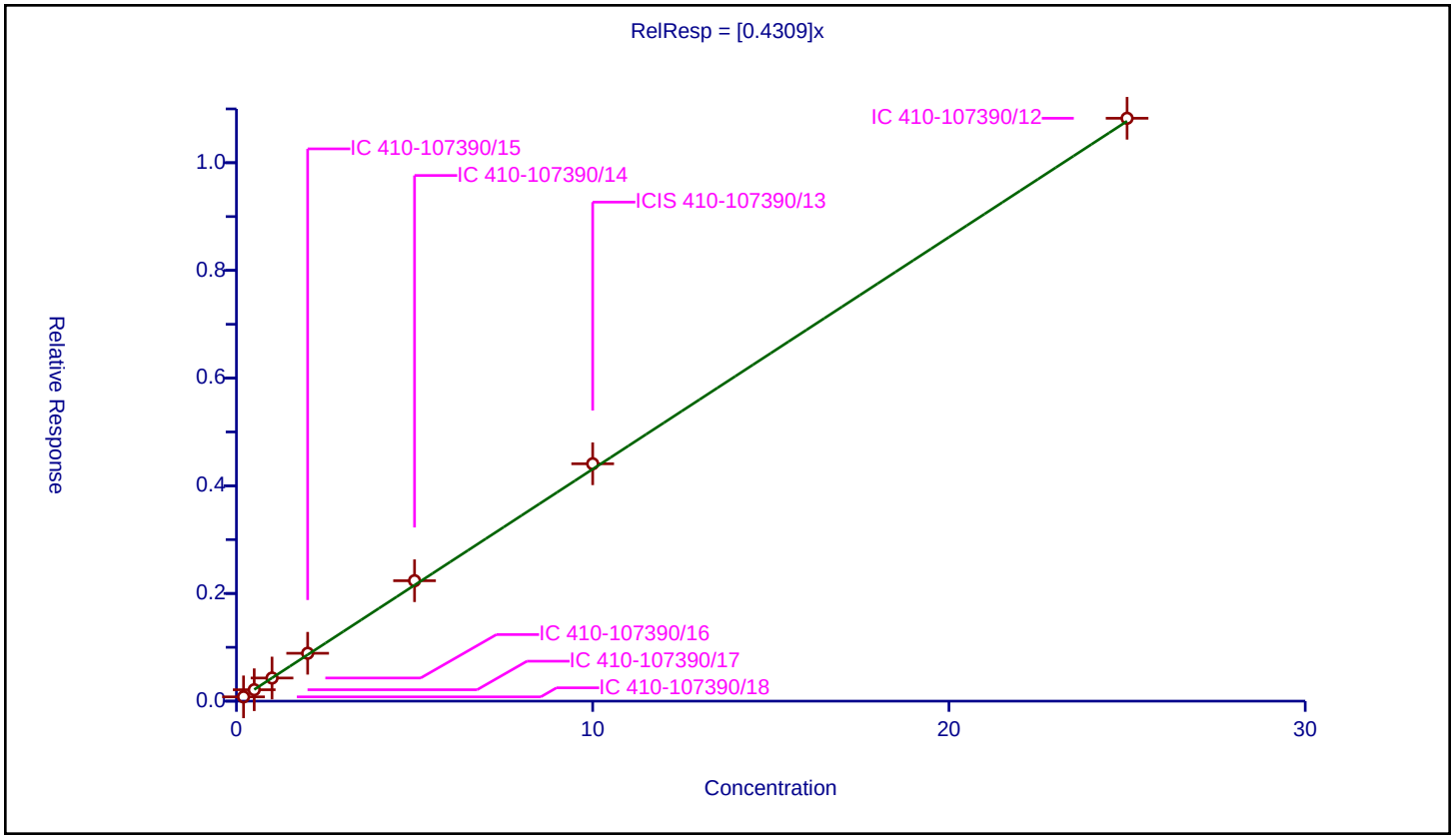
Curve Coefficients

Intercept:	0
Slope:	0.4309

Error Coefficients

Standard Error:	802000
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 410-107390/18	0.2	0.079414	10.0	1649576.0	0.397072	Y
2	IC 410-107390/17	0.5	0.211875	10.0	1642102.0	0.42375	Y
3	IC 410-107390/16	1.0	0.429467	10.0	1626155.0	0.429467	Y
4	IC 410-107390/15	2.0	0.889387	10.0	1638769.0	0.444694	Y
5	IC 410-107390/14	5.0	2.236774	10.0	1621764.0	0.447355	Y
6	ICIS 410-107390/13	10.0	4.408712	10.0	1638803.0	0.440871	Y
7	IC 410-107390/12	25.0	10.825712	10.0	1647559.0	0.433028	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

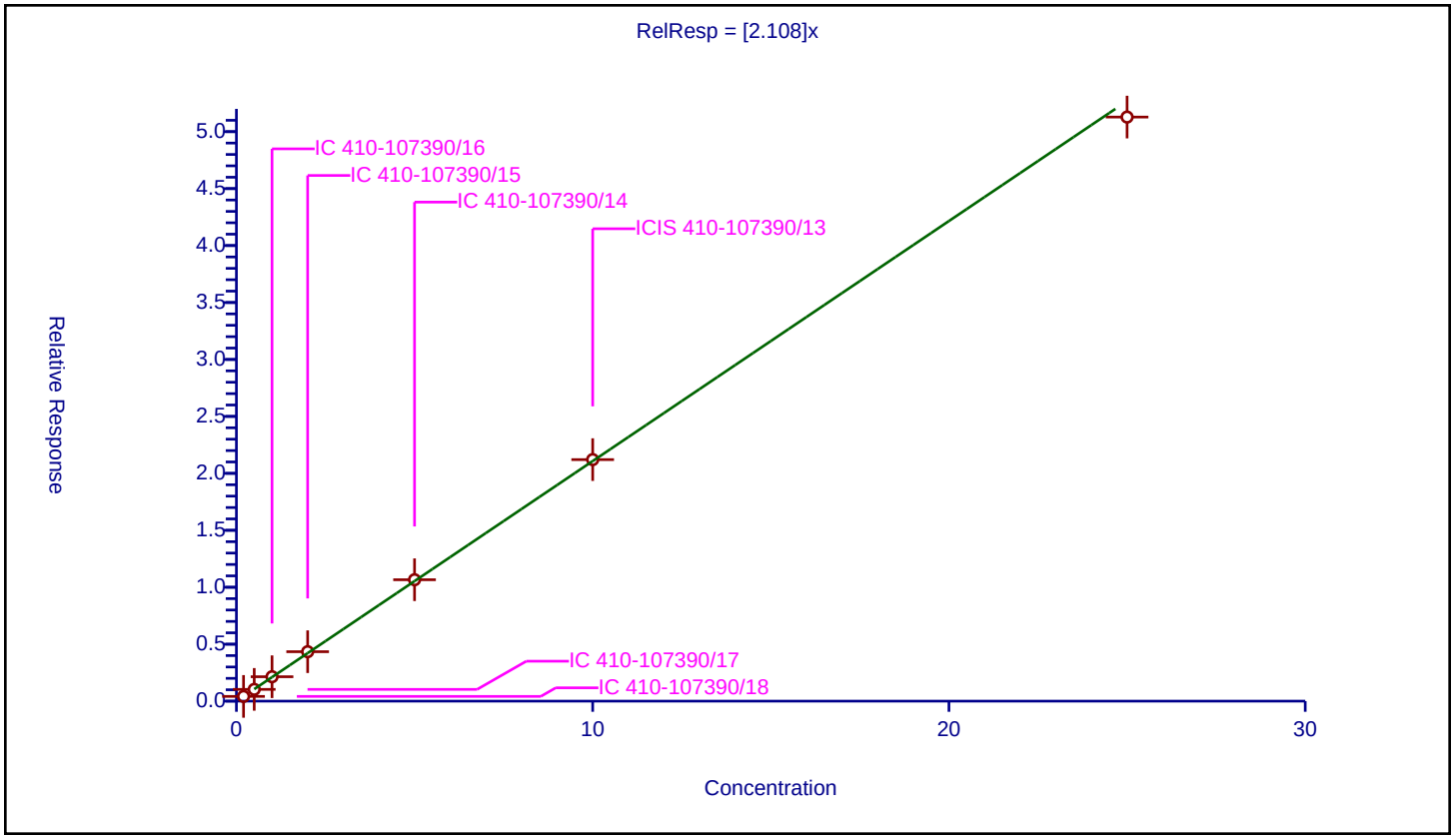
Curve Coefficients

Intercept:	0
Slope:	2.108

Error Coefficients

Standard Error:	3810000
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 410-107390/18	0.2	0.414015	10.0	1649576.0	2.070077	Y
2	IC 410-107390/17	0.5	1.032475	10.0	1642102.0	2.064951	Y
3	IC 410-107390/16	1.0	2.144181	10.0	1626155.0	2.144181	Y
4	IC 410-107390/15	2.0	4.341088	10.0	1638769.0	2.170544	Y
5	IC 410-107390/14	5.0	10.660232	10.0	1621764.0	2.132046	Y
6	ICIS 410-107390/13	10.0	21.207216	10.0	1638803.0	2.120722	Y
7	IC 410-107390/12	25.0	51.282613	10.0	1647559.0	2.051305	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

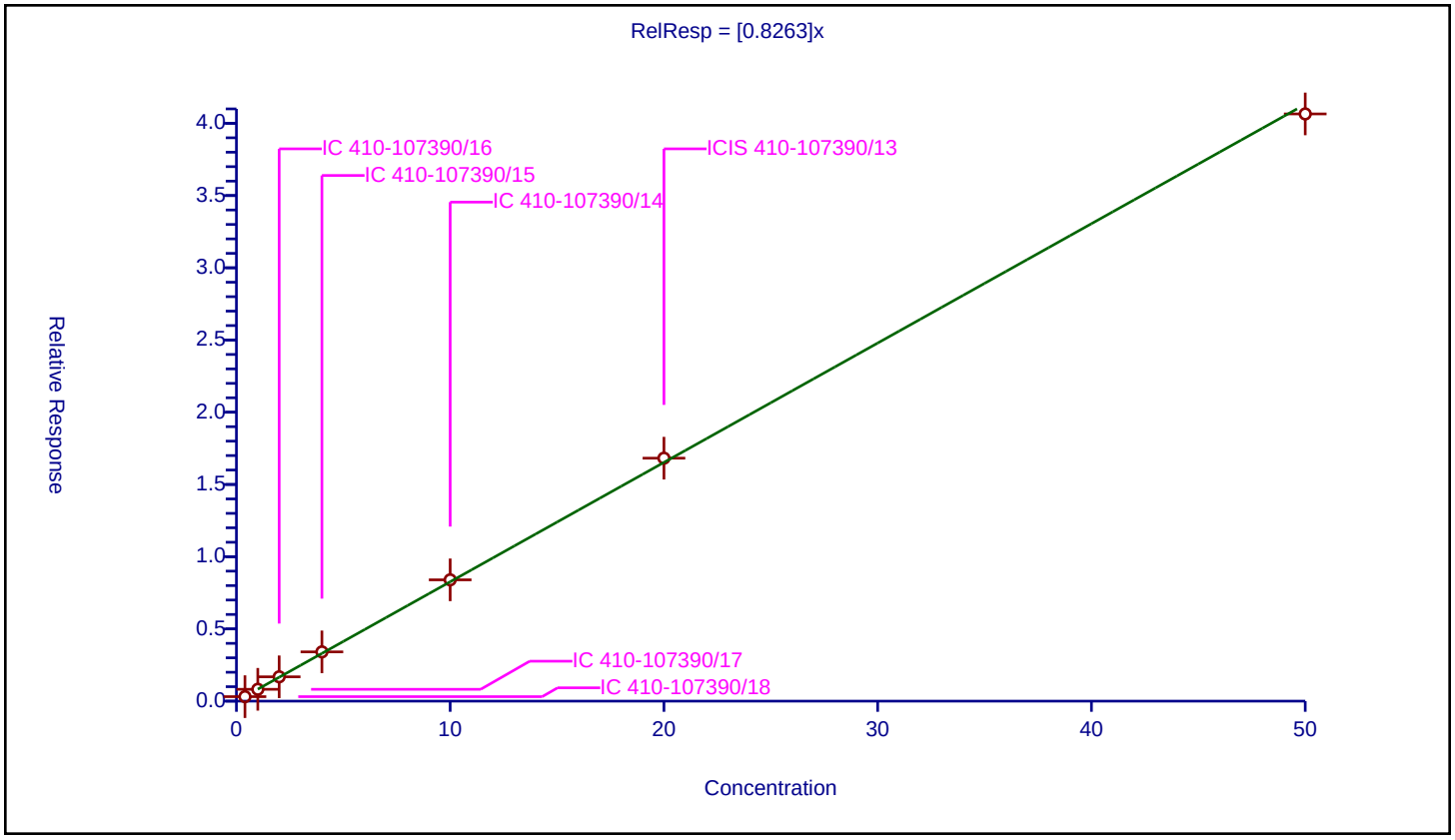
Curve Coefficients

Intercept:	0
Slope:	0.8263

Error Coefficients

Standard Error:	3020000
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 410-107390/18	0.4	0.310383	10.0	1649576.0	0.775957	Y
2	IC 410-107390/17	1.0	0.819766	10.0	1642102.0	0.819766	Y
3	IC 410-107390/16	2.0	1.684132	10.0	1626155.0	0.842066	Y
4	IC 410-107390/15	4.0	3.41023	10.0	1638769.0	0.852558	Y
5	IC 410-107390/14	10.0	8.398404	10.0	1621764.0	0.83984	Y
6	ICIS 410-107390/13	20.0	16.820051	10.0	1638803.0	0.841003	Y
7	IC 410-107390/12	50.0	40.650854	10.0	1647559.0	0.813017	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

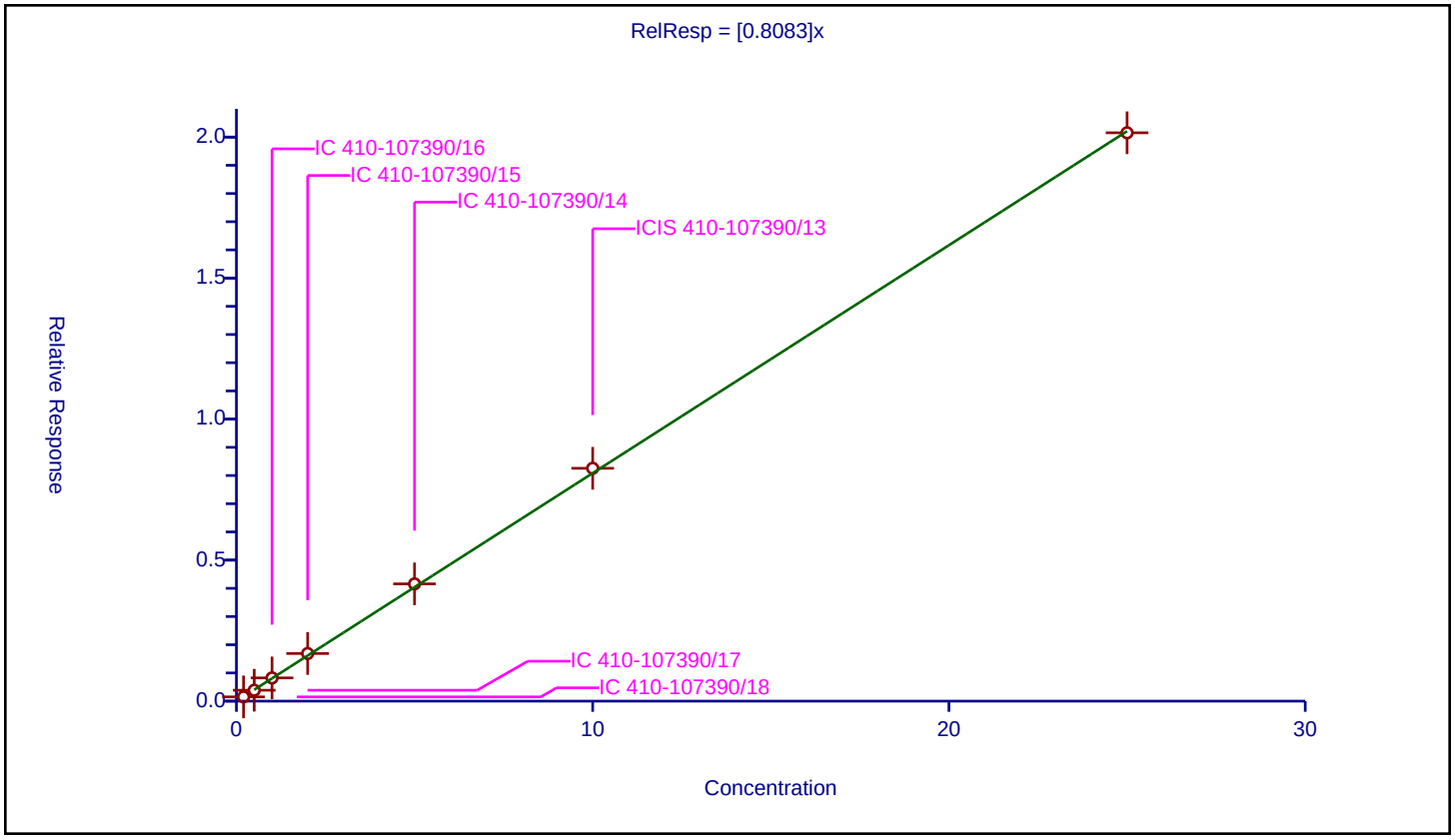
Curve Coefficients

Intercept:	0
Slope:	0.8083

Error Coefficients

Standard Error:	1490000
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 410-107390/18	0.2	0.150439	10.0	1649576.0	0.752193	Y
2	IC 410-107390/17	0.5	0.387187	10.0	1642102.0	0.774373	Y
3	IC 410-107390/16	1.0	0.823839	10.0	1626155.0	0.823839	Y
4	IC 410-107390/15	2.0	1.689402	10.0	1638769.0	0.844701	Y
5	IC 410-107390/14	5.0	4.157985	10.0	1621764.0	0.831597	Y
6	ICIS 410-107390/13	10.0	8.256398	10.0	1638803.0	0.82564	Y
7	IC 410-107390/12	25.0	20.152444	10.0	1647559.0	0.806098	Y



Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

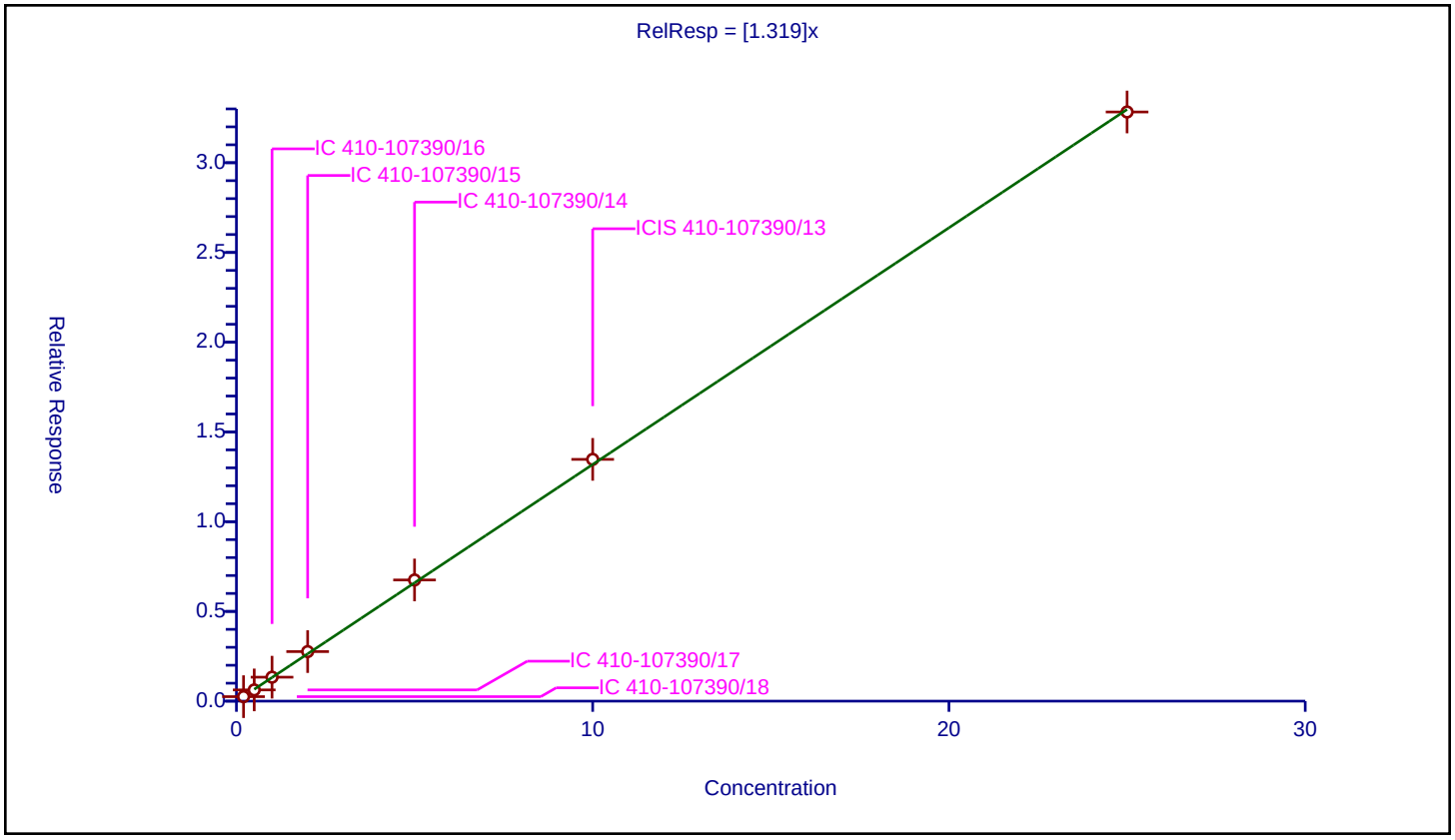
Curve Coefficients

Intercept:	0
Slope:	1.319

Error Coefficients

Standard Error:	2440000
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 410-107390/18	0.2	0.250646	10.0	1649576.0	1.253231	Y
2	IC 410-107390/17	0.5	0.626063	10.0	1642102.0	1.252127	Y
3	IC 410-107390/16	1.0	1.334867	10.0	1626155.0	1.334867	Y
4	IC 410-107390/15	2.0	2.76139	10.0	1638769.0	1.380695	Y
5	IC 410-107390/14	5.0	6.752098	10.0	1621764.0	1.35042	Y
6	ICIS 410-107390/13	10.0	13.471186	10.0	1638803.0	1.347119	Y
7	IC 410-107390/12	25.0	32.827486	10.0	1647559.0	1.313099	Y



Calibration / Bromoform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

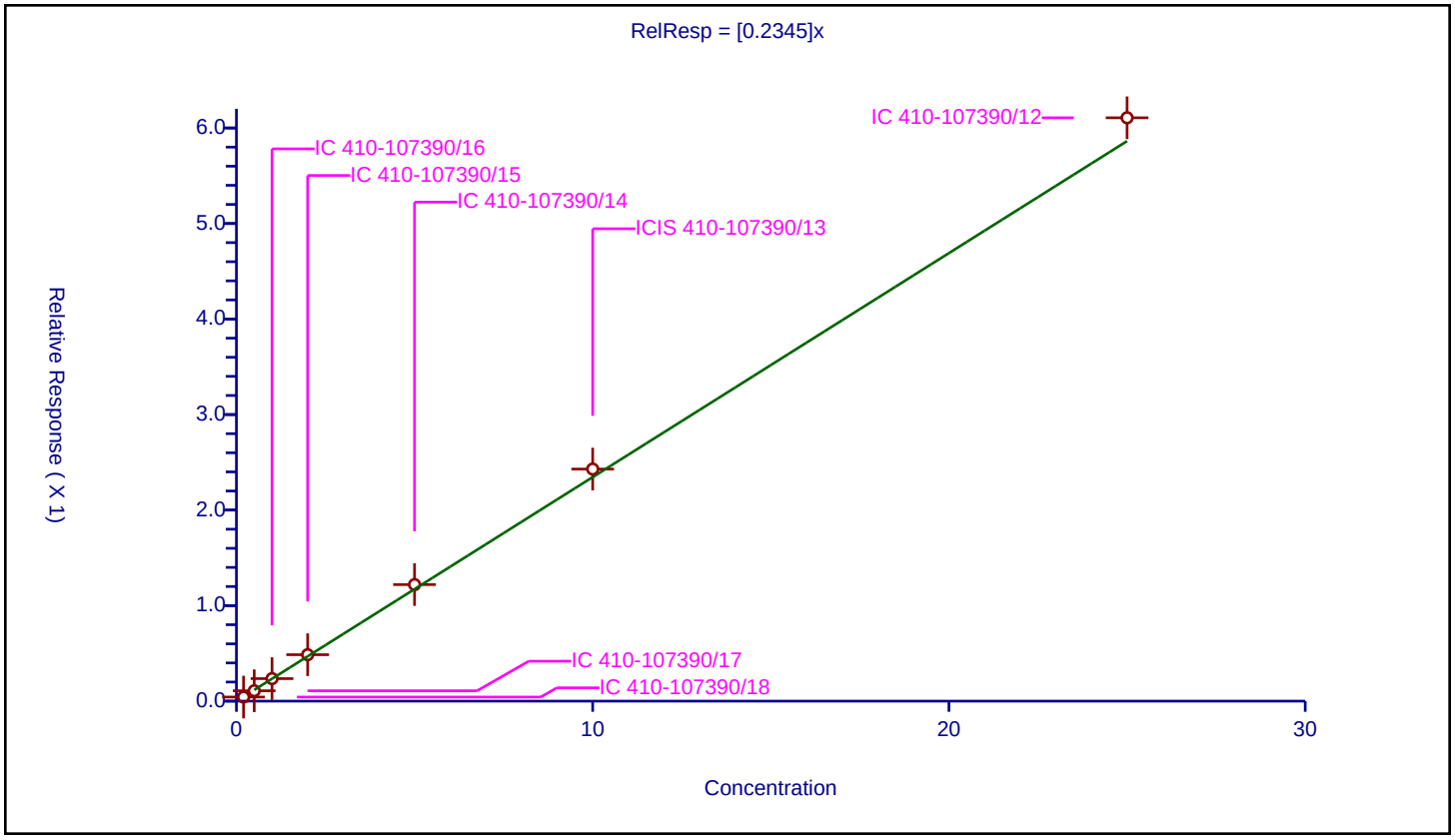
Curve Coefficients

Intercept:	0
Slope:	0.2345

Error Coefficients

Standard Error:	451000
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 410-107390/18	0.2	0.042872	10.0	1649576.0	0.214358	Y
2	IC 410-107390/17	0.5	0.108556	10.0	1642102.0	0.217112	Y
3	IC 410-107390/16	1.0	0.235875	10.0	1626155.0	0.235875	Y
4	IC 410-107390/15	2.0	0.486121	10.0	1638769.0	0.24306	Y
5	IC 410-107390/14	5.0	1.219894	10.0	1621764.0	0.243979	Y
6	ICIS 410-107390/13	10.0	2.429517	10.0	1638803.0	0.242952	Y
7	IC 410-107390/12	25.0	6.106865	10.0	1647559.0	0.244275	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

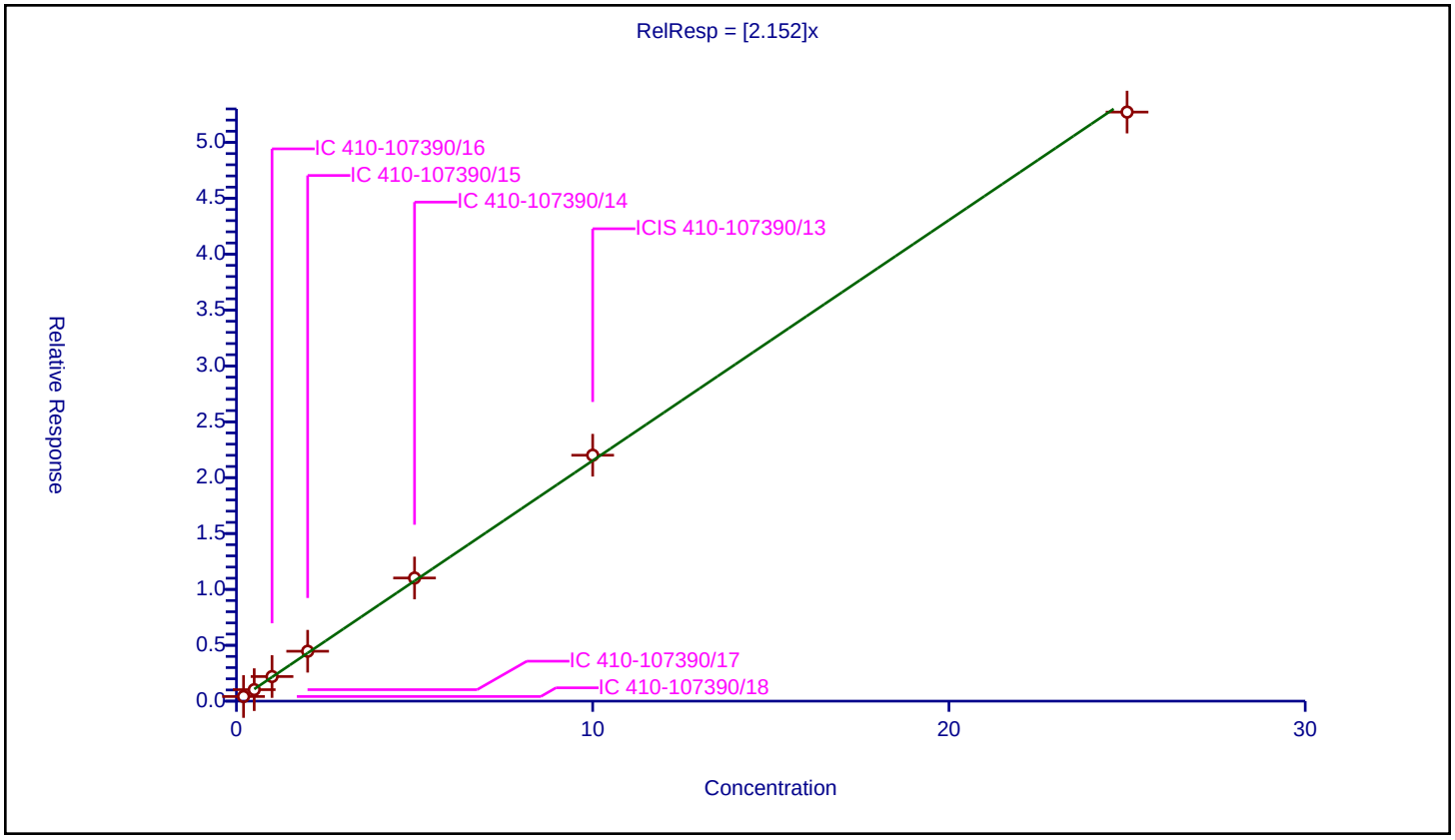
Curve Coefficients

Intercept:	0
Slope:	2.152

Error Coefficients

Standard Error:	3920000
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 410-107390/18	0.2	0.412997	10.0	1649576.0	2.064985	Y
2	IC 410-107390/17	0.5	1.027342	10.0	1642102.0	2.054684	Y
3	IC 410-107390/16	1.0	2.201112	10.0	1626155.0	2.201112	Y
4	IC 410-107390/15	2.0	4.464552	10.0	1638769.0	2.232276	Y
5	IC 410-107390/14	5.0	11.020352	10.0	1621764.0	2.20407	Y
6	ICIS 410-107390/13	10.0	22.007789	10.0	1638803.0	2.200779	Y
7	IC 410-107390/12	25.0	52.717396	10.0	1647559.0	2.108696	Y



Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

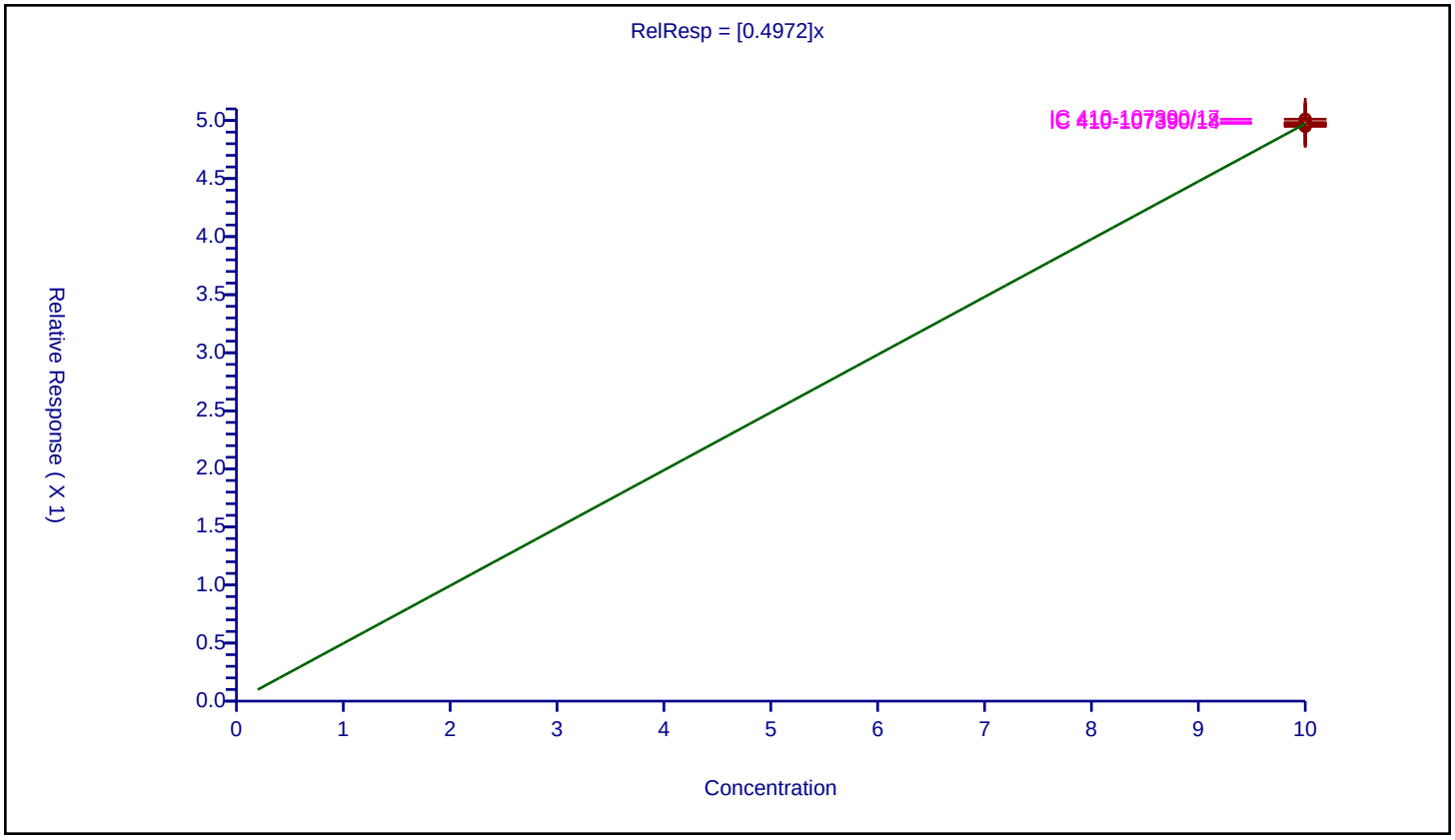
Curve Coefficients

Intercept:	0
Slope:	0.4972

Error Coefficients

Standard Error:	880000
Relative Standard Error:	0.4
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/15	10.0	4.949123	10.0	1638769.0	0.494912	Y
2	IC 410-107390/14	10.0	4.975169	10.0	1621764.0	0.497517	Y
3	IC 410-107390/12	10.0	4.959185	10.0	1647559.0	0.495919	Y
4	ICIS 410-107390/13	10.0	4.958985	10.0	1638803.0	0.495899	Y
5	IC 410-107390/16	10.0	4.968524	10.0	1626155.0	0.496852	Y
6	IC 410-107390/17	10.0	5.011461	10.0	1642102.0	0.501146	Y
7	IC 410-107390/18	10.0	4.983105	10.0	1649576.0	0.49831	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

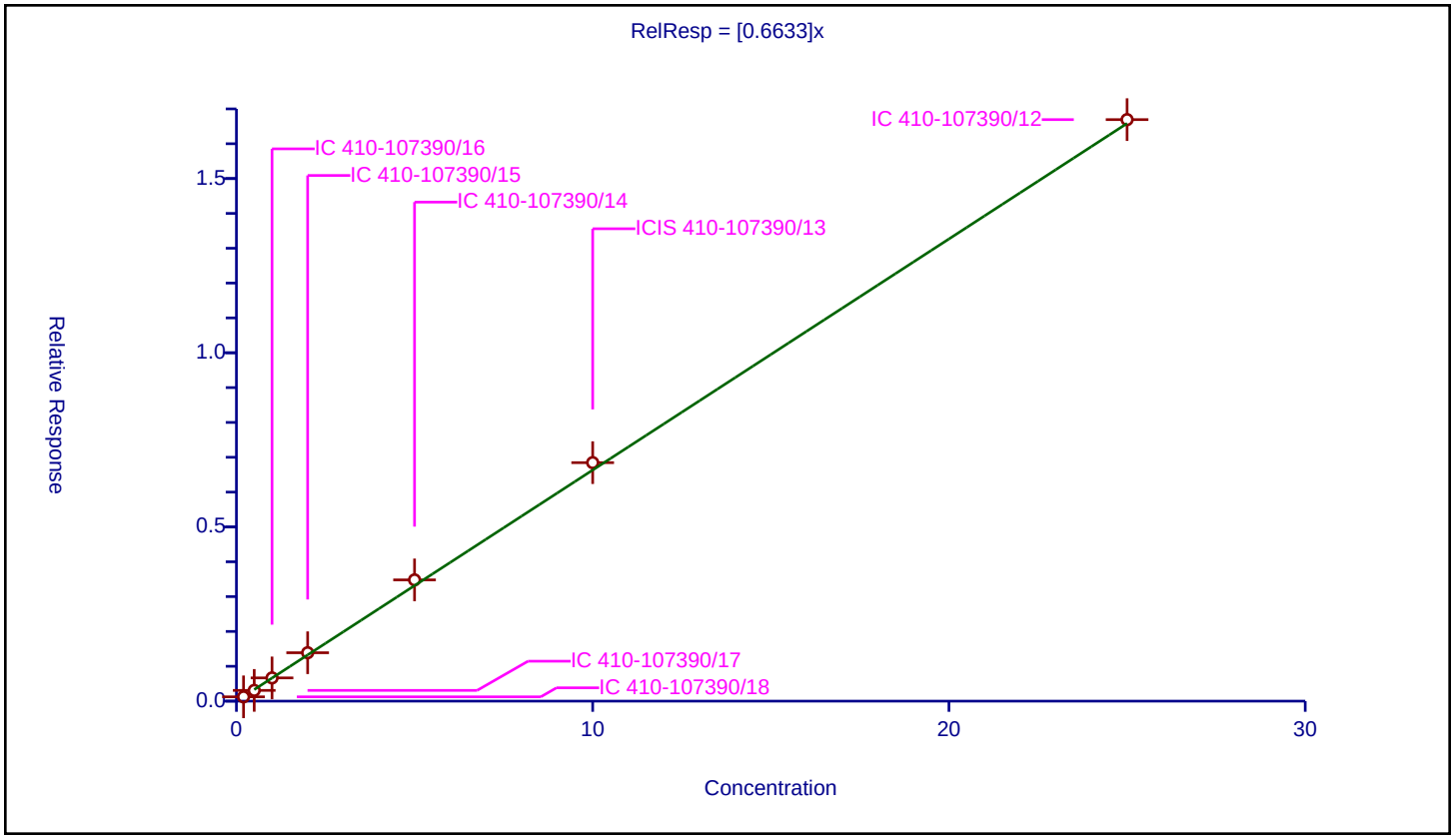
Curve Coefficients

Intercept:	0
Slope:	0.6633

Error Coefficients

Standard Error:	685000
Relative Standard Error:	5.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.123182	10.0	922535.0	0.615912	Y
2	IC 410-107390/17	0.5	0.308807	10.0	926371.0	0.617614	Y
3	IC 410-107390/16	1.0	0.666761	10.0	911826.0	0.666761	Y
4	IC 410-107390/15	2.0	1.389169	10.0	911732.0	0.694585	Y
5	IC 410-107390/14	5.0	3.4807	10.0	899730.0	0.69614	Y
6	ICIS 410-107390/13	10.0	6.845448	10.0	899738.0	0.684545	Y
7	IC 410-107390/12	25.0	16.692185	10.0	911496.0	0.667687	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

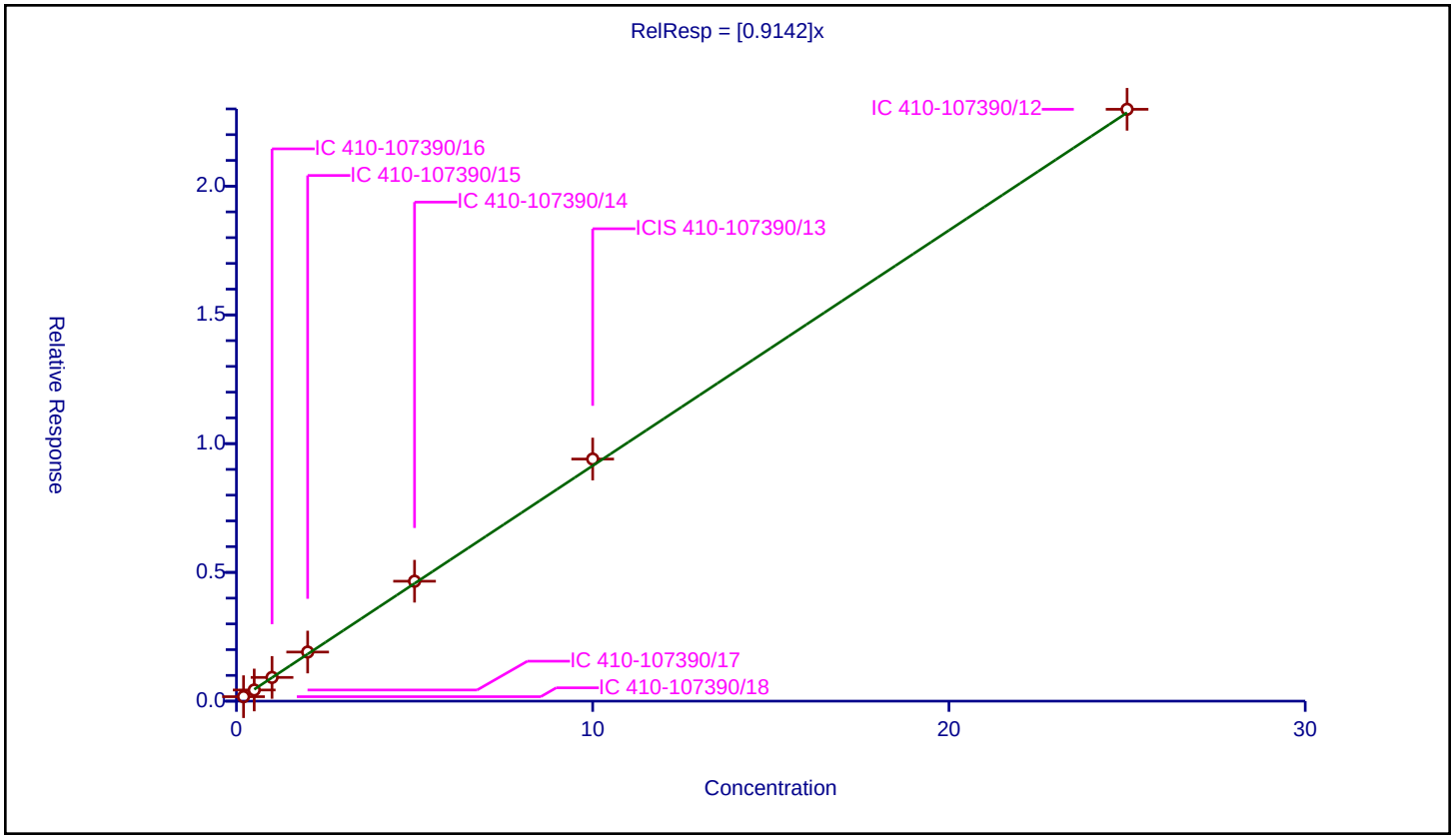
Curve Coefficients

Intercept:	0
Slope:	0.9142

Error Coefficients

Standard Error:	942000
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 410-107390/18	0.2	0.173533	10.0	922535.0	0.867664	Y
2	IC 410-107390/17	0.5	0.433358	10.0	926371.0	0.866715	Y
3	IC 410-107390/16	1.0	0.920779	10.0	911826.0	0.920779	Y
4	IC 410-107390/15	2.0	1.906514	10.0	911732.0	0.953257	Y
5	IC 410-107390/14	5.0	4.656664	10.0	899730.0	0.931333	Y
6	ICIS 410-107390/13	10.0	9.401404	10.0	899738.0	0.94014	Y
7	IC 410-107390/12	25.0	22.984785	10.0	911496.0	0.919391	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

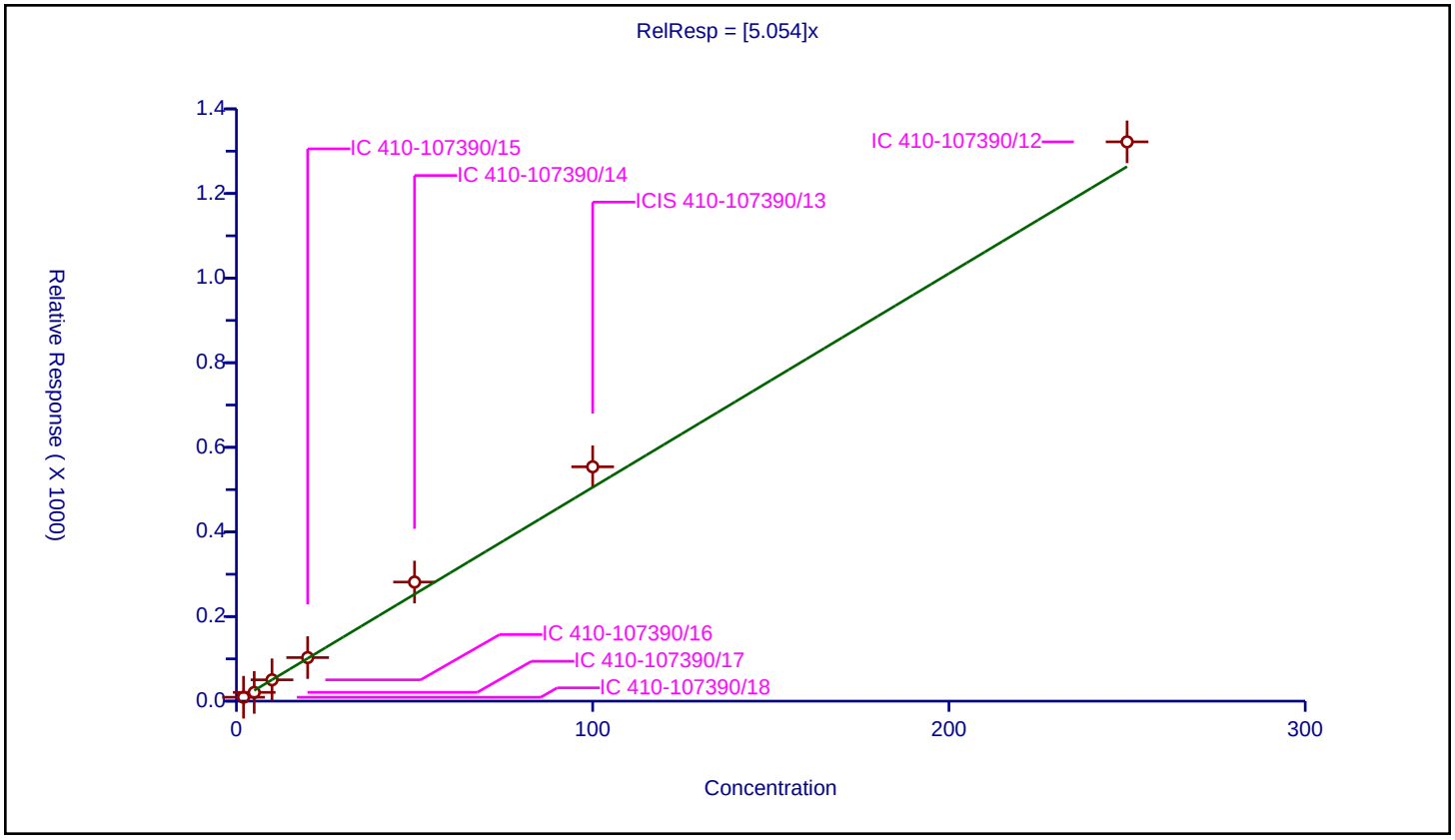
Curve Coefficients

Intercept:	0
Slope:	5.054

Error Coefficients

Standard Error:	1890000
Relative Standard Error:	10.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.987

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	2.0	9.202552	50.0	175560.0	4.601276	Y
2	IC 410-107390/17	5.0	20.660392	50.0	186889.0	4.132078	Y
3	IC 410-107390/16	10.0	50.425332	50.0	165165.0	5.042533	Y
4	IC 410-107390/15	20.0	102.939645	50.0	167112.0	5.146982	Y
5	IC 410-107390/14	50.0	281.50349	50.0	152718.0	5.63007	Y
6	ICIS 410-107390/13	100.0	553.953175	50.0	155217.0	5.539532	Y
7	IC 410-107390/12	250.0	1322.101406	50.0	158827.0	5.288406	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

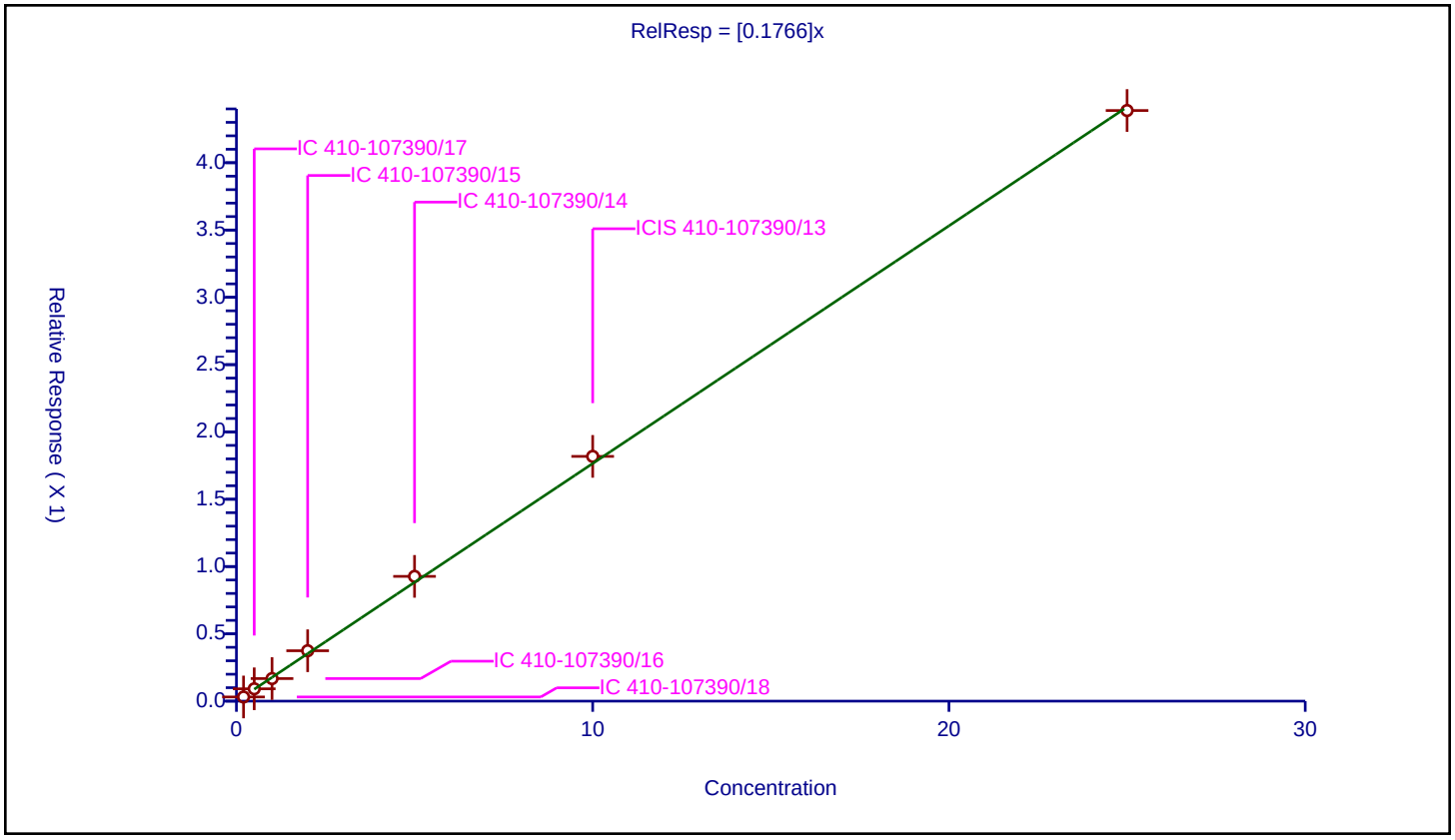
Curve Coefficients

Intercept:	0
Slope:	0.1766

Error Coefficients

Standard Error:	180000
Relative Standard Error:	6.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.030915	10.0	922535.0	0.154574	Y
2	IC 410-107390/17	0.5	0.091799	10.0	926371.0	0.183598	Y
3	IC 410-107390/16	1.0	0.167762	10.0	911826.0	0.167762	Y
4	IC 410-107390/15	2.0	0.37454	10.0	911732.0	0.18727	Y
5	IC 410-107390/14	5.0	0.926845	10.0	899730.0	0.185369	Y
6	ICIS 410-107390/13	10.0	1.818374	10.0	899738.0	0.181837	Y
7	IC 410-107390/12	25.0	4.387995	10.0	911496.0	0.17552	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

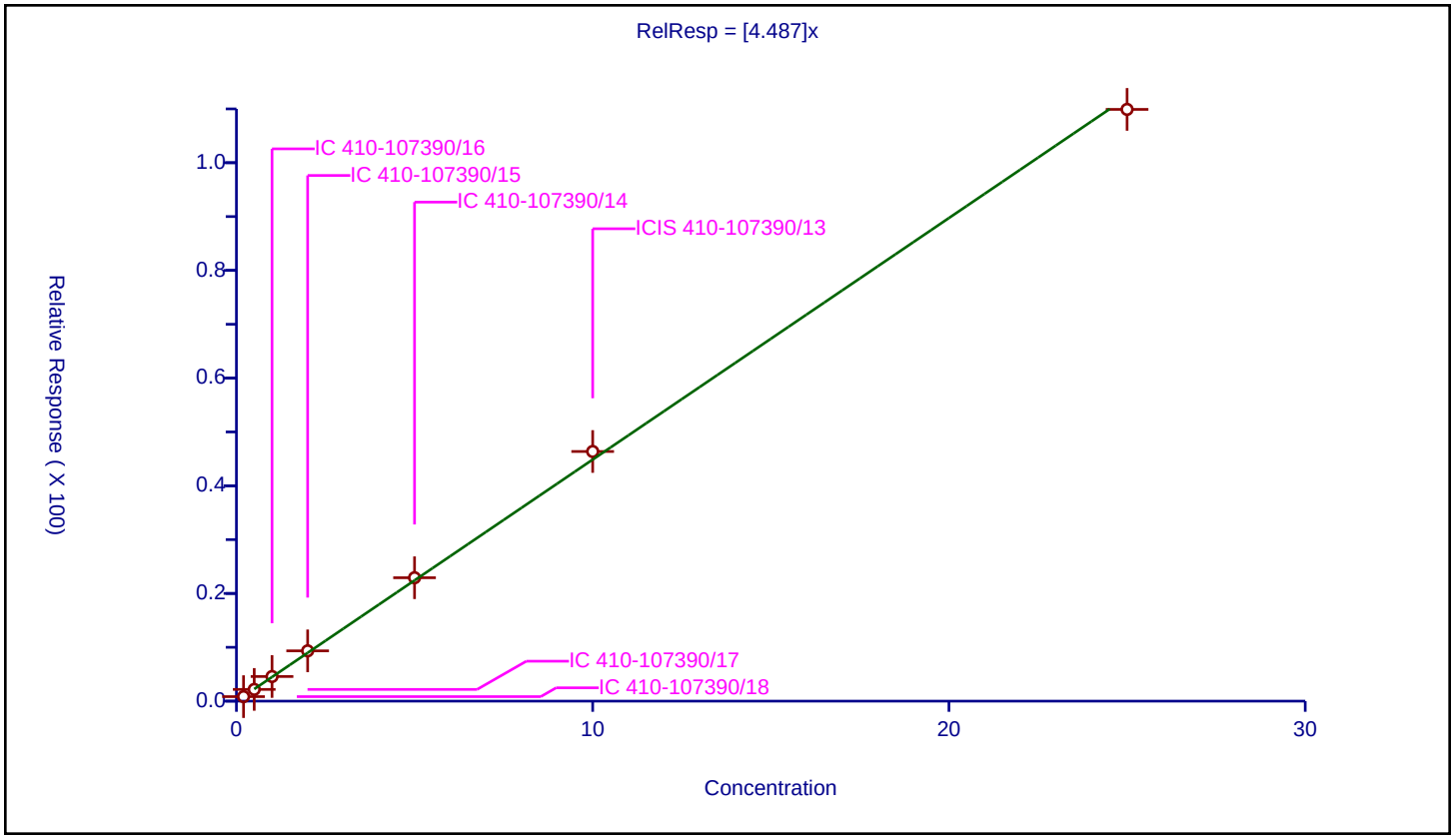
Curve Coefficients

Intercept:	0
Slope:	4.487

Error Coefficients

Standard Error:	4530000
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 410-107390/18	0.2	0.836239	10.0	922535.0	4.181196	Y
2	IC 410-107390/17	0.5	2.181405	10.0	926371.0	4.362809	Y
3	IC 410-107390/16	1.0	4.573614	10.0	911826.0	4.573614	Y
4	IC 410-107390/15	2.0	9.342131	10.0	911732.0	4.671066	Y
5	IC 410-107390/14	5.0	22.921632	10.0	899730.0	4.584326	Y
6	ICIS 410-107390/13	10.0	46.367987	10.0	899738.0	4.636799	Y
7	IC 410-107390/12	25.0	109.908316	10.0	911496.0	4.396333	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

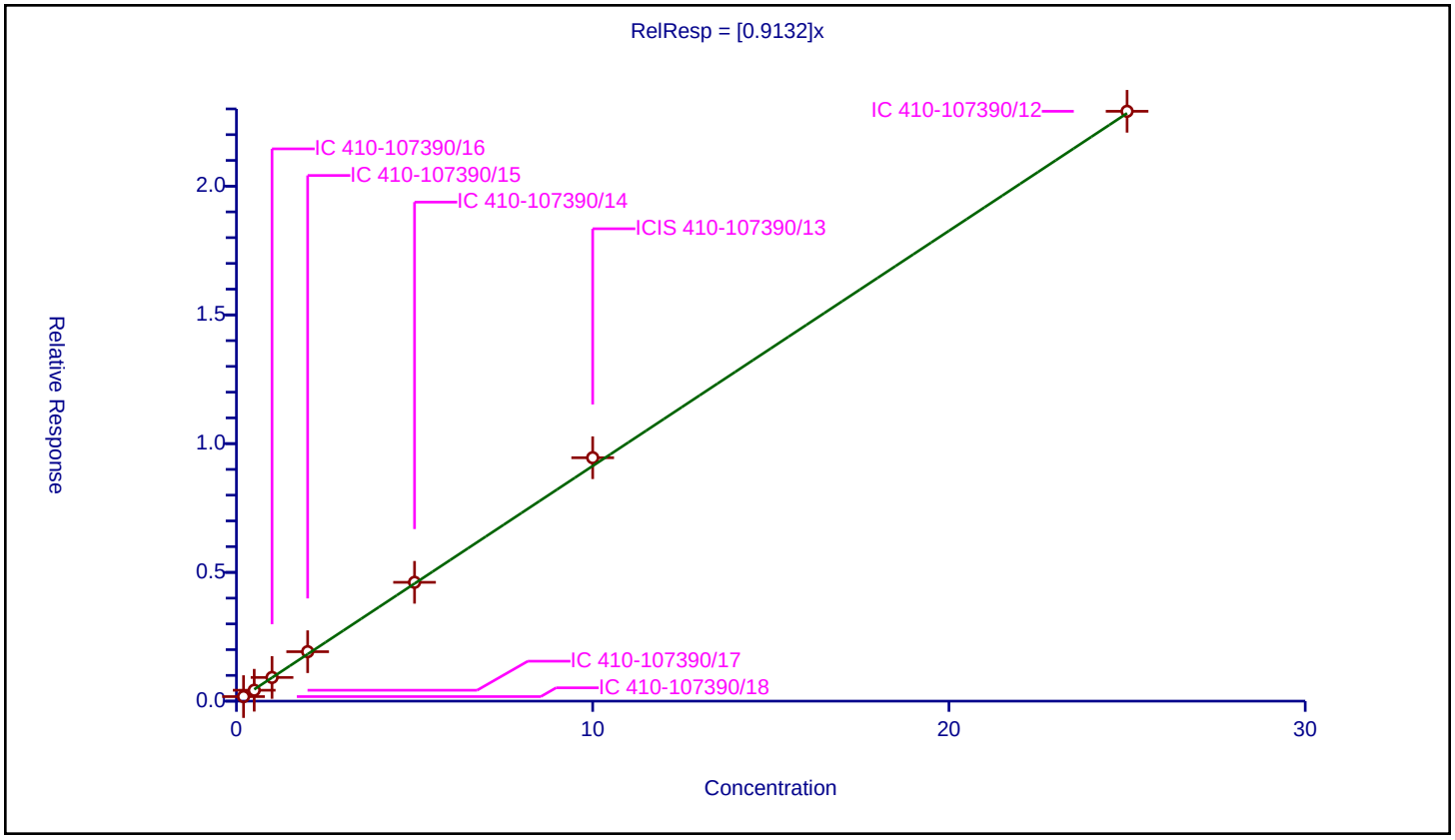
Curve Coefficients

Intercept:	0
Slope:	0.9132

Error Coefficients

Standard Error:	939000
Relative Standard Error:	4.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.176221	10.0	922535.0	0.881105	Y
2	IC 410-107390/17	0.5	0.423459	10.0	926371.0	0.846918	Y
3	IC 410-107390/16	1.0	0.919814	10.0	911826.0	0.919814	Y
4	IC 410-107390/15	2.0	1.920685	10.0	911732.0	0.960343	Y
5	IC 410-107390/14	5.0	4.614584	10.0	899730.0	0.922917	Y
6	ICIS 410-107390/13	10.0	9.453163	10.0	899738.0	0.945316	Y
7	IC 410-107390/12	25.0	22.907045	10.0	911496.0	0.916282	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

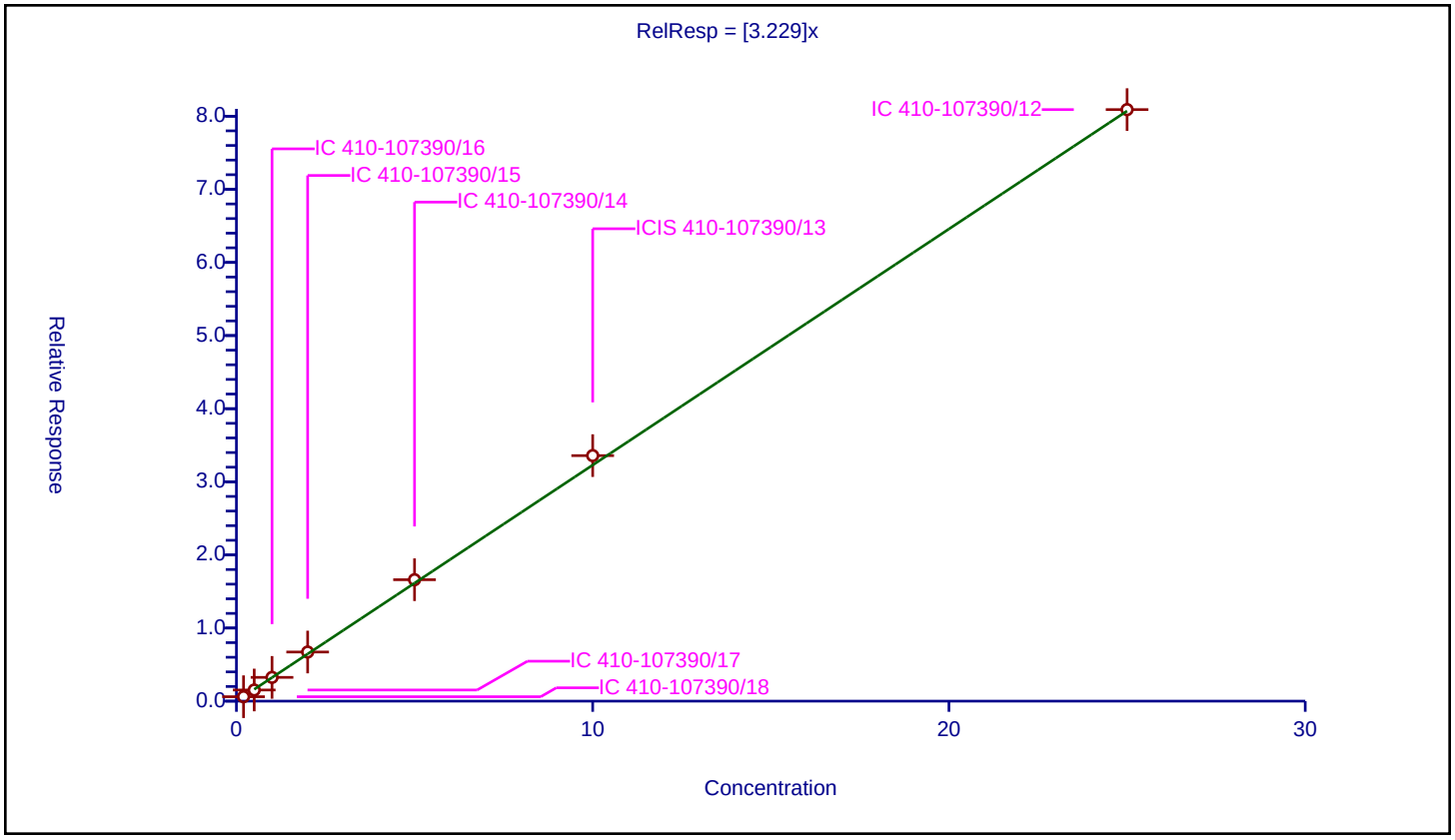
Curve Coefficients

Intercept:	0
Slope:	3.229

Error Coefficients

Standard Error:	3320000
Relative Standard Error:	4.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.605961	10.0	922535.0	3.029804	Y
2	IC 410-107390/17	0.5	1.523364	10.0	926371.0	3.046727	Y
3	IC 410-107390/16	1.0	3.249765	10.0	911826.0	3.249765	Y
4	IC 410-107390/15	2.0	6.717413	10.0	911732.0	3.358706	Y
5	IC 410-107390/14	5.0	16.609394	10.0	899730.0	3.321879	Y
6	ICIS 410-107390/13	10.0	33.579431	10.0	899738.0	3.357943	Y
7	IC 410-107390/12	25.0	80.902176	10.0	911496.0	3.236087	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

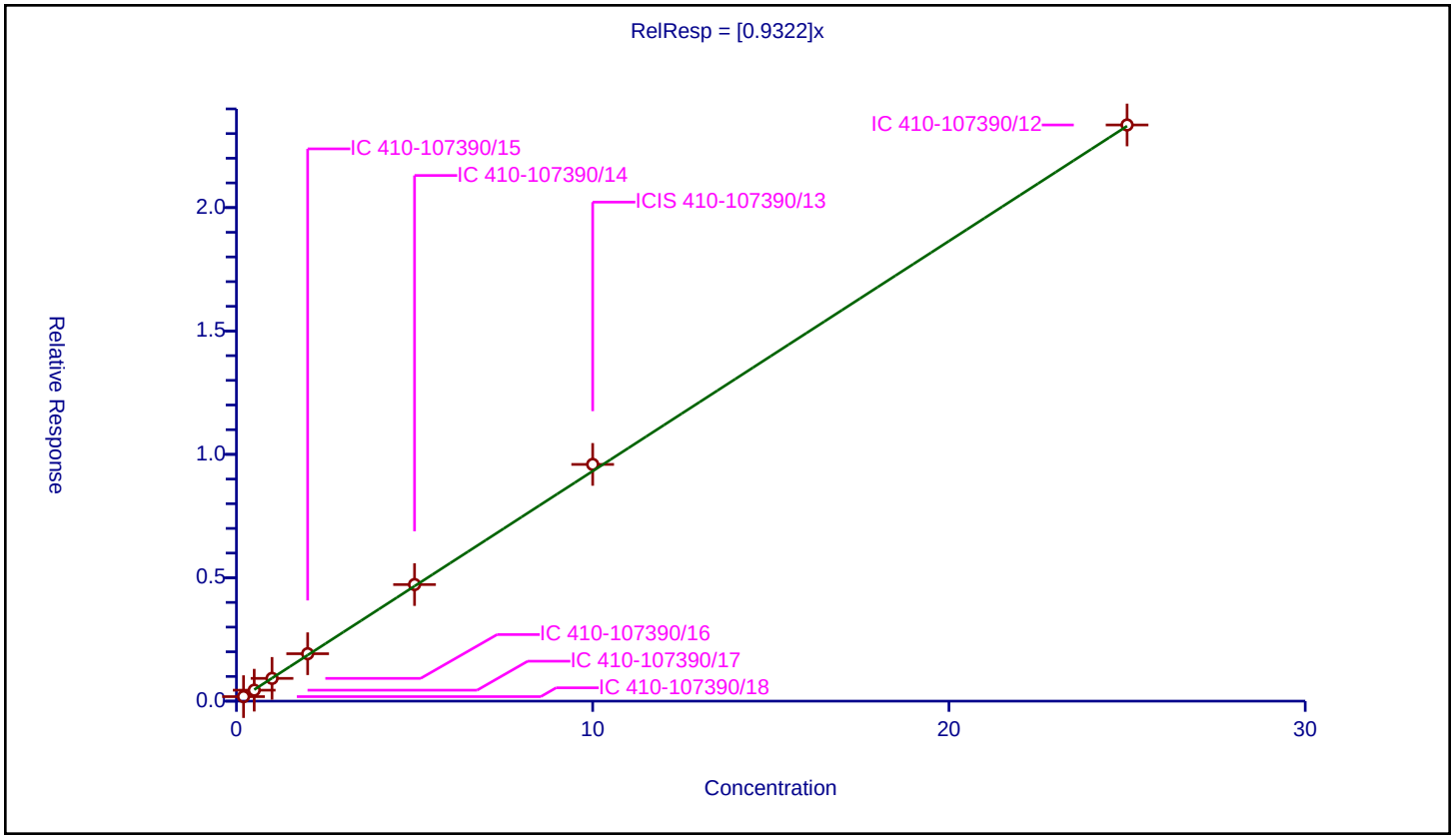
Curve Coefficients

Intercept:	0
Slope:	0.9322

Error Coefficients

Standard Error:	957000
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 410-107390/18	0.2	0.183191	10.0	922535.0	0.915954	Y
2	IC 410-107390/17	0.5	0.444077	10.0	926371.0	0.888154	Y
3	IC 410-107390/16	1.0	0.921875	10.0	911826.0	0.921875	Y
4	IC 410-107390/15	2.0	1.922122	10.0	911732.0	0.961061	Y
5	IC 410-107390/14	5.0	4.724239	10.0	899730.0	0.944848	Y
6	ICIS 410-107390/13	10.0	9.593682	10.0	899738.0	0.959368	Y
7	IC 410-107390/12	25.0	23.349603	10.0	911496.0	0.933984	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

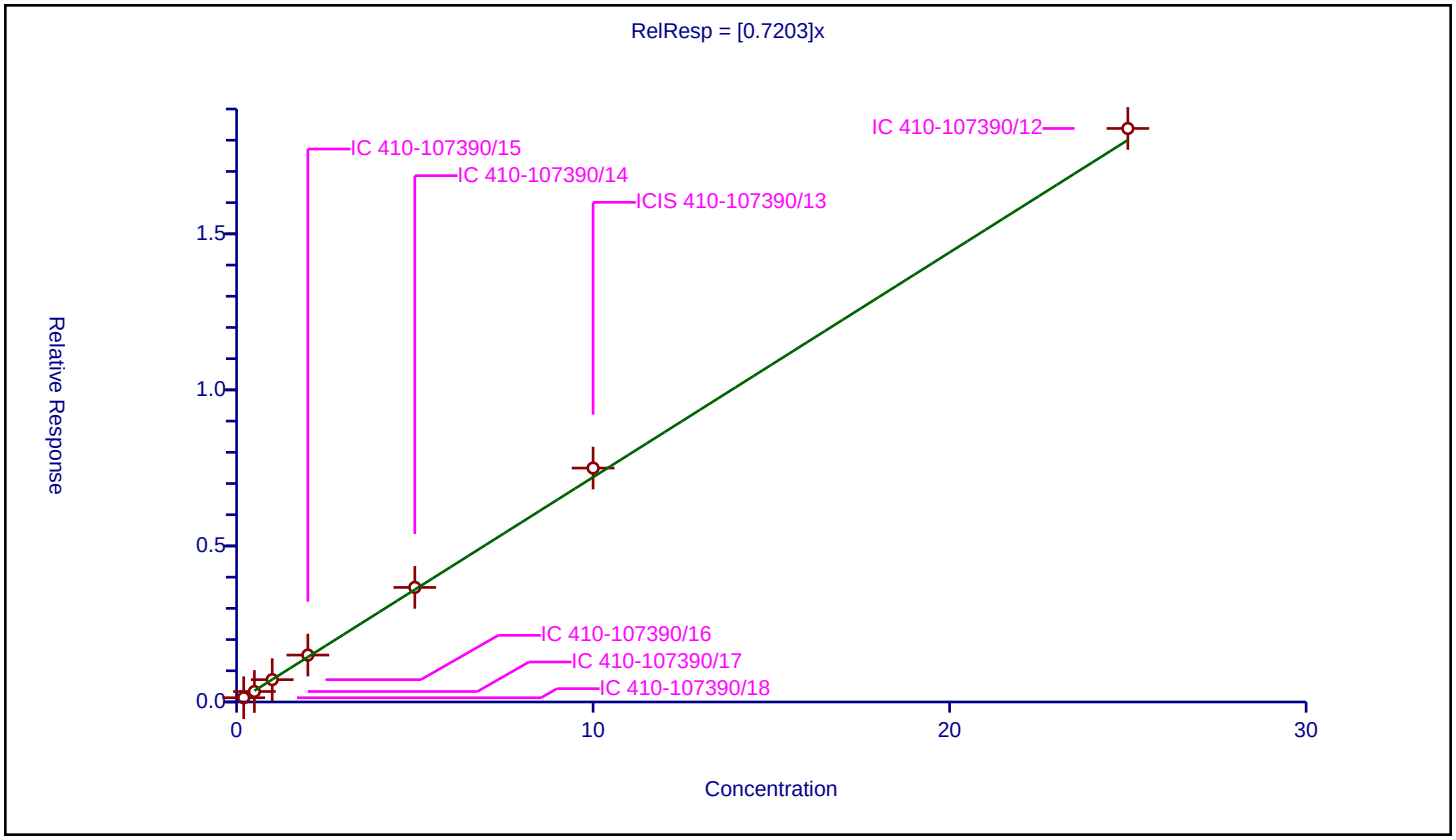
Curve Coefficients

Intercept:	0
Slope:	0.7203

Error Coefficients

Standard Error:	752000
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.136613	10.0	922535.0	0.683064	Y
2	IC 410-107390/17	0.5	0.336366	10.0	926371.0	0.672733	Y
3	IC 410-107390/16	1.0	0.715334	10.0	911826.0	0.715334	Y
4	IC 410-107390/15	2.0	1.5036	10.0	911732.0	0.7518	Y
5	IC 410-107390/14	5.0	3.67139	10.0	899730.0	0.734278	Y
6	ICIS 410-107390/13	10.0	7.495282	10.0	899738.0	0.749528	Y
7	IC 410-107390/12	25.0	18.376943	10.0	911496.0	0.735078	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

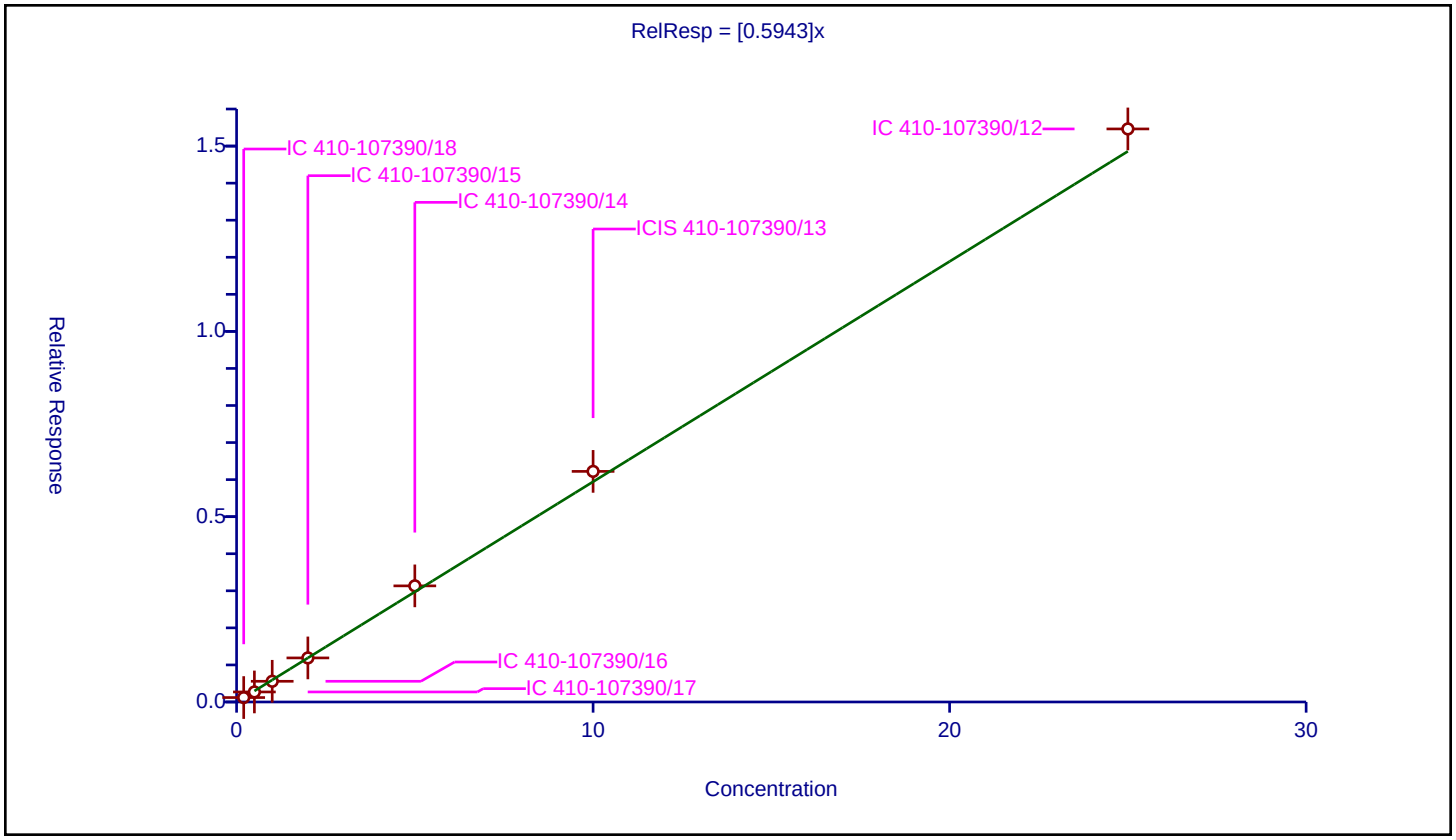
Curve Coefficients

Intercept:	0
Slope:	0.5943

Error Coefficients

Standard Error:	632000
Relative Standard Error:	5.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.119584	10.0	922535.0	0.597918	Y
2	IC 410-107390/17	0.5	0.271015	10.0	926371.0	0.542029	Y
3	IC 410-107390/16	1.0	0.558462	10.0	911826.0	0.558462	Y
4	IC 410-107390/15	2.0	1.188935	10.0	911732.0	0.594467	Y
5	IC 410-107390/14	5.0	3.133407	10.0	899730.0	0.626681	Y
6	ICIS 410-107390/13	10.0	6.221956	10.0	899738.0	0.622196	Y
7	IC 410-107390/12	25.0	15.462317	10.0	911496.0	0.618493	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

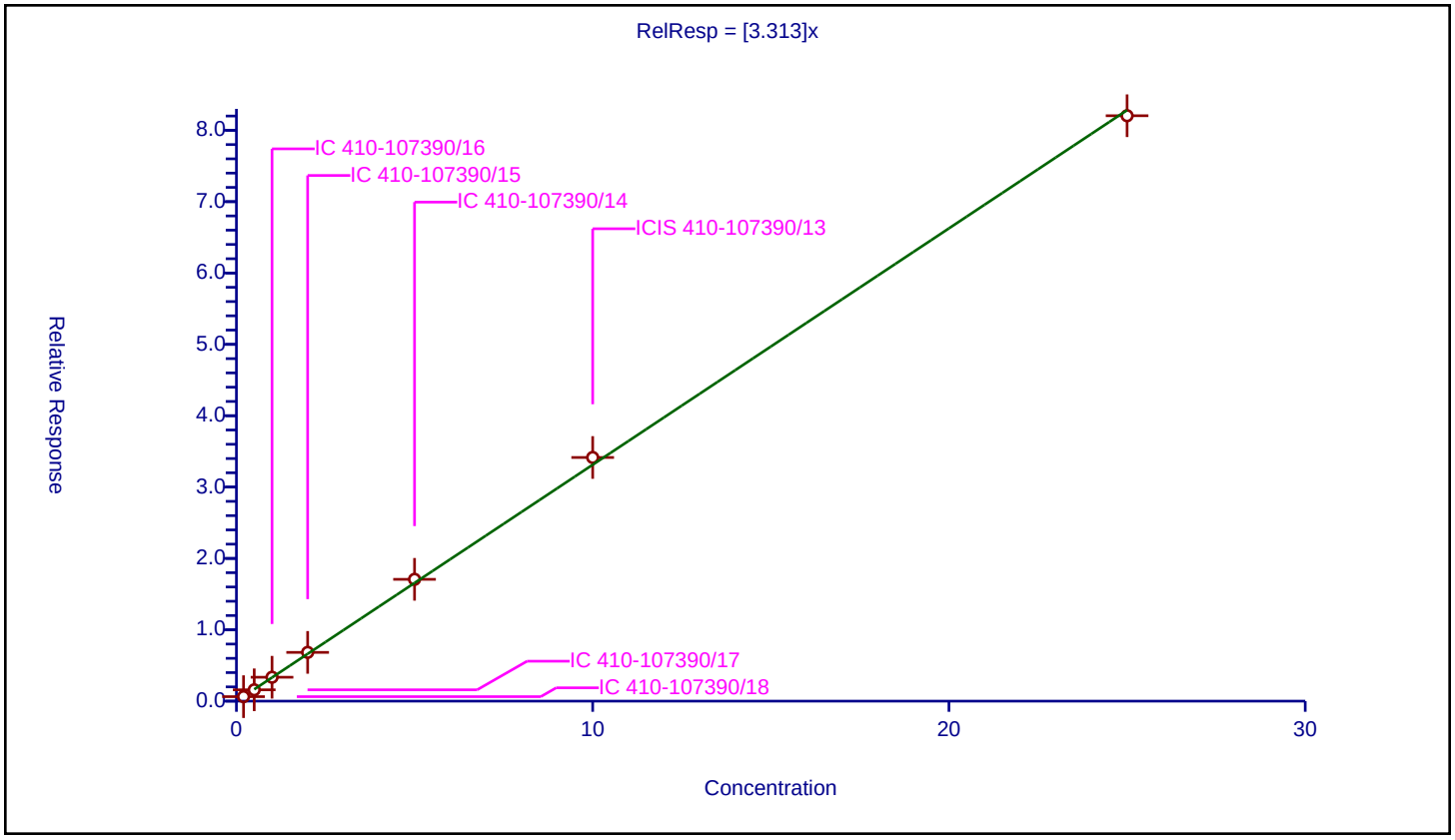
Curve Coefficients

Intercept:	0
Slope:	3.313

Error Coefficients

Standard Error:	3370000
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 410-107390/18	0.2	0.627423	10.0	922535.0	3.137117	Y
2	IC 410-107390/17	0.5	1.587237	10.0	926371.0	3.174473	Y
3	IC 410-107390/16	1.0	3.350135	10.0	911826.0	3.350135	Y
4	IC 410-107390/15	2.0	6.833795	10.0	911732.0	3.416898	Y
5	IC 410-107390/14	5.0	17.072299	10.0	899730.0	3.41446	Y
6	ICIS 410-107390/13	10.0	34.147352	10.0	899738.0	3.414735	Y
7	IC 410-107390/12	25.0	82.041567	10.0	911496.0	3.281663	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

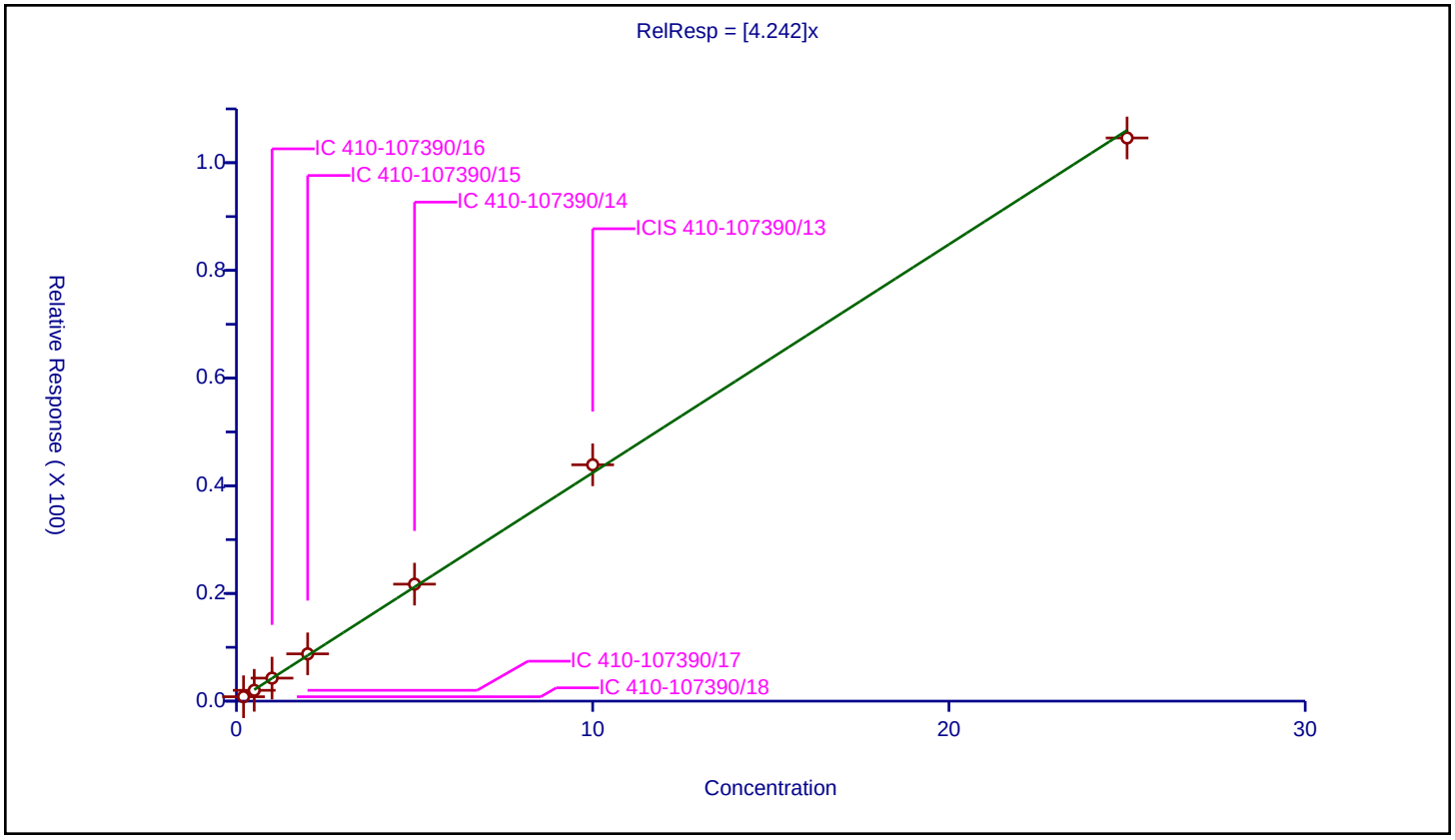
Curve Coefficients

Intercept:	0
Slope:	4.242

Error Coefficients

Standard Error:	4300000
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 410-107390/18	0.2	0.816273	10.0	922535.0	4.081363	Y
2	IC 410-107390/17	0.5	2.012131	10.0	926371.0	4.024262	Y
3	IC 410-107390/16	1.0	4.27439	10.0	911826.0	4.27439	Y
4	IC 410-107390/15	2.0	8.782285	10.0	911732.0	4.391142	Y
5	IC 410-107390/14	5.0	21.730352	10.0	899730.0	4.34607	Y
6	ICIS 410-107390/13	10.0	43.893756	10.0	899738.0	4.389376	Y
7	IC 410-107390/12	25.0	104.601578	10.0	911496.0	4.184063	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

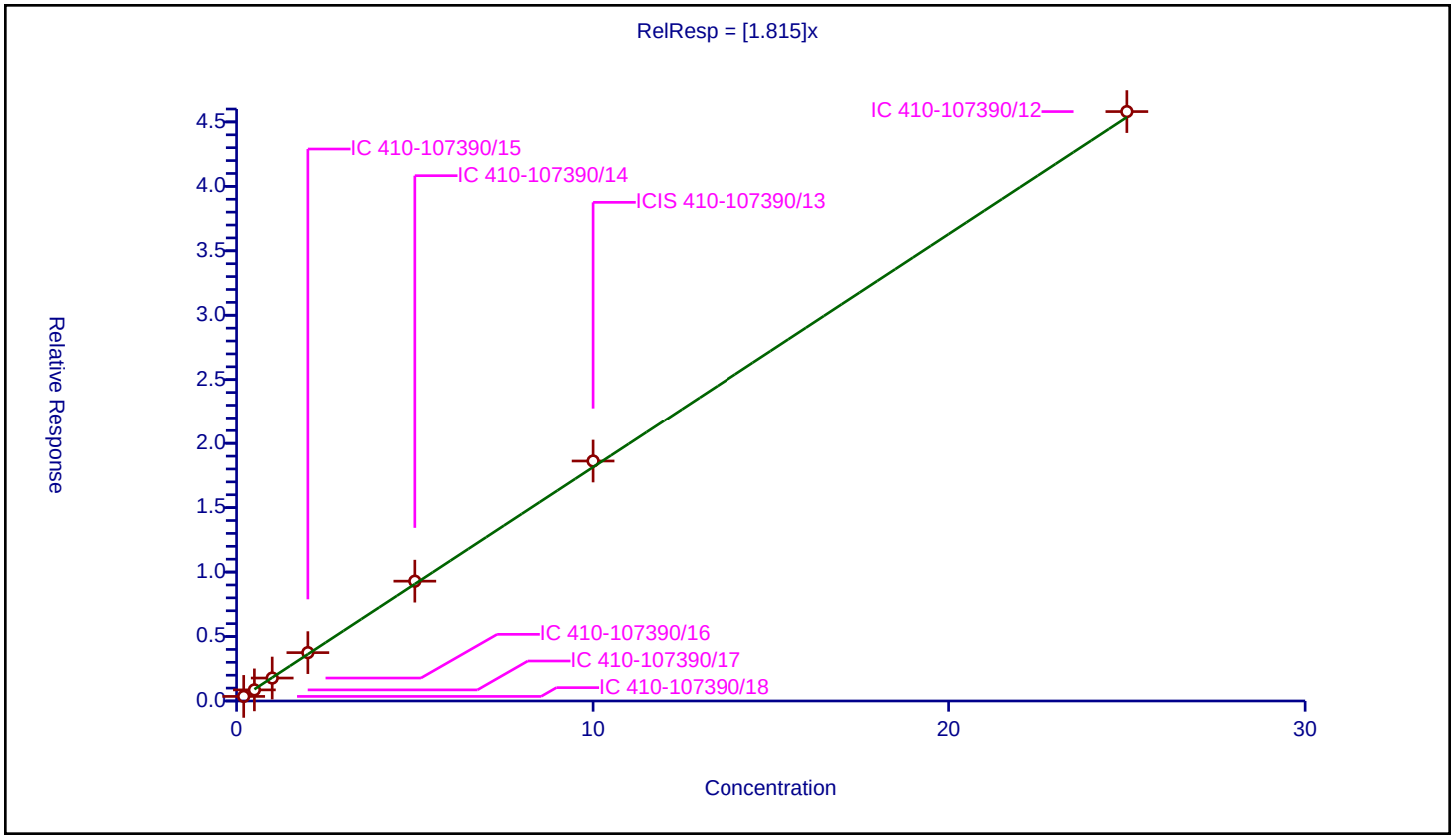
Curve Coefficients

Intercept:	0
Slope:	1.815

Error Coefficients

Standard Error:	1870000
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 410-107390/18	0.2	0.3541	10.0	922535.0	1.770502	Y
2	IC 410-107390/17	0.5	0.862333	10.0	926371.0	1.724665	Y
3	IC 410-107390/16	1.0	1.779155	10.0	911826.0	1.779155	Y
4	IC 410-107390/15	2.0	3.751387	10.0	911732.0	1.875694	Y
5	IC 410-107390/14	5.0	9.295733	10.0	899730.0	1.859147	Y
6	ICIS 410-107390/13	10.0	18.618264	10.0	899738.0	1.861826	Y
7	IC 410-107390/12	25.0	45.802132	10.0	911496.0	1.832085	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

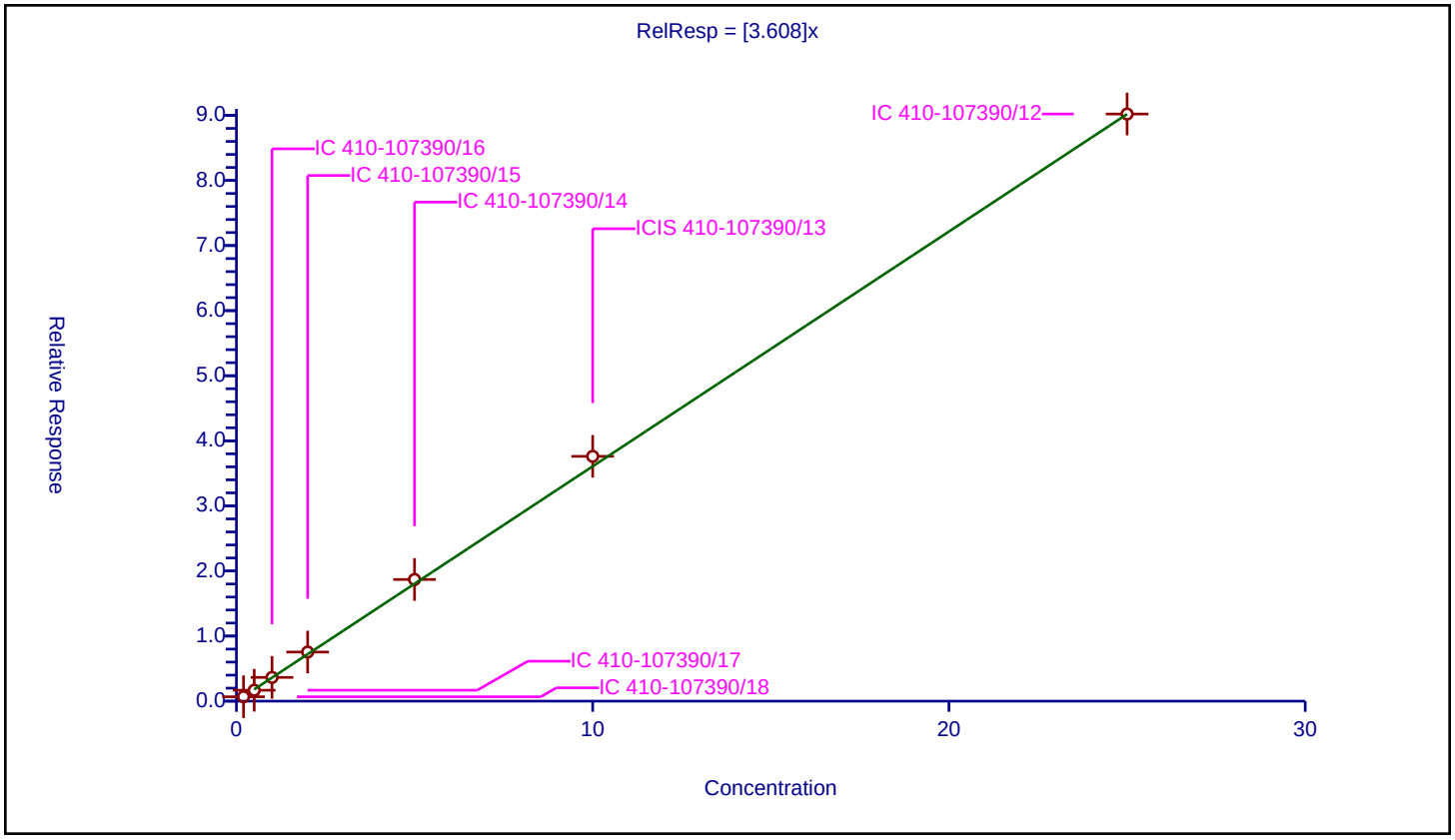
Curve Coefficients

Intercept:	0
Slope:	3.608

Error Coefficients

Standard Error:	3710000
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 410-107390/18	0.2	0.674338	10.0	922535.0	3.371688	Y
2	IC 410-107390/17	0.5	1.676013	10.0	926371.0	3.352026	Y
3	IC 410-107390/16	1.0	3.649918	10.0	911826.0	3.649918	Y
4	IC 410-107390/15	2.0	7.545035	10.0	911732.0	3.772518	Y
5	IC 410-107390/14	5.0	18.692174	10.0	899730.0	3.738435	Y
6	ICIS 410-107390/13	10.0	37.613905	10.0	899738.0	3.761391	Y
7	IC 410-107390/12	25.0	90.209436	10.0	911496.0	3.608377	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

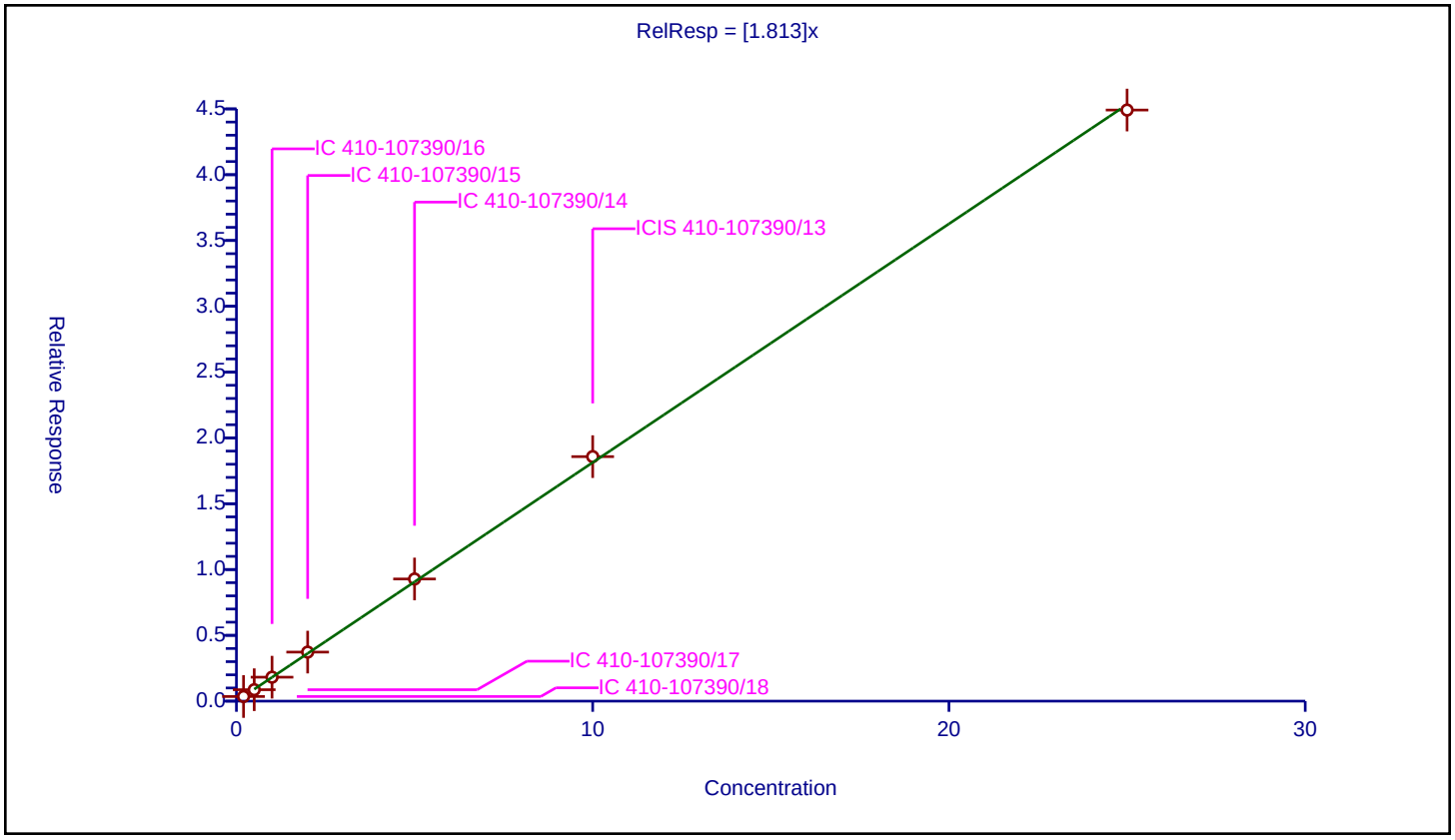
Curve Coefficients

Intercept:	0
Slope:	1.813

Error Coefficients

Standard Error:	1840000
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 410-107390/18	0.2	0.352008	10.0	922535.0	1.760042	Y
2	IC 410-107390/17	0.5	0.868745	10.0	926371.0	1.73749	Y
3	IC 410-107390/16	1.0	1.820314	10.0	911826.0	1.820314	Y
4	IC 410-107390/15	2.0	3.727301	10.0	911732.0	1.863651	Y
5	IC 410-107390/14	5.0	9.280906	10.0	899730.0	1.856181	Y
6	ICIS 410-107390/13	10.0	18.578975	10.0	899738.0	1.857898	Y
7	IC 410-107390/12	25.0	44.912287	10.0	911496.0	1.796491	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

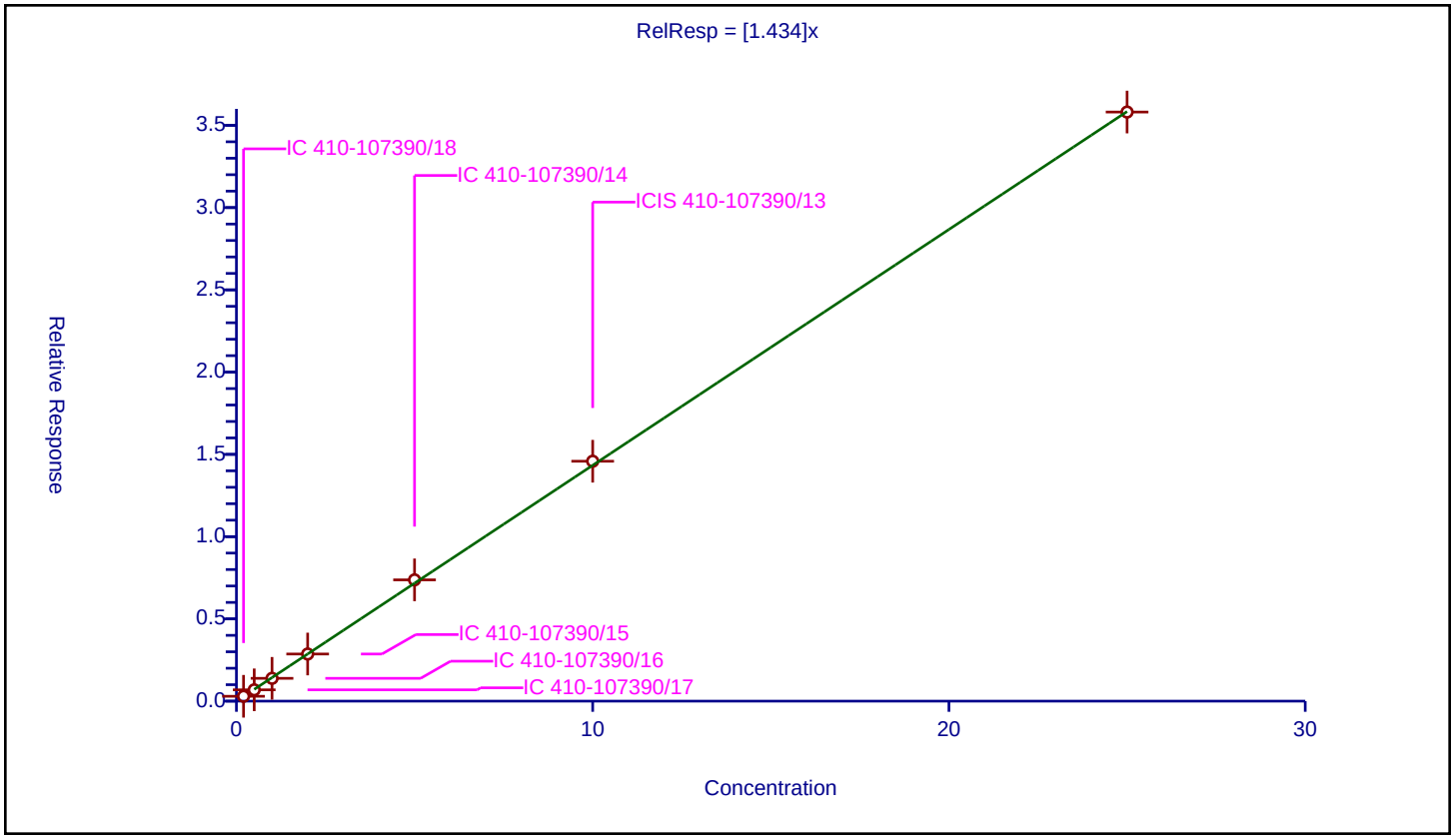
Curve Coefficients

Intercept:	0
Slope:	1.434

Error Coefficients

Standard Error:	1470000
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 410-107390/18	0.2	0.295057	10.0	922535.0	1.475283	Y
2	IC 410-107390/17	0.5	0.687975	10.0	926371.0	1.37595	Y
3	IC 410-107390/16	1.0	1.386196	10.0	911826.0	1.386196	Y
4	IC 410-107390/15	2.0	2.865162	10.0	911732.0	1.432581	Y
5	IC 410-107390/14	5.0	7.371567	10.0	899730.0	1.474313	Y
6	ICIS 410-107390/13	10.0	14.582812	10.0	899738.0	1.458281	Y
7	IC 410-107390/12	25.0	35.808857	10.0	911496.0	1.432354	Y



Calibration / Benzyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

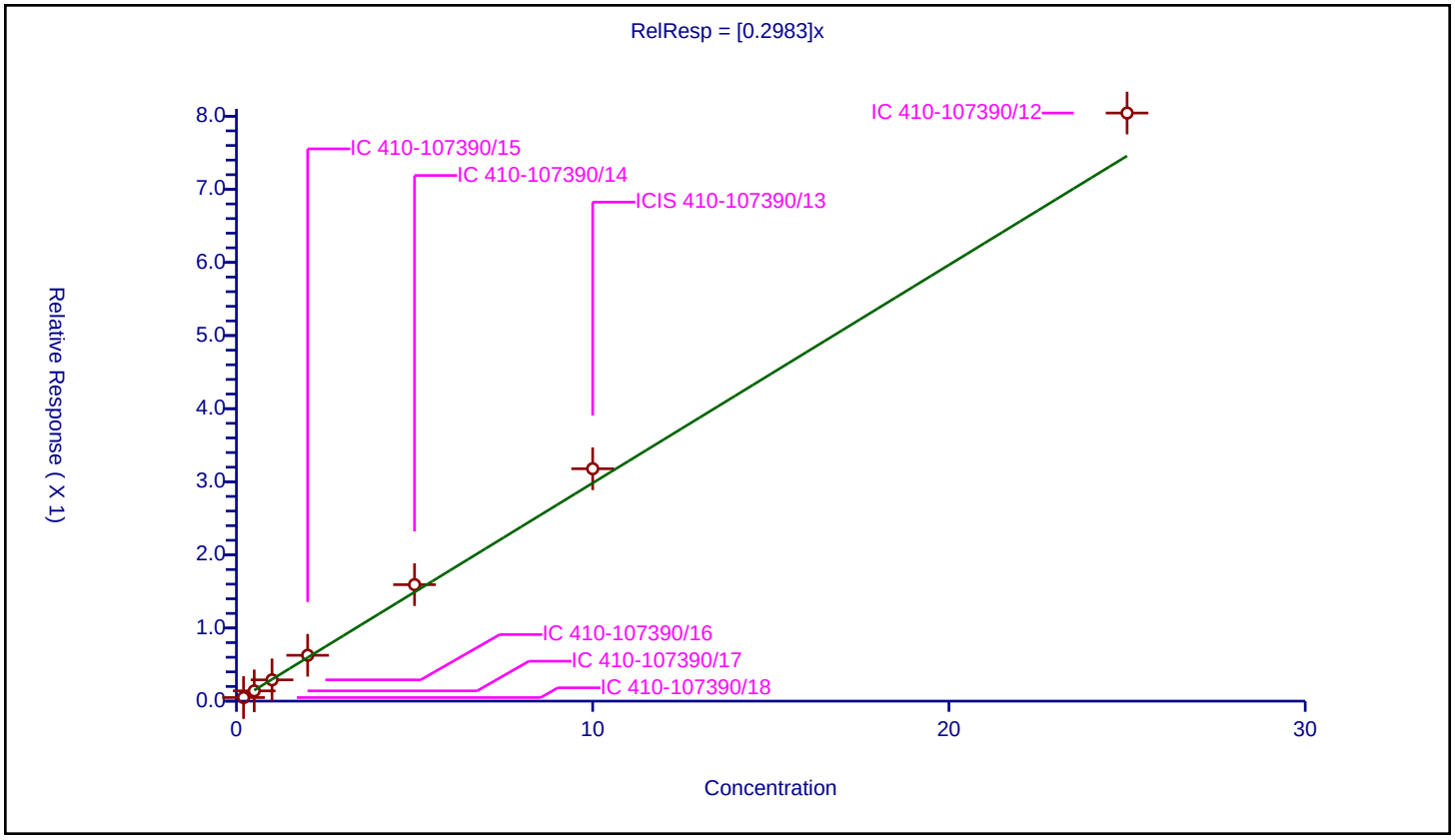
Curve Coefficients

Intercept:	0
Slope:	0.2983

Error Coefficients

Standard Error:	328000
Relative Standard Error:	9.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.989

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.048909	10.0	922535.0	0.244544	Y
2	IC 410-107390/17	0.5	0.140473	10.0	926371.0	0.280946	Y
3	IC 410-107390/16	1.0	0.290691	10.0	911826.0	0.290691	Y
4	IC 410-107390/15	2.0	0.627257	10.0	911732.0	0.313628	Y
5	IC 410-107390/14	5.0	1.593122	10.0	899730.0	0.318624	Y
6	ICIS 410-107390/13	10.0	3.178492	10.0	899738.0	0.317849	Y
7	IC 410-107390/12	25.0	8.043392	10.0	911496.0	0.321736	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

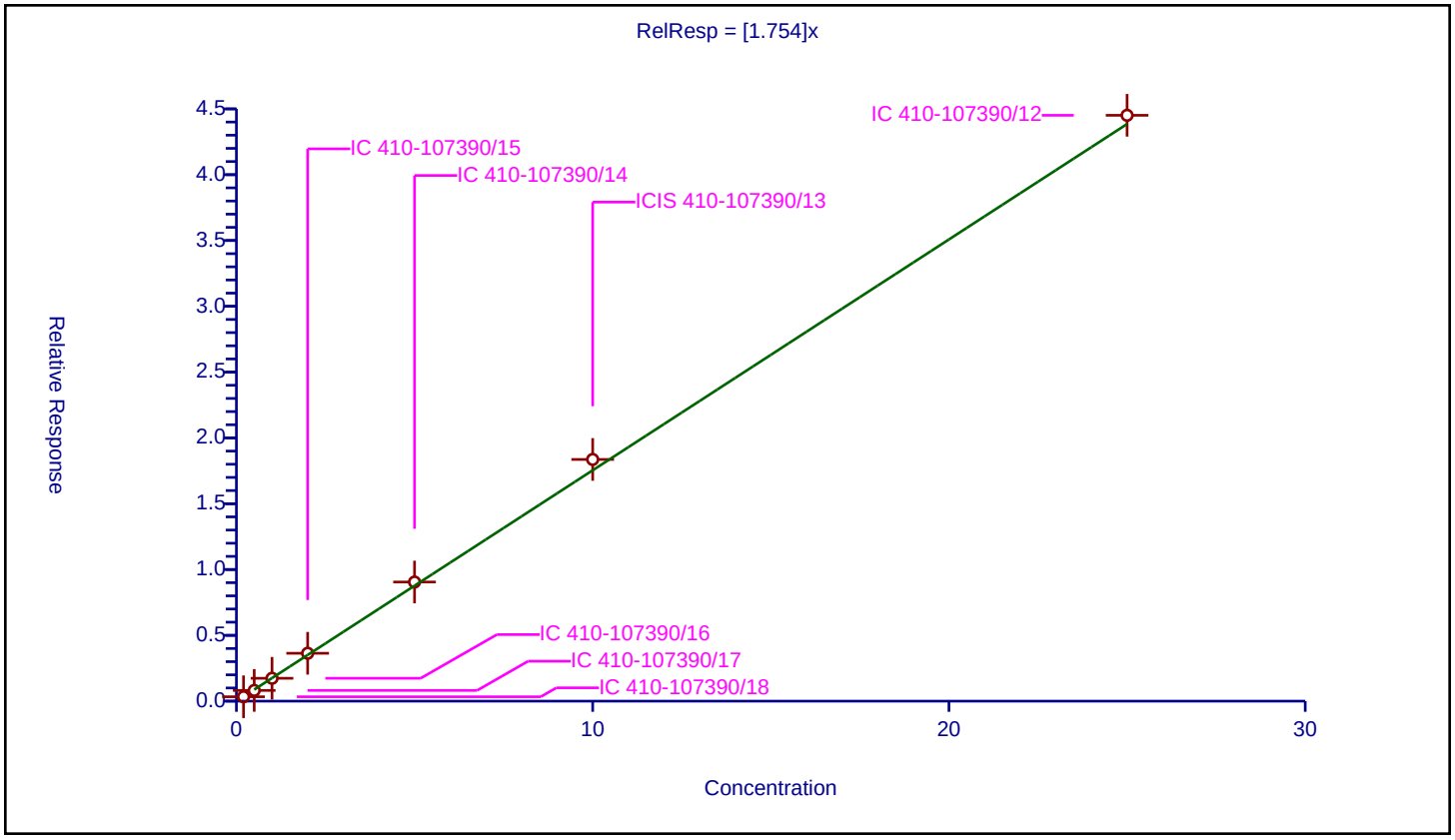
Curve Coefficients

Intercept:	0
Slope:	1.754

Error Coefficients

Standard Error:	1830000
Relative Standard Error:	4.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.333288	10.0	922535.0	1.666441	Y
2	IC 410-107390/17	0.5	0.814728	10.0	926371.0	1.629455	Y
3	IC 410-107390/16	1.0	1.736516	10.0	911826.0	1.736516	Y
4	IC 410-107390/15	2.0	3.637187	10.0	911732.0	1.818594	Y
5	IC 410-107390/14	5.0	9.05086	10.0	899730.0	1.810172	Y
6	ICIS 410-107390/13	10.0	18.363501	10.0	899738.0	1.83635	Y
7	IC 410-107390/12	25.0	44.512702	10.0	911496.0	1.780508	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

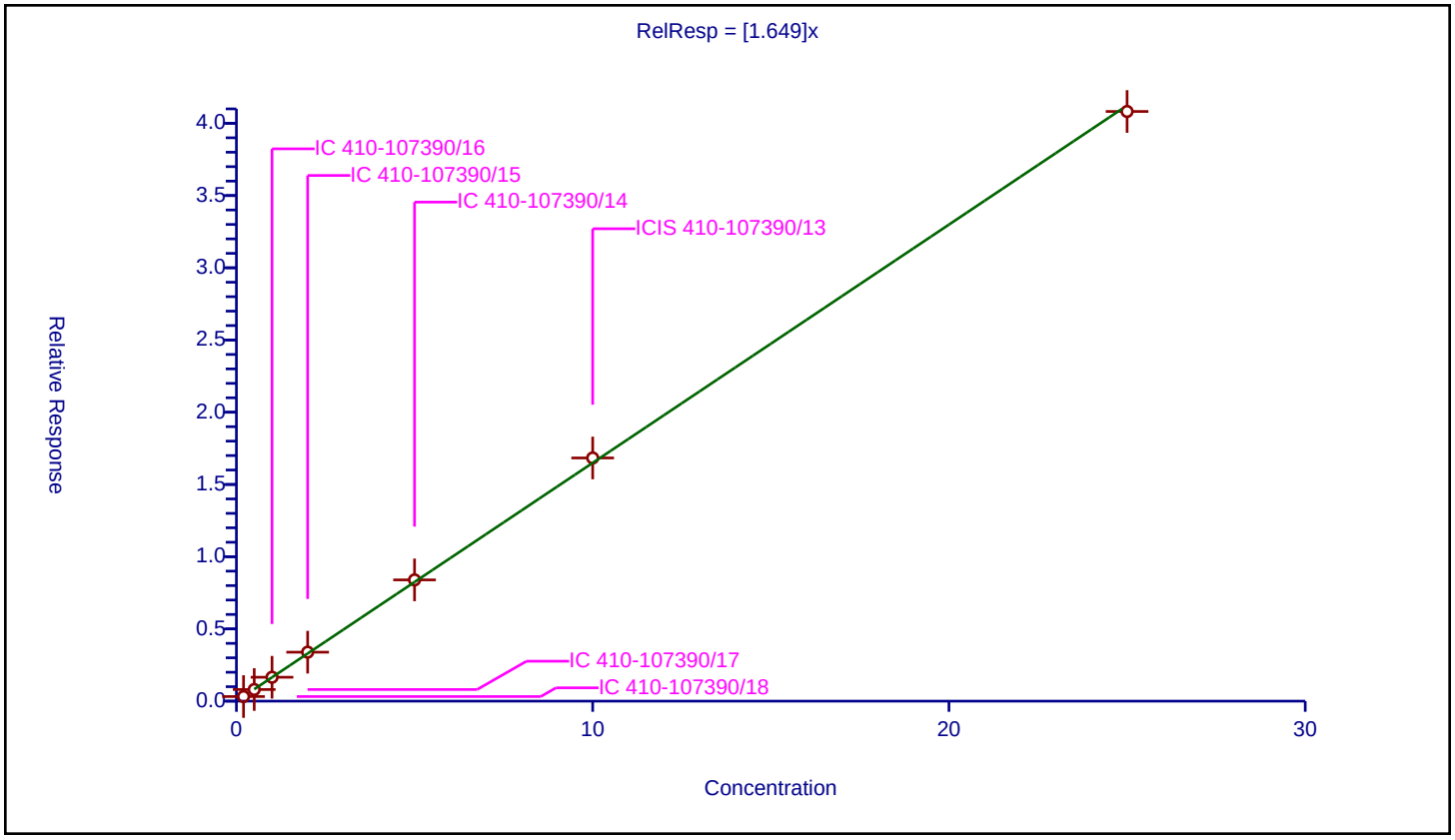
Curve Coefficients

Intercept:	0
Slope:	1.649

Error Coefficients

Standard Error:	1680000
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 410-107390/18	0.2	0.317831	10.0	922535.0	1.589154	Y
2	IC 410-107390/17	0.5	0.805628	10.0	926371.0	1.611255	Y
3	IC 410-107390/16	1.0	1.655513	10.0	911826.0	1.655513	Y
4	IC 410-107390/15	2.0	3.390295	10.0	911732.0	1.695147	Y
5	IC 410-107390/14	5.0	8.394629	10.0	899730.0	1.678926	Y
6	ICIS 410-107390/13	10.0	16.834512	10.0	899738.0	1.683451	Y
7	IC 410-107390/12	25.0	40.82188	10.0	911496.0	1.632875	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

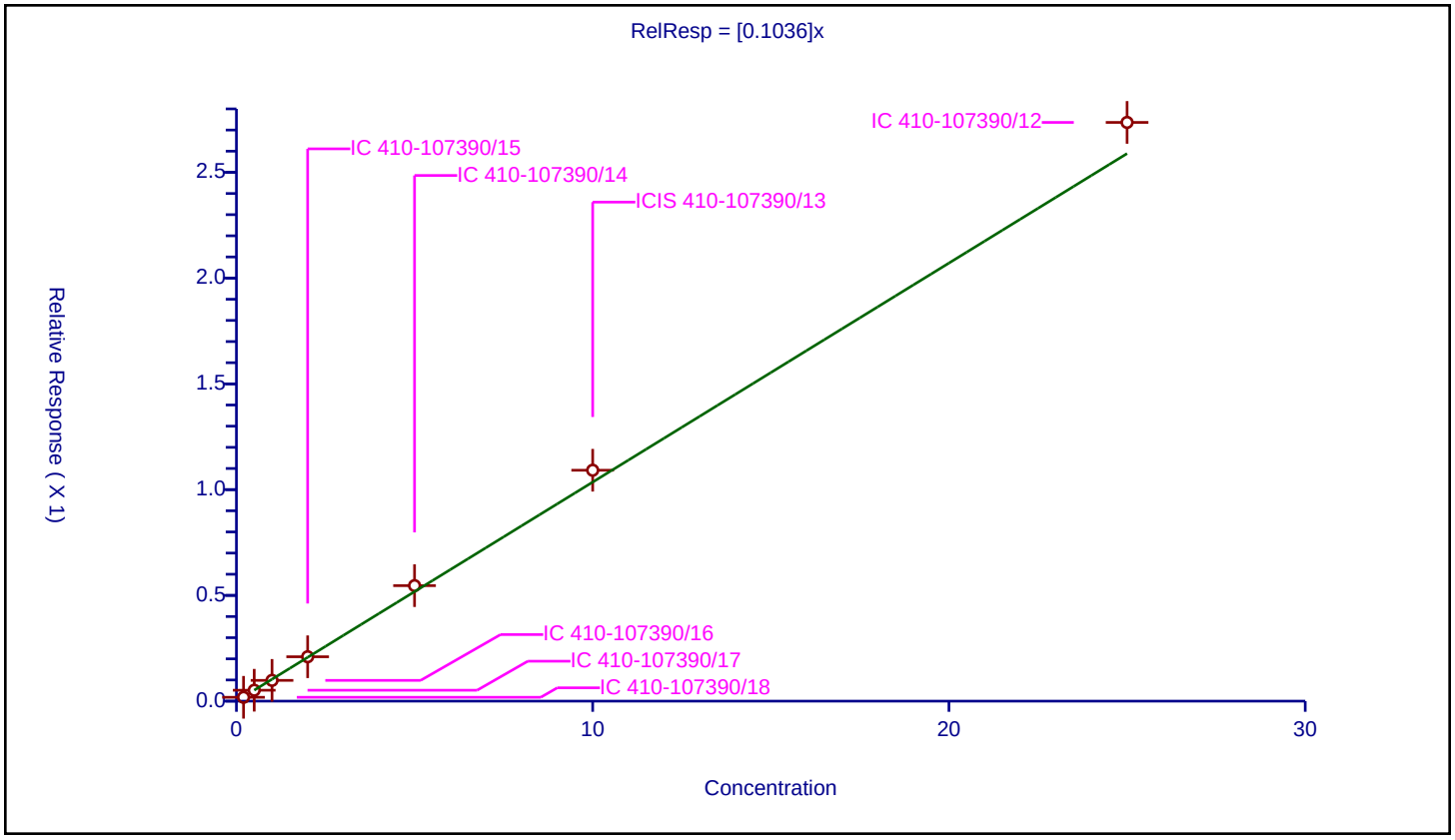
Curve Coefficients

Intercept:	0
Slope:	0.1036

Error Coefficients

Standard Error:	112000
Relative Standard Error:	6.7
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.018189	10.0	922535.0	0.090945	Y
2	IC 410-107390/17	0.5	0.051524	10.0	926371.0	0.103047	Y
3	IC 410-107390/16	1.0	0.098111	10.0	911826.0	0.098111	Y
4	IC 410-107390/15	2.0	0.209897	10.0	911732.0	0.104949	Y
5	IC 410-107390/14	5.0	0.546086	10.0	899730.0	0.109217	Y
6	ICIS 410-107390/13	10.0	1.09164	10.0	899738.0	0.109164	Y
7	IC 410-107390/12	25.0	2.736019	10.0	911496.0	0.109441	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

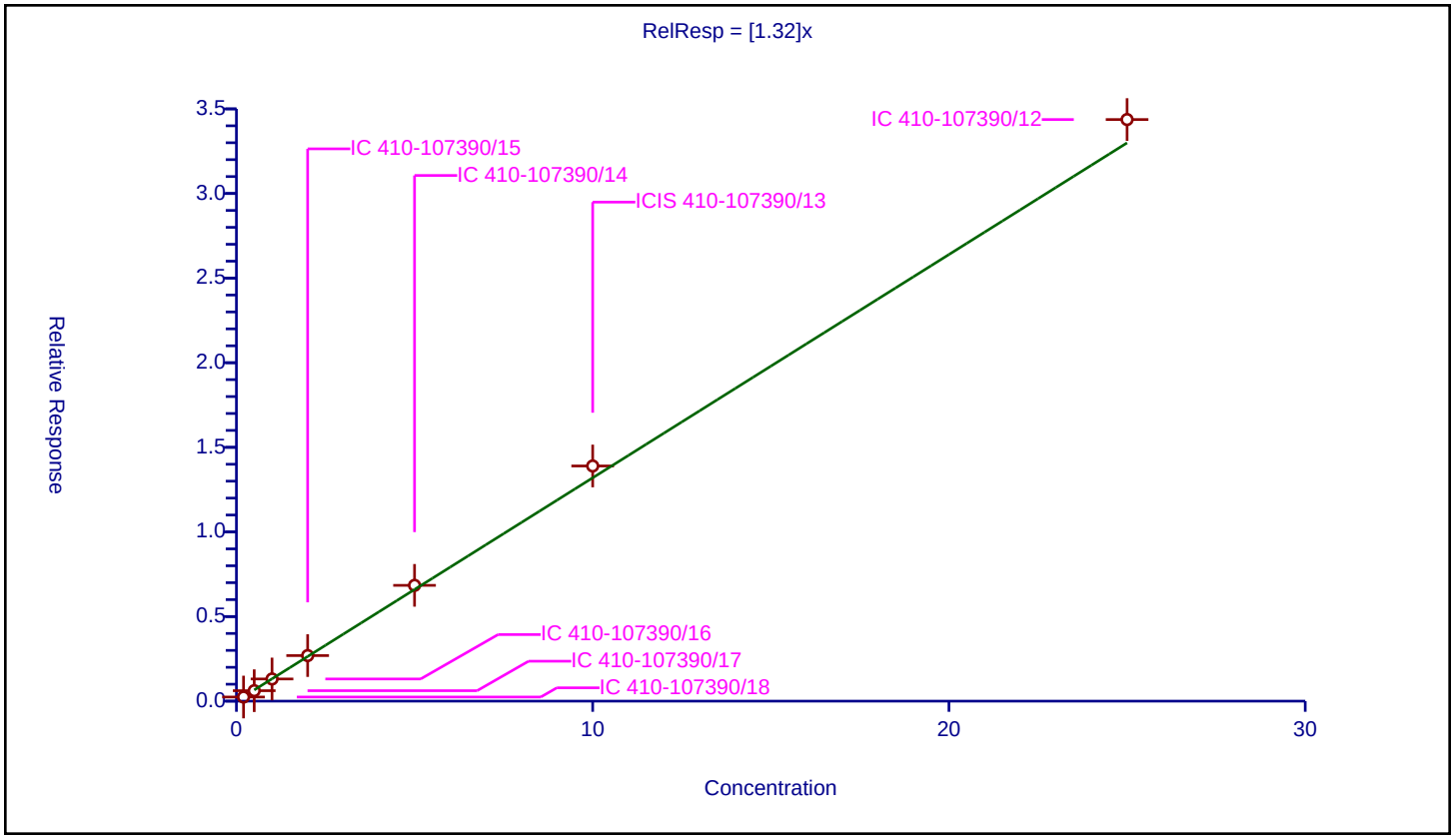
Curve Coefficients

Intercept:	0
Slope:	1.32

Error Coefficients

Standard Error:	1400000
Relative Standard Error:	5.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.996

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.242419	10.0	922535.0	1.212095	Y
2	IC 410-107390/17	0.5	0.618014	10.0	926371.0	1.236027	Y
3	IC 410-107390/16	1.0	1.310217	10.0	911826.0	1.310217	Y
4	IC 410-107390/15	2.0	2.692995	10.0	911732.0	1.346498	Y
5	IC 410-107390/14	5.0	6.842808	10.0	899730.0	1.368562	Y
6	ICIS 410-107390/13	10.0	13.897301	10.0	899738.0	1.38973	Y
7	IC 410-107390/12	25.0	34.369772	10.0	911496.0	1.374791	Y



Calibration / 1,2,4-Trichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

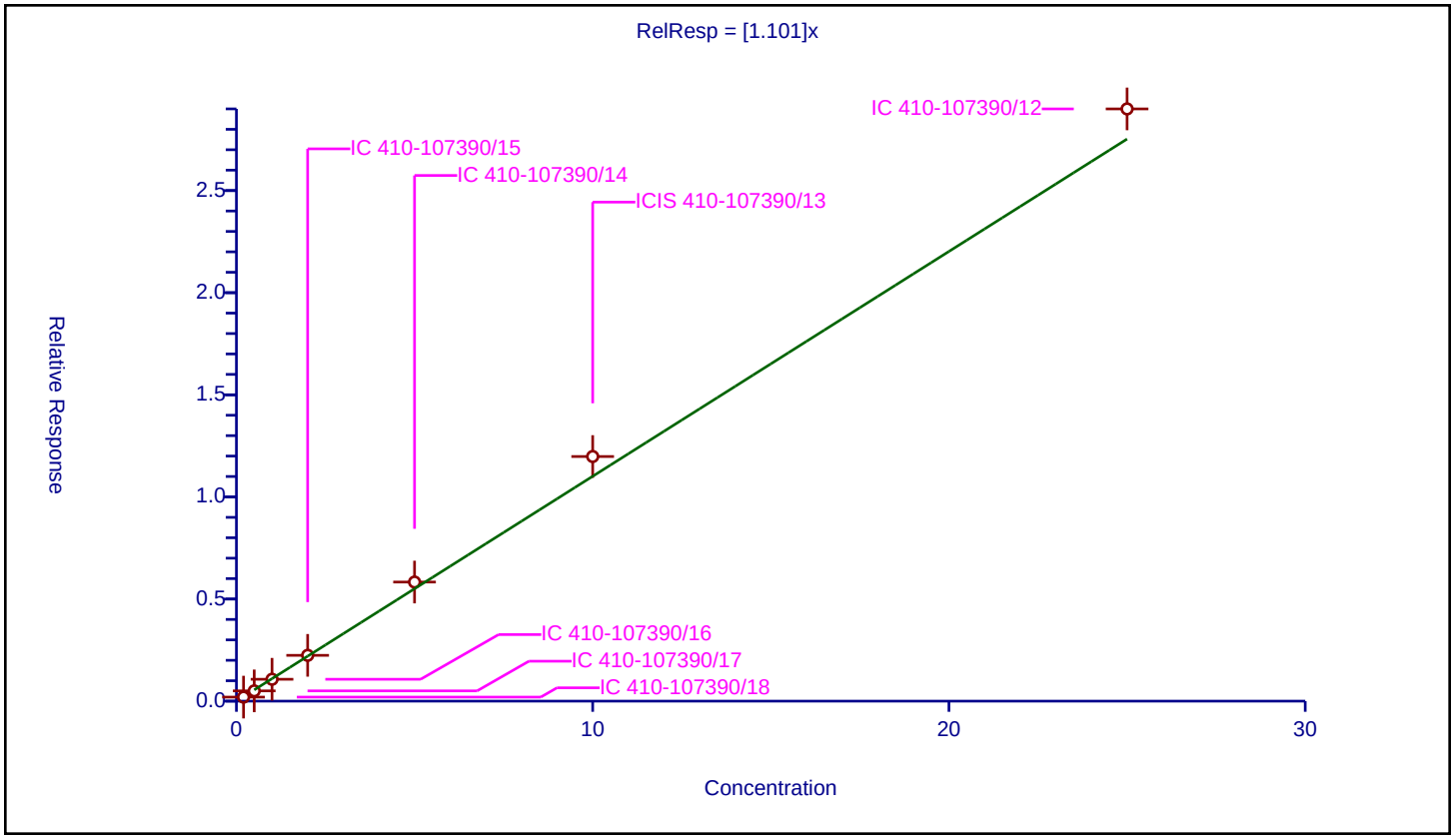
Curve Coefficients

Intercept:	0
Slope:	1.101

Error Coefficients

Standard Error:	1190000
Relative Standard Error:	7.5
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.993

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.196957	10.0	922535.0	0.984786	Y
2	IC 410-107390/17	0.5	0.502628	10.0	926371.0	1.005256	Y
3	IC 410-107390/16	1.0	1.071202	10.0	911826.0	1.071202	Y
4	IC 410-107390/15	2.0	2.243006	10.0	911732.0	1.121503	Y
5	IC 410-107390/14	5.0	5.831772	10.0	899730.0	1.166354	Y
6	ICIS 410-107390/13	10.0	11.978698	10.0	899738.0	1.19787	Y
7	IC 410-107390/12	25.0	28.999184	10.0	911496.0	1.159967	Y



Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

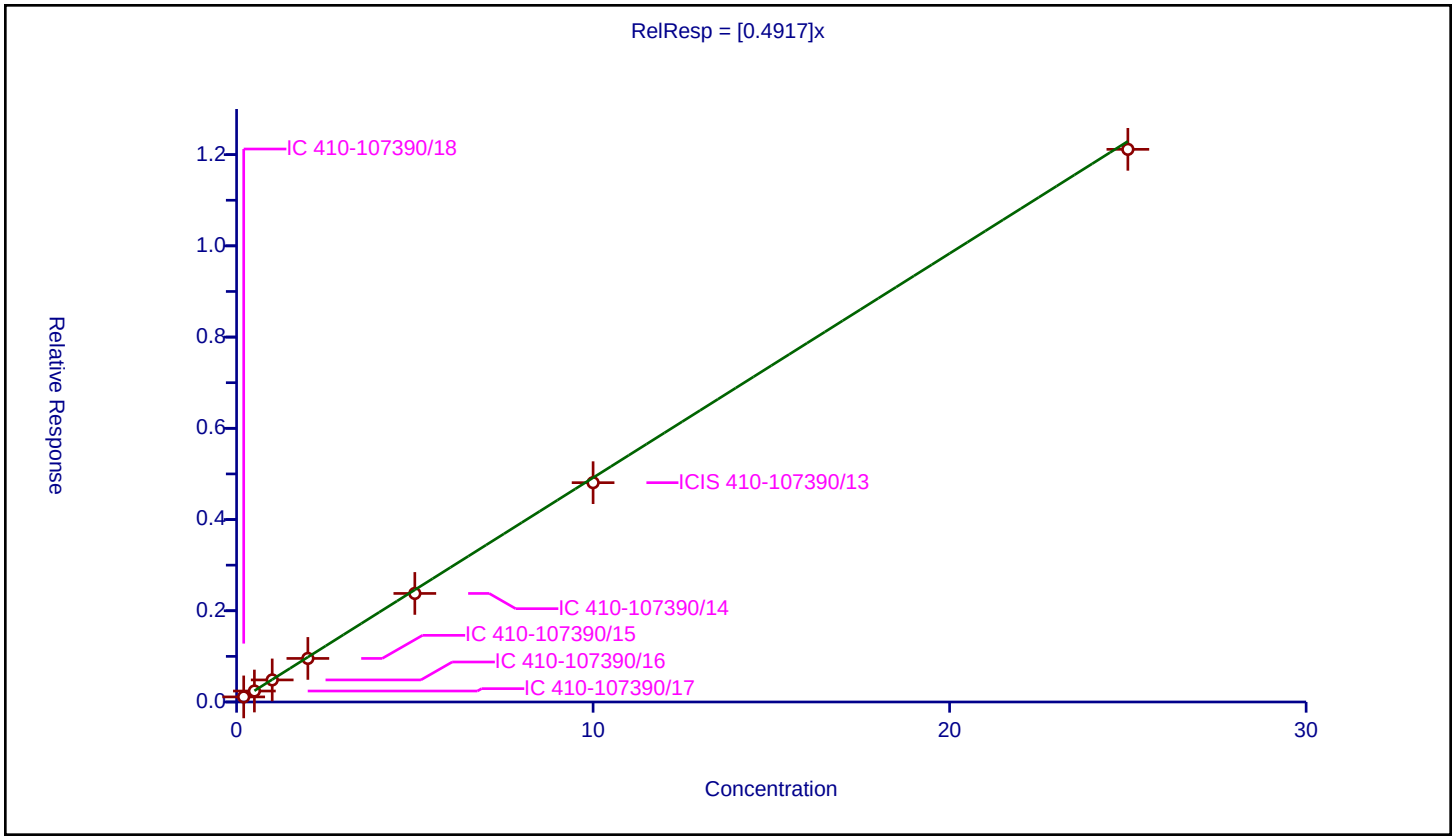
Curve Coefficients

Intercept:	0
Slope:	0.4917

Error Coefficients

Standard Error:	494000
Relative Standard Error:	6.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.111627	10.0	922535.0	0.558136	Y
2	IC 410-107390/17	0.5	0.24053	10.0	926371.0	0.48106	Y
3	IC 410-107390/16	1.0	0.483755	10.0	911826.0	0.483755	Y
4	IC 410-107390/15	2.0	0.954886	10.0	911732.0	0.477443	Y
5	IC 410-107390/14	5.0	2.379569	10.0	899730.0	0.475914	Y
6	ICIS 410-107390/13	10.0	4.808378	10.0	899738.0	0.480838	Y
7	IC 410-107390/12	25.0	12.115972	10.0	911496.0	0.484639	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

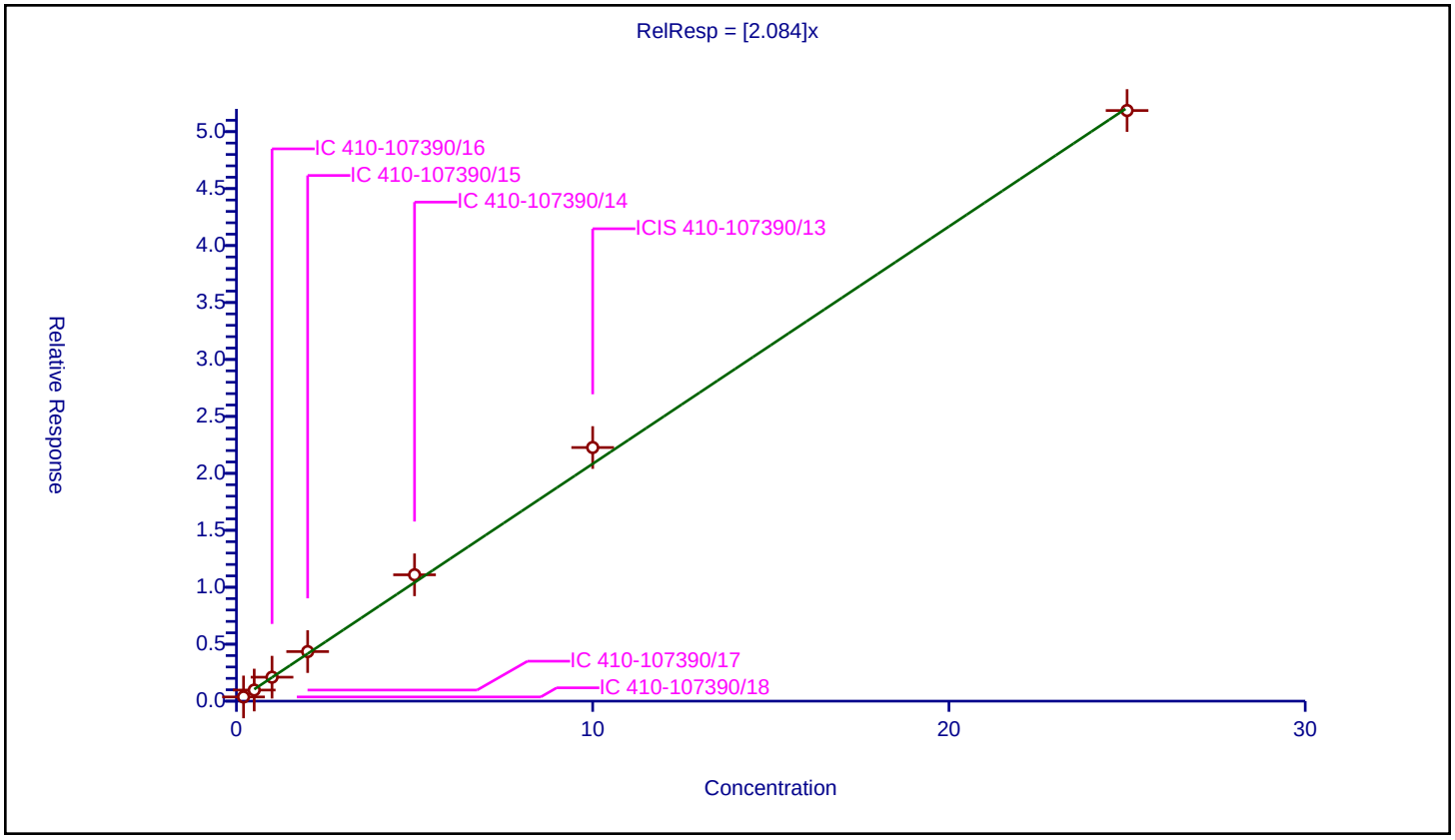
Curve Coefficients

Intercept:	0
Slope:	2.084

Error Coefficients

Standard Error:	2140000
Relative Standard Error:	6.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.367693	10.0	922535.0	1.838467	Y
2	IC 410-107390/17	0.5	0.974642	10.0	926371.0	1.949284	Y
3	IC 410-107390/16	1.0	2.103406	10.0	911826.0	2.103406	Y
4	IC 410-107390/15	2.0	4.349973	10.0	911732.0	2.174987	Y
5	IC 410-107390/14	5.0	11.093595	10.0	899730.0	2.218719	Y
6	ICIS 410-107390/13	10.0	22.268416	10.0	899738.0	2.226842	Y
7	IC 410-107390/12	25.0	51.857726	10.0	911496.0	2.074309	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

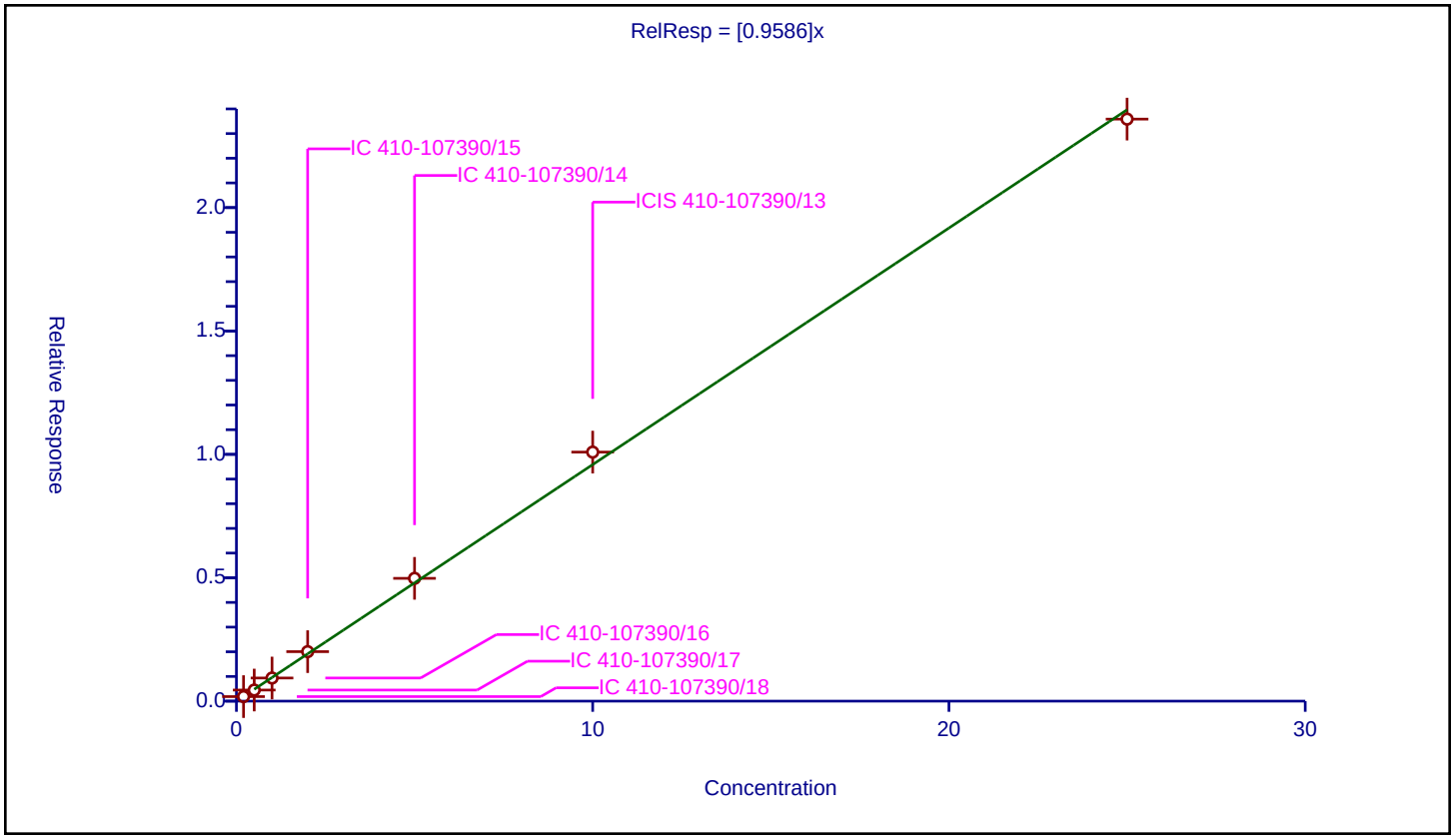
Curve Coefficients

Intercept:	0
Slope:	0.9586

Error Coefficients

Standard Error:	974000
Relative Standard Error:	4.5
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-107390/18	0.2	0.184481	10.0	922535.0	0.922404	Y
2	IC 410-107390/17	0.5	0.449906	10.0	926371.0	0.899812	Y
3	IC 410-107390/16	1.0	0.937229	10.0	911826.0	0.937229	Y
4	IC 410-107390/15	2.0	2.006258	10.0	911732.0	1.003129	Y
5	IC 410-107390/14	5.0	4.976004	10.0	899730.0	0.995201	Y
6	ICIS 410-107390/13	10.0	10.091538	10.0	899738.0	1.009154	Y
7	IC 410-107390/12	25.0	23.587103	10.0	911496.0	0.943484	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-41319-1

SDG No.:

Lab Sample ID: ICV 410-107390/19 Calibration Date: 03/26/2021 01:47

Instrument ID: 19930 Calib Start Date: 03/25/2021 20:09

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 03/25/2021 22:16

Lab File ID: IM25V01.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.1080				5.00		

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25V01.D
Lims ID: ICV LG
Client ID:
Sample Type: ICV
Inject. Date: 26-Mar-2021 01:47:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0025078-019
Misc. Info.: ICV LG
Operator ID: mec29284 Instrument ID: 19930
Sublist:

Method: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 26-Mar-2021 17:13:18 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1605

First Level Reviewer: campbellme Date: 26-Mar-2021 17:08:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.971	1.983	-0.012	99	423532	5.00	6.32	M
4 Chloromethane	50	2.172	2.178	-0.006	99	464335	5.00	5.69	
6 Butadiene	39	2.288	2.294	-0.006	94	344361	5.00	4.77	
5 Vinyl chloride	62	2.294	2.300	-0.006	98	438207	5.00	5.94	
7 Bromomethane	94	2.617	2.629	-0.012	90	293814	5.00	5.49	
8 Chloroethane	64	2.702	2.715	-0.012	100	246861	5.00	5.34	
9 Dichlorofluoromethane	67	2.940	2.952	-0.012	97	361892	5.00	4.78	
10 Trichlorofluoromethane	101	3.007	3.019	-0.012	98	536277	5.00	5.17	
11 Ethyl ether	59	3.263	3.275	-0.012	93	277107	5.00	5.54	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.336	3.342	-0.006	93	384751	5.00	4.97	
13 Acrolein	56	3.434	3.446	-0.012	100	280242	37.5	34.0	
14 1,1-Dichloroethene	96	3.580	3.586	-0.006	97	292553	5.00	5.24	
15 Acetone	43	3.611	3.617	-0.006	97	349673	37.5	32.3	
16 112TCTFE	101	3.617	3.623	-0.006	91	293423	5.00	4.66	
17 Iodomethane	142	3.775	3.787	-0.012	98	531105	5.00	4.80	
18 Ethyl bromide	108	3.806	3.812	-0.006	98	248516	5.03	4.92	
19 Carbon disulfide	76	3.885	3.897	-0.012	99	799246	5.00	4.84	
21 Methyl acetate	43	4.037	4.050	-0.013	99	148573	5.00	4.18	
22 3-Chloro-1-propene	41	4.062	4.074	-0.012	92	556616	5.00	4.88	
23 Methylene Chloride	84	4.251	4.257	-0.006	95	316004	5.00	5.04	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.263	0.006	0	167068	50.0	50.0	
25 2-Methyl-2-propanol	59	4.397	4.391	0.006	100	189101	50.0	48.6	
26 Acrylonitrile	53	4.598	4.604	-0.006	98	336823	25.0	25.3	
27 Methyl tert-butyl ether	73	4.659	4.659	0.000	96	780174	5.00	4.77	
28 trans-1,2-Dichloroethene	96	4.678	4.684	-0.006	99	314297	5.00	4.94	
29 Hexane	57	5.098	5.104	-0.006	94	487520	5.00	4.71	
31 1,1-Dichloroethane	63	5.336	5.342	-0.006	96	601511	5.00	4.89	
32 Isopropyl ether	45	5.385	5.397	-0.012	95	1099063	5.00	4.82	
33 2-Chloro-1,3-butadiene	53	5.440	5.446	-0.006	91	529760	5.00	4.90	
34 Tert-butyl ethyl ether	59	5.921	5.927	-0.006	98	1002398	5.00	4.84	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.122	6.122	0.000	100	691497	37.5	36.3	
37 cis-1,2-Dichloroethene	96	6.159	6.165	-0.006	83	361454	5.00	4.92	
38 2,2-Dichloropropane	77	6.171	6.183	-0.012	91	520302	5.00	4.89	
40 Propionitrile	54	6.220	6.214	0.006	99	162051	37.5	35.9	
42 Methacrylonitrile	67	6.427	6.427	0.000	93	648416	37.5	37.2	
43 Chlorobromomethane	128	6.494	6.488	0.006	96	152785	5.00	4.66	
44 Tetrahydrofuran	71	6.507	6.500	0.006	84	125131	25.0	24.9	
45 Chloroform	83	6.641	6.647	-0.006	94	581752	5.00	4.97	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.860	-0.006	94	539679	10.0	10.0	
47 1,1,1-Trichloroethane	97	6.866	6.872	-0.006	98	527895	5.00	4.96	
48 Cyclohexane	56	6.964	6.964	0.000	91	590388	5.00	4.76	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	94	455464	5.00	4.84	
50 Carbon tetrachloride	117	7.080	7.086	-0.006	89	467571	5.00	5.01	
52 Isobutyl alcohol	41	7.220	7.220	0.000	96	163096	125.0	116.2	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	104964	10.0	9.93	
54 Benzene	78	7.342	7.342	0.000	97	1344285	5.00	4.86	
56 1,2-Dichloroethane	62	7.415	7.415	0.000	97	353599	5.00	4.78	
57 Tert-amyl methyl ether	73	7.525	7.531	-0.006	98	890864	5.00	4.91	
* 58 Fluorobenzene (IS)	96	7.738	7.744	-0.006	99	2148117	10.0	10.0	
59 n-Heptane	43	7.750	7.756	-0.006	94	538781	5.00	4.59	
60 n-Butanol	56	8.092	8.092	0.000	90	274539	250.0	225.1	
61 Trichloroethene	95	8.220	8.220	0.000	98	355440	5.00	4.94	
62 Methylcyclohexane	83	8.531	8.530	0.000	93	614188	5.00	4.84	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	81	352097	5.00	4.91	
64 Methyl methacrylate	69	8.628	8.628	0.000	93	174514	5.00	5.05	
65 1,4-Dioxane	88	8.640	8.634	0.006	31	26646	125.0	114.3	M
66 Dibromomethane	93	8.659	8.665	-0.006	95	160492	5.00	4.93	
68 Dichlorobromomethane	83	8.890	8.890	0.000	99	420517	5.00	4.94	
69 2-Nitropropane	41	9.158	9.158	0.000	98	52307	5.00	4.84	
71 2-Chloroethyl vinyl ether	63		9.250				ND	ND	
72 1-Bromo-2-chloroethane	63	9.286	9.286	0.000	99	342576	5.00	5.13	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	95	524701	5.00	4.93	
74 4-Methyl-2-pentanone (MIBK)	43	9.603	9.603	0.000	97	1198420	25.0	24.5	
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	2129593	10.0	9.96	
76 Toluene	92	9.817	9.817	0.000	98	851233	5.00	4.84	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	93	446306	5.00	5.20	
79 Ethyl methacrylate	69	10.128	10.128	0.000	90	362799	5.00	4.93	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	236692	5.00	4.98	
81 Tetrachloroethene	166	10.366	10.359	0.007	98	419857	5.00	5.02	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	90	410508	5.00	4.90	
83 2-Hexanone	43	10.481	10.481	0.000	99	865959	25.0	25.2	
85 Chlorodibromomethane	129	10.646	10.652	-0.006	89	305615	5.00	5.04	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	227960	5.00	4.90	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.188	0.001	86	1633240	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	99	494145	5.00	4.60	
90 Chlorobenzene	112	11.213	11.213	0.000	95	965440	5.00	4.97	
92 Ethylbenzene	91	11.298	11.298	0.000	98	1697112	5.00	4.93	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	96	356814	5.00	5.07	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	1329524	10.0	9.85	
94 o-Xylene	106	11.743	11.743	0.000	96	654573	5.00	4.96	
95 Styrene	104	11.755	11.755	0.000	94	1072288	5.00	4.98	
96 Bromoform	173	11.920	11.914	0.006	98	189038	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
97 Isopropylbenzene	105	12.042	12.042	0.000	95	1700728	5.00	4.84	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	93	801581	10.0	9.87	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	305208	5.00	5.03	
102 Bromobenzene	156	12.304	12.304	0.000	96	409303	5.00	4.89	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	91	409945	25.0	24.3	
104 1,2,3-Trichloropropane	110	12.329	12.328	0.001	82	80511	5.00	4.98	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	2028673	5.00	4.94	
106 2-Chlorotoluene	126	12.444	12.444	0.000	97	409266	5.00	4.90	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	1449613	5.00	4.90	
108 4-Chlorotoluene	126	12.536	12.542	-0.006	98	416873	5.00	4.88	
109 tert-Butylbenzene	134	12.749	12.743	0.006	93	319903	5.00	4.85	
110 Pentachloroethane	167	12.780	12.780	0.000	94	265732	5.00	4.88	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	97	1462735	5.00	4.82	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	1864821	5.00	4.80	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	801839	5.00	4.83	
114 4-Isopropyltoluene	119	13.017	13.017	0.000	97	1633806	5.00	4.95	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	915488	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.084	13.084	0.000	95	812417	5.00	4.89	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	98	669611	5.00	5.10	
118 Benzyl chloride	126	13.158	13.158	0.000	99	134378	5.00	4.92	
119 n-Butylbenzene	92	13.310	13.310	0.000	98	765270	5.00	4.77	
120 1,2-Dichlorobenzene	146	13.341	13.340	0.001	99	730895	5.00	4.84	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	86	46369	5.00	4.89	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	97	582795	5.00	4.82	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	488509	5.00	4.85	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	201913	5.00	4.49	
126 Naphthalene	128	14.615	14.615	0.000	97	920478	5.00	4.83	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	413484	5.00	4.71	
204 Pentane	43		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_EE_00003	Amount Added:	12.50	Units: uL	
MSV_Q_QVOA1_00073	Amount Added:	12.50	Units: uL	
MSV_Q_QARC_00073	Amount Added:	12.50	Units: uL	
MSV_Q_QVOA6_00071	Amount Added:	12.50	Units: uL	
MSV_QGAS_826_00118	Amount Added:	12.50	Units: uL	
MSV_Q_ETBR_00006	Amount Added:	12.50	Units: uL	
MSV_31_826ISS_00004	Amount Added:	5.00	Units: uL	Run Reagent

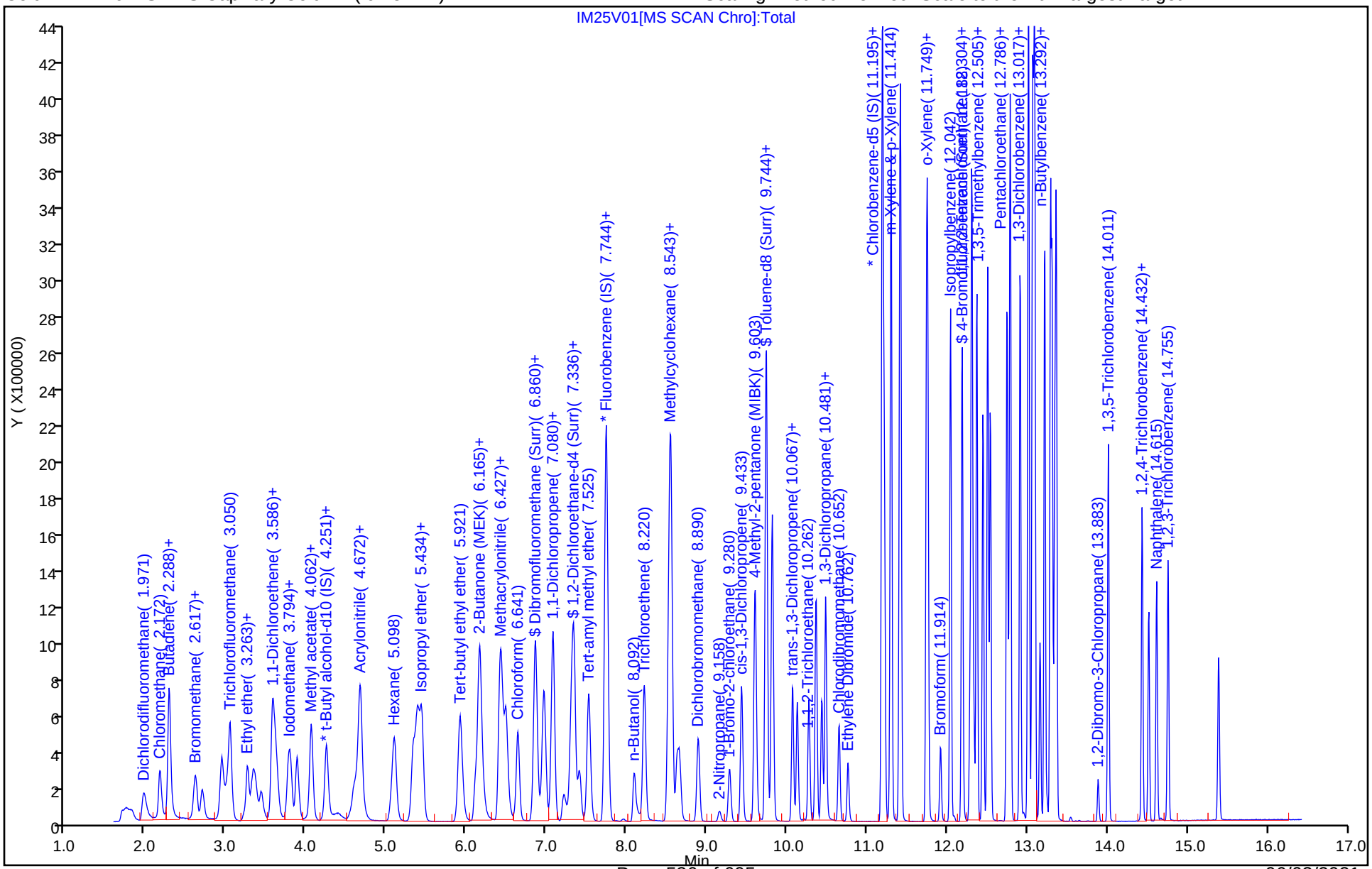
Report Date: 26-Mar-2021 17:13:26 Chrom Revision: 2.3 19-Mar-2021 08:24:58

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25V01.D

Injection Date:	26-Mar-2021 01:47:30	Instrument ID:	19930	Operator ID:	mec29284
Lims ID:	ICV LG			Worklist Smp#:	19
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-41319-1

SDG No.:

Lab Sample ID: ICV 410-107390/19 Calibration Date: 03/26/2021 01:47

Instrument ID: 19930 Calib Start Date: 03/25/2021 23:19

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 03/26/2021 01:26

Lab File ID: IM25V01.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	0.3119	0.3943	0.1000	6.32	5.00	26.4	30.0
Chloromethane	Ave	0.3796	0.4323	0.1000	5.69	5.00	13.9	30.0
1,3-Butadiene	Ave	0.3361	0.3206		4.77	5.00	-4.6	30.0
Vinyl chloride	Ave	0.3435	0.4080	0.1000	5.94	5.00	18.8	30.0
Bromomethane	Ave	0.2492	0.2736	0.1000	5.49	5.00	9.8	30.0
Chloroethane	Ave	0.2152	0.2298	0.1000	5.34	5.00	6.8	30.0
Dichlorofluoromethane	Ave	0.3528	0.3369		4.78	5.00	-4.5	30.0
Trichlorofluoromethane	Ave	0.4824	0.4993	0.1000	5.17	5.00	3.5	30.0
Ethyl ether	Ave	0.2329	0.2580		5.54	5.00	10.8	30.0
Freon 123a	Ave	0.3602	0.3582		4.97	5.00	-0.6	30.0
Acrolein	Ave	2.470	2.236		34.0	37.5	-9.4	30.0
1,1-Dichloroethene	Ave	0.2598	0.2724	0.1000	5.24	5.00	4.8	30.0
Acetone	Ave	3.240	2.791	0.1000	32.3	37.5	-13.9	30.0
Freon 113	Ave	0.2930	0.2732	0.1000	4.66	5.00	-6.8	30.0
Methyl iodide	Ave	0.5154	0.4945		4.80	5.00	-4.1	30.0
Ethyl bromide	Ave	0.2350	0.2298		4.92	5.03	-2.2	30.0
Carbon disulfide	Ave	0.7688	0.7441	0.1000	4.84	5.00	-3.2	30.0
Methyl acetate	Ave	10.64	8.893	0.1000	4.18	5.00	-16.4	30.0
Allyl chloride	Ave	0.5310	0.5182		4.88	5.00	-2.4	30.0
Methylene Chloride	Ave	0.2920	0.2942	0.1000	5.04	5.00	0.8	30.0
t-Butyl alcohol	Ave	1.165	1.132		48.6	50.0	-2.8	30.0
Acrylonitrile	Ave	3.977	4.032		25.3	25.0	1.4	30.0
Methyl tert-butyl ether	Ave	0.7620	0.7264	0.1000	4.77	5.00	-4.7	30.0
trans-1,2-Dichloroethene	Ave	0.2962	0.2926	0.1000	4.94	5.00	-1.2	30.0
n-Hexane	Ave	0.4823	0.4539		4.71	5.00	-5.9	30.0
1,1-Dichloroethane	Ave	0.5723	0.5600	0.2000	4.89	5.00	-2.1	30.0
di-Isopropyl ether	Ave	1.061	1.023		4.82	5.00	-3.5	30.0
2-Chloro-1,3-butadiene	Ave	0.5038	0.4932		4.90	5.00	-2.1	30.0
Ethyl t-butyl ether	Ave	0.9647	0.9333		4.84	5.00	-3.3	30.0
2-Butanone (MEK)	Ave	5.701	5.519	0.1000	36.3	37.5	-3.2	30.0
cis-1,2-Dichloroethene	Ave	0.3417	0.3365	0.1000	4.92	5.00	-1.5	30.0
2,2-Dichloropropane	Ave	0.4952	0.4844		4.89	5.00	-2.2	30.0
Propionitrile	Ave	1.353	1.293		35.9	37.5	-4.4	30.0
Methacrylonitrile	Ave	5.222	5.175		37.2	37.5	-0.9	30.0
Bromochloromethane	Ave	0.1526	0.1423		4.66	5.00	-6.8	30.0
Tetrahydrofuran	Ave	1.504	1.498		24.9	25.0	-0.4	30.0
Chloroform	Ave	0.5451	0.5416	0.2000	4.97	5.00	-0.6	30.0
1,1,1-Trichloroethane	Ave	0.4958	0.4915	0.1000	4.96	5.00	-0.9	30.0
Cyclohexane	Ave	0.5773	0.5497	0.1000	4.76	5.00	-4.8	30.0
1,1-Dichloropropene	Ave	0.4385	0.4241		4.84	5.00	-3.3	30.0
Carbon tetrachloride	Ave	0.4347	0.4353	0.1000	5.01	5.00	0.1	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-41319-1

SDG No.:

Lab Sample ID: ICV 410-107390/19 Calibration Date: 03/26/2021 01:47

Instrument ID: 19930 Calib Start Date: 03/25/2021 23:19

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 03/26/2021 01:26

Lab File ID: IM25V01.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	0.4202	0.3905		116	125	-7.1	30.0
Benzene	Ave	1.289	1.252	0.5000	4.86	5.00	-2.9	30.0
1,2-Dichloroethane	Ave	0.3443	0.3292	0.1000	4.78	5.00	-4.4	30.0
t-Amyl methyl ether	Ave	0.8443	0.8294		4.91	5.00	-1.8	30.0
n-Heptane	Ave	0.5463	0.5016		4.59	5.00	-8.2	30.0
n-Butanol	Ave	0.3649	0.3287		225	250	-9.9	30.0
Trichloroethene	Ave	0.3349	0.3309	0.2000	4.94	5.00	-1.2	30.0
Methylcyclohexane	Ave	0.5907	0.5718	0.1000	4.84	5.00	-3.2	30.0
1,2-Dichloropropane	Ave	0.3337	0.3278	0.1000	4.91	5.00	-1.8	30.0
Methyl methacrylate	Ave	10.35	10.45		5.05	5.00	0.9	30.0
1,4-Dioxane	Ave	0.0698	0.0638	0.0050	114	125	-8.6	30.0
Dibromomethane	Ave	0.1515	0.1494		4.93	5.00	-1.4	30.0
Bromodichloromethane	Ave	0.3961	0.3915	0.2000	4.94	5.00	-1.2	30.0
2-Nitropropane	Ave	3.233	3.131		4.84	5.00	-3.2	30.0
1-Bromo-2-chloroethane	Ave	0.3108	0.3190		5.13	5.00	2.6	30.0
cis-1,3-Dichloropropene	Ave	0.4954	0.4885	0.2000	4.93	5.00	-1.4	30.0
4-Methyl-2-pentanone (MIBK)	Ave	14.64	14.35	0.1000	24.5	25.0	-2.0	30.0
Toluene	Ave	1.077	1.042	0.4000	4.84	5.00	-3.2	30.0
trans-1,3-Dichloropropene	Ave	0.5250	0.5465	0.1000	5.20	5.00	4.1	30.0
Ethyl methacrylate	Ave	0.4509	0.4443		4.93	5.00	-1.5	30.0
1,1,2-Trichloroethane	Ave	0.2908	0.2898	0.1000	4.98	5.00	-0.3	30.0
Tetrachloroethene	Ave	0.5124	0.5141	0.2000	5.02	5.00	0.3	30.0
1,3-Dichloropropane	Ave	0.5126	0.5027		4.90	5.00	-1.9	30.0
2-Hexanone	Ave	10.27	10.37	0.1000	25.2	25.0	0.9	30.0
Dibromochloromethane	Ave	0.3711	0.3742		5.04	5.00	0.9	30.0
1,2-Dibromoethane (EDB)	Ave	0.2846	0.2792	0.1000	4.90	5.00	-1.9	30.0
1-Chlorohexane	Ave	0.6583	0.6051		4.60	5.00	-8.1	30.0
Chlorobenzene	Ave	1.190	1.182	0.5000	4.97	5.00	-0.7	30.0
1,1,1,2-Tetrachloroethane	Ave	0.4309	0.4369		5.07	5.00	1.4	30.0
Ethylbenzene	Ave	2.108	2.078	0.1000	4.93	5.00	-1.4	30.0
m&p-Xylene	Ave	0.8263	0.8140	0.1000	9.85	10.0	-1.5	30.0
o-Xylene	Ave	0.8083	0.8016	0.3000	4.96	5.00	-0.8	30.0
Styrene	Ave	1.319	1.313	0.3000	4.98	5.00	-0.4	30.0
Bromoform	Ave	0.2345	0.2315	0.1000	4.94	5.00	-1.3	30.0
Isopropylbenzene	Ave	2.152	2.083	0.1000	4.84	5.00	-3.2	30.0
1,1,2,2-Tetrachloroethane	Ave	0.6633	0.6668	0.3000	5.03	5.00	0.5	30.0
Bromobenzene	Ave	0.9142	0.8942		4.89	5.00	-2.2	30.0
trans-1,4-Dichloro-2-butene	Ave	5.054	4.908		24.3	25.0	-2.9	30.0
1,2,3-Trichloropropane	Ave	0.1766	0.1759		4.98	5.00	-0.4	30.0
N-Propylbenzene	Ave	4.487	4.432		4.94	5.00	-1.2	30.0
2-Chlorotoluene	Ave	0.9132	0.8941		4.90	5.00	-2.1	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-41319-1

SDG No.:

Lab Sample ID: ICV 410-107390/19 Calibration Date: 03/26/2021 01:47

Instrument ID: 19930 Calib Start Date: 03/25/2021 23:19

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 03/26/2021 01:26

Lab File ID: IM25V01.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	3.229	3.167		4.90	5.00	-1.9	30.0
4-Chlorotoluene	Ave	0.9322	0.9107		4.88	5.00	-2.3	30.0
tert-Butylbenzene	Ave	0.7203	0.6989		4.85	5.00	-3.0	30.0
Pentachloroethane	Ave	0.5943	0.5805		4.88	5.00	-2.3	30.0
1,2,4-Trimethylbenzene	Ave	3.313	3.196		4.82	5.00	-3.5	30.0
sec-Butylbenzene	Ave	4.242	4.074		4.80	5.00	-4.0	30.0
1,3-Dichlorobenzene	Ave	1.815	1.752	0.6000	4.83	5.00	-3.5	30.0
p-Isopropyltoluene	Ave	3.608	3.569		4.95	5.00	-1.1	30.0
1,4-Dichlorobenzene	Ave	1.813	1.775	0.5000	4.89	5.00	-2.1	30.0
1,2,3-Trimethylbenzene	Ave	1.434	1.463		5.10	5.00	2.0	30.0
Benzyl chloride	Ave	0.2983	0.2936		4.92	5.00	-1.6	30.0
n-Butylbenzene	Ave	1.754	1.672		4.77	5.00	-4.7	30.0
1,2-Dichlorobenzene	Ave	1.649	1.597	0.4000	4.84	5.00	-3.2	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.1036	0.1013	0.0500	4.89	5.00	-2.2	30.0
1,3,5-Trichlorobenzene	Ave	1.320	1.273		4.82	5.00	-3.5	30.0
1,2,4-Trichlorobenzene	Ave	1.101	1.067	0.2000	4.85	5.00	-3.1	30.0
Hexachlorobutadiene	Ave	0.4917	0.4411		4.49	5.00	-10.3	30.0
Naphthalene	Ave	2.084	2.011		4.83	5.00	-3.5	30.0
1,2,3-Trichlorobenzene	Ave	0.9586	0.9033		4.71	5.00	-5.8	30.0
Dibromofluoromethane (Surr)	Ave	0.2514	0.2512		9.99	10.0	-0.0	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0492	0.0489		9.93	10.0	-0.7	30.0
Toluene-d8 (Surr)	Ave	1.309	1.304		9.96	10.0	-0.4	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4972	0.4908		9.87	10.0	-1.3	30.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25V01.D
Lims ID: ICV LG
Client ID:
Sample Type: ICV
Inject. Date: 26-Mar-2021 01:47:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0025078-019
Misc. Info.: ICV LG
Operator ID: mec29284 Instrument ID: 19930
Sublist:

Method: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 26-Mar-2021 17:13:18 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1605

First Level Reviewer: campbellme Date: 26-Mar-2021 17:08:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.971	1.983	-0.012	99	423532	5.00	6.32	M
4 Chloromethane	50	2.172	2.178	-0.006	99	464335	5.00	5.69	
6 Butadiene	39	2.288	2.294	-0.006	94	344361	5.00	4.77	
5 Vinyl chloride	62	2.294	2.300	-0.006	98	438207	5.00	5.94	
7 Bromomethane	94	2.617	2.629	-0.012	90	293814	5.00	5.49	
8 Chloroethane	64	2.702	2.715	-0.012	100	246861	5.00	5.34	
9 Dichlorofluoromethane	67	2.940	2.952	-0.012	97	361892	5.00	4.78	
10 Trichlorofluoromethane	101	3.007	3.019	-0.012	98	536277	5.00	5.17	
11 Ethyl ether	59	3.263	3.275	-0.012	93	277107	5.00	5.54	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.336	3.342	-0.006	93	384751	5.00	4.97	
13 Acrolein	56	3.434	3.446	-0.012	100	280242	37.5	34.0	
14 1,1-Dichloroethene	96	3.580	3.586	-0.006	97	292553	5.00	5.24	
15 Acetone	43	3.611	3.617	-0.006	97	349673	37.5	32.3	
16 112TCTFE	101	3.617	3.623	-0.006	91	293423	5.00	4.66	
17 Iodomethane	142	3.775	3.787	-0.012	98	531105	5.00	4.80	
18 Ethyl bromide	108	3.806	3.812	-0.006	98	248516	5.03	4.92	
19 Carbon disulfide	76	3.885	3.897	-0.012	99	799246	5.00	4.84	
21 Methyl acetate	43	4.037	4.050	-0.013	99	148573	5.00	4.18	
22 3-Chloro-1-propene	41	4.062	4.074	-0.012	92	556616	5.00	4.88	
23 Methylene Chloride	84	4.251	4.257	-0.006	95	316004	5.00	5.04	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.263	0.006	0	167068	50.0	50.0	
25 2-Methyl-2-propanol	59	4.397	4.391	0.006	100	189101	50.0	48.6	
26 Acrylonitrile	53	4.598	4.604	-0.006	98	336823	25.0	25.3	
27 Methyl tert-butyl ether	73	4.659	4.659	0.000	96	780174	5.00	4.77	
28 trans-1,2-Dichloroethene	96	4.678	4.684	-0.006	99	314297	5.00	4.94	
29 Hexane	57	5.098	5.104	-0.006	94	487520	5.00	4.71	
31 1,1-Dichloroethane	63	5.336	5.342	-0.006	96	601511	5.00	4.89	
32 Isopropyl ether	45	5.385	5.397	-0.012	95	1099063	5.00	4.82	
33 2-Chloro-1,3-butadiene	53	5.440	5.446	-0.006	91	529760	5.00	4.90	
34 Tert-butyl ethyl ether	59	5.921	5.927	-0.006	98	1002398	5.00	4.84	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.122	6.122	0.000	100	691497	37.5	36.3	
37 cis-1,2-Dichloroethene	96	6.159	6.165	-0.006	83	361454	5.00	4.92	
38 2,2-Dichloropropane	77	6.171	6.183	-0.012	91	520302	5.00	4.89	
40 Propionitrile	54	6.220	6.214	0.006	99	162051	37.5	35.9	
42 Methacrylonitrile	67	6.427	6.427	0.000	93	648416	37.5	37.2	
43 Chlorobromomethane	128	6.494	6.488	0.006	96	152785	5.00	4.66	
44 Tetrahydrofuran	71	6.507	6.500	0.006	84	125131	25.0	24.9	
45 Chloroform	83	6.641	6.647	-0.006	94	581752	5.00	4.97	
$ 46 Dibromofluoromethane (Surr)	113	6.854	6.860	-0.006	94	539679	10.0	10.0	
47 1,1,1-Trichloroethane	97	6.866	6.872	-0.006	98	527895	5.00	4.96	
48 Cyclohexane	56	6.964	6.964	0.000	91	590388	5.00	4.76	
51 1,1-Dichloropropene	75	7.080	7.080	0.000	94	455464	5.00	4.84	
50 Carbon tetrachloride	117	7.080	7.086	-0.006	89	467571	5.00	5.01	
52 Isobutyl alcohol	41	7.220	7.220	0.000	96	163096	125.0	116.2	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.305	0.000	0	104964	10.0	9.93	
54 Benzene	78	7.342	7.342	0.000	97	1344285	5.00	4.86	
56 1,2-Dichloroethane	62	7.415	7.415	0.000	97	353599	5.00	4.78	
57 Tert-amyl methyl ether	73	7.525	7.531	-0.006	98	890864	5.00	4.91	
* 58 Fluorobenzene (IS)	96	7.738	7.744	-0.006	99	2148117	10.0	10.0	
59 n-Heptane	43	7.750	7.756	-0.006	94	538781	5.00	4.59	
60 n-Butanol	56	8.092	8.092	0.000	90	274539	250.0	225.1	
61 Trichloroethene	95	8.220	8.220	0.000	98	355440	5.00	4.94	
62 Methylcyclohexane	83	8.531	8.530	0.000	93	614188	5.00	4.84	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	81	352097	5.00	4.91	
64 Methyl methacrylate	69	8.628	8.628	0.000	93	174514	5.00	5.05	
65 1,4-Dioxane	88	8.640	8.634	0.006	31	26646	125.0	114.3	M
66 Dibromomethane	93	8.659	8.665	-0.006	95	160492	5.00	4.93	
68 Dichlorobromomethane	83	8.890	8.890	0.000	99	420517	5.00	4.94	
69 2-Nitropropane	41	9.158	9.158	0.000	98	52307	5.00	4.84	
71 2-Chloroethyl vinyl ether	63		9.250				ND	ND	
72 1-Bromo-2-chloroethane	63	9.286	9.286	0.000	99	342576	5.00	5.13	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	95	524701	5.00	4.93	
74 4-Methyl-2-pentanone (MIBK)	43	9.603	9.603	0.000	97	1198420	25.0	24.5	
$ 75 Toluene-d8 (Surr)	98	9.744	9.744	0.000	93	2129593	10.0	9.96	
76 Toluene	92	9.817	9.817	0.000	98	851233	5.00	4.84	
78 trans-1,3-Dichloropropene	75	10.073	10.073	0.000	93	446306	5.00	5.20	
79 Ethyl methacrylate	69	10.128	10.128	0.000	90	362799	5.00	4.93	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	90	236692	5.00	4.98	
81 Tetrachloroethene	166	10.366	10.359	0.007	98	419857	5.00	5.02	
82 1,3-Dichloropropane	76	10.439	10.439	0.000	90	410508	5.00	4.90	
83 2-Hexanone	43	10.481	10.481	0.000	99	865959	25.0	25.2	
85 Chlorodibromomethane	129	10.646	10.652	-0.006	89	305615	5.00	5.04	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	227960	5.00	4.90	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.188	0.001	86	1633240	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	99	494145	5.00	4.60	
90 Chlorobenzene	112	11.213	11.213	0.000	95	965440	5.00	4.97	
92 Ethylbenzene	91	11.298	11.298	0.000	98	1697112	5.00	4.93	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.298	0.000	96	356814	5.00	5.07	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	99	1329524	10.0	9.85	
94 o-Xylene	106	11.743	11.743	0.000	96	654573	5.00	4.96	
95 Styrene	104	11.755	11.755	0.000	94	1072288	5.00	4.98	
96 Bromoform	173	11.920	11.914	0.006	98	189038	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
97 Isopropylbenzene	105	12.042	12.042	0.000	95	1700728	5.00	4.84	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	93	801581	10.0	9.87	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	305208	5.00	5.03	
102 Bromobenzene	156	12.304	12.304	0.000	96	409303	5.00	4.89	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	91	409945	25.0	24.3	
104 1,2,3-Trichloropropane	110	12.329	12.328	0.001	82	80511	5.00	4.98	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	2028673	5.00	4.94	
106 2-Chlorotoluene	126	12.444	12.444	0.000	97	409266	5.00	4.90	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	1449613	5.00	4.90	
108 4-Chlorotoluene	126	12.536	12.542	-0.006	98	416873	5.00	4.88	
109 tert-Butylbenzene	134	12.749	12.743	0.006	93	319903	5.00	4.85	
110 Pentachloroethane	167	12.780	12.780	0.000	94	265732	5.00	4.88	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	97	1462735	5.00	4.82	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	1864821	5.00	4.80	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	801839	5.00	4.83	
114 4-Isopropyltoluene	119	13.017	13.017	0.000	97	1633806	5.00	4.95	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	94	915488	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.084	13.084	0.000	95	812417	5.00	4.89	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	98	669611	5.00	5.10	
118 Benzyl chloride	126	13.158	13.158	0.000	99	134378	5.00	4.92	
119 n-Butylbenzene	92	13.310	13.310	0.000	98	765270	5.00	4.77	
120 1,2-Dichlorobenzene	146	13.341	13.340	0.001	99	730895	5.00	4.84	
122 1,2-Dibromo-3-Chloropropane	155	13.883	13.883	0.000	86	46369	5.00	4.89	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	97	582795	5.00	4.82	
124 1,2,4-Trichlorobenzene	180	14.432	14.432	0.000	94	488509	5.00	4.85	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	201913	5.00	4.49	
126 Naphthalene	128	14.615	14.615	0.000	97	920478	5.00	4.83	
127 1,2,3-Trichlorobenzene	180	14.755	14.755	0.000	96	413484	5.00	4.71	
204 Pentane	43		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_Q_EE_00003	Amount Added:	12.50	Units: uL	
MSV_Q_QVOA1_00073	Amount Added:	12.50	Units: uL	
MSV_Q_QARC_00073	Amount Added:	12.50	Units: uL	
MSV_Q_QVOA6_00071	Amount Added:	12.50	Units: uL	
MSV_QGAS_826_00118	Amount Added:	12.50	Units: uL	
MSV_Q_ETBR_00006	Amount Added:	12.50	Units: uL	
MSV_31_826ISS_00004	Amount Added:	5.00	Units: uL	Run Reagent

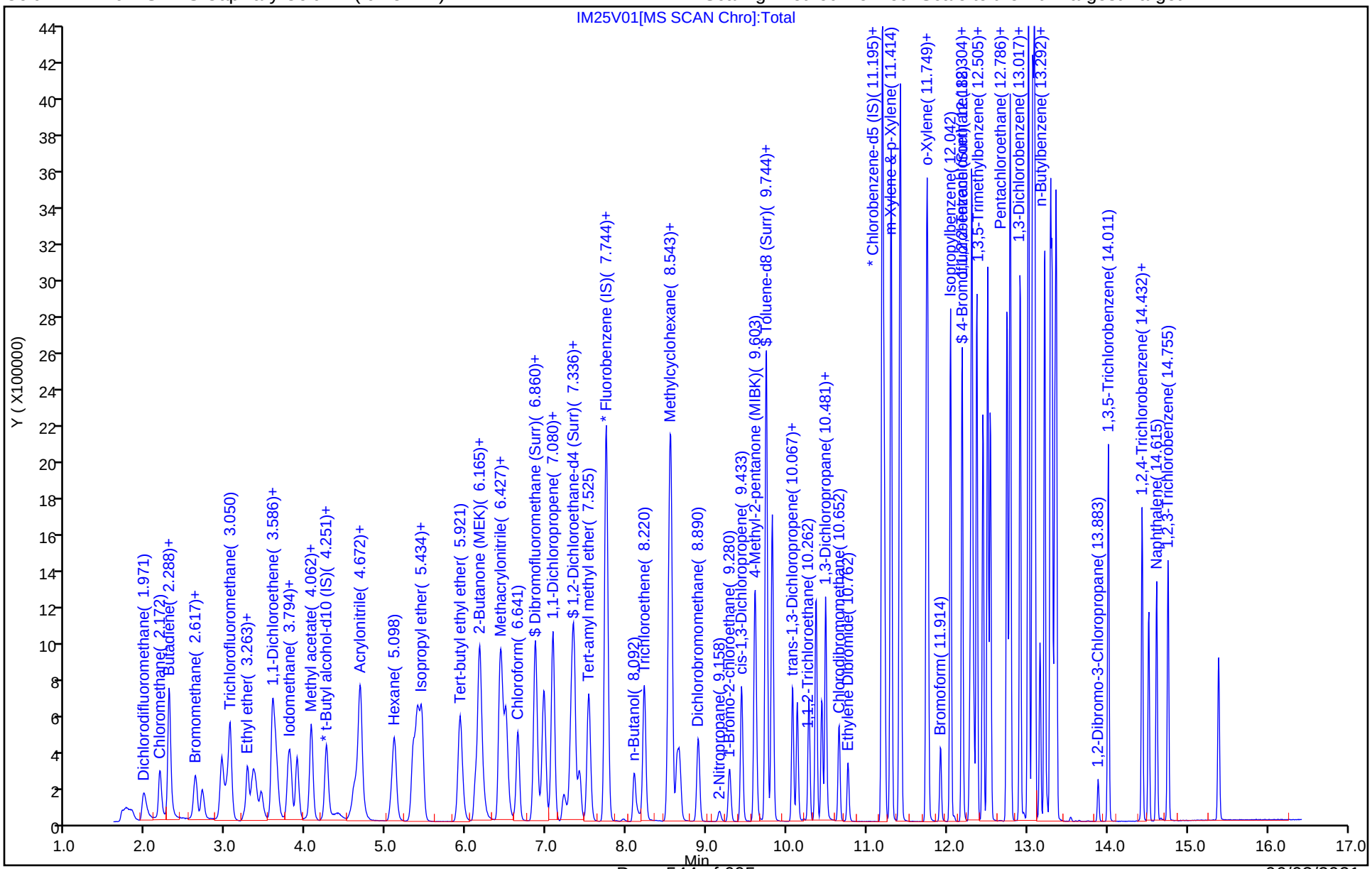
Report Date: 26-Mar-2021 17:13:26 Chrom Revision: 2.3 19-Mar-2021 08:24:58

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25V01.D

Injection Date:	26-Mar-2021 01:47:30	Instrument ID:	19930	Operator ID:	mec29284
Lims ID:	ICV LG			Worklist Smp#:	19
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

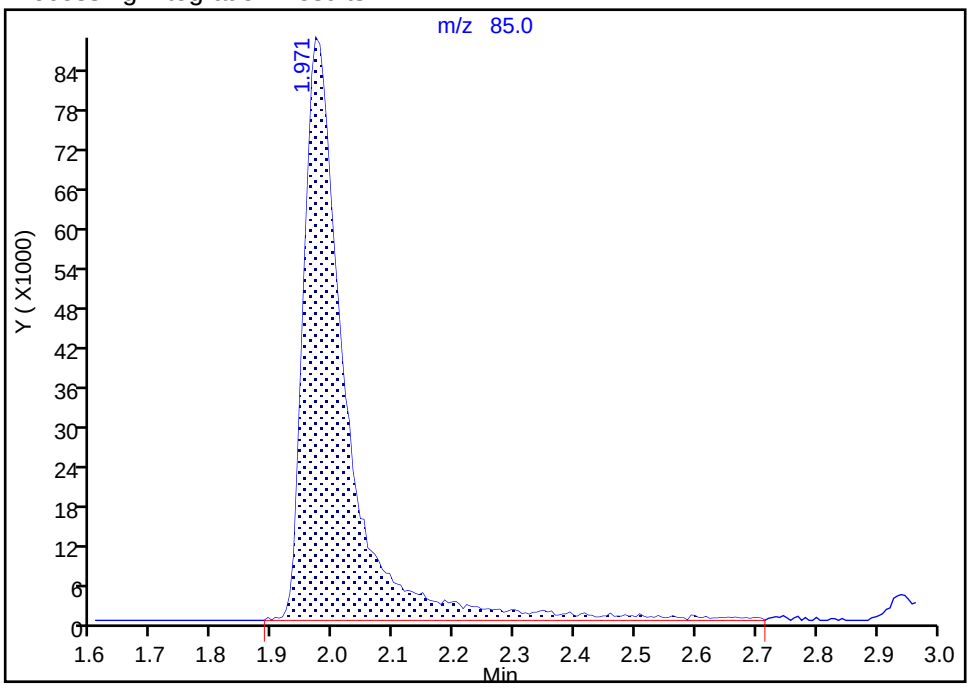
Data File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25V01.D				
Injection Date:	26-Mar-2021 01:47:30	Instrument ID:	19930		
Lims ID:	ICV LG				
Client ID:					
Operator ID:	mec29284	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

1 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

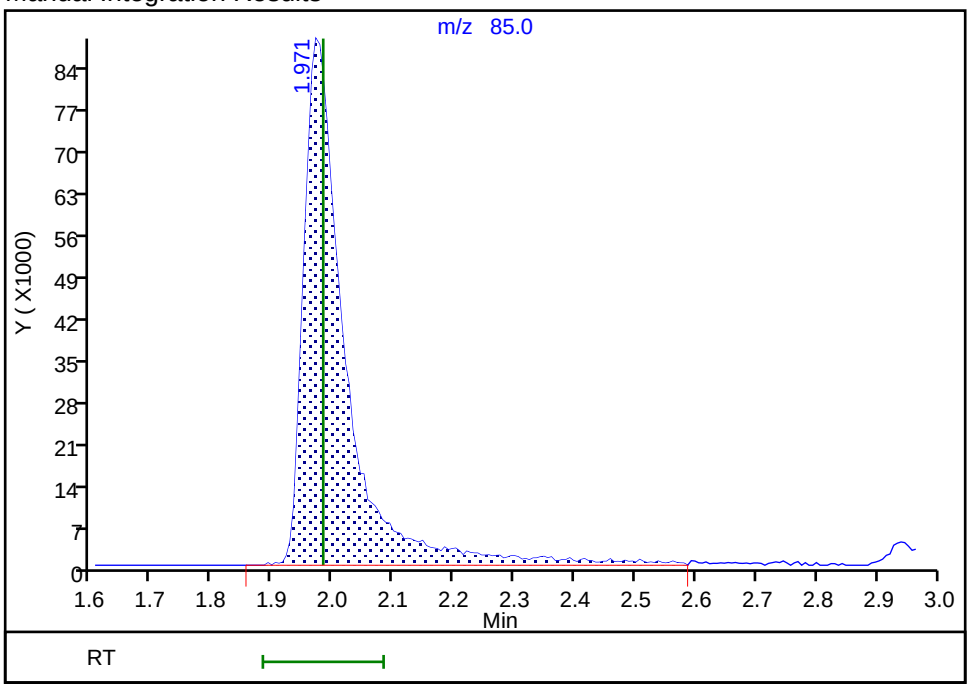
Processing Integration Results

RT: 1.97
Area: 426483
Amount: 6.365214
Amount Units: ug/l



Manual Integration Results

RT: 1.97
Area: 423532
Amount: 6.321170
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 17:07:43

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

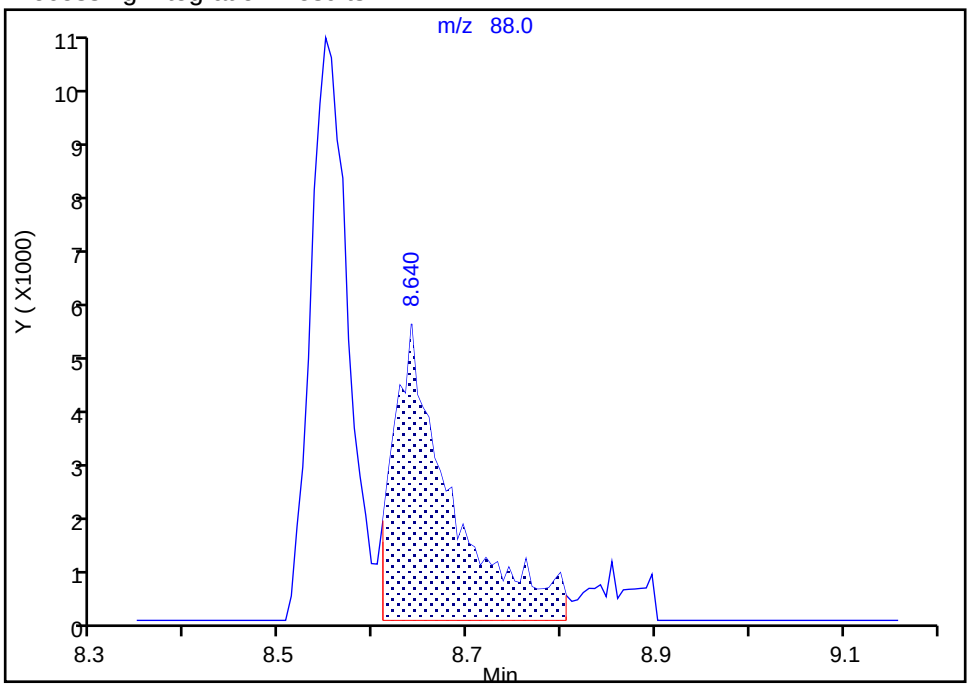
Data File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25V01.D				
Injection Date:	26-Mar-2021 01:47:30	Instrument ID:	19930		
Lims ID:	ICV LG				
Client ID:					
Operator ID:	mec29284	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

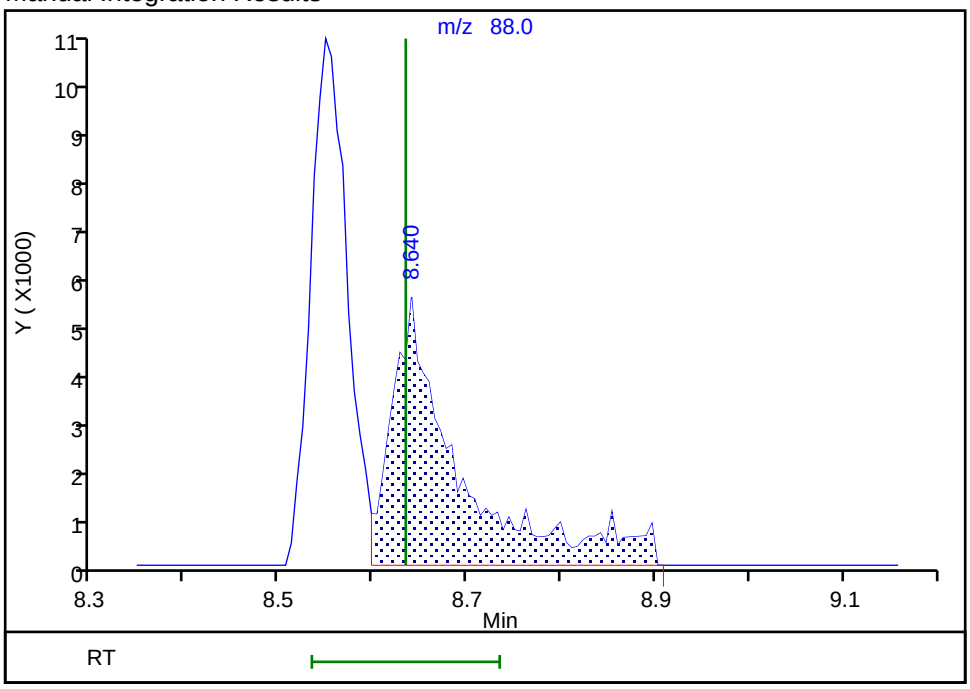
Processing Integration Results

RT: 8.64
Area: 22758
Amount: 97.622173
Amount Units: ug/l



Manual Integration Results

RT: 8.64
Area: 26646
Amount: 114.3000
Amount Units: ug/l



Reviewer: campbellme, 26-Mar-2021 17:03:30

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.: 410-41319-1

SDG No.:

Lab Sample ID: CCVIS 410-132853/3 Calibration Date: 06/01/2021 23:12

Instrument ID: 19930 Calib Start Date: 03/25/2021 23:19

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 03/26/2021 01:26

Lab File ID: IU01C01.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	0.3119	0.2849	0.1000	11.4	12.5	-8.7	20.0
Chloromethane	Ave	0.3796	0.3574	0.1000	11.8	12.5	-5.8	20.0
1,3-Butadiene	Ave	0.3361	0.6648		24.7	12.5	97.8*	20.0
Vinyl chloride	Ave	0.3435	0.3389	0.1000	12.3	12.5	-1.3	20.0
Bromomethane	Ave	0.2492	0.2484	0.1000	12.5	12.5	-0.3	20.0
Chloroethane	Ave	0.2152	0.1939	0.1000	11.3	12.5	-9.9	20.0
Dichlorofluoromethane	Ave	0.3528	0.4697		16.6	12.5	33.1*	20.0
Trichlorofluoromethane	Ave	0.4824	0.4485	0.1000	11.6	12.5	-7.0	20.0
Ethyl ether	Ave	0.2329	0.2085		11.2	12.5	-10.5	20.0
Freon 123a	Ave	0.3602	0.3497		12.1	12.5	-2.9	20.0
Acrolein	Ave	2.470	2.089		529	625	-15.4	20.0
1,1-Dichloroethene	Ave	0.2598	0.2474	0.1000	11.9	12.5	-4.8	20.0
Acetone	Ave	3.240	2.403	0.1000	92.7	125	-25.8*	20.0
Freon 113	Ave	0.2930	0.2718	0.1000	11.6	12.5	-7.2	20.0
Methyl iodide	Ave	0.5154	0.4990		12.1	12.5	-3.2	20.0
Ethyl bromide	Ave	0.2350	0.2230		11.9	12.5	-5.1	20.0
Carbon disulfide	Ave	0.7688	0.6907	0.1000	11.2	12.5	-10.2	20.0
Methyl acetate	Ave	10.64	8.848	0.1000	10.4	12.5	-16.8	20.0
Allyl chloride	Ave	0.5310	0.4060		9.56	12.5	-23.5*	20.0
Methylene Chloride	Ave	0.2920	0.2751	0.1000	11.8	12.5	-5.8	20.0
t-Butyl alcohol	Ave	1.165	0.9013		193	250	-22.6*	20.0
Acrylonitrile	Ave	3.977	3.442		27.0	31.3	-13.5	20.0
Methyl tert-butyl ether	Ave	0.7620	0.6823	0.1000	11.2	12.5	-10.5	20.0
trans-1,2-Dichloroethene	Ave	0.2962	0.2793	0.1000	11.8	12.5	-5.7	20.0
n-Hexane	Ave	0.4823	0.4164		10.8	12.5	-13.7	20.0
1,1-Dichloroethane	Ave	0.5723	0.5118	0.2000	11.2	12.5	-10.6	20.0
di-Isopropyl ether	Ave	1.061	0.9031		10.6	12.5	-14.9	20.0
2-Chloro-1,3-butadiene	Ave	0.5038	0.4126		10.2	12.5	-18.1	20.0
Ethyl t-butyl ether	Ave	0.9647	0.8270		10.7	12.5	-14.3	20.0
2-Butanone (MEK)	Ave	5.701	4.737	0.1000	104	125	-16.9	20.0
cis-1,2-Dichloroethene	Ave	0.3417	0.3191	0.1000	11.7	12.5	-6.6	20.0
2,2-Dichloropropane	Ave	0.4952	0.4145		10.5	12.5	-16.3	20.0
Propionitrile	Ave	1.353	1.219		225	250	-9.9	20.0
Methacrylonitrile	Ave	5.222	4.895		117	125	-6.3	20.0
Bromochloromethane	Ave	0.1526	0.1410		11.5	12.5	-7.6	20.0
Tetrahydrofuran	Ave	1.504	1.412		58.7	62.5	-6.1	20.0
Chloroform	Ave	0.5451	0.4994	0.2000	11.5	12.5	-8.4	20.0
1,1,1-Trichloroethane	Ave	0.4958	0.4444	0.1000	11.2	12.5	-10.4	20.0
Cyclohexane	Ave	0.5773	0.5081	0.1000	11.0	12.5	-12.0	20.0
1,1-Dichloropropene	Ave	0.4385	0.3955		11.3	12.5	-9.8	20.0
Carbon tetrachloride	Ave	0.4347	0.3921	0.1000	11.3	12.5	-9.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-41319-1

SDG No.:

Lab Sample ID: CCVIS 410-132853/3 Calibration Date: 06/01/2021 23:12

Instrument ID: 19930 Calib Start Date: 03/25/2021 23:19

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 03/26/2021 01:26

Lab File ID: IU01C01.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	0.4202	0.3372		502	625	-19.8	20.0
Benzene	Ave	1.289	1.205	0.5000	11.7	12.5	-6.5	20.0
1,2-Dichloroethane	Ave	0.3443	0.2843	0.1000	10.3	12.5	-17.4	20.0
t-Amyl methyl ether	Ave	0.8443	0.7592		11.2	12.5	-10.1	20.0
n-Heptane	Ave	0.5463	0.4232		9.68	12.5	-22.5*	20.0
n-Butanol	Ave	0.3649	0.3095		928	1090	-15.2	20.0
Trichloroethene	Ave	0.3349	0.3211	0.2000	12.0	12.5	-4.1	20.0
Methylcyclohexane	Ave	0.5907	0.5541	0.1000	11.7	12.5	-6.2	20.0
1,2-Dichloropropane	Ave	0.3337	0.3107	0.1000	11.6	12.5	-6.9	20.0
Methyl methacrylate	Ave	10.35	9.778		11.8	12.5	-5.5	20.0
1,4-Dioxane	Ave	0.0698	0.0841	0.0050	753	625	20.5*	20.0
Dibromomethane	Ave	0.1515	0.1423		11.7	12.5	-6.0	20.0
Bromodichloromethane	Ave	0.3961	0.3538	0.2000	11.2	12.5	-10.7	20.0
2-Nitropropane	Ave	3.233	2.308		44.6	62.5	-28.6*	20.0
1-Bromo-2-chloroethane	Ave	0.3108	0.3139		12.6	12.5	1.0	20.0
cis-1,3-Dichloropropene	Ave	0.4954	0.4504	0.2000	11.4	12.5	-9.1	20.0
4-Methyl-2-pentanone (MIBK)	Ave	14.64	12.47	0.1000	106	125	-14.8	20.0
Toluene	Ave	1.077	0.9483	0.4000	11.0	12.5	-12.0	20.0
trans-1,3-Dichloropropene	Ave	0.5250	0.4475	0.1000	10.7	12.5	-14.8	20.0
Ethyl methacrylate	Ave	0.4509	0.4026		11.2	12.5	-10.7	20.0
1,1,2-Trichloroethane	Ave	0.2908	0.2730	0.1000	11.7	12.5	-6.1	20.0
Tetrachloroethene	Ave	0.5124	0.4683	0.2000	11.4	12.5	-8.6	20.0
1,3-Dichloropropane	Ave	0.5126	0.4536		11.1	12.5	-11.5	20.0
2-Hexanone	Ave	10.27	8.805	0.1000	107	125	-14.3	20.0
Dibromochloromethane	Ave	0.3711	0.3363		11.3	12.5	-9.4	20.0
1,2-Dibromoethane (EDB)	Ave	0.2846	0.2667	0.1000	11.7	12.5	-6.3	20.0
1-Chlorohexane	Ave	0.6583	0.5855		11.1	12.5	-11.1	20.0
Chlorobenzene	Ave	1.190	1.139	0.5000	12.0	12.5	-4.3	20.0
1,1,1,2-Tetrachloroethane	Ave	0.4309	0.4019		11.7	12.5	-6.7	20.0
Ethylbenzene	Ave	2.108	1.947	0.1000	11.5	12.5	-7.6	20.0
m&p-Xylene	Ave	0.8263	0.7732	0.1000	23.4	25.0	-6.4	20.0
o-Xylene	Ave	0.8083	0.7823	0.3000	12.1	12.5	-3.2	20.0
Styrene	Ave	1.319	1.245	0.3000	11.8	12.5	-5.6	20.0
Bromoform	Ave	0.2345	0.1988	0.1000	10.6	12.5	-15.2	20.0
Isopropylbenzene	Ave	2.152	1.997	0.1000	11.6	12.5	-7.2	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6633	0.6256	0.3000	11.8	12.5	-5.7	20.0
Bromobenzene	Ave	0.9142	0.8322		11.4	12.5	-9.0	20.0
trans-1,4-Dichloro-2-butene	Ave	5.054	1.954		48.3	125	-61.3*	20.0
1,2,3-Trichloropropane	Ave	0.1766	0.1660		11.8	12.5	-6.0	20.0
N-Propylbenzene	Ave	4.487	4.132		11.5	12.5	-7.9	20.0
2-Chlorotoluene	Ave	0.9132	0.8672		11.9	12.5	-5.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-41319-1

SDG No.:

Lab Sample ID: CCVIS 410-132853/3 Calibration Date: 06/01/2021 23:12

Instrument ID: 19930 Calib Start Date: 03/25/2021 23:19

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 03/26/2021 01:26

Lab File ID: IU01C01.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	3.229	2.920		11.3	12.5	-9.6	20.0
4-Chlorotoluene	Ave	0.9322	0.8649		11.6	12.5	-7.2	20.0
tert-Butylbenzene	Ave	0.7203	0.6465		11.2	12.5	-10.2	20.0
Pentachloroethane	Ave	0.5943	0.5361		11.3	12.5	-9.8	20.0
1,2,4-Trimethylbenzene	Ave	3.313	2.993		11.3	12.5	-9.7	20.0
sec-Butylbenzene	Ave	4.242	3.756		11.1	12.5	-11.4	20.0
1,3-Dichlorobenzene	Ave	1.815	1.658	0.6000	11.4	12.5	-8.6	20.0
p-Isopropyltoluene	Ave	3.608	3.200		11.1	12.5	-11.3	20.0
1,4-Dichlorobenzene	Ave	1.813	1.668	0.5000	11.5	12.5	-8.0	20.0
1,2,3-Trimethylbenzene	Ave	1.434	1.329		11.6	12.5	-7.3	20.0
Benzyl chloride	Ave	0.2983	0.2818		11.8	12.5	-5.5	20.0
n-Butylbenzene	Ave	1.754	1.554		11.1	12.5	-11.4	20.0
1,2-Dichlorobenzene	Ave	1.649	1.518	0.4000	11.5	12.5	-8.0	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1036	0.0965	0.0500	11.7	12.5	-6.8	20.0
1,3,5-Trichlorobenzene	Ave	1.320	1.138		10.8	12.5	-13.7	20.0
1,2,4-Trichlorobenzene	Ave	1.101	0.9702	0.2000	11.0	12.5	-11.9	20.0
Hexachlorobutadiene	Ave	0.4917	0.3773		9.59	12.5	-23.3*	20.0
Naphthalene	Ave	2.084	1.857		11.1	12.5	-10.9	20.0
1,2,3-Trichlorobenzene	Ave	0.9586	0.7912		10.3	12.5	-17.5	20.0
Dibromofluoromethane (Surr)	Ave	0.2514	0.2506		9.97	10.0	-0.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0492	0.0497		10.1	10.0	1.0	20.0
Toluene-d8 (Surr)	Ave	1.309	1.271		9.71	10.0	-2.9	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4972	0.4775		9.60	10.0	-4.0	20.0

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01C01.D
Lims ID: CCVIS VSTD12.5
Client ID:
Sample Type: CCVIS
Inject. Date: 01-Jun-2021 23:12:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-003
Misc. Info.: CCVIS VSTD12.5
Operator ID: MEC29284 Instrument ID: 19930
Sublist: chrom-8260 25ml HP31*sub2

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 01-Jun-2021 23:42:32 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1667

First Level Reviewer: campbellme Date: 01-Jun-2021 23:40:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.977	1.977	0.000	99	660304	12.5	11.4	
4 Chloromethane	50	2.172	2.172	0.000	98	828439	12.5	11.8	
6 Butadiene	39	2.288	2.288	0.000	90	1540701	12.5	24.7	
5 Vinyl chloride	62	2.294	2.294	0.000	98	785464	12.5	12.3	
7 Bromomethane	94	2.623	2.623	0.000	90	575792	12.5	12.5	
8 Chloroethane	64	2.702	2.702	0.000	100	449500	12.5	11.3	
9 Dichlorofluoromethane	67	2.946	2.946	0.000	97	1088556	12.5	16.6	
10 Trichlorofluoromethane	101	3.019	3.019	0.000	98	1039591	12.5	11.6	
11 Ethyl ether	59	3.251	3.251	0.000	90	483263	12.5	11.2	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.349	3.349	0.000	91	810572	12.5	12.1	
13 Acrolein	56	3.422	3.422	0.000	99	3768860	625.0	528.8	
14 1,1-Dichloroethene	96	3.574	3.574	0.000	98	573509	12.5	11.9	
15 Acetone	43	3.592	3.592	0.000	100	866943	125.0	92.7	
16 112TCTFE	101	3.611	3.611	0.000	91	630048	12.5	11.6	
17 Iodomethane	142	3.769	3.769	0.000	97	1156537	12.5	12.1	
18 Ethyl bromide	108	3.800	3.800	0.000	97	517134	12.5	11.9	
19 Carbon disulfide	76	3.885	3.885	0.000	99	1600902	12.5	11.2	
21 Methyl acetate	43	4.019	4.019	0.000	98	319203	12.5	10.4	M
22 3-Chloro-1-propene	41	4.050	4.050	0.000	95	940914	12.5	9.56	
* 24 t-Butyl alcohol-d10 (IS)	65	4.233	4.233	0.000	95	144303	50.0	50.0	
23 Methylene Chloride	84	4.245	4.245	0.000	91	637638	12.5	11.8	
25 2-Methyl-2-propanol	59	4.367	4.367	0.000	99	650266	250.0	193.4	
26 Acrylonitrile	53	4.580	4.580	0.000	100	310428	31.3	27.0	
27 Methyl tert-butyl ether	73	4.647	4.647	0.000	94	1581361	12.5	11.2	
28 trans-1,2-Dichloroethene	96	4.659	4.659	0.000	99	647354	12.5	11.8	
29 Hexane	57	5.080	5.080	0.000	90	965031	12.5	10.8	
31 1,1-Dichloroethane	63	5.318	5.318	0.000	96	1186079	12.5	11.2	
32 Isopropyl ether	45	5.379	5.379	0.000	95	2093018	12.5	10.6	
33 2-Chloro-1,3-butadiene	53	5.427	5.427	0.000	89	956197	12.5	10.2	
34 Tert-butyl ethyl ether	59	5.909	5.909	0.000	97	1916703	12.5	10.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
36 2-Butanone (MEK)	43	6.116	6.116	0.000	99	1709012	125.0	103.9	
37 cis-1,2-Dichloroethene	96	6.147	6.147	0.000	81	739652	12.5	11.7	
38 2,2-Dichloropropane	77	6.171	6.171	0.000	85	960583	12.5	10.5	
40 Propionitrile	54	6.202	6.202	0.000	99	879533	250.0	225.3	
42 Methacrylonitrile	67	6.415	6.415	0.000	90	1765902	125.0	117.2	
43 Chlorobromomethane	128	6.482	6.482	0.000	92	326706	12.5	11.5	
44 Tetrahydrofuran	71	6.494	6.494	0.000	85	254705	62.5	58.7	
45 Chloroform	83	6.628	6.628	0.000	93	1157381	12.5	11.5	
$ 46 Dibromofluoromethane (Surr)	113	6.848	6.848	0.000	94	464664	10.0	9.97	
47 1,1,1-Trichloroethane	97	6.860	6.860	0.000	98	1030029	12.5	11.2	
48 Cyclohexane	56	6.958	6.958	0.000	88	1177706	12.5	11.0	
50 Carbon tetrachloride	117	7.073	7.073	0.000	82	908694	12.5	11.3	
51 1,1-Dichloropropene	75	7.073	7.073	0.000	97	916634	12.5	11.3	
52 Isobutyl alcohol	41	7.214	7.214	0.000	96	608243	625.0	501.5	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.299	7.299	0.000	83	92128	10.0	10.1	
54 Benzene	78	7.336	7.336	0.000	95	2792567	12.5	11.7	
56 1,2-Dichloroethane	62	7.403	7.403	0.000	97	658819	12.5	10.3	
57 Tert-amyl methyl ether	73	7.518	7.518	0.000	99	1759478	12.5	11.2	
* 58 Fluorobenzene (IS)	96	7.732	7.732	0.000	99	1854150	10.0	10.0	
59 n-Heptane	43	7.744	7.744	0.000	91	980763	12.5	9.68	
60 n-Butanol	56	8.092	8.092	0.000	86	976962	1093.8	927.6	
61 Trichloroethene	95	8.213	8.213	0.000	96	744255	12.5	12.0	
62 Methylcyclohexane	83	8.518	8.518	0.000	94	1284294	12.5	11.7	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	84	720221	12.5	11.6	
64 Methyl methacrylate	69	8.622	8.622	0.000	91	352743	12.5	11.8	
65 1,4-Dioxane	88	8.634	8.634	0.000	37	151685	625.0	753.3	M
66 Dibromomethane	93	8.659	8.659	0.000	94	329884	12.5	11.7	
68 Dichlorobromomethane	83	8.890	8.890	0.000	99	820007	12.5	11.2	
69 2-Nitropropane	41	9.152	9.152	0.000	98	416269	62.5	44.6	
72 1-Bromo-2-chloroethane	63	9.280	9.280	0.000	98	727629	12.5	12.6	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	98	1043993	12.5	11.4	
74 4-Methyl-2-pentanone (MIBK)	43	9.597	9.597	0.000	95	4497352	125.0	106.4	
$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	93	1859961	10.0	9.71	
76 Toluene	92	9.811	9.811	0.000	99	1734223	12.5	11.0	
78 trans-1,3-Dichloropropene	75	10.067	10.067	0.000	90	818390	12.5	10.7	
79 Ethyl methacrylate	69	10.128	10.128	0.000	88	736256	12.5	11.2	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	89	499190	12.5	11.7	
81 Tetrachloroethene	166	10.359	10.359	0.000	97	856466	12.5	11.4	
82 1,3-Dichloropropane	76	10.433	10.433	0.000	87	829436	12.5	11.1	
83 2-Hexanone	43	10.481	10.481	0.000	96	3176423	125.0	107.2	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	614968	12.5	11.3	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	487705	12.5	11.7	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.000	83	1463006	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	95	1070769	12.5	11.1	
90 Chlorobenzene	112	11.213	11.213	0.000	96	2082352	12.5	12.0	
91 1,1,1,2-Tetrachloroethane	131	11.292	11.292	0.000	97	735044	12.5	11.7	
92 Ethylbenzene	91	11.298	11.298	0.000	97	3561134	12.5	11.5	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	100	2827885	25.0	23.4	
94 o-Xylene	106	11.743	11.743	0.000	95	1430688	12.5	12.1	
95 Styrene	104	11.755	11.755	0.000	95	2276244	12.5	11.8	
96 Bromoform	173	11.920	11.920	0.000	98	363555	12.5	10.6	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	3651535	12.5	11.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	698626	10.0	9.60	
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	92	645397	12.5	11.8	
102 Bromobenzene	156	12.304	12.304	0.000	95	858585	12.5	11.4	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	88	704793	125.0	48.3	
104 1,2,3-Trichloropropane	110	12.329	12.329	0.000	80	171295	12.5	11.8	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	4262632	12.5	11.5	
106 2-Chlorotoluene	126	12.444	12.444	0.000	98	894688	12.5	11.9	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	3012081	12.5	11.3	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	892320	12.5	11.6	
109 tert-Butylbenzene	134	12.749	12.749	0.000	92	666943	12.5	11.2	
110 Pentachloroethane	167	12.780	12.780	0.000	93	553135	12.5	11.3	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	96	3087593	12.5	11.3	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	3875488	12.5	11.1	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	1710487	12.5	11.4	
114 4-Isopropyltoluene	119	13.017	13.017	0.000	97	3301459	12.5	11.1	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	825359	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.084	13.084	0.000	95	1721080	12.5	11.5	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	98	1370940	12.5	11.6	
118 Benzyl chloride	126	13.158	13.158	0.000	98	290775	12.5	11.8	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	1602949	12.5	11.1	
120 1,2-Dichlorobenzene	146	13.347	13.347	0.000	99	1566363	12.5	11.5	
122 1,2-Dibromo-3-Chloropropane	155	13.889	13.889	0.000	89	99574	12.5	11.7	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	1174429	12.5	10.8	
124 1,2,4-Trichlorobenzene	180	14.438	14.438	0.000	94	1000907	12.5	11.0	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	389269	12.5	9.59	
126 Naphthalene	128	14.615	14.615	0.000	96	1915557	12.5	11.1	
127 1,2,3-Trichlorobenzene	180	14.761	14.761	0.000	96	816328	12.5	10.3	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#2_826_00001	Amount Added: 25.00	Units: uL	
MSV_LL_#1_826_00002	Amount Added: 25.00	Units: uL	
MSV_LL_GAS826_00003	Amount Added: 25.00	Units: uL	
MSV_LLcentISS_00001	Amount Added: 5.00	Units: uL	Run Reagent

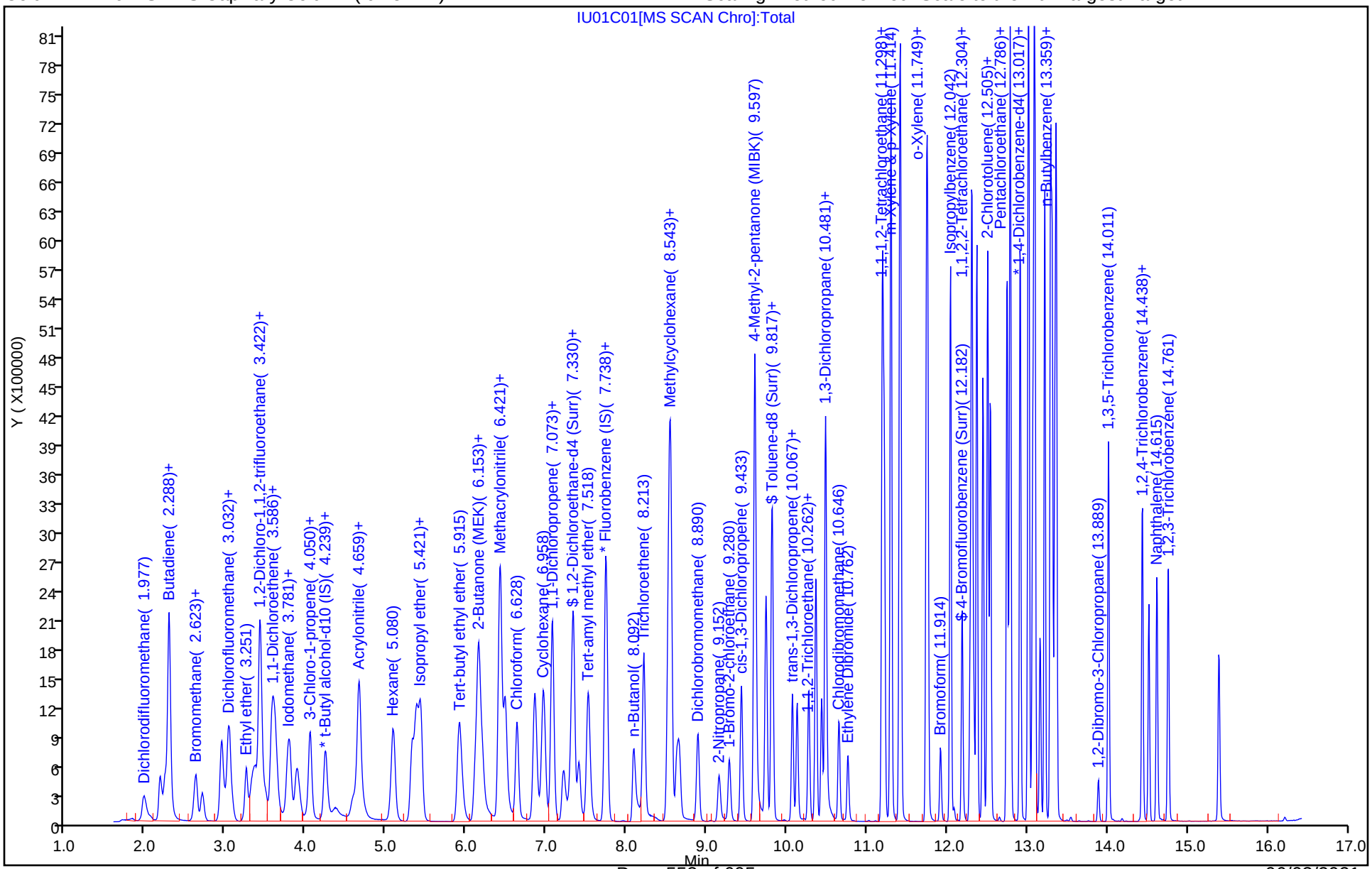
Report Date: 01-Jun-2021 23:42:33 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01C01.D

Injection Date:	01-Jun-2021 23:12:30	Instrument ID:	19930	Operator ID:	MEC29284
Lims ID:	CCVIS VSTD12.5			Worklist Smp#:	3
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

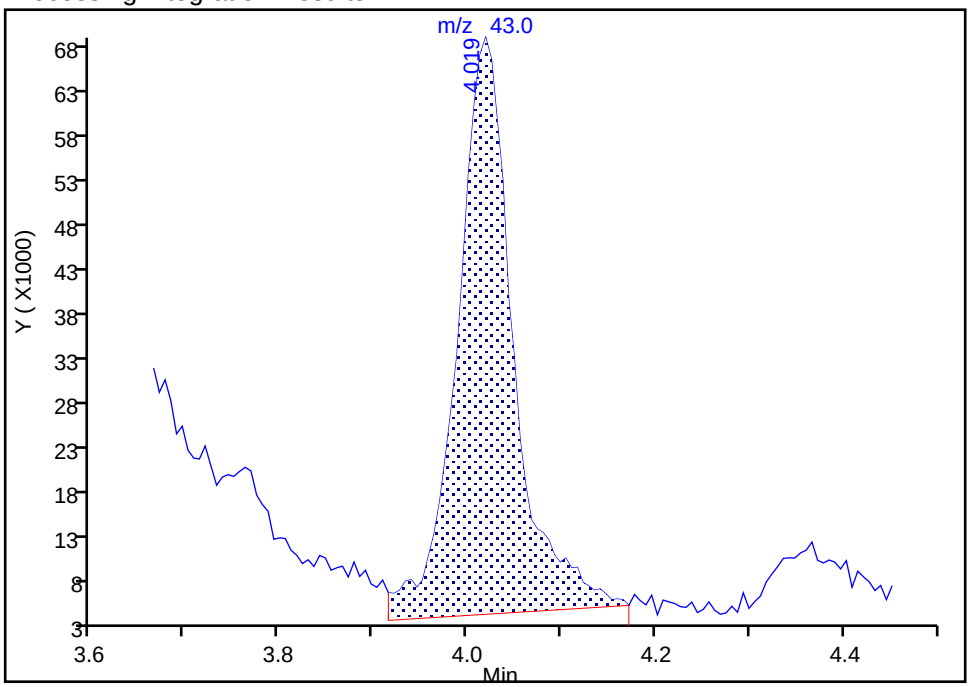
Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01C01.D				
Injection Date:	01-Jun-2021 23:12:30	Instrument ID:	19930		
Lims ID:	CCVIS VSTD12.5				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

21 Methyl acetate, CAS: 79-20-9

Signal: 1

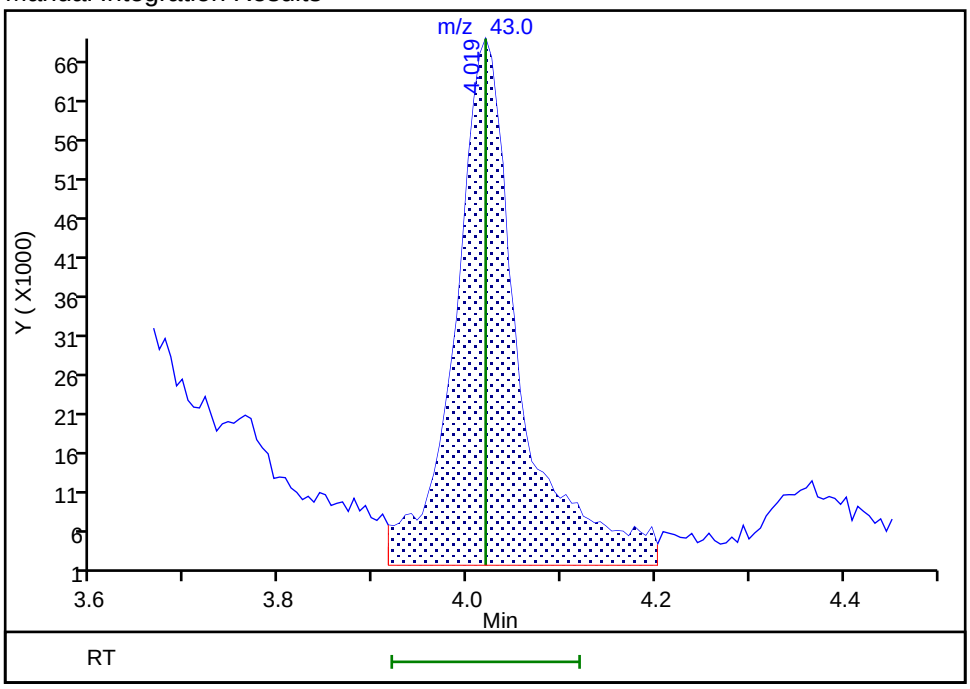
Processing Integration Results

RT: 4.02
Area: 267256
Amount: 8.705269
Amount Units: ug/l



Manual Integration Results

RT: 4.02
Area: 319203
Amount: 10.397327
Amount Units: ug/l



Reviewer: campbellme, 01-Jun-2021 23:39:06

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Env, LLC

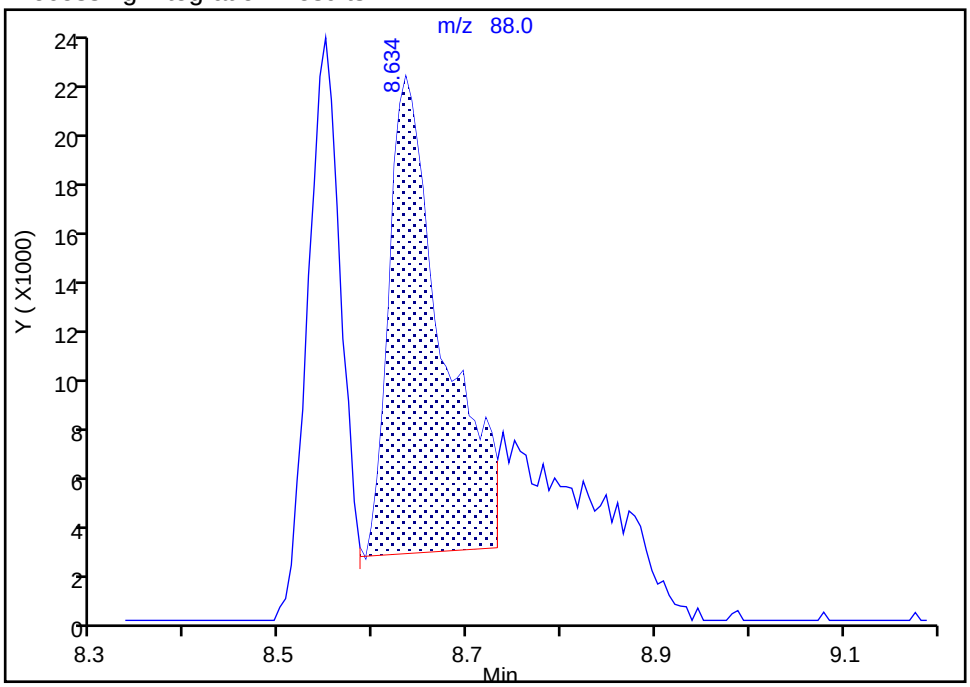
Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01C01.D				
Injection Date:	01-Jun-2021 23:12:30	Instrument ID:	19930		
Lims ID:	CCVIS VSTD12.5				
Client ID:					
Operator ID:	MEC29284	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

65 1,4-Dioxane, CAS: 123-91-1

Signal: 1

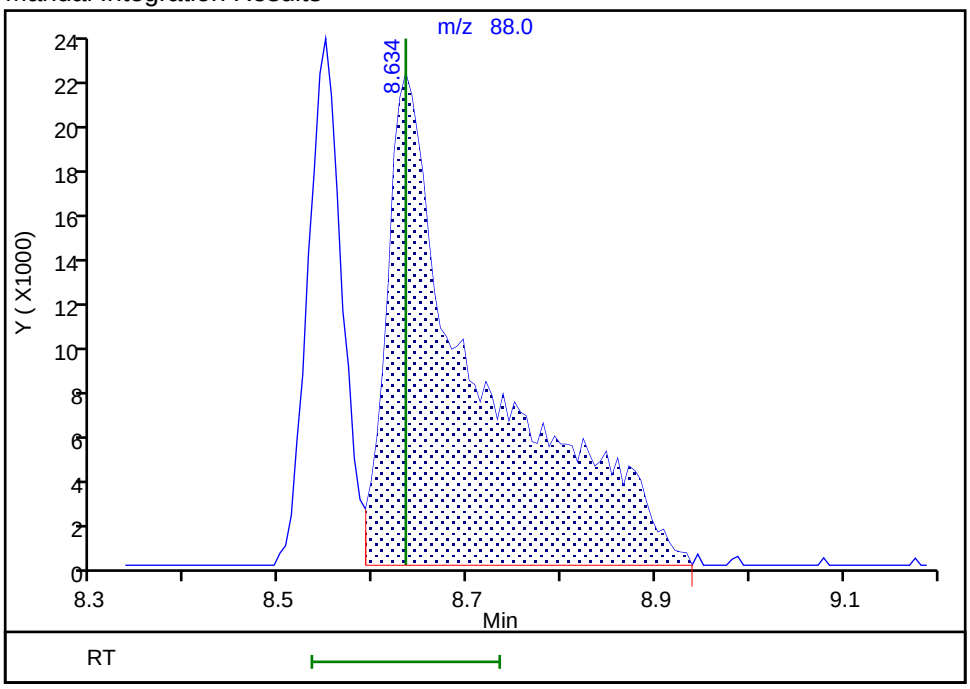
Processing Integration Results

RT: 8.63
Area: 75768
Amount: 376.2860
Amount Units: ug/l



Manual Integration Results

RT: 8.63
Area: 151685
Amount: 753.3121
Amount Units: ug/l



Reviewer: campbellme, 01-Jun-2021 23:39:30

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

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25T01.D				
Lims ID:	bfb				
Client ID:					
Sample Type:	BFB				
Inject. Date:	25-Mar-2021 19:32:30	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:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	26-Mar-2021 17:13:18	Calib Date:	26-Mar-2021 01:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1605				
First Level Reviewer: campbellme		Date:	25-Mar-2021 19:45:59		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 145 BFB	95	5.190	5.190	0.000	0	267167	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

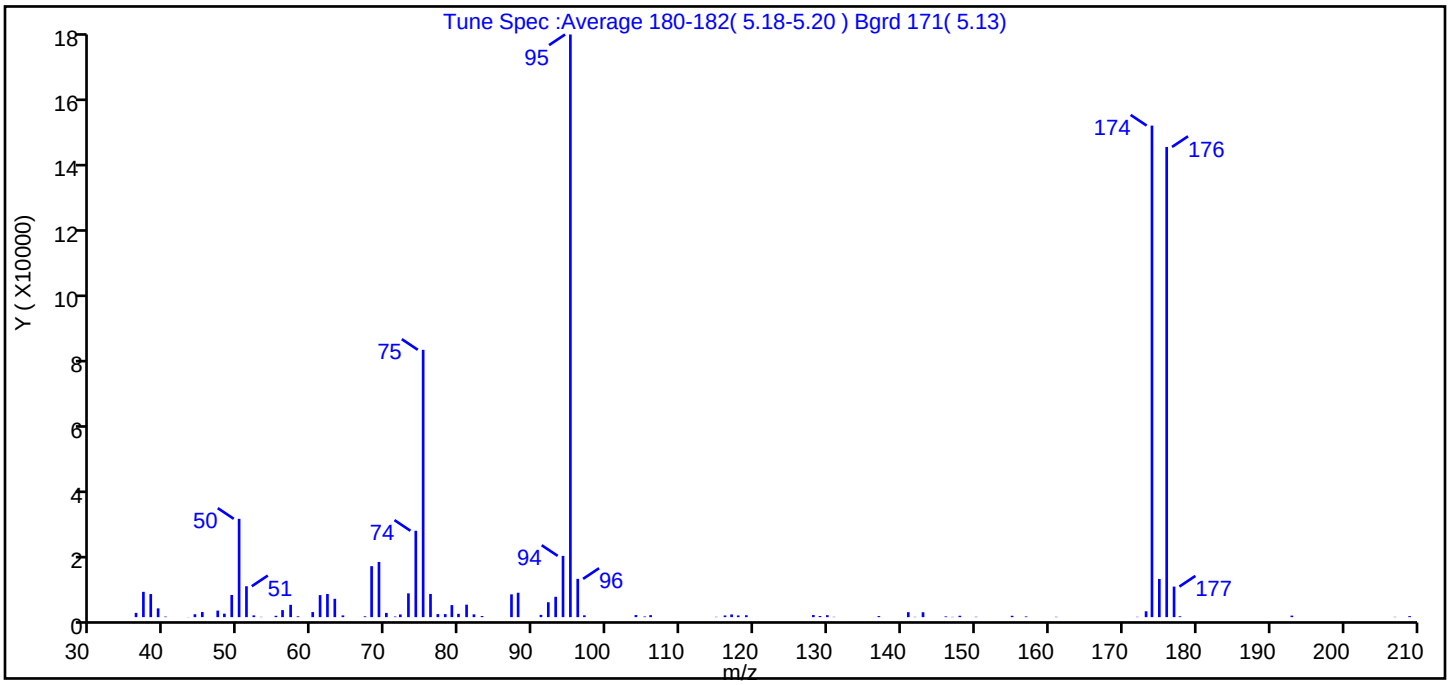
MSV_V_BFB_00004 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Lancaster Laboratories Env, LLC

Data File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25T01.D				
Injection Date:	25-Mar-2021 19:32:30	Instrument ID:	19930		
Lims ID:	bfb				
Client ID:					
Operator ID:	mec29284	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		
Tune Method:	BFB Method 8260				

$ 145 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.9
75	30 to 60% of m/z 95	45.9
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	1.0 (1.2)
174	50 to 120% of m/z 95	84.4
175	5 to 9% of m/z 174	6.6 (7.8)
176	Greater than 95% but less than 101% of m/z 174	80.7 (95.7)
177	5 to 9% of m/z 176	5.2 (6.5)

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25T01.D\8260 25ml HP31.rslt\spectra.d
Injection Date: 25-Mar-2021 19:32:30
Spectrum: Tune Spec :Average 180-182(5.18-5.20) Bgrd 171(5.13)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 83

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1306	62.00	7076	88.00	7457	141.00	1523
37.00	7732	63.00	5608	91.00	695	142.00	94
38.00	7053	64.00	527	92.00	4556	143.00	1498
39.00	2690	67.00	257	93.00	6221	146.00	233
40.00	172	68.00	15578	94.00	18720	147.00	87
43.00	42	69.00	16872	95.00	178048	148.00	424
44.00	887	70.00	1301	96.00	11695	150.00	113
45.00	1562	71.00	189	97.00	559	155.00	417
47.00	1997	72.00	819	104.00	638	157.00	222
48.00	1059	73.00	7274	105.00	199	161.00	99
49.00	6773	74.00	26392	106.00	613	172.00	98
50.00	30048	75.00	81688	115.00	98	173.00	1797
51.00	9447	76.00	7090	116.00	515	174.00	150208
52.00	540	77.00	931	117.00	820	175.00	11669
53.00	90	78.00	927	118.00	519	176.00	143680
55.00	413	79.00	3681	119.00	578	177.00	9336
56.00	2150	80.00	1018	128.00	641	178.00	259
57.00	3766	81.00	3810	129.00	341	193.00	471
58.00	246	82.00	848	130.00	599	207.00	87
60.00	1551	83.00	338	131.00	94	209.00	313
61.00	6734	87.00	6966	137.00	330		

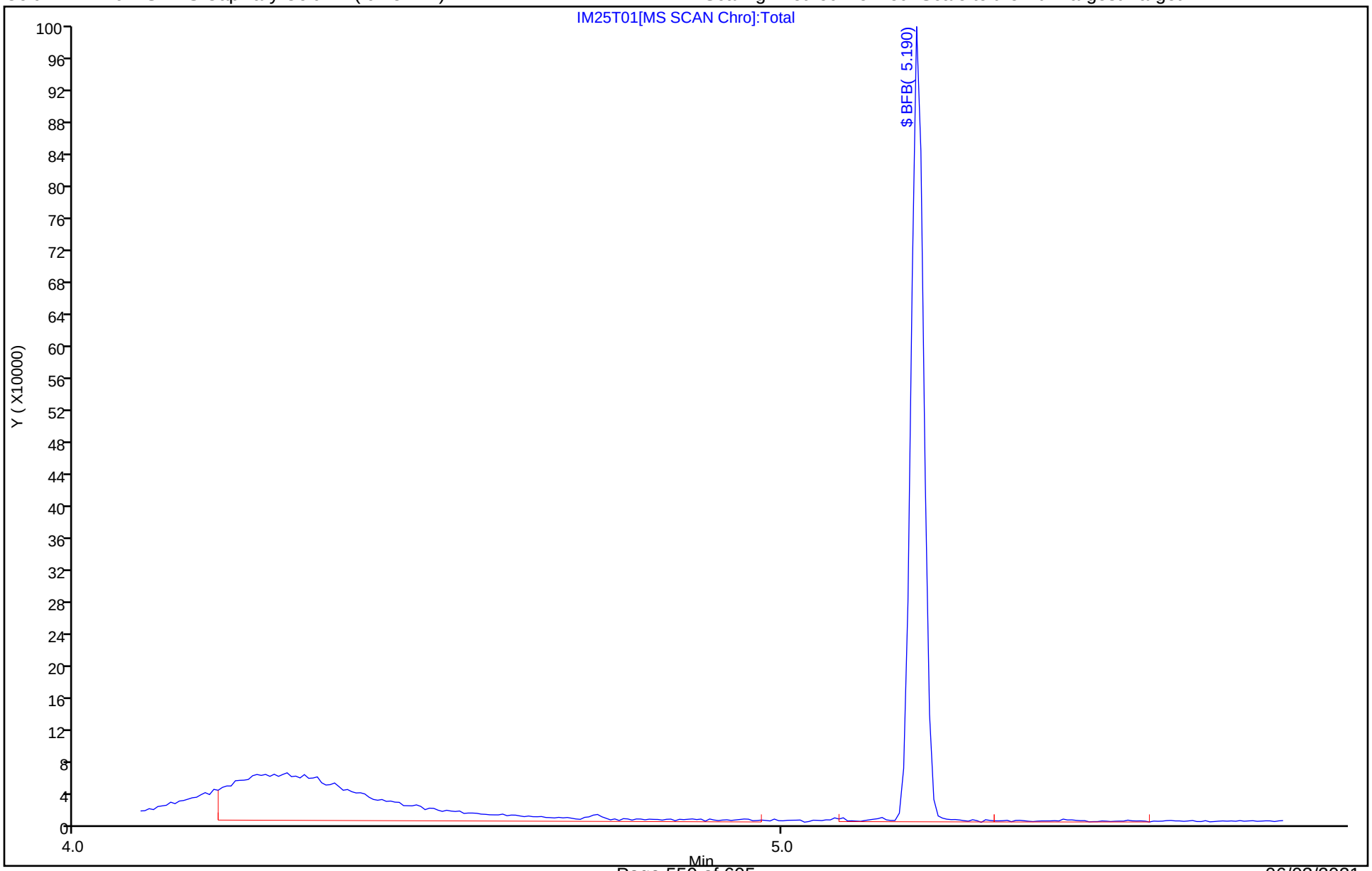
Report Date: 26-Mar-2021 17:13:18 Chrom Revision: 2.3 19-Mar-2021 08:24:58

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25T01.D

Injection Date:	25-Mar-2021 19:32:30	Instrument ID:	19930	Operator ID:	mec29284
Lims ID:	bfb			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01T04.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	01-Jun-2021 22:39:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	410-0030814-001				
Misc. Info.:	BFB				
Operator ID:	MEC29284	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	01-Jun-2021 23:42:31	Calib Date:	26-Mar-2021 01:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1667				
First Level Reviewer: campbellme		Date:	01-Jun-2021 22:57:48		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 145 BFB	95	5.190	5.190	0.000	0	184867	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

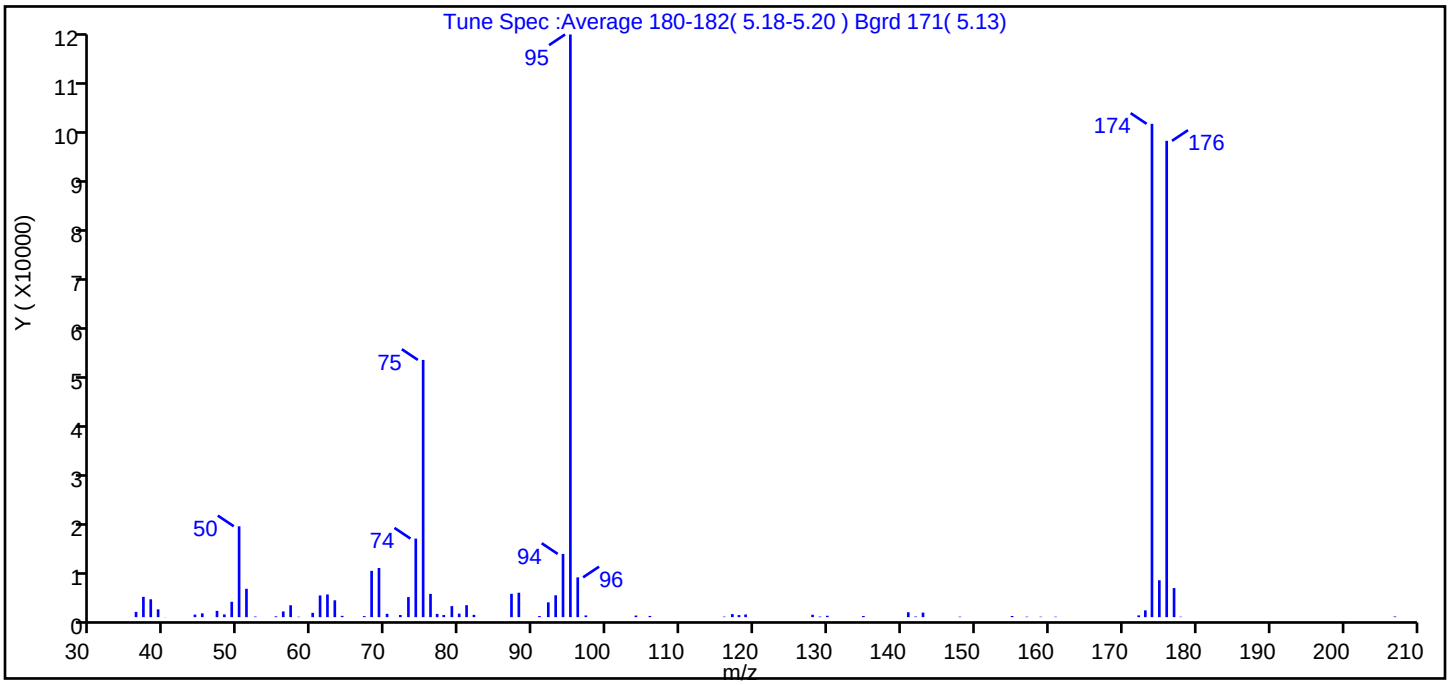
MSV_V_BFB_00005 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01T04.D
Injection Date: 01-Jun-2021 22:39:30 Instrument ID: 19930
Lims ID: BFB
Client ID:
Operator ID: MEC29284 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: 8260 25ml HP31 Limit Group: MSV - 8260C_D
Tune Method: BFB Method 8260

$ 145 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	15.6
75	30 to 60% of m/z 95	44.1
96	5 to 9% of m/z 95	6.8
173	Less than 2% of m/z 174	1.2 (1.4)
174	50 to 120% of m/z 95	84.7
175	5 to 9% of m/z 174	6.3 (7.5)
176	Greater than 95% but less than 101% of m/z 174	81.7 (96.6)
177	5 to 9% of m/z 176	5.0 (6.1)

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01T04.D\8260 25ml HP31.rslt\spectra.d
Injection Date: 01-Jun-2021 22:39:30
Spectrum: Tune Spec :Average 180-182(5.18-5.20) Bgrd 171(5.13)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 72

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1073	61.00	4422	82.00	466	130.00	281
37.00	4130	62.00	4619	87.00	4750	135.00	233
38.00	3641	63.00	3429	88.00	4974	141.00	994
39.00	1591	64.00	267	91.00	225	142.00	128
40.00	22	67.00	216	92.00	3014	143.00	926
44.00	516	68.00	9436	93.00	4448	148.00	98
45.00	771	69.00	10011	94.00	12880	155.00	233
47.00	1285	70.00	681	95.00	118688	157.00	98
48.00	546	72.00	439	96.00	8110	159.00	88
49.00	3133	73.00	4090	97.00	347	161.00	89
50.00	18512	74.00	16004	104.00	328	172.00	363
51.00	5772	75.00	52400	106.00	250	173.00	1383
52.00	125	76.00	4731	116.00	107	174.00	100488
55.00	164	77.00	661	117.00	624	175.00	7509
56.00	1162	78.00	435	118.00	420	176.00	97024
57.00	2418	79.00	2254	119.00	545	177.00	5923
58.00	85	80.00	717	128.00	484	178.00	85
60.00	877	81.00	2433	129.00	120	207.00	140

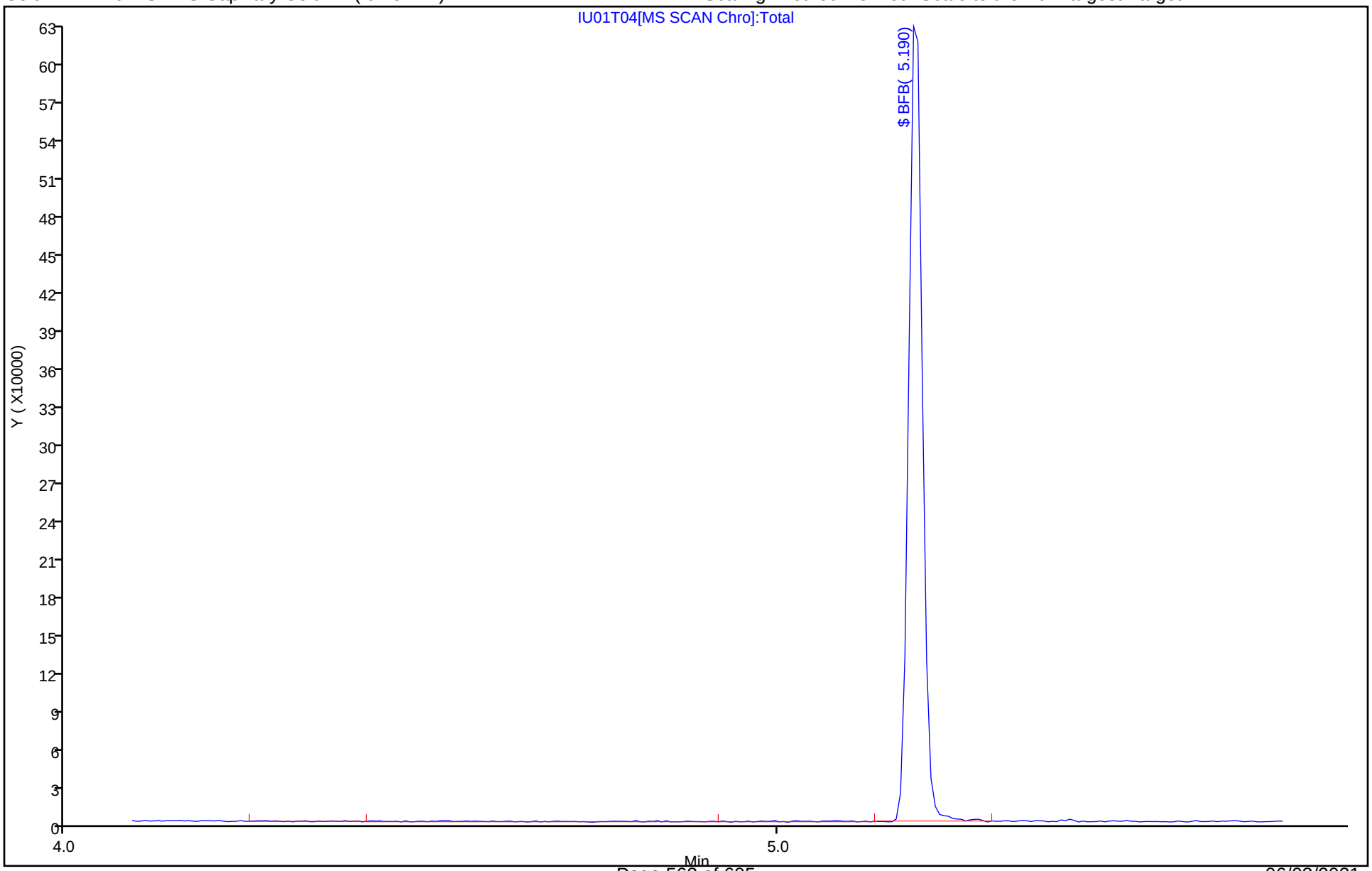
Report Date: 01-Jun-2021 23:42:31 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01T04.D

Injection Date:	01-Jun-2021 22:39:30	Instrument ID:	19930	Operator ID:	MEC29284
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-132853/6

Matrix: Water Lab File ID: IU01B01.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 00:16

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 132853 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.: 410-41319-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-132853/6

Matrix: Water Lab File ID: IU01B01.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 00:16

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 132853 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)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01B01.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 02-Jun-2021 00:16:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-006
Misc. Info.: MB
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 00:44:14 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1667

First Level Reviewer: campbellme Date: 02-Jun-2021 00:44:14

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85		1.977					ND	
2 Chlorodifluoromethane	51		1.989					ND	
3 Dimethyl ether	45		2.044					ND	
4 Chloromethane	50		2.172					ND	
6 Butadiene	39		2.288					ND	7
5 Vinyl chloride	62		2.294					ND	
7 Bromomethane	94		2.623					ND	
8 Chloroethane	64		2.702					ND	
9 Dichlorofluoromethane	67		2.946					ND	
10 Trichlorofluoromethane	101		3.019					ND	
11 Ethyl ether	59		3.251					ND	
12 1,2-Dichloro-1,1,2-trifluoroetha	67		3.349					ND	
13 Acrolein	56		3.422					ND	7
14 1,1-Dichloroethene	96		3.574					ND	
15 Acetone	43		3.592					ND	7
16 112TCTFE	101		3.611					ND	
17 Iodomethane	142		3.769					ND	
18 Ethyl bromide	108		3.800					ND	
19 Carbon disulfide	76		3.885					ND	7
20 Acetonitrile	41		3.995					ND	
21 Methyl acetate	43		4.019					ND	
22 3-Chloro-1-propene	41		4.050					ND	
* 24 t-Butyl alcohol-d10 (IS)	65	4.251	4.233	0.018	18	125876	50.0	50.0	
23 Methylene Chloride	84		4.245					ND	
25 2-Methyl-2-propanol	59		4.367					ND	
26 Acrylonitrile	53		4.580					ND	
27 Methyl tert-butyl ether	73		4.647					ND	
28 trans-1,2-Dichloroethene	96		4.659					ND	
29 Hexane	57		5.080					ND	
31 1,1-Dichloroethane	63		5.318					ND	
30 Vinyl acetate	43		5.324					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
32 Isopropyl ether	45		5.379					ND	
33 2-Chloro-1,3-butadiene	53		5.427					ND	
34 Tert-butyl ethyl ether	59		5.909					ND	
36 2-Butanone (MEK)	43		6.116					ND	
37 cis-1,2-Dichloroethene	96		6.147					ND	
S 35 1,2-Dichloroethene, Total	100		6.155					ND	7
38 2,2-Dichloropropane	77		6.171					ND	
39 Ethyl acetate	43		6.190					ND	
40 Propionitrile	54		6.202					ND	
41 Methyl acrylate	55		6.245					ND	
42 Methacrylonitrile	67		6.415					ND	
43 Chlorobromomethane	128		6.482					ND	
44 Tetrahydrofuran	71		6.494					ND	
45 Chloroform	83		6.628					ND	
$ 46 Dibromofluoromethane (Surr)	113	6.848	6.848	0.000	94	452100	10.0	10.1	
47 1,1,1-Trichloroethane	97		6.860					ND	
48 Cyclohexane	56		6.958					ND	
49 1-Chlorobutane	56		7.019					ND	
50 Carbon tetrachloride	117		7.073					ND	
51 1,1-Dichloropropene	75		7.073					ND	
52 Isobutyl alcohol	41		7.214					ND	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.299	7.299	0.000	84	87693	10.0	9.98	
54 Benzene	78		7.336					ND	
56 1,2-Dichloroethane	62		7.403					ND	
55 Isopropyl acetate	43	7.488	7.409	0.079	1	271		0.003516	
57 Tert-amyl methyl ether	73		7.518					ND	
* 58 Fluorobenzene (IS)	96	7.738	7.732	0.006	99	1784970	10.0	10.0	
59 n-Heptane	43	7.744	7.744	0.000	36	3121		0.0320	
60 n-Butanol	56		8.092					ND	
61 Trichloroethene	95		8.213					ND	
62 Methylcyclohexane	83		8.518					ND	7
63 1,2-Dichloropropane	63		8.549					ND	
64 Methyl methacrylate	69		8.622					ND	
65 1,4-Dioxane	88		8.634					ND	
66 Dibromomethane	93		8.659					ND	
67 n-Propyl acetate	43		8.708					ND	
68 Dichlorobromomethane	83		8.890					ND	
69 2-Nitropropane	41		9.152					ND	7
70 Chloroacetonitrile	75		9.226					ND	
71 2-Chloroethyl vinyl ether	63		9.250					ND	
72 1-Bromo-2-chloroethane	63		9.280					ND	
73 cis-1,3-Dichloropropene	75		9.433					ND	
74 4-Methyl-2-pentanone (MIBK)	43		9.597					ND	7
$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	93	1797556	10.0	9.87	
76 Toluene	92		9.811					ND	7
S 77 1,3-Dichloropropene, Total	100		10.060					ND	7
78 trans-1,3-Dichloropropene	75		10.067					ND	
79 Ethyl methacrylate	69		10.128					ND	
80 1,1,2-Trichloroethane	97		10.274					ND	
81 Tetrachloroethene	166		10.359					ND	
82 1,3-Dichloropropane	76		10.433					ND	
83 2-Hexanone	43		10.481					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
84 n-Butyl acetate	43		10.603					ND	
85 Chlorodibromomethane	129		10.652					ND	
86 Ethylene Dibromide	107		10.762					ND	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.001	84	1391720	10.0	10.0	
88 1-Chlorohexane	91		11.195					ND	7
90 Chlorobenzene	112		11.213					ND	
S 89 Xylenes, Total	106		11.245					ND	7
91 1,1,1,2-Tetrachloroethane	131		11.292					ND	
92 Ethylbenzene	91		11.298					ND	
93 m-Xylene & p-Xylene	106		11.414					ND	
94 o-Xylene	106		11.743					ND	
95 Styrene	104		11.755					ND	
96 Bromoform	173		11.920					ND	
97 Isopropylbenzene	105		12.042					ND	
98 cis-1,4-Dichloro-2-butene	88		12.085					ND	U
99 Cyclohexanone	55		12.115					ND	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	652927	10.0	9.44	
101 1,1,2,2-Tetrachloroethane	83		12.286					ND	
102 Bromobenzene	156		12.304					ND	
103 trans-1,4-Dichloro-2-butene	53		12.310					ND	
104 1,2,3-Trichloropropane	110		12.329					ND	
105 N-Propylbenzene	91		12.371					ND	7
106 2-Chlorotoluene	126		12.444					ND	
107 1,3,5-Trimethylbenzene	105		12.505					ND	7
108 4-Chlorotoluene	126		12.542					ND	
109 tert-Butylbenzene	134		12.749					ND	
110 Pentachloroethane	167		12.780					ND	
111 1,2,4-Trimethylbenzene	105		12.786					ND	7
112 sec-Butylbenzene	105		12.908					ND	7
113 1,3-Dichlorobenzene	146		13.011					ND	7
114 4-Isopropyltoluene	119		13.017					ND	7
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	812492	10.0	10.0	
116 1,4-Dichlorobenzene	146		13.084					ND	7
117 1,2,3-Trimethylbenzene	120		13.091					ND	7
118 Benzyl chloride	126		13.158					ND	
119 n-Butylbenzene	92		13.310					ND	7
120 1,2-Dichlorobenzene	146		13.347					ND	
121 Hexachloroethane	117		13.542					ND	
122 1,2-Dibromo-3-Chloropropane	155		13.889					ND	
123 1,3,5-Trichlorobenzene	180		14.011					ND	7
124 1,2,4-Trichlorobenzene	180	14.444	14.438	0.006	88	3091		0.0346	
125 Hexachlorobutadiene	225	14.523	14.517	0.006	84	2016		0.0505	
126 Naphthalene	128	14.627	14.615	0.012	90	4626		0.0273	
127 1,2,3-Trichlorobenzene	180	14.761	14.761	0.000	92	3697		0.0475	
128 Dodecane	57		0.000					ND	
136 2-Chloro-1,1,1-Trifluoroethane	1		0.000					ND	
144 2-ethoxy-2-methyl butane	1		0.000					ND	
205 1,1-Dichloroacetone	1		0.000					ND	
139 1-Bromo-3-Chloropropane	1		0.000					ND	
143 n-Decane	57		0.000					ND	
204 Pentane	43		0.000					ND	
203 Propargyl alcohol TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
202 1,3-Dichloro-2-propanol TIC	1		0.000					ND	
138 1,1-Dichloro-1-fluoroethane	1		0.000					ND	
137 2-Methylnaphthalene	142		0.000					ND	
135 p-Diethylbenzene	1		0.000					ND	
132 Methylal	1		0.000					ND	
131 tert-Butyl Formate	1		0.000					ND	
142 2-Bromo-1-chloropropane	1		0.000					ND	
206 Pentachloroethane TIC	1		0.000					ND	
130 Chlorotrifluoroethene	1		0.000					ND	
207 Acetonitrile TIC	1		0.000					ND	
129 Propene oxide	1		0.000					ND	
141 1-Chloropropane	1		0.000					ND	
134 Isopropyl alcohol	45		0.000					ND	
133 t-Amyl alcohol	1		0.000					ND	
140 Ethanol	45		3.288					ND	

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

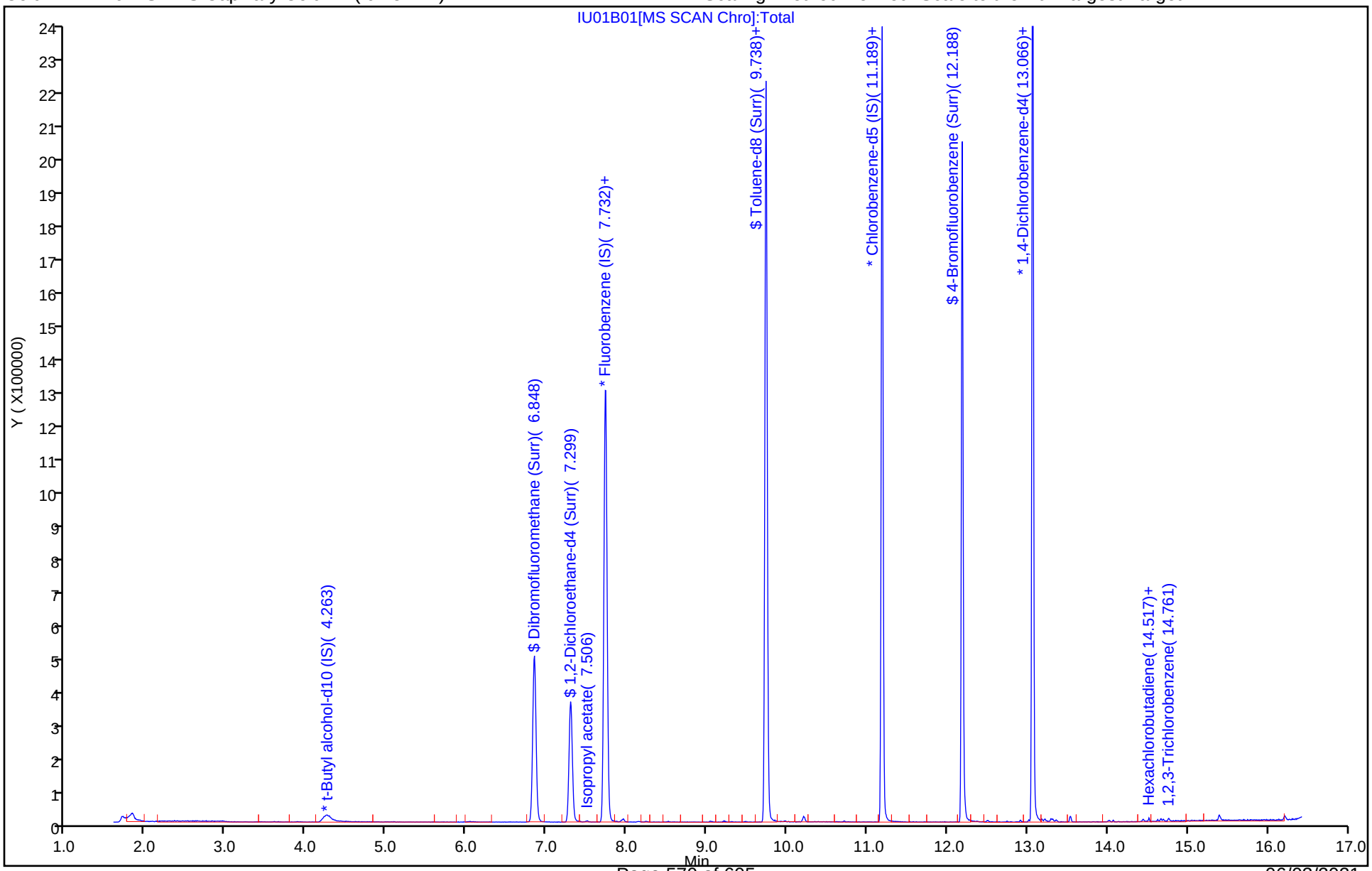
Report Date: 02-Jun-2021 00:44:32 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01B01.D

Injection Date:	02-Jun-2021 00:16:30	Instrument ID:	19930	Operator ID:	MEC29284
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01B01.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 02-Jun-2021 00:16:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-006
Misc. Info.: MB
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 00:44:14 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1667

First Level Reviewer: campbellme Date: 02-Jun-2021 00:44:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	10.1	100.73
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.98	99.82
$ 75 Toluene-d8 (Surr)	10.0	9.87	98.69
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.44	94.35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-132853/4

Matrix: Water Lab File ID: IU01L01.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 06/01/2021 23:34

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.: 132853 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	4.84		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.64		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.96		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.06		0.50	0.060
75-34-3	1,1-Dichloroethane	4.58		0.50	0.070
75-35-4	1,1-Dichloroethene	4.92		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.89		0.50	0.060
107-06-2	1,2-Dichloroethane	4.14		0.50	0.050
78-87-5	1,2-Dichloropropane	4.75		0.50	0.060
78-93-3	2-Butanone (MEK)	56.7		5.0	0.60
591-78-6	2-Hexanone	57.7		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	56.6		5.0	0.70
67-64-1	Acetone	50.9		5.0	0.90
71-43-2	Benzene	4.81		0.50	0.050
74-97-5	Bromochloromethane	4.75		0.50	0.050
75-27-4	Bromodichloromethane	4.62		0.50	0.050
75-25-2	Bromoform	4.10		1.0	0.30
74-83-9	Bromomethane	5.27		0.50	0.070
75-15-0	Carbon disulfide	4.30		1.0	0.060
56-23-5	Carbon tetrachloride	4.69		0.50	0.070
108-90-7	Chlorobenzene	4.97		0.50	0.060
75-00-3	Chloroethane	4.85		0.50	0.070
67-66-3	Chloroform	4.76		0.50	0.090
74-87-3	Chloromethane	5.39		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	4.92		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.46		0.50	0.050
124-48-1	Dibromochloromethane	4.66		0.50	0.070
100-41-4	Ethylbenzene	4.80		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.52		0.50	0.050
75-09-2	Methylene Chloride	4.91		0.50	0.070
100-42-5	Styrene	4.92		0.50	0.050
127-18-4	Tetrachloroethene	4.73		0.50	0.060
108-88-3	Toluene	4.84		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	4.78		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.44		0.50	0.060
79-01-6	Trichloroethene	4.95		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-132853/4

Matrix: Water Lab File ID: IU01L01.D

Analysis Method: 8260D Date Collected:

Sample wt/vol: 25(mL) Date Analyzed: 06/01/2021 23:34

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.: 132853 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	5.56		0.50	0.10
1330-20-7	Xylenes, Total	14.9		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01L01.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 01-Jun-2021 23:34:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-004
Misc. Info.: LCS
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 00:14:10 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1667

First Level Reviewer: campbellme Date: 02-Jun-2021 00:14:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.977	1.977	0.000	99	343056	5.00	6.06	
4 Chloromethane	50	2.178	2.172	0.006	99	371504	5.00	5.39	
6 Butadiene	39	2.294	2.288	0.006	91	482322	5.00	7.91	
5 Vinyl chloride	62	2.294	2.294	0.000	98	346229	5.00	5.56	
7 Bromomethane	94	2.623	2.623	0.000	90	238281	5.00	5.27	
8 Chloroethane	64	2.709	2.702	0.007	100	189242	5.00	4.85	
9 Dichlorofluoromethane	67	2.952	2.946	0.006	97	450951	5.00	7.05	
10 Trichlorofluoromethane	101	3.026	3.019	0.007	97	431858	5.00	4.93	
11 Ethyl ether	59	3.257	3.251	0.006	91	195349	5.02	4.62	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.355	3.349	0.006	94	337521	5.00	5.16	
13 Acrolein	56	3.428	3.422	0.006	99	227295	37.5	33.9	
14 1,1-Dichloroethene	96	3.580	3.574	0.006	97	231835	5.00	4.92	
15 Acetone	43	3.605	3.592	0.013	100	447275	62.5	50.9	
16 112TCTFE	101	3.617	3.611	0.006	90	244851	5.00	4.61	
17 Iodomethane	142	3.769	3.769	0.000	98	440090	5.00	4.71	
18 Ethyl bromide	108	3.800	3.800	0.000	98	186145	5.03	4.37	
19 Carbon disulfide	76	3.891	3.885	0.006	99	600424	5.00	4.30	
21 Methyl acetate	43	4.025	4.019	0.006	97	117988	5.00	4.09	M
22 3-Chloro-1-propene	41	4.056	4.050	0.006	95	369927	5.00	3.84	
* 24 t-Butyl alcohol-d10 (IS)	65	4.269	4.233	0.036	96	135650	50.0	50.0	
23 Methylene Chloride	84	4.245	4.245	0.000	91	260126	5.00	4.91	
25 2-Methyl-2-propanol	59	4.385	4.367	0.018	99	139794	50.0	44.2	
26 Acrylonitrile	53	4.580	4.580	0.000	98	253116	25.0	23.5	a
27 Methyl tert-butyl ether	73	4.659	4.647	0.012	94	624980	5.00	4.52	
28 trans-1,2-Dichloroethene	96	4.665	4.659	0.006	99	256958	5.00	4.78	
29 Hexane	57	5.086	5.080	0.006	92	355274	5.00	4.06	
31 1,1-Dichloroethane	63	5.324	5.318	0.006	96	475882	5.00	4.58	
32 Isopropyl ether	45	5.379	5.379	0.000	95	821368	5.00	4.27	
33 2-Chloro-1,3-butadiene	53	5.434	5.427	0.007	89	382562	5.00	4.19	
34 Tert-butyl ethyl ether	59	5.915	5.909	0.006	97	774465	5.00	4.43	
36 2-Butanone (MEK)	43	6.123	6.116	0.006	99	877063	62.5	56.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 cis-1,2-Dichloroethene	96	6.153	6.147	0.006	80	305213	5.00	4.92	
38 2,2-Dichloropropane	77	6.171	6.171	0.000	84	403027	5.00	4.49	
40 Propionitrile	54	6.214	6.202	0.012	98	141975	37.5	38.7	
42 Methacrylonitrile	67	6.421	6.415	0.006	90	538409	37.5	38.0	
43 Chlorobromomethane	128	6.482	6.482	0.000	93	131536	5.00	4.75	
44 Tetrahydrofuran	71	6.494	6.494	0.000	90	105012	25.0	25.7	
45 Chloroform	83	6.635	6.628	0.007	92	470414	5.00	4.76	
$ 46 Dibromofluoromethane (Surr)	113	6.848	6.848	0.000	94	453046	10.0	9.93	
47 1,1,1-Trichloroethane	97	6.860	6.860	0.000	98	417249	5.00	4.64	
48 Cyclohexane	56	6.964	6.958	0.006	88	456484	5.00	4.36	
50 Carbon tetrachloride	117	7.074	7.073	0.001	83	370127	5.00	4.69	
51 1,1-Dichloropropene	75	7.074	7.073	0.001	97	371060	5.00	4.66	
52 Isobutyl alcohol	41	7.220	7.214	0.006	94	121620	125.0	106.7	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.305	7.299	0.006	90	87673	10.0	9.82	
54 Benzene	78	7.336	7.336	0.000	96	1125659	5.00	4.81	
56 1,2-Dichloroethane	62	7.409	7.403	0.006	97	258501	5.00	4.14	
57 Tert-amyl methyl ether	73	7.525	7.518	0.007	99	707633	5.00	4.62	
* 58 Fluorobenzene (IS)	96	7.738	7.732	0.006	99	1814120	10.0	10.0	
59 n-Heptane	43	7.750	7.744	0.006	92	390008	5.00	3.94	
60 n-Butanol	56	8.092	8.092	0.000	85	219001	250.0	221.2	
61 Trichloroethene	95	8.214	8.213	0.001	96	300471	5.00	4.95	
62 Methylcyclohexane	83	8.524	8.518	0.006	93	502666	5.00	4.69	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	92	287349	5.00	4.75	
64 Methyl methacrylate	69	8.628	8.622	0.006	90	133125	5.00	4.74	
65 1,4-Dioxane	88	8.640	8.634	0.006	32	32042	125.0	169.3	M
66 Dibromomethane	93	8.659	8.659	0.001	95	135418	5.00	4.93	
68 Dichlorobromomethane	83	8.890	8.890	0.000	100	331777	5.00	4.62	
69 2-Nitropropane	41	9.158	9.152	0.006	98	35363	5.00	4.03	M
72 1-Bromo-2-chloroethane	63	9.280	9.280	0.000	98	287342	5.00	5.10	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	98	400723	5.00	4.46	
74 4-Methyl-2-pentanone (MIBK)	43	9.604	9.597	0.007	95	2247922	62.5	56.6	
$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	93	1826002	10.0	9.89	
76 Toluene	92	9.817	9.811	0.006	98	735154	5.00	4.84	
78 trans-1,3-Dichloropropene	75	10.073	10.067	0.006	90	329044	5.00	4.44	
79 Ethyl methacrylate	69	10.128	10.128	0.000	88	296164	5.00	4.65	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	89	207466	5.00	5.06	
81 Tetrachloroethene	166	10.359	10.359	0.000	97	342206	5.00	4.73	
82 1,3-Dichloropropane	76	10.433	10.433	0.000	87	348923	5.00	4.82	
83 2-Hexanone	43	10.481	10.481	0.000	96	1608491	62.5	57.7	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	244116	5.00	4.66	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	196407	5.00	4.89	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.001	84	1411230	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	94	429994	5.00	4.63	
90 Chlorobenzene	112	11.213	11.213	0.000	97	834472	5.00	4.97	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.292	0.006	97	294141	5.00	4.84	
92 Ethylbenzene	91	11.298	11.298	0.000	97	1426343	5.00	4.80	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	100	1159565	10.0	9.94	
94 o-Xylene	106	11.743	11.743	0.000	95	565321	5.00	4.96	
95 Styrene	104	11.756	11.755	0.001	95	916157	5.00	4.92	
96 Bromoform	173	11.920	11.920	0.000	98	135632	5.00	4.10	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	1493332	5.00	4.92	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	95	667297	10.0	9.51	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	266731	5.00	4.96	
102 Bromobenzene	156	12.304	12.304	0.000	90	356972	5.00	4.82	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	86	103188	25.0	7.53	a
104 1,2,3-Trichloropropane	110	12.335	12.329	0.006	77	69980	5.00	4.89	a
105 N-Propylbenzene	91	12.371	12.371	0.000	98	1738339	5.00	4.78	
106 2-Chlorotoluene	126	12.444	12.444	0.000	97	355562	5.00	4.80	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	1230515	5.00	4.70	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	362419	5.00	4.80	
109 tert-Butylbenzene	134	12.749	12.749	0.000	92	283310	5.00	4.85	
110 Pentachloroethane	167	12.780	12.780	0.000	90	218927	5.00	4.54	
111 1,2,4-Trimethylbenzene	105	12.792	12.786	0.006	96	1263689	5.00	4.70	
112 sec-Butylbenzene	105	12.914	12.908	0.006	93	1631072	5.00	4.74	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	97	697429	5.00	4.74	
114 4-Isopropyltoluene	119	13.017	13.017	0.000	97	1392496	5.00	4.76	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	810759	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.084	0.001	96	710792	5.00	4.84	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	98	564013	5.00	4.85	
118 Benzyl chloride	126	13.164	13.158	0.006	98	112046	5.00	4.63	
119 n-Butylbenzene	92	13.310	13.310	0.000	97	659814	5.00	4.64	
120 1,2-Dichlorobenzene	146	13.347	13.347	0.000	99	648221	5.00	4.85	
122 1,2-Dibromo-3-Chloropropane	155	13.889	13.889	0.000	92	39479	5.00	4.70	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	488430	5.00	4.56	
124 1,2,4-Trichlorobenzene	180	14.438	14.438	0.000	94	415428	5.00	4.65	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	161379	5.00	4.05	
126 Naphthalene	128	14.615	14.615	0.000	97	810160	5.00	4.80	
127 1,2,3-Trichlorobenzene	180	14.761	14.761	0.000	95	348464	5.00	4.48	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
204 Pentane	43		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_LCS_VOC#1_00003	Amount Added: 12.50	Units: uL	
MSV_Q_ETBR_00006	Amount Added: 12.50	Units: uL	
MSV_Q_EE_00004	Amount Added: 12.50	Units: uL	
MSV_LCS_Penta_00002	Amount Added: 12.50	Units: uL	
MSV_QC_Gas826_00003	Amount Added: 12.50	Units: uL	
MSV_LLcentISS_00001	Amount Added: 5.00	Units: uL	Run Reagent

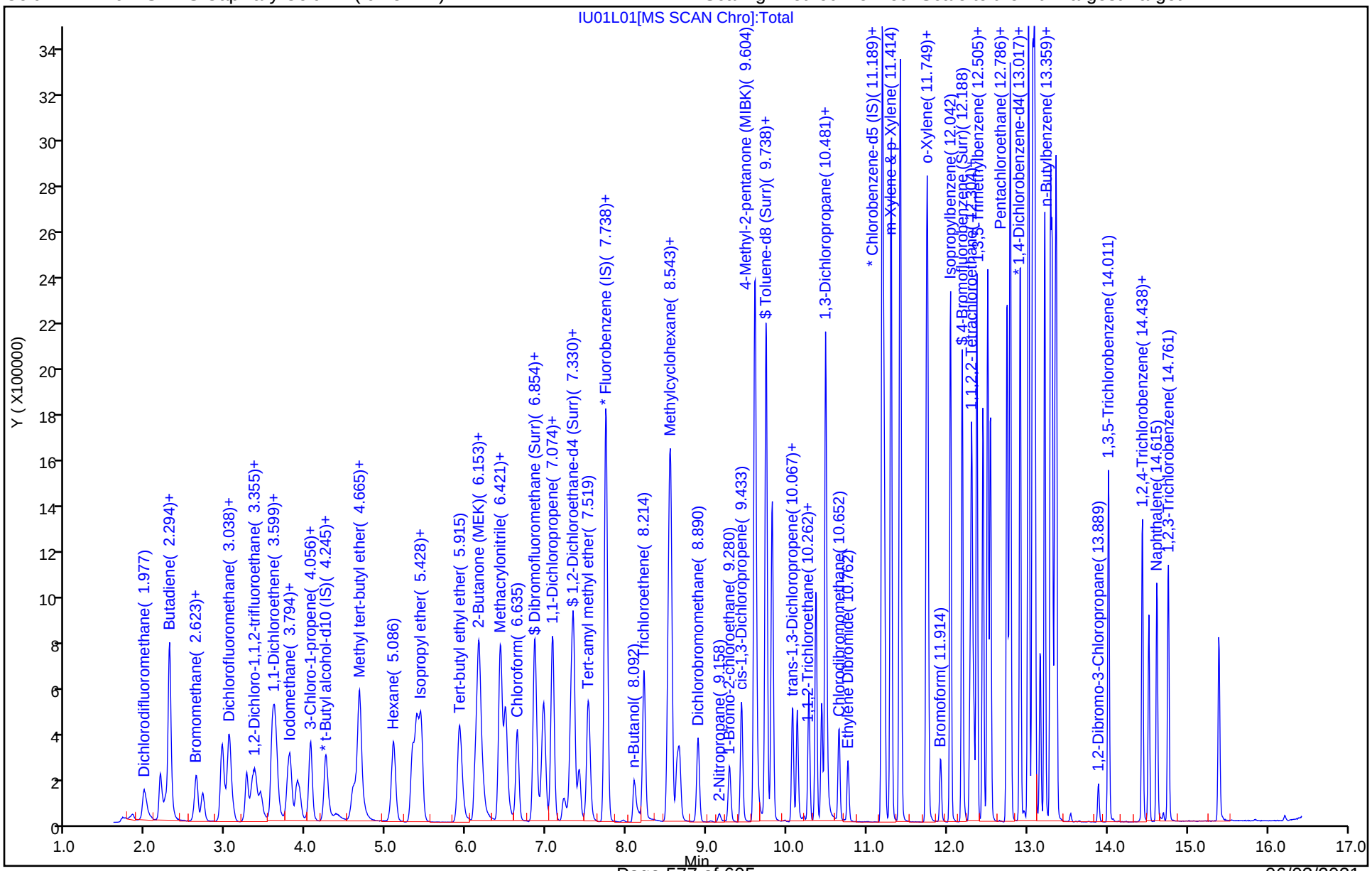
Report Date: 02-Jun-2021 00:14:57 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01L01.D

Injection Date:	01-Jun-2021 23:34:30	Instrument ID:	19930	Operator ID:	MEC29284
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01L01.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 01-Jun-2021 23:34:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-004
Misc. Info.: LCS
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 00:14:10 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1667

First Level Reviewer: campbellme Date: 02-Jun-2021 00:14:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	9.93	99.32
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.82	98.20
$ 75 Toluene-d8 (Surr)	10.0	9.89	98.87
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.51	95.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MS Lab Sample ID: 410-41319-6 MS

Matrix: Water Lab File ID: IU01S04.D

Analysis Method: 8260D Date Collected: 05/25/2021 11:30

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 01:53

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 132853 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.17		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.24		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	5.25		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.23		0.50	0.060
75-34-3	1,1-Dichloroethane	4.96		0.50	0.070
75-35-4	1,1-Dichloroethene	5.94		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.90		0.50	0.060
107-06-2	1,2-Dichloroethane	4.48		0.50	0.050
78-87-5	1,2-Dichloropropane	5.08		0.50	0.060
78-93-3	2-Butanone (MEK)	61.5		5.0	0.60
591-78-6	2-Hexanone	63.0		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	62.6		5.0	0.70
67-64-1	Acetone	53.0		5.0	0.90
71-43-2	Benzene	5.25		0.50	0.050
74-97-5	Bromochloromethane	4.98		0.50	0.050
75-27-4	Bromodichloromethane	4.80		0.50	0.050
75-25-2	Bromoform	4.06		1.0	0.30
74-83-9	Bromomethane	5.43		0.50	0.070
75-15-0	Carbon disulfide	5.02		1.0	0.060
56-23-5	Carbon tetrachloride	5.30		0.50	0.070
108-90-7	Chlorobenzene	5.39		0.50	0.060
75-00-3	Chloroethane	4.96		0.50	0.070
67-66-3	Chloroform	5.33		0.50	0.090
74-87-3	Chloromethane	5.48		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	6.01		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.66		0.50	0.050
124-48-1	Dibromochloromethane	4.74		0.50	0.070
100-41-4	Ethylbenzene	5.28		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.62		0.50	0.050
75-09-2	Methylene Chloride	5.28		0.50	0.070
100-42-5	Styrene	5.28		0.50	0.050
127-18-4	Tetrachloroethene	7.62		0.50	0.060
108-88-3	Toluene	5.27		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	5.42		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.54		0.50	0.060
79-01-6	Trichloroethene	6.02		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MS Lab Sample ID: 410-41319-6 MS

Matrix: Water Lab File ID: IU01S04.D

Analysis Method: 8260D Date Collected: 05/25/2021 11:30

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 01:53

Soil Aliquot Vol: Dilution Factor: 1

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 132853 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	5.81		0.50	0.10
1330-20-7	Xylenes, Total	16.2		1.0	0.15

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S04.D
Lims ID: 410-41319-A-6 MS
Client ID: HD-COD-SW-15-0/1-0
Sample Type: MS
Inject. Date: 02-Jun-2021 01:53:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-010
Misc. Info.: 410-41319-A-6 MS
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 14:16:43 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: riehlc Date: 02-Jun-2021 14:08:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.977	1.977	0.000	99	365395	5.00	6.48	
4 Chloromethane	50	2.178	2.172	0.006	99	376224	5.00	5.48	
6 Butadiene	39	2.288	2.288	0.000	91	507716	5.00	8.36	
5 Vinyl chloride	62	2.294	2.294	0.000	97	360716	5.00	5.81	
7 Bromomethane	94	2.623	2.623	0.000	89	244672	5.00	5.43	
8 Chloroethane	64	2.709	2.702	0.007	99	192827	5.00	4.96	
9 Dichlorofluoromethane	67	2.946	2.946	0.000	97	457845	5.00	7.18	
10 Trichlorofluoromethane	101	3.013	3.019	-0.006	97	449695	5.00	5.16	
11 Ethyl ether	59	3.251	3.251	0.000	90	191353	5.03	4.55	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.355	3.349	0.006	93	359740	5.00	5.52	
13 Acrolein	56	3.428	3.422	0.006	99	214038	37.5	36.7	
14 1,1-Dichloroethene	96	3.568	3.574	-0.006	97	278947	5.00	5.94	
15 Acetone	43	3.599	3.592	0.007	100	405508	62.6	53.0	
16 112TCTFE	101	3.611	3.611	0.000	91	298359	5.00	5.63	
17 Iodomethane	142	3.775	3.769	0.006	98	486426	5.00	5.22	
18 Ethyl bromide	108	3.794	3.800	-0.006	98	197699	5.04	4.65	
19 Carbon disulfide	76	3.885	3.885	0.000	99	698241	5.00	5.02	
21 Methyl acetate	43	4.019	4.019	0.000	97	110420	5.00	4.40	
22 3-Chloro-1-propene	41	4.056	4.050	0.006	95	413457	5.00	4.31	
* 24 t-Butyl alcohol-d10 (IS)	65	4.263	4.233	0.030	98	118041	50.0	50.0	
23 Methylene Chloride	84	4.239	4.245	-0.006	91	278457	5.00	5.28	
25 2-Methyl-2-propanol	59	4.379	4.367	0.012	99	134934	50.0	49.1	
26 Acrylonitrile	53	4.580	4.580	0.000	100	259890	25.0	27.7	
27 Methyl tert-butyl ether	73	4.653	4.647	0.006	83	635841	5.00	4.62	
28 trans-1,2-Dichloroethene	96	4.665	4.659	0.006	99	290121	5.00	5.42	
29 Hexane	57	5.086	5.080	0.006	91	436664	5.00	5.01	
31 1,1-Dichloroethane	63	5.318	5.318	0.000	96	513405	5.00	4.96	
32 Isopropyl ether	45	5.385	5.379	0.006	95	851456	5.00	4.44	
33 2-Chloro-1,3-butadiene	53	5.428	5.427	0.001	88	433209	5.00	4.76	
34 Tert-butyl ethyl ether	59	5.915	5.909	0.006	97	796333	5.00	4.57	
36 2-Butanone (MEK)	43	6.122	6.116	0.006	99	827285	62.6	61.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 cis-1,2-Dichloroethene	96	6.153	6.147	0.006	80	371180	5.00	6.01	
38 2,2-Dichloropropane	77	6.165	6.171	-0.006	87	446812	5.00	4.99	
40 Propionitrile	54	6.214	6.202	0.012	98	134823	37.5	42.2	
42 Methacrylonitrile	67	6.421	6.415	0.006	91	518875	37.5	42.1	
43 Chlorobromomethane	128	6.482	6.482	0.000	92	137309	5.00	4.98	
44 Tetrahydrofuran	71	6.494	6.494	0.000	80	99727	25.0	28.1	
45 Chloroform	83	6.628	6.628	0.000	92	525470	5.00	5.33	
$ 46 Dibromofluoromethane (Surr)	113	6.842	6.848	-0.006	94	453402	10.0	9.98	
47 1,1,1-Trichloroethane	97	6.860	6.860	0.000	98	469481	5.00	5.24	
48 Cyclohexane	56	6.964	6.958	0.006	89	536585	5.00	5.14	
50 Carbon tetrachloride	117	7.074	7.073	0.001	83	416826	5.00	5.30	
51 1,1-Dichloropropene	75	7.074	7.073	0.001	97	422684	5.00	5.33	
52 Isobutyl alcohol	41	7.220	7.214	0.006	93	110855	125.1	111.7	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.299	7.299	0.000	95	84793	10.0	9.53	
54 Benzene	78	7.330	7.336	-0.006	96	1222185	5.00	5.25	
56 1,2-Dichloroethane	62	7.403	7.403	0.000	97	278748	5.00	4.48	
57 Tert-amyl methyl ether	73	7.519	7.518	0.001	99	714387	5.00	4.68	
* 58 Fluorobenzene (IS)	96	7.732	7.732	0.000	99	1807570	10.0	10.0	
59 n-Heptane	43	7.750	7.744	0.006	91	466817	5.00	4.73	
60 n-Butanol	56	8.098	8.092	0.006	85	207991	250.2	241.4	
61 Trichloroethene	95	8.214	8.213	0.001	97	364468	5.00	6.02	
62 Methylcyclohexane	83	8.524	8.518	0.006	94	600942	5.00	5.63	
63 1,2-Dichloropropane	63	8.543	8.549	-0.006	85	306196	5.00	5.08	
64 Methyl methacrylate	69	8.628	8.622	0.006	89	131593	5.00	5.39	
65 1,4-Dioxane	88	8.640	8.634	0.006	30	26307	125.1	159.7	M
66 Dibromomethane	93	8.659	8.659	0.001	94	133908	5.00	4.89	
68 Dichlorobromomethane	83	8.890	8.890	0.000	99	343432	5.00	4.80	
69 2-Nitropropane	41	9.152	9.152	0.000	98	30699	5.00	4.02	
72 1-Bromo-2-chloroethane	63	9.280	9.280	0.000	98	284728	5.00	5.07	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	98	417180	5.00	4.66	
74 4-Methyl-2-pentanone (MIBK)	43	9.597	9.597	0.000	96	2164314	62.6	62.6	
$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	93	1809846	10.0	9.92	
76 Toluene	92	9.817	9.811	0.006	98	791700	5.00	5.27	
78 trans-1,3-Dichloropropene	75	10.067	10.067	0.000	91	332251	5.00	4.54	
79 Ethyl methacrylate	69	10.128	10.128	0.000	89	293566	5.00	4.67	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	88	212041	5.00	5.23	
81 Tetrachloroethene	166	10.359	10.359	0.000	97	544471	5.00	7.62	
82 1,3-Dichloropropane	76	10.433	10.433	0.000	88	343687	5.00	4.81	
83 2-Hexanone	43	10.481	10.481	0.000	96	1526439	62.6	63.0	
85 Chlorodibromomethane	129	10.646	10.652	-0.006	90	245384	5.00	4.74	
86 Ethylene Dibromide	107	10.762	10.762	0.000	99	194257	5.00	4.90	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.001	85	1394126	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	95	480085	5.00	5.23	
90 Chlorobenzene	112	11.213	11.213	0.000	97	894659	5.00	5.39	
91 1,1,1,2-Tetrachloroethane	131	11.298	11.292	0.006	96	310447	5.00	5.17	
92 Ethylbenzene	91	11.298	11.298	0.000	97	1552135	5.00	5.28	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	100	1245279	10.0	10.8	
94 o-Xylene	106	11.743	11.743	0.000	96	605661	5.00	5.37	
95 Styrene	104	11.756	11.755	0.001	94	971018	5.00	5.28	
96 Bromoform	173	11.920	11.920	0.000	98	132879	5.00	4.06	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	1606947	5.00	5.36	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	93	667284	10.0	9.63	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	257666	5.00	5.25	
102 Bromobenzene	156	12.304	12.304	0.000	91	367017	5.00	5.43	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	54	83089	25.0	6.96	M
104 1,2,3-Trichloropropane	110	12.335	12.329	0.006	82	68145	5.00	5.22	
105 N-Propylbenzene	91	12.371	12.371	0.000	98	1882046	5.00	5.67	
106 2-Chlorotoluene	126	12.444	12.444	0.000	98	365442	5.00	5.41	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	1255595	5.00	5.26	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	363946	5.00	5.28	
109 tert-Butylbenzene	134	12.749	12.749	0.000	92	259106	5.00	4.86	
111 1,2,4-Trimethylbenzene	105	12.786	12.786	0.000	97	1192677	5.00	4.87	
112 sec-Butylbenzene	105	12.914	12.908	0.006	93	1599887	5.00	5.10	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	669002	5.00	4.98	
114 4-Isopropyltoluene	119	13.017	13.017	0.000	97	1369260	5.00	5.13	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	739698	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.085	13.084	0.001	95	691293	5.00	5.15	
117 1,2,3-Trimethylbenzene	120	13.091	13.091	0.000	98	532834	5.00	5.02	
118 Benzyl chloride	126	13.158	13.158	0.000	98	99979	5.00	4.53	
119 n-Butylbenzene	92	13.310	13.310	0.000	96	677663	5.00	5.22	
120 1,2-Dichlorobenzene	146	13.347	13.347	0.000	99	619126	5.00	5.07	
122 1,2-Dibromo-3-Chloropropane	155	13.889	13.889	0.000	91	32971	5.00	4.30	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	474681	5.00	4.86	
124 1,2,4-Trichlorobenzene	180	14.438	14.438	0.000	94	398463	5.00	4.89	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	95	171302	5.00	4.71	
126 Naphthalene	128	14.615	14.615	0.000	96	696237	5.00	4.52	
127 1,2,3-Trichlorobenzene	180	14.761	14.761	0.000	96	314752	5.00	4.44	
204 Pentane	43		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_VOC#1_00003	Amount Added:	5.38	Units: uL	
MSV_Q_EE_00004	Amount Added:	5.38	Units: uL	
MSV_Q_ETBR_00006	Amount Added:	5.38	Units: uL	
MSV_QC_Gas826_00003	Amount Added:	5.38	Units: uL	
MSV_LLcentISS_00001	Amount Added:	5.00	Units: uL	Run Reagent

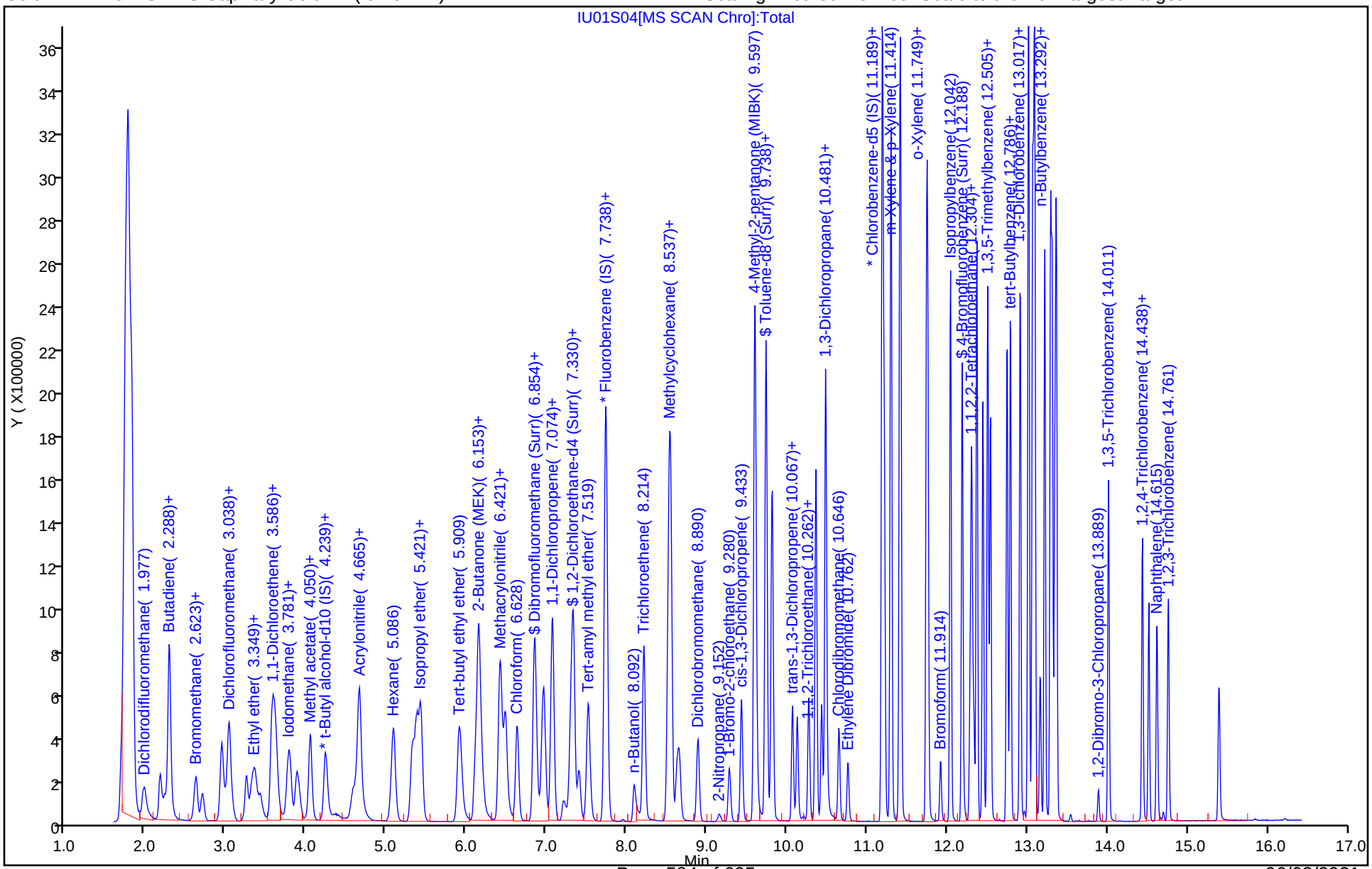
Report Date: 02-Jun-2021 14:18:21 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S04.D

Injection Date:	02-Jun-2021 01:53:30	Instrument ID:	19930	Operator ID:	MEC29284
Lims ID:	410-41319-A-6 MS			Worklist Smp#:	10
Client ID:	HD-COD-SW-15-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S04.D				
Lims ID:	410-41319-A-6 MS				
Client ID:	HD-COD-SW-15-0/1-0				
Sample Type:	MS				
Inject. Date:	02-Jun-2021 01:53:30	ALS Bottle#:	9	Worklist Smp#:	10
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0030814-010				
Misc. Info.:	410-41319-A-6 MS				
Operator ID:	MEC29284	Instrument ID:	19930		
Method:	\\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m				
Limit Group:	MSV - 8260C_D				
Last Update:	02-Jun-2021 14:16:43	Calib Date:	26-Mar-2021 01:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1617				
First Level Reviewer: riehlc		Date:	02-Jun-2021 14:08:39		

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	9.98	99.76
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.53	95.32
$ 75 Toluene-d8 (Surr)	10.0	9.92	99.20
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.63	96.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MSD Lab Sample ID: 410-41319-6 MSD

Matrix: Water Lab File ID: IU01S05.D

Analysis Method: 8260D Date Collected: 05/25/2021 11:30

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 02:15

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.: 132853 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.05		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.10		0.50	0.060
79-34-5	1,1,2,2-Tetrachloroethane	4.78		0.50	0.070
79-00-5	1,1,2-Trichloroethane	5.01		0.50	0.060
75-34-3	1,1-Dichloroethane	4.83		0.50	0.070
75-35-4	1,1-Dichloroethene	5.70		0.50	0.060
106-93-4	1,2-Dibromoethane (EDB)	4.78		0.50	0.060
107-06-2	1,2-Dichloroethane	4.34		0.50	0.050
78-87-5	1,2-Dichloropropane	4.98		0.50	0.060
78-93-3	2-Butanone (MEK)	60.0		5.0	0.60
591-78-6	2-Hexanone	60.6		5.0	0.60
108-10-1	4-Methyl-2-pentanone (MIBK)	60.0		5.0	0.70
67-64-1	Acetone	43.9		5.0	0.90
71-43-2	Benzene	5.13		0.50	0.050
74-97-5	Bromochloromethane	4.90		0.50	0.050
75-27-4	Bromodichloromethane	4.73		0.50	0.050
75-25-2	Bromoform	4.03		1.0	0.30
74-83-9	Bromomethane	5.30		0.50	0.070
75-15-0	Carbon disulfide	4.98		1.0	0.060
56-23-5	Carbon tetrachloride	5.20		0.50	0.070
108-90-7	Chlorobenzene	5.20		0.50	0.060
75-00-3	Chloroethane	4.93		0.50	0.070
67-66-3	Chloroform	5.23		0.50	0.090
74-87-3	Chloromethane	5.33		0.50	0.060
156-59-2	cis-1,2-Dichloroethene	5.87		0.50	0.050
10061-01-5	cis-1,3-Dichloropropene	4.54		0.50	0.050
124-48-1	Dibromochloromethane	4.58		0.50	0.070
100-41-4	Ethylbenzene	5.12		0.50	0.060
1634-04-4	Methyl tert-butyl ether	4.54		0.50	0.050
75-09-2	Methylene Chloride	5.07		0.50	0.070
100-42-5	Styrene	5.12		0.50	0.050
127-18-4	Tetrachloroethene	7.39		0.50	0.060
108-88-3	Toluene	5.19		0.50	0.070
156-60-5	trans-1,2-Dichloroethene	5.29		0.50	0.060
10061-02-6	trans-1,3-Dichloropropene	4.47		0.50	0.060
79-01-6	Trichloroethene	5.91		0.50	0.060

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories E Job No.: 410-41319-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MSD Lab Sample ID: 410-41319-6 MSD

Matrix: Water Lab File ID: IU01S05.D

Analysis Method: 8260D Date Collected: 05/25/2021 11:30

Sample wt/vol: 25(mL) Date Analyzed: 06/02/2021 02:15

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.: 132853 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-01-4	Vinyl chloride	5.61		0.50	0.10
1330-20-7	Xylenes, Total	15.7		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)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Env, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S05.D
Lims ID: 410-41319-A-6 MSD
Client ID: HD-COD-SW-15-0/1-0
Sample Type: MSD
Inject. Date: 02-Jun-2021 02:15:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-011
Misc. Info.: 410-41319-A-6 MSD
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 14:16:43 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: riehlc Date: 02-Jun-2021 14:10:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Dichlorodifluoromethane	85	1.983	1.977	0.006	99	368298	5.00	6.50	
4 Chloromethane	50	2.178	2.172	0.006	99	367773	5.00	5.33	
6 Butadiene	39	2.288	2.288	0.000	91	474027	5.00	7.76	
5 Vinyl chloride	62	2.294	2.294	0.000	82	350021	5.00	5.61	
7 Bromomethane	94	2.623	2.623	0.000	89	240059	5.00	5.30	
8 Chloroethane	64	2.702	2.702	0.000	99	192924	5.00	4.93	
9 Dichlorofluoromethane	67	2.946	2.946	0.000	96	468018	5.00	7.30	
10 Trichlorofluoromethane	101	3.019	3.019	0.000	98	463384	5.00	5.29	
11 Ethyl ether	59	3.251	3.251	0.000	90	194995	5.03	4.61	
12 1,2-Dichloro-1,1,2-trifluoroetha	67	3.355	3.349	0.006	91	355384	5.00	5.43	
13 Acrolein	56	3.428	3.422	0.006	99	215466	37.5	35.7	
14 1,1-Dichloroethene	96	3.574	3.574	0.000	97	268865	5.00	5.70	
15 Acetone	43	3.592	3.592	0.000	95	347663	62.6	43.9	
16 112TCTFE	101	3.617	3.611	0.006	90	294088	5.00	5.52	
17 Iodomethane	142	3.775	3.769	0.006	97	481095	5.00	5.14	
18 Ethyl bromide	108	3.794	3.800	-0.006	98	193625	5.04	4.54	
19 Carbon disulfide	76	3.885	3.885	0.000	99	695872	5.00	4.98	
21 Methyl acetate	43	4.019	4.019	0.000	97	107697	5.00	4.15	
22 3-Chloro-1-propene	41	4.050	4.050	0.000	95	407979	5.00	4.23	
* 24 t-Butyl alcohol-d10 (IS)	65	4.239	4.233	0.006	98	122112	50.0	50.0	
23 Methylene Chloride	84	4.239	4.245	-0.006	91	268889	5.00	5.07	
25 2-Methyl-2-propanol	59	4.373	4.367	0.006	99	112497	50.0	39.5	
26 Acrylonitrile	53	4.586	4.580	0.006	99	240784	25.0	24.8	
27 Methyl tert-butyl ether	73	4.653	4.647	0.006	86	628807	5.00	4.54	
28 trans-1,2-Dichloroethene	96	4.665	4.659	0.006	100	284497	5.00	5.29	
29 Hexane	57	5.086	5.080	0.006	91	428679	5.00	4.89	
31 1,1-Dichloroethane	63	5.324	5.318	0.006	96	502336	5.00	4.83	
32 Isopropyl ether	45	5.379	5.379	0.000	95	839831	5.00	4.36	
33 2-Chloro-1,3-butadiene	53	5.427	5.427	0.000	88	429276	5.00	4.69	
34 Tert-butyl ethyl ether	59	5.909	5.909	0.000	97	782824	5.00	4.47	
36 2-Butanone (MEK)	43	6.122	6.116	0.006	100	835642	62.6	60.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
37 cis-1,2-Dichloroethene	96	6.153	6.147	0.006	80	364751	5.00	5.87	
38 2,2-Dichloropropane	77	6.177	6.171	0.006	86	434901	5.00	4.83	
40 Propionitrile	54	6.214	6.202	0.012	98	110374	37.5	33.4	
42 Methacrylonitrile	67	6.415	6.415	0.000	90	510115	37.5	40.0	
43 Chlorobromomethane	128	6.482	6.482	0.000	92	135908	5.00	4.90	
44 Tetrahydrofuran	71	6.494	6.494	0.000	81	92899	25.0	25.3	
45 Chloroform	83	6.635	6.628	0.007	92	517573	5.00	5.23	
$ 46 Dibromofluoromethane (Surr)	113	6.848	6.848	0.000	94	454467	10.0	9.95	
47 1,1,1-Trichloroethane	97	6.860	6.860	0.000	98	459190	5.00	5.10	
48 Cyclohexane	56	6.964	6.958	0.006	90	534172	5.00	5.09	
50 Carbon tetrachloride	117	7.073	7.073	0.000	95	410564	5.00	5.20	
51 1,1-Dichloropropene	75	7.073	7.073	0.000	97	416782	5.00	5.23	
52 Isobutyl alcohol	41	7.208	7.214	-0.006	96	109372	125.1	106.6	
$ 53 1,2-Dichloroethane-d4 (Surr)	102	7.299	7.299	0.000	97	88314	10.0	9.88	
54 Benzene	78	7.336	7.336	0.000	96	1202136	5.00	5.13	
56 1,2-Dichloroethane	62	7.403	7.403	0.000	97	271552	5.00	4.34	
57 Tert-amyl methyl ether	73	7.519	7.518	0.000	100	711637	5.00	4.64	
* 58 Fluorobenzene (IS)	96	7.738	7.732	0.006	99	1816794	10.0	10.0	
59 n-Heptane	43	7.744	7.744	0.000	90	444668	5.00	4.48	
60 n-Butanol	56	8.098	8.092	0.006	86	200542	250.2	225.0	
61 Trichloroethene	95	8.213	8.213	0.000	97	359426	5.00	5.91	
62 Methylcyclohexane	83	8.524	8.518	0.006	91	594381	5.00	5.54	
63 1,2-Dichloropropane	63	8.549	8.549	0.000	96	301607	5.00	4.98	
64 Methyl methacrylate	69	8.628	8.622	0.006	91	131777	5.00	5.21	
65 1,4-Dioxane	88	8.640	8.634	0.006	30	25623	125.1	150.4	M
66 Dibromomethane	93	8.659	8.659	0.001	94	133508	5.00	4.85	
68 Dichlorobromomethane	83	8.890	8.890	0.000	99	340186	5.00	4.73	
69 2-Nitropropane	41	9.152	9.152	0.000	97	32000	5.00	4.05	
72 1-Bromo-2-chloroethane	63	9.280	9.280	0.000	98	283030	5.00	5.01	
73 cis-1,3-Dichloropropene	75	9.433	9.433	0.000	97	408727	5.00	4.54	
74 4-Methyl-2-pentanone (MIBK)	43	9.597	9.597	0.000	96	2145542	62.6	60.0	
$ 75 Toluene-d8 (Surr)	98	9.738	9.738	0.000	93	1813857	10.0	9.84	
76 Toluene	92	9.817	9.811	0.006	99	788072	5.00	5.19	
78 trans-1,3-Dichloropropene	75	10.067	10.067	0.000	91	330829	5.00	4.47	
79 Ethyl methacrylate	69	10.128	10.128	0.000	87	288369	5.00	4.54	
80 1,1,2-Trichloroethane	97	10.274	10.274	0.000	89	205439	5.00	5.01	
81 Tetrachloroethene	166	10.359	10.359	0.000	97	533420	5.00	7.39	
82 1,3-Dichloropropane	76	10.433	10.433	0.000	89	345770	5.00	4.79	
83 2-Hexanone	43	10.481	10.481	0.000	96	1519954	62.6	60.6	
85 Chlorodibromomethane	129	10.652	10.652	0.000	90	239234	5.00	4.58	
86 Ethylene Dibromide	107	10.762	10.762	0.000	98	191559	5.00	4.78	
* 87 Chlorobenzene-d5 (IS)	117	11.189	11.189	0.001	84	1409039	10.0	10.0	
88 1-Chlorohexane	91	11.195	11.195	0.000	95	469379	5.00	5.06	
90 Chlorobenzene	112	11.213	11.213	0.000	96	872067	5.00	5.20	
91 1,1,1,2-Tetrachloroethane	131	11.292	11.292	0.000	97	306808	5.00	5.05	
92 Ethylbenzene	91	11.298	11.298	0.000	98	1520396	5.00	5.12	
93 m-Xylene & p-Xylene	106	11.414	11.414	0.000	100	1227022	10.0	10.5	
94 o-Xylene	106	11.743	11.743	0.000	95	597366	5.00	5.24	
95 Styrene	104	11.755	11.755	0.000	95	952192	5.00	5.12	
96 Bromoform	173	11.914	11.920	-0.006	98	133180	5.00	4.03	
97 Isopropylbenzene	105	12.042	12.042	0.000	95	1601465	5.00	5.28	
$ 100 4-Bromofluorobenzene (Surr)	95	12.188	12.188	0.000	94	669742	10.0	9.56	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 1,1,2,2-Tetrachloroethane	83	12.286	12.286	0.000	93	255837	5.00	4.78	
102 Bromobenzene	156	12.304	12.304	0.000	91	366002	5.00	4.96	
103 trans-1,4-Dichloro-2-butene	53	12.310	12.310	0.000	56	87924	25.0	7.12	M
104 1,2,3-Trichloropropane	110	12.335	12.329	0.006	82	64814	5.00	4.55	
105 N-Propylbenzene	91	12.371	12.371	0.000	99	1861569	5.00	5.14	
106 2-Chlorotoluene	126	12.450	12.444	0.006	97	370351	5.00	5.03	
107 1,3,5-Trimethylbenzene	105	12.505	12.505	0.000	94	1294593	5.00	4.97	
108 4-Chlorotoluene	126	12.542	12.542	0.000	96	385680	5.00	5.13	
109 tert-Butylbenzene	134	12.749	12.749	0.000	91	289746	5.00	4.99	
111 1,2,4-Trimethylbenzene	105	12.792	12.786	0.006	97	1325504	5.00	4.96	
112 sec-Butylbenzene	105	12.908	12.908	0.000	94	1750259	5.00	5.11	
113 1,3-Dichlorobenzene	146	13.011	13.011	0.000	98	729834	5.00	4.98	
114 4-Isopropyltoluene	119	13.017	13.017	0.000	97	1490465	5.00	5.12	
* 115 1,4-Dichlorobenzene-d4	152	13.066	13.066	0.000	93	806918	10.0	10.0	
116 1,4-Dichlorobenzene	146	13.084	13.084	0.000	95	733968	5.00	5.02	
117 1,2,3-Trimethylbenzene	120	13.097	13.091	0.006	97	583921	5.00	5.05	
118 Benzyl chloride	126	13.158	13.158	0.000	98	109742	5.00	4.56	
119 n-Butylbenzene	92	13.310	13.310	0.000	96	715755	5.00	5.06	
120 1,2-Dichlorobenzene	146	13.347	13.347	0.000	99	663601	5.00	4.99	
122 1,2-Dibromo-3-Chloropropane	155	13.889	13.889	0.000	90	36240	5.00	4.34	
123 1,3,5-Trichlorobenzene	180	14.011	14.011	0.000	98	504119	5.00	4.73	
124 1,2,4-Trichlorobenzene	180	14.438	14.438	0.000	94	418216	5.00	4.71	
125 Hexachlorobutadiene	225	14.517	14.517	0.000	96	177064	5.00	4.46	
126 Naphthalene	128	14.615	14.615	0.000	97	771306	5.00	4.59	
127 1,2,3-Trichlorobenzene	180	14.761	14.761	0.000	96	345607	5.00	4.47	
204 Pentane	43		0.000				ND	ND	
137 2-Methylnaphthalene	142		0.000				ND	ND	
135 p-Diethylbenzene	1		0.000				ND	ND	
144 2-ethoxy-2-methyl butane	1		0.000				ND	ND	
134 Isopropyl alcohol	45		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_VOC#1_00003	Amount Added:	5.38	Units: uL	
MSV_Q_EE_00004	Amount Added:	5.38	Units: uL	
MSV_Q_ETBR_00006	Amount Added:	5.38	Units: uL	
MSV_QC_Gas826_00003	Amount Added:	5.38	Units: uL	
MSV_LLcentISS_00001	Amount Added:	5.00	Units: uL	Run Reagent

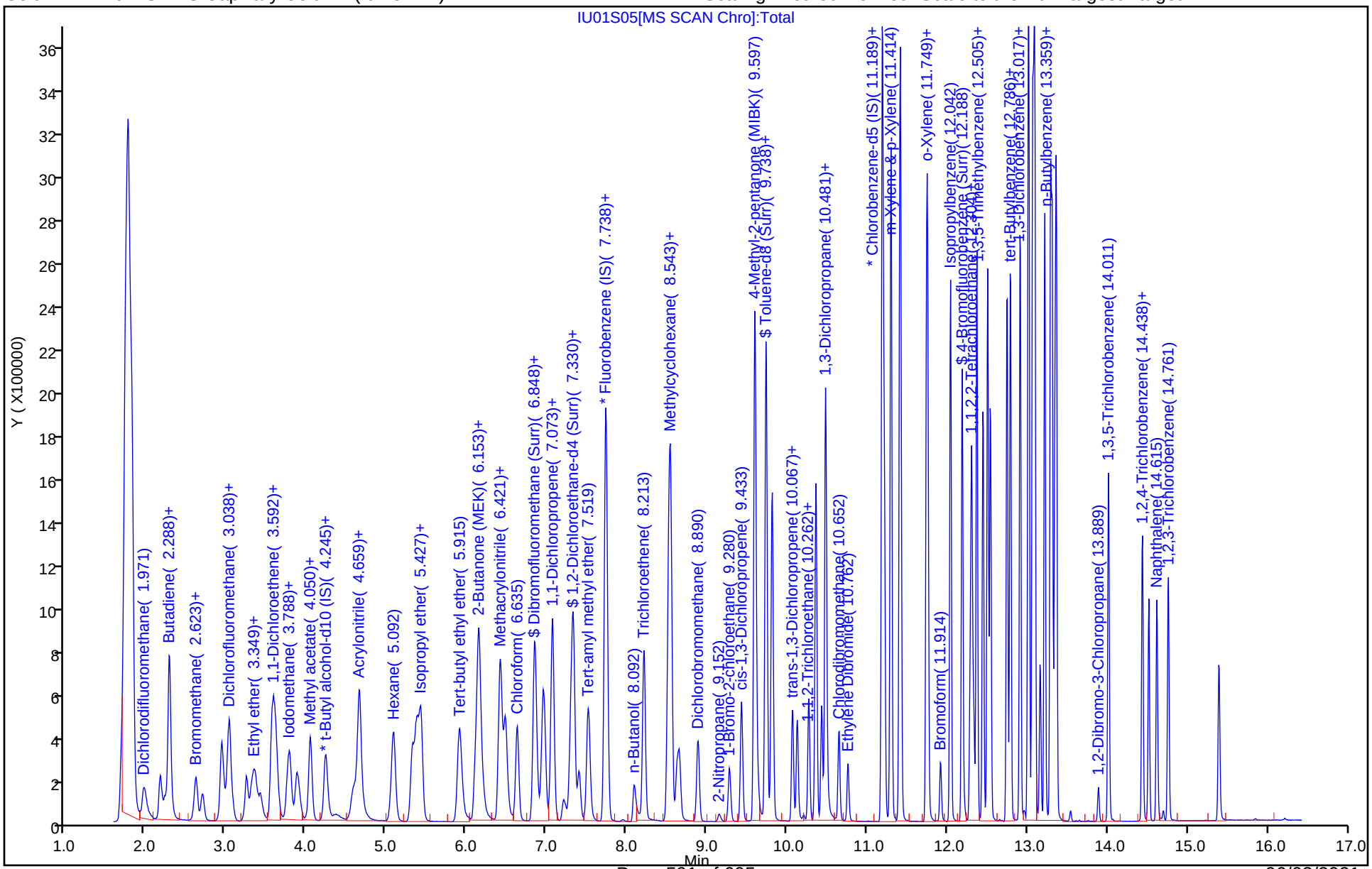
Report Date: 02-Jun-2021 14:18:25 Chrom Revision: 2.3 13-May-2021 07:57:40

Eurofins Lancaster Laboratories Env, LLC

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S05.D

Injection Date:	02-Jun-2021 02:15:30	Instrument ID:	19930	Operator ID:	MEC29284
Lims ID:	410-41319-A-6 MSD			Worklist Smp#:	11
Client ID:	HD-COD-SW-15-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	8260 25ml HP31	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Env, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\IU01S05.D
Lims ID: 410-41319-A-6 MSD
Client ID: HD-COD-SW-15-0/1-0
Sample Type: MSD
Inject. Date: 02-Jun-2021 02:15:30 ALS Bottle#: 10 Worklist Smp#: 11
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0030814-011
Misc. Info.: 410-41319-A-6 MSD
Operator ID: MEC29284 Instrument ID: 19930

Method: \\chromfs\Lancaster\ChromData\19930\20210601-30814.b\8260 25ml HP31.m
Limit Group: MSV - 8260C_D
Last Update: 02-Jun-2021 14:16:43 Calib Date: 26-Mar-2021 01:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19930\20210325-25078.b\IM25I07.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1617

First Level Reviewer: riehlc Date: 02-Jun-2021 14:10:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 46 Dibromofluoromethane (Surr)	10.0	9.95	99.48
$ 53 1,2-Dichloroethane-d4 (Surr)	10.0	9.88	98.77
$ 75 Toluene-d8 (Surr)	10.0	9.84	98.36
$ 100 4-Bromofluorobenzene (Surr)	10.0	9.56	95.59

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-41319-1

SDG No.:

Instrument ID: 19930 Start Date: 03/25/2021 19:32

Analysis Batch Number: 107390 End Date: 03/26/2021 01:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-107390/1		03/25/2021 19:32	1	IM25T01.D	R-624SilMS 30m 0.25(mm)
IC 410-107390/3		03/25/2021 20:09	1		R-624SilMS 30m 0.25(mm)
IC 410-107390/4		03/25/2021 20:30	1		R-624SilMS 30m 0.25(mm)
IC 410-107390/5		03/25/2021 20:51	1		R-624SilMS 30m 0.25(mm)
IC 410-107390/6		03/25/2021 21:12	1		R-624SilMS 30m 0.25(mm)
IC 410-107390/7		03/25/2021 21:33	1		R-624SilMS 30m 0.25(mm)
IC 410-107390/8		03/25/2021 21:55	1		R-624SilMS 30m 0.25(mm)
IC 410-107390/9		03/25/2021 22:16	1		R-624SilMS 30m 0.25(mm)
ICV 410-107390/10		03/25/2021 22:37	1		R-624SilMS 30m 0.25(mm)
IC 410-107390/12		03/25/2021 23:19	1	IM25I01.D	R-624SilMS 30m 0.25(mm)
ICIS 410-107390/13		03/25/2021 23:41	1	IM25I02.D	R-624SilMS 30m 0.25(mm)
IC 410-107390/14		03/26/2021 00:02	1	IM25I03.D	R-624SilMS 30m 0.25(mm)
IC 410-107390/15		03/26/2021 00:23	1	IM25I04.D	R-624SilMS 30m 0.25(mm)
IC 410-107390/16		03/26/2021 00:44	1	IM25I05.D	R-624SilMS 30m 0.25(mm)
IC 410-107390/17		03/26/2021 01:05	1	IM25I06.D	R-624SilMS 30m 0.25(mm)
IC 410-107390/18		03/26/2021 01:26	1	IM25I07.D	R-624SilMS 30m 0.25(mm)
ICV 410-107390/19		03/26/2021 01:47	1	IM25V01.D	R-624SilMS 30m 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Env, Job No.: 410-41319-1

SDG No.:

Instrument ID: 19930 Start Date: 06/01/2021 22:39

Analysis Batch Number: 132853 End Date: 06/02/2021 09:41

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-132853/1		06/01/2021 22:39	1	IU01T04.D	R-624SilMS 30m 0.25(mm)
CCVIS 410-132853/3		06/01/2021 23:12	1	IU01C01.D	R-624SilMS 30m 0.25(mm)
LCS 410-132853/4		06/01/2021 23:34	1	IU01L01.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		06/01/2021 23:55	1		R-624SilMS 30m 0.25(mm)
MB 410-132853/6		06/02/2021 00:16	1	IU01B01.D	R-624SilMS 30m 0.25(mm)
410-41319-14	HD-QC1-0/1-2	06/02/2021 00:49	1	IU01S01.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		06/02/2021 01:11	1		R-624SilMS 30m 0.25(mm)
410-41319-6	HD-COD-SW-15-0/1-0	06/02/2021 01:32	1	IU01S03.D	R-624SilMS 30m 0.25(mm)
410-41319-6 MS	HD-COD-SW-15-0/1-0 MS	06/02/2021 01:53	1	IU01S04.D	R-624SilMS 30m 0.25(mm)
410-41319-6 MSD	HD-COD-SW-15-0/1-0 MSD	06/02/2021 02:15	1	IU01S05.D	R-624SilMS 30m 0.25(mm)
410-41319-13	HD-QC1-0/1-1	06/02/2021 02:57	1	IU01S07.D	R-624SilMS 30m 0.25(mm)
410-41319-1	HD-COD-SW-6-0/1-0	06/02/2021 03:18	1	IU01S08.D	R-624SilMS 30m 0.25(mm)
410-41319-2	HD-COD-SW-7-0/1-0	06/02/2021 03:39	1	IU01S09.D	R-624SilMS 30m 0.25(mm)
410-41319-3	HD-COD-SW-8-0/1-0	06/02/2021 04:00	1	IU01S10.D	R-624SilMS 30m 0.25(mm)
410-41319-4	HD-COD-SW-9-0/1-0	06/02/2021 04:21	1	IU01S11.D	R-624SilMS 30m 0.25(mm)
410-41319-5	HD-COD-SW-13-0/1-0	06/02/2021 04:43	1	IU01S12.D	R-624SilMS 30m 0.25(mm)
410-41319-7	HD-COD-SW-16-0/1-0	06/02/2021 05:04	1	IU01S13.D	R-624SilMS 30m 0.25(mm)
410-41319-8	HD-COD-SW-17-0/1-0	06/02/2021 05:25	1	IU01S14.D	R-624SilMS 30m 0.25(mm)
410-41319-9	HD-COD-SW-26-0/1-0	06/02/2021 05:47	1	IU01S15.D	R-624SilMS 30m 0.25(mm)
410-41319-10	HD-COD-SW-27-0/1-0	06/02/2021 06:08	1	IU01S16.D	R-624SilMS 30m 0.25(mm)
410-41319-11	HD-COD-SW-28-0/1-0	06/02/2021 06:29	1	IU01S17.D	R-624SilMS 30m 0.25(mm)
410-41319-12	HD-COD-SW-29-0/1-0	06/02/2021 06:50	1	IU01S18.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		06/02/2021 07:11	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		06/02/2021 07:33	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		06/02/2021 07:54	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		06/02/2021 08:15	10		R-624SilMS 30m 0.25(mm)
ZZZZZ		06/02/2021 08:37	100		R-624SilMS 30m 0.25(mm)
ZZZZZ		06/02/2021 08:58	10		R-624SilMS 30m 0.25(mm)
ZZZZZ		06/02/2021 09:19	100		R-624SilMS 30m 0.25(mm)
ZZZZZ		06/02/2021 09:41	10		R-624SilMS 30m 0.25(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-41319-1

SDG No.:

Batch Number: 107390 Batch Start Date: 03/25/21 19:32 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_31_826ISS 00004	MSV_Q_EE 00003	MSV_Q_ETBR 00006
BFB 410-107390/1		8260D		1 uL	1 uL				
IC 410-107390/12		8260D		25 mL	25 mL	0126201F	5 uL		
ICIS 410-107390/13		8260D		25 mL	25 mL	0126201F	5 uL		
IC 410-107390/14		8260D		25 mL	25 mL	0126201F	5 uL		
IC 410-107390/15		8260D		25 mL	25 mL	0126201F	5 uL		
IC 410-107390/16		8260D		25 mL	25 mL	0126201F	5 uL		
IC 410-107390/17		8260D		25 mL	25 mL	0126201F	5 uL		
IC 410-107390/18		8260D		25 mL	25 mL	0126201F	5 uL		
ICV 410-107390/19		8260D		25 mL	25 mL	0126201F	5 uL	12.5 uL	12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_QARC 00073	MSV_Q_QVOA1 00073	MSV_Q_QVOA6 00071	MSV_QGAS_826 00118	MSV_RV1_826 00042	MSV_RV4_826 00048
BFB 410-107390/1		8260D							
IC 410-107390/12		8260D						25 uL	25 uL
ICIS 410-107390/13		8260D						10 uL	10 uL
IC 410-107390/14		8260D						5 uL	5 uL
IC 410-107390/15		8260D						2 uL	2 uL
IC 410-107390/16		8260D						2 uL	2 uL
IC 410-107390/17		8260D						2 uL	2 uL
IC 410-107390/18		8260D						2 uL	2 uL
ICV 410-107390/19		8260D		12.5 uL	12.5 uL	12.5 uL	12.5 uL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-41319-1

SDG No.:

Batch Number: 107390 Batch Start Date: 03/25/21 19:32 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_RV4GAS826 00121	MSV_V_BFB 00004				
BFB 410-107390/1		8260D			1 uL				
IC 410-107390/12		8260D		25 uL					
ICIS 410-107390/13		8260D		10 uL					
IC 410-107390/14		8260D		5 uL					
IC 410-107390/15		8260D		2 uL					
IC 410-107390/16		8260D		2 uL					
IC 410-107390/17		8260D		2 uL					
IC 410-107390/18		8260D		2 uL					
ICV 410-107390/19		8260D							

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.: 410-41319-1

SDG No.:

Batch Number: 132853 Batch Start Date: 06/01/21 22:39 Batch Analyst: Knouse, Shian

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloCheck	Headspace	Lot#Vial
BFB 410-132853/1		8260D		1 uL	1 uL				
CCVIS 410-132853/3		8260D		25 mL	25 mL				2593
LCS 410-132853/4		8260D		25 mL	25 mL				2593
MB 410-132853/6		8260D		25 mL	25 mL				2593
410-41319-A-14	HD-QC1-0/1-2	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-41319-A-6	HD-COD-SW-15-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-41319-A-6 MS	HD-COD-SW-15-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-41319-A-6 MSD	HD-COD-SW-15-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-41319-A-13	HD-QC1-0/1-1	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-41319-A-1	HD-COD-SW-6-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-41319-A-2	HD-COD-SW-7-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-41319-A-3	HD-COD-SW-8-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-41319-A-4	HD-COD-SW-9-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-41319-A-5	HD-COD-SW-13-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-41319-A-7	HD-COD-SW-16-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-41319-A-8	HD-COD-SW-17-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-41319-A-9	HD-COD-SW-26-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-41319-A-10	HD-COD-SW-27-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-41319-A-11	HD-COD-SW-28-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-41319-A-12	HD-COD-SW-29-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LCS_Penta 00002	MSV_LCS_VOC#1 00003	MSV_LL_#1_826 00002	MSV_LL_#2_826 00001	MSV_LL_GAS826 00003	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.: 410-41319-1

SDG No.:

Batch Number: 132853 Batch Start Date: 06/01/21 22:39 Batch Analyst: Knouse, Shian

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LCS_Penta 00002	MSV_LCS_VOC#1 00003	MSV_LL_#1_826 00002	MSV_LL_#2_826 00001	MSV_LL_GAS826 00003	MSV_LLcentISS 00001
BFB 410-132853/1		8260D							
CCVIS 410-132853/3		8260D				25 uL	25 uL	25 uL	5 uL
LCS 410-132853/4		8260D		12.5 uL	12.5 uL				5 uL
MB 410-132853/6		8260D							5 uL
410-41319-A-14	HD-QC1-0/1-2	8260D	T						5 uL
410-41319-A-6	HD-COD-SW-15-0/1-0	8260D	T						5 uL
410-41319-A-6 MS	HD-COD-SW-15-0/1-0	8260D	T		5.38 uL				5 uL
410-41319-A-6 MSD	HD-COD-SW-15-0/1-0	8260D	T		5.38 uL				5 uL
410-41319-A-13	HD-QC1-0/1-1	8260D	T						5 uL
410-41319-A-1	HD-COD-SW-6-0/1-0	8260D	T						5 uL
410-41319-A-2	HD-COD-SW-7-0/1-0	8260D	T						5 uL
410-41319-A-3	HD-COD-SW-8-0/1-0	8260D	T						5 uL
410-41319-A-4	HD-COD-SW-9-0/1-0	8260D	T						5 uL
410-41319-A-5	HD-COD-SW-13-0/1-0	8260D	T						5 uL
410-41319-A-7	HD-COD-SW-16-0/1-0	8260D	T						5 uL
410-41319-A-8	HD-COD-SW-17-0/1-0	8260D	T						5 uL
410-41319-A-9	HD-COD-SW-26-0/1-0	8260D	T						5 uL
410-41319-A-10	HD-COD-SW-27-0/1-0	8260D	T						5 uL
410-41319-A-11	HD-COD-SW-28-0/1-0	8260D	T						5 uL
410-41319-A-12	HD-COD-SW-29-0/1-0	8260D	T						5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_EE 00004	MSV_Q_ETBR 00006	MSV_QC_Gas826 00003	MSV_V_BFB 00005		

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.: 410-41319-1

SDG No.:

Batch Number: 132853 Batch Start Date: 06/01/21 22:39 Batch Analyst: Knouse, Shian

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Q_EE 00004	MSV_Q_ETBR 00006	MSV_QC_Gas826 00003	MSV_V_BFB 00005		
BFB 410-132853/1		8260D					1 uL		
CCVIS 410-132853/3		8260D							
LCS 410-132853/4		8260D		12.5 uL	12.5 uL	12.5 uL			
MB 410-132853/6		8260D							
410-41319-A-14	HD-QC1-0/1-2	8260D	T						
410-41319-A-6	HD-COD-SW-15-0/1-0	8260D	T						
410-41319-A-6 MS	HD-COD-SW-15-0/1-0	8260D	T	5.38 uL	5.38 uL	5.38 uL			
410-41319-A-6 MSD	HD-COD-SW-15-0/1-0	8260D	T	5.38 uL	5.38 uL	5.38 uL			
410-41319-A-13	HD-QC1-0/1-1	8260D	T						
410-41319-A-1	HD-COD-SW-6-0/1-0	8260D	T						
410-41319-A-2	HD-COD-SW-7-0/1-0	8260D	T						
410-41319-A-3	HD-COD-SW-8-0/1-0	8260D	T						
410-41319-A-4	HD-COD-SW-9-0/1-0	8260D	T						
410-41319-A-5	HD-COD-SW-13-0/1-0	8260D	T						
410-41319-A-7	HD-COD-SW-16-0/1-0	8260D	T						
410-41319-A-8	HD-COD-SW-17-0/1-0	8260D	T						
410-41319-A-9	HD-COD-SW-26-0/1-0	8260D	T						
410-41319-A-10	HD-COD-SW-27-0/1-0	8260D	T						
410-41319-A-11	HD-COD-SW-28-0/1-0	8260D	T						
410-41319-A-12	HD-COD-SW-29-0/1-0	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.: 410-41319-1

SDG No.:

Batch Number: 132853 Batch Start Date: 06/01/21 22:39 Batch Analyst: Knouse, Shian

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

Environm[illegible] uest/Chain of Custody

eurofins

Lancaster Laboratories Environmental

410-41319 Chain of Custody

Acct. [illegible] ple # _____

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:	Total # of Containers	Analyses Requested: Aqueous VOCs via 8260D (low level - 25 ml purge)	Preservation Codes: H
HD-COD-SW-6-0/1-0	5/25/21	1025	X					X					3	X	
HD-COD-SW-7-0/1-0		1105	X					X					3	X	
HD-COD-SW-8-0/1-0		0910	X					X					3	X	
HD-COD-SW-9-0/1-0		1210	X					X					3	X	
HD-COD-SW-13-0/1-0		0925	X					X					3	X	
HD-COD-SW-15-0/1-0		1130	X					X					3	X	
HD-COD-SW-15-0/1-0 MS		1130	X					X					3	X	
HD-COD-SW-15-0/1-0 MSD		1130	X					X					3	X	
HD-COD-SW-16-0/1-0		0950	X					X					3	X	
HD-COD-SW-17-0/1-0		1005	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]	5/25/21	1530	[signature]	05/25/21	1530
[signature]	05/26/21	1322	[signature]	5/26/21	1322
[signature]	5/26/21	1430			
			[signature]	5/26/21	1533

Relinquished by Commercial Carrier:

UPS _____ FedEx _____ Other X

Temperature upon receipt 19 °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 ☐ NPDES ☐ Surface ☑	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	5.25.21	1045	X			X		3	X	
HD-COD-SW-27-0/1-0	↓	1120	X			X		3	X	
HD-COD-SW-28-0/1-0		1225	X			X		3	X	
HD-COD-SW-29-0/1-0		0850	X			X		3	X	
HD-QC1-0/1-1		1200	X			X		3	X	
HD-QC1-0/1-2	↓	—	X				X	2	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]	5/25/21	1530	[signature]	05/25/21	1530
[signature]	05/26/21	1322	[signature]	5/26/21	1322
[signature]	5/26/21	1430			
			[signature]	5/26/21	1833

Relinquished by Commercial Carrier:

UPS _____ FedEx _____ Other X

Temperature upon receipt 1.9 °C

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 410-41319-1

Login Number: 41319
List Number: 1
Creator: Reiff, Nicole L

List Source: Eurofins Lancaster Laboratories Env, LLC

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.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=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: 410-41319-1

Login Number: 41319
List Number: 2
Creator: Knoedler, Christine M

List Source: Eurofins Lancaster Laboratories Env, LLC

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time (excluding tests with immediate HTs)		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		