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ANALYTICAL REPORT

PREPARED FOR

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

Generated 1/3/2023 6:34 PM

JOB DESCRIPTION

fYNOP Monthly Surface Water

JOB NUMBER

410-110288-1

Eurofins Lancaster Laboratories Environment Testing, LLC
2425 New Holland Pike
Lancaster PA 17601

See page two for job notes and contact information.

Eurofins Lancaster Laboratories Environment Testing, LLC

Job Notes

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

Authorization

Generated
1/3/2023 6:34 PM

Authorized for release by
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Table of Contents

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
cn	Refer to Case Narrative for further detail
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
410-110288-1

Receipt
The samples were received on 12/22/2022 5:58 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 3.2°C

GC/MS VOA
Method 8260D_LL: The continuing calibration verification (CCV) associated with batch 410-330696 recovered outside acceptance criteria, low biased, for 1,1-Dichloroethene. 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
Job ID: 410-110288-1
Project/Site: fYNOP Monthly Surface Water

Client Sample ID: HD-COD-SW-6-0/1-0 — Lab Sample ID: 410-110288-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.4	J	5.0	1.0	ug/L	1		8260D	Total/NA
Chloromethane	0.10	J	0.50	0.10	ug/L	1		8260D	Total/NA
Trichloroethene	0.097	J	0.50	0.080	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-7-0/1-0 — Lab Sample ID: 410-110288-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.5	J	5.0	1.0	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.099	J	0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	0.14	J	0.50	0.080	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-8-0/1-0 — Lab Sample ID: 410-110288-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.7	J	5.0	1.0	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.13	J	0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.39	J	0.50	0.20	ug/L	1		8260D	Total/NA
Trichloroethene	0.15	J	0.50	0.080	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-9-0/1-0 — Lab Sample ID: 410-110288-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.2	J	5.0	1.0	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.12	J	0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	0.13	J	0.50	0.080	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-13-0/1-0 — Lab Sample ID: 410-110288-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.9	J	5.0	1.0	ug/L	1		8260D	Total/NA
Chloromethane	0.11	J	0.50	0.10	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.12	J	0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.47	J	0.50	0.20	ug/L	1		8260D	Total/NA
Trichloroethene	0.15	J	0.50	0.080	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-15-0/1-0 — Lab Sample ID: 410-110288-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.42	J	0.50	0.080	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	0.16	J	0.50	0.10	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.20	J ^c cn	0.50	0.10	ug/L	1		8260D	Total/NA
Chloroform	0.28	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	2.4		0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene	6.4		0.50	0.20	ug/L	1		8260D	Total/NA
Trichloroethene	1.9		0.50	0.080	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-16-0/1-0 — Lab Sample ID: 410-110288-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.2	J	5.0	1.0	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.12	J	0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.71		0.50	0.20	ug/L	1		8260D	Total/NA
Trichloroethene	0.16	J	0.50	0.080	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Groundwater Sciences Corporation
Job ID: 410-110288-1
Project/Site: fYNOP Monthly Surface Water

Client Sample ID: HD-COD-SW-17-0/1-0
Lab Sample ID: 410-110288-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	6.1		0.50	0.080	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	1.2		0.50	0.10	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.56	^c cn	0.50	0.10	ug/L	1		8260D	Total/NA
Chloroform	0.25	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	3.5		0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	4.4		0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene - DL	69		5.0	2.0	ug/L	10		8260D	Total/NA

Client Sample ID: HD-COD-SW-26-0/1-0
Lab Sample ID: 410-110288-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.13	J ^c cn	0.50	0.10	ug/L	1		8260D	Total/NA
Chloroform	0.42	J	0.50	0.090	ug/L	1		8260D	Total/NA
Tetrachloroethene	2.9		0.50	0.20	ug/L	1		8260D	Total/NA
Trichloroethene	0.18	J	0.50	0.080	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-27-0/1-0
Lab Sample ID: 410-110288-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.0	J	5.0	1.0	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.11	J	0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	0.14	J	0.50	0.080	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-28-0/1-0
Lab Sample ID: 410-110288-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.6	J	5.0	1.0	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.15	J	0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.24	J	0.50	0.20	ug/L	1		8260D	Total/NA
Trichloroethene	0.15	J	0.50	0.080	ug/L	1		8260D	Total/NA

Client Sample ID: HD-COD-SW-29-0/1-0
Lab Sample ID: 410-110288-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.6	J	5.0	1.0	ug/L	1		8260D	Total/NA
Chloromethane	0.12	J	0.50	0.10	ug/L	1		8260D	Total/NA
Tetrachloroethene	0.28	J	0.50	0.20	ug/L	1		8260D	Total/NA
Trichloroethene	0.14	J	0.50	0.080	ug/L	1		8260D	Total/NA

Client Sample ID: HD-QC1-0/1-1
Lab Sample ID: 410-110288-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	6.3		0.50	0.080	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	1.2		0.50	0.10	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.56	^c cn	0.50	0.10	ug/L	1		8260D	Total/NA
Chloroform	0.27	J	0.50	0.090	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	3.7		0.50	0.080	ug/L	1		8260D	Total/NA
Trichloroethene	4.4		0.50	0.080	ug/L	1		8260D	Total/NA
Tetrachloroethene - DL	70		5.0	2.0	ug/L	10		8260D	Total/NA

Client Sample ID: HD-QC1-0/1-2
Lab Sample ID: 410-110288-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.9	J	5.0	1.0	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

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

Lab Sample ID: 410-110288-1

Date Collected: 12/21/22 10:25

Matrix: Water

Date Received: 12/22/22 17:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/28/22 13:31	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 13:31	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/28/22 13:31	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 13:31	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/28/22 13:31	1
1,1-Dichloroethene	ND	^c cn	0.50	0.10	ug/L			12/28/22 13:31	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/28/22 13:31	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/28/22 13:31	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/28/22 13:31	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/28/22 13:31	1
2-Hexanone	ND		5.0	0.10	ug/L			12/28/22 13:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/28/22 13:31	1
Acetone	**2.4**	**J**	5.0	1.0	ug/L			12/28/22 13:31	1
Benzene	ND		0.50	0.10	ug/L			12/28/22 13:31	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/28/22 13:31	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/28/22 13:31	1
Bromoform	ND		1.0	0.30	ug/L			12/28/22 13:31	1
Bromomethane	ND		0.50	0.10	ug/L			12/28/22 13:31	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/28/22 13:31	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/28/22 13:31	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/28/22 13:31	1
Chloroethane	ND		0.50	0.10	ug/L			12/28/22 13:31	1
Chloroform	ND		0.50	0.090	ug/L			12/28/22 13:31	1
Chloromethane	**0.10**	**J**	0.50	0.10	ug/L			12/28/22 13:31	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			12/28/22 13:31	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/28/22 13:31	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/28/22 13:31	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/28/22 13:31	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/28/22 13:31	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/28/22 13:31	1
Styrene	ND		0.50	0.070	ug/L			12/28/22 13:31	1
Tetrachloroethene	ND		0.50	0.20	ug/L			12/28/22 13:31	1
Toluene	ND		0.50	0.080	ug/L			12/28/22 13:31	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/28/22 13:31	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/28/22 13:31	1
Trichloroethene	**0.097**	**J**	0.50	0.080	ug/L			12/28/22 13:31	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/28/22 13:31	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/28/22 13:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*12/28/22 13:31*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*12/28/22 13:31*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*12/28/22 13:31*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*12/28/22 13:31*	*1*

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

Lab Sample ID: 410-110288-2

Date Collected: 12/21/22 11:05

Matrix: Water

Date Received: 12/22/22 17:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/28/22 13:53	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 13:53	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/28/22 13:53	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 13:53	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/28/22 13:53	1
1,1-Dichloroethene	ND	^c cn	0.50	0.10	ug/L			12/28/22 13:53	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/28/22 13:53	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/28/22 13:53	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/28/22 13:53	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/28/22 13:53	1
2-Hexanone	ND		5.0	0.10	ug/L			12/28/22 13:53	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/28/22 13:53	1
Acetone	**2.5**	**J**	5.0	1.0	ug/L			12/28/22 13:53	1
Benzene	ND		0.50	0.10	ug/L			12/28/22 13:53	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/28/22 13:53	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/28/22 13:53	1
Bromoform	ND		1.0	0.30	ug/L			12/28/22 13:53	1
Bromomethane	ND		0.50	0.10	ug/L			12/28/22 13:53	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/28/22 13:53	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/28/22 13:53	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/28/22 13:53	1
Chloroethane	ND		0.50	0.10	ug/L			12/28/22 13:53	1
Chloroform	ND		0.50	0.090	ug/L			12/28/22 13:53	1
Chloromethane	ND		0.50	0.10	ug/L			12/28/22 13:53	1
cis-1,2-Dichloroethene	**0.099**	**J**	0.50	0.080	ug/L			12/28/22 13:53	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/28/22 13:53	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/28/22 13:53	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/28/22 13:53	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/28/22 13:53	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/28/22 13:53	1
Styrene	ND		0.50	0.070	ug/L			12/28/22 13:53	1
Tetrachloroethene	ND		0.50	0.20	ug/L			12/28/22 13:53	1
Toluene	ND		0.50	0.080	ug/L			12/28/22 13:53	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/28/22 13:53	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/28/22 13:53	1
Trichloroethene	**0.14**	**J**	0.50	0.080	ug/L			12/28/22 13:53	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/28/22 13:53	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/28/22 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*12/28/22 13:53*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*12/28/22 13:53*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*12/28/22 13:53*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*12/28/22 13:53*	*1*

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

Lab Sample ID: 410-110288-3

Date Collected: 12/21/22 09:00

Matrix: Water

Date Received: 12/22/22 17:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/28/22 14:16	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 14:16	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/28/22 14:16	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 14:16	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/28/22 14:16	1
1,1-Dichloroethene	ND	^c cn	0.50	0.10	ug/L			12/28/22 14:16	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/28/22 14:16	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/28/22 14:16	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/28/22 14:16	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/28/22 14:16	1
2-Hexanone	ND		5.0	0.10	ug/L			12/28/22 14:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/28/22 14:16	1
Acetone	**2.7**	**J**	5.0	1.0	ug/L			12/28/22 14:16	1
Benzene	ND		0.50	0.10	ug/L			12/28/22 14:16	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/28/22 14:16	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/28/22 14:16	1
Bromoform	ND		1.0	0.30	ug/L			12/28/22 14:16	1
Bromomethane	ND		0.50	0.10	ug/L			12/28/22 14:16	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/28/22 14:16	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/28/22 14:16	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/28/22 14:16	1
Chloroethane	ND		0.50	0.10	ug/L			12/28/22 14:16	1
Chloroform	ND		0.50	0.090	ug/L			12/28/22 14:16	1
Chloromethane	ND		0.50	0.10	ug/L			12/28/22 14:16	1
cis-1,2-Dichloroethene	**0.13**	**J**	0.50	0.080	ug/L			12/28/22 14:16	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/28/22 14:16	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/28/22 14:16	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/28/22 14:16	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/28/22 14:16	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/28/22 14:16	1
Styrene	ND		0.50	0.070	ug/L			12/28/22 14:16	1
Tetrachloroethene	**0.39**	**J**	0.50	0.20	ug/L			12/28/22 14:16	1
Toluene	ND		0.50	0.080	ug/L			12/28/22 14:16	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/28/22 14:16	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/28/22 14:16	1
Trichloroethene	**0.15**	**J**	0.50	0.080	ug/L			12/28/22 14:16	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/28/22 14:16	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/28/22 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*12/28/22 14:16*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*12/28/22 14:16*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*12/28/22 14:16*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/28/22 14:16*	*1*

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

Lab Sample ID: 410-110288-4

Date Collected: 12/21/22 12:45

Matrix: Water

Date Received: 12/22/22 17:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/28/22 14:38	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 14:38	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/28/22 14:38	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 14:38	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/28/22 14:38	1
1,1-Dichloroethene	ND	^c cn	0.50	0.10	ug/L			12/28/22 14:38	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/28/22 14:38	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/28/22 14:38	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/28/22 14:38	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/28/22 14:38	1
2-Hexanone	ND		5.0	0.10	ug/L			12/28/22 14:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/28/22 14:38	1
Acetone	**2.2**	**J**	5.0	1.0	ug/L			12/28/22 14:38	1
Benzene	ND		0.50	0.10	ug/L			12/28/22 14:38	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/28/22 14:38	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/28/22 14:38	1
Bromoform	ND		1.0	0.30	ug/L			12/28/22 14:38	1
Bromomethane	ND		0.50	0.10	ug/L			12/28/22 14:38	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/28/22 14:38	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/28/22 14:38	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/28/22 14:38	1
Chloroethane	ND		0.50	0.10	ug/L			12/28/22 14:38	1
Chloroform	ND		0.50	0.090	ug/L			12/28/22 14:38	1
Chloromethane	ND		0.50	0.10	ug/L			12/28/22 14:38	1
cis-1,2-Dichloroethene	**0.12**	**J**	0.50	0.080	ug/L			12/28/22 14:38	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/28/22 14:38	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/28/22 14:38	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/28/22 14:38	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/28/22 14:38	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/28/22 14:38	1
Styrene	ND		0.50	0.070	ug/L			12/28/22 14:38	1
Tetrachloroethene	ND		0.50	0.20	ug/L			12/28/22 14:38	1
Toluene	ND		0.50	0.080	ug/L			12/28/22 14:38	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/28/22 14:38	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/28/22 14:38	1
Trichloroethene	**0.13**	**J**	0.50	0.080	ug/L			12/28/22 14:38	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/28/22 14:38	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/28/22 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*12/28/22 14:38*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*12/28/22 14:38*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*12/28/22 14:38*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/28/22 14:38*	*1*

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

Lab Sample ID: 410-110288-5

Date Collected: 12/21/22 09:22

Matrix: Water

Date Received: 12/22/22 17:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/28/22 15:00	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 15:00	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/28/22 15:00	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 15:00	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/28/22 15:00	1
1,1-Dichloroethene	ND	^c cn	0.50	0.10	ug/L			12/28/22 15:00	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/28/22 15:00	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/28/22 15:00	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/28/22 15:00	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/28/22 15:00	1
2-Hexanone	ND		5.0	0.10	ug/L			12/28/22 15:00	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/28/22 15:00	1
Acetone	**3.9**	**J**	5.0	1.0	ug/L			12/28/22 15:00	1
Benzene	ND		0.50	0.10	ug/L			12/28/22 15:00	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/28/22 15:00	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/28/22 15:00	1
Bromoform	ND		1.0	0.30	ug/L			12/28/22 15:00	1
Bromomethane	ND		0.50	0.10	ug/L			12/28/22 15:00	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/28/22 15:00	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/28/22 15:00	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/28/22 15:00	1
Chloroethane	ND		0.50	0.10	ug/L			12/28/22 15:00	1
Chloroform	ND		0.50	0.090	ug/L			12/28/22 15:00	1
Chloromethane	**0.11**	**J**	0.50	0.10	ug/L			12/28/22 15:00	1
cis-1,2-Dichloroethene	**0.12**	**J**	0.50	0.080	ug/L			12/28/22 15:00	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/28/22 15:00	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/28/22 15:00	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/28/22 15:00	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/28/22 15:00	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/28/22 15:00	1
Styrene	ND		0.50	0.070	ug/L			12/28/22 15:00	1
Tetrachloroethene	**0.47**	**J**	0.50	0.20	ug/L			12/28/22 15:00	1
Toluene	ND		0.50	0.080	ug/L			12/28/22 15:00	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/28/22 15:00	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/28/22 15:00	1
Trichloroethene	**0.15**	**J**	0.50	0.080	ug/L			12/28/22 15:00	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/28/22 15:00	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/28/22 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*12/28/22 15:00*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*12/28/22 15:00*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*12/28/22 15:00*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*12/28/22 15:00*	*1*

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

Lab Sample ID: 410-110288-6

Date Collected: 12/21/22 11:30

Matrix: Water

Date Received: 12/22/22 17:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/28/22 15:23	1
1,1,1-Trichloroethane	**0.42**	**J**	0.50	0.080	ug/L			12/28/22 15:23	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/28/22 15:23	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 15:23	1
1,1-Dichloroethane	**0.16**	**J**	0.50	0.10	ug/L			12/28/22 15:23	1
1,1-Dichloroethene	**0.20**	**J ^c cn**	0.50	0.10	ug/L			12/28/22 15:23	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/28/22 15:23	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/28/22 15:23	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/28/22 15:23	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/28/22 15:23	1
2-Hexanone	ND		5.0	0.10	ug/L			12/28/22 15:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/28/22 15:23	1
Acetone	ND		5.0	1.0	ug/L			12/28/22 15:23	1
Benzene	ND		0.50	0.10	ug/L			12/28/22 15:23	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/28/22 15:23	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/28/22 15:23	1
Bromoform	ND		1.0	0.30	ug/L			12/28/22 15:23	1
Bromomethane	ND		0.50	0.10	ug/L			12/28/22 15:23	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/28/22 15:23	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/28/22 15:23	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/28/22 15:23	1
Chloroethane	ND		0.50	0.10	ug/L			12/28/22 15:23	1
Chloroform	**0.28**	**J**	0.50	0.090	ug/L			12/28/22 15:23	1
Chloromethane	ND		0.50	0.10	ug/L			12/28/22 15:23	1
cis-1,2-Dichloroethene	**2.4**		0.50	0.080	ug/L			12/28/22 15:23	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/28/22 15:23	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/28/22 15:23	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/28/22 15:23	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/28/22 15:23	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/28/22 15:23	1
Styrene	ND		0.50	0.070	ug/L			12/28/22 15:23	1
Tetrachloroethene	**6.4**		0.50	0.20	ug/L			12/28/22 15:23	1
Toluene	ND		0.50	0.080	ug/L			12/28/22 15:23	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/28/22 15:23	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/28/22 15:23	1
Trichloroethene	**1.9**		0.50	0.080	ug/L			12/28/22 15:23	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/28/22 15:23	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/28/22 15:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*		*12/28/22 15:23*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*12/28/22 15:23*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*12/28/22 15:23*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/28/22 15:23*	*1*

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

Lab Sample ID: 410-110288-7

Date Collected: 12/21/22 09:45

Matrix: Water

Date Received: 12/22/22 17:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/28/22 16:29	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 16:29	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/28/22 16:29	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 16:29	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/28/22 16:29	1
1,1-Dichloroethene	ND	^c cn	0.50	0.10	ug/L			12/28/22 16:29	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/28/22 16:29	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/28/22 16:29	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/28/22 16:29	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/28/22 16:29	1
2-Hexanone	ND		5.0	0.10	ug/L			12/28/22 16:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/28/22 16:29	1
Acetone	**2.2**	**J**	5.0	1.0	ug/L			12/28/22 16:29	1
Benzene	ND		0.50	0.10	ug/L			12/28/22 16:29	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/28/22 16:29	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/28/22 16:29	1
Bromoform	ND		1.0	0.30	ug/L			12/28/22 16:29	1
Bromomethane	ND		0.50	0.10	ug/L			12/28/22 16:29	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/28/22 16:29	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/28/22 16:29	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/28/22 16:29	1
Chloroethane	ND		0.50	0.10	ug/L			12/28/22 16:29	1
Chloroform	ND		0.50	0.090	ug/L			12/28/22 16:29	1
Chloromethane	ND		0.50	0.10	ug/L			12/28/22 16:29	1
cis-1,2-Dichloroethene	**0.12**	**J**	0.50	0.080	ug/L			12/28/22 16:29	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/28/22 16:29	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/28/22 16:29	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/28/22 16:29	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/28/22 16:29	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/28/22 16:29	1
Styrene	ND		0.50	0.070	ug/L			12/28/22 16:29	1
Tetrachloroethene	**0.71**		0.50	0.20	ug/L			12/28/22 16:29	1
Toluene	ND		0.50	0.080	ug/L			12/28/22 16:29	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/28/22 16:29	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/28/22 16:29	1
Trichloroethene	**0.16**	**J**	0.50	0.080	ug/L			12/28/22 16:29	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/28/22 16:29	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/28/22 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*12/28/22 16:29*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*12/28/22 16:29*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*12/28/22 16:29*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/28/22 16:29*	*1*

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

Lab Sample ID: 410-110288-8

Date Collected: 12/21/22 09:52

Matrix: Water

Date Received: 12/22/22 17:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/28/22 16:52	1
1,1,1-Trichloroethane	**6.1**		0.50	0.080	ug/L			12/28/22 16:52	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/28/22 16:52	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 16:52	1
1,1-Dichloroethane	**1.2**		0.50	0.10	ug/L			12/28/22 16:52	1
1,1-Dichloroethene	**0.56**	**^c cn**	0.50	0.10	ug/L			12/28/22 16:52	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/28/22 16:52	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/28/22 16:52	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/28/22 16:52	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/28/22 16:52	1
2-Hexanone	ND		5.0	0.10	ug/L			12/28/22 16:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/28/22 16:52	1
Acetone	ND		5.0	1.0	ug/L			12/28/22 16:52	1
Benzene	ND		0.50	0.10	ug/L			12/28/22 16:52	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/28/22 16:52	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/28/22 16:52	1
Bromoform	ND		1.0	0.30	ug/L			12/28/22 16:52	1
Bromomethane	ND		0.50	0.10	ug/L			12/28/22 16:52	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/28/22 16:52	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/28/22 16:52	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/28/22 16:52	1
Chloroethane	ND		0.50	0.10	ug/L			12/28/22 16:52	1
Chloroform	**0.25**	**J**	0.50	0.090	ug/L			12/28/22 16:52	1
Chloromethane	ND		0.50	0.10	ug/L			12/28/22 16:52	1
cis-1,2-Dichloroethene	**3.5**		0.50	0.080	ug/L			12/28/22 16:52	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/28/22 16:52	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/28/22 16:52	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/28/22 16:52	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/28/22 16:52	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/28/22 16:52	1
Styrene	ND		0.50	0.070	ug/L			12/28/22 16:52	1
Toluene	ND		0.50	0.080	ug/L			12/28/22 16:52	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/28/22 16:52	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/28/22 16:52	1
Trichloroethene	**4.4**		0.50	0.080	ug/L			12/28/22 16:52	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/28/22 16:52	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/28/22 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*12/28/22 16:52*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*12/28/22 16:52*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*12/28/22 16:52*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/28/22 16:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**69**		5.0	2.0	ug/L			12/29/22 20:30	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*12/29/22 20:30*	*10*

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

Lab Sample ID: 410-110288-8

Date Collected: 12/21/22 09:52

Matrix: Water

Date Received: 12/22/22 17:58

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*12/29/22 20:30*	*10*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*12/29/22 20:30*	*10*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/29/22 20:30*	*10*

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

Lab Sample ID: 410-110288-9

Date Collected: 12/21/22 10:55

Matrix: Water

Date Received: 12/22/22 17:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/28/22 17:14	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 17:14	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/28/22 17:14	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 17:14	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/28/22 17:14	1
1,1-Dichloroethene	**0.13**	**J ^c cn**	0.50	0.10	ug/L			12/28/22 17:14	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/28/22 17:14	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/28/22 17:14	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/28/22 17:14	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/28/22 17:14	1
2-Hexanone	ND		5.0	0.10	ug/L			12/28/22 17:14	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/28/22 17:14	1
Acetone	ND		5.0	1.0	ug/L			12/28/22 17:14	1
Benzene	ND		0.50	0.10	ug/L			12/28/22 17:14	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/28/22 17:14	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/28/22 17:14	1
Bromoform	ND		1.0	0.30	ug/L			12/28/22 17:14	1
Bromomethane	ND		0.50	0.10	ug/L			12/28/22 17:14	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/28/22 17:14	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/28/22 17:14	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/28/22 17:14	1
Chloroethane	ND		0.50	0.10	ug/L			12/28/22 17:14	1
Chloroform	**0.42**	**J**	0.50	0.090	ug/L			12/28/22 17:14	1
Chloromethane	ND		0.50	0.10	ug/L			12/28/22 17:14	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			12/28/22 17:14	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/28/22 17:14	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/28/22 17:14	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/28/22 17:14	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/28/22 17:14	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/28/22 17:14	1
Styrene	ND		0.50	0.070	ug/L			12/28/22 17:14	1
Tetrachloroethene	**2.9**		0.50	0.20	ug/L			12/28/22 17:14	1
Toluene	ND		0.50	0.080	ug/L			12/28/22 17:14	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/28/22 17:14	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/28/22 17:14	1
Trichloroethene	**0.18**	**J**	0.50	0.080	ug/L			12/28/22 17:14	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/28/22 17:14	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/28/22 17:14	1

Client Sample ID: HD-COD-SW-26-0/1-0
Lab Sample ID: 410-110288-9

Date Collected: 12/21/22 10:55
Matrix: Water
Date Received: 12/22/22 17:58

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		12/28/22 17:14	1
4-Bromofluorobenzene (Surr)	95		80 - 120		12/28/22 17:14	1
Dibromofluoromethane (Surr)	99		80 - 120		12/28/22 17:14	1
Toluene-d8 (Surr)	98		80 - 120		12/28/22 17:14	1

Client Sample ID: HD-COD-SW-27-0/1-0
Lab Sample ID: 410-110288-10

Date Collected: 12/21/22 11:20
Matrix: Water
Date Received: 12/22/22 17:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/28/22 17:36	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 17:36	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/28/22 17:36	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 17:36	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/28/22 17:36	1
1,1-Dichloroethene	ND	^c cn	0.50	0.10	ug/L			12/28/22 17:36	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/28/22 17:36	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/28/22 17:36	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/28/22 17:36	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/28/22 17:36	1
2-Hexanone	ND		5.0	0.10	ug/L			12/28/22 17:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/28/22 17:36	1
Acetone	**2.0**	**J**	5.0	1.0	ug/L			12/28/22 17:36	1
Benzene	ND		0.50	0.10	ug/L			12/28/22 17:36	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/28/22 17:36	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/28/22 17:36	1
Bromoform	ND		1.0	0.30	ug/L			12/28/22 17:36	1
Bromomethane	ND		0.50	0.10	ug/L			12/28/22 17:36	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/28/22 17:36	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/28/22 17:36	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/28/22 17:36	1
Chloroethane	ND		0.50	0.10	ug/L			12/28/22 17:36	1
Chloroform	ND		0.50	0.090	ug/L			12/28/22 17:36	1
Chloromethane	ND		0.50	0.10	ug/L			12/28/22 17:36	1
cis-1,2-Dichloroethene	**0.11**	**J**	0.50	0.080	ug/L			12/28/22 17:36	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/28/22 17:36	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/28/22 17:36	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/28/22 17:36	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/28/22 17:36	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/28/22 17:36	1
Styrene	ND		0.50	0.070	ug/L			12/28/22 17:36	1
Tetrachloroethene	ND		0.50	0.20	ug/L			12/28/22 17:36	1
Toluene	ND		0.50	0.080	ug/L			12/28/22 17:36	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/28/22 17:36	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/28/22 17:36	1
Trichloroethene	**0.14**	**J**	0.50	0.080	ug/L			12/28/22 17:36	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/28/22 17:36	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/28/22 17:36	1

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

Lab Sample ID: 410-110288-10

Date Collected: 12/21/22 11:20

Matrix: Water

Date Received: 12/22/22 17:58

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		12/28/22 17:36	1
4-Bromofluorobenzene (Surr)	96		80 - 120		12/28/22 17:36	1
Dibromofluoromethane (Surr)	99		80 - 120		12/28/22 17:36	1
Toluene-d8 (Surr)	99		80 - 120		12/28/22 17:36	1

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

Lab Sample ID: 410-110288-11

Date Collected: 12/21/22 13:00

Matrix: Water

Date Received: 12/22/22 17:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/28/22 17:58	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 17:58	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/28/22 17:58	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 17:58	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/28/22 17:58	1
1,1-Dichloroethene	ND	^c cn	0.50	0.10	ug/L			12/28/22 17:58	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/28/22 17:58	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/28/22 17:58	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/28/22 17:58	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/28/22 17:58	1
2-Hexanone	ND		5.0	0.10	ug/L			12/28/22 17:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/28/22 17:58	1
Acetone	**3.6**	**J**	5.0	1.0	ug/L			12/28/22 17:58	1
Benzene	ND		0.50	0.10	ug/L			12/28/22 17:58	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/28/22 17:58	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/28/22 17:58	1
Bromoform	ND		1.0	0.30	ug/L			12/28/22 17:58	1
Bromomethane	ND		0.50	0.10	ug/L			12/28/22 17:58	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/28/22 17:58	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/28/22 17:58	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/28/22 17:58	1
Chloroethane	ND		0.50	0.10	ug/L			12/28/22 17:58	1
Chloroform	ND		0.50	0.090	ug/L			12/28/22 17:58	1
Chloromethane	ND		0.50	0.10	ug/L			12/28/22 17:58	1
cis-1,2-Dichloroethene	**0.15**	**J**	0.50	0.080	ug/L			12/28/22 17:58	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/28/22 17:58	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/28/22 17:58	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/28/22 17:58	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/28/22 17:58	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/28/22 17:58	1
Styrene	ND		0.50	0.070	ug/L			12/28/22 17:58	1
Tetrachloroethene	**0.24**	**J**	0.50	0.20	ug/L			12/28/22 17:58	1
Toluene	ND		0.50	0.080	ug/L			12/28/22 17:58	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/28/22 17:58	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/28/22 17:58	1
Trichloroethene	**0.15**	**J**	0.50	0.080	ug/L			12/28/22 17:58	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/28/22 17:58	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/28/22 17:58	1

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

Lab Sample ID: 410-110288-11

Date Collected: 12/21/22 13:00

Matrix: Water

Date Received: 12/22/22 17:58

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*12/28/22 17:58*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*12/28/22 17:58*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*12/28/22 17:58*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/28/22 17:58*	*1*

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

Lab Sample ID: 410-110288-12

Date Collected: 12/21/22 08:50

Matrix: Water

Date Received: 12/22/22 17:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/28/22 18:21	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 18:21	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/28/22 18:21	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 18:21	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/28/22 18:21	1
1,1-Dichloroethene	ND	^c cn	0.50	0.10	ug/L			12/28/22 18:21	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/28/22 18:21	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/28/22 18:21	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/28/22 18:21	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/28/22 18:21	1
2-Hexanone	ND		5.0	0.10	ug/L			12/28/22 18:21	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/28/22 18:21	1
Acetone	**2.6**	**J**	5.0	1.0	ug/L			12/28/22 18:21	1
Benzene	ND		0.50	0.10	ug/L			12/28/22 18:21	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/28/22 18:21	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/28/22 18:21	1
Bromoform	ND		1.0	0.30	ug/L			12/28/22 18:21	1
Bromomethane	ND		0.50	0.10	ug/L			12/28/22 18:21	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/28/22 18:21	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/28/22 18:21	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/28/22 18:21	1
Chloroethane	ND		0.50	0.10	ug/L			12/28/22 18:21	1
Chloroform	ND		0.50	0.090	ug/L			12/28/22 18:21	1
Chloromethane	**0.12**	**J**	0.50	0.10	ug/L			12/28/22 18:21	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			12/28/22 18:21	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/28/22 18:21	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/28/22 18:21	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/28/22 18:21	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/28/22 18:21	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/28/22 18:21	1
Styrene	ND		0.50	0.070	ug/L			12/28/22 18:21	1
Tetrachloroethene	**0.28**	**J**	0.50	0.20	ug/L			12/28/22 18:21	1
Toluene	ND		0.50	0.080	ug/L			12/28/22 18:21	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/28/22 18:21	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/28/22 18:21	1
Trichloroethene	**0.14**	**J**	0.50	0.080	ug/L			12/28/22 18:21	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/28/22 18:21	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/28/22 18:21	1

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

Lab Sample ID: 410-110288-12

Date Collected: 12/21/22 08:50

Matrix: Water

Date Received: 12/22/22 17:58

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*12/28/22 18:21*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*12/28/22 18:21*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*12/28/22 18:21*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/28/22 18:21*	*1*

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

Lab Sample ID: 410-110288-13

Date Collected: 12/21/22 08:00

Matrix: Water

Date Received: 12/22/22 17:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/28/22 18:43	1
1,1,1-Trichloroethane	**6.3**		0.50	0.080	ug/L			12/28/22 18:43	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/28/22 18:43	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 18:43	1
1,1-Dichloroethane	**1.2**		0.50	0.10	ug/L			12/28/22 18:43	1
1,1-Dichloroethene	**0.56**	**^c cn**	0.50	0.10	ug/L			12/28/22 18:43	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/28/22 18:43	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/28/22 18:43	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/28/22 18:43	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/28/22 18:43	1
2-Hexanone	ND		5.0	0.10	ug/L			12/28/22 18:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/28/22 18:43	1
Acetone	ND		5.0	1.0	ug/L			12/28/22 18:43	1
Benzene	ND		0.50	0.10	ug/L			12/28/22 18:43	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/28/22 18:43	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/28/22 18:43	1
Bromoform	ND		1.0	0.30	ug/L			12/28/22 18:43	1
Bromomethane	ND		0.50	0.10	ug/L			12/28/22 18:43	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/28/22 18:43	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/28/22 18:43	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/28/22 18:43	1
Chloroethane	ND		0.50	0.10	ug/L			12/28/22 18:43	1
Chloroform	**0.27**	**J**	0.50	0.090	ug/L			12/28/22 18:43	1
Chloromethane	ND		0.50	0.10	ug/L			12/28/22 18:43	1
cis-1,2-Dichloroethene	**3.7**		0.50	0.080	ug/L			12/28/22 18:43	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/28/22 18:43	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/28/22 18:43	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/28/22 18:43	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/28/22 18:43	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/28/22 18:43	1
Styrene	ND		0.50	0.070	ug/L			12/28/22 18:43	1
Toluene	ND		0.50	0.080	ug/L			12/28/22 18:43	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/28/22 18:43	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/28/22 18:43	1
Trichloroethene	**4.4**		0.50	0.080	ug/L			12/28/22 18:43	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/28/22 18:43	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/28/22 18:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*12/28/22 18:43*	*1*

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

Lab Sample ID: 410-110288-13

Date Collected: 12/21/22 08:00

Matrix: Water

Date Received: 12/22/22 17:58

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*12/28/22 18:43*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*12/28/22 18:43*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*12/28/22 18:43*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**70**		5.0	2.0	ug/L			12/29/22 20:53	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*12/29/22 20:53*	*10*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*12/29/22 20:53*	*10*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*12/29/22 20:53*	*10*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/29/22 20:53*	*10*

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

Lab Sample ID: 410-110288-14

Date Collected: 12/21/22 00:00

Matrix: Water

Date Received: 12/22/22 17:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			12/28/22 13:09	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 13:09	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/28/22 13:09	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 13:09	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/28/22 13:09	1
1,1-Dichloroethene	ND	^c cn	0.50	0.10	ug/L			12/28/22 13:09	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/28/22 13:09	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/28/22 13:09	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/28/22 13:09	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/28/22 13:09	1
2-Hexanone	ND		5.0	0.10	ug/L			12/28/22 13:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/28/22 13:09	1
Acetone	**1.9**	**J**	5.0	1.0	ug/L			12/28/22 13:09	1
Benzene	ND		0.50	0.10	ug/L			12/28/22 13:09	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/28/22 13:09	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/28/22 13:09	1
Bromoform	ND		1.0	0.30	ug/L			12/28/22 13:09	1
Bromomethane	ND		0.50	0.10	ug/L			12/28/22 13:09	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/28/22 13:09	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/28/22 13:09	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/28/22 13:09	1
Chloroethane	ND		0.50	0.10	ug/L			12/28/22 13:09	1
Chloroform	ND		0.50	0.090	ug/L			12/28/22 13:09	1
Chloromethane	ND		0.50	0.10	ug/L			12/28/22 13:09	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			12/28/22 13:09	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/28/22 13:09	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/28/22 13:09	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/28/22 13:09	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/28/22 13:09	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/28/22 13:09	1

Client: Groundwater Sciences Corporation
Job ID: 410-110288-1
Project/Site: fYNOP Monthly Surface Water

Client Sample ID: HD-QC1-0/1-2
Lab Sample ID: 410-110288-14
Date Collected: 12/21/22 00:00
Matrix: Water
Date Received: 12/22/22 17:58

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		0.50	0.070	ug/L			12/28/22 13:09	1
Tetrachloroethene	ND		0.50	0.20	ug/L			12/28/22 13:09	1
Toluene	ND		0.50	0.080	ug/L			12/28/22 13:09	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/28/22 13:09	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/28/22 13:09	1
Trichloroethene	ND		0.50	0.080	ug/L			12/28/22 13:09	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/28/22 13:09	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/28/22 13:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*12/28/22 13:09*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*12/28/22 13:09*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*12/28/22 13:09*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/28/22 13:09*	*1*

Default Detection Limits

Client: Groundwater Sciences Corporation
Job ID: 410-110288-1
Project/Site: fYNOP Monthly Surface Water

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

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

Surrogate Summary

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

Job ID: 410-110288-1

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)
410-110288-1	HD-COD-SW-6-0/1-0	101	95	99	100
410-110288-2	HD-COD-SW-7-0/1-0	101	95	99	100
410-110288-3	HD-COD-SW-8-0/1-0	101	95	99	99
410-110288-4	HD-COD-SW-9-0/1-0	102	95	99	99
410-110288-5	HD-COD-SW-13-0/1-0	100	95	100	100
410-110288-6	HD-COD-SW-15-0/1-0	98	95	99	99
410-110288-6 MS	HD-COD-SW-15-0/1-0 MS	106	99	100	99
410-110288-6 MSD	HD-COD-SW-15-0/1-0 MSD	104	100	100	100
410-110288-7	HD-COD-SW-16-0/1-0	101	95	99	99
410-110288-8	HD-COD-SW-17-0/1-0	102	96	99	98
410-110288-8 - DL	HD-COD-SW-17-0/1-0	100	94	100	99
410-110288-9	HD-COD-SW-26-0/1-0	101	95	99	98
410-110288-10	HD-COD-SW-27-0/1-0	100	96	99	99
410-110288-11	HD-COD-SW-28-0/1-0	101	97	98	99
410-110288-12	HD-COD-SW-29-0/1-0	102	96	99	99
410-110288-13	HD-QC1-0/1-1	102	94	100	97
410-110288-13 - DL	HD-QC1-0/1-1	101	93	100	98
410-110288-14	HD-QC1-0/1-2	99	96	99	99
LCS 410-330696/4	Lab Control Sample	103	99	100	99
LCS 410-331173/5	Lab Control Sample	105	99	99	100
LCSD 410-331173/6	Lab Control Sample Dup	105	99	99	99
MB 410-330696/6	Method Blank	101	95	99	99
MB 410-331173/10	Method Blank	102	95	99	98

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 410-330696/6
Matrix: Water
Analysis Batch: 330696

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			12/28/22 10:55	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 10:55	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/28/22 10:55	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/28/22 10:55	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/28/22 10:55	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			12/28/22 10:55	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/28/22 10:55	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/28/22 10:55	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/28/22 10:55	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/28/22 10:55	1
2-Hexanone	ND		5.0	0.10	ug/L			12/28/22 10:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/28/22 10:55	1
Acetone	ND		5.0	1.0	ug/L			12/28/22 10:55	1
Benzene	ND		0.50	0.10	ug/L			12/28/22 10:55	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/28/22 10:55	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/28/22 10:55	1
Bromoform	ND		1.0	0.30	ug/L			12/28/22 10:55	1
Bromomethane	ND		0.50	0.10	ug/L			12/28/22 10:55	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/28/22 10:55	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/28/22 10:55	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/28/22 10:55	1
Chloroethane	ND		0.50	0.10	ug/L			12/28/22 10:55	1
Chloroform	ND		0.50	0.090	ug/L			12/28/22 10:55	1
Chloromethane	ND		0.50	0.10	ug/L			12/28/22 10:55	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			12/28/22 10:55	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/28/22 10:55	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/28/22 10:55	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/28/22 10:55	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/28/22 10:55	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/28/22 10:55	1
Styrene	ND		0.50	0.070	ug/L			12/28/22 10:55	1
Tetrachloroethene	ND		0.50	0.20	ug/L			12/28/22 10:55	1
Toluene	ND		0.50	0.080	ug/L			12/28/22 10:55	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/28/22 10:55	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/28/22 10:55	1
Trichloroethene	ND		0.50	0.080	ug/L			12/28/22 10:55	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/28/22 10:55	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/28/22 10:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*12/28/22 10:55*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*12/28/22 10:55*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*12/28/22 10:55*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/28/22 10:55*	*1*

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

Lab Sample ID: LCS 410-330696/4
Matrix: Water
Analysis Batch: 330696

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	5.00	5.05		ug/L		101	71 - 134
1,1,1-Trichloroethane	5.00	4.88		ug/L		98	78 - 126
1,1,2,2-Tetrachloroethane	5.00	5.03		ug/L		101	75 - 123
1,1,2-Trichloroethane	5.00	5.00		ug/L		100	80 - 120
1,1-Dichloroethane	5.00	5.04		ug/L		101	74 - 120
1,1-Dichloroethene	5.00	4.97		ug/L		99	80 - 131
1,2-Dibromoethane (EDB)	5.00	5.06		ug/L		101	80 - 120
1,2-Dichloroethane	5.00	4.83		ug/L		97	69 - 122
1,2-Dichloropropane	5.00	5.27		ug/L		105	80 - 120
2-Butanone (MEK)	62.5	71.1		ug/L		114	59 - 141
2-Hexanone	62.5	73.7		ug/L		118	52 - 140
4-Methyl-2-pentanone (MIBK)	62.5	72.5		ug/L		116	55 - 140
Acetone	62.5	63.4		ug/L		101	60 - 146
Benzene	5.00	5.09		ug/L		102	80 - 120
Bromochloromethane	5.00	5.19		ug/L		104	80 - 120
Bromodichloromethane	5.00	5.04		ug/L		101	73 - 124
Bromoform	5.00	5.03		ug/L		101	49 - 144
Bromomethane	5.00	4.44		ug/L		89	60 - 136
Carbon disulfide	5.00	5.93		ug/L		119	67 - 130
Carbon tetrachloride	5.00	5.05		ug/L		101	64 - 141
Chlorobenzene	5.00	4.86		ug/L		97	80 - 120
Chloroethane	5.00	4.69		ug/L		94	63 - 120
Chloroform	5.00	4.95		ug/L		99	80 - 120
Chloromethane	5.00	4.92		ug/L		98	56 - 124
cis-1,2-Dichloroethene	5.00	5.09		ug/L		102	80 - 122
cis-1,3-Dichloropropene	5.00	4.99		ug/L		100	67 - 121
Dibromochloromethane	5.00	4.97		ug/L		99	64 - 138
Ethylbenzene	5.00	4.93		ug/L		99	80 - 120
Methyl tert-butyl ether	5.00	5.11		ug/L		102	69 - 120
Methylene Chloride	5.00	5.01		ug/L		100	80 - 120
Styrene	5.00	4.76		ug/L		95	80 - 120
Tetrachloroethene	5.00	4.82		ug/L		96	80 - 120
Toluene	5.00	4.90		ug/L		98	80 - 120
trans-1,2-Dichloroethene	5.00	4.85		ug/L		97	80 - 122
trans-1,3-Dichloropropene	5.00	5.10		ug/L		102	61 - 129
Trichloroethene	5.00	4.94		ug/L		99	80 - 120
Vinyl chloride	5.00	4.61		ug/L		92	60 - 125
Xylenes, Total	15.0	14.8		ug/L		98	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*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: 410-110288-6 MS
Matrix: Water
Analysis Batch: 330696

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	ND		5.00	5.38		ug/L		107	71 - 134
1,1,1-Trichloroethane	0.42	J	5.00	5.78		ug/L		107	78 - 126
1,1,2,2-Tetrachloroethane	ND		5.00	5.33		ug/L		107	75 - 123
1,1,2-Trichloroethane	ND		5.00	5.12		ug/L		102	80 - 120
1,1-Dichloroethane	0.16	J	5.00	5.54		ug/L		108	74 - 120
1,1-Dichloroethene	0.20	J ^c cn	5.00	5.65		ug/L		109	80 - 131
1,2-Dibromoethane (EDB)	ND		5.00	5.33		ug/L		106	80 - 120
1,2-Dichloroethane	ND		5.00	5.04		ug/L		101	69 - 122
1,2-Dichloropropane	ND		5.00	5.43		ug/L		109	80 - 120
2-Butanone (MEK)	ND		62.6	55.5		ug/L		89	59 - 141
2-Hexanone	ND		62.6	66.2		ug/L		106	52 - 140
4-Methyl-2-pentanone (MIBK)	ND		62.6	59.5		ug/L		95	55 - 140
Acetone	ND		62.6	53.7		ug/L		86	60 - 146
Benzene	ND		5.00	5.39		ug/L		108	80 - 120
Bromochloromethane	ND		5.00	5.25		ug/L		105	80 - 120
Bromodichloromethane	ND		5.00	5.29		ug/L		106	73 - 124
Bromoform	ND		5.00	5.35		ug/L		107	49 - 144
Bromomethane	ND		5.00	4.93		ug/L		99	60 - 136
Carbon disulfide	ND		5.00	6.46		ug/L		129	67 - 130
Carbon tetrachloride	ND		5.00	5.69		ug/L		114	64 - 141
Chlorobenzene	ND		5.00	5.22		ug/L		104	80 - 120
Chloroethane	ND		5.00	5.21		ug/L		104	63 - 120
Chloroform	0.28	J	5.00	5.52		ug/L		105	80 - 120
Chloromethane	ND		5.00	5.39		ug/L		108	80 - 120
cis-1,2-Dichloroethene	2.4		5.00	7.92		ug/L		110	80 - 122
cis-1,3-Dichloropropene	ND		5.00	5.07		ug/L		101	67 - 121
Dibromochloromethane	ND		5.00	5.21		ug/L		104	64 - 138
Ethylbenzene	ND		5.00	5.35		ug/L		107	80 - 120
Methyl tert-butyl ether	ND		5.00	5.17		ug/L		103	69 - 120
Methylene Chloride	ND		5.00	5.29		ug/L		106	80 - 120
Styrene	ND		5.00	5.09		ug/L		102	80 - 120
Tetrachloroethene	6.4		5.00	11.8		ug/L		108	80 - 120
Toluene	ND		5.00	5.35		ug/L		107	80 - 120
trans-1,2-Dichloroethene	ND		5.00	5.35		ug/L		107	80 - 122
trans-1,3-Dichloropropene	ND		5.00	5.19		ug/L		104	61 - 129
Trichloroethene	1.9		5.00	7.18		ug/L		106	80 - 120
Vinyl chloride	ND		5.00	5.29		ug/L		106	60 - 125
Xylenes, Total	ND		15.0	15.8		ug/L		105	80 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*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: 410-110288-6 MSD
Matrix: Water
Analysis Batch: 330696

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		5.00	5.34		ug/L		107	71 - 134	1	30
1,1,1-Trichloroethane	0.42	J	5.00	5.72		ug/L		106	78 - 126	1	30
1,1,2,2-Tetrachloroethane	ND		5.00	5.23		ug/L		105	75 - 123	2	30
1,1,2-Trichloroethane	ND		5.00	5.19		ug/L		104	80 - 120	1	30
1,1-Dichloroethane	0.16	J	5.00	5.51		ug/L		107	74 - 120	1	30
1,1-Dichloroethene	0.20	J ^c cn	5.00	5.60		ug/L		108	80 - 131	1	30
1,2-Dibromoethane (EDB)	ND		5.00	5.20		ug/L		104	80 - 120	2	30
1,2-Dichloroethane	ND		5.00	5.06		ug/L		101	69 - 122	0	30
1,2-Dichloropropane	ND		5.00	5.43		ug/L		108	80 - 120	0	30
2-Butanone (MEK)	ND		62.6	71.4		ug/L		114	59 - 141	25	30
2-Hexanone	ND		62.6	71.9		ug/L		115	52 - 140	8	30
4-Methyl-2-pentanone (MIBK)	ND		62.6	71.9		ug/L		115	55 - 140	19	30
Acetone	ND		62.6	65.4		ug/L		105	60 - 146	20	30
Benzene	ND		5.00	5.39		ug/L		108	80 - 120	0	30
Bromochloromethane	ND		5.00	5.32		ug/L		106	80 - 120	1	30
Bromodichloromethane	ND		5.00	5.25		ug/L		105	73 - 124	1	30
Bromoform	ND		5.00	5.28		ug/L		105	49 - 144	1	30
Bromomethane	ND		5.00	4.97		ug/L		99	60 - 136	1	30
Carbon disulfide	ND		5.00	6.44		ug/L		129	67 - 130	0	30
Carbon tetrachloride	ND		5.00	5.68		ug/L		113	64 - 141	0	30
Chlorobenzene	ND		5.00	5.19		ug/L		104	80 - 120	1	30
Chloroethane	ND		5.00	5.30		ug/L		106	63 - 120	2	30
Chloroform	0.28	J	5.00	5.48		ug/L		104	80 - 120	1	30
Chloromethane	ND		5.00	5.63		ug/L		113	80 - 120	5	30
cis-1,2-Dichloroethene	2.4		5.00	7.93		ug/L		110	80 - 122	0	30
cis-1,3-Dichloropropene	ND		5.00	5.09		ug/L		102	67 - 121	0	30
Dibromochloromethane	ND		5.00	5.15		ug/L		103	64 - 138	1	30
Ethylbenzene	ND		5.00	5.34		ug/L		107	80 - 120	0	30
Methyl tert-butyl ether	ND		5.00	5.26		ug/L		105	69 - 120	2	30
Methylene Chloride	ND		5.00	5.30		ug/L		106	80 - 120	0	30
Styrene	ND		5.00	5.04		ug/L		101	80 - 120	1	30
Tetrachloroethene	6.4		5.00	11.8		ug/L		107	80 - 120	0	30
Toluene	ND		5.00	5.31		ug/L		106	80 - 120	1	30
trans-1,2-Dichloroethene	ND		5.00	5.22		ug/L		104	80 - 122	3	30
trans-1,3-Dichloropropene	ND		5.00	5.41		ug/L		108	61 - 129	4	30
Trichloroethene	1.9		5.00	7.10		ug/L		105	80 - 120	1	30
Vinyl chloride	ND		5.00	5.42		ug/L		108	60 - 125	2	30
Xylenes, Total	ND		15.0	15.8		ug/L		105	80 - 120	0	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

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

Lab Sample ID: MB 410-331173/10
Matrix: Water
Analysis Batch: 331173

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			12/29/22 14:56	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			12/29/22 14:56	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			12/29/22 14:56	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			12/29/22 14:56	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			12/29/22 14:56	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			12/29/22 14:56	1
1,2-Dibromoethane (EDB)	ND		0.50	0.080	ug/L			12/29/22 14:56	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			12/29/22 14:56	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			12/29/22 14:56	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			12/29/22 14:56	1
2-Hexanone	ND		5.0	0.10	ug/L			12/29/22 14:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			12/29/22 14:56	1
Acetone	ND		5.0	1.0	ug/L			12/29/22 14:56	1
Benzene	ND		0.50	0.10	ug/L			12/29/22 14:56	1
Bromochloromethane	ND		0.50	0.080	ug/L			12/29/22 14:56	1
Bromodichloromethane	ND		0.50	0.080	ug/L			12/29/22 14:56	1
Bromoform	ND		1.0	0.30	ug/L			12/29/22 14:56	1
Bromomethane	ND		0.50	0.10	ug/L			12/29/22 14:56	1
Carbon disulfide	ND		1.0	0.10	ug/L			12/29/22 14:56	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			12/29/22 14:56	1
Chlorobenzene	ND		0.50	0.070	ug/L			12/29/22 14:56	1
Chloroethane	ND		0.50	0.10	ug/L			12/29/22 14:56	1
Chloroform	ND		0.50	0.090	ug/L			12/29/22 14:56	1
Chloromethane	ND		0.50	0.10	ug/L			12/29/22 14:56	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			12/29/22 14:56	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			12/29/22 14:56	1
Dibromochloromethane	ND		0.50	0.080	ug/L			12/29/22 14:56	1
Ethylbenzene	ND		0.50	0.080	ug/L			12/29/22 14:56	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			12/29/22 14:56	1
Methylene Chloride	ND		0.50	0.10	ug/L			12/29/22 14:56	1
Styrene	ND		0.50	0.070	ug/L			12/29/22 14:56	1
Tetrachloroethene	ND		0.50	0.20	ug/L			12/29/22 14:56	1
Toluene	ND		0.50	0.080	ug/L			12/29/22 14:56	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			12/29/22 14:56	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			12/29/22 14:56	1
Trichloroethene	ND		0.50	0.080	ug/L			12/29/22 14:56	1
Vinyl chloride	ND		0.50	0.10	ug/L			12/29/22 14:56	1
Xylenes, Total	ND		1.0	0.070	ug/L			12/29/22 14:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*12/29/22 14:56*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*12/29/22 14:56*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*12/29/22 14:56*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/29/22 14:56*	*1*

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

Lab Sample ID: LCS 410-331173/5
Matrix: Water
Analysis Batch: 331173

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	5.00	5.07		ug/L		101	71 - 134
1,1,1-Trichloroethane	5.00	4.77		ug/L		95	78 - 126
1,1,2,2-Tetrachloroethane	5.00	5.21		ug/L		104	75 - 123
1,1,2-Trichloroethane	5.00	5.10		ug/L		102	80 - 120
1,1-Dichloroethane	5.00	4.88		ug/L		98	74 - 120
1,1-Dichloroethene	5.00	4.66		ug/L		93	80 - 131
1,2-Dibromoethane (EDB)	5.00	5.20		ug/L		104	80 - 120
1,2-Dichloroethane	5.00	5.15		ug/L		103	69 - 122
1,2-Dichloropropane	5.00	5.22		ug/L		104	80 - 120
2-Butanone (MEK)	62.5	61.9		ug/L		99	59 - 141
2-Hexanone	62.5	59.9		ug/L		96	52 - 140
4-Methyl-2-pentanone (MIBK)	62.5	61.7		ug/L		99	55 - 140
Acetone	62.5	60.1		ug/L		96	60 - 146
Benzene	5.00	5.00		ug/L		100	80 - 120
Bromochloromethane	5.00	5.14		ug/L		103	80 - 120
Bromodichloromethane	5.00	5.11		ug/L		102	73 - 124
Bromoform	5.00	5.22		ug/L		104	49 - 144
Bromomethane	5.00	4.24		ug/L		85	60 - 136
Carbon disulfide	5.00	5.72		ug/L		114	67 - 130
Carbon tetrachloride	5.00	4.92		ug/L		98	64 - 141
Chlorobenzene	5.00	4.89		ug/L		98	80 - 120
Chloroethane	5.00	4.62		ug/L		92	63 - 120
Chloroform	5.00	4.87		ug/L		97	80 - 120
Chloromethane	5.00	4.69		ug/L		94	56 - 124
cis-1,2-Dichloroethene	5.00	5.00		ug/L		100	80 - 122
cis-1,3-Dichloropropene	5.00	4.99		ug/L		100	67 - 121
Dibromochloromethane	5.00	5.07		ug/L		101	64 - 138
Ethylbenzene	5.00	4.94		ug/L		99	80 - 120
Methyl tert-butyl ether	5.00	5.15		ug/L		103	69 - 120
Methylene Chloride	5.00	5.02		ug/L		100	80 - 120
Styrene	5.00	4.81		ug/L		96	80 - 120
Tetrachloroethene	5.00	4.87		ug/L		97	80 - 120
Toluene	5.00	4.90		ug/L		98	80 - 120
trans-1,2-Dichloroethene	5.00	4.66		ug/L		93	80 - 122
trans-1,3-Dichloropropene	5.00	5.18		ug/L		104	61 - 129
Trichloroethene	5.00	4.79		ug/L		96	80 - 120
Vinyl chloride	5.00	4.41		ug/L		88	60 - 125
Xylenes, Total	15.0	14.9		ug/L		99	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

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

Lab Sample ID: LCSD 410-331173/6
Matrix: Water
Analysis Batch: 331173

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	5.00	5.25		ug/L		105	71 - 134	4	30
1,1,1-Trichloroethane	5.00	4.89		ug/L		98	78 - 126	3	30
1,1,2,2-Tetrachloroethane	5.00	5.42		ug/L		108	75 - 123	4	30
1,1,2-Trichloroethane	5.00	5.23		ug/L		105	80 - 120	2	30
1,1-Dichloroethane	5.00	5.06		ug/L		101	74 - 120	4	30
1,1-Dichloroethene	5.00	4.80		ug/L		96	80 - 131	3	30
1,2-Dibromoethane (EDB)	5.00	5.27		ug/L		105	80 - 120	1	30
1,2-Dichloroethane	5.00	5.31		ug/L		106	69 - 122	3	30
1,2-Dichloropropane	5.00	5.35		ug/L		107	80 - 120	2	30
2-Butanone (MEK)	62.5	61.6		ug/L		98	59 - 141	1	30
2-Hexanone	62.5	60.1		ug/L		96	52 - 140	0	30
4-Methyl-2-pentanone (MIBK)	62.5	61.4		ug/L		98	55 - 140	1	30
Acetone	62.5	59.6		ug/L		95	60 - 146	1	30
Benzene	5.00	5.10		ug/L		102	80 - 120	2	30
Bromochloromethane	5.00	5.29		ug/L		106	80 - 120	3	30
Bromodichloromethane	5.00	5.20		ug/L		104	73 - 124	2	30
Bromoform	5.00	5.41		ug/L		108	49 - 144	4	30
Bromomethane	5.00	4.53		ug/L		91	60 - 136	7	30
Carbon disulfide	5.00	5.83		ug/L		117	67 - 130	2	30
Carbon tetrachloride	5.00	5.01		ug/L		100	64 - 141	2	30
Chlorobenzene	5.00	4.96		ug/L		99	80 - 120	2	30
Chloroethane	5.00	4.77		ug/L		95	63 - 120	3	30
Chloroform	5.00	5.05		ug/L		101	80 - 120	4	30
Chloromethane	5.00	4.74		ug/L		95	56 - 124	1	30
cis-1,2-Dichloroethene	5.00	5.18		ug/L		104	80 - 122	3	30
cis-1,3-Dichloropropene	5.00	5.09		ug/L		102	67 - 121	2	30
Dibromochloromethane	5.00	5.16		ug/L		103	64 - 138	2	30
Ethylbenzene	5.00	5.07		ug/L		101	80 - 120	3	30
Methyl tert-butyl ether	5.00	5.33		ug/L		107	69 - 120	4	30
Methylene Chloride	5.00	5.14		ug/L		103	80 - 120	2	30
Styrene	5.00	4.98		ug/L		100	80 - 120	3	30
Tetrachloroethene	5.00	4.90		ug/L		98	80 - 120	1	30
Toluene	5.00	4.99		ug/L		100	80 - 120	2	30
trans-1,2-Dichloroethene	5.00	4.83		ug/L		97	80 - 122	4	30
trans-1,3-Dichloropropene	5.00	5.28		ug/L		106	61 - 129	2	30
Trichloroethene	5.00	4.95		ug/L		99	80 - 120	3	30
Vinyl chloride	5.00	4.67		ug/L		93	60 - 125	6	30
Xylenes, Total	15.0	15.1		ug/L		101	80 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*

GC/MS VOA

Analysis Batch: 330696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-110288-1	HD-COD-SW-6-0/1-0	Total/NA	Water	8260D	
410-110288-2	HD-COD-SW-7-0/1-0	Total/NA	Water	8260D	
410-110288-3	HD-COD-SW-8-0/1-0	Total/NA	Water	8260D	
410-110288-4	HD-COD-SW-9-0/1-0	Total/NA	Water	8260D	
410-110288-5	HD-COD-SW-13-0/1-0	Total/NA	Water	8260D	
410-110288-6	HD-COD-SW-15-0/1-0	Total/NA	Water	8260D	
410-110288-7	HD-COD-SW-16-0/1-0	Total/NA	Water	8260D	
410-110288-8	HD-COD-SW-17-0/1-0	Total/NA	Water	8260D	
410-110288-9	HD-COD-SW-26-0/1-0	Total/NA	Water	8260D	
410-110288-10	HD-COD-SW-27-0/1-0	Total/NA	Water	8260D	
410-110288-11	HD-COD-SW-28-0/1-0	Total/NA	Water	8260D	
410-110288-12	HD-COD-SW-29-0/1-0	Total/NA	Water	8260D	
410-110288-13	HD-QC1-0/1-1	Total/NA	Water	8260D	
410-110288-14	HD-QC1-0/1-2	Total/NA	Water	8260D	
MB 410-330696/6	Method Blank	Total/NA	Water	8260D	
LCS 410-330696/4	Lab Control Sample	Total/NA	Water	8260D	
410-110288-6 MS	HD-COD-SW-15-0/1-0 MS	Total/NA	Water	8260D	
410-110288-6 MSD	HD-COD-SW-15-0/1-0 MSD	Total/NA	Water	8260D	

Analysis Batch: 331173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-110288-8 - DL	HD-COD-SW-17-0/1-0	Total/NA	Water	8260D	
410-110288-13 - DL	HD-QC1-0/1-1	Total/NA	Water	8260D	
MB 410-331173/10	Method Blank	Total/NA	Water	8260D	
LCS 410-331173/5	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-331173/6	Lab Control Sample Dup	Total/NA	Water	8260D	

Client Sample ID: HD-COD-SW-6-0/1-0
Lab Sample ID: 410-110288-1

Date Collected: 12/21/22 10:25
Matrix: Water
Date Received: 12/22/22 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	330696	DVW2	ELLE	12/28/22 13:31

Client Sample ID: HD-COD-SW-7-0/1-0
Lab Sample ID: 410-110288-2

Date Collected: 12/21/22 11:05
Matrix: Water
Date Received: 12/22/22 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	330696	DVW2	ELLE	12/28/22 13:53

Client Sample ID: HD-COD-SW-8-0/1-0
Lab Sample ID: 410-110288-3

Date Collected: 12/21/22 09:00
Matrix: Water
Date Received: 12/22/22 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	330696	DVW2	ELLE	12/28/22 14:16

Client Sample ID: HD-COD-SW-9-0/1-0
Lab Sample ID: 410-110288-4

Date Collected: 12/21/22 12:45
Matrix: Water
Date Received: 12/22/22 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	330696	DVW2	ELLE	12/28/22 14:38

Client Sample ID: HD-COD-SW-13-0/1-0
Lab Sample ID: 410-110288-5

Date Collected: 12/21/22 09:22
Matrix: Water
Date Received: 12/22/22 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	330696	DVW2	ELLE	12/28/22 15:00

Client Sample ID: HD-COD-SW-15-0/1-0
Lab Sample ID: 410-110288-6

Date Collected: 12/21/22 11:30
Matrix: Water
Date Received: 12/22/22 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	330696	DVW2	ELLE	12/28/22 15:23

Client Sample ID: HD-COD-SW-16-0/1-0
Lab Sample ID: 410-110288-7

Date Collected: 12/21/22 09:45
Matrix: Water
Date Received: 12/22/22 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	330696	DVW2	ELLE	12/28/22 16:29

Client Sample ID: HD-COD-SW-17-0/1-0
Lab Sample ID: 410-110288-8

Date Collected: 12/21/22 09:52
Matrix: Water
Date Received: 12/22/22 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	330696	DVW2	ELLE	12/28/22 16:52
Total/NA	Analysis	8260D	DL	10	331173	DVW2	ELLE	12/29/22 20:30

Client Sample ID: HD-COD-SW-26-0/1-0
Lab Sample ID: 410-110288-9

Date Collected: 12/21/22 10:55
Matrix: Water
Date Received: 12/22/22 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	330696	DVW2	ELLE	12/28/22 17:14

Client Sample ID: HD-COD-SW-27-0/1-0
Lab Sample ID: 410-110288-10

Date Collected: 12/21/22 11:20
Matrix: Water
Date Received: 12/22/22 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	330696	DVW2	ELLE	12/28/22 17:36

Client Sample ID: HD-COD-SW-28-0/1-0
Lab Sample ID: 410-110288-11

Date Collected: 12/21/22 13:00
Matrix: Water
Date Received: 12/22/22 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	330696	DVW2	ELLE	12/28/22 17:58

Client Sample ID: HD-COD-SW-29-0/1-0
Lab Sample ID: 410-110288-12

Date Collected: 12/21/22 08:50
Matrix: Water
Date Received: 12/22/22 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	330696	DVW2	ELLE	12/28/22 18:21

Client Sample ID: HD-QC1-0/1-1
Lab Sample ID: 410-110288-13

Date Collected: 12/21/22 08:00
Matrix: Water
Date Received: 12/22/22 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	330696	DVW2	ELLE	12/28/22 18:43
Total/NA	Analysis	8260D	DL	10	331173	DVW2	ELLE	12/29/22 20:53

Client Sample ID: HD-QC1-0/1-2
Lab Sample ID: 410-110288-14

Date Collected: 12/21/22 00:00
Matrix: Water
Date Received: 12/22/22 17:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	330696	DVW2	ELLE	12/28/22 13:09

Laboratory References:

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

Accreditation/Certification Summary

Client: Groundwater Sciences Corporation
Job ID: 410-110288-1
Project/Site: fYNOP Monthly Surface Water

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

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

Method Summary

Client: Groundwater Sciences Corporation
Job ID: 410-110288-1
Project/Site: fYNOP Monthly Surface Water

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

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Groundwater Sciences Corporation
Job ID: 410-110288-1
Project/Site: fYNOP Monthly Surface Water

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-110288-1	HD-COD-SW-6-0/1-0	Water	12/21/22 10:25	12/22/22 17:58
410-110288-2	HD-COD-SW-7-0/1-0	Water	12/21/22 11:05	12/22/22 17:58
410-110288-3	HD-COD-SW-8-0/1-0	Water	12/21/22 09:00	12/22/22 17:58
410-110288-4	HD-COD-SW-9-0/1-0	Water	12/21/22 12:45	12/22/22 17:58
410-110288-5	HD-COD-SW-13-0/1-0	Water	12/21/22 09:22	12/22/22 17:58
410-110288-6	HD-COD-SW-15-0/1-0	Water	12/21/22 11:30	12/22/22 17:58
410-110288-7	HD-COD-SW-16-0/1-0	Water	12/21/22 09:45	12/22/22 17:58
410-110288-8	HD-COD-SW-17-0/1-0	Water	12/21/22 09:52	12/22/22 17:58
410-110288-9	HD-COD-SW-26-0/1-0	Water	12/21/22 10:55	12/22/22 17:58
410-110288-10	HD-COD-SW-27-0/1-0	Water	12/21/22 11:20	12/22/22 17:58
410-110288-11	HD-COD-SW-28-0/1-0	Water	12/21/22 13:00	12/22/22 17:58
410-110288-12	HD-COD-SW-29-0/1-0	Water	12/21/22 08:50	12/22/22 17:58
410-110288-13	HD-QC1-0/1-1	Water	12/21/22 08:00	12/22/22 17:58
410-110288-14	HD-QC1-0/1-2	Water	12/21/22 00:00	12/22/22 17:58

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-110288-1

SDG No.:

Instrument ID: 10193 Analysis Batch Number: 288300

Lab Sample ID: IC 410-288300/13 Client Sample ID:

Date Analyzed: 08/22/22 20:12 Lab File ID: CG22X12.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,3-Butadiene	2.04	Incomplete Integration	DVW2	08/23/22 09:23
Bromomethane	2.32	Incomplete Integration	DVW2	08/23/22 09:23
2-Chloro-1,3-butadiene	4.84	Incomplete Integration	DVW2	08/23/22 09:24
2,2-Dichloropropane	5.59	Incomplete Integration	DVW2	08/23/22 09:24
Propionitrile	5.69	Incomplete Integration	DVW2	08/23/22 09:24
Tetrahydrofuran	5.93	Incomplete Integration	DVW2	08/23/22 09:24
1,1-Dichloropropene	6.51	Incomplete Integration	DVW2	08/23/22 09:24
Isobutyl alcohol	6.73	Incomplete Integration	DVW2	08/23/22 09:24
t-Amyl methyl ether	6.98	Incomplete Integration	DVW2	08/23/22 09:24
2-Nitropropane	8.67	Incomplete Integration	DVW2	08/23/22 09:25

Lab Sample ID: IC 410-288300/14 Client Sample ID:

Date Analyzed: 08/22/22 20:34 Lab File ID: CG22X13.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
t-Butyl alcohol-d10 (IS)	3.74	Incomplete Integration	DVW2	08/23/22 09:26
2-Chloro-1,3-butadiene	4.83	Incomplete Integration	DVW2	08/23/22 09:26
1,4-Dioxane	8.13	Incomplete Integration	DVW2	08/23/22 09:27

Lab Sample ID: IC 410-288300/15 Client Sample ID:

Date Analyzed: 08/22/22 20:57 Lab File ID: CG22X14.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrahydrofuran	5.92	Incomplete Integration	DVW2	08/23/22 09:28
1,4-Dioxane	8.15	Incomplete Integration	DVW2	08/23/22 09:28

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-110288-1

SDG No.:

Instrument ID: 10193 Analysis Batch Number: 288300

Lab Sample ID: IC 410-288300/16 Client Sample ID:

Date Analyzed: 08/22/22 21:19 Lab File ID: CG22X15.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.54	Incomplete Integration	DVW2	08/23/22 09:29

Lab Sample ID: IC 410-288300/17 Client Sample ID:

Date Analyzed: 08/22/22 21:41 Lab File ID: CG22X16.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.13	Incomplete Integration	DVW2	08/23/22 09:31

Lab Sample ID: ICIS 410-288300/18 Client Sample ID:

Date Analyzed: 08/22/22 22:04 Lab File ID: CG22X17.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
t-Butyl alcohol-d10 (IS)	3.75	Incomplete Integration	DVW2	08/23/22 09:19
t-Butyl alcohol	3.85	Incomplete Integration	DVW2	08/23/22 09:19

Lab Sample ID: IC 410-288300/19 Client Sample ID:

Date Analyzed: 08/22/22 22:26 Lab File ID: CG22X18.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.13	Incomplete Integration	DVW2	08/23/22 09:32

Lab Sample ID: ICV 410-288300/21 Client Sample ID:

Date Analyzed: 08/22/22 23:10 Lab File ID: CG22X20.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	8.12	Incomplete Integration	DVW2	08/23/22 09:33

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-110288-1

SDG No.:

Instrument ID: 10193 Analysis Batch Number: 330696

Lab Sample ID: MB 410-330696/6 Client Sample ID:

Date Analyzed: 12/28/22 10:55 Lab File ID: CD28X05.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetone	3.11	Incomplete Integration	DVW2	12/28/22 11:26

Lab Sample ID: 410-110288-1 Client Sample ID: HD-COD-SW-6-0/1-0

Date Analyzed: 12/28/22 13:31 Lab File ID: CD28X12.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	5.99	Peak assignment corrected	innoonk	12/29/22 10:32
Trichloroethene	7.60	Peak assignment corrected	innoonk	12/29/22 10:32

Lab Sample ID: 410-110288-2 Client Sample ID: HD-COD-SW-7-0/1-0

Date Analyzed: 12/28/22 13:53 Lab File ID: CD28X13.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.34	Incomplete Integration	innoonk	12/29/22 10:33

Lab Sample ID: 410-110288-3 Client Sample ID: HD-COD-SW-8-0/1-0

Date Analyzed: 12/28/22 14:16 Lab File ID: CD28X14.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichloroethene	7.62	Peak assignment corrected	innoonk	12/29/22 10:34

Lab Sample ID: 410-110288-4 Client Sample ID: HD-COD-SW-9-0/1-0

Date Analyzed: 12/28/22 14:38 Lab File ID: CD28X15.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	5.50	Peak assignment corrected	innoonk	12/29/22 10:35
Chloroform	6.00	Peak assignment corrected	innoonk	12/29/22 10:35

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-110288-1

SDG No.:

Instrument ID: 10193 Analysis Batch Number: 330696

Lab Sample ID: 410-110288-5 Client Sample ID: HD-COD-SW-13-0/1-0

Date Analyzed: 12/28/22 15:00 Lab File ID: CD28X16.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,1,1-Trichloroethane		Invalid Compound ID	innoonk	12/29/22 10:36

Lab Sample ID: 410-110288-7 Client Sample ID: HD-COD-SW-16-0/1-0

Date Analyzed: 12/28/22 16:29 Lab File ID: CD28X20.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	3.32	Incomplete Integration	innoonk	12/29/22 10:41

Lab Sample ID: 410-110288-8 Client Sample ID: HD-COD-SW-17-0/1-0

Date Analyzed: 12/28/22 16:52 Lab File ID: CD28X21.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
trans-1,2-Dichloroethene	4.01	Peak assignment corrected	innoonk	12/29/22 10:42
Acetone		Invalid Compound ID	innoonk	12/29/22 10:42
Chlorobenzene	10.80	Peak assignment corrected	innoonk	12/29/22 10:42

Lab Sample ID: 410-110288-9 Client Sample ID: HD-COD-SW-26-0/1-0

Date Analyzed: 12/28/22 17:14 Lab File ID: CD28X22.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
cis-1,2-Dichloroethene	5.52	Peak assignment corrected	innoonk	12/29/22 10:44
Trichloroethene	7.61	Incomplete Integration	innoonk	12/29/22 10:45

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-110288-1

SDG No.:

Instrument ID: 10193 Analysis Batch Number: 330696

Lab Sample ID: 410-110288-10 Client Sample ID: HD-COD-SW-27-0/1-0

Date Analyzed: 12/28/22 17:36 Lab File ID: CD28X23.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzene	6.69	Peak assignment corrected	innoonk	12/29/22 10:46

Lab Sample ID: 410-110288-11 Client Sample ID: HD-COD-SW-28-0/1-0

Date Analyzed: 12/28/22 17:58 Lab File ID: CD28X24.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chloroform	5.99	Peak assignment corrected	innoonk	12/29/22 10:47
Benzene	6.70	Peak assignment corrected	innoonk	12/29/22 10:47
Trichloroethene	7.62	Peak assignment corrected	innoonk	12/29/22 10:47

Lab Sample ID: 410-110288-12 Client Sample ID: HD-COD-SW-29-0/1-0

Date Analyzed: 12/28/22 18:21 Lab File ID: CD28X25.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzene	6.71	Peak assignment corrected	innoonk	12/29/22 10:48

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-110288-1

SDG No.:

Instrument ID: 10193 Analysis Batch Number: 331173

Lab Sample ID: CCVIS 410-331173/3 Client Sample ID:

Date Analyzed: 12/29/22 12:20 Lab File ID: CD29X02.D GC Column: R-624SilMS 30m ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methyl acetate	3.46	Incomplete Integration	DVW2	12/29/22 12:58

Lab Name: Eurofins Lancaster Laboratories Envirc Job No.: 410-110288-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MSV_HP25_ISSS_00058	02/22/23	08/22/22	Methanol, Lot EB679	10 mL	MSV_8260_SS_00734	1 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL
					MSV_Cus826_IS_00483	1 mL	1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5 (IS)	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							t-Butyl alcohol-d10 (IS)	1250 ug/mL
.MSV_8260_SS_00734	03/31/25		Restek, Lot A0183565		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
.MSV_Cus826_IS_00483	04/30/25		Restek, Lot A0184225		(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_HP25_ISSS_00063	06/11/23	12/23/22	Methanol, Lot EB679	10 mL	MSV_Cus826_IS_00522	1 mL	1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5 (IS)	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							t-Butyl alcohol-d10 (IS)	1250 ug/mL
.MSV_Cus826_IS_00522	06/11/23		Restek, Lot A0184225		(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_HP25_ISSS_00063	06/11/23	12/23/22	Methanol, Lot EB679	10 mL	MSV_8260_SS_00815	1 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL
.MSV_8260_SS_00815	03/31/25		Restek, Lot A0183565		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
MSV_LCS_VOC#1_00069	09/20/22	08/21/22	Methanol, Lot EB679	25 mL	MSV_M_MIX1SEC_00083	1 mL	1,1,1,2-Tetrachloroethane	40 ug/mL
							1,1,1-Trichloroethane	40 ug/mL
							1,1,2,2-Tetrachloroethane	40 ug/mL
							1,1,2-Trichloroethane	40 ug/mL
							1,1-Dichloroethane	40 ug/mL
							1,1-Dichloroethene	40 ug/mL
							1,2-Dibromoethane (EDB)	40 ug/mL
							1,2-Dichloroethane	40 ug/mL
							1,2-Dichloropropane	40 ug/mL
							Benzene	40 ug/mL
							Bromochloromethane	40 ug/mL
							Bromodichloromethane	40 ug/mL
							Bromoform	40 ug/mL
							Carbon tetrachloride	40 ug/mL
							Chlorobenzene	40 ug/mL

Lab Name: Eurofins Lancaster Laboratories Envirc Job No.: 410-110288-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloroform	40 ug/mL
							cis-1,2-Dichloroethene	40 ug/mL
							cis-1,3-Dichloropropene	40 ug/mL
							Dibromochloromethane	40 ug/mL
							Ethylbenzene	40 ug/mL
							Methylene Chloride	40 ug/mL
							Styrene	40 ug/mL
							Tetrachloroethene	40 ug/mL
							Toluene	40 ug/mL
							trans-1,2-Dichloroethene	40 ug/mL
							trans-1,3-Dichloropropene	40 ug/mL
							Trichloroethene	40 ug/mL
					MSV_M_MIX2SEC_00082	1 mL	Carbon disulfide	40 ug/mL
							Methyl tert-butyl ether	40 ug/mL
					MSV_Q_Ketones_00082	1 mL	2-Butanone (MEK)	500 ug/mL
							2-Hexanone	500 ug/mL
							4-Methyl-2-pentanone (MIBK)	500 ug/mL
							Acetone	500 ug/mL
.MSV_M_MIX1SEC_00083	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_00082	04/30/24		Restek, Lot A0171837		(Purchased Reagent)		Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
.MSV_Q_Ketones_00082	01/31/24		Restek, Lot A0178490		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
MSV_LCS_VOC#1_00087	01/17/23	12/18/22	Methanol, Lot EB679	25 mL	MSV_M_MIX1SEC_00105	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_00102	1 mL	Carbon disulfide	40 ug/mL
							Methyl tert-butyl ether	40 ug/mL
					MSV_Q_Ketones_00105	1 mL	2-Butanone (MEK)	500 ug/mL
							2-Hexanone	500 ug/mL
							4-Methyl-2-pentanone (MIBK)	500 ug/mL
							Acetone	500 ug/mL
.MSV_M_MIX1SEC_00105	04/30/25		Restek, Lot A0184354		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							Benzene	1000 ug/mL
							Bromochloromethane	1000 ug/mL

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Methylene Chloride	1000 ug/mL
							Styrene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
.MSV_M_MIX2SEC_00102	04/30/25		Restek, Lot A0184412		(Purchased Reagent)		Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
.MSV_Q_Ketones_00105	04/28/25		Restek, Lot A0184721		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
MSV_LCS_VOC#1_00088	01/27/23	12/28/22	Methanol, Lot EB679	25 mL	MSV_M_MIX1SEC_00103	1 mL	1,1,1,2-Tetrachloroethane	40 ug/mL
							1,1,1-Trichloroethane	40 ug/mL
							1,1,2,2-Tetrachloroethane	40 ug/mL
							1,1,2-Trichloroethane	40 ug/mL
							1,1-Dichloroethane	40 ug/mL
							1,1-Dichloroethene	40 ug/mL
							1,2-Dibromoethane (EDB)	40 ug/mL
							1,2-Dichloroethane	40 ug/mL
							1,2-Dichloropropane	40 ug/mL
							Benzene	40 ug/mL
							Bromochloromethane	40 ug/mL
							Bromodichloromethane	40 ug/mL
							Bromoform	40 ug/mL
							Carbon tetrachloride	40 ug/mL
							Chlorobenzene	40 ug/mL
							Chloroform	40 ug/mL
							cis-1,2-Dichloroethene	40 ug/mL
							cis-1,3-Dichloropropene	40 ug/mL
							Dibromochloromethane	40 ug/mL
							Ethylbenzene	40 ug/mL
							Methylene Chloride	40 ug/mL
							Styrene	40 ug/mL
							Tetrachloroethene	40 ug/mL
							Toluene	40 ug/mL
							trans-1,2-Dichloroethene	40 ug/mL

Lab Name: Eurofins Lancaster Laboratories Envirc Job No.: 410-110288-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,3-Dichloropropene	40 ug/mL
							Trichloroethene	40 ug/mL
					MSV_M_MIX2SEC_00103	1 mL	Carbon disulfide	40 ug/mL
							Methyl tert-butyl ether	40 ug/mL
					MSV_Q_Ketones_00106	1 mL	2-Butanone (MEK)	500 ug/mL
							2-Hexanone	500 ug/mL
							4-Methyl-2-pentanone (MIBK)	500 ug/mL
							Acetone	500 ug/mL
.MSV_M_MIX1SEC_00103	04/30/25		Restek, Lot A0184354		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	1000 ug/mL
							1,1,1-Trichloroethane	1000 ug/mL
							1,1,2,2-Tetrachloroethane	1000 ug/mL
							1,1,2-Trichloroethane	1000 ug/mL
							1,1-Dichloroethane	1000 ug/mL
							1,1-Dichloroethene	1000 ug/mL
							1,2-Dibromoethane (EDB)	1000 ug/mL
							1,2-Dichloroethane	1000 ug/mL
							1,2-Dichloropropane	1000 ug/mL
							Benzene	1000 ug/mL
							Bromochloromethane	1000 ug/mL
							Bromodichloromethane	1000 ug/mL
							Bromoform	1000 ug/mL
							Carbon tetrachloride	1000 ug/mL
							Chlorobenzene	1000 ug/mL
							Chloroform	1000 ug/mL
							cis-1,2-Dichloroethene	1000 ug/mL
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Methylene Chloride	1000 ug/mL
							Styrene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
.MSV_M_MIX2SEC_00103	04/30/25		Restek, Lot A0184412		(Purchased Reagent)		Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
.MSV_Q_Ketones_00106	01/31/24		Restek, Lot A0184721		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
MSV_LL_#1_826_00053	09/11/22	08/22/22	Methanol, Lot EB679	1 mL	MSV_CCV_VOC#1_00084	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

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SDG No.:

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

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SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1,4-Dioxane	2500 ug/mL
							1-Chlorohexane	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							2-Nitropropane	250 ug/mL
							3-Chloro-1-propene	50 ug/mL
							Acrylonitrile	125 ug/mL
							Benzyl chloride	50 ug/mL
							Carbon disulfide	50 ug/mL
							Cyclohexane	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Isopropyl ether	50 ug/mL
							Methacrylonitrile	500 ug/mL
							Methyl acetate	50 ug/mL
							Methyl methacrylate	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							n-Butanol	4375 ug/mL
							n-Heptane	50 ug/mL
							Propionitrile	1000 ug/mL
							Tert-amyl methyl ether	50 ug/mL
							Tert-butyl ethyl ether	50 ug/mL
							Tetrahydrofuran	250 ug/mL
							trans-1,4-Dichloro-2-butene	500 ug/mL
					MSV_CCV_VOC#3_00085	200 uL	Acrolein	2499.94 ug/mL
							2-Butanone (MEK)	500 ug/mL
							2-Hexanone	500 ug/mL
							4-Methyl-2-pentanone (MIBK)	500 ug/mL
							Acetone	500 ug/mL
					MSV_V_VOA2_00154	150 uL	1,4-Dioxane	2500 ug/mL
							2-Methyl-2-propanol	1000 ug/mL
							Isobutyl alcohol	2500 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	4375 ug/mL
							Propionitrile	1000 ug/mL
							trans-1,4-Dichloro-2-butene	500 ug/mL
.MSV_CCV_VOC#1_00084	09/20/22	08/21/22	Methanol, Lot EB679	5 mL	MSV_MegaMIX#1_00083	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

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SDG No.:

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

Lab Name: Eurofins Lancaster Laboratories Envirc Job No.: 410-110288-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					MSV_MegaMix#2_00082	1 mL	1,1,2-Trichloro-1,2,2-trifluoroethane	1000 ug/mL
							1,2,3-Trimethylbenzene	1000 ug/mL
							1,3,5-Trichlorobenzene	1000 ug/mL
							1,4-Dioxane	12500 ug/mL
							1-Chlorohexane	1000 ug/mL
							2-Chloro-1,3-butadiene	1000 ug/mL
							2-Methyl-2-propanol	5000 ug/mL
							2-Nitropropane	5000 ug/mL
							3-Chloro-1-propene	1000 ug/mL
							Acrylonitrile	2500 ug/mL
							Benzyl chloride	1000 ug/mL
							Carbon disulfide	1000 ug/mL
							Cyclohexane	1000 ug/mL
							Ethyl methacrylate	1000 ug/mL
							Hexane	1000 ug/mL
							Iodomethane	1000 ug/mL
							Isobutyl alcohol	12500 ug/mL
							Isopropyl ether	1000 ug/mL
							Methacrylonitrile	2500 ug/mL
							Methyl acetate	1000 ug/mL
							Methyl methacrylate	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
							Methylcyclohexane	1000 ug/mL
							n-Butanol	12500 ug/mL
							n-Heptane	1000 ug/mL
							Propionitrile	5000 ug/mL
							Tert-amyl methyl ether	1000 ug/mL
							Tert-butyl ethyl ether	1000 ug/mL
							Tetrahydrofuran	5000 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
..MSV_MegaMIX#1_00083	09/20/22		Restek, Lot A0171634		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	5000 ug/mL
							1,1,1-Trichloroethane	5000 ug/mL
							1,1,2,2-Tetrachloroethane	5000 ug/mL
							1,1,2-Trichloroethane	5000 ug/mL
							1,1-Dichloroethane	5000 ug/mL
							1,1-Dichloroethene	5000 ug/mL
							1,1-Dichloropropene	5000 ug/mL
							1,2,3-Trichlorobenzene	5000 ug/mL
							1,2,3-Trichloropropane	5000 ug/mL
							1,2,4-Trichlorobenzene	5000 ug/mL
							1,2,4-Trimethylbenzene	5000 ug/mL
							1,2-Dibromo-3-Chloropropane	5000 ug/mL
							1,2-Dibromoethane (EDB)	5000 ug/mL
							1,2-Dichlorobenzene	5000 ug/mL
							1,2-Dichloroethane	5000 ug/mL
							1,2-Dichloropropane	5000 ug/mL
							1,3,5-Trimethylbenzene	5000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Envirc Job No.: 410-110288-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	5000 ug/mL
							1,3-Dichloropropane	5000 ug/mL
							1,4-Dichlorobenzene	5000 ug/mL
							2,2-Dichloropropane	5000 ug/mL
							2-Chlorotoluene	5000 ug/mL
							4-Chlorotoluene	5000 ug/mL
							4-Isopropyltoluene	5000 ug/mL
							Benzene	5000 ug/mL
							Bromobenzene	5000 ug/mL
							Bromochloromethane	5000 ug/mL
							Bromodichloromethane	5000 ug/mL
							Bromoform	5000 ug/mL
							Carbon tetrachloride	5000 ug/mL
							Chlorobenzene	5000 ug/mL
							Chloroform	5000 ug/mL
							cis-1,2-Dichloroethene	5000 ug/mL
							cis-1,3-Dichloropropene	5000 ug/mL
							Dibromochloromethane	5000 ug/mL
							Dibromomethane	5000 ug/mL
							Ethylbenzene	5000 ug/mL
							Hexachlorobutadiene	5000 ug/mL
							Isopropylbenzene	5000 ug/mL
							m-Xylene & p-Xylene	10000 ug/mL
							Methylene Chloride	5000 ug/mL
							n-Butylbenzene	5000 ug/mL
							N-Propylbenzene	5000 ug/mL
							Naphthalene	5000 ug/mL
							o-Xylene	5000 ug/mL
							sec-Butylbenzene	5000 ug/mL
							Styrene	5000 ug/mL
							tert-Butylbenzene	5000 ug/mL
							Tetrachloroethene	5000 ug/mL
							Toluene	5000 ug/mL
							trans-1,2-Dichloroethene	5000 ug/mL
							trans-1,3-Dichloropropene	5000 ug/mL
							Trichloroethene	5000 ug/mL
..MSV_MegaMix#2_00082	09/20/22		Restek, Lot A0173454		(Purchased Reagent)		1,1,2-Trichloro-1,2,2-trifluoroethane	5000 ug/mL
							1,2,3-Trimethylbenzene	5000 ug/mL
							1,3,5-Trichlorobenzene	5000 ug/mL
							1,4-Dioxane	62500 ug/mL
							1-Chlorohexane	5000 ug/mL
							2-Chloro-1,3-butadiene	5000 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							2-Nitropropane	25000 ug/mL
							3-Chloro-1-propene	5000 ug/mL
							Acrylonitrile	12500 ug/mL
							Benzyl chloride	5000 ug/mL

Lab Name: Eurofins Lancaster Laboratories Envirc Job No.: 410-110288-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon disulfide	5000 ug/mL
							Cyclohexane	5000 ug/mL
							Ethyl methacrylate	5000 ug/mL
							Hexane	5000 ug/mL
							Iodomethane	5000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropyl ether	5000 ug/mL
							Methacrylonitrile	12500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
							Methylcyclohexane	5000 ug/mL
							n-Butanol	62500 ug/mL
							n-Heptane	5000 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	5000 ug/mL
							Tert-butyl ethyl ether	5000 ug/mL
							Tetrahydrofuran	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL
.MSV_CCV_VOC#3_00085	09/11/22	08/21/22	Methanol, Lot EB679	5 mL	MSV_CCV_ACR_00005	0.5 mL	Acrolein	12499.7 ug/mL
					MSV_V_Ketones_00080	1 mL	2-Butanone (MEK)	2500 ug/mL
							2-Hexanone	2500 ug/mL
							4-Methyl-2-pentanone (MIBK)	2500 ug/mL
							Acetone	2500 ug/mL
..MSV_CCV_ACR_00005	09/11/22	07/13/22	Methanol, Lot EB679	10 mL	MSV_VACR_STK_00027	9.205 mL	Acrolein	124997 ug/mL
...MSV_VACR_STK_00027	09/11/22	07/13/22	Methanol, Lot EB679	10 mL	MSV_ACROLEIN_00020	1.457 g	Acrolein	135792 ug/mL
....MSV_ACROLEIN_00020	02/28/23	Chem Service, Lot 12926800			(Purchased Reagent)		Acrolein	0.932 g/g
..MSV_V_Ketones_00080	07/31/24	Restek, Lot A0174287			(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MSV_V_VOA2_00154	09/20/22	08/21/22	Methanol, Lot EB679	5 mL	MSV_V#2B_00283	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_00283	04/30/24	Restek, Lot A0184378			(Purchased Reagent)		1,4-Dioxane	62500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Methacrylonitrile	12500 ug/mL
							n-Butanol	125000 ug/mL
							Propionitrile	25000 ug/mL
							trans-1,4-Dichloro-2-butene	12500 ug/mL
MSV_LL_#1_826_00062	01/01/23	12/11/22	Methanol, Lot EB679	1 mL	MSV_CCV_VOC#1_00101	50 uL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL

Lab Name: Eurofins Lancaster Laboratories Envirc Job No.: 410-110288-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,2-Dibromoethane (EDB)	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							Benzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromochloromethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Methylene Chloride	50 ug/mL
							Styrene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Carbon disulfide	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
					MSV_CCV_VOC#3_00101	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_00101	01/10/23	12/11/22	Methanol, Lot EB679	5 mL	MSV_MegaMIX#1_00102	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

Lab Name: Eurofins Lancaster Laboratories Envirc Job No.: 410-110288-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,3-Dichloropropene	1000 ug/mL
							Dibromochloromethane	1000 ug/mL
							Ethylbenzene	1000 ug/mL
							Methylene Chloride	1000 ug/mL
							Styrene	1000 ug/mL
							Tetrachloroethene	1000 ug/mL
							Toluene	1000 ug/mL
							trans-1,2-Dichloroethene	1000 ug/mL
							trans-1,3-Dichloropropene	1000 ug/mL
							Trichloroethene	1000 ug/mL
					MSV_MegaMix#2_00098	1 mL	Carbon disulfide	1000 ug/mL
							Methyl tert-butyl ether	1000 ug/mL
..MSV_MegaMIX#1_00102	01/10/23		Restek, Lot A0184527		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	5000 ug/mL
							1,1,1-Trichloroethane	5000 ug/mL
							1,1,2,2-Tetrachloroethane	5000 ug/mL
							1,1,2-Trichloroethane	5000 ug/mL
							1,1-Dichloroethane	5000 ug/mL
							1,1-Dichloroethene	5000 ug/mL
							1,2-Dibromoethane (EDB)	5000 ug/mL
							1,2-Dichloroethane	5000 ug/mL
							1,2-Dichloropropane	5000 ug/mL
							Benzene	5000 ug/mL
							Bromochloromethane	5000 ug/mL
							Bromodichloromethane	5000 ug/mL
							Bromoform	5000 ug/mL
							Carbon tetrachloride	5000 ug/mL
							Chlorobenzene	5000 ug/mL
							Chloroform	5000 ug/mL
							cis-1,2-Dichloroethene	5000 ug/mL
							cis-1,3-Dichloropropene	5000 ug/mL
							Dibromochloromethane	5000 ug/mL
							Ethylbenzene	5000 ug/mL
							Methylene Chloride	5000 ug/mL
							Styrene	5000 ug/mL
							Tetrachloroethene	5000 ug/mL
							Toluene	5000 ug/mL
							trans-1,2-Dichloroethene	5000 ug/mL
							trans-1,3-Dichloropropene	5000 ug/mL
							Trichloroethene	5000 ug/mL
..MSV_MegaMix#2_00098	01/10/23		Restek, Lot A0173454		(Purchased Reagent)		Carbon disulfide	5000 ug/mL
							Methyl tert-butyl ether	5000 ug/mL
.MSV_CCV_VOC#3_00101	01/01/23	12/11/22	Methanol, Lot EB679	5 mL	MSV_V_Ketones_00095	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_00095	01/31/24		Restek, Lot A0180742		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL

Lab Name: Eurofins Lancaster Laboratories Envirc Job No.: 410-110288-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetone	12500 ug/mL
MSV_LL_#2_826_00057	09/07/22	08/22/22	Methanol, Lot EB679	1 mL	MSV_CCV_EE_00003	50 uL	Ethyl ether	50.0143 ug/mL
					MSV_V_PentaCL_00020	10 uL	Pentachloroethane	50 ug/mL
.MSV_CCV_EE_00003	11/20/22	05/20/22	Methanol, Lot EB679	100 mL	MSV_EE_MISCSK_00010	1.73 mL	Ethyl ether	1000.29 ug/mL
..MSV_EE_MISCSK_00010	11/20/22	05/20/22	Methanol, Lot EB679	10 mL	MSV_EE_Neat_00007	0.5782 g	Ethyl ether	57820 ug/mL
...MSV_EE_Neat_00007	12/31/25		Chem Service, Lot 12123300		(Purchased Reagent)		Ethyl ether	1 g/g
.MSV_V_PentaCL_00020	09/07/22		Restek, Lot A0171341		(Purchased Reagent)		Pentachloroethane	5000 ug/mL
MSV_LL_GAS826_00109	08/29/22	08/22/22	Methanol, Lot EB679	1 mL	MSV_CCV_GASES_00256	25 uL	1,2-Dichloro-1,1,2-trifluoroethane	50 ug/mL
							Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_CCV_GASES_00256	08/29/22		Restek, Lot A0172364		(Purchased Reagent)		1,2-Dichloro-1,1,2-trifluoroethane	2000 ug/mL
							Bromomethane	2000 ug/mL
							Butadiene	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Dichlorofluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_LL_GAS826_00129	12/30/22	12/23/22	Methanol, Lot EB679	1 mL	MSV_CCV_GASES_00361	25 uL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.MSV_CCV_GASES_00361	12/30/22		Restek, Lot A0184815		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_QC_Gas826_00096	08/28/22	08/22/22	Methanol, Lot EB679	1 mL	MSV_QC_2K_GAS_00104	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MSV_QC_2K_GAS_00104	08/28/22		Restek, Lot A0172021		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_QC_Gas826_00117	12/30/22	12/27/22	Methanol, Lot EB679	1 mL	MSV_QC_2K_GAS_00123	20 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL

Lab Name: Eurofins Lancaster Laboratories Envirc Job No.: 410-110288-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Vinyl chloride	40 ug/mL
.MSV_QC_2K_GAS_00123	12/30/22	Restek, Lot A0184924			(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
MSV_V_BFB_00008							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Xylenes, Total	
					MSV_VBFB_STK_00008	0.128 mL	BFB	49.8125 ug/mL
.MSV_VBFB_STK_00008	12/27/22	06/27/22	Methanol, Lot EB679	10 mL	MSV_4BFB_NEAT_00008	0.9729 g	BFB	97290 ug/mL
..MSV_4BFB_NEAT_00008	02/28/25	Chem Service, Lot 13233000			(Purchased Reagent)		BFB	1 g/g
MSV_V_BFB_00011							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Tentatively Identified Compound	
							Xylenes, Total	
					MSV_VBFB_STK_00009	0.127 mL	BFB	50.1498 ug/mL
.MSV_VBFB_STK_00009	06/18/23	12/18/22	Methanol, Lot EB679	10 mL	MSV_4BFB_NEAT_00007	0.9872 g	BFB	98720 ug/mL
..MSV_4BFB_NEAT_00007	02/28/25	Chem Service, Lot 13233000			(Purchased Reagent)		BFB	1 g/g

Reagent

MSV_4BFB_NEAT_00007

660 Tower Lane • P.O. Box 599 • West Chester, PA 19381-0599
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info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

4-Bromofluorobenzene

CATALOG NUMBER	N-10809-1G
LOT NUMBER	13233000
DATE CERTIFIED	05/12/22
EXPIRATION DATE	05/31/25
CAS NUMBER	460-00-4
MOLECULAR FORMULA	C6H4BrF
MOLECULAR WEIGHT	175.00
STORAGE	Store at room temperature (20 - 25 °C).
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.

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

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

Certified By:

Mary Beth O'Donnell
CSM/TC

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

PJLA Testing

PJLA Reference Material Producer

COA Form
Revision 3 (3/2015)

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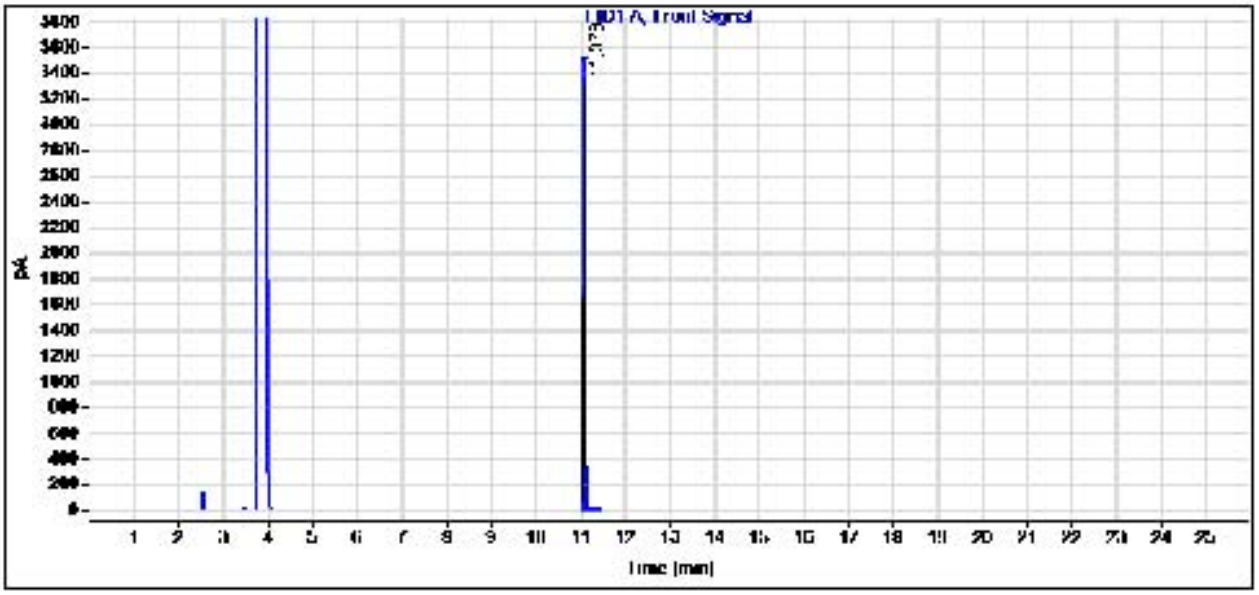
CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\CHEM32\1\DATA\2022 DATA\0522\FID010615.D

Sample name: N-10809

Instrument:	GC 1	**Sample type:**	Sample
Injection date:	5/12/2022 11:36:15 AM	**Location:**	Vial 43
Acq. method:	MIX1.M	**Injection volume:**	1.0uL
Column name:	DB-624 (30m x 0.53mm x 3.0um)		



Signal: FID1 A, Front Signal

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

Reagent

MSV_8260_SS_00734

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110 Benner Circle
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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. : 55671 **Lot No.:** A0183565

Description : 8260A Surrogate Mix

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

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

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

Ship: Ambient

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

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

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

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

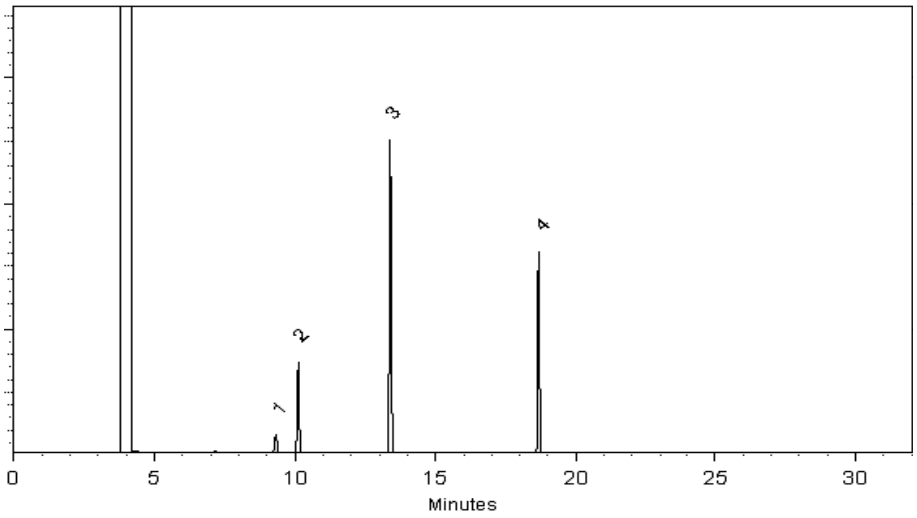
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Russ Bookhamer - Operations Technician I

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

Fang-Yun Lo - QC Analyst

Date Passed: 04-Apr-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_ACROLEIN_00020

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info@chemservice.com • www.chemservice.com

CERTIFICATE OF ANALYSIS

Acrolein

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

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

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

PJLA Testing

PJLA Reference Material Producer

COA Form
Revision 3 (3/2015)

Print Date: 02/14/22

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

Certified By:

Mary Beth O'Donnell
CSM/TC

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CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

Data file: C:\CHEM32\1\DATA\2022 DATA\0222\SIG2022990.D

Sample name: Acrolein

Instrument: GC 1
Injection date: 2/3/2022 2:54:32 PM
Acq. method: GASBOMB_TCD.M
Column name: DB-624 (30m x 0.53mm x 3.0um)

Sample type: Sample
Location: Vial 1
Injection volume: 1.0uL

Signal: TCD2 B, Back Signal

RT [min]	Type	Width [min]	Area	Height	Area%
2.600	BB	0.0362	14.5715	6.2387	4.5336
2.902	BB	0.0314	7.2404	3.5582	2.2527
4.046	BB	0.0349	299.5987	134.6697	93.2137
		Sum	321.4106		

Reagent

MSV_CCV_GASES_00256

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Bellefonte, PA 16823-8812
Tel: (800)356-1688
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
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Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 577488 **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)

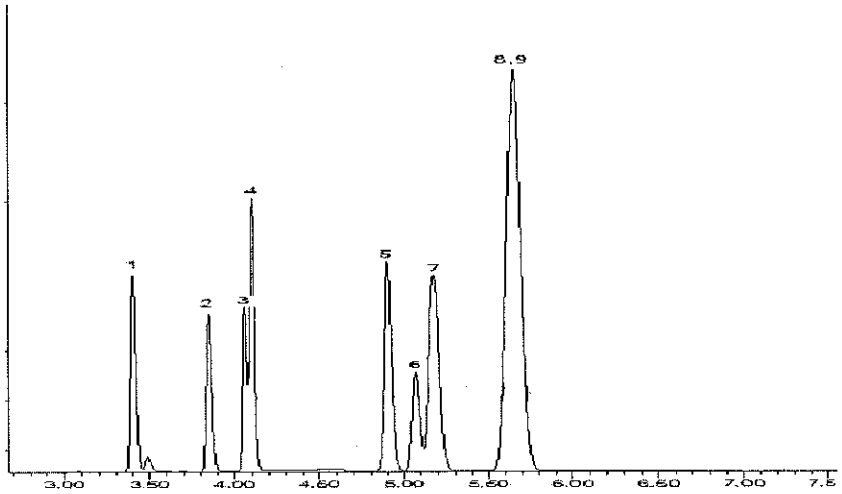
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

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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. : 577488 **Lot No.:** A0184815

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, 2025 **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	Dichlorodifluoromethane (CFC-12)	2,008.5 µg/mL	+/- 16.4522 µg/mL	Gravimetric
	CAS # 75-71-8 (Lot 00012554)		+/- 113.2099 µg/mL	Unstressed
	Purity 99%		+/- 115.8314 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,017.9 µg/mL	+/- 17.1593 µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBK6571)		+/- 113.8303 µg/mL	Unstressed
	Purity 99%		+/- 116.4619 µg/mL	Stressed
3	Vinyl chloride	2,023.8 µg/mL	+/- 20.0801 µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 00015559)		+/- 114.6342 µg/mL	Unstressed
	Purity 99%		+/- 117.2631 µg/mL	Stressed
4	1,3-Butadiene	2,021.2 µg/mL	+/- 16.5562 µg/mL	Gravimetric
	CAS # 106-99-0 (Lot 00019375)		+/- 113.9252 µg/mL	Unstressed
	Purity 99%		+/- 116.5633 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,003.9 µg/mL	+/- 16.6513 µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/- 112.9858 µg/mL	Unstressed
	Purity 99%		+/- 115.6006 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,024.9 µg/mL	+/- 16.7845 µg/mL	Gravimetric
	CAS # 75-00-3 (Lot 107-401039114-1)		+/- 114.1621 µg/mL	Unstressed
	Purity 99%		+/- 116.8044 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,000.0 µg/mL	+/- 11.6550 µg/mL	Gravimetric
	CAS # 75-43-4 (Lot 12841600)		+/- 112.1408 µg/mL	Unstressed
	Purity 99%		+/- 114.7646 µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,015.0	µg/mL	+/-	11.7425	µg/mL	Gravimetric
	CAS # 75-69-4	(Lot MKCL8411)			+/-	112.9819	µg/mL	Unstressed
	Purity 99%				+/-	115.6254	µg/mL	Stressed
9	1,2-Dichloro-1,1,2-trifluoroethane (CFC-123a)		2,002.3	µg/mL	+/-	20.4087	µg/mL	Gravimetric
	CAS # 354-23-4	(Lot Q9B-64)			+/-	113.5126	µg/mL	Unstressed
	Purity 99%				+/-	116.1114	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)

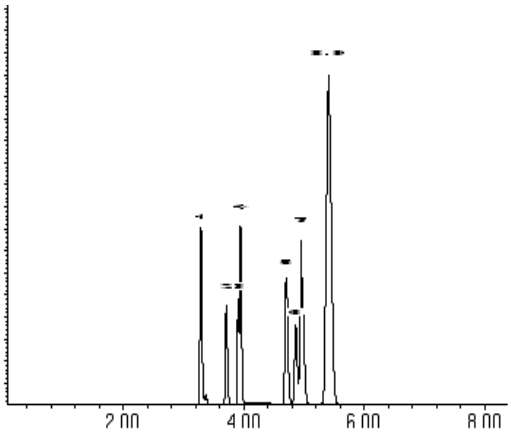
Carrier Gas:
helium-constant flow 2.0 mL/min.

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.

Miranda Kline - Operations Technician I

Date Mixed: 03-May-2022 **Balance:** B707717271

Christie Mills - Operations Technician II

Date Passed: 09-May-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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CERTIFICATE OF ANALYSIS

Ethyl ether

CATALOG NUMBER	N-11897-1G
LOT NUMBER	12123300
DATE CERTIFIED	12/04/20
EXPIRATION DATE	12/31/25
CAS NUMBER	60-29-7
MOLECULAR FORMULA	C4H10O
MOLECULAR WEIGHT	74.12
STORAGE	Refrigerator storage (2 - 8 °C)
HANDLING	See Safety Data Sheet
INTENDED USE	For laboratory use only.

Analytical Test	Value
% PURITY (GC/TCD)	99.5

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

Certified By:

Mary Beth O'Donnell

Mary Beth O'Donnell
CSM/TC

COA Form
Revision 3 (3/2015)

PJLA Testing
Accreditation #63520

Print Date: 07/26/21

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CERTIFICATE OF ANALYSIS

Gas Chromatography / Flame Ionization Detector (GC/FID)

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

Sample name: Ethylether

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

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

Signal: TCD2 B, Back Signal

RT [min]	Type	Width [min]	Area	Height	Area%
1.206	BB	0.0364	16.2548	6.6698	0.0305
1.560	BB	0.0278	55.8996	29.9782	0.1049
1.892	BB	0.0328	64.6527	28.1084	0.1214
2.224	BB	0.0347	9.6188	4.3673	0.0181
2.545	BB S	0.0880	53125.6797	7942.5742	99.7251
		Sum	53272.1055		

PJLA Testing

Reagent

MSV_M_MIX1SEC_00083

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www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom VOC MegaMix®.SEC #1 Standard

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

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

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

Ship: Ambient

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

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

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

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

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

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

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

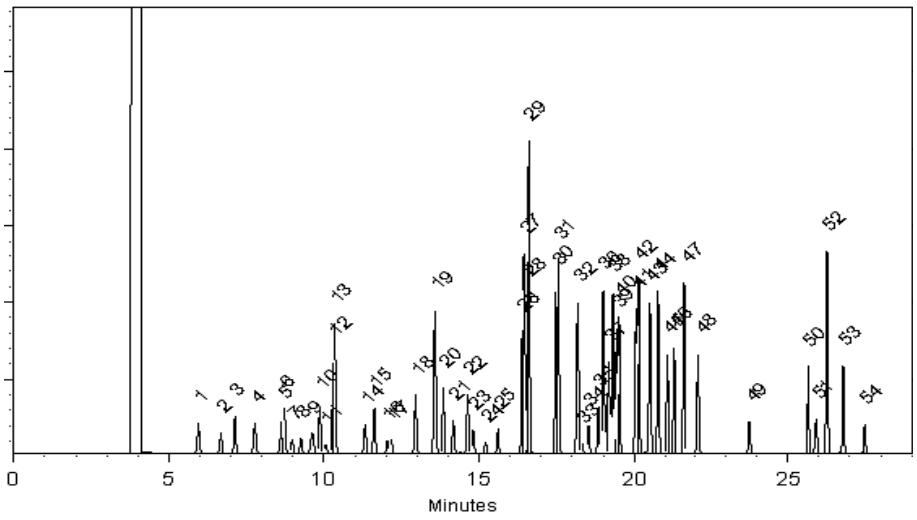
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Bradley Meyer - Mix Technician

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

Alexis Shelow - Operations Tech I

Date Passed: 30-Apr-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_M_MIX1SEC_00103

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 577493 **Lot No.:** A0184354

Description : Custom VOC MegaMix®.SEC #1 Standard

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

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

Expiration Date : April 30, 2025 **Storage:** 0°C or colder

Ship: Ambient

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,1-Dichloroethene	1,003.8 µg/mL	+/- 9.9833 µg/mL	Gravimetric
	CAS # 75-35-4.SEC (Lot 9201700)		+/- 56.8592 µg/mL	Unstressed
	Purity 99%		+/- 58.1629 µg/mL	Stressed
2	Methylene chloride (dichloromethane)	1,001.8 µg/mL	+/- 9.9634 µg/mL	Gravimetric
	CAS # 75-09-2.SEC (Lot FGM02)		+/- 56.7459 µg/mL	Unstressed
	Purity 99%		+/- 58.0470 µg/mL	Stressed
3	trans-1,2-Dichloroethene	1,000.3 µg/mL	+/- 9.9490 µg/mL	Gravimetric
	CAS # 156-60-5.SEC (Lot TS5UB)		+/- 56.6637 µg/mL	Unstressed
	Purity 99%		+/- 57.9630 µg/mL	Stressed
4	1,1-Dichloroethane	1,002.0 µg/mL	+/- 9.9659 µg/mL	Gravimetric
	CAS # 75-34-3.SEC (Lot 7482000)		+/- 56.7600 µg/mL	Unstressed
	Purity 99%		+/- 58.0615 µg/mL	Stressed
5	2,2-Dichloropropane	1,000.0 µg/mL	+/- 9.9222 µg/mL	Gravimetric
	CAS # 594-20-7.SEC (Lot I7E8E)		+/- 56.6441 µg/mL	Unstressed
	Purity 98%		+/- 57.9431 µg/mL	Stressed
6	cis-1,2-Dichloroethene	1,000.1 µg/mL	+/- 9.9225 µg/mL	Gravimetric
	CAS # 156-59-2.SEC (Lot YZO5O)		+/- 56.6460 µg/mL	Unstressed
	Purity 99%		+/- 57.9451 µg/mL	Stressed
7	Chloroform	1,000.8 µg/mL	+/- 9.9535 µg/mL	Gravimetric
	CAS # 67-66-3.SEC (Lot 1297547)		+/- 56.6892 µg/mL	Unstressed
	Purity 99%		+/- 57.9891 µg/mL	Stressed

8	Bromochloromethane		1,000.1	µg/mL	+/-	9.9231	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 8529200)			+/-	56.6496	µg/mL	Unstressed
	Purity 99%				+/-	57.9487	µg/mL	Stressed
9	1,1,1-trichloroethane		1,000.3	µg/mL	+/-	9.9491	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot 190123CG)			+/-	56.6645	µg/mL	Unstressed
	Purity 98%				+/-	57.9637	µg/mL	Stressed
10	1,1-Dichloropropene		1,002.5	µg/mL	+/-	9.9470	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 8541600)			+/-	56.7861	µg/mL	Unstressed
	Purity 95%				+/-	58.0883	µg/mL	Stressed
11	Carbon tetrachloride		1,000.8	µg/mL	+/-	9.9535	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)			+/-	56.6892	µg/mL	Unstressed
	Purity 99%				+/-	57.9891	µg/mL	Stressed
12	1,2-Dichloroethane		1,000.6	µg/mL	+/-	9.9524	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot 00016165)			+/-	56.6831	µg/mL	Unstressed
	Purity 99%				+/-	57.9828	µg/mL	Stressed
13	Benzene		1,000.1	µg/mL	+/-	9.9229	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)			+/-	56.6482	µg/mL	Unstressed
	Purity 99%				+/-	57.9473	µg/mL	Stressed
14	Trichloroethene		1,000.9	µg/mL	+/-	9.9548	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)			+/-	56.6965	µg/mL	Unstressed
	Purity 99%				+/-	57.9965	µg/mL	Stressed
15	1,2-Dichloropropane		1,000.1	µg/mL	+/-	9.9474	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot ERRBI-RH)			+/-	56.6547	µg/mL	Unstressed
	Purity 99%				+/-	57.9537	µg/mL	Stressed
16	Bromodichloromethane		1,000.8	µg/mL	+/-	9.9539	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 13780)			+/-	56.6918	µg/mL	Unstressed
	Purity 99%				+/-	57.9917	µg/mL	Stressed
17	Dibromomethane		1,000.1	µg/mL	+/-	9.9231	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot MOKKJ)			+/-	56.6496	µg/mL	Unstressed
	Purity 99%				+/-	57.9487	µg/mL	Stressed
18	cis-1,3-Dichloropropene		1,000.9	µg/mL	+/-	9.9550	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 487OA)			+/-	56.6979	µg/mL	Unstressed
	Purity 98%				+/-	57.9980	µg/mL	Stressed
19	Toluene		1,000.0	µg/mL	+/-	9.9222	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)			+/-	56.6446	µg/mL	Unstressed
	Purity 99%				+/-	57.9436	µg/mL	Stressed
20	trans-1,3-Dichloropropene		1,002.1	µg/mL	+/-	9.9673	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot ZDMSL)			+/-	56.7679	µg/mL	Unstressed
	Purity 96%				+/-	58.0696	µg/mL	Stressed
21	1,1,2-Trichloroethane		1,001.3	µg/mL	+/-	9.9585	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 7871500)			+/-	56.7176	µg/mL	Unstressed
	Purity 99%				+/-	58.0180	µg/mL	Stressed
22	1,3-Dichloropropane		1,000.1	µg/mL	+/-	9.9229	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot AGN01-EFPC)			+/-	56.6482	µg/mL	Unstressed
	Purity 99%				+/-	57.9473	µg/mL	Stressed
23	Tetrachloroethene		1,000.2	µg/mL	+/-	9.9484	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)			+/-	56.6603	µg/mL	Unstressed
	Purity 99%				+/-	57.9595	µg/mL	Stressed

24	Dibromochloromethane		1,000.5	µg/mL	+/-	9.9509	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot 10206360)			+/-	56.6743	µg/mL	Unstressed
	Purity 97%				+/-	57.9738	µg/mL	Stressed
25	1,2-Dibromoethane (EDB)		1,000.1	µg/mL	+/-	9.9230	µg/mL	Gravimetric
	CAS # 106-93-4.SEC	(Lot 7511900)			+/-	56.6489	µg/mL	Unstressed
	Purity 99%				+/-	57.9480	µg/mL	Stressed
26	Chlorobenzene		1,001.4	µg/mL	+/-	9.9598	µg/mL	Gravimetric
	CAS # 108-90-7.SEC	(Lot 1161936)			+/-	56.7253	µg/mL	Unstressed
	Purity 99%				+/-	58.0260	µg/mL	Stressed
27	1,1,1,2-Tetrachloroethane		1,000.1	µg/mL	+/-	9.9230	µg/mL	Gravimetric
	CAS # 630-20-6.SEC	(Lot GC01)			+/-	56.6489	µg/mL	Unstressed
	Purity 99%				+/-	57.9480	µg/mL	Stressed
28	Ethylbenzene		1,000.2	µg/mL	+/-	9.9235	µg/mL	Gravimetric
	CAS # 100-41-4.SEC	(Lot PI4SE)			+/-	56.6517	µg/mL	Unstressed
	Purity 99%				+/-	57.9509	µg/mL	Stressed
29	m-Xylene		1,000.2	µg/mL	+/-	9.9235	µg/mL	Gravimetric
	CAS # 108-38-3.SEC	(Lot 7ZV6F)			+/-	56.6517	µg/mL	Unstressed
	Purity 99%				+/-	57.9509	µg/mL	Stressed
30	p-Xylene		1,000.1	µg/mL	+/-	9.9224	µg/mL	Gravimetric
	CAS # 106-42-3.SEC	(Lot D6UOA)			+/-	56.6453	µg/mL	Unstressed
	Purity 99%				+/-	57.9444	µg/mL	Stressed
31	o-Xylene		1,000.1	µg/mL	+/-	9.9225	µg/mL	Gravimetric
	CAS # 95-47-6.SEC	(Lot FGL01)			+/-	56.6460	µg/mL	Unstressed
	Purity 99%				+/-	57.9451	µg/mL	Stressed
32	Styrene		1,000.1	µg/mL	+/-	9.9231	µg/mL	Gravimetric
	CAS # 100-42-5.SEC	(Lot OFIOL-IA)			+/-	56.6496	µg/mL	Unstressed
	Purity 99%				+/-	57.9487	µg/mL	Stressed
33	Isopropylbenzene (cumene)		1,000.0	µg/mL	+/-	9.9220	µg/mL	Gravimetric
	CAS # 98-82-8.SEC	(Lot JN4EC)			+/-	56.6432	µg/mL	Unstressed
	Purity 99%				+/-	57.9422	µg/mL	Stressed
34	Bromoform		1,001.7	µg/mL	+/-	9.9633	µg/mL	Gravimetric
	CAS # 75-25-2.SEC	(Lot 9170700)			+/-	56.7453	µg/mL	Unstressed
	Purity 99%				+/-	58.0464	µg/mL	Stressed
35	1,1,2,2-Tetrachloroethane		1,001.6	µg/mL	+/-	9.9624	µg/mL	Gravimetric
	CAS # 79-34-5.SEC	(Lot BCCB0724)			+/-	56.7398	µg/mL	Unstressed
	Purity 98%				+/-	58.0408	µg/mL	Stressed
36	1,2,3-Trichloropropane		1,000.0	µg/mL	+/-	9.9222	µg/mL	Gravimetric
	CAS # 96-18-4.SEC	(Lot GUHZN)			+/-	56.6446	µg/mL	Unstressed
	Purity 99%				+/-	57.9436	µg/mL	Stressed
37	n-Propylbenzene		1,000.1	µg/mL	+/-	9.9224	µg/mL	Gravimetric
	CAS # 103-65-1.SEC	(Lot T2HFC)			+/-	56.6453	µg/mL	Unstressed
	Purity 99%				+/-	57.9444	µg/mL	Stressed
38	Bromobenzene		1,000.2	µg/mL	+/-	9.9234	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 8DKWJ)			+/-	56.6510	µg/mL	Unstressed
	Purity 99%				+/-	57.9502	µg/mL	Stressed
39	1,3,5-Trimethylbenzene		1,000.1	µg/mL	+/-	9.9225	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot TOOOF)			+/-	56.6460	µg/mL	Unstressed
	Purity 99%				+/-	57.9451	µg/mL	Stressed

40	2-Chlorotoluene		1,000.0	µg/mL	+/-	9.9220	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot BRHPM)			+/-	56.6432	µg/mL	Unstressed
	Purity 99%				+/-	57.9422	µg/mL	Stressed
41	4-Chlorotoluene		1,000.1	µg/mL	+/-	9.9227	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot S5SKD)			+/-	56.6475	µg/mL	Unstressed
	Purity 99%				+/-	57.9465	µg/mL	Stressed
42	tert-Butylbenzene		1,000.1	µg/mL	+/-	9.9226	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot D6OHC)			+/-	56.6468	µg/mL	Unstressed
	Purity 99%				+/-	57.9458	µg/mL	Stressed
43	1,2,4-Trimethylbenzene		1,000.1	µg/mL	+/-	9.9229	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot JMIYD)			+/-	56.6482	µg/mL	Unstressed
	Purity 99%				+/-	57.9473	µg/mL	Stressed
44	sec-Butylbenzene		1,000.1	µg/mL	+/-	9.9226	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot O4HRF)			+/-	56.6468	µg/mL	Unstressed
	Purity 99%				+/-	57.9458	µg/mL	Stressed
45	4-Isopropyltoluene (p-cymene)		1,000.1	µg/mL	+/-	9.9226	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 8380000)			+/-	56.6468	µg/mL	Unstressed
	Purity 99%				+/-	57.9458	µg/mL	Stressed
46	1,3-Dichlorobenzene		1,000.1	µg/mL	+/-	9.9467	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	56.6504	µg/mL	Unstressed
	Purity 99%				+/-	57.9494	µg/mL	Stressed
47	1,4-Dichlorobenzene		1,002.5	µg/mL	+/-	9.9708	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot YWKDC-MK)			+/-	56.7875	µg/mL	Unstressed
	Purity 99%				+/-	58.0896	µg/mL	Stressed
48	n-Butylbenzene		1,000.1	µg/mL	+/-	9.9229	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot MMPGA)			+/-	56.6482	µg/mL	Unstressed
	Purity 99%				+/-	57.9473	µg/mL	Stressed
49	1,2-Dichlorobenzene		1,001.6	µg/mL	+/-	9.9619	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	56.7374	µg/mL	Unstressed
	Purity 99%				+/-	58.0383	µg/mL	Stressed
50	1,2-Dibromo-3-chloropropane		1,000.0	µg/mL	+/-	9.9220	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot Q135-105)			+/-	56.6432	µg/mL	Unstressed
	Purity 99%				+/-	57.9422	µg/mL	Stressed
51	1,2,4-Trichlorobenzene		1,000.1	µg/mL	+/-	9.9224	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot IGLFA)			+/-	56.6453	µg/mL	Unstressed
	Purity 99%				+/-	57.9444	µg/mL	Stressed
52	Hexachlorobutadiene		1,000.8	µg/mL	+/-	9.9297	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 8532700)			+/-	56.6870	µg/mL	Unstressed
	Purity 97%				+/-	57.9870	µg/mL	Stressed
53	Naphthalene		1,000.1	µg/mL	+/-	9.9229	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot SKZ5N)			+/-	56.6482	µg/mL	Unstressed
	Purity 99%				+/-	57.9473	µg/mL	Stressed
54	1,2,3-Trichlorobenzene		1,000.7	µg/mL	+/-	9.9292	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)			+/-	56.6844	µg/mL	Unstressed
	Purity 98%				+/-	57.9843	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)

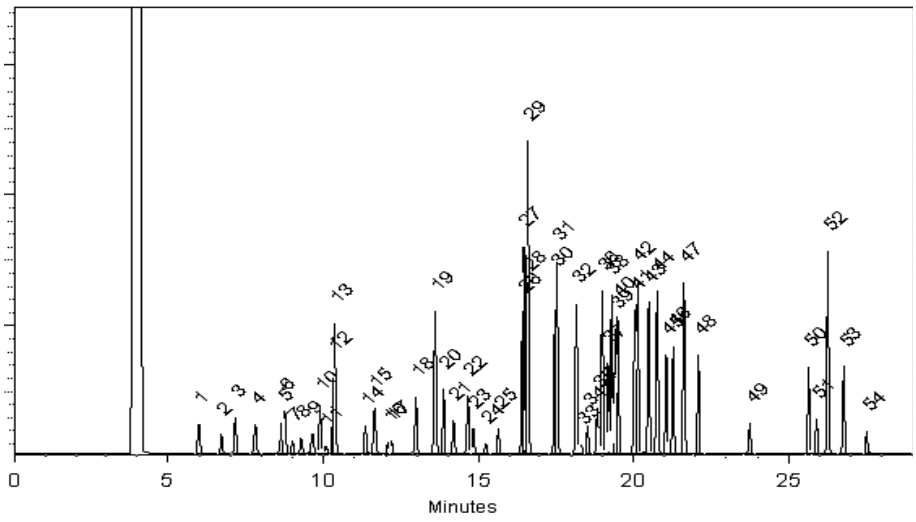
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Katelyn McGinni - Operations Tech I

Date Mixed: 21-Apr-2022 **Balance:** B345965662

Marlina Cowan - Operations Tech I

Date Passed: 27-Apr-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_M_MIX1SEC_00105

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 577493 **Lot No.:** A0184354

Description : Custom VOC MegaMix®.SEC #1 Standard

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

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

Expiration Date : April 30, 2025 **Storage:** 0°C or colder

Ship: Ambient

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,1-Dichloroethene	1,003.8 µg/mL	+/- 9.9833 µg/mL	Gravimetric
	CAS # 75-35-4.SEC (Lot 9201700)		+/- 56.8592 µg/mL	Unstressed
	Purity 99%		+/- 58.1629 µg/mL	Stressed
2	Methylene chloride (dichloromethane)	1,001.8 µg/mL	+/- 9.9634 µg/mL	Gravimetric
	CAS # 75-09-2.SEC (Lot FGM02)		+/- 56.7459 µg/mL	Unstressed
	Purity 99%		+/- 58.0470 µg/mL	Stressed
3	trans-1,2-Dichloroethene	1,000.3 µg/mL	+/- 9.9490 µg/mL	Gravimetric
	CAS # 156-60-5.SEC (Lot TS5UB)		+/- 56.6637 µg/mL	Unstressed
	Purity 99%		+/- 57.9630 µg/mL	Stressed
4	1,1-Dichloroethane	1,002.0 µg/mL	+/- 9.9659 µg/mL	Gravimetric
	CAS # 75-34-3.SEC (Lot 7482000)		+/- 56.7600 µg/mL	Unstressed
	Purity 99%		+/- 58.0615 µg/mL	Stressed
5	2,2-Dichloropropane	1,000.0 µg/mL	+/- 9.9222 µg/mL	Gravimetric
	CAS # 594-20-7.SEC (Lot I7E8E)		+/- 56.6441 µg/mL	Unstressed
	Purity 98%		+/- 57.9431 µg/mL	Stressed
6	cis-1,2-Dichloroethene	1,000.1 µg/mL	+/- 9.9225 µg/mL	Gravimetric
	CAS # 156-59-2.SEC (Lot YZO5O)		+/- 56.6460 µg/mL	Unstressed
	Purity 99%		+/- 57.9451 µg/mL	Stressed
7	Chloroform	1,000.8 µg/mL	+/- 9.9535 µg/mL	Gravimetric
	CAS # 67-66-3.SEC (Lot 1297547)		+/- 56.6892 µg/mL	Unstressed
	Purity 99%		+/- 57.9891 µg/mL	Stressed

8	Bromochloromethane		1,000.1	µg/mL	+/-	9.9231	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 8529200)			+/-	56.6496	µg/mL	Unstressed
	Purity 99%				+/-	57.9487	µg/mL	Stressed
9	1,1,1-trichloroethane		1,000.3	µg/mL	+/-	9.9491	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot 190123CG)			+/-	56.6645	µg/mL	Unstressed
	Purity 98%				+/-	57.9637	µg/mL	Stressed
10	1,1-Dichloropropene		1,002.5	µg/mL	+/-	9.9470	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 8541600)			+/-	56.7861	µg/mL	Unstressed
	Purity 95%				+/-	58.0883	µg/mL	Stressed
11	Carbon tetrachloride		1,000.8	µg/mL	+/-	9.9535	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)			+/-	56.6892	µg/mL	Unstressed
	Purity 99%				+/-	57.9891	µg/mL	Stressed
12	1,2-Dichloroethane		1,000.6	µg/mL	+/-	9.9524	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot 00016165)			+/-	56.6831	µg/mL	Unstressed
	Purity 99%				+/-	57.9828	µg/mL	Stressed
13	Benzene		1,000.1	µg/mL	+/-	9.9229	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)			+/-	56.6482	µg/mL	Unstressed
	Purity 99%				+/-	57.9473	µg/mL	Stressed
14	Trichloroethene		1,000.9	µg/mL	+/-	9.9548	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)			+/-	56.6965	µg/mL	Unstressed
	Purity 99%				+/-	57.9965	µg/mL	Stressed
15	1,2-Dichloropropane		1,000.1	µg/mL	+/-	9.9474	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot ERRBI-RH)			+/-	56.6547	µg/mL	Unstressed
	Purity 99%				+/-	57.9537	µg/mL	Stressed
16	Bromodichloromethane		1,000.8	µg/mL	+/-	9.9539	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 13780)			+/-	56.6918	µg/mL	Unstressed
	Purity 99%				+/-	57.9917	µg/mL	Stressed
17	Dibromomethane		1,000.1	µg/mL	+/-	9.9231	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot MOKKJ)			+/-	56.6496	µg/mL	Unstressed
	Purity 99%				+/-	57.9487	µg/mL	Stressed
18	cis-1,3-Dichloropropene		1,000.9	µg/mL	+/-	9.9550	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 487OA)			+/-	56.6979	µg/mL	Unstressed
	Purity 98%				+/-	57.9980	µg/mL	Stressed
19	Toluene		1,000.0	µg/mL	+/-	9.9222	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)			+/-	56.6446	µg/mL	Unstressed
	Purity 99%				+/-	57.9436	µg/mL	Stressed
20	trans-1,3-Dichloropropene		1,002.1	µg/mL	+/-	9.9673	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot ZDMSL)			+/-	56.7679	µg/mL	Unstressed
	Purity 96%				+/-	58.0696	µg/mL	Stressed
21	1,1,2-Trichloroethane		1,001.3	µg/mL	+/-	9.9585	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 7871500)			+/-	56.7176	µg/mL	Unstressed
	Purity 99%				+/-	58.0180	µg/mL	Stressed
22	1,3-Dichloropropane		1,000.1	µg/mL	+/-	9.9229	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot AGN01-EFPC)			+/-	56.6482	µg/mL	Unstressed
	Purity 99%				+/-	57.9473	µg/mL	Stressed
23	Tetrachloroethene		1,000.2	µg/mL	+/-	9.9484	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)			+/-	56.6603	µg/mL	Unstressed
	Purity 99%				+/-	57.9595	µg/mL	Stressed

24	Dibromochloromethane		1,000.5	µg/mL	+/-	9.9509	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot 10206360)			+/-	56.6743	µg/mL	Unstressed
	Purity 97%				+/-	57.9738	µg/mL	Stressed
25	1,2-Dibromoethane (EDB)		1,000.1	µg/mL	+/-	9.9230	µg/mL	Gravimetric
	CAS # 106-93-4.SEC	(Lot 7511900)			+/-	56.6489	µg/mL	Unstressed
	Purity 99%				+/-	57.9480	µg/mL	Stressed
26	Chlorobenzene		1,001.4	µg/mL	+/-	9.9598	µg/mL	Gravimetric
	CAS # 108-90-7.SEC	(Lot 1161936)			+/-	56.7253	µg/mL	Unstressed
	Purity 99%				+/-	58.0260	µg/mL	Stressed
27	1,1,1,2-Tetrachloroethane		1,000.1	µg/mL	+/-	9.9230	µg/mL	Gravimetric
	CAS # 630-20-6.SEC	(Lot GC01)			+/-	56.6489	µg/mL	Unstressed
	Purity 99%				+/-	57.9480	µg/mL	Stressed
28	Ethylbenzene		1,000.2	µg/mL	+/-	9.9235	µg/mL	Gravimetric
	CAS # 100-41-4.SEC	(Lot PI4SE)			+/-	56.6517	µg/mL	Unstressed
	Purity 99%				+/-	57.9509	µg/mL	Stressed
29	m-Xylene		1,000.2	µg/mL	+/-	9.9235	µg/mL	Gravimetric
	CAS # 108-38-3.SEC	(Lot 7ZV6F)			+/-	56.6517	µg/mL	Unstressed
	Purity 99%				+/-	57.9509	µg/mL	Stressed
30	p-Xylene		1,000.1	µg/mL	+/-	9.9224	µg/mL	Gravimetric
	CAS # 106-42-3.SEC	(Lot D6UOA)			+/-	56.6453	µg/mL	Unstressed
	Purity 99%				+/-	57.9444	µg/mL	Stressed
31	o-Xylene		1,000.1	µg/mL	+/-	9.9225	µg/mL	Gravimetric
	CAS # 95-47-6.SEC	(Lot FGL01)			+/-	56.6460	µg/mL	Unstressed
	Purity 99%				+/-	57.9451	µg/mL	Stressed
32	Styrene		1,000.1	µg/mL	+/-	9.9231	µg/mL	Gravimetric
	CAS # 100-42-5.SEC	(Lot OFIOL-IA)			+/-	56.6496	µg/mL	Unstressed
	Purity 99%				+/-	57.9487	µg/mL	Stressed
33	Isopropylbenzene (cumene)		1,000.0	µg/mL	+/-	9.9220	µg/mL	Gravimetric
	CAS # 98-82-8.SEC	(Lot JN4EC)			+/-	56.6432	µg/mL	Unstressed
	Purity 99%				+/-	57.9422	µg/mL	Stressed
34	Bromoform		1,001.7	µg/mL	+/-	9.9633	µg/mL	Gravimetric
	CAS # 75-25-2.SEC	(Lot 9170700)			+/-	56.7453	µg/mL	Unstressed
	Purity 99%				+/-	58.0464	µg/mL	Stressed
35	1,1,2,2-Tetrachloroethane		1,001.6	µg/mL	+/-	9.9624	µg/mL	Gravimetric
	CAS # 79-34-5.SEC	(Lot BCCB0724)			+/-	56.7398	µg/mL	Unstressed
	Purity 98%				+/-	58.0408	µg/mL	Stressed
36	1,2,3-Trichloropropane		1,000.0	µg/mL	+/-	9.9222	µg/mL	Gravimetric
	CAS # 96-18-4.SEC	(Lot GUHZN)			+/-	56.6446	µg/mL	Unstressed
	Purity 99%				+/-	57.9436	µg/mL	Stressed
37	n-Propylbenzene		1,000.1	µg/mL	+/-	9.9224	µg/mL	Gravimetric
	CAS # 103-65-1.SEC	(Lot T2HFC)			+/-	56.6453	µg/mL	Unstressed
	Purity 99%				+/-	57.9444	µg/mL	Stressed
38	Bromobenzene		1,000.2	µg/mL	+/-	9.9234	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 8DKWJ)			+/-	56.6510	µg/mL	Unstressed
	Purity 99%				+/-	57.9502	µg/mL	Stressed
39	1,3,5-Trimethylbenzene		1,000.1	µg/mL	+/-	9.9225	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot TOOOF)			+/-	56.6460	µg/mL	Unstressed
	Purity 99%				+/-	57.9451	µg/mL	Stressed

40	2-Chlorotoluene		1,000.0	µg/mL	+/-	9.9220	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot BRHPM)			+/-	56.6432	µg/mL	Unstressed
	Purity 99%				+/-	57.9422	µg/mL	Stressed
41	4-Chlorotoluene		1,000.1	µg/mL	+/-	9.9227	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot S5SKD)			+/-	56.6475	µg/mL	Unstressed
	Purity 99%				+/-	57.9465	µg/mL	Stressed
42	tert-Butylbenzene		1,000.1	µg/mL	+/-	9.9226	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot D6OHC)			+/-	56.6468	µg/mL	Unstressed
	Purity 99%				+/-	57.9458	µg/mL	Stressed
43	1,2,4-Trimethylbenzene		1,000.1	µg/mL	+/-	9.9229	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot JMIYD)			+/-	56.6482	µg/mL	Unstressed
	Purity 99%				+/-	57.9473	µg/mL	Stressed
44	sec-Butylbenzene		1,000.1	µg/mL	+/-	9.9226	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot O4HRF)			+/-	56.6468	µg/mL	Unstressed
	Purity 99%				+/-	57.9458	µg/mL	Stressed
45	4-Isopropyltoluene (p-cymene)		1,000.1	µg/mL	+/-	9.9226	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 8380000)			+/-	56.6468	µg/mL	Unstressed
	Purity 99%				+/-	57.9458	µg/mL	Stressed
46	1,3-Dichlorobenzene		1,000.1	µg/mL	+/-	9.9467	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	56.6504	µg/mL	Unstressed
	Purity 99%				+/-	57.9494	µg/mL	Stressed
47	1,4-Dichlorobenzene		1,002.5	µg/mL	+/-	9.9708	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot YWKDC-MK)			+/-	56.7875	µg/mL	Unstressed
	Purity 99%				+/-	58.0896	µg/mL	Stressed
48	n-Butylbenzene		1,000.1	µg/mL	+/-	9.9229	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot MMPGA)			+/-	56.6482	µg/mL	Unstressed
	Purity 99%				+/-	57.9473	µg/mL	Stressed
49	1,2-Dichlorobenzene		1,001.6	µg/mL	+/-	9.9619	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	56.7374	µg/mL	Unstressed
	Purity 99%				+/-	58.0383	µg/mL	Stressed
50	1,2-Dibromo-3-chloropropane		1,000.0	µg/mL	+/-	9.9220	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot Q135-105)			+/-	56.6432	µg/mL	Unstressed
	Purity 99%				+/-	57.9422	µg/mL	Stressed
51	1,2,4-Trichlorobenzene		1,000.1	µg/mL	+/-	9.9224	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot IGLFA)			+/-	56.6453	µg/mL	Unstressed
	Purity 99%				+/-	57.9444	µg/mL	Stressed
52	Hexachlorobutadiene		1,000.8	µg/mL	+/-	9.9297	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 8532700)			+/-	56.6870	µg/mL	Unstressed
	Purity 97%				+/-	57.9870	µg/mL	Stressed
53	Naphthalene		1,000.1	µg/mL	+/-	9.9229	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot SKZ5N)			+/-	56.6482	µg/mL	Unstressed
	Purity 99%				+/-	57.9473	µg/mL	Stressed
54	1,2,3-Trichlorobenzene		1,000.7	µg/mL	+/-	9.9292	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)			+/-	56.6844	µg/mL	Unstressed
	Purity 98%				+/-	57.9843	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)

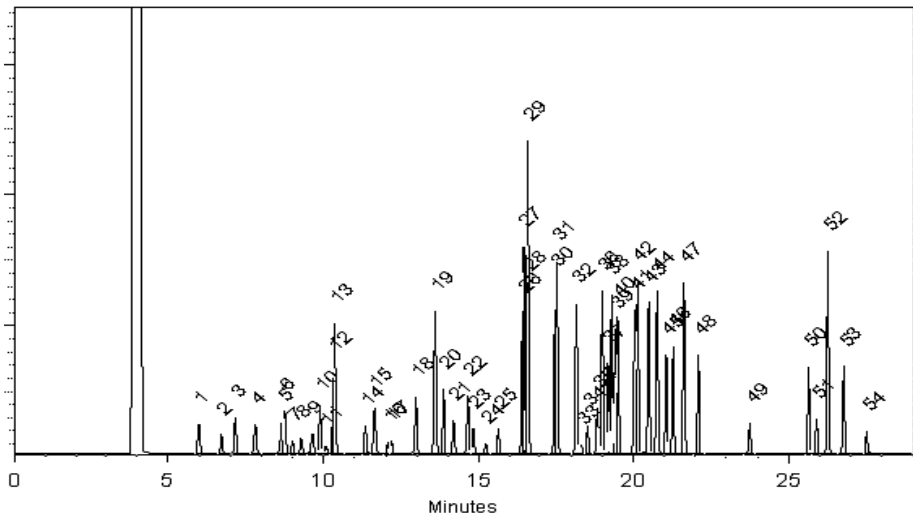
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Katelyn McGinni - Operations Tech I

Date Mixed: 21-Apr-2022 **Balance:** B345965662

Marlina Cowan - Operations Tech I

Date Passed: 27-Apr-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_M_MIX2SEC_00082

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom VOC MegaMix®.SEC #2 Standard

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

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

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

Ship: Ambient

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

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

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

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

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

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

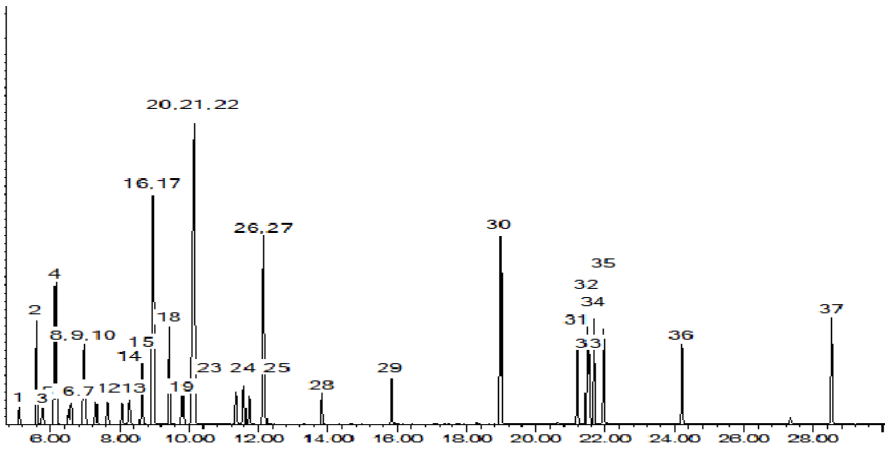
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

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

Alexis Shelow - Operations Tech I

Date Passed: 04-May-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_M_MIX2SEC_00102

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 577494 **Lot No.:** A0184412

Description : Custom VOC MegaMix®.SEC #2 Standard

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

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

Expiration Date : April 30, 2025 **Storage:** 0°C or colder

Ship: Ambient

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	n-Pentane (C5)	1,008.7 µg/mL	+/- 5.9912 µg/mL	Gravimetric
	CAS # 109-66-0.SEC (Lot FGH02)		+/- 49.9116 µg/mL	Unstressed
	Purity 99%		+/- 51.1520 µg/mL	Stressed
2	2-Propanol (isopropanol)	7,505.3 µg/mL	+/- 43.9454 µg/mL	Gravimetric
	CAS # 67-63-0.SEC (Lot G6HNF)		+/- 371.3091 µg/mL	Unstressed
	Purity 99%		+/- 380.5402 µg/mL	Stressed
3	1,1,2-Trichlorotrifluoroethane (CFC-113)	1,010.0 µg/mL	+/- 5.9991 µg/mL	Gravimetric
	CAS # 76-13-1.SEC (Lot 18342)		+/- 49.9776 µg/mL	Unstressed
	Purity 99%		+/- 51.2196 µg/mL	Stressed
4	tert-Butanol (TBA)	10,043.3 µg/mL	+/- 58.8059 µg/mL	Gravimetric
	CAS # 75-65-0.SEC (Lot ZSJ2O)		+/- 496.8708 µg/mL	Unstressed
	Purity 99%		+/- 509.2235 µg/mL	Stressed
5	Methyl acetate	1,002.0 µg/mL	+/- 5.9516 µg/mL	Gravimetric
	CAS # 79-20-9.SEC (Lot UCNEL)		+/- 49.5817 µg/mL	Unstressed
	Purity 99%		+/- 50.8139 µg/mL	Stressed
6	Iodomethane (methyl iodide)	1,003.3 µg/mL	+/- 5.9595 µg/mL	Gravimetric
	CAS # 74-88-4.SEC (Lot Y25A027)		+/- 49.6477 µg/mL	Unstressed
	Purity 99%		+/- 50.8815 µg/mL	Stressed
7	Allyl chloride (3-chloropropene)	1,003.3 µg/mL	+/- 5.9595 µg/mL	Gravimetric
	CAS # 107-05-1.SEC (Lot RD210329)		+/- 49.6477 µg/mL	Unstressed
	Purity 99%		+/- 50.8815 µg/mL	Stressed

8	Carbon disulfide		1,008.7	µg/mL	+/-	5.9912	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	49.9116	µg/mL	Unstressed
	Purity 99%				+/-	51.1520	µg/mL	Stressed
9	Acrylonitrile		5,034.7	µg/mL	+/-	29.5462	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot V54AD)			+/-	249.0865	µg/mL	Unstressed
	Purity 99%				+/-	255.2787	µg/mL	Stressed
10	Methyl-tert-butyl ether (MTBE)		1,008.0	µg/mL	+/-	5.9872	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZHKYA)			+/-	49.8786	µg/mL	Unstressed
	Purity 99%				+/-	51.1182	µg/mL	Stressed
11	n-Hexane (C6)		1,002.7	µg/mL	+/-	5.9555	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot 10188491)			+/-	49.6147	µg/mL	Unstressed
	Purity 99%				+/-	50.8477	µg/mL	Stressed
12	Diisopropyl ether (DIPE)		1,002.7	µg/mL	+/-	5.9555	µg/mL	Gravimetric
	CAS # 108-20-3.SEC	(Lot LL7TN-SH)			+/-	49.6147	µg/mL	Unstressed
	Purity 99%				+/-	50.8477	µg/mL	Stressed
13	Chloroprene (2-chloro-1,3-butadiene)		1,006.7	µg/mL	+/-	5.9793	µg/mL	Gravimetric
	CAS # 126-99-8	(Lot 210927JLM)			+/-	49.8127	µg/mL	Unstressed
	Purity 99%				+/-	51.0506	µg/mL	Stressed
14	Ethyl-tert-butyl ether (ETBE)		1,004.2	µg/mL	+/-	5.9645	µg/mL	Gravimetric
	CAS # 637-92-3.SEC	(Lot UCI5B)			+/-	49.6893	µg/mL	Unstressed
	Purity 98%				+/-	50.9241	µg/mL	Stressed
15	Propionitrile		7,512.7	µg/mL	+/-	43.9883	µg/mL	Gravimetric
	CAS # 107-12-0.SEC	(Lot PS48O)			+/-	371.6719	µg/mL	Unstressed
	Purity 99%				+/-	380.9121	µg/mL	Stressed
16	Methacrylonitrile		7,502.7	µg/mL	+/-	43.9298	µg/mL	Gravimetric
	CAS # 126-98-7	(Lot 1012020)			+/-	371.1772	µg/mL	Unstressed
	Purity 99%				+/-	380.4050	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		25,034.0	µg/mL	+/-	146.5796	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot YNG3K)			+/-	1,238.4996	µg/mL	Unstressed
	Purity 99%				+/-	1,269.2900	µg/mL	Stressed
18	Tetrahydrofuran		5,008.7	µg/mL	+/-	29.3937	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot 3NYHE)			+/-	247.8002	µg/mL	Unstressed
	Purity 99%				+/-	253.9604	µg/mL	Stressed
19	Cyclohexane		1,004.0	µg/mL	+/-	5.9635	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	49.6807	µg/mL	Unstressed
	Purity 99%				+/-	50.9153	µg/mL	Stressed
20	1-Butanol		50,012.0	µg/mL	+/-	292.8313	µg/mL	Gravimetric
	CAS # 71-36-3.SEC	(Lot RSHAH)			+/-	2,474.2286	µg/mL	Unstressed
	Purity 99%				+/-	2,535.7406	µg/mL	Stressed
21	tert-Amyl methyl ether (TAME)		1,009.4	µg/mL	+/-	5.9955	µg/mL	Gravimetric
	CAS # 994-05-8.SEC	(Lot 12075100)			+/-	49.9479	µg/mL	Unstressed
	Purity 98%				+/-	51.1892	µg/mL	Stressed
22	n-Heptane (C7)		1,007.3	µg/mL	+/-	5.9833	µg/mL	Gravimetric
	CAS # 142-82-5.SEC	(Lot TFHUC)			+/-	49.8456	µg/mL	Unstressed
	Purity 99%				+/-	51.0844	µg/mL	Stressed
23	tert-Amyl ethyl ether (TAEE)		1,004.7	µg/mL	+/-	5.9674	µg/mL	Gravimetric
	CAS # 919-94-8.SEC	(Lot 11370700)			+/-	49.7137	µg/mL	Unstressed
	Purity 99%				+/-	50.9491	µg/mL	Stressed

24	Methylcyclohexane		1,005.3	µg/mL	+/-	5.9714	µg/mL	Gravimetric
	CAS # 108-87-2.SEC	(Lot Q02QG)			+/-	49.7467	µg/mL	Unstressed
	Purity 99%				+/-	50.9829	µg/mL	Stressed
25	Methyl methacrylate		1,004.0	µg/mL	+/-	5.9635	µg/mL	Gravimetric
	CAS # 80-62-6.SEC	(Lot G01X021)			+/-	49.6807	µg/mL	Unstressed
	Purity 99%				+/-	50.9153	µg/mL	Stressed
26	1,4-Dioxane		25,019.3	µg/mL	+/-	146.4937	µg/mL	Gravimetric
	CAS # 123-91-1.SEC	(Lot KLE2K)			+/-	1,237.7740	µg/mL	Unstressed
	Purity 99%				+/-	1,268.5463	µg/mL	Stressed
27	2-Nitropropane		1,010.0	µg/mL	+/-	5.9991	µg/mL	Gravimetric
	CAS # 79-46-9.SEC	(Lot F43IA)			+/-	49.9776	µg/mL	Unstressed
	Purity 99%				+/-	51.2196	µg/mL	Stressed
28	Ethyl methacrylate		1,001.3	µg/mL	+/-	5.9476	µg/mL	Gravimetric
	CAS # 97-63-2.SEC	(Lot AQSPO)			+/-	49.5487	µg/mL	Unstressed
	Purity 99%				+/-	50.7801	µg/mL	Stressed
29	1-Chlorohexane		1,000.7	µg/mL	+/-	5.9437	µg/mL	Gravimetric
	CAS # 544-10-5.SEC	(Lot 13075400)			+/-	49.5158	µg/mL	Unstressed
	Purity 99%				+/-	50.7463	µg/mL	Stressed
30	trans-1,4-Dichloro-2-butene		5,014.9	µg/mL	+/-	29.4302	µg/mL	Gravimetric
	CAS # 110-57-6.SEC	(Lot RD220126S)			+/-	248.1086	µg/mL	Unstressed
	Purity 97%				+/-	254.2764	µg/mL	Stressed
31	1,2,3-Trimethylbenzene		1,003.5	µg/mL	+/-	5.9606	µg/mL	Gravimetric
	CAS # 526-73-8.SEC	(Lot 11386600)			+/-	49.6569	µg/mL	Unstressed
	Purity 98%				+/-	50.8910	µg/mL	Stressed
32	1,3-Diethylbenzene		1,001.3	µg/mL	+/-	5.9476	µg/mL	Gravimetric
	CAS # 141-93-5.SEC	(Lot 113566-1)			+/-	49.5487	µg/mL	Unstressed
	Purity 99%				+/-	50.7801	µg/mL	Stressed
33	Benzyl chloride		1,001.3	µg/mL	+/-	5.9476	µg/mL	Gravimetric
	CAS # 100-44-7.SEC	(Lot H29N03)			+/-	49.5487	µg/mL	Unstressed
	Purity 99%				+/-	50.7801	µg/mL	Stressed
34	1,4-Diethylbenzene		1,001.6	µg/mL	+/-	5.9490	µg/mL	Gravimetric
	CAS # 105-05-5.SEC	(Lot FBQ02)			+/-	49.5600	µg/mL	Unstressed
	Purity 98%				+/-	50.7916	µg/mL	Stressed
35	1,2-Diethylbenzene		1,002.0	µg/mL	+/-	5.9516	µg/mL	Gravimetric
	CAS # 135-01-3.SEC	(Lot BCBF3667V)			+/-	49.5817	µg/mL	Unstressed
	Purity 99%				+/-	50.8139	µg/mL	Stressed
36	1,3,5-Trichlorobenzene		1,009.3	µg/mL	+/-	5.9951	µg/mL	Gravimetric
	CAS # 108-70-3.SEC	(Lot I28U021)			+/-	49.9446	µg/mL	Unstressed
	Purity 99%				+/-	51.1858	µg/mL	Stressed
37	2-Methylnaphthalene		1,002.7	µg/mL	+/-	5.9555	µg/mL	Gravimetric
	CAS # 91-57-6.SEC	(Lot 76023-1)			+/-	49.6147	µg/mL	Unstressed
	Purity 99%				+/-	50.8477	µg/mL	Stressed

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

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

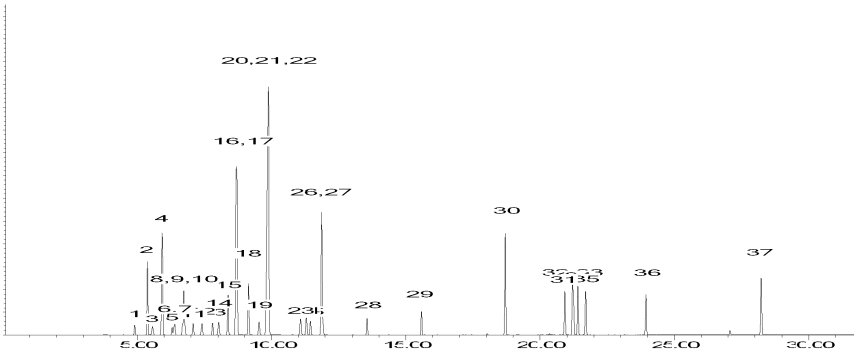
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Lane Kibe - Mix Technician

Date Mixed: 22-Apr-2022 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 27-Apr-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_M_MIX2SEC_00103

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www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 577494 **Lot No.:** A0184412

Description : Custom VOC MegaMix®.SEC #2 Standard

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

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

Expiration Date : April 30, 2025 **Storage:** 0°C or colder

Ship: Ambient

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	n-Pentane (C5)	1,008.7 µg/mL	+/- 5.9912	µg/mL	Gravimetric
	CAS # 109-66-0.SEC (Lot FGH02)		+/- 49.9116	µg/mL	Unstressed
	Purity 99%		+/- 51.1520	µg/mL	Stressed
2	2-Propanol (isopropanol)	7,505.3 µg/mL	+/- 43.9454	µg/mL	Gravimetric
	CAS # 67-63-0.SEC (Lot G6HNF)		+/- 371.3091	µg/mL	Unstressed
	Purity 99%		+/- 380.5402	µg/mL	Stressed
3	1,1,2-Trichlorotrifluoroethane (CFC-113)	1,010.0 µg/mL	+/- 5.9991	µg/mL	Gravimetric
	CAS # 76-13-1.SEC (Lot 18342)		+/- 49.9776	µg/mL	Unstressed
	Purity 99%		+/- 51.2196	µg/mL	Stressed
4	tert-Butanol (TBA)	10,043.3 µg/mL	+/- 58.8059	µg/mL	Gravimetric
	CAS # 75-65-0.SEC (Lot ZSJ2O)		+/- 496.8708	µg/mL	Unstressed
	Purity 99%		+/- 509.2235	µg/mL	Stressed
5	Methyl acetate	1,002.0 µg/mL	+/- 5.9516	µg/mL	Gravimetric
	CAS # 79-20-9.SEC (Lot UCNEL)		+/- 49.5817	µg/mL	Unstressed
	Purity 99%		+/- 50.8139	µg/mL	Stressed
6	Iodomethane (methyl iodide)	1,003.3 µg/mL	+/- 5.9595	µg/mL	Gravimetric
	CAS # 74-88-4.SEC (Lot Y25A027)		+/- 49.6477	µg/mL	Unstressed
	Purity 99%		+/- 50.8815	µg/mL	Stressed
7	Allyl chloride (3-chloropropene)	1,003.3 µg/mL	+/- 5.9595	µg/mL	Gravimetric
	CAS # 107-05-1.SEC (Lot RD210329)		+/- 49.6477	µg/mL	Unstressed
	Purity 99%		+/- 50.8815	µg/mL	Stressed

8	Carbon disulfide		1,008.7	µg/mL	+/-	5.9912	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	49.9116	µg/mL	Unstressed
	Purity 99%				+/-	51.1520	µg/mL	Stressed
9	Acrylonitrile		5,034.7	µg/mL	+/-	29.5462	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot V54AD)			+/-	249.0865	µg/mL	Unstressed
	Purity 99%				+/-	255.2787	µg/mL	Stressed
10	Methyl-tert-butyl ether (MTBE)		1,008.0	µg/mL	+/-	5.9872	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZHKYA)			+/-	49.8786	µg/mL	Unstressed
	Purity 99%				+/-	51.1182	µg/mL	Stressed
11	n-Hexane (C6)		1,002.7	µg/mL	+/-	5.9555	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot 10188491)			+/-	49.6147	µg/mL	Unstressed
	Purity 99%				+/-	50.8477	µg/mL	Stressed
12	Diisopropyl ether (DIPE)		1,002.7	µg/mL	+/-	5.9555	µg/mL	Gravimetric
	CAS # 108-20-3.SEC	(Lot LL7TN-SH)			+/-	49.6147	µg/mL	Unstressed
	Purity 99%				+/-	50.8477	µg/mL	Stressed
13	Chloroprene (2-chloro-1,3-butadiene)		1,006.7	µg/mL	+/-	5.9793	µg/mL	Gravimetric
	CAS # 126-99-8	(Lot 210927JLM)			+/-	49.8127	µg/mL	Unstressed
	Purity 99%				+/-	51.0506	µg/mL	Stressed
14	Ethyl-tert-butyl ether (ETBE)		1,004.2	µg/mL	+/-	5.9645	µg/mL	Gravimetric
	CAS # 637-92-3.SEC	(Lot UCI5B)			+/-	49.6893	µg/mL	Unstressed
	Purity 98%				+/-	50.9241	µg/mL	Stressed
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	Purity 99%				+/-	380.9121	µg/mL	Stressed
16	Methacrylonitrile		7,502.7	µg/mL	+/-	43.9298	µg/mL	Gravimetric
	CAS # 126-98-7	(Lot 1012020)			+/-	371.1772	µg/mL	Unstressed
	Purity 99%				+/-	380.4050	µg/mL	Stressed
17	Isobutanol (2-Methyl-1-propanol)		25,034.0	µg/mL	+/-	146.5796	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot YNG3K)			+/-	1,238.4996	µg/mL	Unstressed
	Purity 99%				+/-	1,269.2900	µg/mL	Stressed
18	Tetrahydrofuran		5,008.7	µg/mL	+/-	29.3937	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot 3NYHE)			+/-	247.8002	µg/mL	Unstressed
	Purity 99%				+/-	253.9604	µg/mL	Stressed
19	Cyclohexane		1,004.0	µg/mL	+/-	5.9635	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	49.6807	µg/mL	Unstressed
	Purity 99%				+/-	50.9153	µg/mL	Stressed
20	1-Butanol		50,012.0	µg/mL	+/-	292.8313	µg/mL	Gravimetric
	CAS # 71-36-3.SEC	(Lot RSHAH)			+/-	2,474.2286	µg/mL	Unstressed
	Purity 99%				+/-	2,535.7406	µg/mL	Stressed
21	tert-Amyl methyl ether (TAME)		1,009.4	µg/mL	+/-	5.9955	µg/mL	Gravimetric
	CAS # 994-05-8.SEC	(Lot 12075100)			+/-	49.9479	µg/mL	Unstressed
	Purity 98%				+/-	51.1892	µg/mL	Stressed
22	n-Heptane (C7)		1,007.3	µg/mL	+/-	5.9833	µg/mL	Gravimetric
	CAS # 142-82-5.SEC	(Lot TFHUC)			+/-	49.8456	µg/mL	Unstressed
	Purity 99%				+/-	51.0844	µg/mL	Stressed
23	tert-Amyl ethyl ether (TAEE)		1,004.7	µg/mL	+/-	5.9674	µg/mL	Gravimetric
	CAS # 919-94-8.SEC	(Lot 11370700)			+/-	49.7137	µg/mL	Unstressed
	Purity 99%				+/-	50.9491	µg/mL	Stressed

24	Methylcyclohexane		1,005.3	µg/mL	+/-	5.9714	µg/mL	Gravimetric
	CAS # 108-87-2.SEC	(Lot Q02QG)			+/-	49.7467	µg/mL	Unstressed
	Purity 99%				+/-	50.9829	µg/mL	Stressed
25	Methyl methacrylate		1,004.0	µg/mL	+/-	5.9635	µg/mL	Gravimetric
	CAS # 80-62-6.SEC	(Lot G01X021)			+/-	49.6807	µg/mL	Unstressed
	Purity 99%				+/-	50.9153	µg/mL	Stressed
26	1,4-Dioxane		25,019.3	µg/mL	+/-	146.4937	µg/mL	Gravimetric
	CAS # 123-91-1.SEC	(Lot KLE2K)			+/-	1,237.7740	µg/mL	Unstressed
	Purity 99%				+/-	1,268.5463	µg/mL	Stressed
27	2-Nitropropane		1,010.0	µg/mL	+/-	5.9991	µg/mL	Gravimetric
	CAS # 79-46-9.SEC	(Lot F43IA)			+/-	49.9776	µg/mL	Unstressed
	Purity 99%				+/-	51.2196	µg/mL	Stressed
28	Ethyl methacrylate		1,001.3	µg/mL	+/-	5.9476	µg/mL	Gravimetric
	CAS # 97-63-2.SEC	(Lot AQSPO)			+/-	49.5487	µg/mL	Unstressed
	Purity 99%				+/-	50.7801	µg/mL	Stressed
29	1-Chlorohexane		1,000.7	µg/mL	+/-	5.9437	µg/mL	Gravimetric
	CAS # 544-10-5.SEC	(Lot 13075400)			+/-	49.5158	µg/mL	Unstressed
	Purity 99%				+/-	50.7463	µg/mL	Stressed
30	trans-1,4-Dichloro-2-butene		5,014.9	µg/mL	+/-	29.4302	µg/mL	Gravimetric
	CAS # 110-57-6.SEC	(Lot RD220126S)			+/-	248.1086	µg/mL	Unstressed
	Purity 97%				+/-	254.2764	µg/mL	Stressed
31	1,2,3-Trimethylbenzene		1,003.5	µg/mL	+/-	5.9606	µg/mL	Gravimetric
	CAS # 526-73-8.SEC	(Lot 11386600)			+/-	49.6569	µg/mL	Unstressed
	Purity 98%				+/-	50.8910	µg/mL	Stressed
32	1,3-Diethylbenzene		1,001.3	µg/mL	+/-	5.9476	µg/mL	Gravimetric
	CAS # 141-93-5.SEC	(Lot 113566-1)			+/-	49.5487	µg/mL	Unstressed
	Purity 99%				+/-	50.7801	µg/mL	Stressed
33	Benzyl chloride		1,001.3	µg/mL	+/-	5.9476	µg/mL	Gravimetric
	CAS # 100-44-7.SEC	(Lot H29N03)			+/-	49.5487	µg/mL	Unstressed
	Purity 99%				+/-	50.7801	µg/mL	Stressed
34	1,4-Diethylbenzene		1,001.6	µg/mL	+/-	5.9490	µg/mL	Gravimetric
	CAS # 105-05-5.SEC	(Lot FBQ02)			+/-	49.5600	µg/mL	Unstressed
	Purity 98%				+/-	50.7916	µg/mL	Stressed
35	1,2-Diethylbenzene		1,002.0	µg/mL	+/-	5.9516	µg/mL	Gravimetric
	CAS # 135-01-3.SEC	(Lot BCBF3667V)			+/-	49.5817	µg/mL	Unstressed
	Purity 99%				+/-	50.8139	µg/mL	Stressed
36	1,3,5-Trichlorobenzene		1,009.3	µg/mL	+/-	5.9951	µg/mL	Gravimetric
	CAS # 108-70-3.SEC	(Lot I28U021)			+/-	49.9446	µg/mL	Unstressed
	Purity 99%				+/-	51.1858	µg/mL	Stressed
37	2-Methylnaphthalene		1,002.7	µg/mL	+/-	5.9555	µg/mL	Gravimetric
	CAS # 91-57-6.SEC	(Lot 76023-1)			+/-	49.6147	µg/mL	Unstressed
	Purity 99%				+/-	50.8477	µg/mL	Stressed

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

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

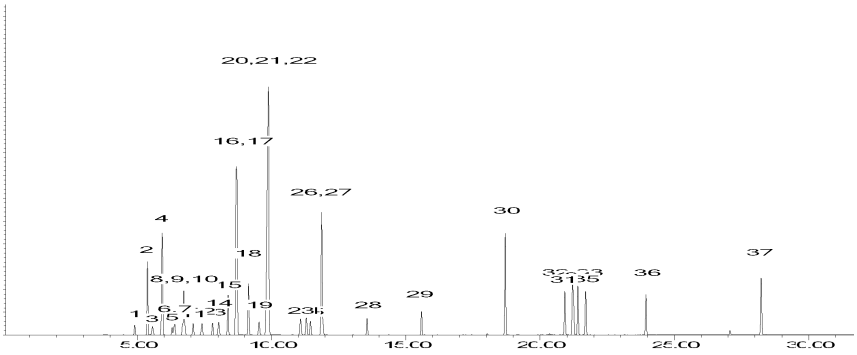
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Lane Kibe - Mix Technician

Date Mixed: 22-Apr-2022 **Balance:** B707717271

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 27-Apr-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_MegaMIX#1_00083

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom VOC MegaMix® #1 Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

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

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

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

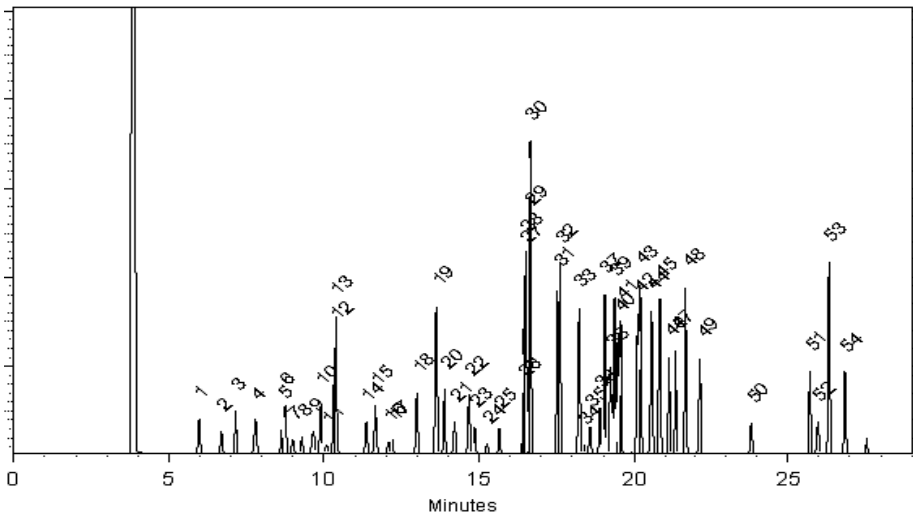
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Walker Workman - Operations Technician I

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

Alexis Shelow - Operations Tech I

Date Passed: 26-Apr-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_MegaMIX#1_00102

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.:** A0184527

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, 2025 **Storage:** 0°C or colder

Ship: Ambient

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

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,1-dichloroethene	5,048.5 µg/mL	+/- 35.8563 µg/mL	Gravimetric
	CAS # 75-35-4 (Lot SHBK2437)		+/- 283.8125 µg/mL	Unstressed
	Purity 99%		+/- 290.4188 µg/mL	Stressed
2	Methylene chloride (dichloromethane)	5,038.2 µg/mL	+/- 35.7831 µg/mL	Gravimetric
	CAS # 75-09-2 (Lot 218028)		+/- 283.2328 µg/mL	Unstressed
	Purity 99%		+/- 289.8256 µg/mL	Stressed
3	trans-1,2-Dichloroethene	5,048.7 µg/mL	+/- 35.8576 µg/mL	Gravimetric
	CAS # 156-60-5 (Lot MKBH9850V)		+/- 283.8231 µg/mL	Unstressed
	Purity 99%		+/- 290.4296 µg/mL	Stressed
4	1,1-Dichloroethane	5,046.4 µg/mL	+/- 35.8412 µg/mL	Gravimetric
	CAS # 75-34-3 (Lot 580900)		+/- 283.6931 µg/mL	Unstressed
	Purity 99%		+/- 290.2966 µg/mL	Stressed
5	2,2-Dichloropropane	5,049.3 µg/mL	+/- 36.0322 µg/mL	Gravimetric
	CAS # 594-20-7 (Lot RD220222)		+/- 283.8791 µg/mL	Unstressed
	Purity 99%		+/- 290.4859 µg/mL	Stressed
6	cis-1,2-Dichloroethene	5,049.4 µg/mL	+/- 36.0329 µg/mL	Gravimetric
	CAS # 156-59-2 (Lot MKCP7830)		+/- 283.8847 µg/mL	Unstressed
	Purity 99%		+/- 290.4917 µg/mL	Stressed
7	chloroform	5,045.8 µg/mL	+/- 35.8368 µg/mL	Gravimetric
	CAS # 67-66-3 (Lot SHBN8469)		+/- 283.6579 µg/mL	Unstressed
	Purity 99%		+/- 290.2606 µg/mL	Stressed

8	Bromochloromethane		5,049.4	µg/mL	+/-	36.0329	µg/mL	Gravimetric
	CAS # 74-97-5	(Lot 00008541)			+/-	283.8847	µg/mL	Unstressed
	Purity 99%				+/-	290.4917	µg/mL	Stressed
9	1,1,1-trichloroethane		5,044.1	µg/mL	+/-	35.8248	µg/mL	Gravimetric
	CAS # 71-55-6	(Lot RD220215)			+/-	283.5631	µg/mL	Unstressed
	Purity 99%				+/-	290.1636	µg/mL	Stressed
10	1,1-Dichloropropene		5,042.1	µg/mL	+/-	35.9808	µg/mL	Gravimetric
	CAS # 563-58-6	(Lot 220217JLM)			+/-	283.4743	µg/mL	Unstressed
	Purity 99%				+/-	290.0717	µg/mL	Stressed
11	carbon tetrachloride		5,046.6	µg/mL	+/-	35.8430	µg/mL	Gravimetric
	CAS # 56-23-5	(Lot SHBL8097)			+/-	283.7071	µg/mL	Unstressed
	Purity 99%				+/-	290.3110	µg/mL	Stressed
12	1,2-Dichloroethane		5,046.8	µg/mL	+/-	35.8439	µg/mL	Gravimetric
	CAS # 107-06-2	(Lot MKCN9758)			+/-	283.7142	µg/mL	Unstressed
	Purity 99%				+/-	290.3182	µg/mL	Stressed
13	Benzene		5,048.9	µg/mL	+/-	36.0293	µg/mL	Gravimetric
	CAS # 71-43-2	(Lot MKCM9242)			+/-	283.8566	µg/mL	Unstressed
	Purity 99%				+/-	290.4629	µg/mL	Stressed
14	Trichloroethene		5,049.6	µg/mL	+/-	35.8643	µg/mL	Gravimetric
	CAS # 79-01-6	(Lot SHBL5816)			+/-	283.8758	µg/mL	Unstressed
	Purity 99%				+/-	290.4835	µg/mL	Stressed
15	1,2-Dichloropropane		5,045.3	µg/mL	+/-	35.8337	µg/mL	Gravimetric
	CAS # 78-87-5	(Lot BCBR0882V)			+/-	283.6333	µg/mL	Unstressed
	Purity 99%				+/-	290.2355	µg/mL	Stressed
16	bromodichloromethane		5,047.1	µg/mL	+/-	35.8461	µg/mL	Gravimetric
	CAS # 75-27-4	(Lot MKCM7156)			+/-	283.7317	µg/mL	Unstressed
	Purity 99%				+/-	290.3361	µg/mL	Stressed
17	Dibromomethane		5,049.9	µg/mL	+/-	36.0365	µg/mL	Gravimetric
	CAS # 74-95-3	(Lot 10215970)			+/-	283.9128	µg/mL	Unstressed
	Purity 99%				+/-	290.5204	µg/mL	Stressed
18	cis-1,3-Dichloropropene		5,044.3	µg/mL	+/-	35.8261	µg/mL	Gravimetric
	CAS # 10061-01-5	(Lot RD211111)			+/-	283.5736	µg/mL	Unstressed
	Purity 99%				+/-	290.1743	µg/mL	Stressed
19	Toluene		5,048.6	µg/mL	+/-	36.0272	µg/mL	Gravimetric
	CAS # 108-88-3	(Lot MKCQ2779)			+/-	283.8397	µg/mL	Unstressed
	Purity 99%				+/-	290.4456	µg/mL	Stressed
20	trans-1,3-Dichloropropene		5,049.6	µg/mL	+/-	35.8639	µg/mL	Gravimetric
	CAS # 10061-02-6	(Lot RD220207A)			+/-	283.8728	µg/mL	Unstressed
	Purity 98%				+/-	290.4805	µg/mL	Stressed
21	1,1,2-Trichloroethane		5,048.6	µg/mL	+/-	35.8567	µg/mL	Gravimetric
	CAS # 79-00-5	(Lot FGB01)			+/-	283.8160	µg/mL	Unstressed
	Purity 99%				+/-	290.4224	µg/mL	Stressed
22	1,3-Dichloropropane		5,049.7	µg/mL	+/-	36.0350	µg/mL	Gravimetric
	CAS # 142-28-9	(Lot BCCB9817)			+/-	283.9016	µg/mL	Unstressed
	Purity 99%				+/-	290.5089	µg/mL	Stressed
23	Tetrachloroethene		5,049.5	µg/mL	+/-	35.8634	µg/mL	Gravimetric
	CAS # 127-18-4	(Lot SHBJ7422)			+/-	283.8688	µg/mL	Unstressed
	Purity 99%				+/-	290.4763	µg/mL	Stressed

24	dibromochloromethane		5,048.9	µg/mL	+/-	35.8590	µg/mL	Gravimetric
	CAS # 124-48-1	(Lot MKCM8659)			+/-	283.8336	µg/mL	Unstressed
	Purity 99%				+/-	290.4404	µg/mL	Stressed
25	1,2-Dibromoethane (EDB)		5,048.0	µg/mL	+/-	36.0229	µg/mL	Gravimetric
	CAS # 106-93-4	(Lot BCBP2268V)			+/-	283.8060	µg/mL	Unstressed
	Purity 99%				+/-	290.4111	µg/mL	Stressed
26	Chlorobenzene		5,047.7	µg/mL	+/-	35.8505	µg/mL	Gravimetric
	CAS # 108-90-7	(Lot SHBL8110)			+/-	283.7669	µg/mL	Unstressed
	Purity 99%				+/-	290.3721	µg/mL	Stressed
27	1,1,1,2-Tetrachloroethane		5,049.1	µg/mL	+/-	36.0308	µg/mL	Gravimetric
	CAS # 630-20-6	(Lot GC01)			+/-	283.8678	µg/mL	Unstressed
	Purity 99%				+/-	290.4744	µg/mL	Stressed
28	Ethylbenzene		5,049.7	µg/mL	+/-	36.0350	µg/mL	Gravimetric
	CAS # 100-41-4	(Lot SHBM4308)			+/-	283.9016	µg/mL	Unstressed
	Purity 99%				+/-	290.5089	µg/mL	Stressed
29	m-Xylene		5,048.2	µg/mL	+/-	36.0243	µg/mL	Gravimetric
	CAS # 108-38-3	(Lot SHBM4841)			+/-	283.8172	µg/mL	Unstressed
	Purity 99%				+/-	290.4226	µg/mL	Stressed
30	p-Xylene		5,046.5	µg/mL	+/-	36.0122	µg/mL	Gravimetric
	CAS # 106-42-3	(Lot 10234437)			+/-	283.7216	µg/mL	Unstressed
	Purity 99%				+/-	290.3248	µg/mL	Stressed
31	o-Xylene		5,049.3	µg/mL	+/-	36.0322	µg/mL	Gravimetric
	CAS # 95-47-6	(Lot SHBM0472)			+/-	283.8791	µg/mL	Unstressed
	Purity 99%				+/-	290.4859	µg/mL	Stressed
32	Styrene		5,049.0	µg/mL	+/-	36.0301	µg/mL	Gravimetric
	CAS # 100-42-5	(Lot MKCP3941)			+/-	283.8622	µg/mL	Unstressed
	Purity 99%				+/-	290.4686	µg/mL	Stressed
33	Isopropylbenzene (cumene)		5,046.5	µg/mL	+/-	36.0122	µg/mL	Gravimetric
	CAS # 98-82-8	(Lot Z20D022)			+/-	283.7216	µg/mL	Unstressed
	Purity 99%				+/-	290.3248	µg/mL	Stressed
34	bromoform		5,045.7	µg/mL	+/-	35.8365	µg/mL	Gravimetric
	CAS # 75-25-2	(Lot SHBK4455)			+/-	283.6559	µg/mL	Unstressed
	Purity 98%				+/-	290.2585	µg/mL	Stressed
35	1,1,2,2-Tetrachloroethane		5,045.8	µg/mL	+/-	35.8368	µg/mL	Gravimetric
	CAS # 79-34-5	(Lot CFA4D)			+/-	283.6579	µg/mL	Unstressed
	Purity 99%				+/-	290.2606	µg/mL	Stressed
36	1,2,3-Trichloropropane		5,049.4	µg/mL	+/-	36.0329	µg/mL	Gravimetric
	CAS # 96-18-4	(Lot 332900)			+/-	283.8847	µg/mL	Unstressed
	Purity 99%				+/-	290.4917	µg/mL	Stressed
37	n-Propylbenzene		5,044.7	µg/mL	+/-	35.9994	µg/mL	Gravimetric
	CAS # 103-65-1	(Lot MKCM4174)			+/-	283.6204	µg/mL	Unstressed
	Purity 99%				+/-	290.2213	µg/mL	Stressed
38	Bromobenzene		5,047.8	µg/mL	+/-	36.0215	µg/mL	Gravimetric
	CAS # 108-86-1	(Lot WXBC5147V)			+/-	283.7947	µg/mL	Unstressed
	Purity 99%				+/-	290.3996	µg/mL	Stressed
39	1,3,5-Trimethylbenzene		5,046.6	µg/mL	+/-	36.0129	µg/mL	Gravimetric
	CAS # 108-67-8	(Lot BCCD0427)			+/-	283.7273	µg/mL	Unstressed
	Purity 99%				+/-	290.3306	µg/mL	Stressed

40	2-Chlorotoluene		5,049.7	µg/mL	+/-	36.0350	µg/mL	Gravimetric
	CAS # 95-49-8	(Lot MKCF5243)			+/-	283.9016	µg/mL	Unstressed
	Purity 99%				+/-	290.5089	µg/mL	Stressed
41	4-Chlorotoluene		5,047.7	µg/mL	+/-	36.0208	µg/mL	Gravimetric
	CAS # 106-43-4	(Lot MKCC8496)			+/-	283.7891	µg/mL	Unstressed
	Purity 99%				+/-	290.3939	µg/mL	Stressed
42	tert-Butylbenzene		5,048.3	µg/mL	+/-	36.0251	µg/mL	Gravimetric
	CAS # 98-06-6	(Lot STBJ1937)			+/-	283.8228	µg/mL	Unstressed
	Purity 99%				+/-	290.4284	µg/mL	Stressed
43	1,2,4-Trimethylbenzene		5,048.0	µg/mL	+/-	36.0228	µg/mL	Gravimetric
	CAS # 95-63-6	(Lot WXBC9428V)			+/-	283.8049	µg/mL	Unstressed
	Purity 98%				+/-	290.4100	µg/mL	Stressed
44	sec-Butylbenzene		5,045.8	µg/mL	+/-	36.0072	µg/mL	Gravimetric
	CAS # 135-98-8	(Lot MKCN2920)			+/-	283.6823	µg/mL	Unstressed
	Purity 99%				+/-	290.2846	µg/mL	Stressed
45	p-Isopropyltoluene (p-Cymene)		5,048.3	µg/mL	+/-	36.0251	µg/mL	Gravimetric
	CAS # 99-87-6	(Lot MKCP6638)			+/-	283.8228	µg/mL	Unstressed
	Purity 99%				+/-	290.4284	µg/mL	Stressed
46	1,3-Dichlorobenzene		5,045.8	µg/mL	+/-	35.8368	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBZ7498)			+/-	283.6579	µg/mL	Unstressed
	Purity 99%				+/-	290.2606	µg/mL	Stressed
47	1,4-Dichlorobenzene		5,018.0	µg/mL	+/-	35.6397	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS4401V)			+/-	282.0979	µg/mL	Unstressed
	Purity 99%				+/-	288.6643	µg/mL	Stressed
48	n-Butylbenzene		5,045.6	µg/mL	+/-	36.0058	µg/mL	Gravimetric
	CAS # 104-51-8	(Lot 09418JJ)			+/-	283.6710	µg/mL	Unstressed
	Purity 99%				+/-	290.2730	µg/mL	Stressed
49	1,2-Dichlorobenzene		5,045.0	µg/mL	+/-	35.8314	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBN3835)			+/-	283.6158	µg/mL	Unstressed
	Purity 99%				+/-	290.2175	µg/mL	Stressed
50	1,2-Dibromo-3-chloropropane		5,046.4	µg/mL	+/-	36.0117	µg/mL	Gravimetric
	CAS # 96-12-8	(Lot HBMVB)			+/-	283.7174	µg/mL	Unstressed
	Purity 97%				+/-	290.3205	µg/mL	Stressed
51	1,2,4-Trichlorobenzene		5,049.9	µg/mL	+/-	36.0365	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBM0526)			+/-	283.9128	µg/mL	Unstressed
	Purity 99%				+/-	290.5204	µg/mL	Stressed
52	Hexachlorobutadiene		5,043.1	µg/mL	+/-	35.9880	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot X05J)			+/-	283.5305	µg/mL	Unstressed
	Purity 99%				+/-	290.1292	µg/mL	Stressed
53	Naphthalene		5,047.6	µg/mL	+/-	36.0201	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKCH0219)			+/-	283.7835	µg/mL	Unstressed
	Purity 99%				+/-	290.3881	µg/mL	Stressed
54	1,2,3-Trichlorobenzene		5,047.7	µg/mL	+/-	36.0208	µg/mL	Gravimetric
	CAS # 87-61-6	(Lot MKBX7627V)			+/-	283.7891	µg/mL	Unstressed
	Purity 99%				+/-	290.3939	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)

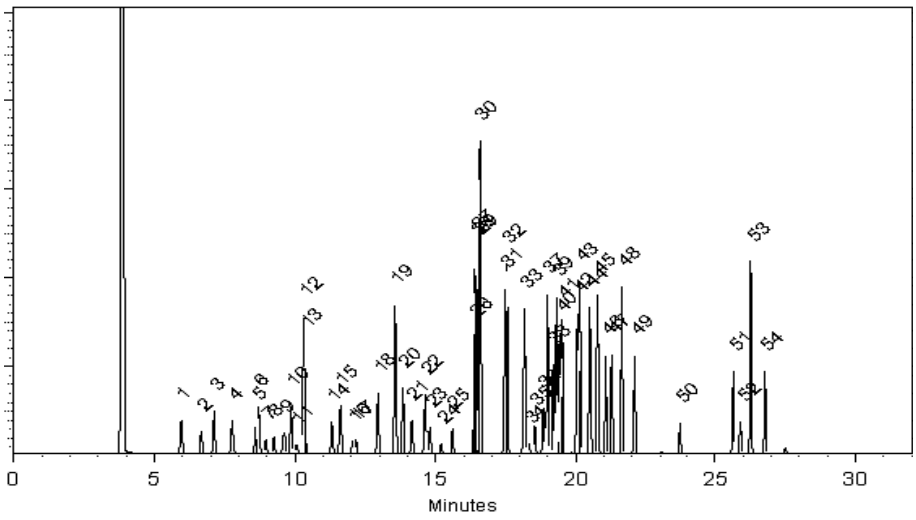
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Bethany Lowery - Operations Tech I

Date Mixed: 26-Apr-2022 **Balance:** B251644995

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 28-Apr-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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_00082

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom VOC MegaMix® #2 Standard

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

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

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

Ship: Ambient

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

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

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

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

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

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

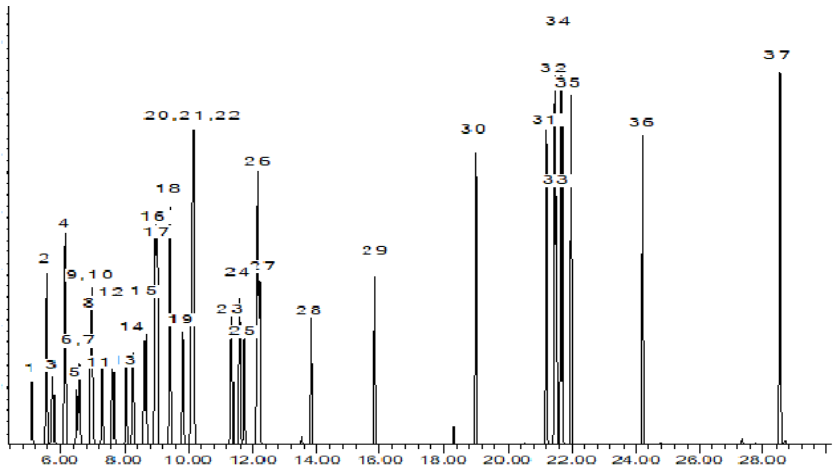
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Russ Bookhamer - Operations Technician I

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

Alexis Shelow - Operations Tech I

Date Passed: 30-Jun-2021

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

General Certified Reference Material Notes

Expiration Notes:

- 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_00098

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom VOC MegaMix® #2 Standard

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

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

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

Ship: Ambient

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

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

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

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

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

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

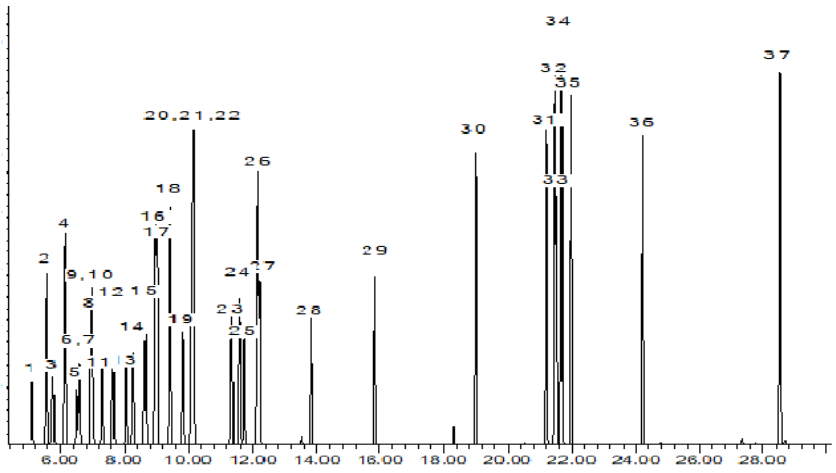
Carrier Gas:
helium-constant pressure 30 psi

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Russ Bookhamer - Operations Technician I

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

Alexis Shelow - Operations Tech I

Date Passed: 30-Jun-2021

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

General Certified Reference Material Notes

Expiration Notes:

- 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

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

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

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

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

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

Ship: Ambient

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	12,504.0 µg/mL	+/- 73.2137 µg/mL	Gravimetric
	CAS # 67-64-1.SEC (Lot S25F025)		+/- 754.4715 µg/mL	Unstressed
	Purity 99%		+/- 756.2625 µg/mL	Stressed
2	2-Butanone (MEK)	12,502.0 µg/mL	+/- 73.2020 µg/mL	Gravimetric
	CAS # 78-93-3.SEC (Lot RGZ2A)		+/- 754.3508 µg/mL	Unstressed
	Purity 99%		+/- 756.1415 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,508.7 µg/mL	+/- 73.2410 µg/mL	Gravimetric
	CAS # 108-10-1.SEC (Lot E29T040)		+/- 754.7530 µg/mL	Unstressed
	Purity 99%		+/- 756.5447 µg/mL	Stressed
4	2-Hexanone	12,507.3 µg/mL	+/- 73.2332 µg/mL	Gravimetric
	CAS # 591-78-6.SEC (Lot Y3TUO)		+/- 754.6726 µg/mL	Unstressed
	Purity 99%		+/- 756.4641 µg/mL	Stressed

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

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

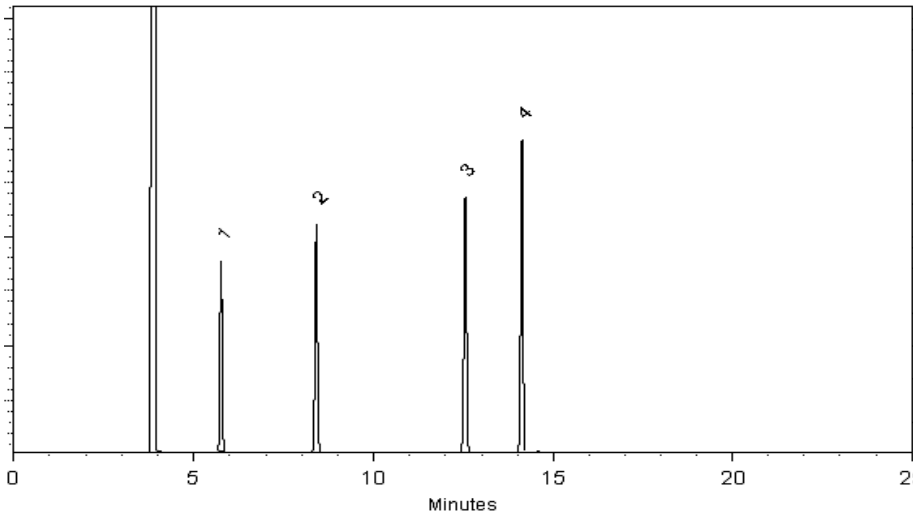
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Jeff Rhoades - Mix Technician

Date Mixed: 15-Nov-2021 **Balance:** 1127510105

Clara Windle - Operations Technician I

Date Passed: 16-Nov-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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.

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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.:** A0184721

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 : April 30, 2025 **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	12,520.4 µg/mL	+/- 73.3097 µg/mL	Gravimetric
	CAS # 67-64-1.SEC (Lot T20G008)		+/- 755.4610 µg/mL	Unstressed
	Purity 99%		+/- 757.2544 µg/mL	Stressed
2	2-Butanone (MEK)	12,520.8 µg/mL	+/- 73.3120 µg/mL	Gravimetric
	CAS # 78-93-3.SEC (Lot HDLUO)		+/- 755.4852 µg/mL	Unstressed
	Purity 99%		+/- 757.2786 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,514.8 µg/mL	+/- 73.2769 µg/mL	Gravimetric
	CAS # 108-10-1.SEC (Lot E29T040)		+/- 755.1231 µg/mL	Unstressed
	Purity 99%		+/- 756.9157 µg/mL	Stressed
4	2-Hexanone	12,514.0 µg/mL	+/- 73.2722 µg/mL	Gravimetric
	CAS # 591-78-6.SEC (Lot Y3TUO)		+/- 755.0749 µg/mL	Unstressed
	Purity 99%		+/- 756.8673 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)

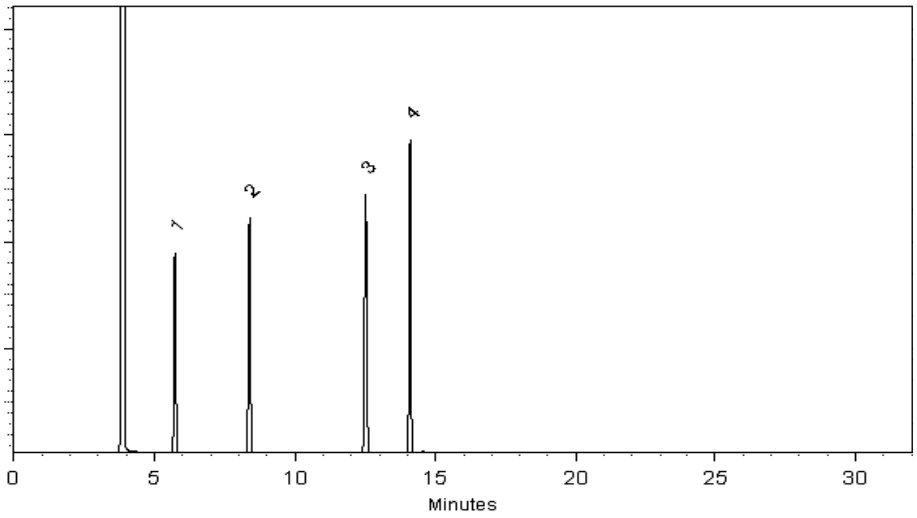
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Jess Hoy - Operations Tech I

Date Mixed: 29-Apr-2022 **Balance:** B345965662

Christie Mills - Operations Technician II

Date Passed: 03-May-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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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. : 569721.SEC **Lot No.:** A0184721

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 : April 30, 2025 **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	12,520.4 µg/mL	+/- 73.3097 µg/mL	Gravimetric
	CAS # 67-64-1.SEC (Lot T20G008)		+/- 755.4610 µg/mL	Unstressed
	Purity 99%		+/- 757.2544 µg/mL	Stressed
2	2-Butanone (MEK)	12,520.8 µg/mL	+/- 73.3120 µg/mL	Gravimetric
	CAS # 78-93-3.SEC (Lot HDLUO)		+/- 755.4852 µg/mL	Unstressed
	Purity 99%		+/- 757.2786 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,514.8 µg/mL	+/- 73.2769 µg/mL	Gravimetric
	CAS # 108-10-1.SEC (Lot E29T040)		+/- 755.1231 µg/mL	Unstressed
	Purity 99%		+/- 756.9157 µg/mL	Stressed
4	2-Hexanone	12,514.0 µg/mL	+/- 73.2722 µg/mL	Gravimetric
	CAS # 591-78-6.SEC (Lot Y3TUO)		+/- 755.0749 µg/mL	Unstressed
	Purity 99%		+/- 756.8673 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)

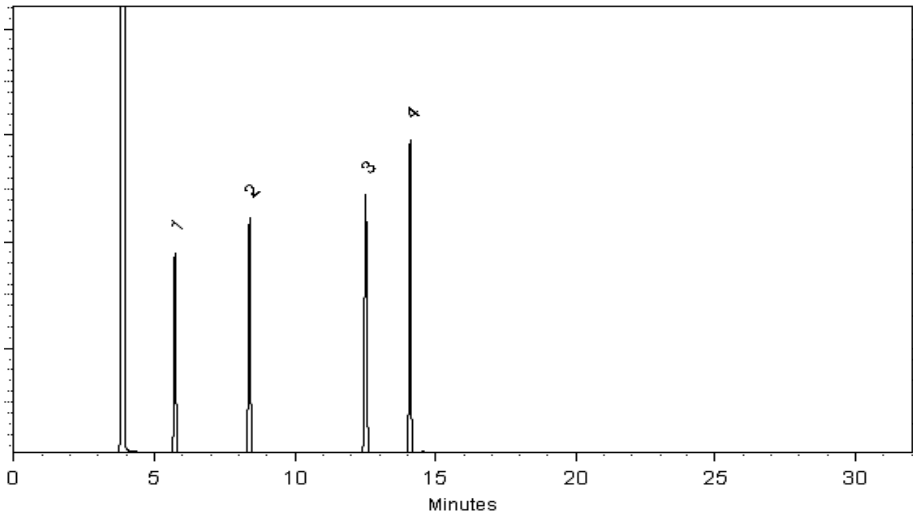
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Jess Hoy - Operations Tech I

Date Mixed: 29-Apr-2022 **Balance:** B345965662

Christie Mills - Operations Technician II

Date Passed: 03-May-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : Custom Gases.SEC Standard

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

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

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

Ship: Ambient

CERTIFIED VALUES

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

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

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

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

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

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

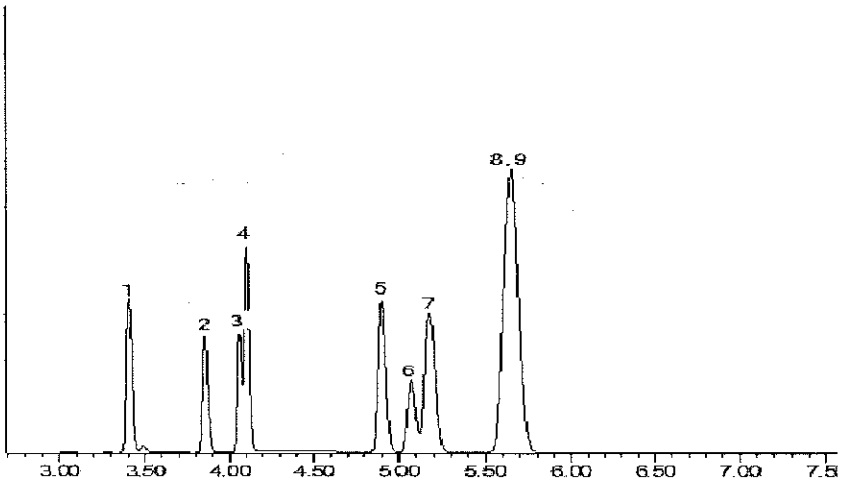
Carrier Gas:
helium-constant flow 2.0 mL/min.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



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

Lane Kibe - Mix Technician

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

Alexis Shelow - Operations Tech I

Date Passed: 17-May-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

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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. : 577488.SEC **Lot No.:** A0184924

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, 2025 **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	Dichlorodifluoromethane (CFC-12)	2,000.3 µg/mL	+/- 17.8749	µg/mL	Gravimetric
	CAS # 75-71-8.SEC (Lot 27545)		+/- 112.9722	µg/mL	Unstressed
	Purity 99%		+/- 115.5779	µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,002.3 µg/mL	+/- 19.9305	µg/mL	Gravimetric
	CAS # 74-87-3.SEC (Lot 18343)		+/- 113.4254	µg/mL	Unstressed
	Purity 99%		+/- 116.0260	µg/mL	Stressed
3	Vinyl chloride	2,002.4 µg/mL	+/- 21.8874	µg/mL	Gravimetric
	CAS # 75-01-4.SEC (Lot MKBK6872V)		+/- 113.7916	µg/mL	Unstressed
	Purity 99%		+/- 116.3843	µg/mL	Stressed
4	1,3-Butadiene	2,003.4 µg/mL	+/- 24.0683	µg/mL	Gravimetric
	CAS # 106-99-0.SEC (Lot 26996)		+/- 114.2862	µg/mL	Unstressed
	Purity 99%		+/- 116.8705	µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,007.9 µg/mL	+/- 17.0860	µg/mL	Gravimetric
	CAS # 74-83-9.SEC (Lot 00017022)		+/- 113.2712	µg/mL	Unstressed
	Purity 99%		+/- 115.8898	µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,002.2 µg/mL	+/- 20.1773	µg/mL	Gravimetric
	CAS # 75-00-3.SEC (Lot 00004202)		+/- 113.4619	µg/mL	Unstressed
	Purity 98%		+/- 116.0614	µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,000.0 µg/mL	+/- 11.7371	µg/mL	Gravimetric
	CAS # 75-43-4 * (Lot 12841600)		+/- 112.1494	µg/mL	Unstressed
	Purity 99%		+/- 114.7730	µg/mL	Stressed

8	Trichlorofluoromethane (CFC-11)		2,000.0	µg/mL	+/-	11.7371	µg/mL	Gravimetric
	CAS # 75-69-4.SEC	(Lot 00010739)			+/-	112.1494	µg/mL	Unstressed
	Purity 99%				+/-	114.7730	µg/mL	Stressed
9	1,2-Dichloro-1,1,2-trifluoroethane (CFC-123a)		2,000.5	µg/mL	+/-	25.4843	µg/mL	Gravimetric
	CAS # 354-23-4 *	(Lot Q9B-64)			+/-	114.4324	µg/mL	Unstressed
	Purity 99%				+/-	117.0060	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)

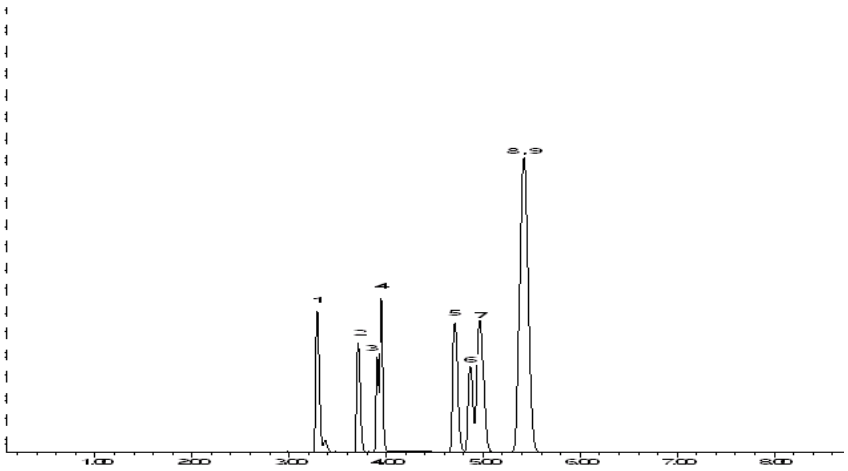
Carrier Gas:
helium-constant flow 2.0 mL/min.

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.

Brandon Reish - Mix Technician

Date Mixed: 05-May-2022 **Balance:** 1127510105

Marlina Cowan - Operations Tech I

Date Passed: 10-May-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_V#2B_00283

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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.:** A0184378

Description : Custom V # 2B Standard

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

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

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

Ship: Ambient

Elution Order	Compound	CAS #	Percent Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2-Propanol (isopropanol)	67-63-0	99%	25,003.0 µg/mL	+/- 146.3981 µg/mL
2	tert-Butanol (TBA)	75-65-0	99%	25,000.0 µg/mL	+/- 146.3805 µg/mL
3	Propionitrile	107-12-0	99%	25,003.0 µg/mL	+/- 146.3981 µg/mL
4	Methacrylonitrile	126-98-7	99%	12,502.0 µg/mL	+/- 73.2020 µg/mL
5	Isobutanol (2-Methyl-1-propanol)	78-83-1	99%	62,503.0 µg/mL	+/- 365.9688 µg/mL
6	1-Butanol	71-36-3	98%	124,982.3 µg/mL	+/- 731.7613 µg/mL
7	1,4-Dioxane	123-91-1	99%	62,530.0 µg/mL	+/- 366.1269 µg/mL
8	trans-1,4-dichloro-2-butene	110-57-6	95%	12,496.3 µg/mL	+/- 73.1686 µg/mL
Solvent:	P&T Methanol	67-56-1	99%		

Specific Reference Material Notes:

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

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

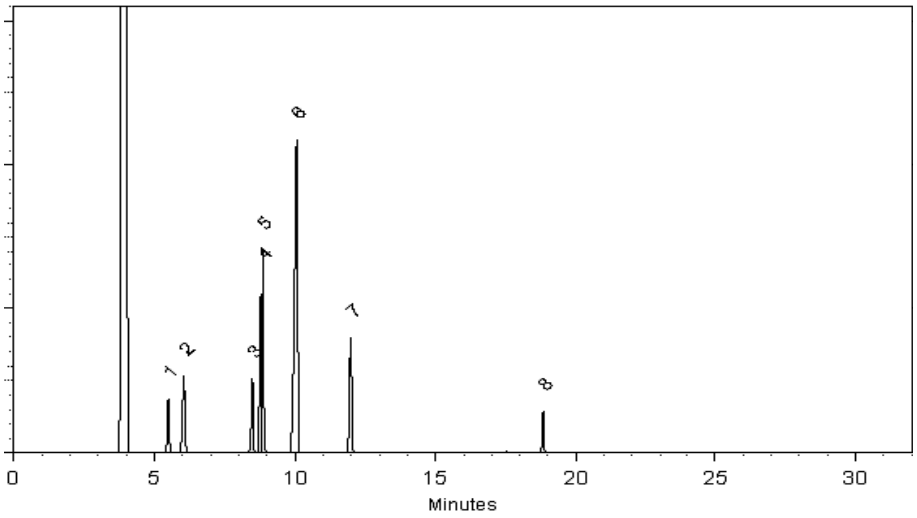
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Josh McCloskey - Operations Technician I

Date Mixed: 21-Apr-2022 **Balance:** B707717271

Christie Mills - Operations Technician II

Date Passed: 27-Apr-2022

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

General Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Uncertainty Value Notes:

- Uncertainties are determined using data from balances and glassware, raw material purity, and, when significant, equipment tolerances or calibration results.

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_V_Ketones_00080

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

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

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

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

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

Ship: Ambient

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

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

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

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

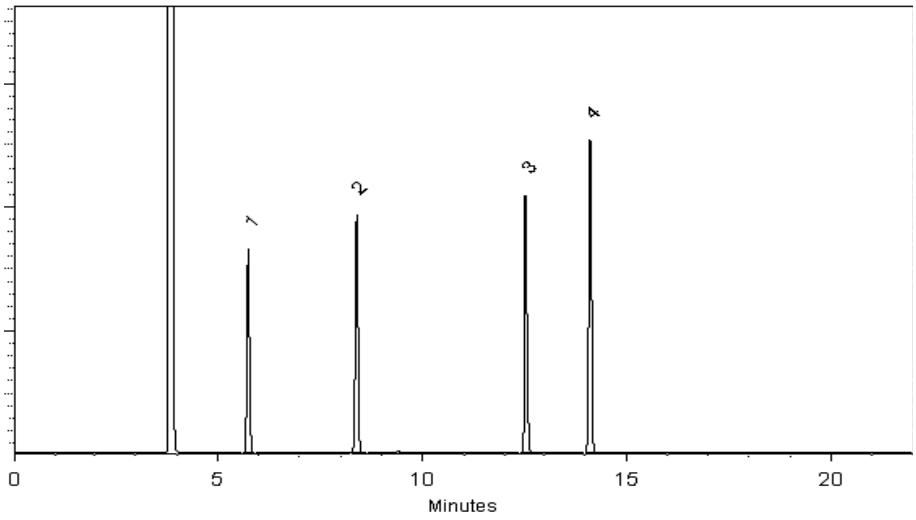
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Sam Moodler - Operations Tech I

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

Marlina Cowan - Operations Tech I

Date Passed: 13-Jul-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_V_Ketones_00095

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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.:** A0180742

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

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

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

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

Ship: Ambient

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	12,524.0 µg/mL	+/- 73.3308 µg/mL	Gravimetric
	CAS # 67-64-1 (Lot MKCP0755)		+/- 755.6782 µg/mL	Unstressed
	Purity 99%		+/- 757.4721 µg/mL	Stressed
2	2-Butanone (MEK)	12,529.5 µg/mL	+/- 73.3630 µg/mL	Gravimetric
	CAS # 78-93-3 (Lot SHBN2844)		+/- 756.0101 µg/mL	Unstressed
	Purity 99%		+/- 757.8048 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,541.5 µg/mL	+/- 73.4332 µg/mL	Gravimetric
	CAS # 108-10-1 (Lot SHBN3601)		+/- 756.7342 µg/mL	Unstressed
	Purity 99%		+/- 758.5305 µg/mL	Stressed
4	2-Hexanone	12,548.0 µg/mL	+/- 73.4713 µg/mL	Gravimetric
	CAS # 591-78-6 (Lot MKCL1599)		+/- 757.1264 µg/mL	Unstressed
	Purity 99%		+/- 758.9237 µg/mL	Stressed

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

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

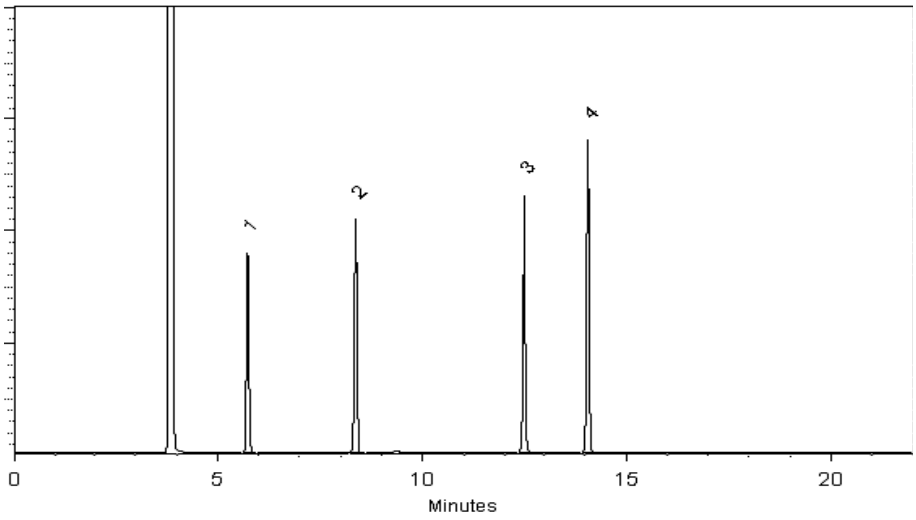
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Penelope Riglin - Operations Tech I

Date Mixed: 18-Jan-2022 **Balance:** B707717271

Marlina Cowan - Operations Tech I

Date Passed: 20-Jan-2022

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Reagent

MSV_V_PentaCL_00020

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

Description : Custom Pentachloroethane Standard

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

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

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

Ship: Ambient

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

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

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

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

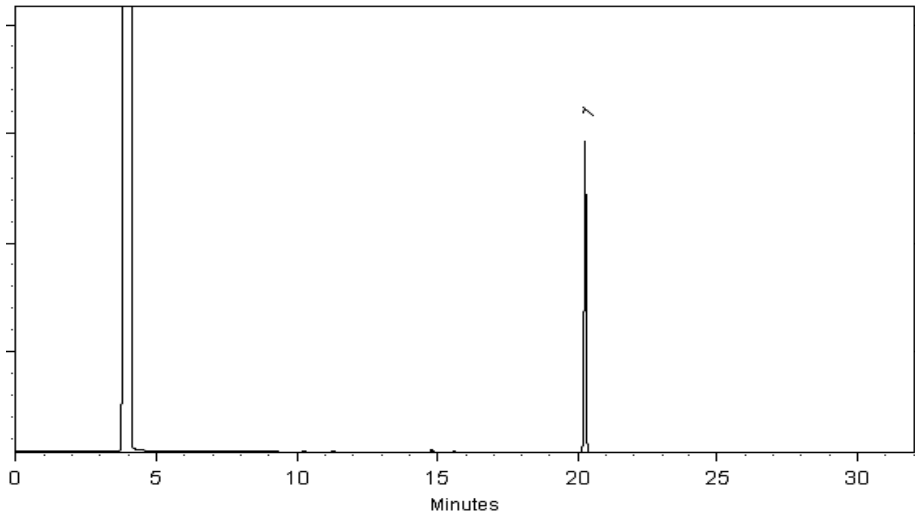
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



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

Jeremy Warefield - Operations Tech I

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

Alexis Shelow - Operations Tech I

Date Passed: 19-Apr-2021

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

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

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

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

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

Manufacturing Notes:

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

Handling Notes:

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

Method 8260D Low Level

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

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories En Job No.: 410-110288-1

SDG No.:

Matrix: Water Level: Low

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

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
HD-COD-SW-6-0/1-0	410-110288-1	99	101	100	95
HD-COD-SW-7-0/1-0	410-110288-2	99	101	100	95
HD-COD-SW-8-0/1-0	410-110288-3	99	101	99	95
HD-COD-SW-9-0/1-0	410-110288-4	99	102	99	95
HD-COD-SW-13-0/1-0	410-110288-5	100	100	100	95
HD-COD-SW-15-0/1-0	410-110288-6	99	98	99	95
HD-COD-SW-16-0/1-0	410-110288-7	99	101	99	95
HD-COD-SW-17-0/1-0	410-110288-8	99	102	98	96
HD-COD-SW-17-0/1-0 DL	410-110288-8 DL	100	100	99	94
HD-COD-SW-26-0/1-0	410-110288-9	99	101	98	95
HD-COD-SW-27-0/1-0	410-110288-10	99	100	99	96
HD-COD-SW-28-0/1-0	410-110288-11	98	101	99	97
HD-COD-SW-29-0/1-0	410-110288-12	99	102	99	96
HD-QC1-0/1-1	410-110288-13	100	102	97	94
HD-QC1-0/1-1 DL	410-110288-13 DL	100	101	98	93
HD-QC1-0/1-2	410-110288-14	99	99	99	96
	MB 410-330696/6	99	101	99	95
	MB 410-331173/10	99	102	98	95
	LCS 410-330696/4	100	103	99	99
	LCS 410-331173/5	99	105	100	99
	LCSD 410-331173/6	99	105	99	99
HD-COD-SW-15-0/1-0 MS MS	410-110288-6 MS	100	106	99	99
HD-COD-SW-15-0/1-0 MSD MSD	410-110288-6 MSD	100	104	100	100

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

Column to be used to flag recovery values

FORM II 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1

SDG No.:

Matrix: Water Level: Low Lab File ID: CD28X03.D

Lab ID: LCS 410-330696/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	5.05	101	71-134	
1,1,1-Trichloroethane	5.00	4.88	98	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.03	101	75-123	
1,1,2-Trichloroethane	5.00	5.00	100	80-120	
1,1-Dichloroethane	5.00	5.04	101	74-120	
1,1-Dichloroethene	5.00	4.97	99	80-131	
1,2-Dibromoethane (EDB)	5.00	5.06	101	80-120	
1,2-Dichloroethane	5.00	4.83	97	69-122	
1,2-Dichloropropane	5.00	5.27	105	80-120	
2-Butanone (MEK)	62.5	71.1	114	59-141	
2-Hexanone	62.5	73.7	118	52-140	
4-Methyl-2-pentanone (MIBK)	62.5	72.5	116	55-140	
Acetone	62.5	63.4	101	60-146	
Benzene	5.00	5.09	102	80-120	
Bromochloromethane	5.00	5.19	104	80-120	
Bromodichloromethane	5.00	5.04	101	73-124	
Bromoform	5.00	5.03	101	49-144	
Bromomethane	5.00	4.44	89	60-136	
Carbon disulfide	5.00	5.93	119	67-130	
Carbon tetrachloride	5.00	5.05	101	64-141	
Chlorobenzene	5.00	4.86	97	80-120	
Chloroethane	5.00	4.69	94	63-120	
Chloroform	5.00	4.95	99	80-120	
Chloromethane	5.00	4.92	98	56-124	
cis-1,2-Dichloroethene	5.00	5.09	102	80-122	
cis-1,3-Dichloropropene	5.00	4.99	100	67-121	
Dibromochloromethane	5.00	4.97	99	64-138	
Ethylbenzene	5.00	4.93	99	80-120	
Methyl tert-butyl ether	5.00	5.11	102	69-120	
Methylene Chloride	5.00	5.01	100	80-120	
Styrene	5.00	4.76	95	80-120	
Tetrachloroethene	5.00	4.82	96	80-120	
Toluene	5.00	4.90	98	80-120	
trans-1,2-Dichloroethene	5.00	4.85	97	80-122	
trans-1,3-Dichloropropene	5.00	5.10	102	61-129	
Trichloroethene	5.00	4.94	99	80-120	
Vinyl chloride	5.00	4.61	92	60-125	
Xylenes, Total	15.0	14.8	98	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1

SDG No.:

Matrix: Water Level: Low Lab File ID: CD29X04.D

Lab ID: LCS 410-331173/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	5.07	101	71-134	
1,1,1-Trichloroethane	5.00	4.77	95	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.21	104	75-123	
1,1,2-Trichloroethane	5.00	5.10	102	80-120	
1,1-Dichloroethane	5.00	4.88	98	74-120	
1,1-Dichloroethene	5.00	4.66	93	80-131	
1,2-Dibromoethane (EDB)	5.00	5.20	104	80-120	
1,2-Dichloroethane	5.00	5.15	103	69-122	
1,2-Dichloropropane	5.00	5.22	104	80-120	
2-Butanone (MEK)	62.5	61.9	99	59-141	
2-Hexanone	62.5	59.9	96	52-140	
4-Methyl-2-pentanone (MIBK)	62.5	61.7	99	55-140	
Acetone	62.5	60.1	96	60-146	
Benzene	5.00	5.00	100	80-120	
Bromochloromethane	5.00	5.14	103	80-120	
Bromodichloromethane	5.00	5.11	102	73-124	
Bromoform	5.00	5.22	104	49-144	
Bromomethane	5.00	4.24	85	60-136	
Carbon disulfide	5.00	5.72	114	67-130	
Carbon tetrachloride	5.00	4.92	98	64-141	
Chlorobenzene	5.00	4.89	98	80-120	
Chloroethane	5.00	4.62	92	63-120	
Chloroform	5.00	4.87	97	80-120	
Chloromethane	5.00	4.69	94	56-124	
cis-1,2-Dichloroethene	5.00	5.00	100	80-122	
cis-1,3-Dichloropropene	5.00	4.99	100	67-121	
Dibromochloromethane	5.00	5.07	101	64-138	
Ethylbenzene	5.00	4.94	99	80-120	
Methyl tert-butyl ether	5.00	5.15	103	69-120	
Methylene Chloride	5.00	5.02	100	80-120	
Styrene	5.00	4.81	96	80-120	
Tetrachloroethene	5.00	4.87	97	80-120	
Toluene	5.00	4.90	98	80-120	
trans-1,2-Dichloroethene	5.00	4.66	93	80-122	
trans-1,3-Dichloropropene	5.00	5.18	104	61-129	
Trichloroethene	5.00	4.79	96	80-120	
Vinyl chloride	5.00	4.41	88	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 LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1

SDG No.:

Matrix: Water Level: Low Lab File ID: CD29X05.D

Lab ID: LCSD 410-331173/6 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	5.25	105	4	30	71-134	
1,1,1-Trichloroethane	5.00	4.89	98	3	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.42	108	4	30	75-123	
1,1,2-Trichloroethane	5.00	5.23	105	2	30	80-120	
1,1-Dichloroethane	5.00	5.06	101	4	30	74-120	
1,1-Dichloroethene	5.00	4.80	96	3	30	80-131	
1,2-Dibromoethane (EDB)	5.00	5.27	105	1	30	80-120	
1,2-Dichloroethane	5.00	5.31	106	3	30	69-122	
1,2-Dichloropropane	5.00	5.35	107	2	30	80-120	
2-Butanone (MEK)	62.5	61.6	98	1	30	59-141	
2-Hexanone	62.5	60.1	96	0	30	52-140	
4-Methyl-2-pentanone (MIBK)	62.5	61.4	98	1	30	55-140	
Acetone	62.5	59.6	95	1	30	60-146	
Benzene	5.00	5.10	102	2	30	80-120	
Bromochloromethane	5.00	5.29	106	3	30	80-120	
Bromodichloromethane	5.00	5.20	104	2	30	73-124	
Bromoform	5.00	5.41	108	4	30	49-144	
Bromomethane	5.00	4.53	91	7	30	60-136	
Carbon disulfide	5.00	5.83	117	2	30	67-130	
Carbon tetrachloride	5.00	5.01	100	2	30	64-141	
Chlorobenzene	5.00	4.96	99	2	30	80-120	
Chloroethane	5.00	4.77	95	3	30	63-120	
Chloroform	5.00	5.05	101	4	30	80-120	
Chloromethane	5.00	4.74	95	1	30	56-124	
cis-1,2-Dichloroethene	5.00	5.18	104	3	30	80-122	
cis-1,3-Dichloropropene	5.00	5.09	102	2	30	67-121	
Dibromochloromethane	5.00	5.16	103	2	30	64-138	
Ethylbenzene	5.00	5.07	101	3	30	80-120	
Methyl tert-butyl ether	5.00	5.33	107	4	30	69-120	
Methylene Chloride	5.00	5.14	103	2	30	80-120	
Styrene	5.00	4.98	100	3	30	80-120	
Tetrachloroethene	5.00	4.90	98	1	30	80-120	
Toluene	5.00	4.99	100	2	30	80-120	
trans-1,2-Dichloroethene	5.00	4.83	97	4	30	80-122	
trans-1,3-Dichloropropene	5.00	5.28	106	2	30	61-129	
Trichloroethene	5.00	4.95	99	3	30	80-120	
Vinyl chloride	5.00	4.67	93	6	30	60-125	
Xylenes, Total	15.0	15.1	101	1	30	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260D

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1

SDG No.:

Matrix: Water Level: Low Lab File ID: CD28X18.D

Lab ID: 410-110288-6 MS Client ID: HD-COD-SW-15-0/1-0 MS MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	ND	5.38	107	71-134	
1,1,1-Trichloroethane	5.00	0.42 J	5.78	107	78-126	
1,1,2,2-Tetrachloroethane	5.00	ND	5.33	107	75-123	
1,1,2-Trichloroethane	5.00	ND	5.12	102	80-120	
1,1-Dichloroethane	5.00	0.16 J	5.54	108	74-120	
1,1-Dichloroethene	5.00	0.20 J	5.65	109	80-131	
1,2-Dibromoethane (EDB)	5.00	ND	5.33	106	80-120	
1,2-Dichloroethane	5.00	ND	5.04	101	69-122	
1,2-Dichloropropane	5.00	ND	5.43	109	80-120	
2-Butanone (MEK)	62.6	ND	55.5	89	59-141	
2-Hexanone	62.6	ND	66.2	106	52-140	
4-Methyl-2-pentanone (MIBK)	62.6	ND	59.5	95	55-140	
Acetone	62.6	ND	53.7	86	60-146	
Benzene	5.00	ND	5.39	108	80-120	
Bromochloromethane	5.00	ND	5.25	105	80-120	
Bromodichloromethane	5.00	ND	5.29	106	73-124	
Bromoform	5.00	ND	5.35	107	49-144	
Bromomethane	5.00	ND	4.93	99	60-136	
Carbon disulfide	5.00	ND	6.46	129	67-130	
Carbon tetrachloride	5.00	ND	5.69	114	64-141	
Chlorobenzene	5.00	ND	5.22	104	80-120	
Chloroethane	5.00	ND	5.21	104	63-120	
Chloroform	5.00	0.28 J	5.52	105	80-120	
Chloromethane	5.00	ND	5.39	108	80-120	
cis-1,2-Dichloroethene	5.00	2.4	7.92	110	80-122	
cis-1,3-Dichloropropene	5.00	ND	5.07	101	67-121	
Dibromochloromethane	5.00	ND	5.21	104	64-138	
Ethylbenzene	5.00	ND	5.35	107	80-120	
Methyl tert-butyl ether	5.00	ND	5.17	103	69-120	
Methylene Chloride	5.00	ND	5.29	106	80-120	
Styrene	5.00	ND	5.09	102	80-120	
Tetrachloroethene	5.00	6.4	11.8	108	80-120	
Toluene	5.00	ND	5.35	107	80-120	
trans-1,2-Dichloroethene	5.00	ND	5.35	107	80-122	
trans-1,3-Dichloropropene	5.00	ND	5.19	104	61-129	
Trichloroethene	5.00	1.9	7.18	106	80-120	
Vinyl chloride	5.00	ND	5.29	106	60-125	
Xylenes, Total	15.0	ND	15.8	105	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 Environment Testing, LLC Job No.: 410-110288-1

SDG No.:

Matrix: Water Level: Low Lab File ID: CD28X19.D

Lab ID: 410-110288-6 MSD Client ID: HD-COD-SW-15-0/1-0 MSD MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	5.00	5.34	107	1	30	71-134	
1,1,1-Trichloroethane	5.00	5.72	106	1	30	78-126	
1,1,2,2-Tetrachloroethane	5.00	5.23	105	2	30	75-123	
1,1,2-Trichloroethane	5.00	5.19	104	1	30	80-120	
1,1-Dichloroethane	5.00	5.51	107	1	30	74-120	
1,1-Dichloroethene	5.00	5.60	108	1	30	80-131	
1,2-Dibromoethane (EDB)	5.00	5.20	104	2	30	80-120	
1,2-Dichloroethane	5.00	5.06	101	0	30	69-122	
1,2-Dichloropropane	5.00	5.43	108	0	30	80-120	
2-Butanone (MEK)	62.6	71.4	114	25	30	59-141	
2-Hexanone	62.6	71.9	115	8	30	52-140	
4-Methyl-2-pentanone (MIBK)	62.6	71.9	115	19	30	55-140	
Acetone	62.6	65.4	105	20	30	60-146	
Benzene	5.00	5.39	108	0	30	80-120	
Bromochloromethane	5.00	5.32	106	1	30	80-120	
Bromodichloromethane	5.00	5.25	105	1	30	73-124	
Bromoform	5.00	5.28	105	1	30	49-144	
Bromomethane	5.00	4.97	99	1	30	60-136	
Carbon disulfide	5.00	6.44	129	0	30	67-130	
Carbon tetrachloride	5.00	5.68	113	0	30	64-141	
Chlorobenzene	5.00	5.19	104	1	30	80-120	
Chloroethane	5.00	5.30	106	2	30	63-120	
Chloroform	5.00	5.48	104	1	30	80-120	
Chloromethane	5.00	5.63	113	5	30	80-120	
cis-1,2-Dichloroethene	5.00	7.93	110	0	30	80-122	
cis-1,3-Dichloropropene	5.00	5.09	102	0	30	67-121	
Dibromochloromethane	5.00	5.15	103	1	30	64-138	
Ethylbenzene	5.00	5.34	107	0	30	80-120	
Methyl tert-butyl ether	5.00	5.26	105	2	30	69-120	
Methylene Chloride	5.00	5.30	106	0	30	80-120	
Styrene	5.00	5.04	101	1	30	80-120	
Tetrachloroethene	5.00	11.8	107	0	30	80-120	
Toluene	5.00	5.31	106	1	30	80-120	
trans-1,2-Dichloroethene	5.00	5.22	104	3	30	80-122	
trans-1,3-Dichloropropene	5.00	5.41	108	4	30	61-129	
Trichloroethene	5.00	7.10	105	1	30	80-120	
Vinyl chloride	5.00	5.42	108	2	30	60-125	
Xylenes, Total	15.0	15.8	105	0	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 Environment Testing, LLC Job No.: 410-110288-1

SDG No.:

Lab File ID: CD28X05.D Lab Sample ID: MB 410-330696/6

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

Instrument ID: 10193 Date Analyzed: 12/28/2022 10:55

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 410-330696/4	CD28X03.D	12/28/2022 10:11
HD-QC1-0/1-2	410-110288-14	CD28X11.D	12/28/2022 13:09
HD-COD-SW-6-0/1-0	410-110288-1	CD28X12.D	12/28/2022 13:31
HD-COD-SW-7-0/1-0	410-110288-2	CD28X13.D	12/28/2022 13:53
HD-COD-SW-8-0/1-0	410-110288-3	CD28X14.D	12/28/2022 14:16
HD-COD-SW-9-0/1-0	410-110288-4	CD28X15.D	12/28/2022 14:38
HD-COD-SW-13-0/1-0	410-110288-5	CD28X16.D	12/28/2022 15:00
HD-COD-SW-15-0/1-0	410-110288-6	CD28X17.D	12/28/2022 15:23
HD-COD-SW-15-0/1-0 MS MS	410-110288-6 MS	CD28X18.D	12/28/2022 15:45
HD-COD-SW-15-0/1-0 MSD MSD	410-110288-6 MSD	CD28X19.D	12/28/2022 16:07
HD-COD-SW-16-0/1-0	410-110288-7	CD28X20.D	12/28/2022 16:29
HD-COD-SW-17-0/1-0	410-110288-8	CD28X21.D	12/28/2022 16:52
HD-COD-SW-26-0/1-0	410-110288-9	CD28X22.D	12/28/2022 17:14
HD-COD-SW-27-0/1-0	410-110288-10	CD28X23.D	12/28/2022 17:36
HD-COD-SW-28-0/1-0	410-110288-11	CD28X24.D	12/28/2022 17:58
HD-COD-SW-29-0/1-0	410-110288-12	CD28X25.D	12/28/2022 18:21
HD-QC1-0/1-1	410-110288-13	CD28X26.D	12/28/2022 18:43

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1

SDG No.:

Lab File ID: CD29X09.D Lab Sample ID: MB 410-331173/10

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

Instrument ID: 10193 Date Analyzed: 12/29/2022 14:56

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 410-331173/5	CD29X04.D	12/29/2022 13:05
	LCSD 410-331173/6	CD29X05.D	12/29/2022 13:27
HD-COD-SW-17-0/1-0 DL	410-110288-8 DL	CD29X24.D	12/29/2022 20:30
HD-QC1-0/1-1 DL	410-110288-13 DL	CD29X25.D	12/29/2022 20:53

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

Lab Name: Eurofins Lancaster Laboratories Env: Job No.: 410-110288-1

SDG No.:

Lab File ID: CG22T04.D BFB Injection Date: 08/22/2022

Instrument ID: 10193 BFB Injection Time: 15:51

Analysis Batch No.: 288300

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.8	
75	30.0 - 60.0 % of mass 95	45.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.3	
173	Less than 2.0 % of mass 174	0.7	(0.9) 1
174	Greater than 50% of mass 95	80.5	
175	5.0 - 9.0 % of mass 174	6.4	(8.0) 1
176	95.0 - 101.0 % of mass 174	79.2	(98.3) 1
177	5.0 - 9.0 % of mass 176	5.2	(6.6) 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 410-288300/13	CG22X12.D	08/22/2022	20:12
	IC 410-288300/14	CG22X13.D	08/22/2022	20:34
	IC 410-288300/15	CG22X14.D	08/22/2022	20:57
	IC 410-288300/16	CG22X15.D	08/22/2022	21:19
	IC 410-288300/17	CG22X16.D	08/22/2022	21:41
	ICIS 410-288300/18	CG22X17.D	08/22/2022	22:04
	IC 410-288300/19	CG22X18.D	08/22/2022	22:26
	ICV 410-288300/21	CG22X20.D	08/22/2022	23:10

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

Lab Name: Eurofins Lancaster Laboratories Env: Job No.: 410-110288-1

SDG No.:

Lab File ID: CD28T01.D BFB Injection Date: 12/28/2022

Instrument ID: 10193 BFB Injection Time: 09:13

Analysis Batch No.: 330696

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.9	
75	30.0 - 60.0 % of mass 95	47.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	1.0	(1.2) 1
174	Greater than 50% of mass 95	85.5	
175	5.0 - 9.0 % of mass 174	6.7	(7.8) 1
176	95.0 - 101.0 % of mass 174	83.3	(97.4) 1
177	5.0 - 9.0 % of mass 176	6.0	(7.2) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-330696/3	CD28X02.D	12/28/2022	9:48
	LCS 410-330696/4	CD28X03.D	12/28/2022	10:11
	MB 410-330696/6	CD28X05.D	12/28/2022	10:55
HD-QC1-0/1-2	410-110288-14	CD28X11.D	12/28/2022	13:09
HD-COD-SW-6-0/1-0	410-110288-1	CD28X12.D	12/28/2022	13:31
HD-COD-SW-7-0/1-0	410-110288-2	CD28X13.D	12/28/2022	13:53
HD-COD-SW-8-0/1-0	410-110288-3	CD28X14.D	12/28/2022	14:16
HD-COD-SW-9-0/1-0	410-110288-4	CD28X15.D	12/28/2022	14:38
HD-COD-SW-13-0/1-0	410-110288-5	CD28X16.D	12/28/2022	15:00
HD-COD-SW-15-0/1-0	410-110288-6	CD28X17.D	12/28/2022	15:23
HD-COD-SW-15-0/1-0 MS MS	410-110288-6 MS	CD28X18.D	12/28/2022	15:45
HD-COD-SW-15-0/1-0 MSD MSD	410-110288-6 MSD	CD28X19.D	12/28/2022	16:07
HD-COD-SW-16-0/1-0	410-110288-7	CD28X20.D	12/28/2022	16:29
HD-COD-SW-17-0/1-0	410-110288-8	CD28X21.D	12/28/2022	16:52
HD-COD-SW-26-0/1-0	410-110288-9	CD28X22.D	12/28/2022	17:14
HD-COD-SW-27-0/1-0	410-110288-10	CD28X23.D	12/28/2022	17:36
HD-COD-SW-28-0/1-0	410-110288-11	CD28X24.D	12/28/2022	17:58
HD-COD-SW-29-0/1-0	410-110288-12	CD28X25.D	12/28/2022	18:21
HD-QC1-0/1-1	410-110288-13	CD28X26.D	12/28/2022	18:43

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

Lab Name: Eurofins Lancaster Laboratories Env: Job No.: 410-110288-1

SDG No.:

Lab File ID: CD29T01.D BFB Injection Date: 12/29/2022

Instrument ID: 10193 BFB Injection Time: 11:31

Analysis Batch No.: 331173

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.2	
75	30.0 - 60.0 % of mass 95	47.3	
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	0.9	(1.1) 1
174	Greater than 50% of mass 95	85.1	
175	5.0 - 9.0 % of mass 174	6.4	(7.5) 1
176	95.0 - 101.0 % of mass 174	81.3	(95.6) 1
177	5.0 - 9.0 % of mass 176	5.5	(6.7) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 410-331173/3	CD29X02.D	12/29/2022	12:20
	LCS 410-331173/5	CD29X04.D	12/29/2022	13:05
	LCSD 410-331173/6	CD29X05.D	12/29/2022	13:27
	MB 410-331173/10	CD29X09.D	12/29/2022	14:56
HD-COD-SW-17-0/1-0 DL	410-110288-8 DL	CD29X24.D	12/29/2022	20:30
HD-QC1-0/1-1 DL	410-110288-13 DL	CD29X25.D	12/29/2022	20:53

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

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1

SDG No.:

Sample No.: ICIS 410-288300/18 Date Analyzed: 08/22/2022 22:04

Instrument ID: 10193 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): CG22X17.D Heated Purge: (Y/N) N

Calibration ID: 41918

		TBAd10		FB		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		129707	3.75	1988424	7.20	1523479	10.84
UPPER LIMIT		259414	4.25	3976848	7.70	3046958	11.34
LOWER LIMIT		64854	3.25	994212	6.70	761740	10.34
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-288300/21		120148	3.74	1986750	7.19	1518942	10.84
CCVIS 410-330696/3		136997	3.68	2105428	7.12	1655566	10.78
CCVIS 410-331173/3		123691	3.67	2011295	7.12	1567068	10.78

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
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1

SDG No.:

Sample No.: ICIS 410-288300/18 Date Analyzed: 08/22/2022 22:04

Instrument ID: 10193 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): CG22X17.D Heated Purge: (Y/N) N

Calibration ID: 41918

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		900908	12.77				
UPPER LIMIT		1801816	13.27				
LOWER LIMIT		450454	12.27				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 410-288300/21		882310	12.77				
CCVIS 410-330696/3		1007973	12.73				
CCVIS 410-331173/3		961947	12.73				

DCBd4 = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

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

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1

SDG No.:

Sample No.: CCVIS 410-330696/3 Date Analyzed: 12/28/2022 09:48

Instrument ID: 10193 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): CD28X02.D Heated Purge: (Y/N) N

Calibration ID: 41918

		TBAd10		FB		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		136997	3.68	2105428	7.12	1655566	10.78
UPPER LIMIT		273994	4.18	4210856	7.62	3311132	11.28
LOWER LIMIT		68499	3.18	1052714	6.62	827783	10.28
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-330696/4		130086	3.69	2091557	7.12	1638726	10.78
MB 410-330696/6		141118	3.67	2027173	7.12	1559849	10.78
410-110288-14	HD-QC1-0/1-2	131879	3.67	2021472	7.12	1540466	10.78
410-110288-1	HD-COD-SW-6-0/1-0	131597	3.68	1990168	7.12	1529442	10.78
410-110288-2	HD-COD-SW-7-0/1-0	135242	3.69	1978403	7.12	1525041	10.78
410-110288-3	HD-COD-SW-8-0/1-0	132379	3.68	1951593	7.12	1496896	10.78
410-110288-4	HD-COD-SW-9-0/1-0	129118	3.69	1961655	7.12	1520579	10.78
410-110288-5	HD-COD-SW-13-0/1-0	125609	3.68	1950255	7.12	1491730	10.78
410-110288-6	HD-COD-SW-15-0/1-0	127037	3.68	1955857	7.12	1509801	10.78
410-110288-6 MS	HD-COD-SW-15-0/1-0 MS MS	147715	3.69	2012499	7.12	1563629	10.78
410-110288-6 MSD	HD-COD-SW-15-0/1-0 MSD MSD	129217	3.66	2050540	7.12	1568102	10.78
410-110288-7	HD-COD-SW-16-0/1-0	133268	3.68	1970482	7.12	1507998	10.78
410-110288-8	HD-COD-SW-17-0/1-0	154480	3.68	2011171	7.12	1559510	10.78
410-110288-9	HD-COD-SW-26-0/1-0	158301	3.67	1971543	7.12	1533111	10.78
410-110288-10	HD-COD-SW-27-0/1-0	145818	3.68	1957224	7.12	1504990	10.78
410-110288-11	HD-COD-SW-28-0/1-0	162608	3.69	1970364	7.12	1500689	10.78
410-110288-12	HD-COD-SW-29-0/1-0	132950	3.68	1934252	7.12	1489807	10.78
410-110288-13	HD-QC1-0/1-1	150203	3.68	1942497	7.12	1527207	10.78

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
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1

SDG No.:

Sample No.: CCVIS 410-330696/3 Date Analyzed: 12/28/2022 09:48

Instrument ID: 10193 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): CD28X02.D Heated Purge: (Y/N) N

Calibration ID: 41918

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		1007973	12.73				
UPPER LIMIT		2015946	13.23				
LOWER LIMIT		503987	12.23				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-330696/4		964715	12.73				
MB 410-330696/6		882938	12.73				
410-110288-14	HD-QC1-0/1-2	875169	12.73				
410-110288-1	HD-COD-SW-6-0/1-0	872857	12.73				
410-110288-2	HD-COD-SW-7-0/1-0	868692	12.73				
410-110288-3	HD-COD-SW-8-0/1-0	843710	12.73				
410-110288-4	HD-COD-SW-9-0/1-0	862550	12.73				
410-110288-5	HD-COD-SW-13-0/1-0	858365	12.73				
410-110288-6	HD-COD-SW-15-0/1-0	861026	12.73				
410-110288-6 MS	HD-COD-SW-15-0/1-0 MS MS	927225	12.73				
410-110288-6 MSD	HD-COD-SW-15-0/1-0 MSD MSD	927037	12.73				
410-110288-7	HD-COD-SW-16-0/1-0	856121	12.73				
410-110288-8	HD-COD-SW-17-0/1-0	882701	12.73				
410-110288-9	HD-COD-SW-26-0/1-0	874280	12.73				
410-110288-10	HD-COD-SW-27-0/1-0	866984	12.73				
410-110288-11	HD-COD-SW-28-0/1-0	864524	12.73				
410-110288-12	HD-COD-SW-29-0/1-0	851770	12.73				
410-110288-13	HD-QC1-0/1-1	867520	12.73				

DCBd4 = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

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

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1

SDG No.:

Sample No.: CCVIS 410-331173/3 Date Analyzed: 12/29/2022 12:20

Instrument ID: 10193 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): CD29X02.D Heated Purge: (Y/N) N

Calibration ID: 41918

		TBAd10		FB		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		123691	3.67	2011295	7.12	1567068	10.78
UPPER LIMIT		247382	4.17	4022590	7.62	3134136	11.28
LOWER LIMIT		61846	3.17	1005648	6.62	783534	10.28
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-331173/5		169320	3.70	2056689	7.12	1588983	10.78
LCSD 410-331173/6		173347	3.72	2039929	7.12	1583432	10.78
MB 410-331173/10		179052	3.69	1998987	7.12	1546721	10.78
410-110288-8 DL	HD-COD-SW-17-0/1-0 DL	149136	3.70	1819043	7.12	1408895	10.78
410-110288-13 DL	HD-QC1-0/1-1 DL	118880	3.70	1820705	7.12	1424677	10.78

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
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1

SDG No.:

Sample No.: CCVIS 410-331173/3 Date Analyzed: 12/29/2022 12:20

Instrument ID: 10193 GC Column: R-624SilMS 30m ID: 0.25(mm)

Lab File ID (Standard): CD29X02.D Heated Purge: (Y/N) N

Calibration ID: 41918

		DCBd4					
		AREA #	RT #	#	RT #	#	RT #
12/24 HOUR STD		961947	12.73				
UPPER LIMIT		1923894	13.23				
LOWER LIMIT		480974	12.23				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 410-331173/5		951331	12.73				
LCSD 410-331173/6		939013	12.73				
MB 410-331173/10		869132	12.73				
410-110288-8 DL	HD-COD-SW-17-0/1-0 DL	803391	12.73				
410-110288-13 DL	HD-QC1-0/1-1 DL	798248	12.73				

DCBd4 = 1,4-Dichlorobenzene-d4

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

Column used to flag values outside QC limits

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-6-0/1-0
Lab Sample ID: 410-110288-1

Matrix: Water
Lab File ID: CD28X12.D

Analysis Method: 8260D
Date Collected: 12/21/2022 10:25

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 13:31

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND	^c cn	0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	2.4	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	0.10	J	0.50	0.10
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-6-0/1-0
Lab Sample ID: 410-110288-1

Matrix: Water
Lab File ID: CD28X12.D

Analysis Method: 8260D
Date Collected: 12/21/2022 10:25

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 13:31

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.097	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		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)	100		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X12.D
Lims ID: 410-110288-A-1
Client ID: HD-COD-SW-6-0/1-0
Sample Type: Client
Inject. Date: 28-Dec-2022 13:31:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074091-013
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 10:32:45 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1603

First Level Reviewer: innoonk Date: 29-Dec-2022 10:32:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	1.904	1.922	-0.018	97	7507	0.1000	
6 Vinyl chloride	62		2.020				ND	7
9 Bromomethane	94		2.306				ND	7
10 Chloroethane	64		2.367				ND	
19 1,1-Dichloroethene	96		3.087				ND	7
20 Acetone	43	3.111	3.123	-0.012	92	15959	2.35	
25 Carbon disulfide	76		3.343				ND	7
29 Methylene Chloride	84		3.654				ND	7
* 30 t-Butyl alcohol-d10 (IS)	65	3.678	3.684	-0.006	96	131597	50.0	
33 Methyl tert-butyl ether	73		4.001				ND	7
34 trans-1,2-Dichloroethene	96		4.007				ND	
36 1,1-Dichloroethane	63		4.647				ND	
41 2-Butanone (MEK)	43		5.483				ND	
42 cis-1,2-Dichloroethene	96	5.507	5.501	0.006	78	4519	0.0765	
47 Chlorobromomethane	128		5.836				ND	
50 Chloroform	83	5.989	5.995	-0.006	93	3925	0.0420	a
52 1,1,1-Trichloroethane	97		6.214				ND	
$ 53 Dibromofluoromethane (Surr)	113	6.208	6.214	-0.006	94	460676	9.90	
55 Carbon tetrachloride	117		6.427				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.671	6.677	-0.006	78	96861	10.1	
59 Benzene	78	6.696	6.702	-0.006	90	6814	0.0298	
61 1,2-Dichloroethane	62		6.781				ND	
* 64 Fluorobenzene (IS)	96	7.116	7.122	-0.006	99	1990168	10.0	
67 Trichloroethene	95	7.604	7.610	-0.006	95	5685	0.0968	a
69 1,2-Dichloropropane	63		7.952				ND	
75 Dichlorobromomethane	83		8.311				ND	7
79 cis-1,3-Dichloropropene	75		8.878				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.085				ND	7
$ 82 Toluene-d8 (Surr)	98	9.213	9.214	-0.001	94	2021598	10.0	
83 Toluene	92	9.299	9.299	0.000	97	7076	0.0476	
84 trans-1,3-Dichloropropene	75		9.598				ND	
86 1,1,2-Trichloroethane	97		9.811				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
87 Tetrachloroethene	166	9.896	9.896	0.000	89	1855	0.0268	
104 2-Hexanone	43		10.061				ND	7
106 Chlorodibromomethane	129		10.213				ND	
107 Ethylene Dibromide	107		10.323				ND	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	85	1529442	10.0	
110 Chlorobenzene	112		10.811				ND	7
111 1,1,1,2-Tetrachloroethane	131		10.896				ND	
112 Ethylbenzene	91		10.902				ND	7
113 m-Xylene & p-Xylene	106		11.024				ND	7
S 114 Xylenes, Total	106		11.245				ND	7
115 o-Xylene	106		11.366				ND	7
116 Styrene	104		11.384				ND	7
117 Bromoform	173		11.542				ND	
$ 121 4-Bromofluorobenzene (Surr)	95	11.823	11.823	0.000	94	710424	9.53	
123 1,1,2,2-Tetrachloroethane	83		11.939				ND	
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	94	872857	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

a - User Assigned ID

Reagents:

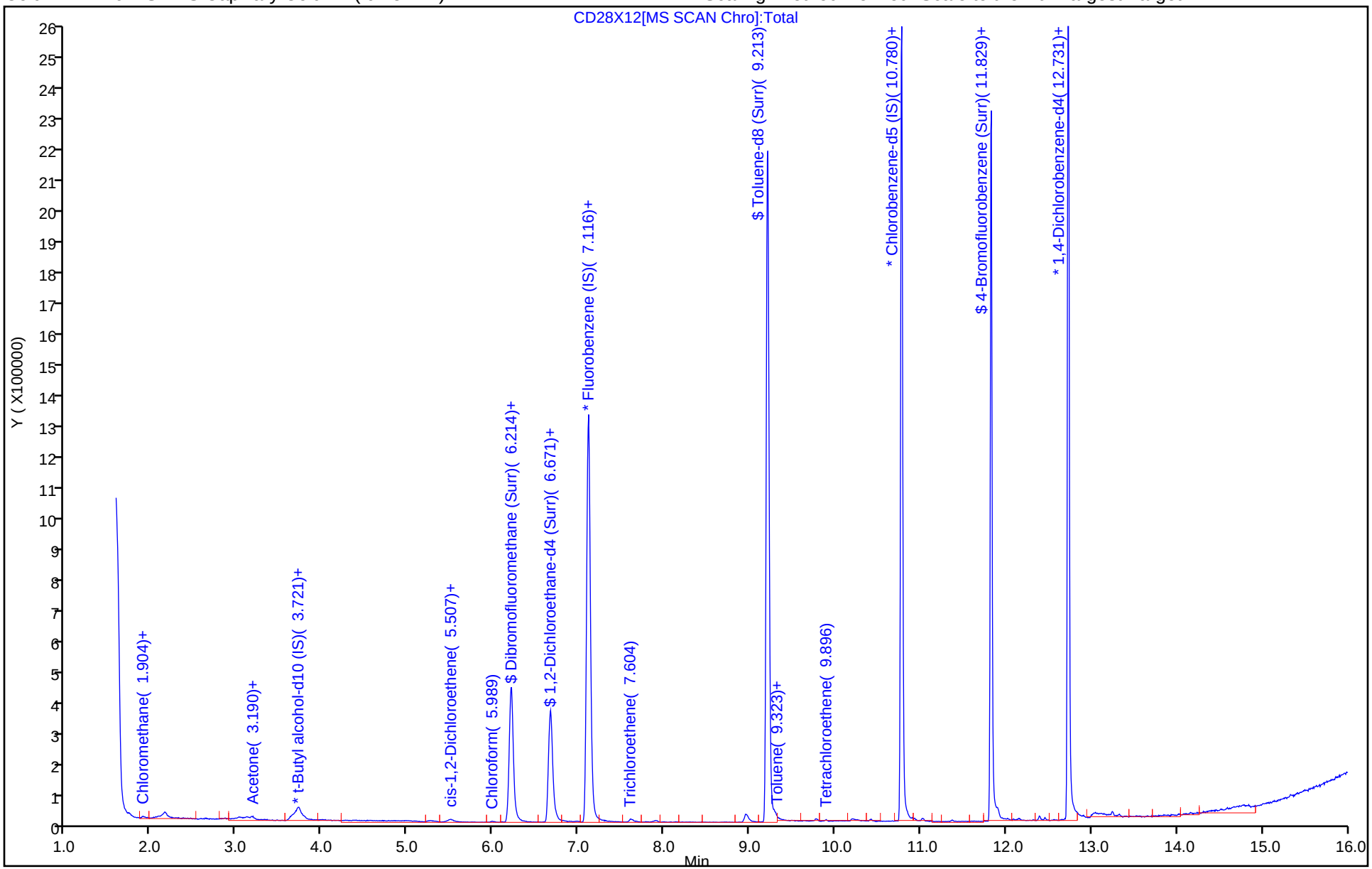
MSV_HP25_ISSS_00063 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 29-Dec-2022 10:32:45 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X12.D				
Injection Date:	28-Dec-2022 13:31:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	410-110288-A-1	Lab Sample ID:	410-110288-1	Worklist Smp#:	13
Client ID:	HD-COD-SW-6-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X12.D				
Lims ID:	410-110288-A-1				
Client ID:	HD-COD-SW-6-0/1-0				
Sample Type:	Client				
Inject. Date:	28-Dec-2022 13:31:30	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0074091-013				
Operator ID:	knk41612	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	29-Dec-2022 10:32:45	Calib Date:	22-Aug-2022 22:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1603				

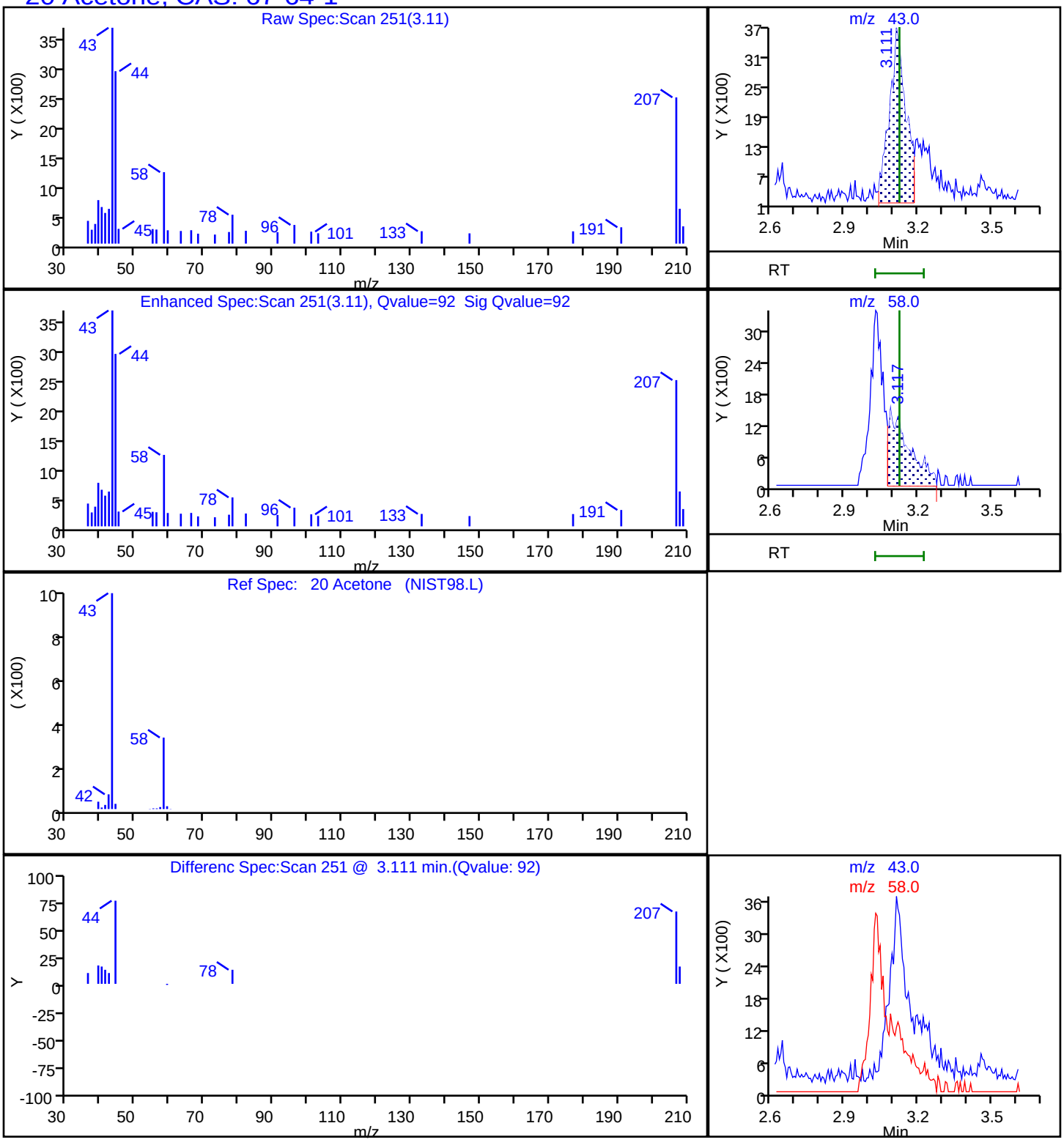
First Level Reviewer: innoonk Date: 29-Dec-2022 10:32:45

Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	9.90	99.05
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	101.29
$ 82 Toluene-d8 (Surr)	10.0	10.0	100.31
$ 121 4-Bromofluorobenzene (Surr)	10.0	9.53	95.26

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X12.D				
Injection Date:	28-Dec-2022 13:31:30	Instrument ID:	10193		
Lims ID:	410-110288-A-1	Lab Sample ID:	410-110288-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

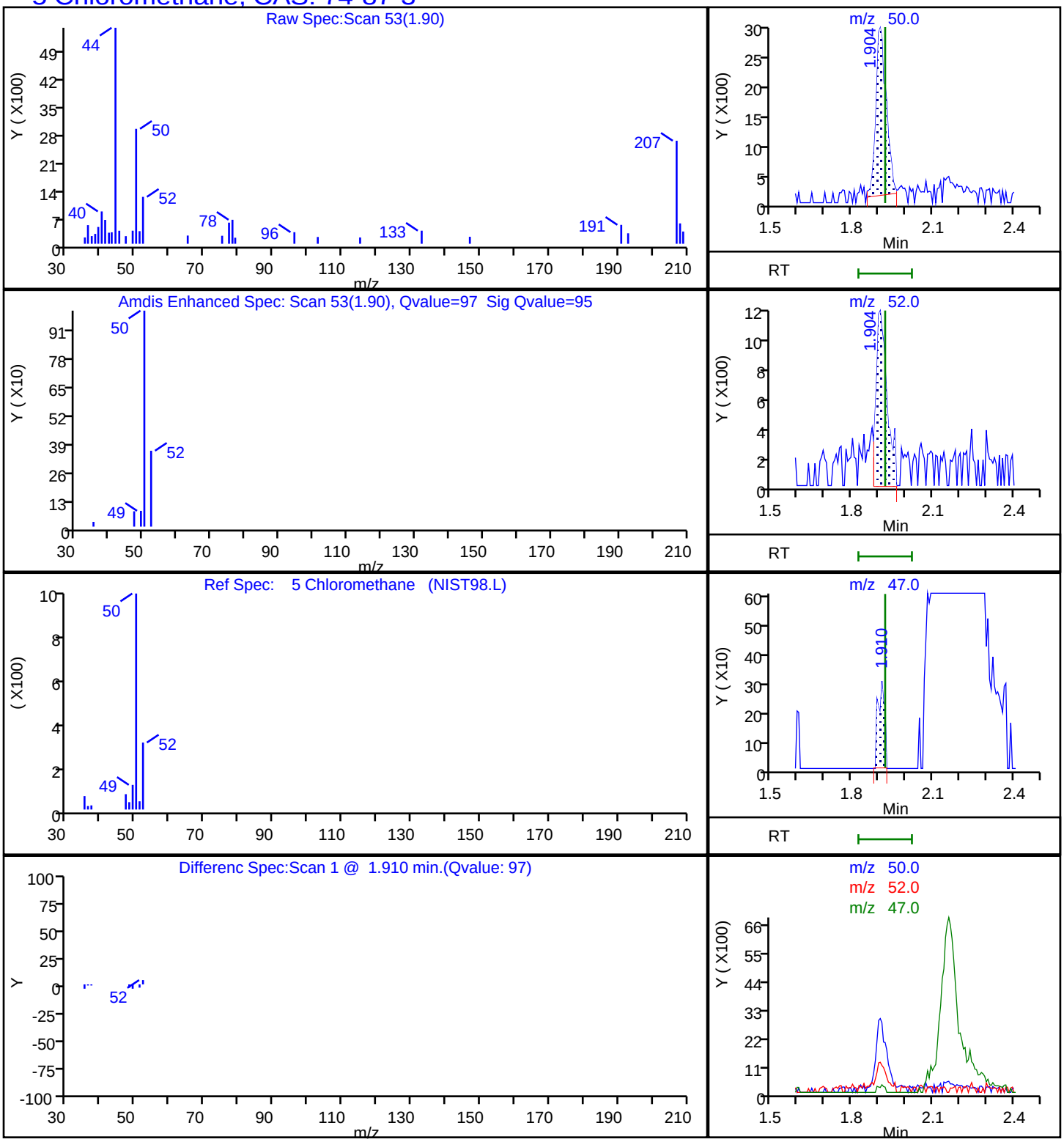
20 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X12.D				
Injection Date:	28-Dec-2022 13:31:30	Instrument ID:	10193		
Lims ID:	410-110288-A-1	Lab Sample ID:	410-110288-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

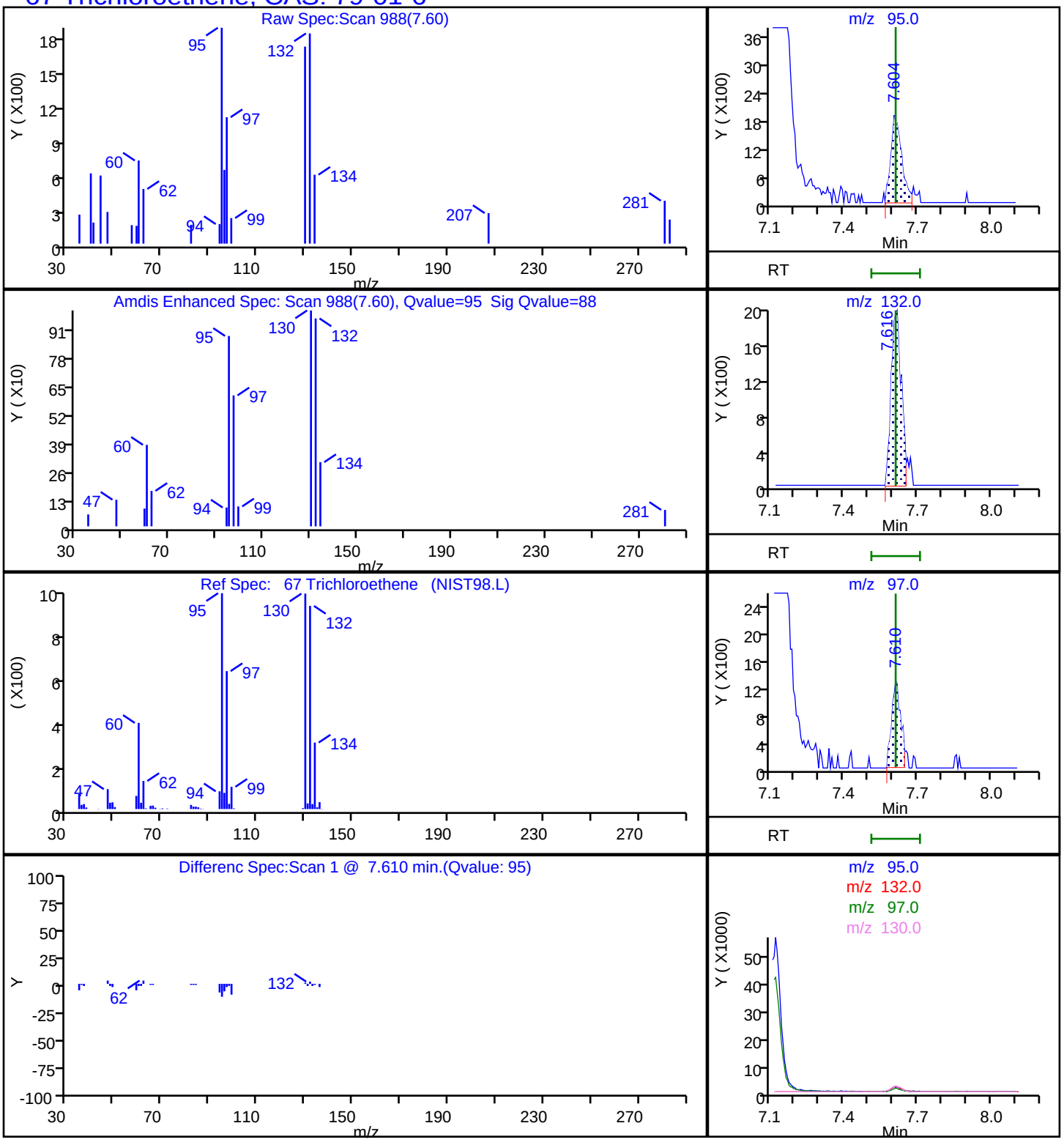
5 Chloromethane, CAS: 74-87-3



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X12.D				
Injection Date:	28-Dec-2022 13:31:30	Instrument ID:	10193		
Lims ID:	410-110288-A-1	Lab Sample ID:	410-110288-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

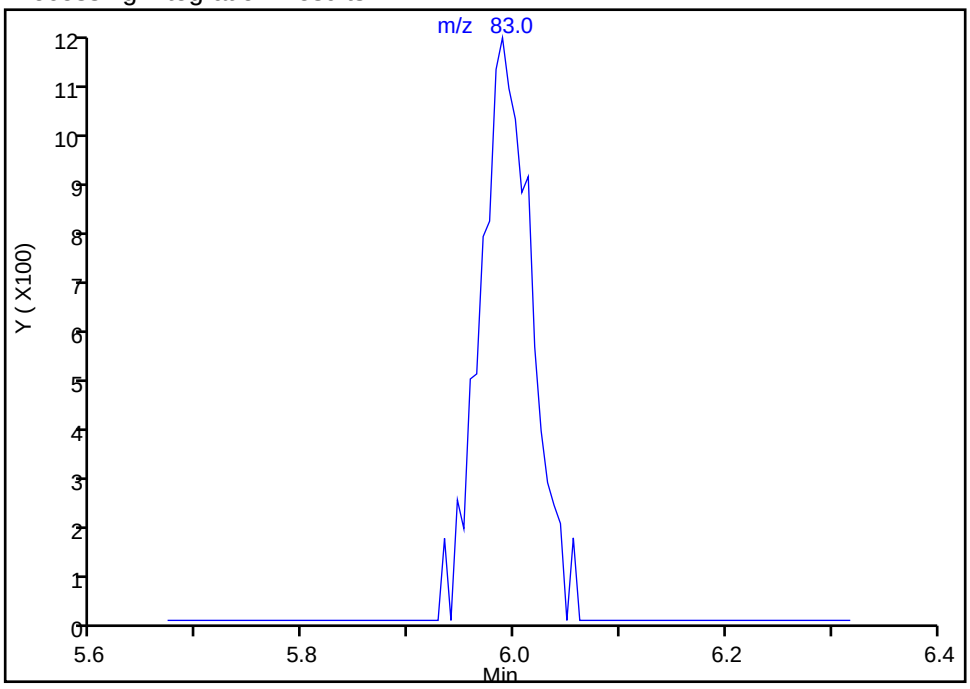
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X12.D				
Injection Date:	28-Dec-2022 13:31:30	Instrument ID:	10193		
Lims ID:	410-110288-A-1	Lab Sample ID:	410-110288-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

50 Chloroform, CAS: 67-66-3

Signal: 1

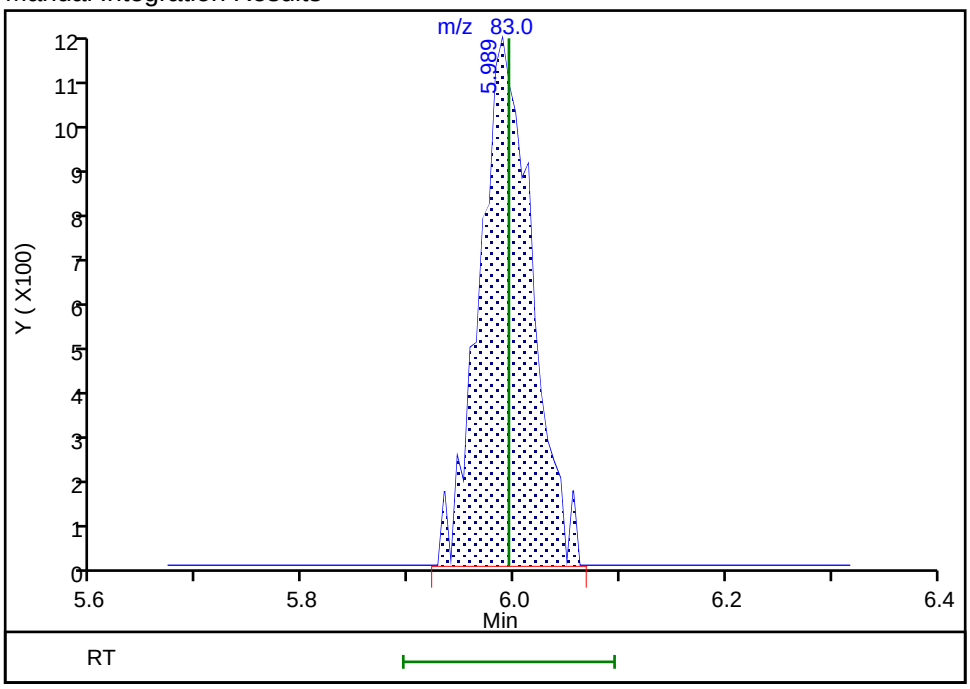
Not Detected
Expected RT: 5.99

Processing Integration Results



Manual Integration Results

RT: 5.99
Area: 3925
Amount: 0.041955
Amount Units: ug/l



Reviewer: innoonk, 29-Dec-2022 10:32:24
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

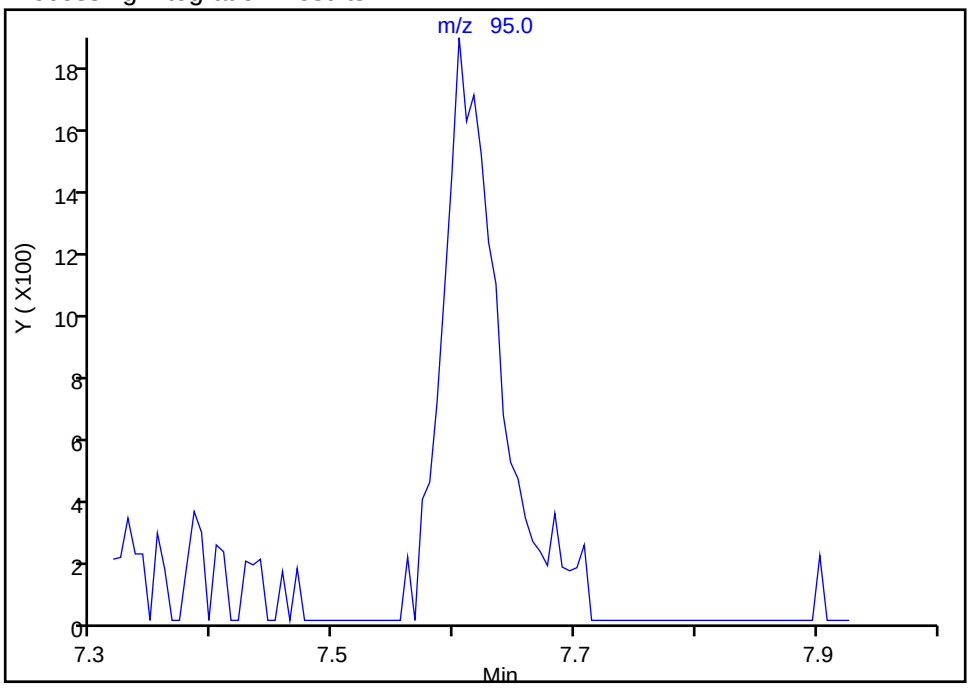
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X12.D				
Injection Date:	28-Dec-2022 13:31:30	Instrument ID:	10193		
Lims ID:	410-110288-A-1	Lab Sample ID:	410-110288-1		
Client ID:	HD-COD-SW-6-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6

Signal: 1

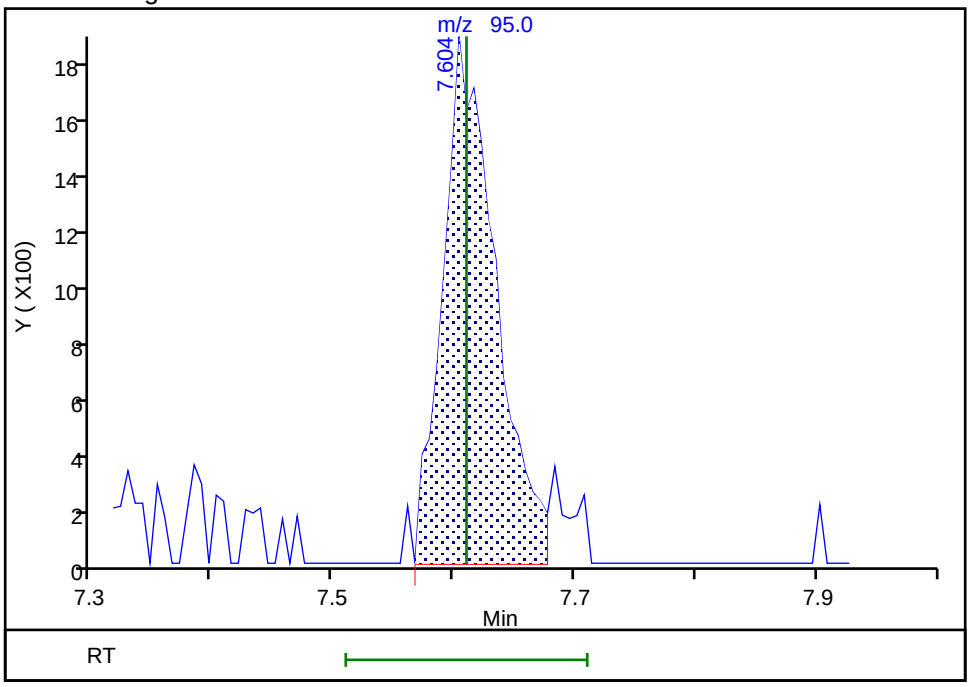
Not Detected
Expected RT: 7.61

Processing Integration Results



Manual Integration Results

RT: 7.60
Area: 5685
Amount: 0.096819
Amount Units: ug/l



Reviewer: innoonk, 29-Dec-2022 10:32:32
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0
Lab Sample ID: 410-110288-2

Matrix: Water
Lab File ID: CD28X13.D

Analysis Method: 8260D
Date Collected: 12/21/2022 11:05

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 13:53

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND	^c cn	0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	2.5	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.099	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-7-0/1-0
Lab Sample ID: 410-110288-2

Matrix: Water
Lab File ID: CD28X13.D

Analysis Method: 8260D
Date Collected: 12/21/2022 11:05

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 13:53

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.14	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		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)	100		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X13.D
Lims ID: 410-110288-A-2
Client ID: HD-COD-SW-7-0/1-0
Sample Type: Client
Inject. Date: 28-Dec-2022 13:53:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074091-014
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 10:33:44 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1603

First Level Reviewer: innoonk Date: 29-Dec-2022 10:33:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	1.904	1.922	-0.018	97	5494	0.0736	
6 Vinyl chloride	62		2.020				ND	7
9 Bromomethane	94		2.306				ND	7
10 Chloroethane	64		2.367				ND	
19 1,1-Dichloroethene	96		3.087				ND	7
20 Acetone	43	3.123	3.123	0.000	96	17411	2.50	
25 Carbon disulfide	76	3.343	3.343	0.000	95	8959	0.0666	M
29 Methylene Chloride	84		3.654				ND	7
* 30 t-Butyl alcohol-d10 (IS)	65	3.690	3.684	0.006	98	135242	50.0	
33 Methyl tert-butyl ether	73		4.001				ND	
34 trans-1,2-Dichloroethene	96		4.007				ND	
36 1,1-Dichloroethane	63		4.647				ND	
41 2-Butanone (MEK)	43		5.483				ND	7
42 cis-1,2-Dichloroethene	96	5.507	5.501	0.006	79	5801	0.0988	
47 Chlorobromomethane	128		5.836				ND	
50 Chloroform	83	6.001	5.995	0.006	92	6044	0.0650	
52 1,1,1-Trichloroethane	97		6.214				ND	
$ 53 Dibromofluoromethane (Surr)	113	6.214	6.214	0.000	94	458762	9.92	
55 Carbon tetrachloride	117		6.427				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.671	6.677	-0.006	78	96381	10.1	
59 Benzene	78	6.702	6.702	0.000	88	6982	0.0307	
61 1,2-Dichloroethane	62		6.781				ND	
* 64 Fluorobenzene (IS)	96	7.116	7.122	-0.006	99	1978403	10.0	
67 Trichloroethene	95	7.610	7.610	0.000	97	8242	0.1412	
69 1,2-Dichloropropane	63		7.952				ND	
75 Dichlorobromomethane	83		8.311				ND	7
79 cis-1,3-Dichloropropene	75		8.878				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.085				ND	7
$ 82 Toluene-d8 (Surr)	98	9.213	9.214	-0.001	93	2000535	9.96	
83 Toluene	92	9.305	9.299	0.006	98	4478	0.0302	
84 trans-1,3-Dichloropropene	75		9.598				ND	
86 1,1,2-Trichloroethane	97		9.811				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
87 Tetrachloroethene	166	9.902	9.896	0.006	94	3304	0.0478	
104 2-Hexanone	43		10.061				ND	7
106 Chlorodibromomethane	129		10.213				ND	
107 Ethylene Dibromide	107		10.323				ND	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	85	1525041	10.0	
110 Chlorobenzene	112		10.811				ND	
111 1,1,1,2-Tetrachloroethane	131		10.896				ND	
112 Ethylbenzene	91		10.902				ND	7
113 m-Xylene & p-Xylene	106		11.024				ND	7
S 114 Xylenes, Total	106		11.245				ND	7
115 o-Xylene	106		11.366				ND	7
116 Styrene	104		11.384				ND	7
117 Bromoform	173		11.542				ND	
$ 121 4-Bromofluorobenzene (Surr)	95	11.823	11.823	0.000	94	703910	9.47	
123 1,1,2,2-Tetrachloroethane	83		11.939				ND	
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	94	868692	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

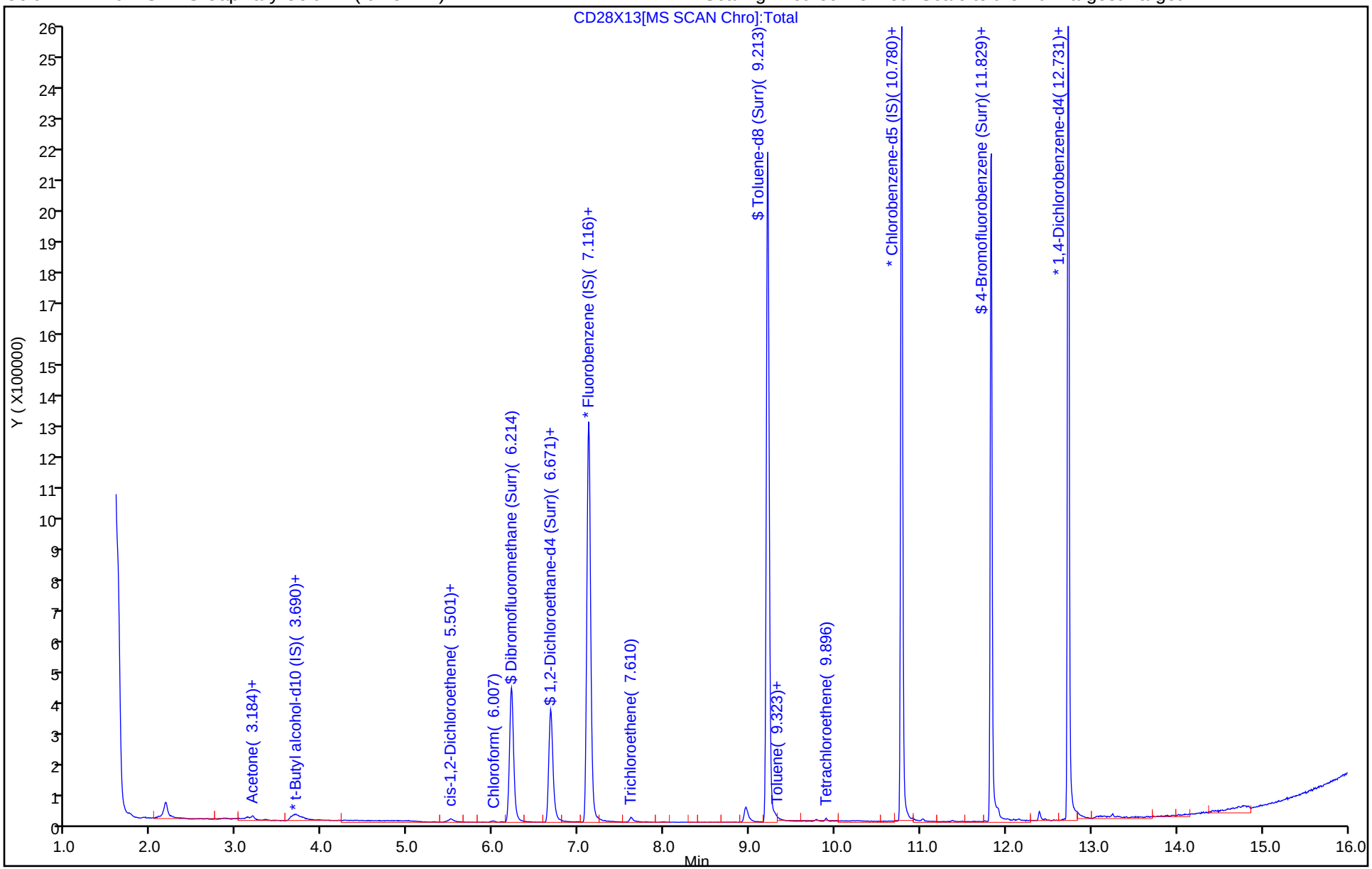
MSV_HP25_ISSS_00063 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 29-Dec-2022 10:33:44 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X13.D				
Injection Date:	28-Dec-2022 13:53:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	410-110288-A-2	Lab Sample ID:	410-110288-2	Worklist Smp#:	14
Client ID:	HD-COD-SW-7-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X13.D				
Lims ID:	410-110288-A-2				
Client ID:	HD-COD-SW-7-0/1-0				
Sample Type:	Client				
Inject. Date:	28-Dec-2022 13:53:30	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0074091-014				
Operator ID:	knk41612	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	29-Dec-2022 10:33:44	Calib Date:	22-Aug-2022 22:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1603				

First Level Reviewer: innoonk Date: 29-Dec-2022 10:33:44

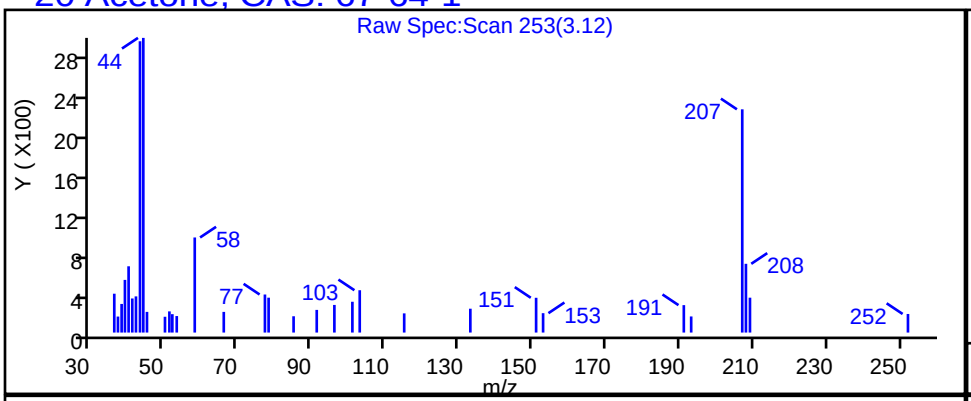
Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	9.92	99.22
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	101.39
$ 82 Toluene-d8 (Surr)	10.0	9.96	99.55
$ 121 4-Bromofluorobenzene (Surr)	10.0	9.47	94.66

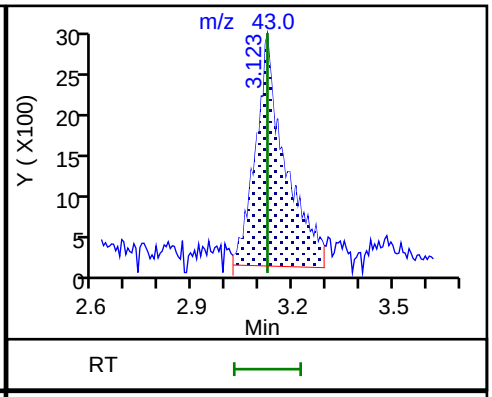
Report Date: 29-Dec-2022 10:33:44 Chrom Revision: 2.3 20-Dec-2022 14:14:06

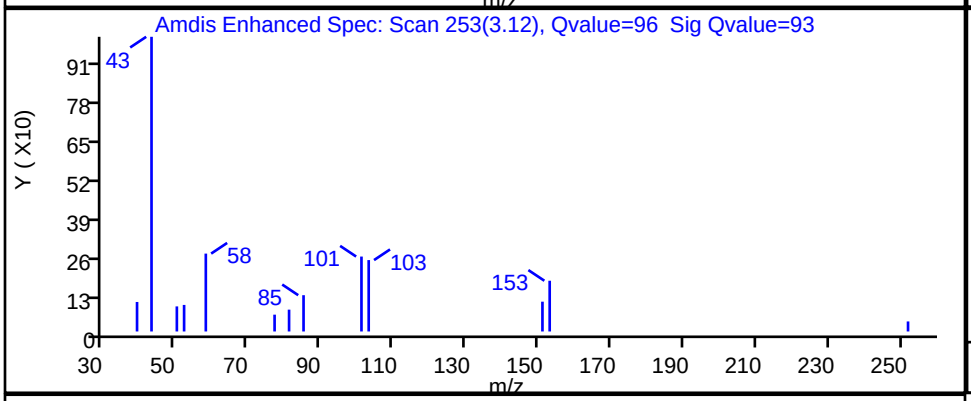
Eurofins Lancaster Laboratories Environment Testing, LLC

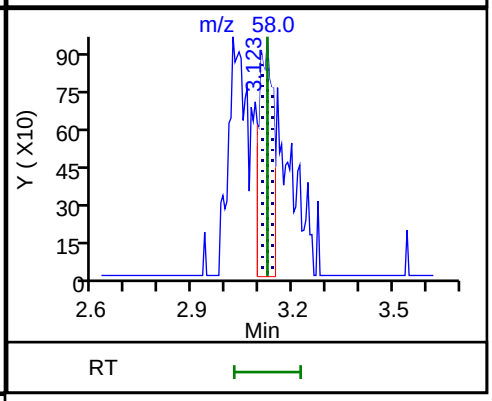
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X13.D				
Injection Date:	28-Dec-2022 13:53:30	Instrument ID:	10193		
Lims ID:	410-110288-A-2	Lab Sample ID:	410-110288-2		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

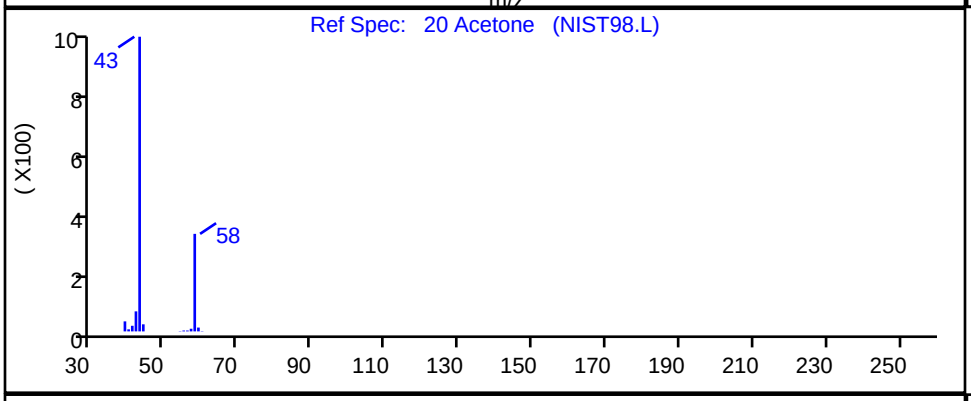
20 Acetone, CAS: 67-64-1

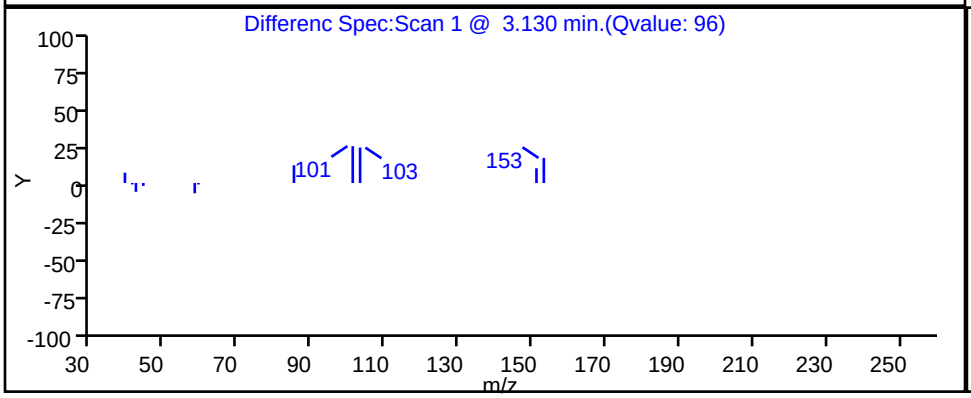


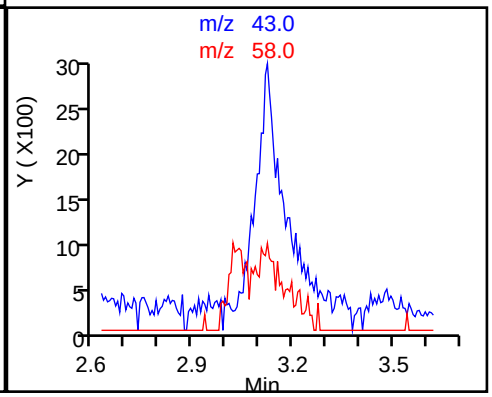








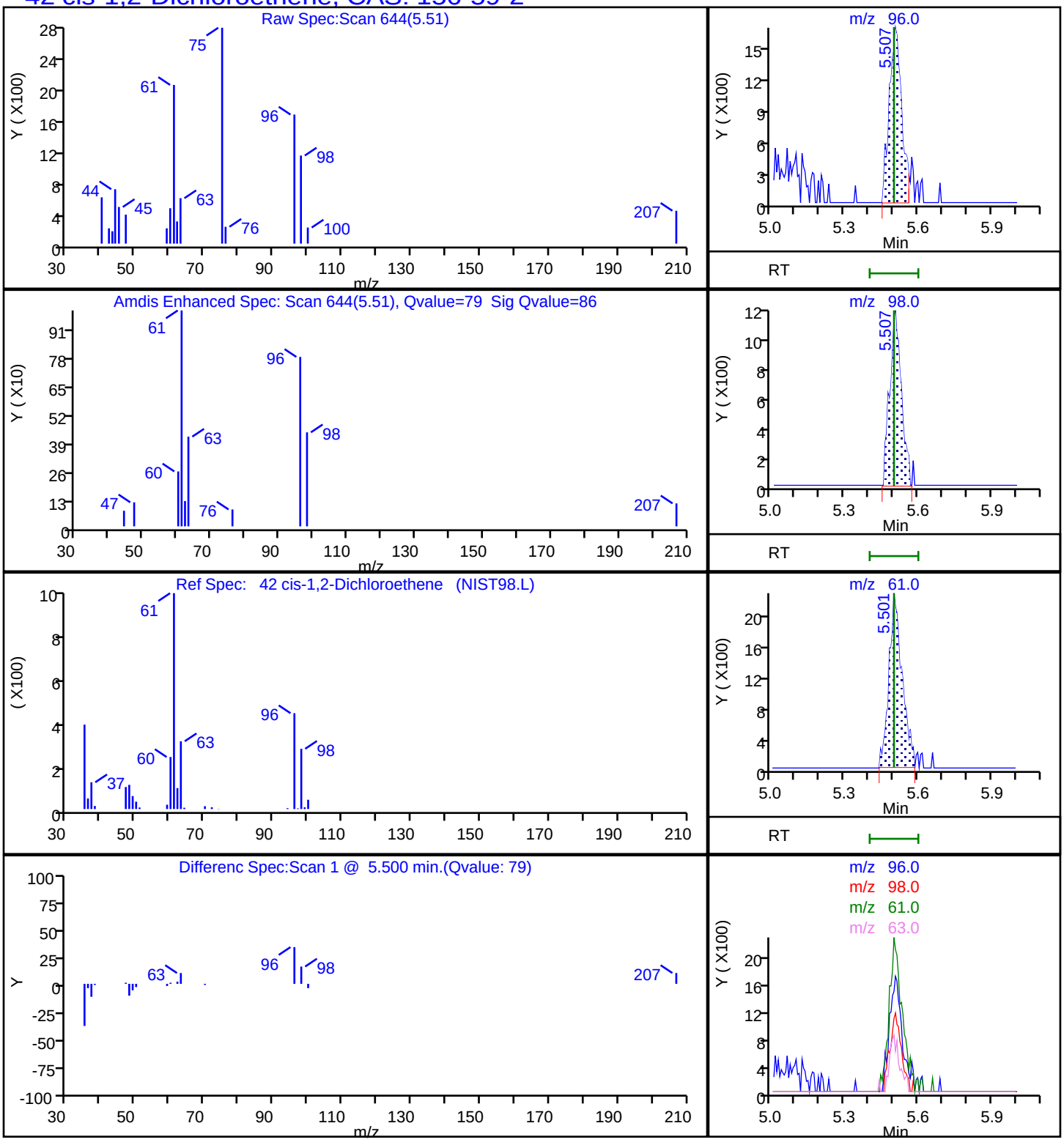




Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X13.D				
Injection Date:	28-Dec-2022 13:53:30	Instrument ID:	10193		
Lims ID:	410-110288-A-2	Lab Sample ID:	410-110288-2		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

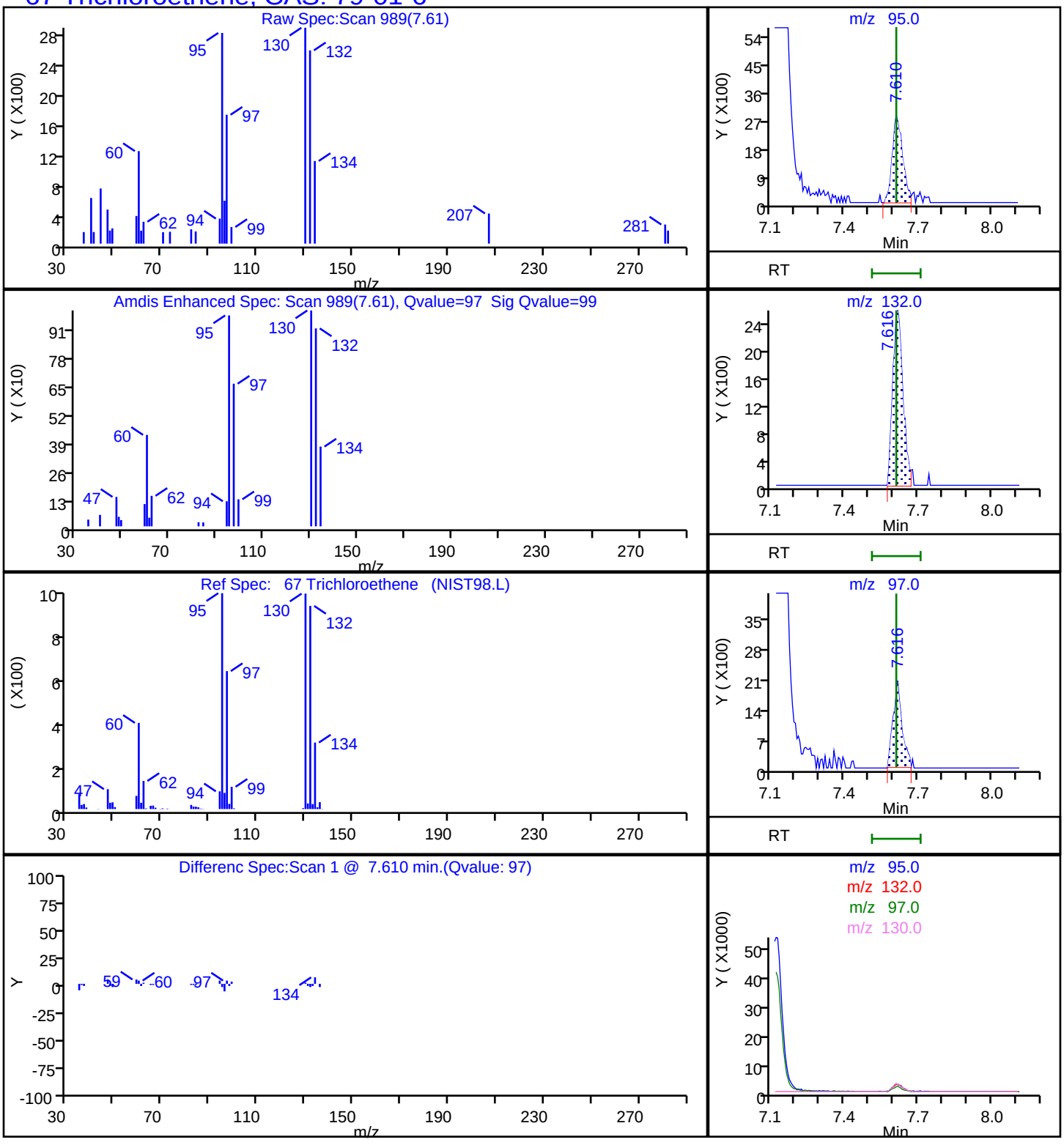
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X13.D				
Injection Date:	28-Dec-2022 13:53:30	Instrument ID:	10193		
Lims ID:	410-110288-A-2	Lab Sample ID:	410-110288-2		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

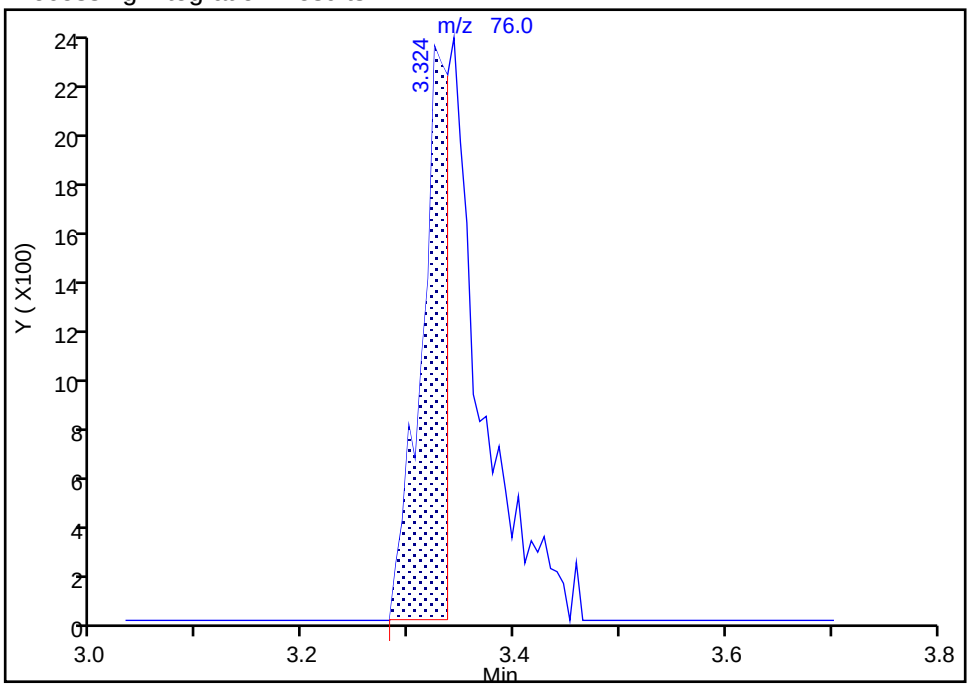
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X13.D				
Injection Date:	28-Dec-2022 13:53:30	Instrument ID:	10193		
Lims ID:	410-110288-A-2	Lab Sample ID:	410-110288-2		
Client ID:	HD-COD-SW-7-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

25 Carbon disulfide, CAS: 75-15-0

Signal: 1

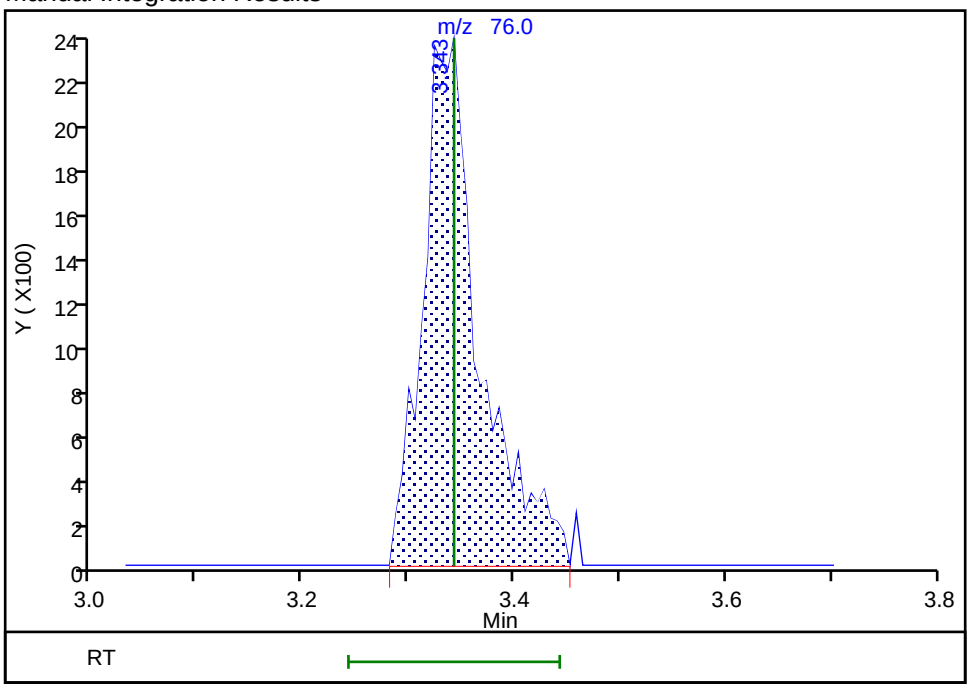
Processing Integration Results

RT: 3.32
Area: 4194
Amount: 0.031156
Amount Units: ug/l



Manual Integration Results

RT: 3.34
Area: 8959
Amount: 0.066554
Amount Units: ug/l



Reviewer: innoonk, 29-Dec-2022 10:33:13
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-8-0/1-0 Lab Sample ID: 410-110288-3

Matrix: Water Lab File ID: CD28X14.D

Analysis Method: 8260D Date Collected: 12/21/2022 09:00

Sample wt/vol: 25(mL) Date Analyzed: 12/28/2022 14:16

Soil Aliquot Vol: Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND	^c cn	0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	2.7	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.13	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	0.39	J	0.50	0.20
108-88-3	Toluene	ND		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-8-0/1-0
Lab Sample ID: 410-110288-3

Matrix: Water
Lab File ID: CD28X14.D

Analysis Method: 8260D
Date Collected: 12/21/2022 09:00

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 14:16

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.15	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		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 Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X14.D
Lims ID: 410-110288-A-3
Client ID: HD-COD-SW-8-0/1-0
Sample Type: Client
Inject. Date: 28-Dec-2022 14:16:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074091-015
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 10:35:08 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1603

First Level Reviewer: innoonk Date: 29-Dec-2022 10:35:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	1.910	1.922	-0.012	97	5359	0.0728	
6 Vinyl chloride	62		2.020				ND	7
9 Bromomethane	94		2.306				ND	7
10 Chloroethane	64		2.367				ND	
19 1,1-Dichloroethene	96		3.087				ND	7
20 Acetone	43	3.123	3.123	0.000	96	18567	2.72	
25 Carbon disulfide	76		3.343				ND	7
29 Methylene Chloride	84		3.654				ND	7
* 30 t-Butyl alcohol-d10 (IS)	65	3.678	3.684	-0.006	98	132379	50.0	
33 Methyl tert-butyl ether	73		4.001				ND	7
34 trans-1,2-Dichloroethene	96		4.007				ND	
36 1,1-Dichloroethane	63		4.647				ND	7
41 2-Butanone (MEK)	43		5.483				ND	7
42 cis-1,2-Dichloroethene	96	5.501	5.501	0.000	82	7454	0.1286	
47 Chlorobromomethane	128		5.836				ND	
50 Chloroform	83	5.994	5.995	-0.001	46	2859	0.0312	
52 1,1,1-Trichloroethane	97		6.214				ND	7
$ 53 Dibromofluoromethane (Surr)	113	6.214	6.214	0.000	94	452931	9.93	
55 Carbon tetrachloride	117		6.427				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.671	6.677	-0.006	53	94592	10.1	
59 Benzene	78	6.696	6.702	-0.006	62	6308	0.0281	
61 1,2-Dichloroethane	62		6.781				ND	
* 64 Fluorobenzene (IS)	96	7.116	7.122	-0.006	99	1951593	10.0	
67 Trichloroethene	95	7.616	7.610	0.006	96	8453	0.1468	a
69 1,2-Dichloropropane	63		7.952				ND	
75 Dichlorobromomethane	83		8.311				ND	7
79 cis-1,3-Dichloropropene	75		8.878				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.085				ND	7
$ 82 Toluene-d8 (Surr)	98	9.213	9.214	-0.001	93	1948816	9.88	
83 Toluene	92	9.299	9.299	0.000	98	5145	0.0353	
84 trans-1,3-Dichloropropene	75		9.598				ND	
86 1,1,2-Trichloroethane	97		9.811				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
87 Tetrachloroethene	166	9.896	9.896	0.000	97	26435	0.3898	
104 2-Hexanone	43		10.061				ND	
106 Chlorodibromomethane	129		10.213				ND	
107 Ethylene Dibromide	107		10.323				ND	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	85	1496896	10.0	
110 Chlorobenzene	112		10.811				ND	
111 1,1,1,2-Tetrachloroethane	131		10.896				ND	
112 Ethylbenzene	91		10.902				ND	7
113 m-Xylene & p-Xylene	106		11.024				ND	7
S 114 Xylenes, Total	106		11.245				ND	7
115 o-Xylene	106		11.366				ND	7
116 Styrene	104		11.384				ND	7
117 Bromoform	173		11.542				ND	
$ 121 4-Bromofluorobenzene (Surr)	95	11.829	11.823	0.006	95	695775	9.53	
123 1,1,2,2-Tetrachloroethane	83		11.939				ND	
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	94	843710	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

a - User Assigned ID

Reagents:

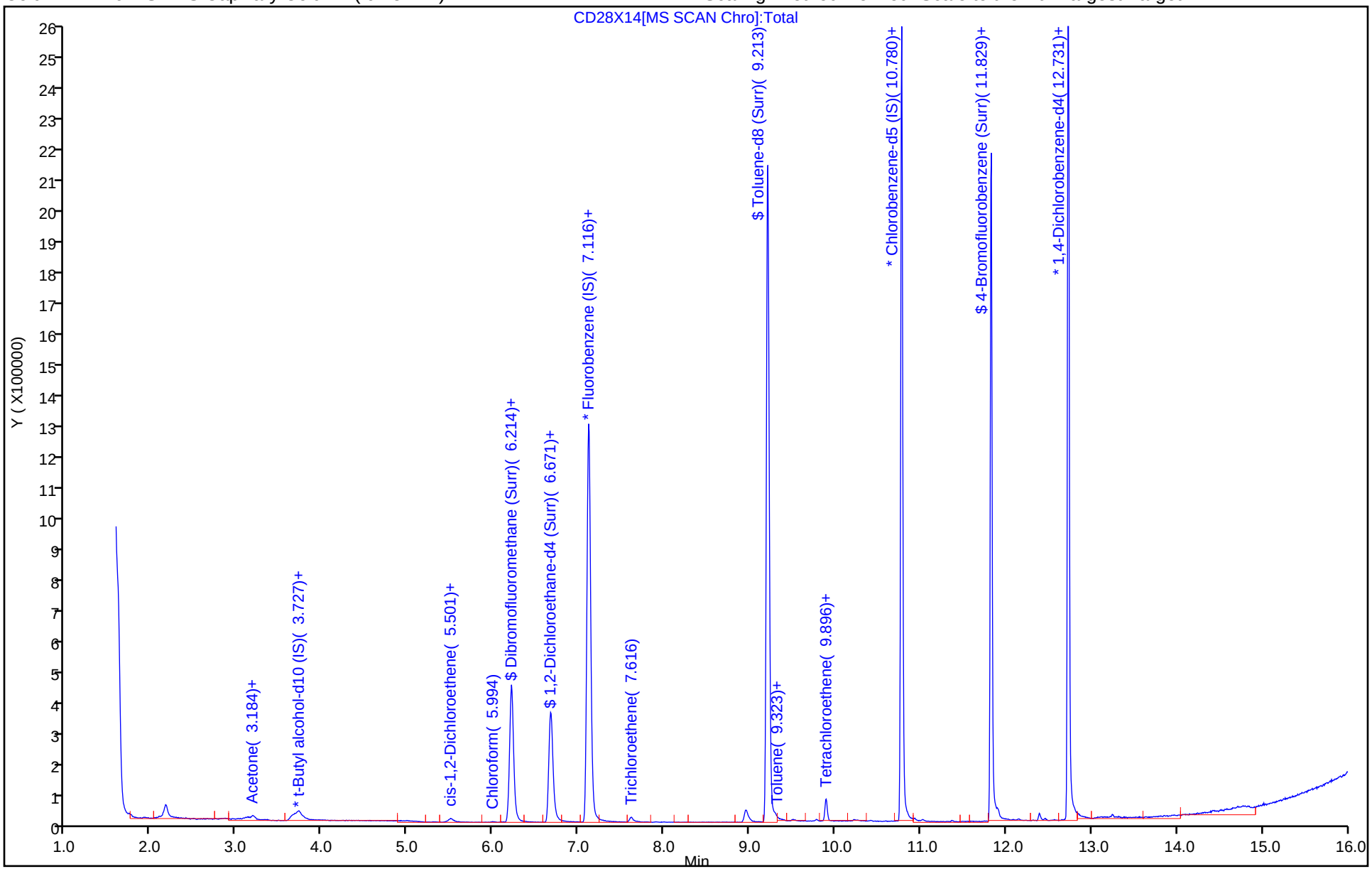
MSV_HP25_ISSS_00063 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 29-Dec-2022 10:35:08 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X14.D				
Injection Date:	28-Dec-2022 14:16:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	410-110288-A-3	Lab Sample ID:	410-110288-3	Worklist Smp#:	15
Client ID:	HD-COD-SW-8-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X14.D
Lims ID: 410-110288-A-3
Client ID: HD-COD-SW-8-0/1-0
Sample Type: Client
Inject. Date: 28-Dec-2022 14:16:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074091-015
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 10:35:08 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1603

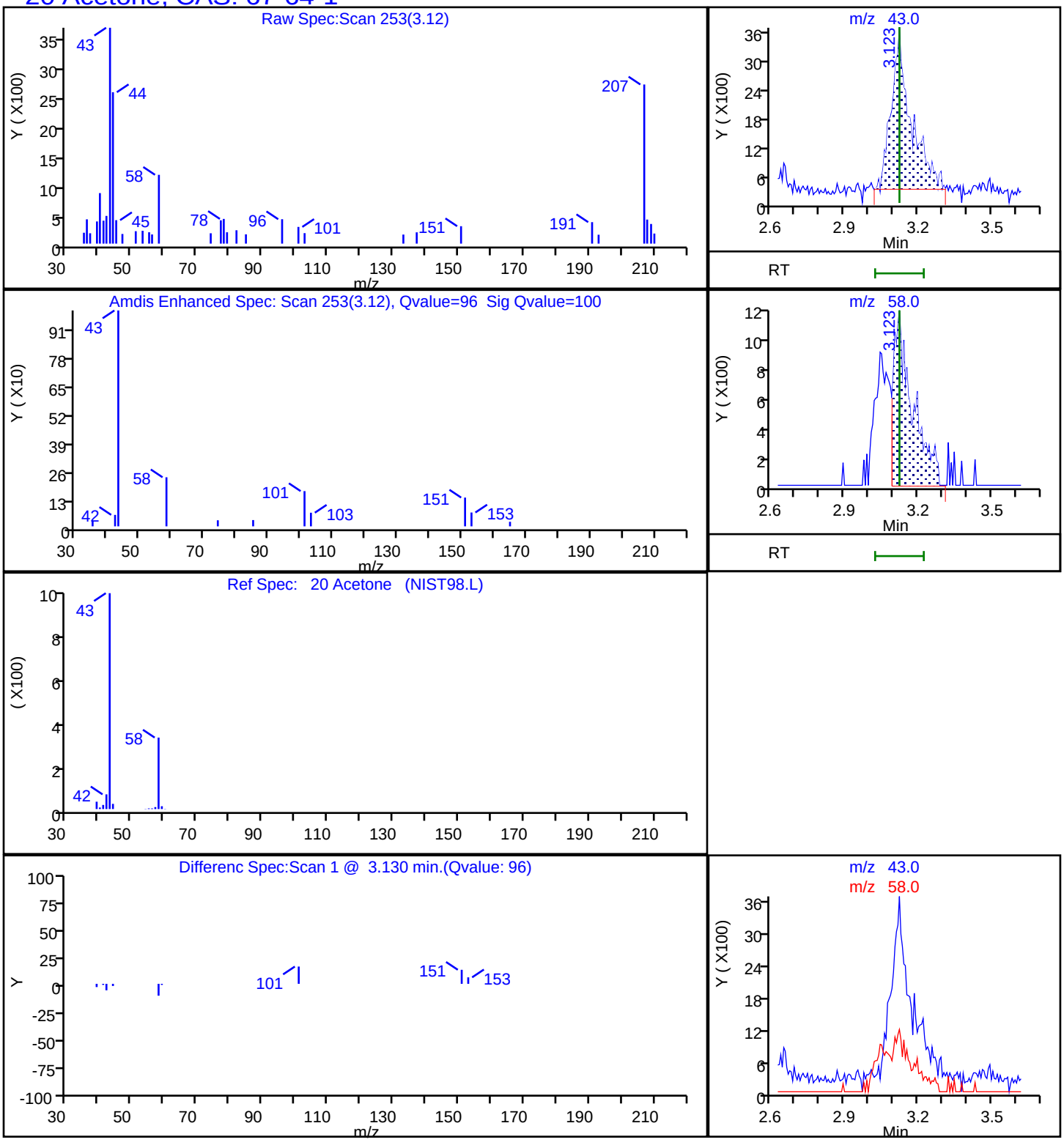
First Level Reviewer: innoonk Date: 29-Dec-2022 10:35:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	9.93	99.31
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.88
$ 82 Toluene-d8 (Surr)	10.0	9.88	98.80
$ 121 4-Bromofluorobenzene (Surr)	10.0	9.53	95.32

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X14.D				
Injection Date:	28-Dec-2022 14:16:30	Instrument ID:	10193		
Lims ID:	410-110288-A-3	Lab Sample ID:	410-110288-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

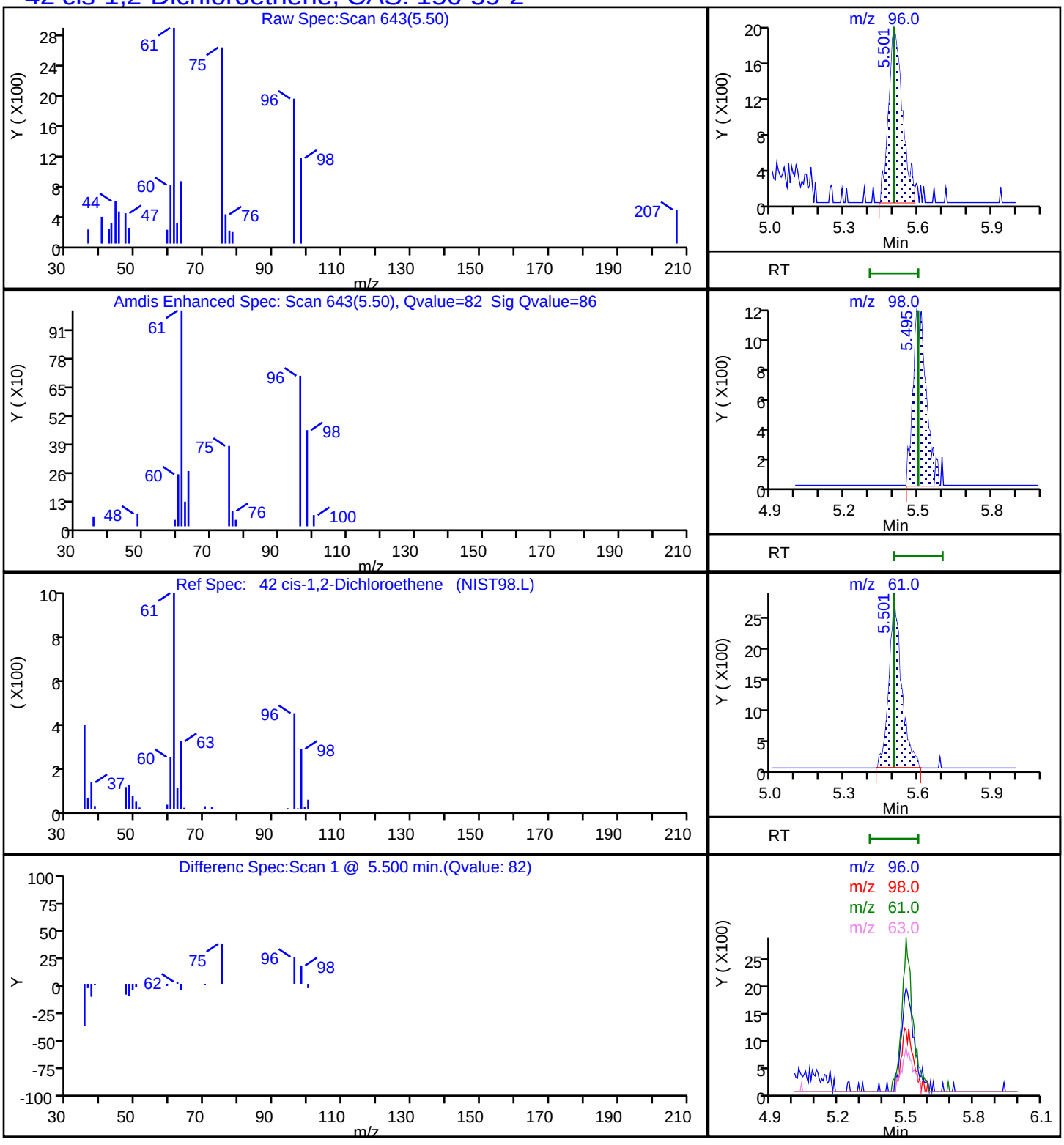
20 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X14.D				
Injection Date:	28-Dec-2022 14:16:30	Instrument ID:	10193		
Lims ID:	410-110288-A-3	Lab Sample ID:	410-110288-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

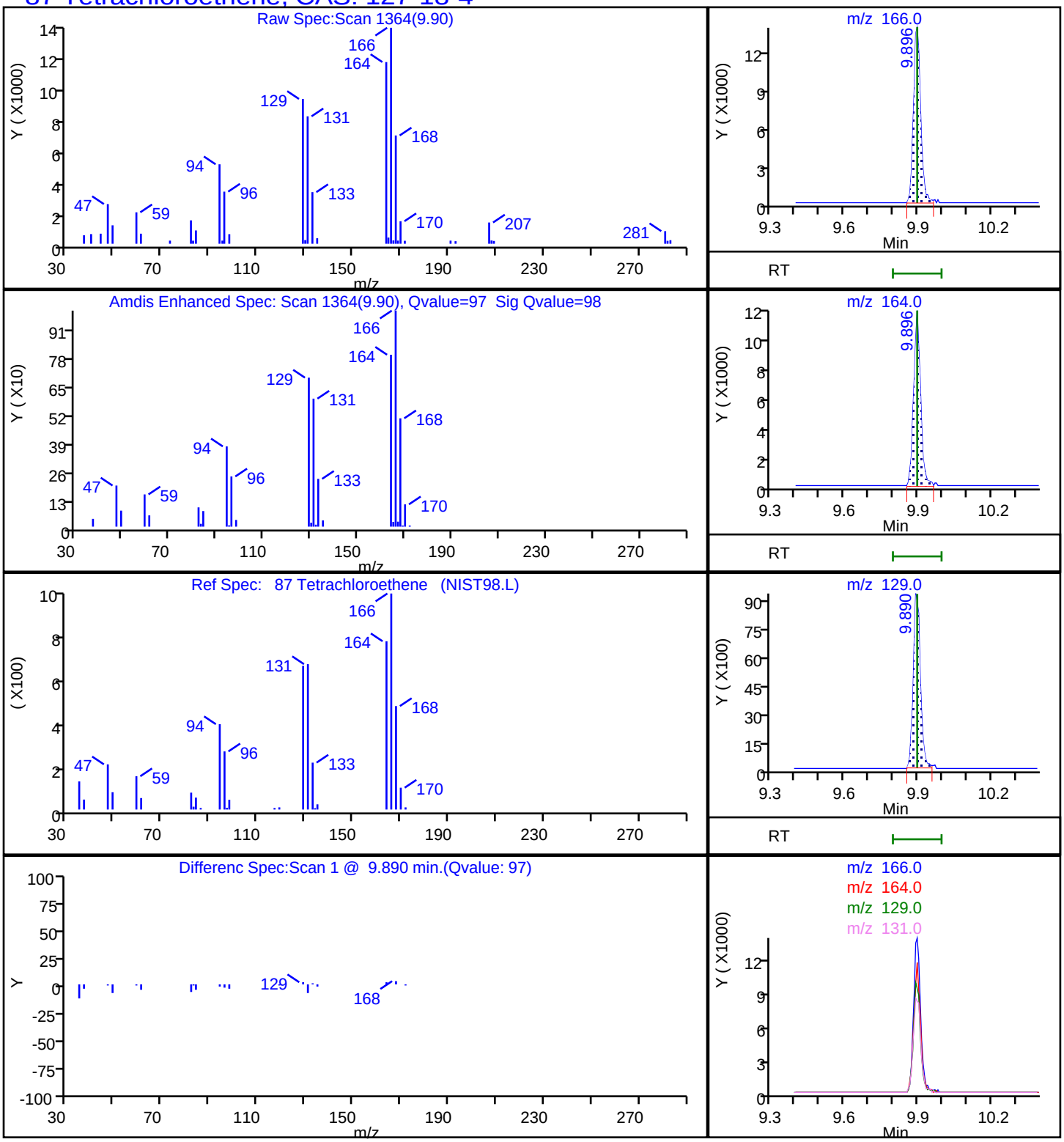
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X14.D				
Injection Date:	28-Dec-2022 14:16:30	Instrument ID:	10193		
Lims ID:	410-110288-A-3	Lab Sample ID:	410-110288-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

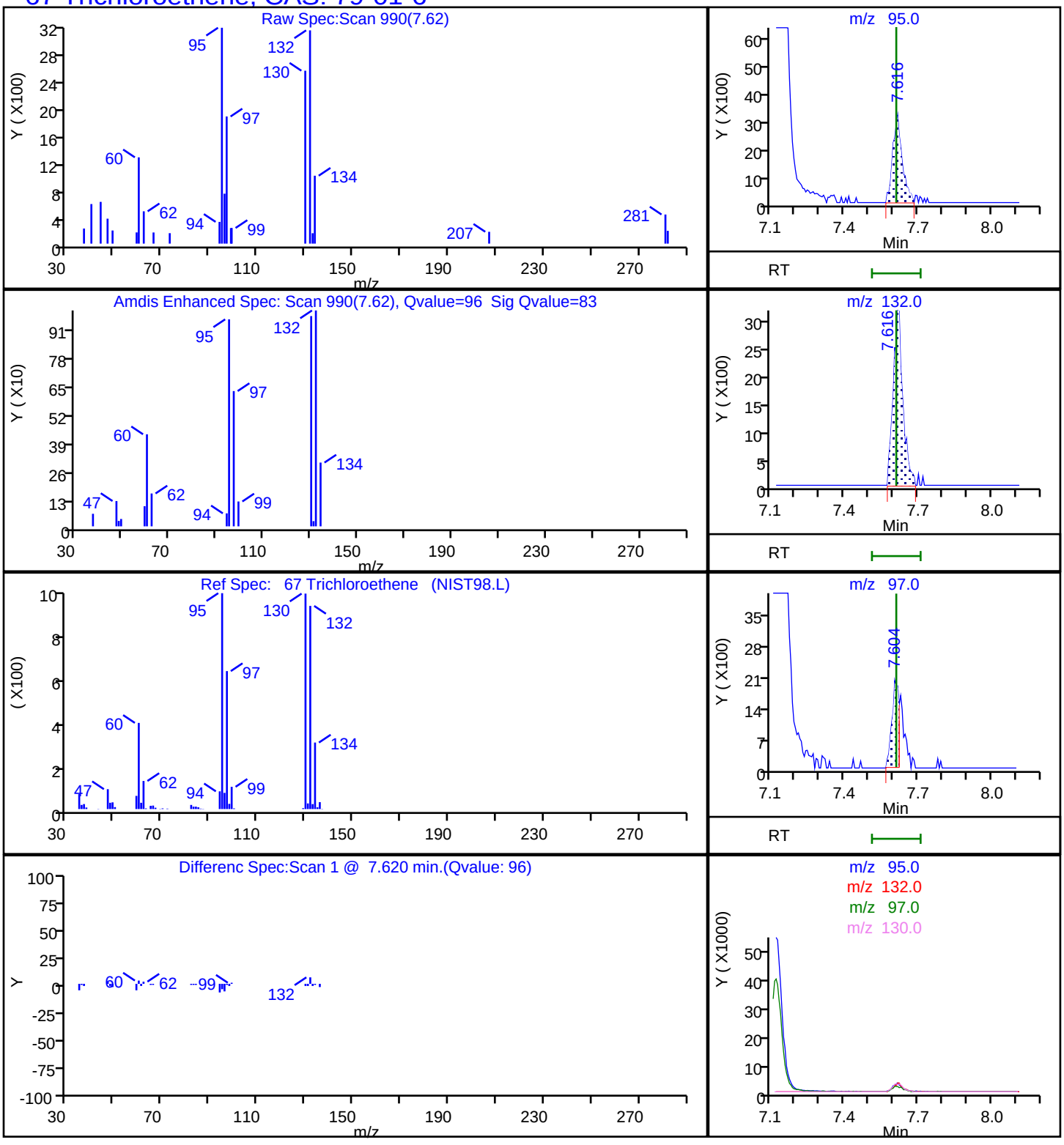
87 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X14.D				
Injection Date:	28-Dec-2022 14:16:30	Instrument ID:	10193		
Lims ID:	410-110288-A-3	Lab Sample ID:	410-110288-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

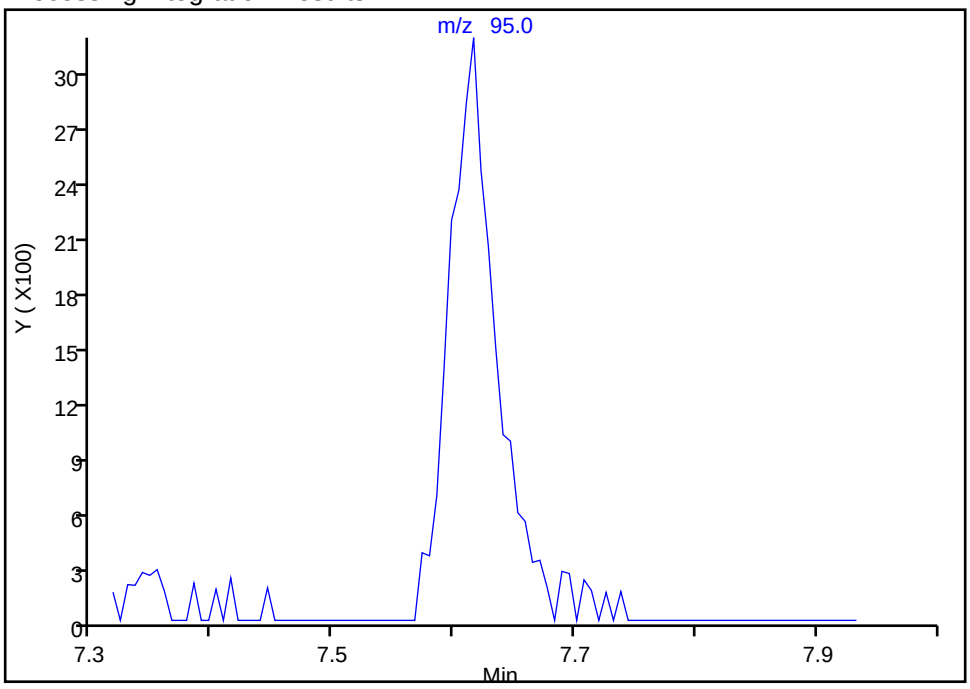
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X14.D				
Injection Date:	28-Dec-2022 14:16:30	Instrument ID:	10193		
Lims ID:	410-110288-A-3	Lab Sample ID:	410-110288-3		
Client ID:	HD-COD-SW-8-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6

Signal: 1

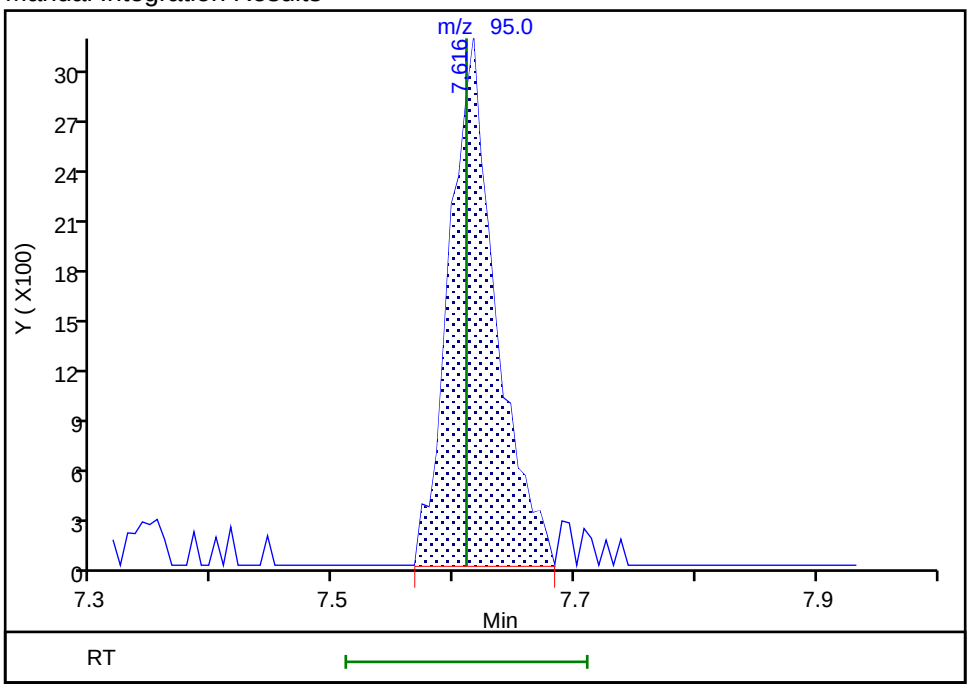
Not Detected
Expected RT: 7.61

Processing Integration Results



Manual Integration Results

RT: 7.62
Area: 8453
Amount: 0.146805
Amount Units: ug/l



Reviewer: innoonk, 29-Dec-2022 10:34:22
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-9-0/1-0
Lab Sample ID: 410-110288-4

Matrix: Water
Lab File ID: CD28X15.D

Analysis Method: 8260D
Date Collected: 12/21/2022 12:45

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 14:38

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND	^c cn	0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	2.2	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.12	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-9-0/1-0
Lab Sample ID: 410-110288-4

Matrix: Water
Lab File ID: CD28X15.D

Analysis Method: 8260D
Date Collected: 12/21/2022 12:45

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 14:38

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.13	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X15.D
Lims ID: 410-110288-A-4
Client ID: HD-COD-SW-9-0/1-0
Sample Type: Client
Inject. Date: 28-Dec-2022 14:38:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074091-016
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 10:36:08 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1603

First Level Reviewer: innoonk Date: 29-Dec-2022 10:36:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	1.916	1.922	-0.006	98	5116	0.0692	
6 Vinyl chloride	62		2.020				ND	
9 Bromomethane	94		2.306				ND	7
10 Chloroethane	64		2.367				ND	
19 1,1-Dichloroethene	96		3.087				ND	7
20 Acetone	43	3.117	3.123	-0.006	79	14454	2.17	
25 Carbon disulfide	76	3.336	3.343	-0.007	93	6745	0.0505	
29 Methylene Chloride	84		3.654				ND	7
* 30 t-Butyl alcohol-d10 (IS)	65	3.690	3.684	0.006	99	129118	50.0	
33 Methyl tert-butyl ether	73		4.001				ND	7
34 trans-1,2-Dichloroethene	96		4.007				ND	
36 1,1-Dichloroethane	63		4.647				ND	7
41 2-Butanone (MEK)	43		5.483				ND	7
42 cis-1,2-Dichloroethene	96	5.501	5.501	0.000	78	6956	0.1194	a
47 Chlorobromomethane	128		5.836				ND	
50 Chloroform	83	6.001	5.995	0.006	93	7147	0.0775	a
52 1,1,1-Trichloroethane	97		6.214				ND	7
$ 53 Dibromofluoromethane (Surr)	113	6.214	6.214	0.000	94	453418	9.89	
55 Carbon tetrachloride	117		6.427				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.671	6.677	-0.006	75	95748	10.2	
59 Benzene	78		6.702				ND	7
61 1,2-Dichloroethane	62		6.781				ND	
* 64 Fluorobenzene (IS)	96	7.116	7.122	-0.006	99	1961655	10.0	
67 Trichloroethene	95	7.616	7.610	0.006	95	7337	0.1268	
69 1,2-Dichloropropane	63		7.952				ND	
75 Dichlorobromomethane	83		8.311				ND	7
79 cis-1,3-Dichloropropene	75		8.878				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.085				ND	7
$ 82 Toluene-d8 (Surr)	98	9.213	9.214	-0.001	93	1975587	9.86	
83 Toluene	92	9.293	9.299	-0.006	98	6194	0.0419	
84 trans-1,3-Dichloropropene	75		9.598				ND	
86 1,1,2-Trichloroethane	97		9.811				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
87 Tetrachloroethene	166	9.896	9.896	0.000	98	12512	0.1816	
104 2-Hexanone	43		10.061				ND	7
106 Chlorodibromomethane	129		10.213				ND	
107 Ethylene Dibromide	107		10.323				ND	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	85	1520579	10.0	
110 Chlorobenzene	112		10.811				ND	
111 1,1,1,2-Tetrachloroethane	131		10.896				ND	
112 Ethylbenzene	91		10.902				ND	7
113 m-Xylene & p-Xylene	106		11.024				ND	7
S 114 Xylenes, Total	106		11.245				ND	7
115 o-Xylene	106		11.366				ND	7
116 Styrene	104		11.384				ND	7
117 Bromoform	173		11.542				ND	
$ 121 4-Bromofluorobenzene (Surr)	95	11.829	11.823	0.006	95	702537	9.47	
123 1,1,2,2-Tetrachloroethane	83		11.939				ND	
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	94	862550	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

a - User Assigned ID

Reagents:

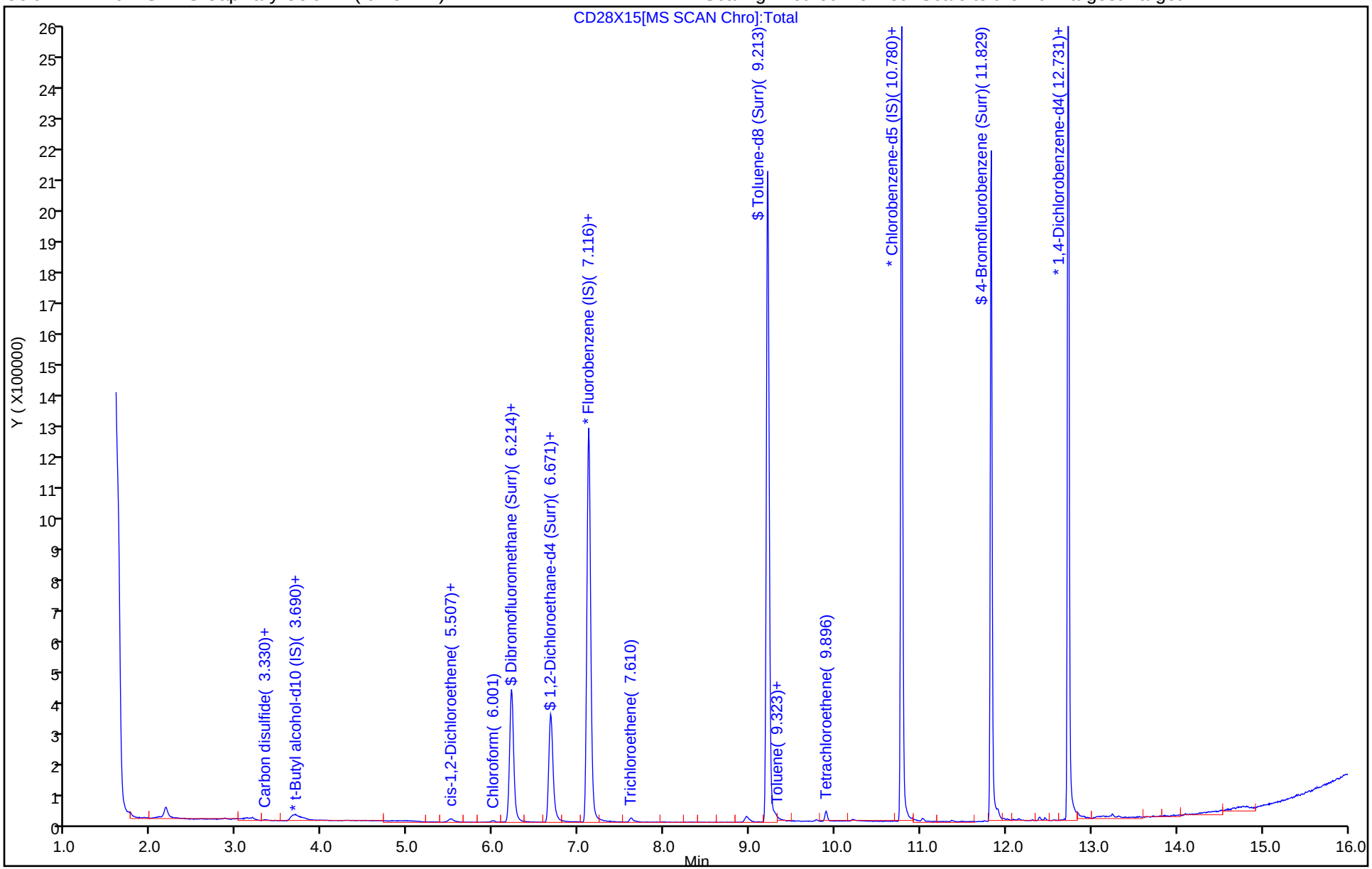
MSV_HP25_ISSS_00063 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 29-Dec-2022 10:36:08 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X15.D				
Injection Date:	28-Dec-2022 14:38:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	410-110288-A-4	Lab Sample ID:	410-110288-4	Worklist Smp#:	16
Client ID:	HD-COD-SW-9-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X15.D				
Lims ID:	410-110288-A-4				
Client ID:	HD-COD-SW-9-0/1-0				
Sample Type:	Client				
Inject. Date:	28-Dec-2022 14:38:30	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0074091-016				
Operator ID:	knk41612	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	29-Dec-2022 10:36:08	Calib Date:	22-Aug-2022 22:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1603				

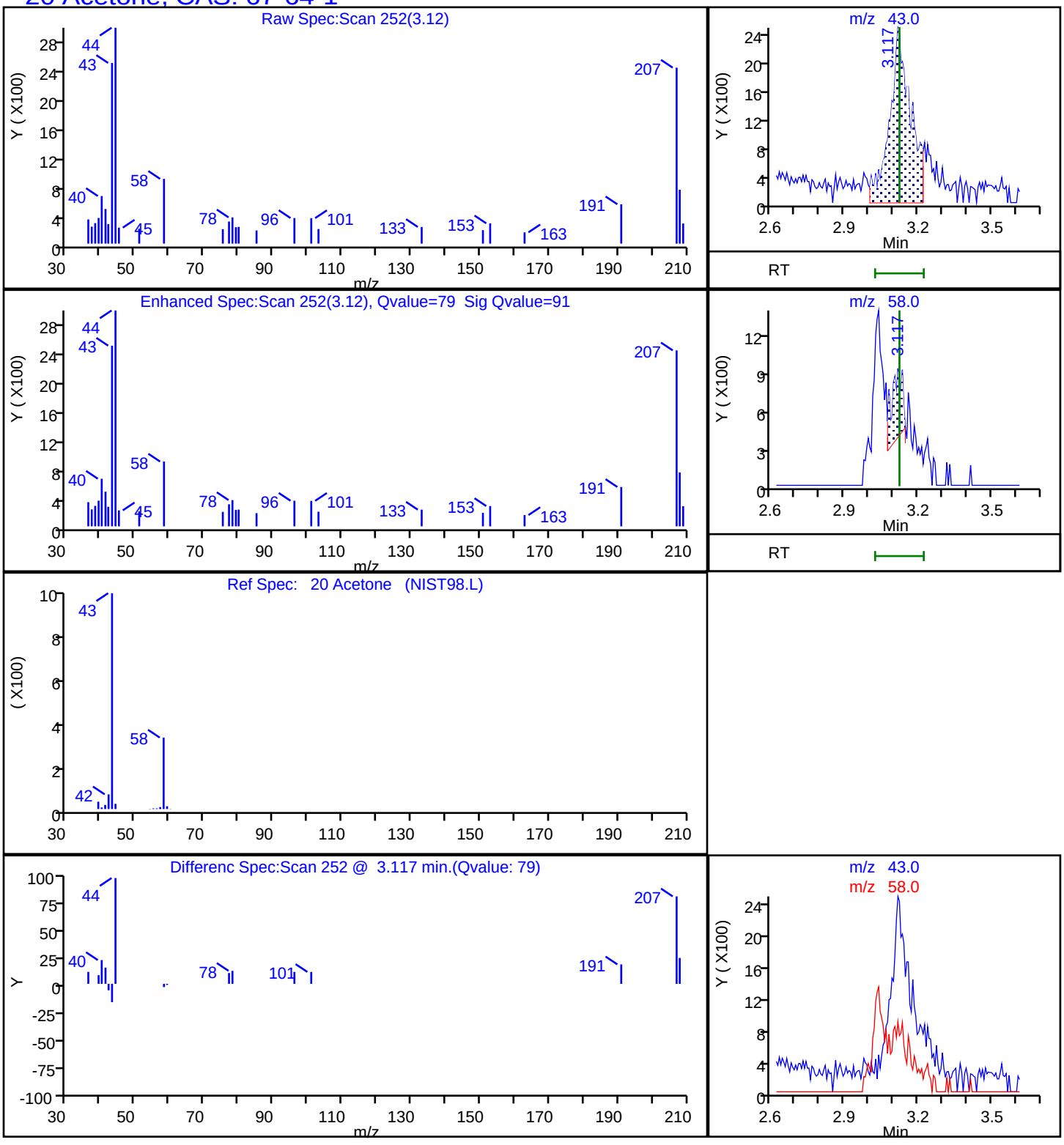
First Level Reviewer: innoonk Date: 29-Dec-2022 10:36:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	9.89	98.90
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.58
$ 82 Toluene-d8 (Surr)	10.0	9.86	98.60
$ 121 4-Bromofluorobenzene (Surr)	10.0	9.47	94.75

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X15.D				
Injection Date:	28-Dec-2022 14:38:30	Instrument ID:	10193		
Lims ID:	410-110288-A-4	Lab Sample ID:	410-110288-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

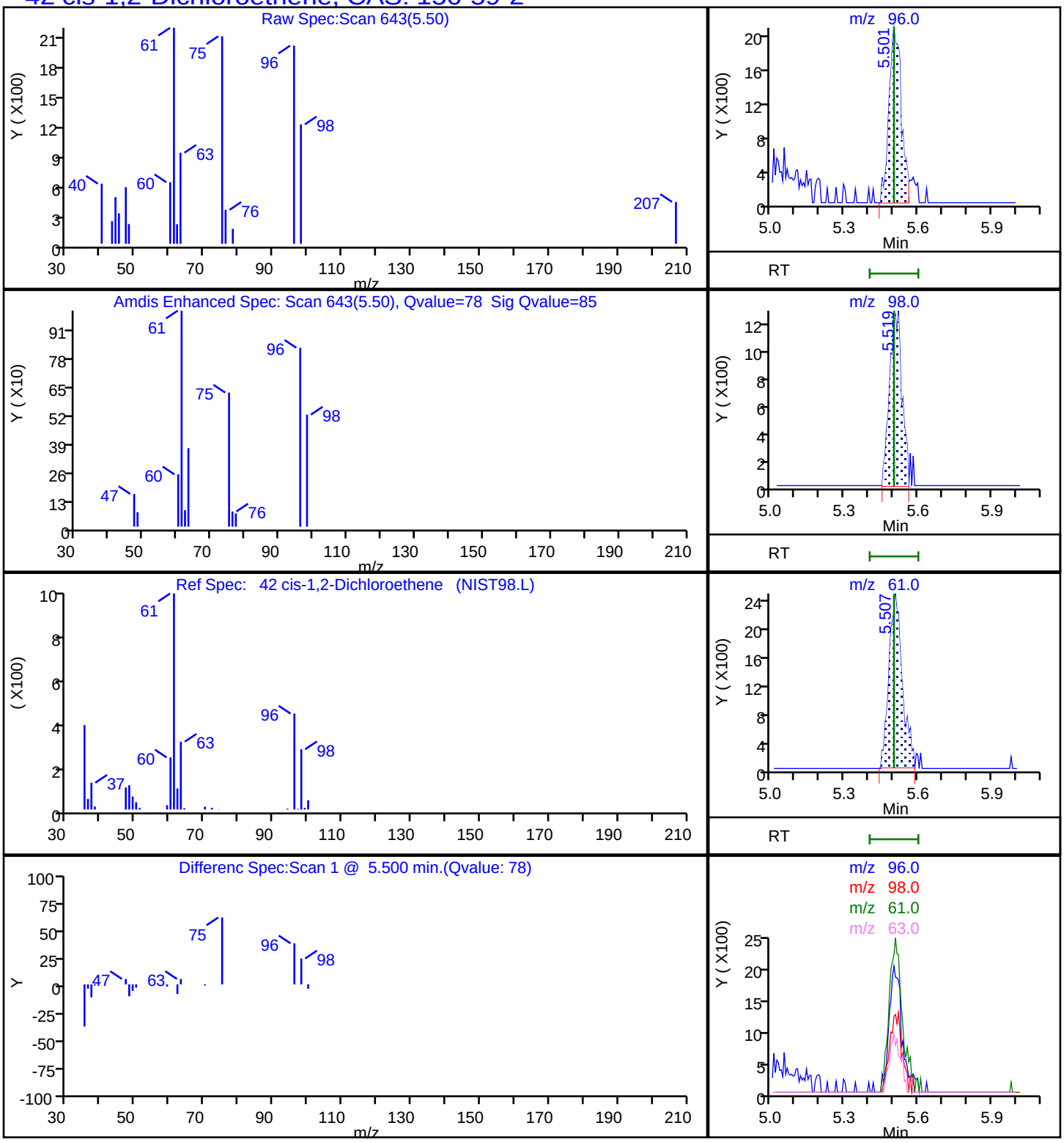
20 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X15.D				
Injection Date:	28-Dec-2022 14:38:30	Instrument ID:	10193		
Lims ID:	410-110288-A-4	Lab Sample ID:	410-110288-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

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

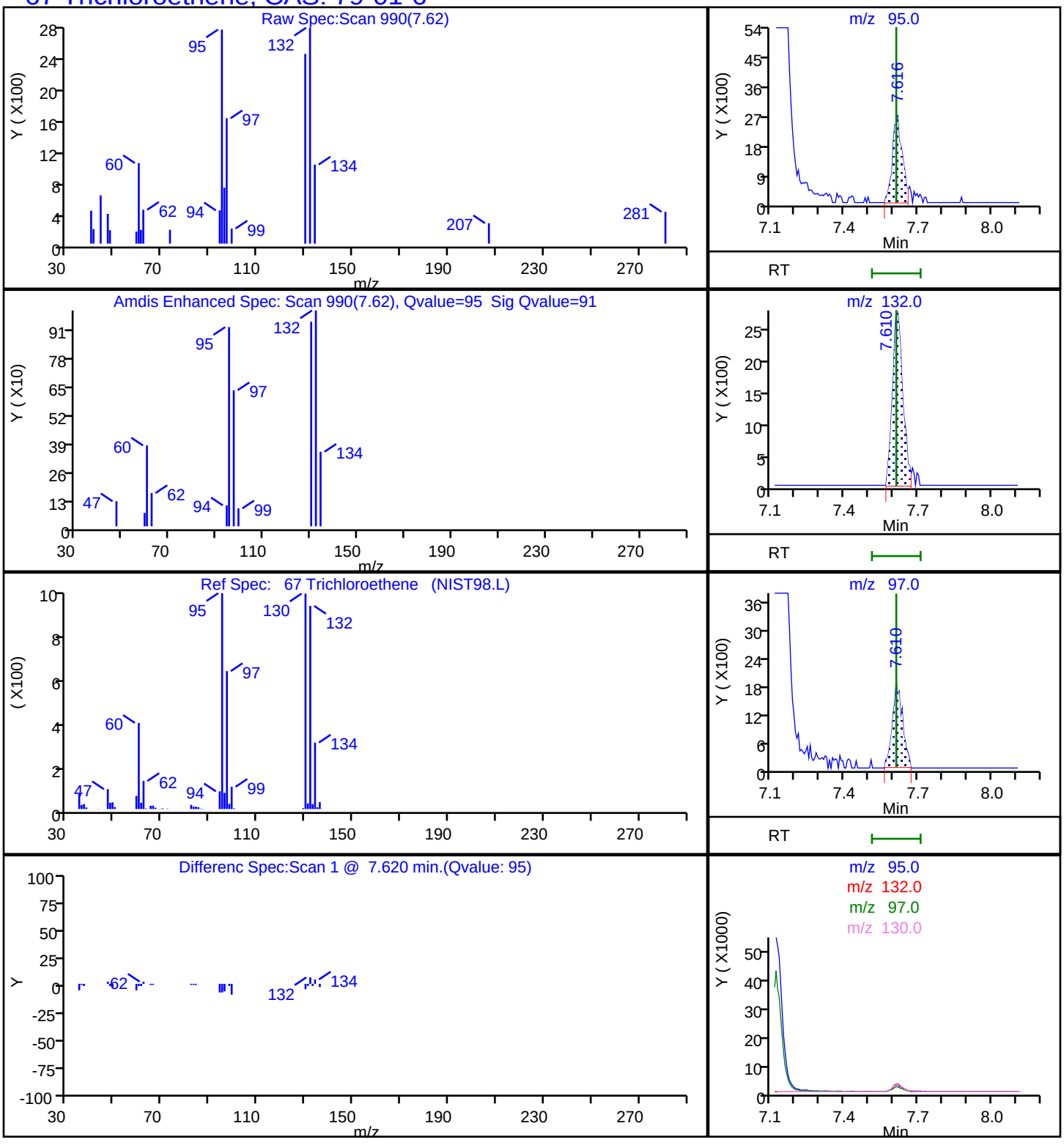


Report Date: 29-Dec-2022 10:36:09 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X15.D				
Injection Date:	28-Dec-2022 14:38:30	Instrument ID:	10193		
Lims ID:	410-110288-A-4	Lab Sample ID:	410-110288-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

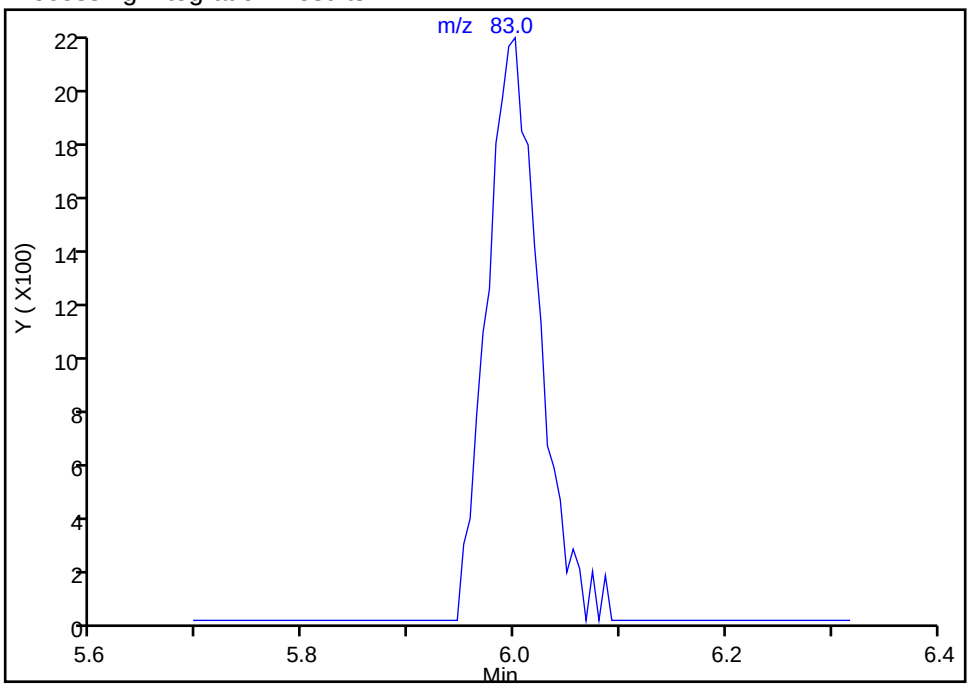
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X15.D				
Injection Date:	28-Dec-2022 14:38:30	Instrument ID:	10193		
Lims ID:	410-110288-A-4	Lab Sample ID:	410-110288-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

50 Chloroform, CAS: 67-66-3

Signal: 1

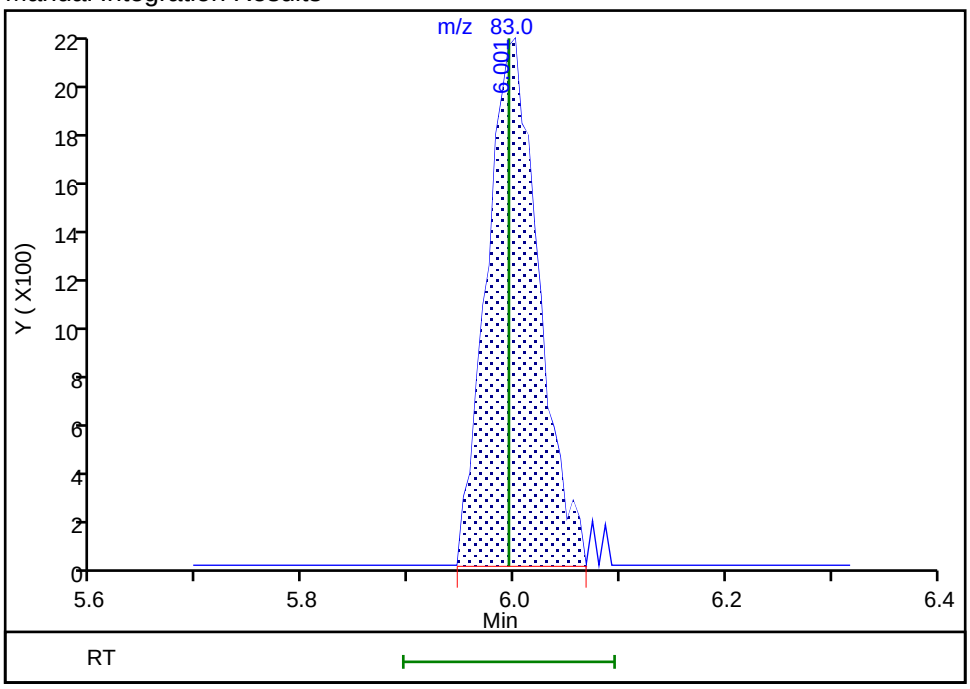
Not Detected
Expected RT: 5.99

Processing Integration Results



Manual Integration Results

RT: 6.00
Area: 7147
Amount: 0.077505
Amount Units: ug/l



Reviewer: innoonk, 29-Dec-2022 10:35:41
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

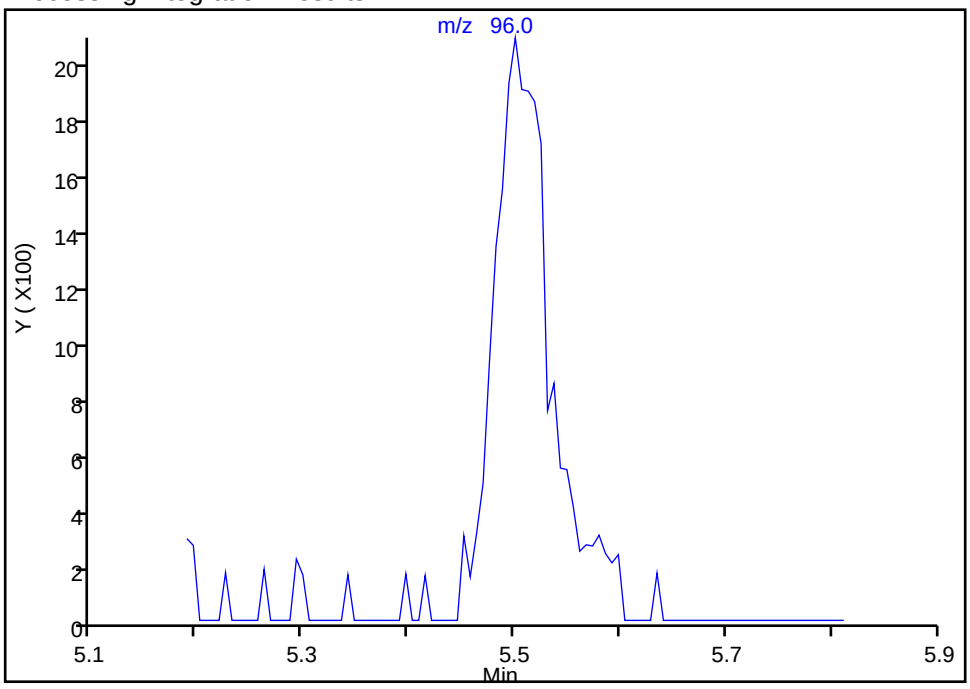
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X15.D				
Injection Date:	28-Dec-2022 14:38:30	Instrument ID:	10193		
Lims ID:	410-110288-A-4	Lab Sample ID:	410-110288-4		
Client ID:	HD-COD-SW-9-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

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

Signal: 1

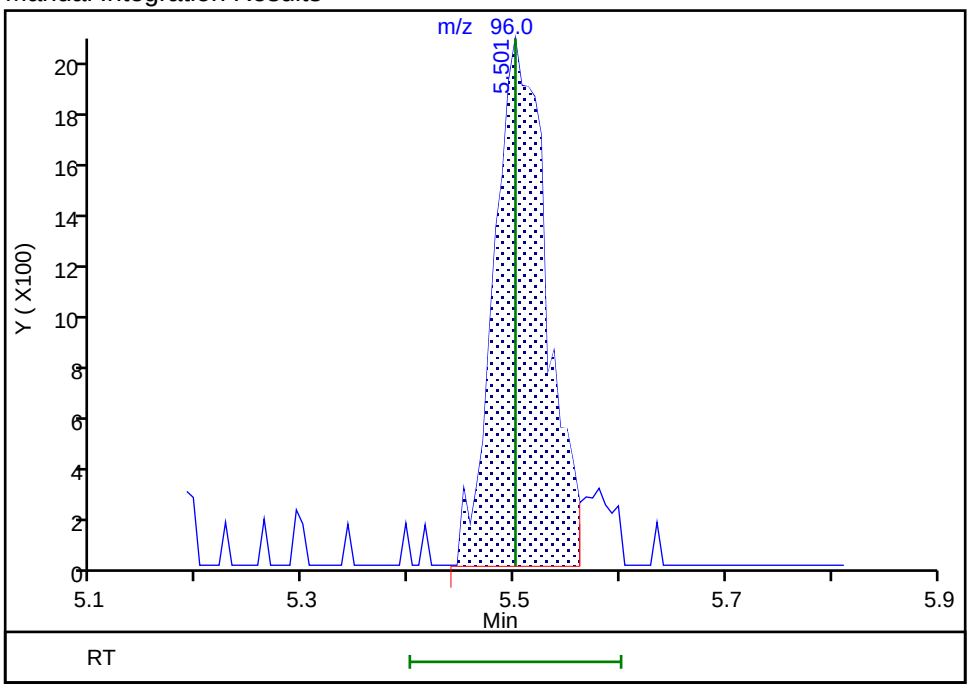
Not Detected
Expected RT: 5.50

Processing Integration Results



Manual Integration Results

RT: 5.50
Area: 6956
Amount: 0.119425
Amount Units: ug/l



Reviewer: innoonk, 29-Dec-2022 10:35:35
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-13-0/1-0
Lab Sample ID: 410-110288-5

Matrix: Water
Lab File ID: CD28X16.D

Analysis Method: 8260D
Date Collected: 12/21/2022 09:22

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 15:00

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND	^c cn	0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	3.9	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	0.11	J	0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.12	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	0.47	J	0.50	0.20
108-88-3	Toluene	ND		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-13-0/1-0
Lab Sample ID: 410-110288-5

Matrix: Water
Lab File ID: CD28X16.D

Analysis Method: 8260D
Date Collected: 12/21/2022 09:22

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 15:00

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.15	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X16.D
Lims ID: 410-110288-A-5
Client ID: HD-COD-SW-13-0/1-0
Sample Type: Client
Inject. Date: 28-Dec-2022 15:00:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074091-017
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 10:37:12 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1603

First Level Reviewer: innoonk Date: 29-Dec-2022 10:37:12

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	1.910	1.922	-0.012	97	8008	0.1089	
6 Vinyl chloride	62		2.020				ND	7
9 Bromomethane	94		2.306				ND	7
10 Chloroethane	64		2.367				ND	
19 1,1-Dichloroethene	96		3.087				ND	7
20 Acetone	43	3.117	3.123	-0.006	99	25510	3.94	
25 Carbon disulfide	76	3.330	3.343	-0.013	94	5015	0.0378	
29 Methylene Chloride	84		3.654				ND	7
* 30 t-Butyl alcohol-d10 (IS)	65	3.678	3.684	-0.006	97	125609	50.0	
33 Methyl tert-butyl ether	73		4.001				ND	7
34 trans-1,2-Dichloroethene	96		4.007				ND	
36 1,1-Dichloroethane	63		4.647				ND	7
41 2-Butanone (MEK)	43		5.483				ND	7
42 cis-1,2-Dichloroethene	96	5.495	5.501	-0.006	81	6984	0.1206	
47 Chlorobromomethane	128		5.836				ND	
50 Chloroform	83	5.988	5.995	-0.007	20	3577	0.0390	
52 1,1,1-Trichloroethane	97		6.214				ND	U
$ 53 Dibromofluoromethane (Surr)	113	6.214	6.214	0.000	94	455340	10.0	
55 Carbon tetrachloride	117		6.427				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.671	6.677	-0.006	58	93822	10.0	
59 Benzene	78	6.689	6.702	-0.013	68	5779	0.0257	
61 1,2-Dichloroethane	62		6.781				ND	7
* 64 Fluorobenzene (IS)	96	7.116	7.122	-0.006	99	1950255	10.0	
67 Trichloroethene	95	7.616	7.610	0.006	97	8384	0.1457	
69 1,2-Dichloropropane	63		7.952				ND	
75 Dichlorobromomethane	83		8.311				ND	7
79 cis-1,3-Dichloropropene	75		8.878				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.085				ND	7
$ 82 Toluene-d8 (Surr)	98	9.213	9.214	-0.001	93	1963203	9.99	
83 Toluene	92	9.299	9.299	0.000	98	5899	0.0407	
84 trans-1,3-Dichloropropene	75		9.598				ND	
86 1,1,2-Trichloroethane	97		9.811				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
87 Tetrachloroethene	166	9.896	9.896	0.000	97	31989	0.4734	
104 2-Hexanone	43		10.061				ND	7
106 Chlorodibromomethane	129		10.213				ND	
107 Ethylene Dibromide	107		10.323				ND	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	85	1491730	10.0	
110 Chlorobenzene	112		10.811				ND	7
111 1,1,1,2-Tetrachloroethane	131		10.896				ND	
112 Ethylbenzene	91		10.902				ND	7
113 m-Xylene & p-Xylene	106		11.024				ND	7
S 114 Xylenes, Total	106		11.245				ND	7
115 o-Xylene	106		11.366				ND	7
116 Styrene	104		11.384				ND	7
117 Bromoform	173		11.542				ND	
$ 121 4-Bromofluorobenzene (Surr)	95	11.829	11.823	0.006	95	689104	9.47	
123 1,1,2,2-Tetrachloroethane	83		11.939				ND	
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	94	858365	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

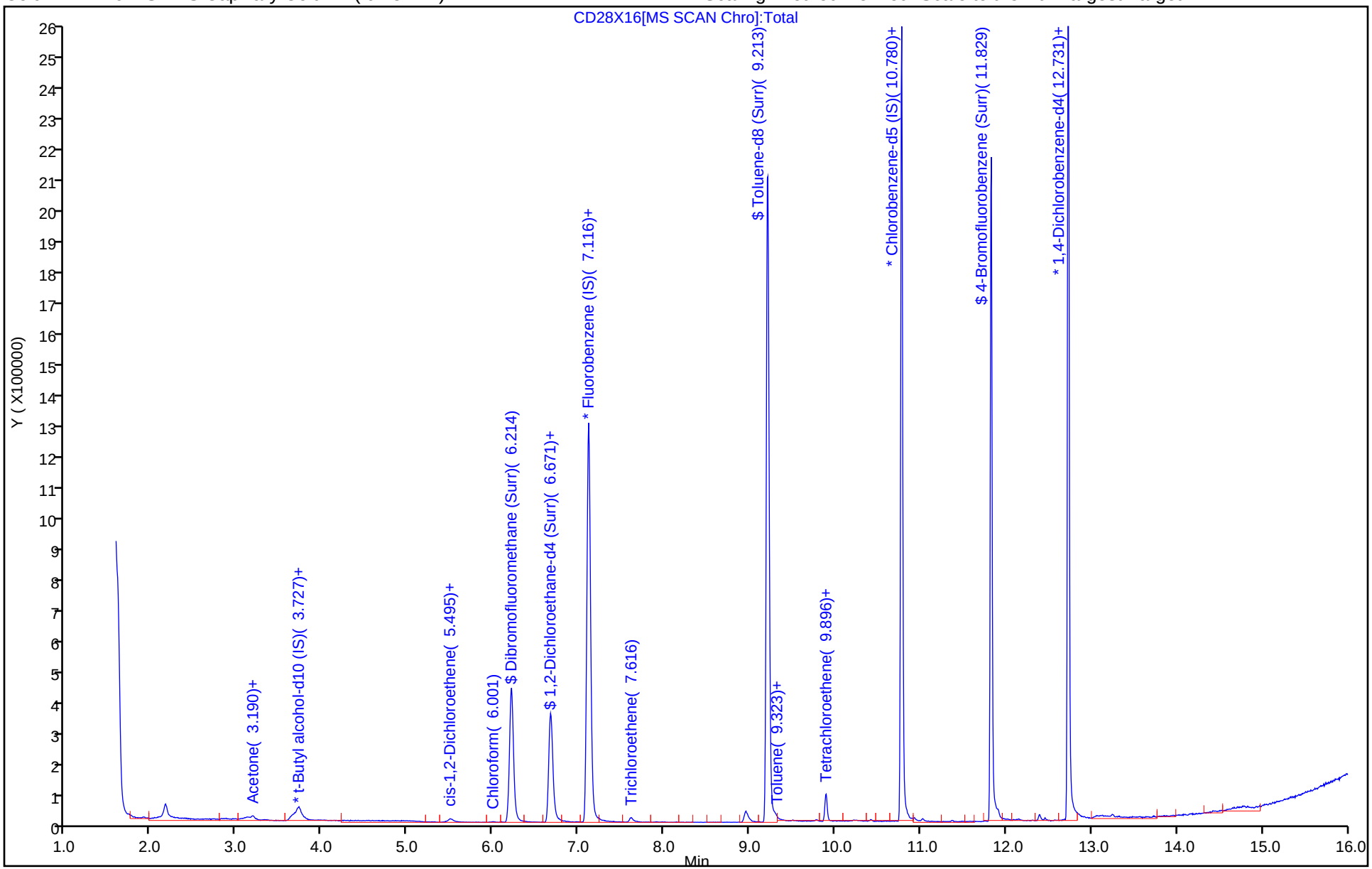
MSV_HP25_ISSS_00063 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 29-Dec-2022 10:37:12 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X16.D				
Injection Date:	28-Dec-2022 15:00:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	410-110288-A-5	Lab Sample ID:	410-110288-5	Worklist Smp#:	17
Client ID:	HD-COD-SW-13-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X16.D				
Lims ID:	410-110288-A-5				
Client ID:	HD-COD-SW-13-0/1-0				
Sample Type:	Client				
Inject. Date:	28-Dec-2022 15:00:30	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0074091-017				
Operator ID:	knk41612	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	29-Dec-2022 10:37:12	Calib Date:	22-Aug-2022 22:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1603				

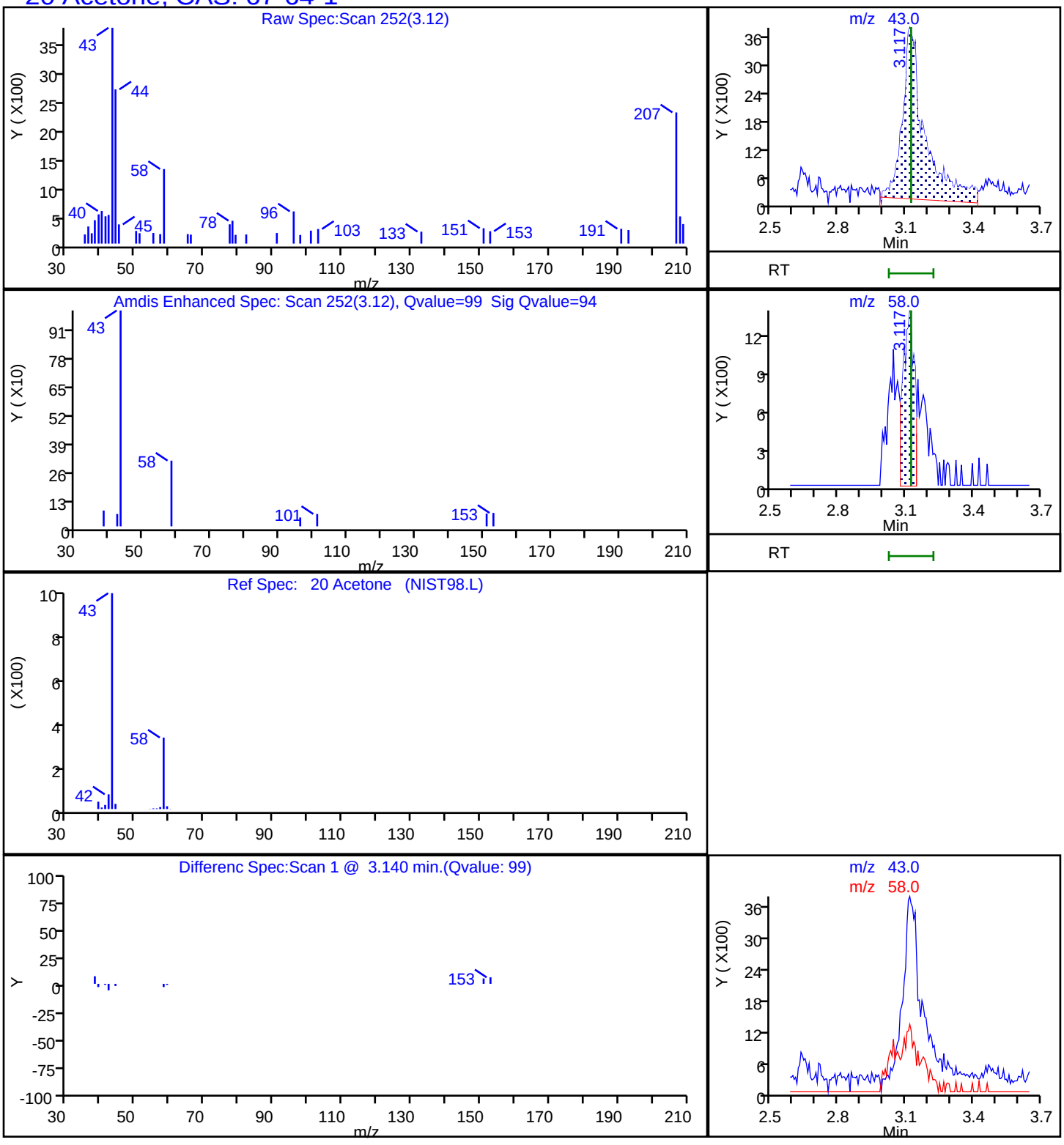
First Level Reviewer: innoonk Date: 29-Dec-2022 10:37:12

Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	10.0	99.90
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	100.12
$ 82 Toluene-d8 (Surr)	10.0	9.99	99.88
$ 121 4-Bromofluorobenzene (Surr)	10.0	9.47	94.73

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X16.D				
Injection Date:	28-Dec-2022 15:00:30	Instrument ID:	10193		
Lims ID:	410-110288-A-5	Lab Sample ID:	410-110288-5		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

20 Acetone, CAS: 67-64-1

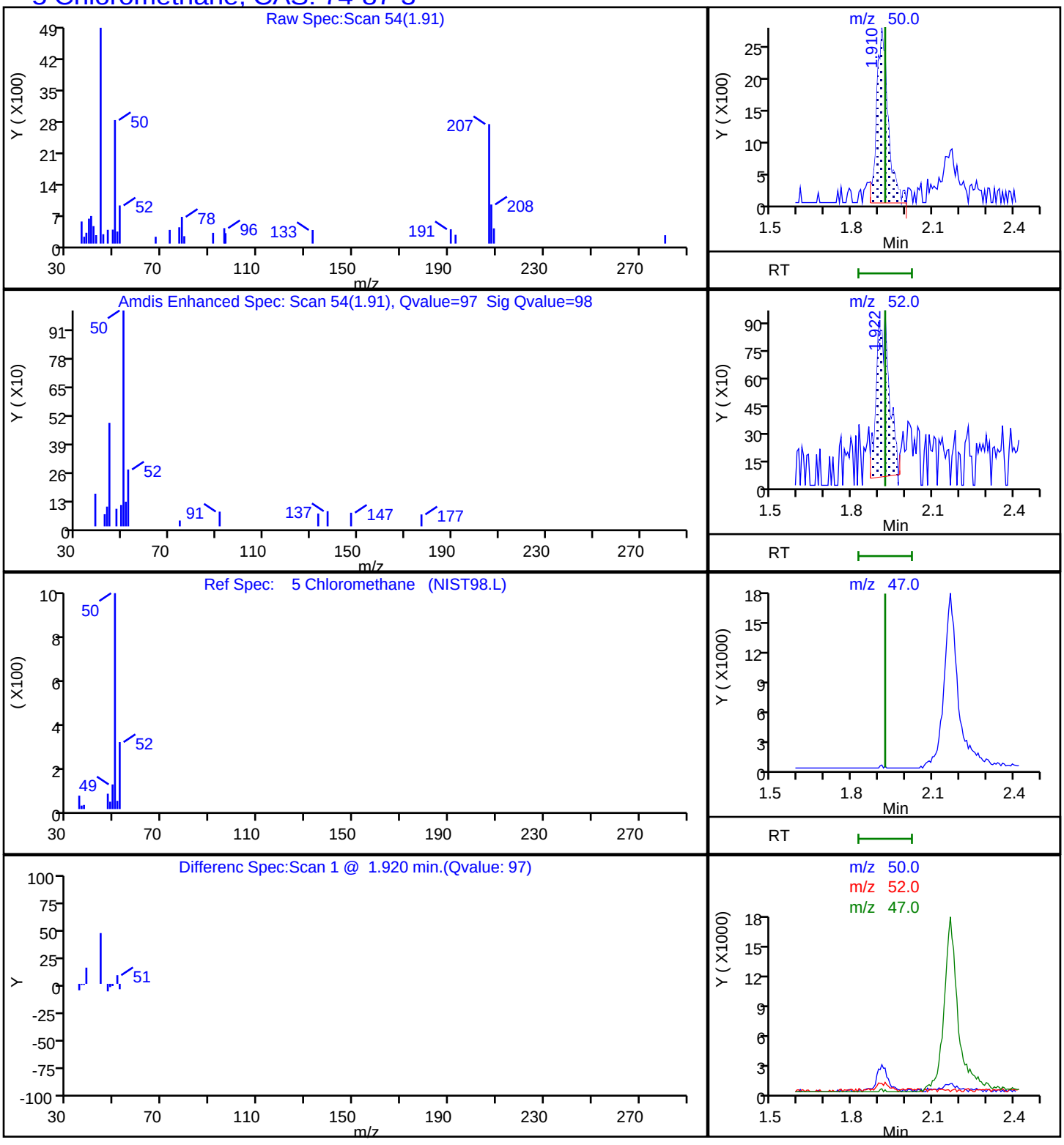


Report Date: 29-Dec-2022 10:37:12 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X16.D				
Injection Date:	28-Dec-2022 15:00:30	Instrument ID:	10193		
Lims ID:	410-110288-A-5	Lab Sample ID:	410-110288-5		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

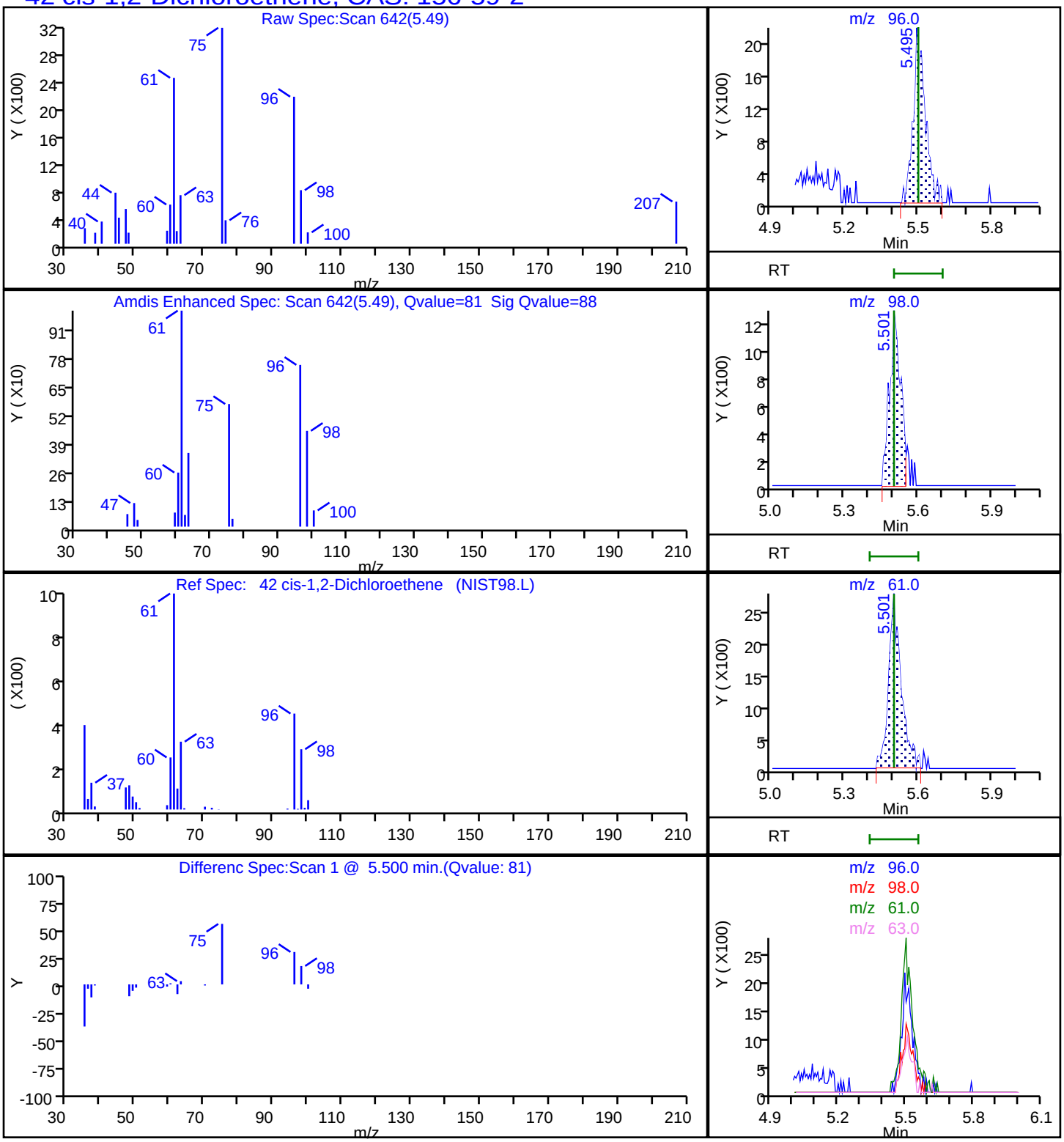
5 Chloromethane, CAS: 74-87-3



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X16.D				
Injection Date:	28-Dec-2022 15:00:30	Instrument ID:	10193		
Lims ID:	410-110288-A-5	Lab Sample ID:	410-110288-5		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

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

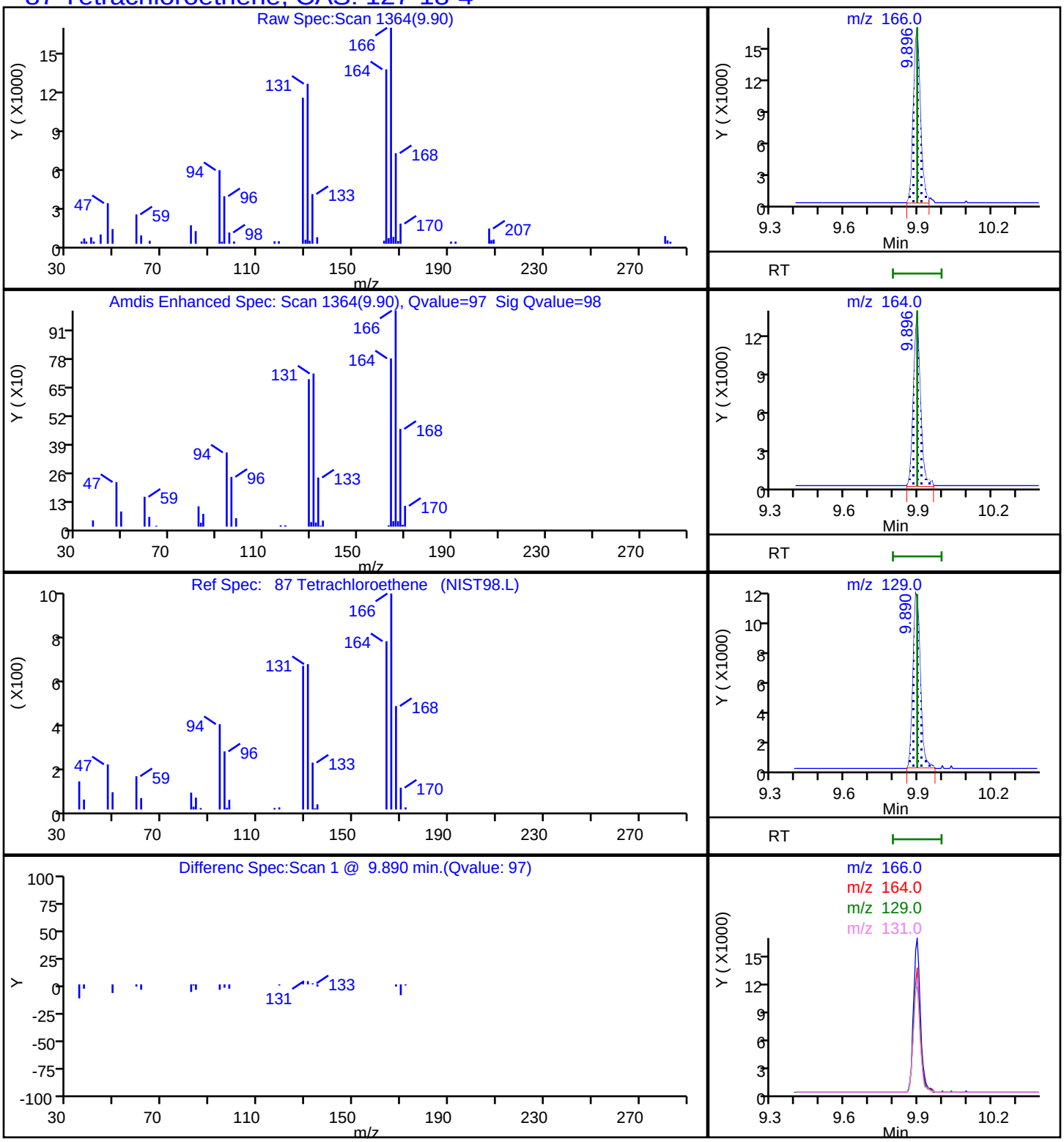


Report Date: 29-Dec-2022 10:37:13 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X16.D				
Injection Date:	28-Dec-2022 15:00:30	Instrument ID:	10193		
Lims ID:	410-110288-A-5	Lab Sample ID:	410-110288-5		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

87 Tetrachloroethene, CAS: 127-18-4

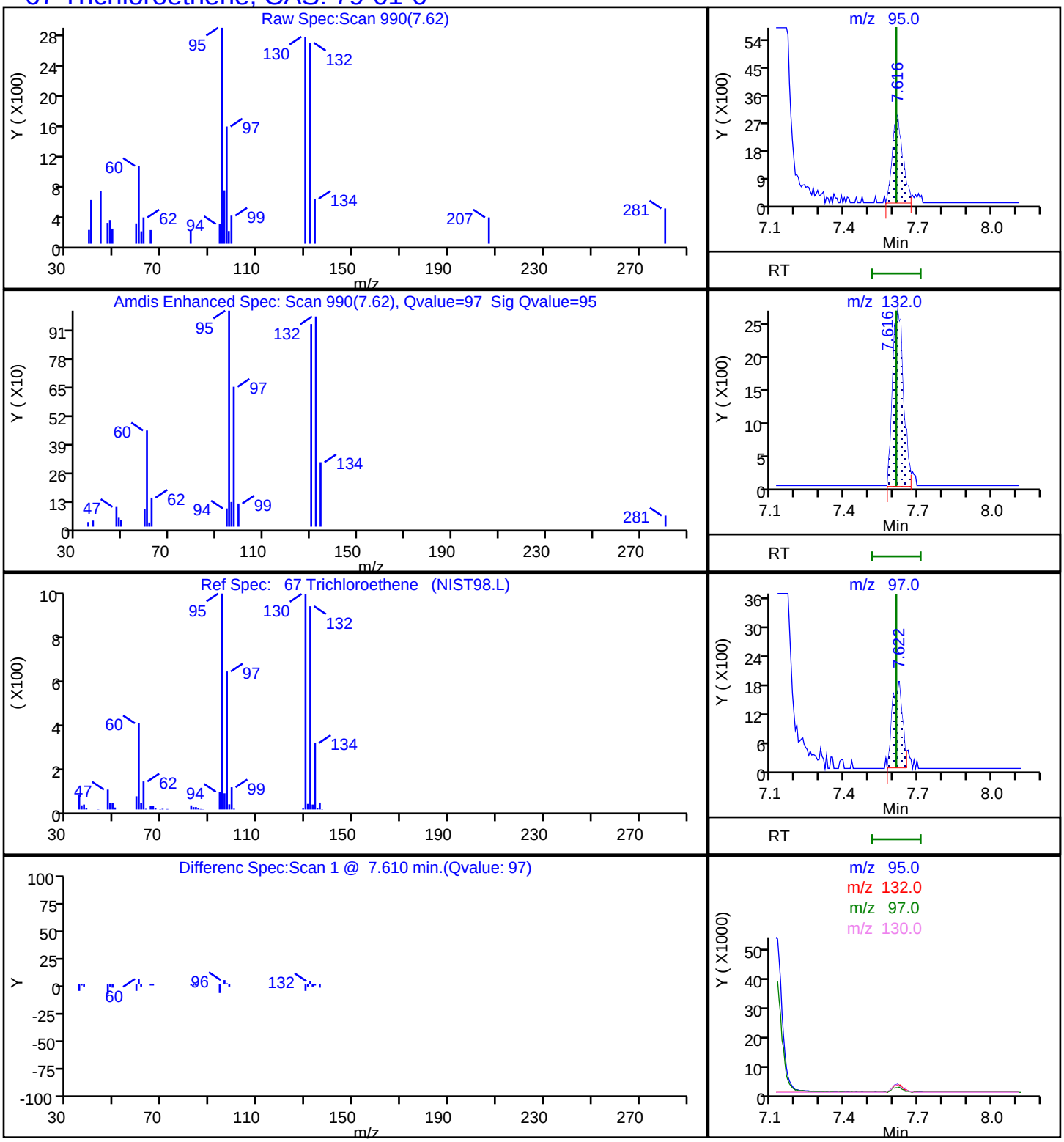


Report Date: 29-Dec-2022 10:37:13 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X16.D				
Injection Date:	28-Dec-2022 15:00:30	Instrument ID:	10193		
Lims ID:	410-110288-A-5	Lab Sample ID:	410-110288-5		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6



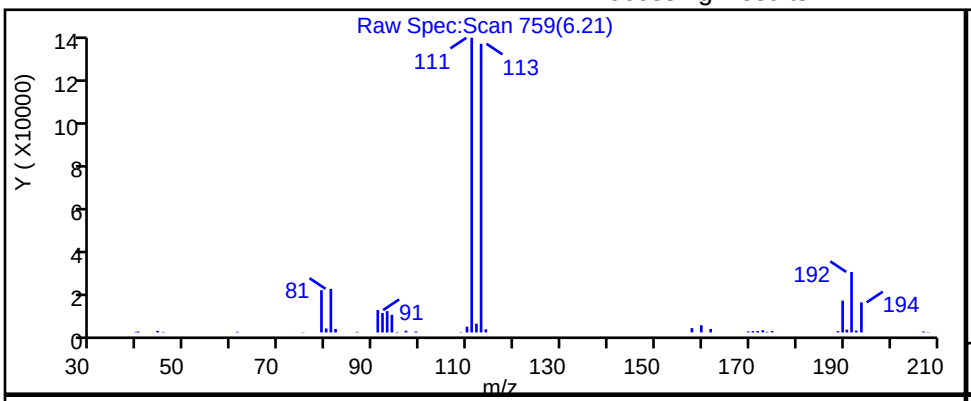
User Disabled Compound Report

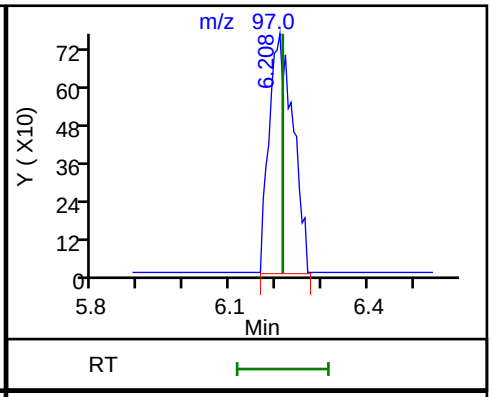
Eurofins Lancaster Laboratories Environment Testing, LLC

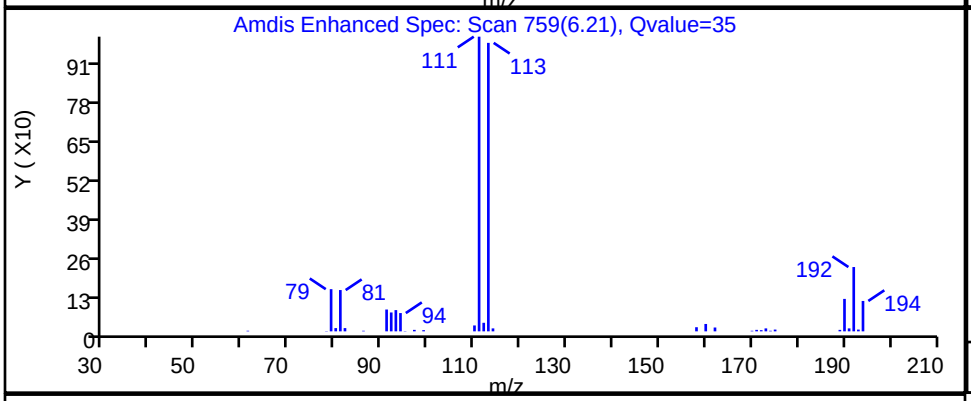
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X16.D				
Injection Date:	28-Dec-2022 15:00:30	Instrument ID:	10193		
Lims ID:	410-110288-A-5	Lab Sample ID:	410-110288-5		
Client ID:	HD-COD-SW-13-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

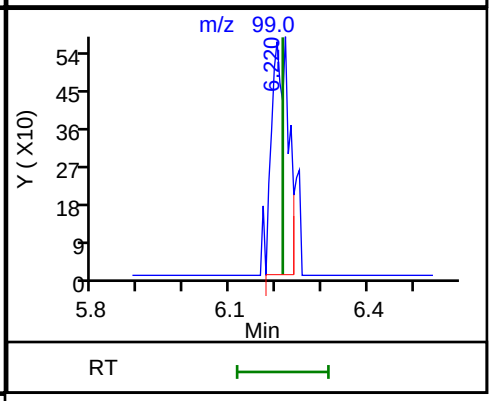
52 1,1,1-Trichloroethane, CAS: 71-55-6

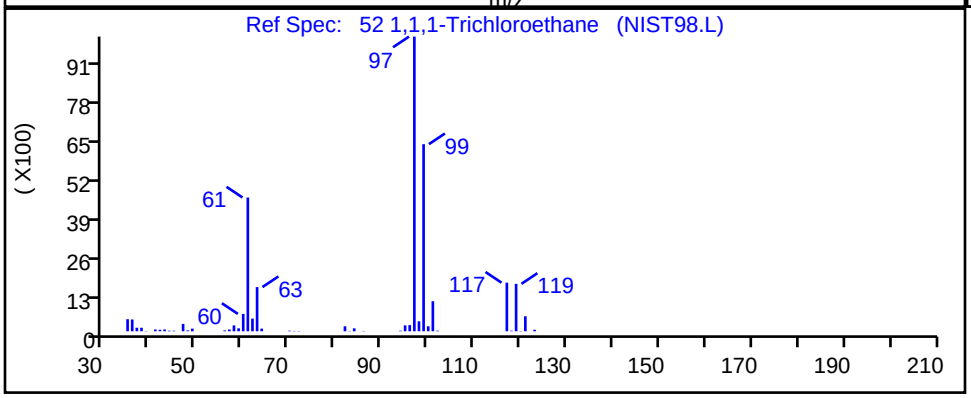
Processing Results











RT	Mass	Response	Amount
6.21	97.00	2801	0.034954
6.22	99.00	1438	

Reviewer: innoonk, 29-Dec-2022 10:36:55

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 Lab Sample ID: 410-110288-6

Matrix: Water Lab File ID: CD28X17.D

Analysis Method: 8260D Date Collected: 12/21/2022 11:30

Sample wt/vol: 25(mL) Date Analyzed: 12/28/2022 15:23

Soil Aliquot Vol: Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696 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	0.42	J	0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	0.16	J	0.50	0.10
75-35-4	1,1-Dichloroethene	0.20	J ^c cn	0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	ND		5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	0.28	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	2.4		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	6.4		0.50	0.20
108-88-3	Toluene	ND		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0
Lab Sample ID: 410-110288-6

Matrix: Water
Lab File ID: CD28X17.D

Analysis Method: 8260D
Date Collected: 12/21/2022 11:30

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 15:23

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	1.9		0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	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 Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X17.D
Lims ID: 410-110288-A-6
Client ID: HD-COD-SW-15-0/1-0
Sample Type: Client
Inject. Date: 28-Dec-2022 15:23:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074091-018
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 10:39:09 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1603

First Level Reviewer: innoonk Date: 29-Dec-2022 10:39:09

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
	1 Chlorotrifluoroethene	116		1.715				ND	
	2 Dichlorodifluoromethane	85		1.745				ND	
	3 Chlorodifluoromethane	51		1.764				ND	7
	4 Dimethyl ether	45		1.806				ND	
	5 Chloromethane	50	1.904	1.922	-0.018	99	7201	0.0976	
	6 Vinyl chloride	62		2.020				ND	
	7 Butadiene	39		2.032				ND	7
	8 2-Chloro-1,1,1-Trifluoroethane	118		2.099				ND	
	9 Bromomethane	94		2.306				ND	7
	10 Chloroethane	64		2.367				ND	
	11 Dichlorofluoromethane	67		2.587				ND	7
	12 Trichlorofluoromethane	101		2.642				ND	
	13 Pentane	43		2.642				ND	U
	15 Ethyl ether	59		2.825				ND	
T	14 Vinyl bromide TIC	106		2.830				ND	
	16 1,2-Dichloro-1,1,2-trifluoroetha	67		2.910				ND	7
	17 Acrolein	56		2.971				ND	7
	19 1,1-Dichloroethene	96	3.086	3.087	-0.001	97	8626	0.2005	
T	18 Ethanol TIC	45	3.105	3.099	0.006	7	282	0.001442	
	20 Acetone	43	3.123	3.123	0.000	34	5198	0.7943	
	21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.129				ND	
	22 Iodomethane	142		3.251				ND	
	23 Isopropyl alcohol	45		3.276				ND	U
	24 Ethyl bromide	108		3.282				ND	
	25 Carbon disulfide	76		3.343				ND	7
	26 Acetonitrile	41		3.477				ND	
	27 Methyl acetate	43		3.477				ND	
	28 3-Chloro-1-propene	41		3.495				ND	
	29 Methylene Chloride	84		3.654				ND	7
*	30 t-Butyl alcohol-d10 (IS)	65	3.684	3.684	0.000	98	127037	50.0	
	31 2-Methyl-2-propanol	59		3.794				ND	
	32 Acrylonitrile	53		3.965				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
33 Methyl tert-butyl ether	73	3.983	4.001	-0.018	41	6530	0.0500	
34 trans-1,2-Dichloroethene	96		4.007				ND	
35 Hexane	57		4.403				ND	
36 1,1-Dichloroethane	63	4.629	4.647	-0.018	95	15304	0.1568	
37 Vinyl acetate	43		4.696				ND	
38 Isopropyl ether	45		4.708				ND	
39 2-Chloro-1,3-butadiene	53		4.757				ND	
40 Tert-butyl ethyl ether	59		5.263				ND	7
41 2-Butanone (MEK)	43		5.483				ND	
42 cis-1,2-Dichloroethene	96	5.494	5.501	-0.007	80	139792	2.41	
43 2,2-Dichloropropane	77		5.513				ND	7
45 Propionitrile	54		5.574				ND	
44 Ethyl acetate	43		5.586				ND	7
46 Methacrylonitrile	67		5.787				ND	
47 Chlorobromomethane	128		5.836				ND	
48 Tetrahydrofuran	71		5.860				ND	
50 Chloroform	83	5.988	5.995	-0.007	94	26063	0.2835	
49 Methyl acrylate	55		6.013				ND	
S 51 1,2-Dichloroethene, Total	100				0		2.41	
52 1,1,1-Trichloroethane	97	6.214	6.214	0.000	39	33828	0.4209	
$ 53 Dibromofluoromethane (Surr)	113	6.208	6.214	-0.006	94	454483	9.94	
54 Cyclohexane	56		6.312				ND	
55 Carbon tetrachloride	117	6.421	6.427	-0.006	79	2936	0.0435	
56 1,1-Dichloropropene	75		6.434				ND	
57 Isobutyl alcohol	41		6.659				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.677	6.677	0.000	40	91876	9.78	
59 Benzene	78		6.702				ND	7
60 1-Chlorobutane	56		6.781				ND	
61 1,2-Dichloroethane	62		6.781				ND	7
62 Isopropyl acetate	43		6.860				ND	
63 Tert-amyl methyl ether	73		6.915				ND	
* 64 Fluorobenzene (IS)	96	7.116	7.122	-0.006	99	1955857	10.0	
65 n-Heptane	43		7.135				ND	7
66 n-Butanol	56		7.580				ND	
67 Trichloroethene	95	7.604	7.610	-0.006	97	106813	1.85	
68 Methylcyclohexane	83		7.909				ND	
69 1,2-Dichloropropane	63		7.952				ND	
70 2-ethoxy-2-methyl butane	87		7.970				ND	
71 Methyl methacrylate	69		8.061				ND	
73 Dibromomethane	93		8.061				ND	
72 1,4-Dioxane	88		8.067				ND	
74 n-Propyl acetate	61		8.189				ND	
75 Dichlorobromomethane	83		8.311				ND	
76 2-Nitropropane	41		8.592				ND	
78 1-Bromo-2-chloroethane	63		8.701				ND	
77 2-Chloroethyl vinyl ether	63		8.707				ND	
79 cis-1,3-Dichloropropene	75		8.878				ND	
80 Chloroacetonitrile	75		9.067				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.085				ND	
$ 82 Toluene-d8 (Surr)	98	9.213	9.214	-0.001	94	1963577	9.87	
83 Toluene	92		9.299				ND	7
84 trans-1,3-Dichloropropene	75		9.598				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
85 Ethyl methacrylate	69		9.677				ND	
86 1,1,2-Trichloroethane	97	9.817	9.811	0.006	54	1098	0.0270	
87 Tetrachloroethene	166	9.890	9.896	-0.006	98	439406	6.42	
102 1,3-Dichloropropane	76		9.982				ND	
T 97 2,3-Dibromopropene TIC	119	9.890	10.000	-0.110	2	3357	0.0172	
T 88 Epibromohydrin TIC	57	10.780	10.000	0.780	1	942	0.004816	
T 89 Epichlorohydrin TIC	57		10.000				ND	
T 90 2,3-Dibromo-1-propanol TIC	57	10.780	10.000	0.780	1	942	0.004816	
T 91 Octamethylcyclotetrasiloxane TIC	281	9.957	10.000	-0.043	5	388	0.001984	
T 101 3-Chloro-1,2-propanediol TIC	44		10.000				ND	
T 99 2-Bromoethanol TIC	45	9.305	10.000	-0.695	1	185	0.000946	
T 93 2-Bromo-3-chloropropene TIC	75	10.780	10.000	0.780	4	21591	0.1104	
T 92 Ethylene oxide TIC	44		10.000				ND	
T 243 Methyl acrylate TIC	55	10.402	10.000	0.402	1	61	0.000312	
T 98 2-Chloroethanol TIC	44		10.000				ND	
T 96 Decamethylcyclopentasiloxane TIC	73	9.975	10.000	-0.025	1	239	0.001222	
T 95 Nitrobenzene TIC	77	10.774	10.000	0.774	6	12040	0.0616	
T 100 Chloroacetaldehyde TIC	50		10.000				ND	
T 94 Monochloroacetic acid TIC	50	9.884	10.000	-0.116	1	234	0.001196	
S 103 1,3-Dichloropropene, Total	100		10.060				ND	7
104 2-Hexanone	43		10.061				ND	
106 Chlorodibromomethane	129		10.213				ND	
105 n-Butyl acetate	43		10.231				ND	
107 Ethylene Dibromide	107		10.323				ND	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	85	1509801	10.0	
109 1-Chlorohexane	91		10.805				ND	7
110 Chlorobenzene	112		10.811				ND	
111 1,1,1,2-Tetrachloroethane	131		10.896				ND	7
112 Ethylbenzene	91		10.902				ND	7
113 m-Xylene & p-Xylene	106		11.024				ND	7
S 114 Xylenes, Total	106		11.245				ND	7
115 o-Xylene	106		11.366				ND	7
116 Styrene	104		11.384				ND	7
117 Bromoform	173		11.542				ND	
118 Isopropylbenzene	105		11.683				ND	
119 cis-1,4-Dichloro-2-butene	88		11.743				ND	
120 Cyclohexanone	55		11.792				ND	
$ 121 4-Bromofluorobenzene (Surr)	95	11.823	11.823	0.000	93	700853	9.52	
122 Bromobenzene	156		11.939				ND	
123 1,1,2,2-Tetrachloroethane	83		11.939				ND	
124 trans-1,4-Dichloro-2-butene	53		11.969				ND	
125 1,2,3-Trichloropropane	110		11.981				ND	
126 N-Propylbenzene	91		12.018				ND	
127 2-Chlorotoluene	126		12.091				ND	
128 1,3,5-Trimethylbenzene	105		12.164				ND	7
129 4-Chlorotoluene	126		12.189				ND	
130 tert-Butylbenzene	134		12.408				ND	
131 Pentachloroethane	167		12.438				ND	
132 1,2,4-Trimethylbenzene	105		12.451				ND	7
133 sec-Butylbenzene	105		12.573				ND	
134 1,3-Dichlorobenzene	146		12.670				ND	7
135 4-Isopropyltoluene	119		12.688				ND	7

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	94	861026	10.0	
137 1,4-Dichlorobenzene	146		12.749				ND	7
138 1,2,3-Trimethylbenzene	120		12.762				ND	7
139 Benzyl chloride	126		12.829				ND	7
140 n-Butylbenzene	92		12.987				ND	
141 1,2-Dichlorobenzene	146		13.012				ND	
142 p-Diethylbenzene	119		13.036				ND	
T 143 Hexachloroethane TIC	117	13.438	13.444	-0.006	1	148	0.000757	
144 Hexachloroethane	117		13.444				ND	
145 1,2-Dibromo-3-Chloropropane	155		13.572				ND	
146 1,3,5-Trichlorobenzene	180		13.694				ND	
147 1,2,4-Trichlorobenzene	180		14.121				ND	
148 Hexachlorobutadiene	225		14.206				ND	
149 Naphthalene	128		14.304				ND	
150 1,2,3-Trichlorobenzene	180		14.450				ND	7
151 2-Methylnaphthalene	142		15.054				ND	
152 Dodecane	57		0.000				ND	
156 1,1-Dichloro-1-fluoroethane	1		0.000				ND	
168 Propargyl alcohol TIC	1		0.000				ND	
167 1,3-Dichloro-2-propanol TIC	1		0.000				ND	
166 Vinyl acetate (TIC)	1		0.000				ND	
165 tert-Butyl Formate	1		0.000				ND	
164 2-Bromo-1-chloropropane	1		0.000				ND	
163 1-Chloropropane	1		0.000				ND	
162 1,1-Dichloroacetone	1		0.000				ND	
169 Pentachloroethane TIC	1		0.000				ND	
161 Methylal	1		0.000				ND	
159 Isopropyl alcohol TIC	1		0.000				ND	
158 Propene oxide	1		0.000				ND	
157 t-Amyl alcohol	1		0.000				ND	
155 Ethanol	45		0.000				ND	
241 Vinyl Fluoride TIC	1		0.000				ND	
154 Acetonitrile TIC	1		0.000				ND	
153 n-Decane	57		0.000				ND	
160 1-Bromo-3-Chloropropane	1		0.000				ND	
232 Chlorofluoromethane TIC	1		0.000				ND	
233 Dichloro-1,1,2,2-tetrafluoretha	1		0.000				ND	
234 1-Chloro-1,1-difluoroethane TIC	1		0.000				ND	
235 Ethyl ether TIC	1		0.000				ND	
236 Freon 115 TIC	1		0.000				ND	
237 Fluoromethane TIC	1		0.000				ND	
238 1,1,1-Trifluoro-2,2-dichloroetha	1		0.000				ND	
239 1,2-Dichlorofluoroethane TIC	1		0.000				ND	
240 1,1,1-Trichloro-2,2,2-trifluoroe	1		0.000				ND	
242 1,1,2-Trifluoroethane TIC	1		0.000				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags
U - Marked Undetected

Reagents:

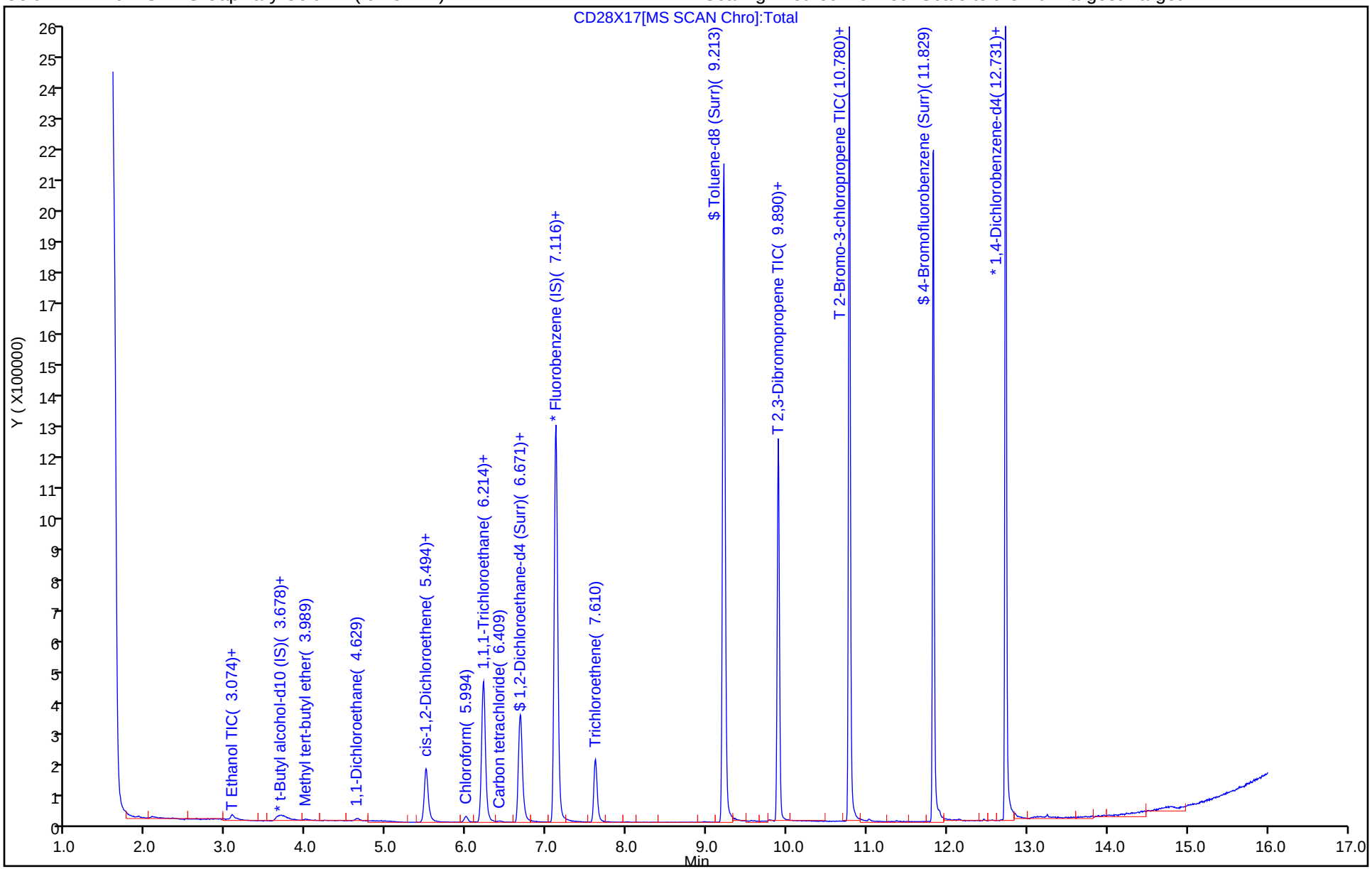
MSV_HP25_ISSS_00063 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 29-Dec-2022 10:39:09 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X17.D				
Injection Date:	28-Dec-2022 15:23:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	410-110288-A-6	Lab Sample ID:	410-110288-6	Worklist Smp#:	18
Client ID:	HD-COD-SW-15-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X17.D				
Lims ID:	410-110288-A-6				
Client ID:	HD-COD-SW-15-0/1-0				
Sample Type:	Client				
Inject. Date:	28-Dec-2022 15:23:30	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0074091-018				
Operator ID:	knk41612	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	29-Dec-2022 10:39:09	Calib Date:	22-Aug-2022 22:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1603				

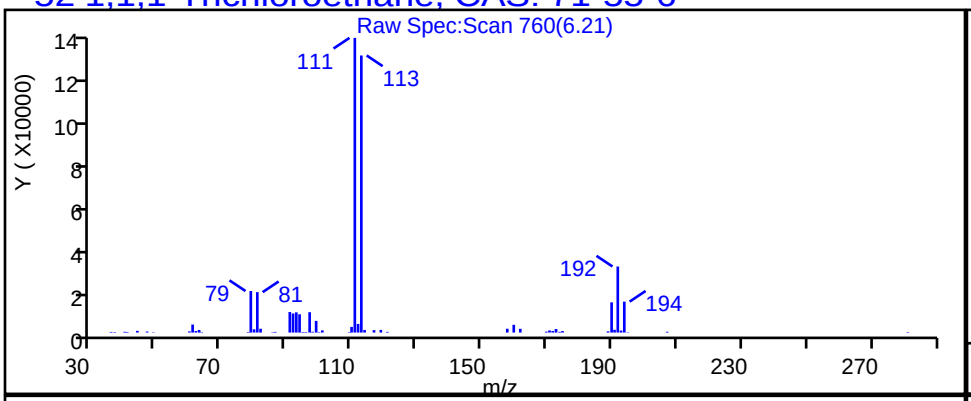
First Level Reviewer: innoonk Date: 29-Dec-2022 10:39:09

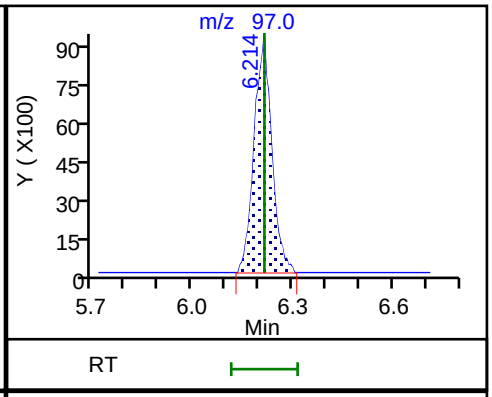
Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	9.94	99.43
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	9.78	97.77
$ 82 Toluene-d8 (Surr)	10.0	9.87	98.70
$ 121 4-Bromofluorobenzene (Surr)	10.0	9.52	95.20

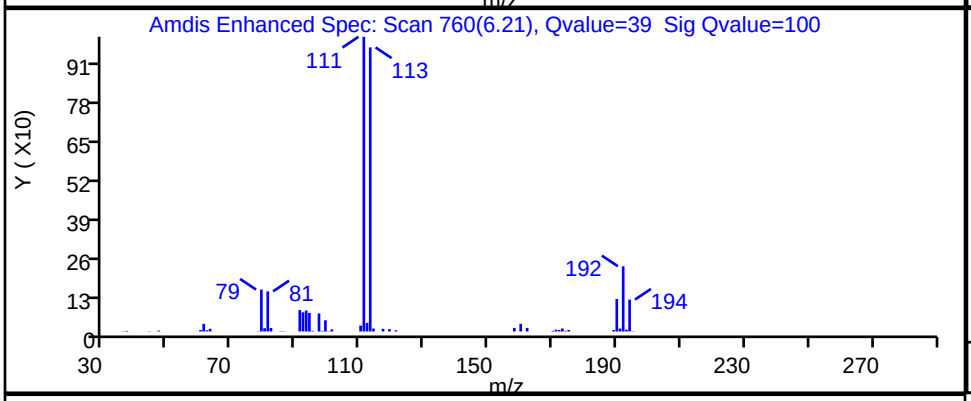
Eurofins Lancaster Laboratories Environment Testing, LLC

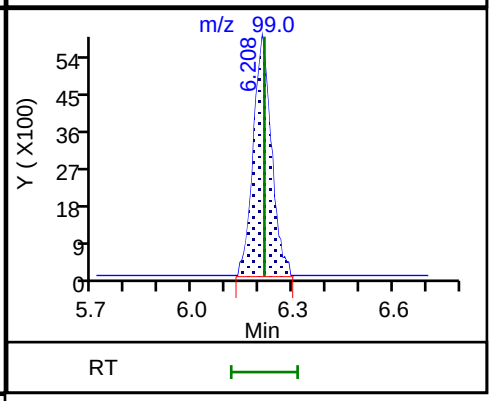
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X17.D				
Injection Date:	28-Dec-2022 15:23:30	Instrument ID:	10193		
Lims ID:	410-110288-A-6	Lab Sample ID:	410-110288-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

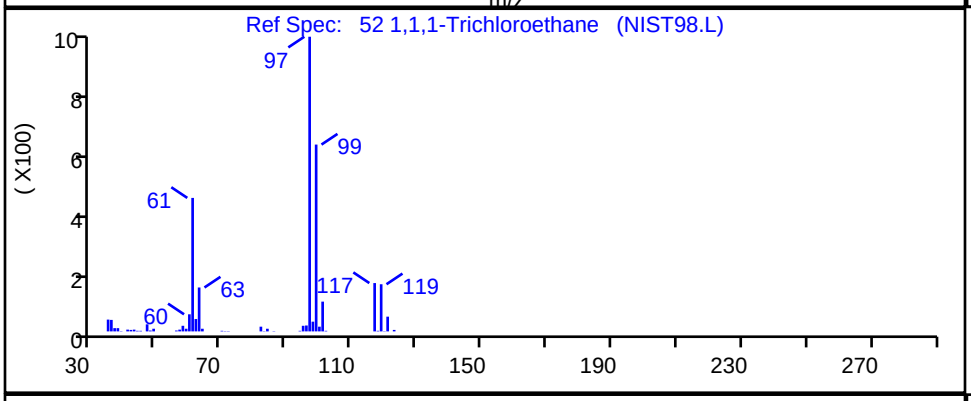
52 1,1,1-Trichloroethane, CAS: 71-55-6

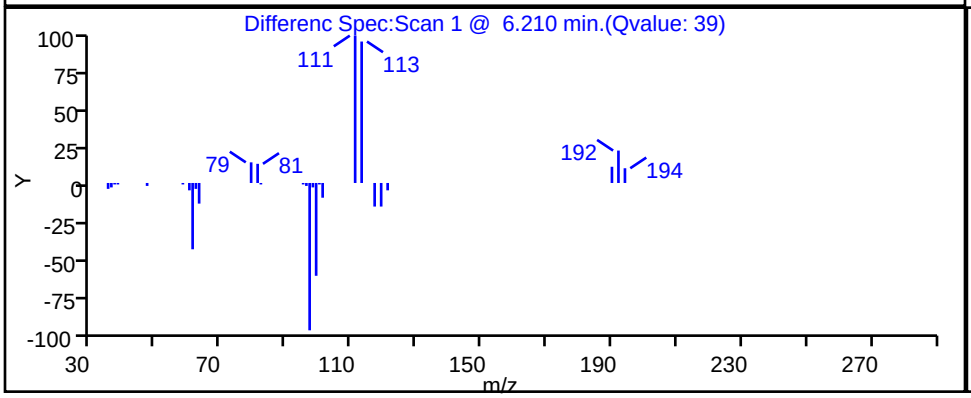


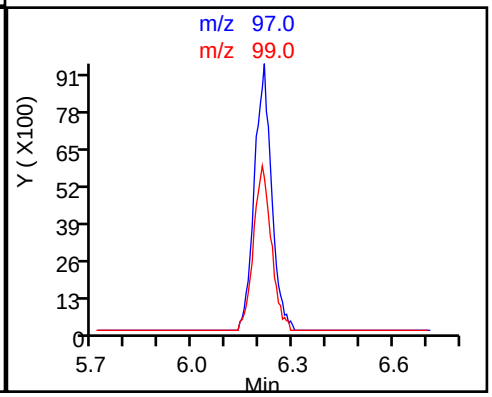












Report Date: 29-Dec-2022 10:39:09 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

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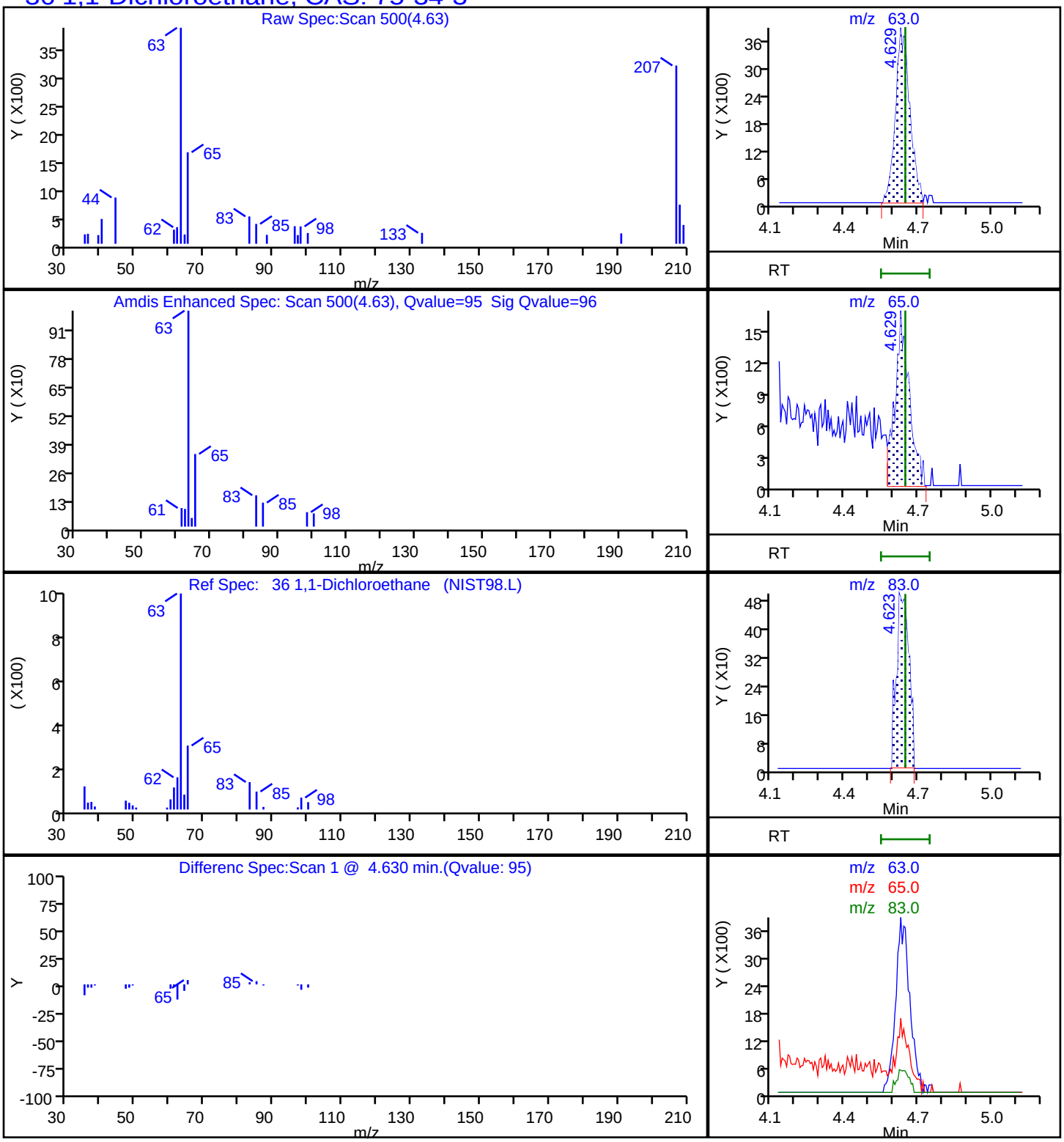
Injection Date:	28-Dec-2022 15:23:30	Instrument ID:	10193		
Lims ID:	410-110288-A-6	Lab Sample ID:	410-110288-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

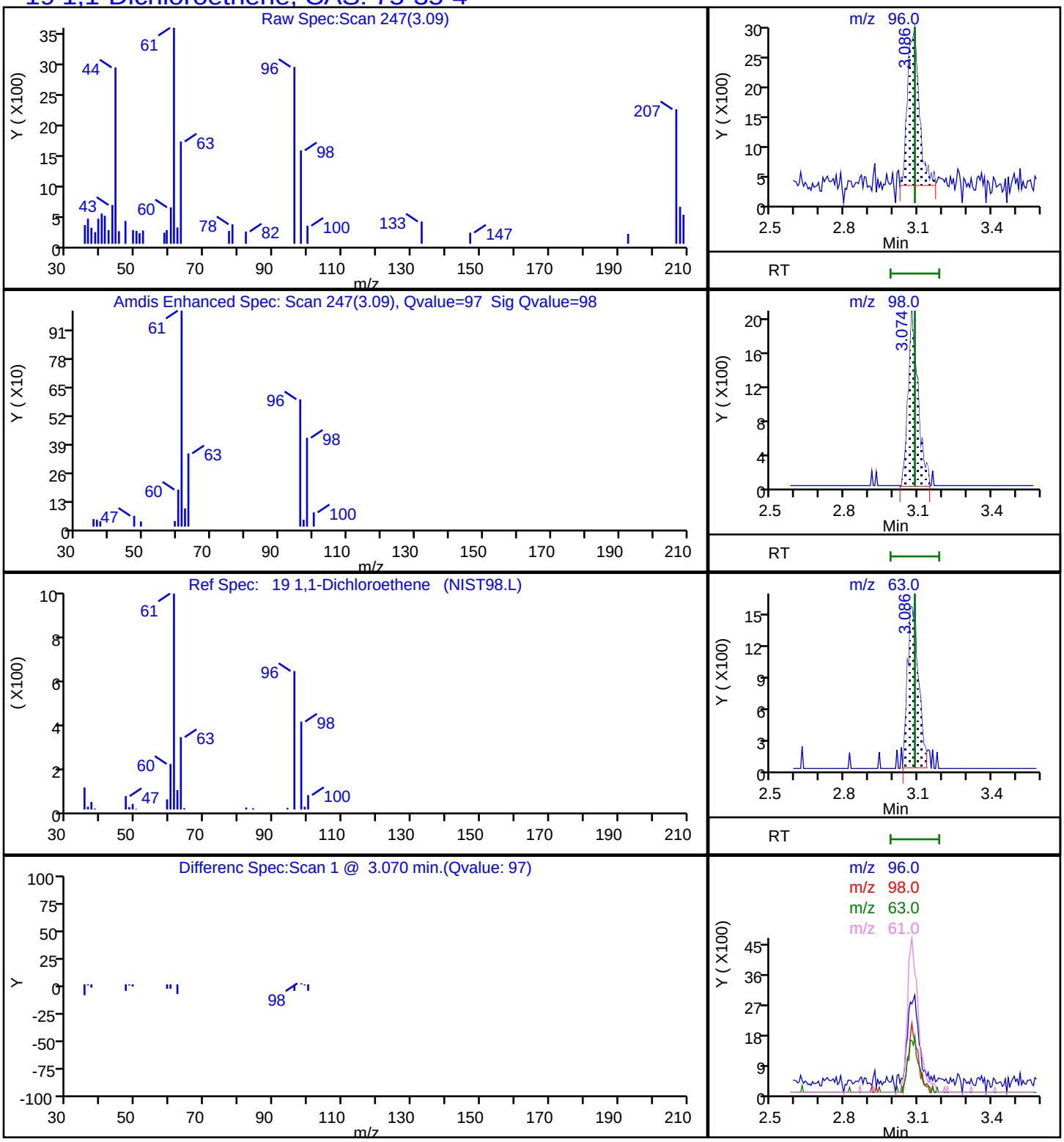
36 1,1-Dichloroethane, CAS: 75-34-3



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X17.D				
Injection Date:	28-Dec-2022 15:23:30	Instrument ID:	10193		
Lims ID:	410-110288-A-6	Lab Sample ID:	410-110288-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X17.D				
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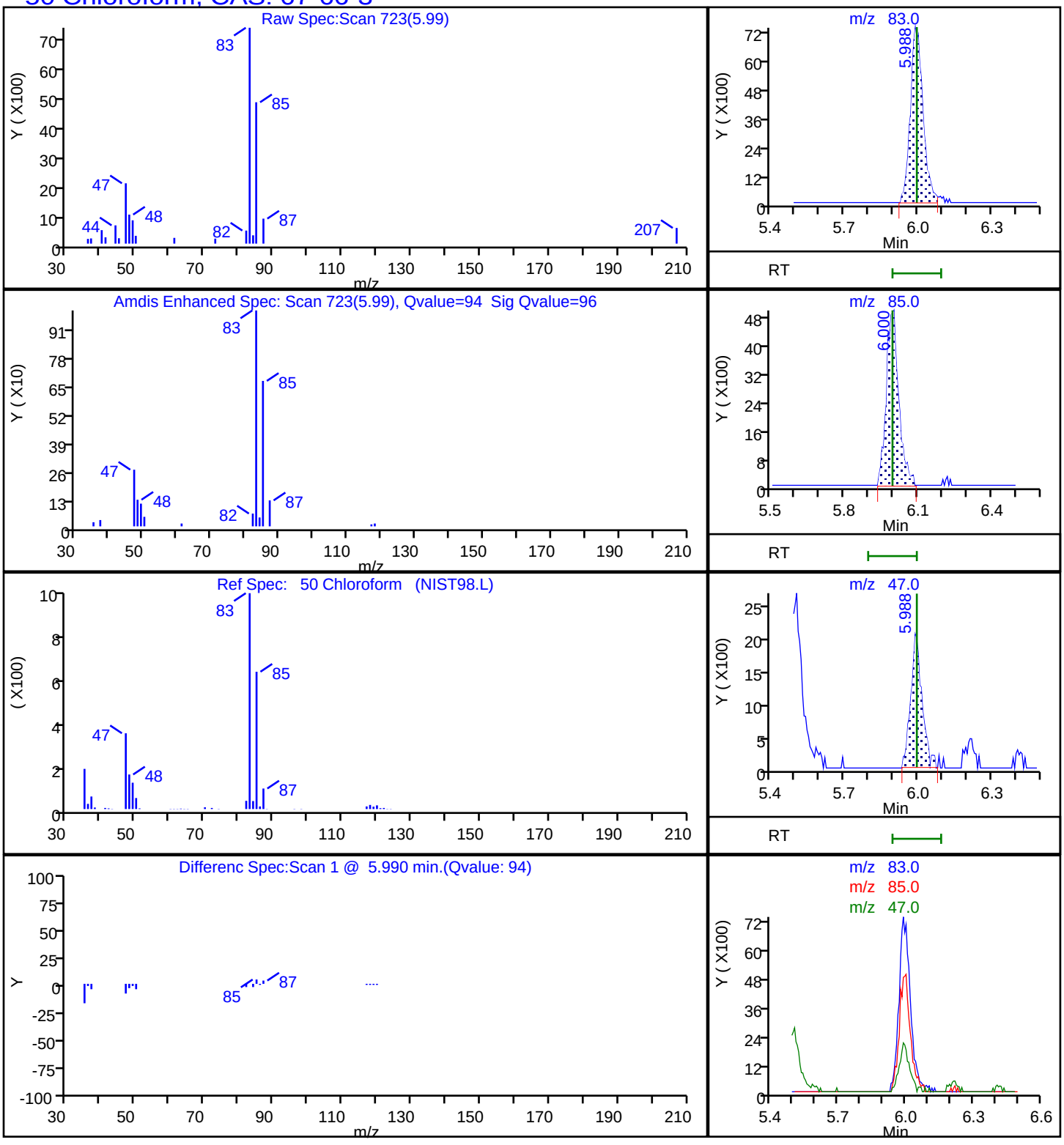
Lims ID:	410-110288-A-6	Lab Sample ID:	410-110288-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

50 Chloroform, CAS: 67-66-3



Report Date: 29-Dec-2022 10:39:09 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

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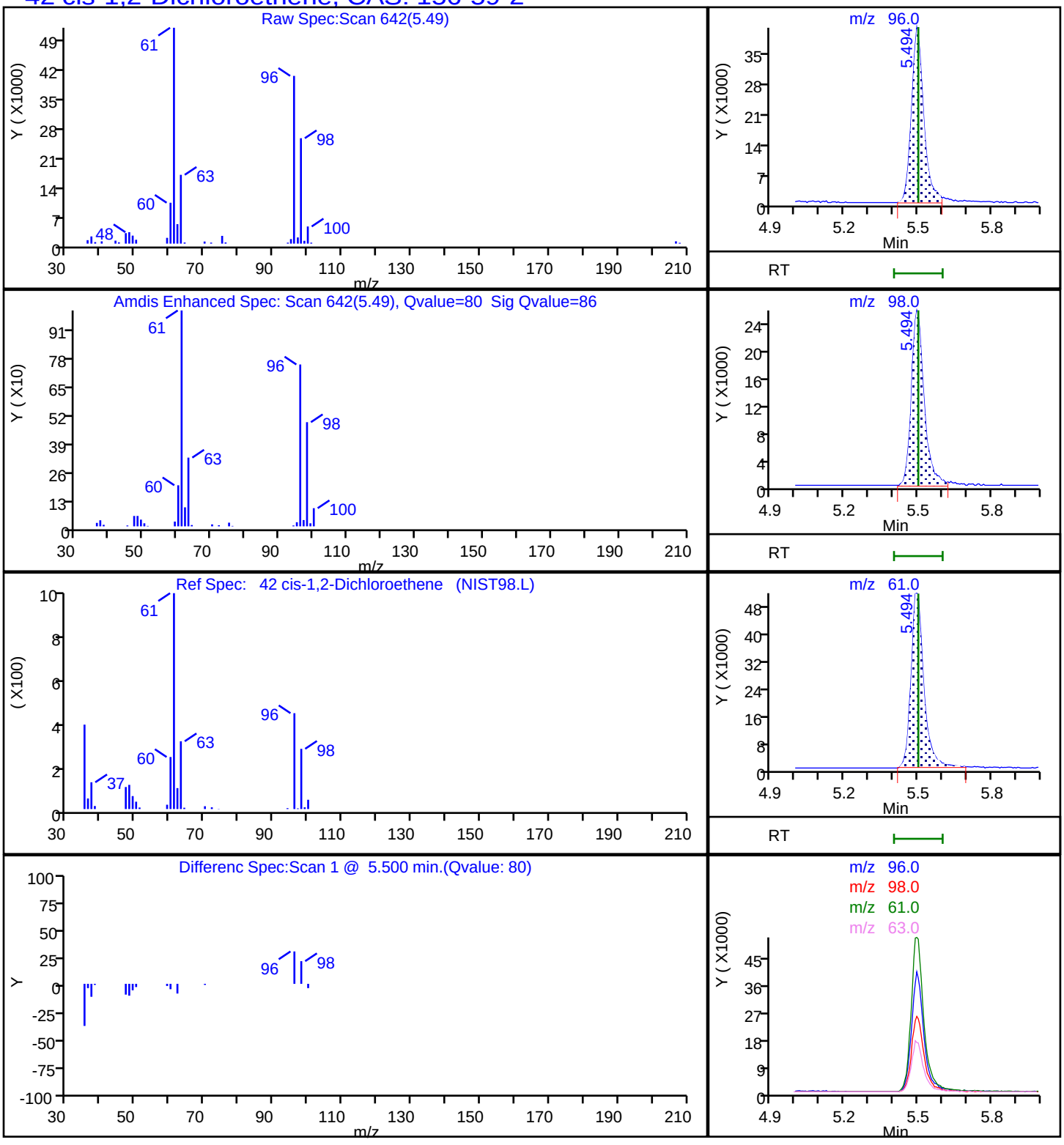
Lims ID:	410-110288-A-6	Lab Sample ID:	410-110288-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

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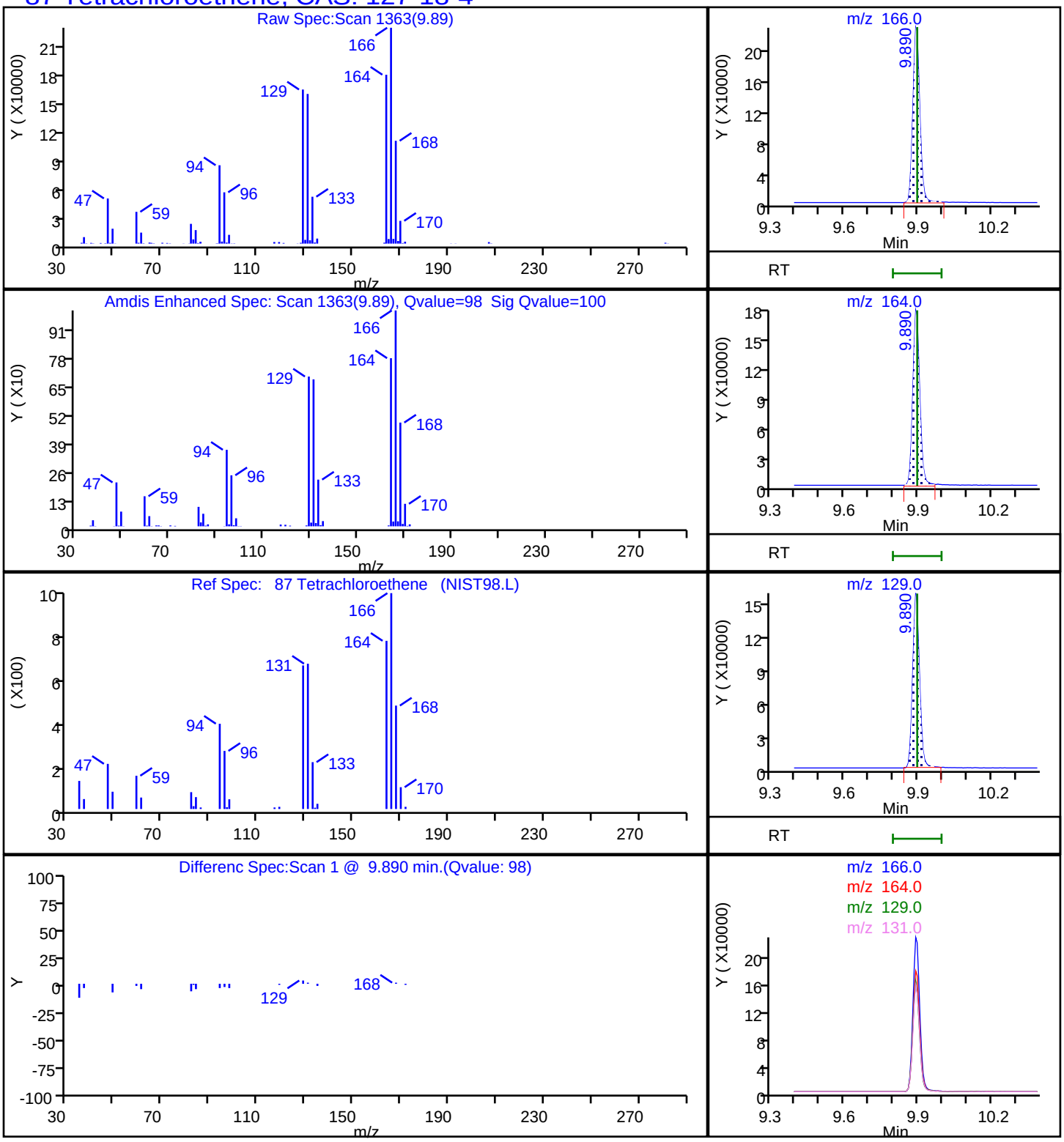
Lims ID:	410-110288-A-6	Lab Sample ID:	410-110288-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

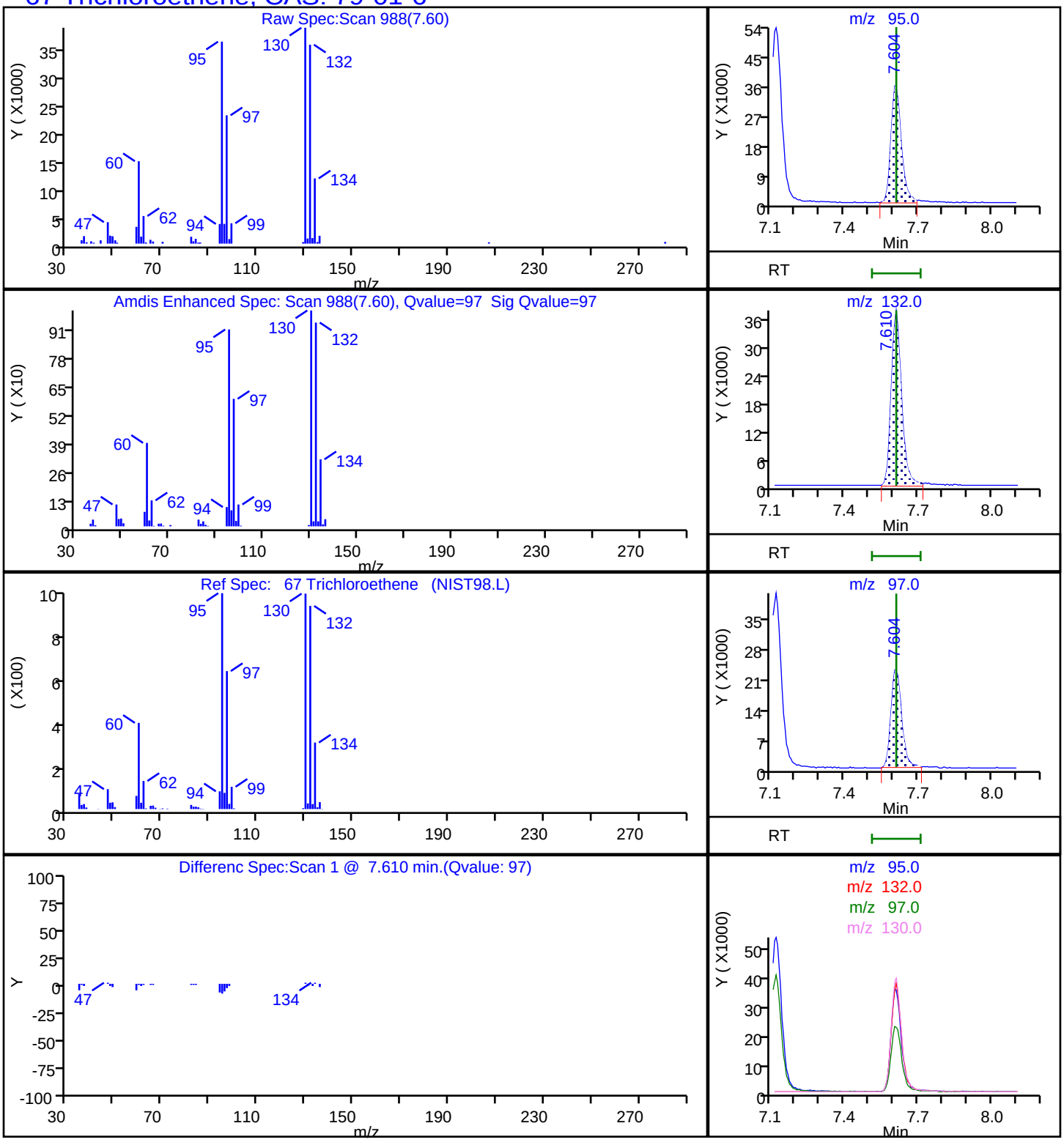
87 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X17.D				
Injection Date:	28-Dec-2022 15:23:30	Instrument ID:	10193		
Lims ID:	410-110288-A-6	Lab Sample ID:	410-110288-6		
Client ID:	HD-COD-SW-15-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	17	Worklist Smp#:	18
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0 Lab Sample ID: 410-110288-7

Matrix: Water Lab File ID: CD28X20.D

Analysis Method: 8260D Date Collected: 12/21/2022 09:45

Sample wt/vol: 25(mL) Date Analyzed: 12/28/2022 16:29

Soil Aliquot Vol: Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND	^c cn	0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	2.2	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.12	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	0.71		0.50	0.20
108-88-3	Toluene	ND		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-16-0/1-0
Lab Sample ID: 410-110288-7

Matrix: Water
Lab File ID: CD28X20.D

Analysis Method: 8260D
Date Collected: 12/21/2022 09:45

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 16:29

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.16	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		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 Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X20.D
Lims ID: 410-110288-A-7
Client ID: HD-COD-SW-16-0/1-0
Sample Type: Client
Inject. Date: 28-Dec-2022 16:29:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074091-021
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 10:41:58 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1603

First Level Reviewer: innoonk Date: 29-Dec-2022 10:41:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	1.922	1.922	0.000	96	5630	0.0758	
6 Vinyl chloride	62		2.020				ND	7
9 Bromomethane	94		2.306				ND	7
10 Chloroethane	64		2.367				ND	
19 1,1-Dichloroethene	96		3.087				ND	7
20 Acetone	43	3.129	3.123	0.006	89	14884	2.17	
25 Carbon disulfide	76	3.324	3.343	-0.019	95	6952	0.0519	M
29 Methylene Chloride	84		3.654				ND	7
* 30 t-Butyl alcohol-d10 (IS)	65	3.678	3.684	-0.006	98	133268	50.0	
33 Methyl tert-butyl ether	73		4.001				ND	7
34 trans-1,2-Dichloroethene	96		4.007				ND	
36 1,1-Dichloroethane	63		4.647				ND	7
41 2-Butanone (MEK)	43		5.483				ND	7
42 cis-1,2-Dichloroethene	96	5.513	5.501	0.012	83	6900	0.1179	
47 Chlorobromomethane	128		5.836				ND	
50 Chloroform	83	5.995	5.995	0.000	87	3532	0.0381	
52 1,1,1-Trichloroethane	97	6.214	6.214	0.000	37	3515	0.0434	
$ 53 Dibromofluoromethane (Surr)	113	6.214	6.214	0.000	91	454844	9.88	
55 Carbon tetrachloride	117		6.427				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.671	6.677	-0.006	40	95472	10.1	
59 Benzene	78	6.690	6.702	-0.012	40	6429	0.0284	
61 1,2-Dichloroethane	62		6.781				ND	
* 64 Fluorobenzene (IS)	96	7.116	7.122	-0.006	99	1970482	10.0	
67 Trichloroethene	95	7.610	7.610	0.000	99	9102	0.1566	
69 1,2-Dichloropropane	63		7.952				ND	
75 Dichlorobromomethane	83		8.311				ND	7
79 cis-1,3-Dichloropropene	75		8.878				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.085				ND	7
$ 82 Toluene-d8 (Surr)	98	9.213	9.214	-0.001	94	1971077	9.92	
83 Toluene	92	9.299	9.299	0.000	96	5248	0.0358	
84 trans-1,3-Dichloropropene	75		9.598				ND	
86 1,1,2-Trichloroethane	97		9.811				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
87 Tetrachloroethene	166	9.896	9.896	0.000	97	48603	0.7115	
104 2-Hexanone	43		10.061				ND	7
106 Chlorodibromomethane	129		10.213				ND	
107 Ethylene Dibromide	107		10.323				ND	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	85	1507998	10.0	
110 Chlorobenzene	112		10.811				ND	
111 1,1,1,2-Tetrachloroethane	131		10.896				ND	
112 Ethylbenzene	91		10.902				ND	7
113 m-Xylene & p-Xylene	106		11.024				ND	7
S 114 Xylenes, Total	106		11.245				ND	7
115 o-Xylene	106		11.366				ND	7
116 Styrene	104		11.384				ND	7
117 Bromoform	173		11.542				ND	
$ 121 4-Bromofluorobenzene (Surr)	95	11.823	11.823	0.000	94	700322	9.52	
123 1,1,2,2-Tetrachloroethane	83		11.939				ND	
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	94	856121	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

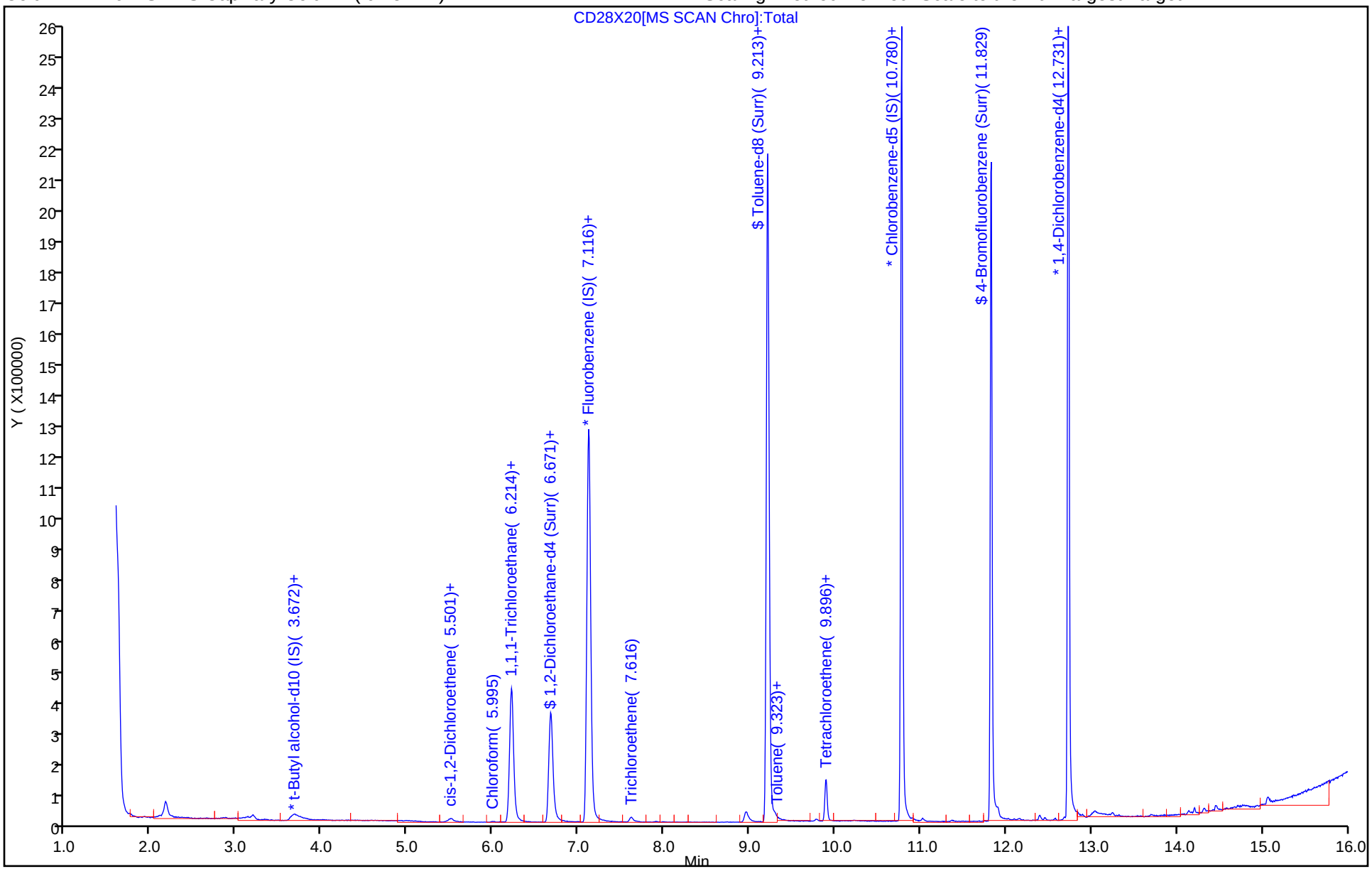
MSV_HP25_ISSS_00063 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 29-Dec-2022 10:41:58 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X20.D				
Injection Date:	28-Dec-2022 16:29:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	410-110288-A-7	Lab Sample ID:	410-110288-7	Worklist Smp#:	21
Client ID:	HD-COD-SW-16-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X20.D				
Lims ID:	410-110288-A-7				
Client ID:	HD-COD-SW-16-0/1-0				
Sample Type:	Client				
Inject. Date:	28-Dec-2022 16:29:30	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0074091-021				
Operator ID:	knk41612	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	29-Dec-2022 10:41:58	Calib Date:	22-Aug-2022 22:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1603				

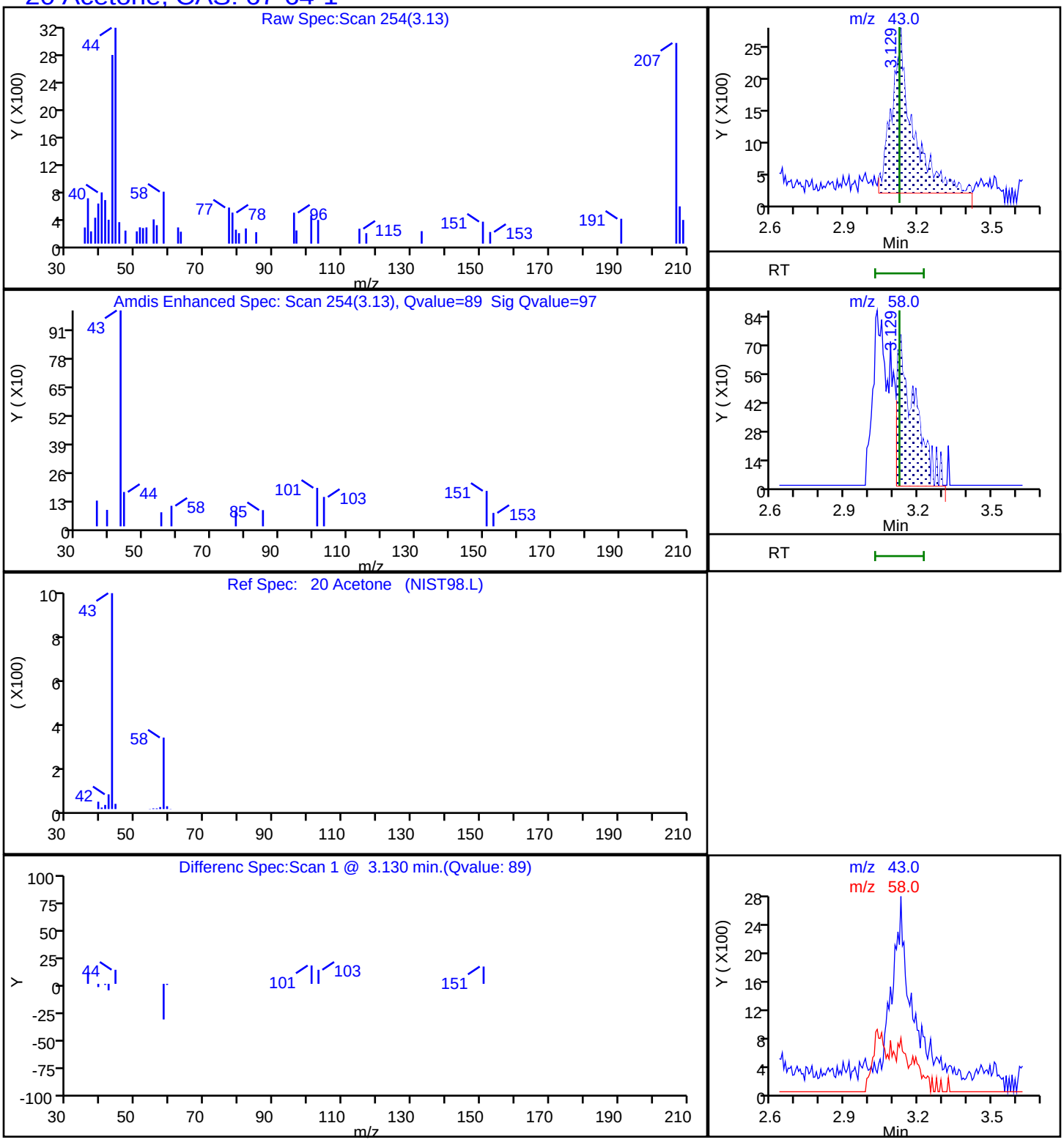
First Level Reviewer: innoonk Date: 29-Dec-2022 10:41:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	9.88	98.77
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.84
$ 82 Toluene-d8 (Surr)	10.0	9.92	99.20
$ 121 4-Bromofluorobenzene (Surr)	10.0	9.52	95.24

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X20.D				
Injection Date:	28-Dec-2022 16:29:30	Instrument ID:	10193		
Lims ID:	410-110288-A-7	Lab Sample ID:	410-110288-7		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

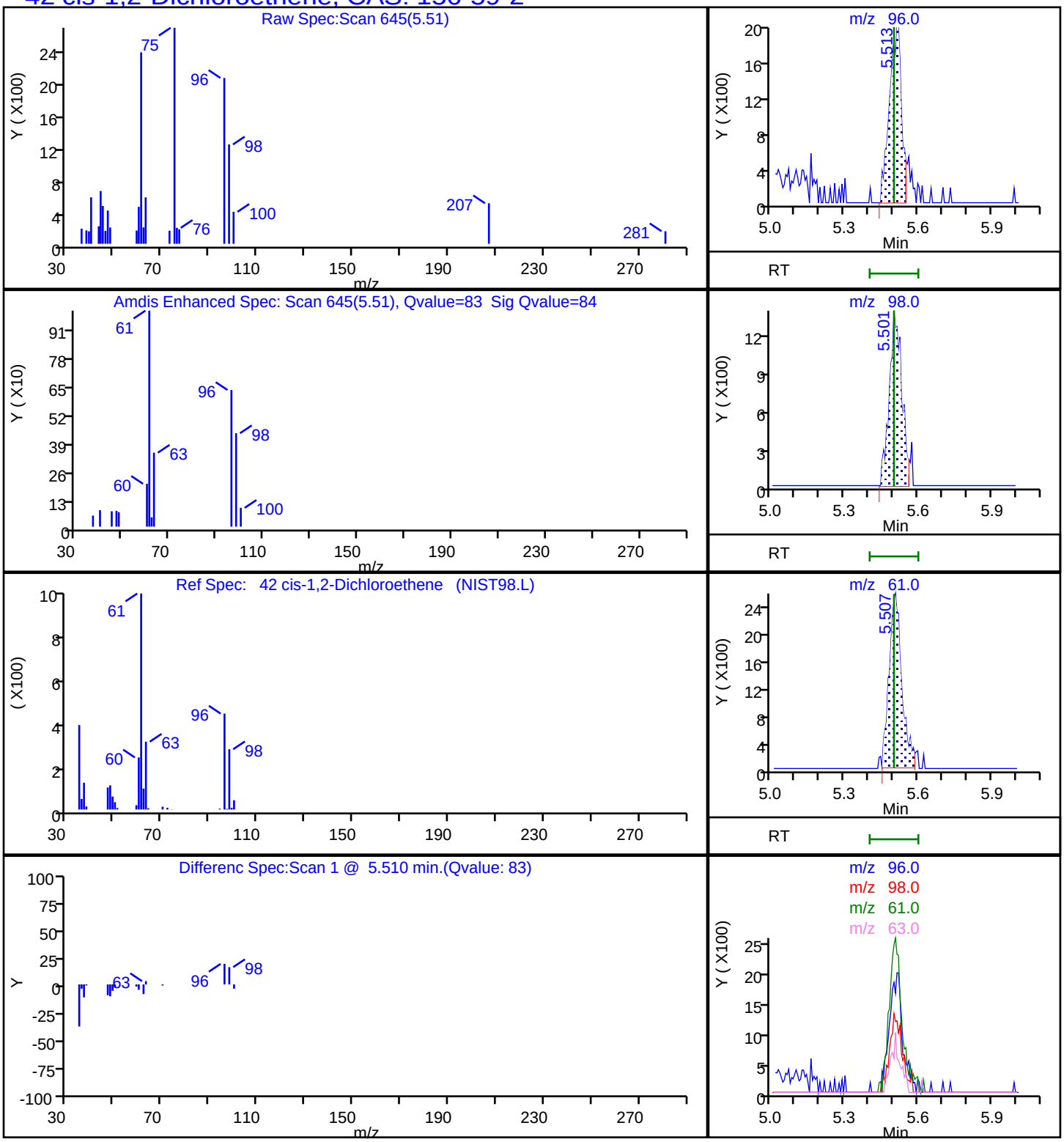
20 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X20.D				
Injection Date:	28-Dec-2022 16:29:30	Instrument ID:	10193		
Lims ID:	410-110288-A-7	Lab Sample ID:	410-110288-7		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

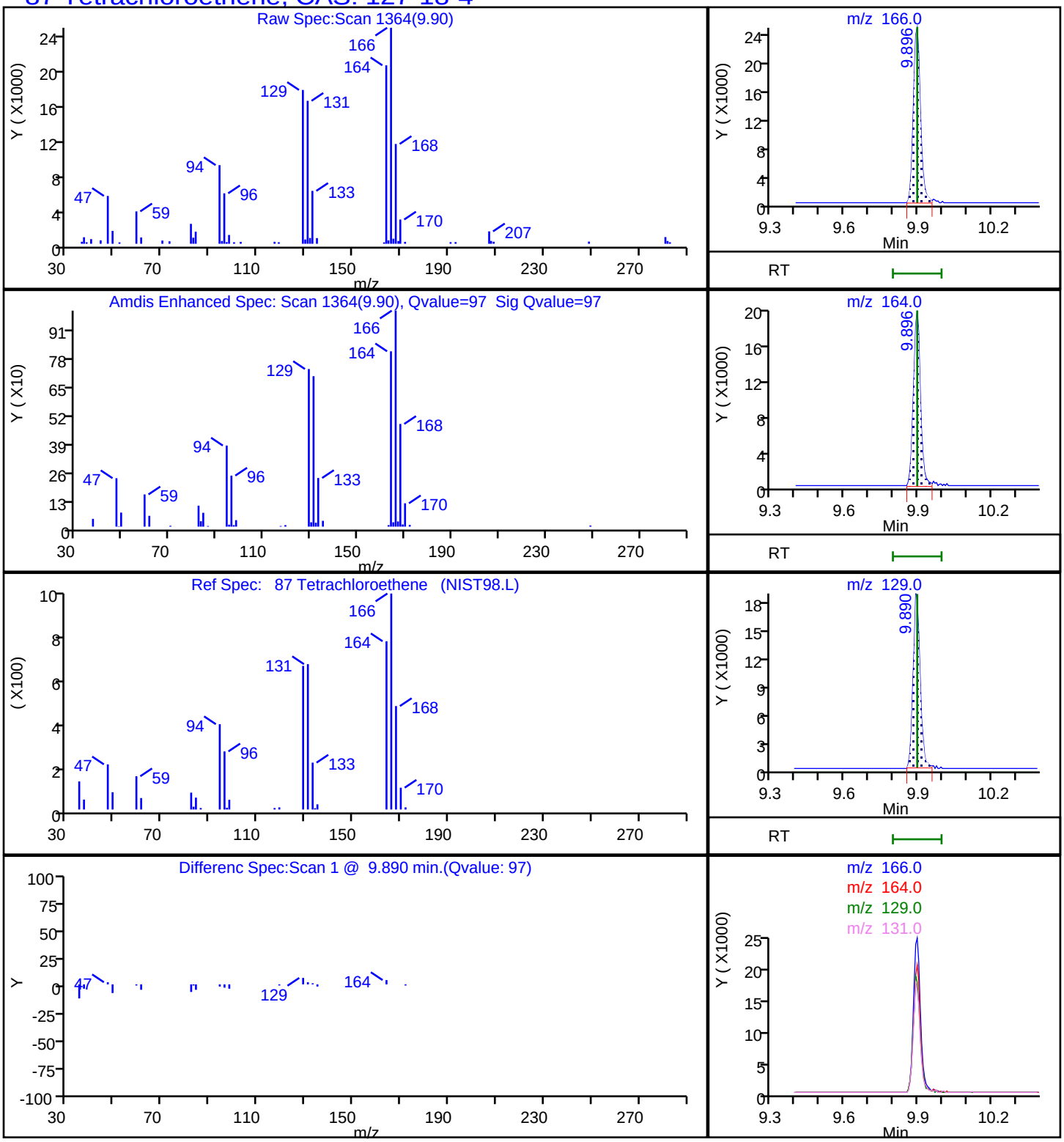
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X20.D				
Injection Date:	28-Dec-2022 16:29:30	Instrument ID:	10193		
Lims ID:	410-110288-A-7	Lab Sample ID:	410-110288-7		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

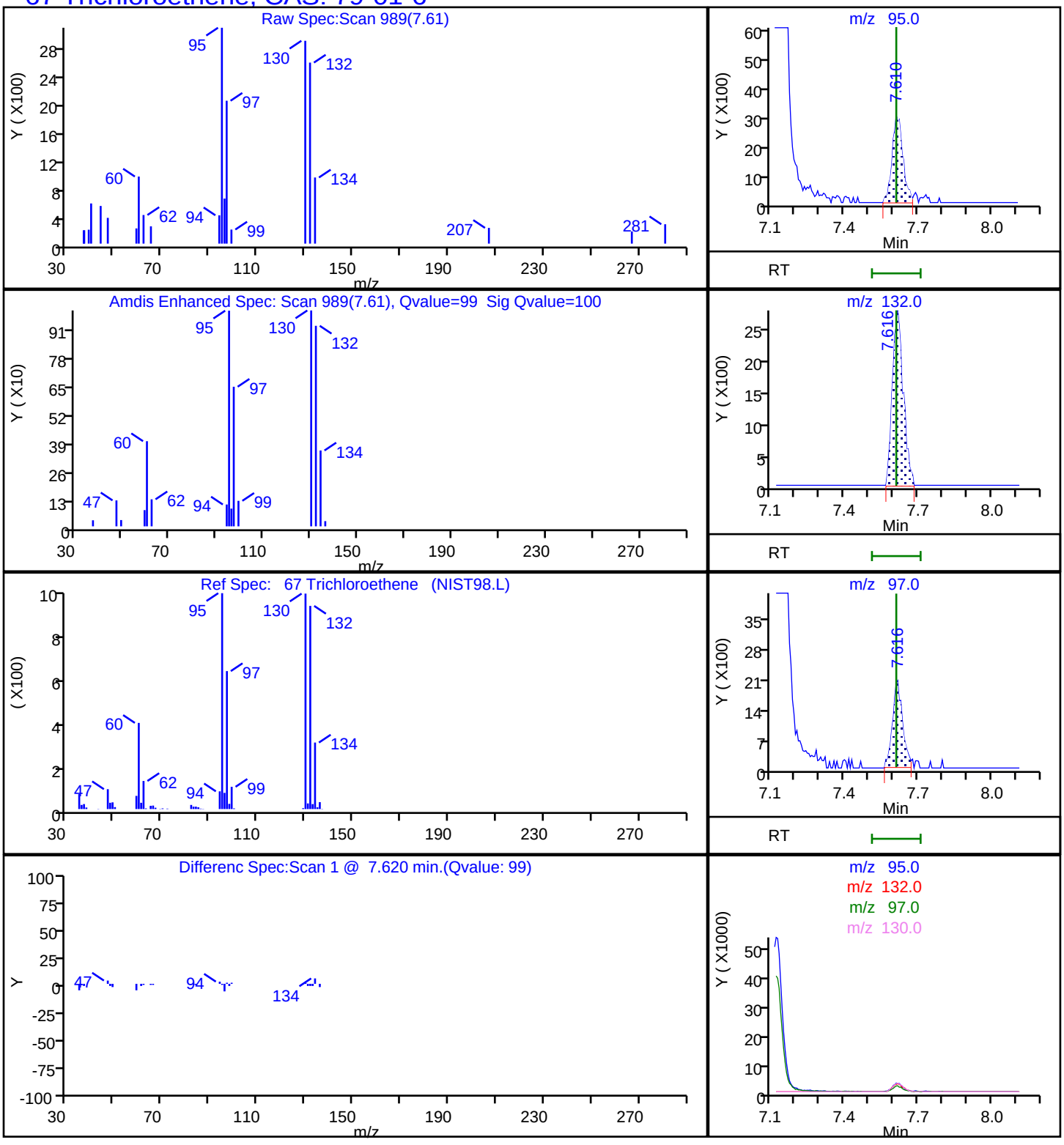
87 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X20.D				
Injection Date:	28-Dec-2022 16:29:30	Instrument ID:	10193		
Lims ID:	410-110288-A-7	Lab Sample ID:	410-110288-7		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

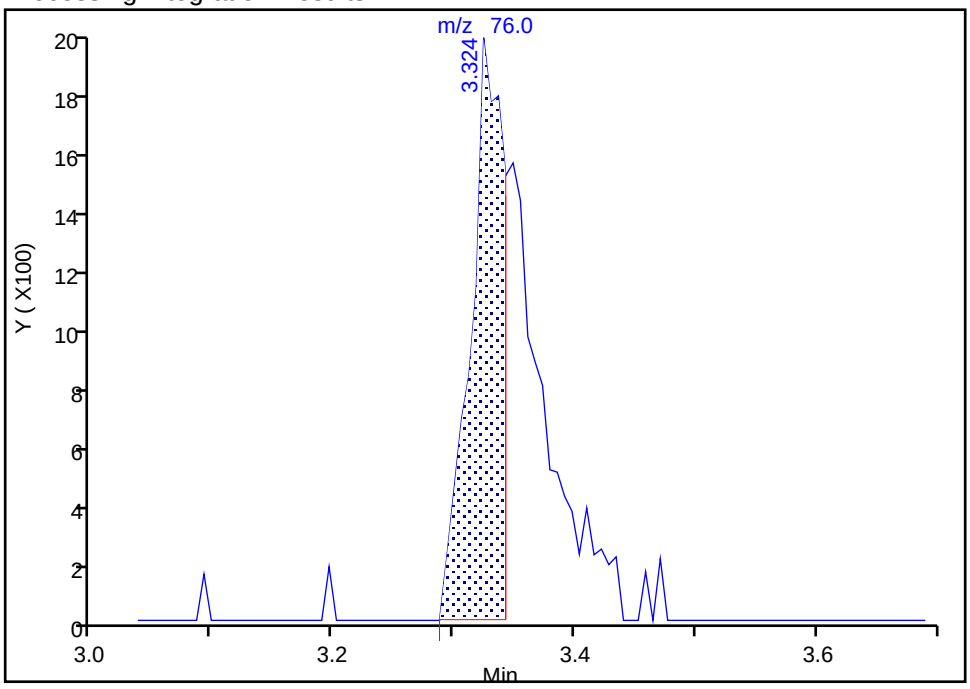
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X20.D				
Injection Date:	28-Dec-2022 16:29:30	Instrument ID:	10193		
Lims ID:	410-110288-A-7	Lab Sample ID:	410-110288-7		
Client ID:	HD-COD-SW-16-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

25 Carbon disulfide, CAS: 75-15-0

Signal: 1

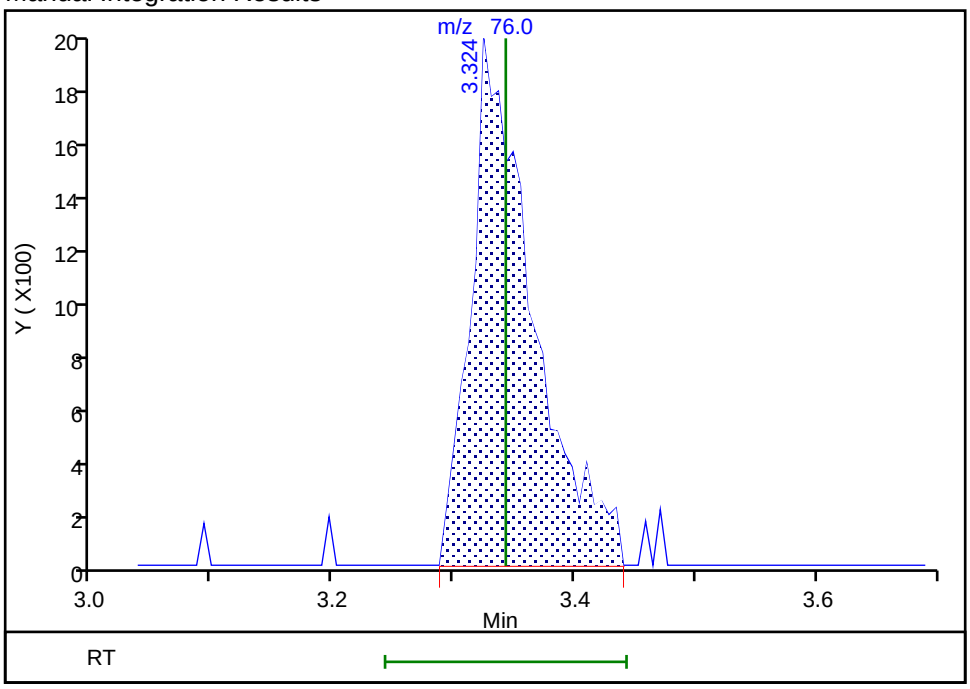
Processing Integration Results

RT: 3.32
Area: 3738
Amount: 0.027880
Amount Units: ug/l



Manual Integration Results

RT: 3.32
Area: 6952
Amount: 0.051852
Amount Units: ug/l



Reviewer: innoonk, 29-Dec-2022 10:41:35
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0
Lab Sample ID: 410-110288-8

Matrix: Water
Lab File ID: CD28X21.D

Analysis Method: 8260D
Date Collected: 12/21/2022 09:52

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 16:52

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
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	6.1		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	1.2		0.50	0.10
75-35-4	1,1-Dichloroethene	0.56	^c cn	0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	ND		5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	0.25	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	3.5		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
108-88-3	Toluene	ND		0.50	0.080
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0
Lab Sample ID: 410-110288-8

Matrix: Water
Lab File ID: CD28X21.D

Analysis Method: 8260D
Date Collected: 12/21/2022 09:52

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 16:52

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	4.4		0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		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 Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X21.D
Lims ID: 410-110288-A-8
Client ID: HD-COD-SW-17-0/1-0
Sample Type: Client
Inject. Date: 28-Dec-2022 16:52:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074091-022
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 10:43:04 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1603

First Level Reviewer: innoonk Date: 29-Dec-2022 10:43:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	1.910	1.922	-0.012	97	5430	0.0716	
6 Vinyl chloride	62		2.020				ND	7
9 Bromomethane	94		2.306				ND	7
10 Chloroethane	64		2.367				ND	
19 1,1-Dichloroethene	96	3.080	3.087	-0.007	95	24630	0.5567	
20 Acetone	43		3.123				ND	U
25 Carbon disulfide	76		3.343				ND	7
29 Methylene Chloride	84		3.654				ND	7
* 30 t-Butyl alcohol-d10 (IS)	65	3.684	3.684	0.000	100	154480	50.0	
33 Methyl tert-butyl ether	73	3.995	4.001	-0.006	67	5779	0.0430	
34 trans-1,2-Dichloroethene	96	4.013	4.007	0.006	92	2820	0.0517	a
36 1,1-Dichloroethane	63	4.641	4.647	-0.006	96	124209	1.24	
41 2-Butanone (MEK)	43		5.483				ND	
42 cis-1,2-Dichloroethene	96	5.501	5.501	0.000	80	210836	3.53	
47 Chlorobromomethane	128		5.836				ND	
50 Chloroform	83	5.994	5.995	-0.001	94	23786	0.2516	
52 1,1,1-Trichloroethane	97	6.214	6.214	0.000	99	503422	6.09	
$ 53 Dibromofluoromethane (Surr)	113	6.214	6.214	0.000	94	463216	9.86	
55 Carbon tetrachloride	117	6.427	6.427	0.000	57	2799	0.0403	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.677	6.677	0.000	73	98243	10.2	
59 Benzene	78		6.702				ND	
61 1,2-Dichloroethane	62		6.781				ND	7
* 64 Fluorobenzene (IS)	96	7.116	7.122	-0.006	99	2011171	10.0	
67 Trichloroethene	95	7.610	7.610	0.000	98	258701	4.36	
69 1,2-Dichloropropane	63		7.952				ND	
75 Dichlorobromomethane	83		8.311				ND	7
79 cis-1,3-Dichloropropene	75		8.878				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.085				ND	7
$ 82 Toluene-d8 (Surr)	98	9.213	9.214	-0.001	93	2010443	9.78	
83 Toluene	92		9.299				ND	7
84 trans-1,3-Dichloropropene	75		9.598				ND	
86 1,1,2-Trichloroethane	97	9.811	9.811	0.000	76	1259	0.0300	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
87 Tetrachloroethene	166	9.896	9.896	0.000	97	6076135	86.0	E
104 2-Hexanone	43		10.061				ND	7
106 Chlorodibromomethane	129		10.213				ND	
107 Ethylene Dibromide	107		10.323				ND	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	85	1559510	10.0	
110 Chlorobenzene	112	10.804	10.811	-0.007	82	2159	0.0121	a
111 1,1,1,2-Tetrachloroethane	131		10.896				ND	7
112 Ethylbenzene	91		10.902				ND	7
113 m-Xylene & p-Xylene	106		11.024				ND	7
S 114 Xylenes, Total	106		11.245				ND	7
115 o-Xylene	106		11.366				ND	7
116 Styrene	104		11.384				ND	7
117 Bromoform	173		11.542				ND	
$ 121 4-Bromofluorobenzene (Surr)	95	11.823	11.823	-0.001	93	727260	9.56	
123 1,1,2,2-Tetrachloroethane	83		11.939				ND	
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	94	882701	10.0	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

MSV_HP25_ISSS_00063 Amount Added: 1.00 Units: uL Run Reagent

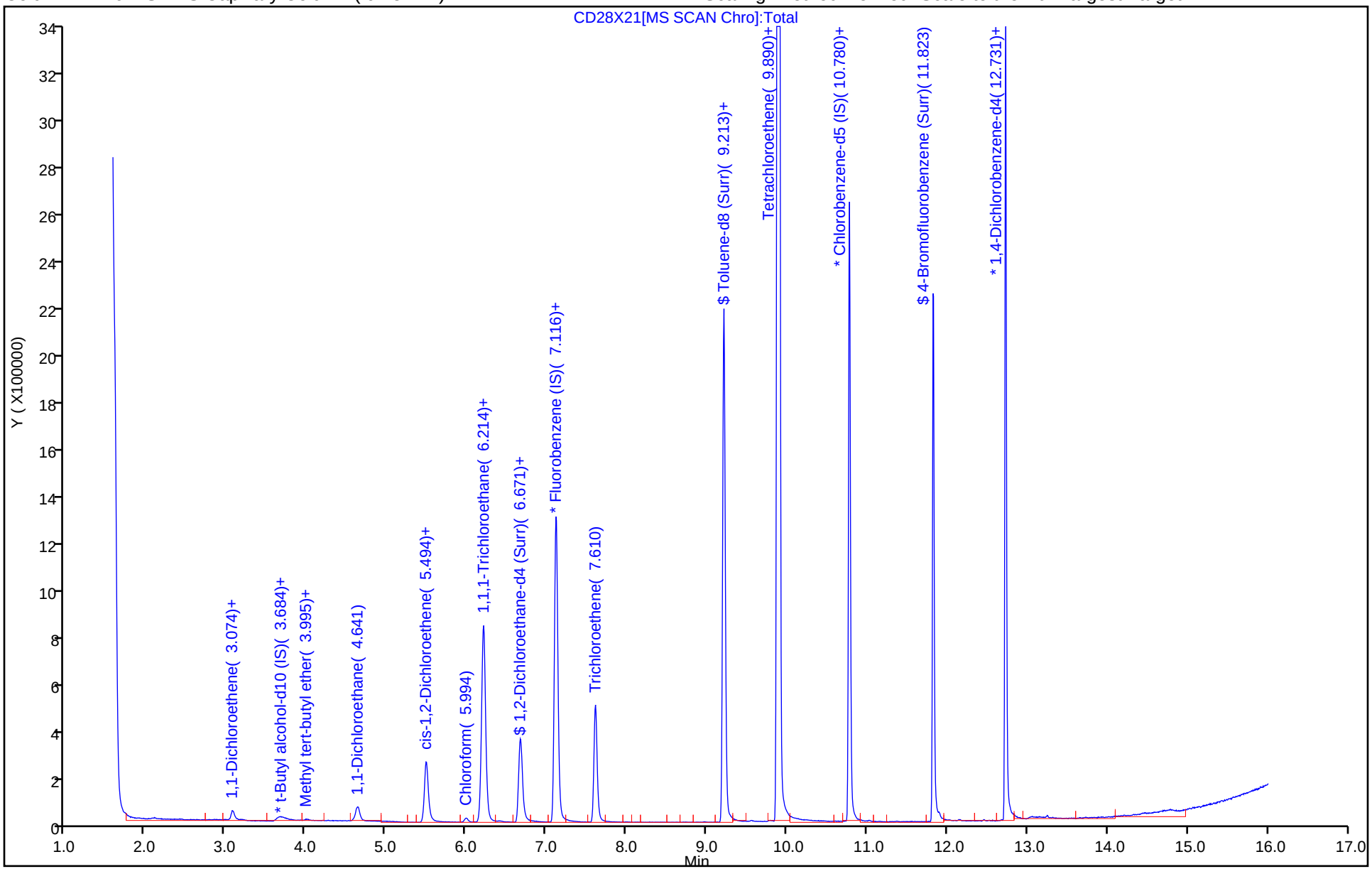
Report Date: 29-Dec-2022 10:43:05 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X21.D

Injection Date:	28-Dec-2022 16:52:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	410-110288-A-8	Lab Sample ID:	410-110288-8	Worklist Smp#:	22
Client ID:	HD-COD-SW-17-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X21.D				
Lims ID:	410-110288-A-8				
Client ID:	HD-COD-SW-17-0/1-0				
Sample Type:	Client				
Inject. Date:	28-Dec-2022 16:52:30	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0074091-022				
Operator ID:	knk41612	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	29-Dec-2022 10:43:04	Calib Date:	22-Aug-2022 22:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1603				

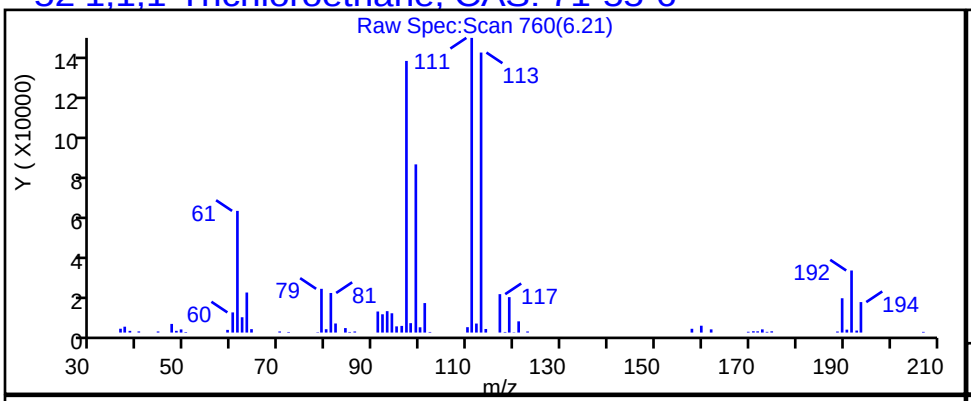
First Level Reviewer: innoonk Date: 29-Dec-2022 10:43:04

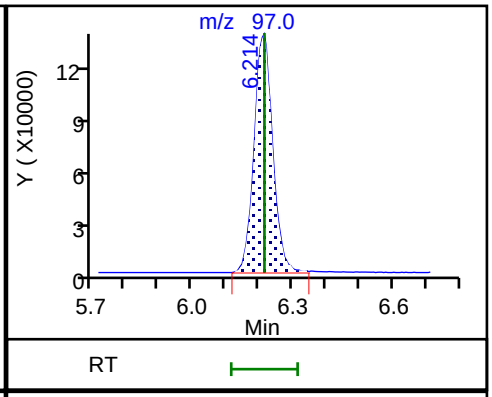
Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	9.86	98.55
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.67
$ 82 Toluene-d8 (Surr)	10.0	9.78	97.84
$ 121 4-Bromofluorobenzene (Surr)	10.0	9.56	95.63

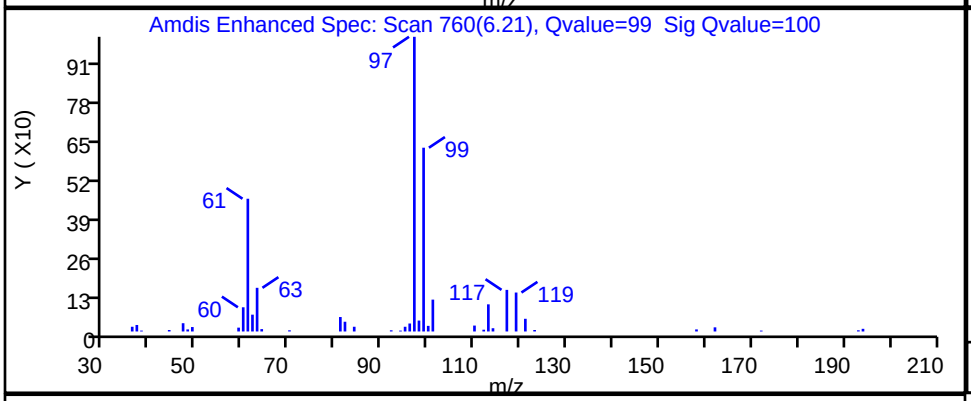
Eurofins Lancaster Laboratories Environment Testing, LLC

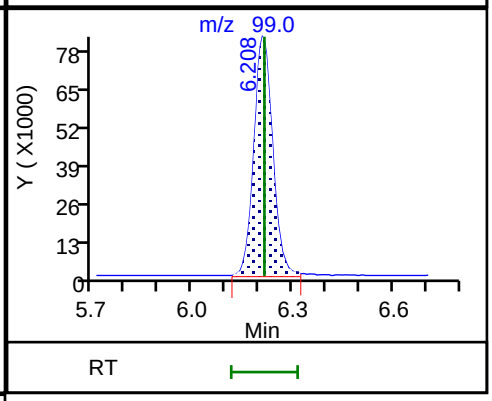
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X21.D				
Injection Date:	28-Dec-2022 16:52:30	Instrument ID:	10193		
Lims ID:	410-110288-A-8	Lab Sample ID:	410-110288-8		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

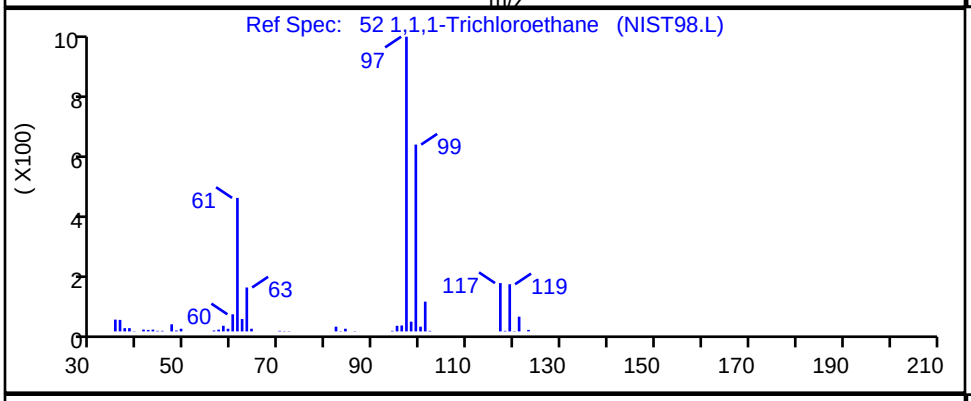
52 1,1,1-Trichloroethane, CAS: 71-55-6

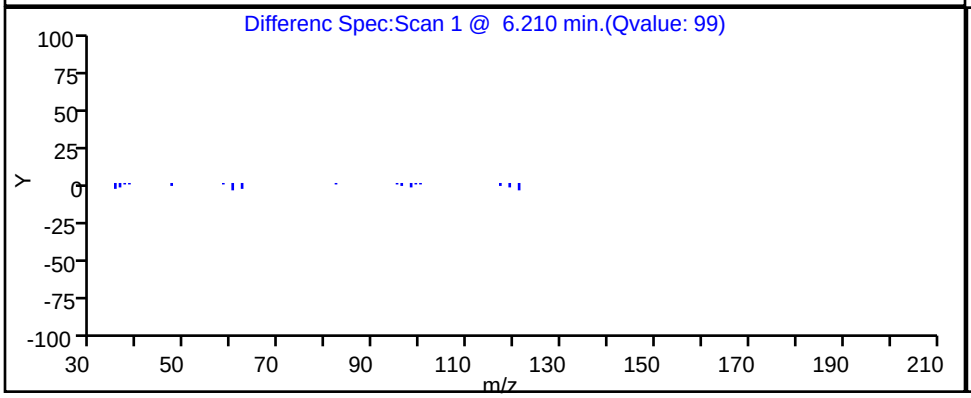


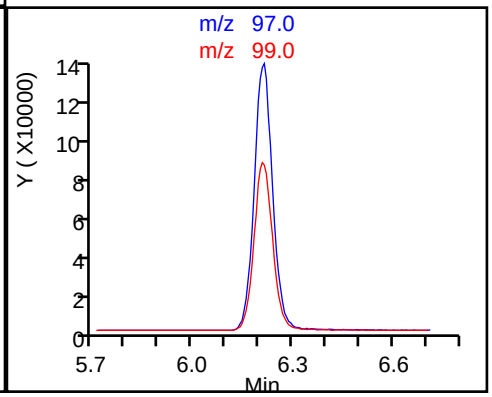








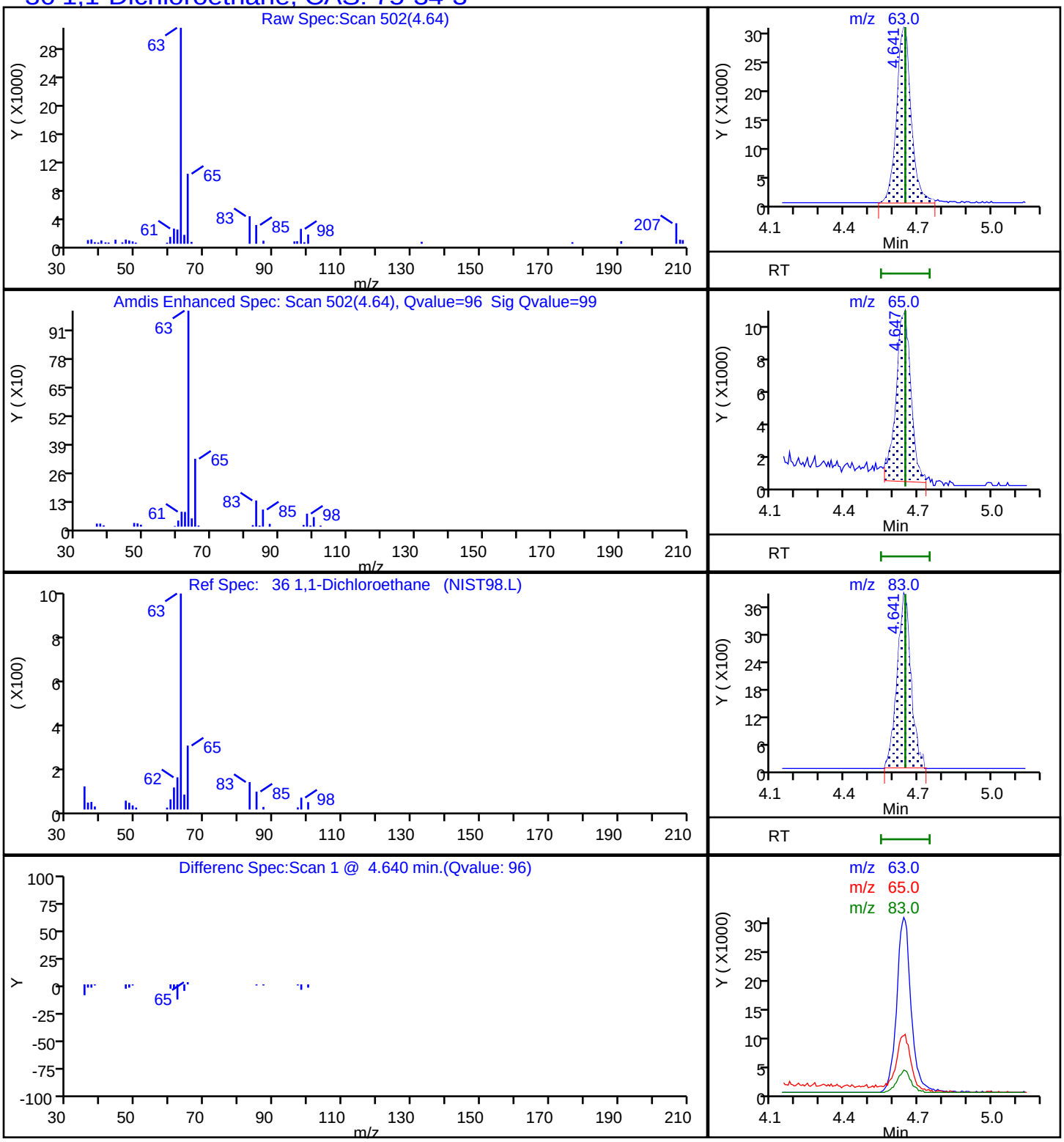




Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X21.D				
Injection Date:	28-Dec-2022 16:52:30	Instrument ID:	10193		
Lims ID:	410-110288-A-8	Lab Sample ID:	410-110288-8		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

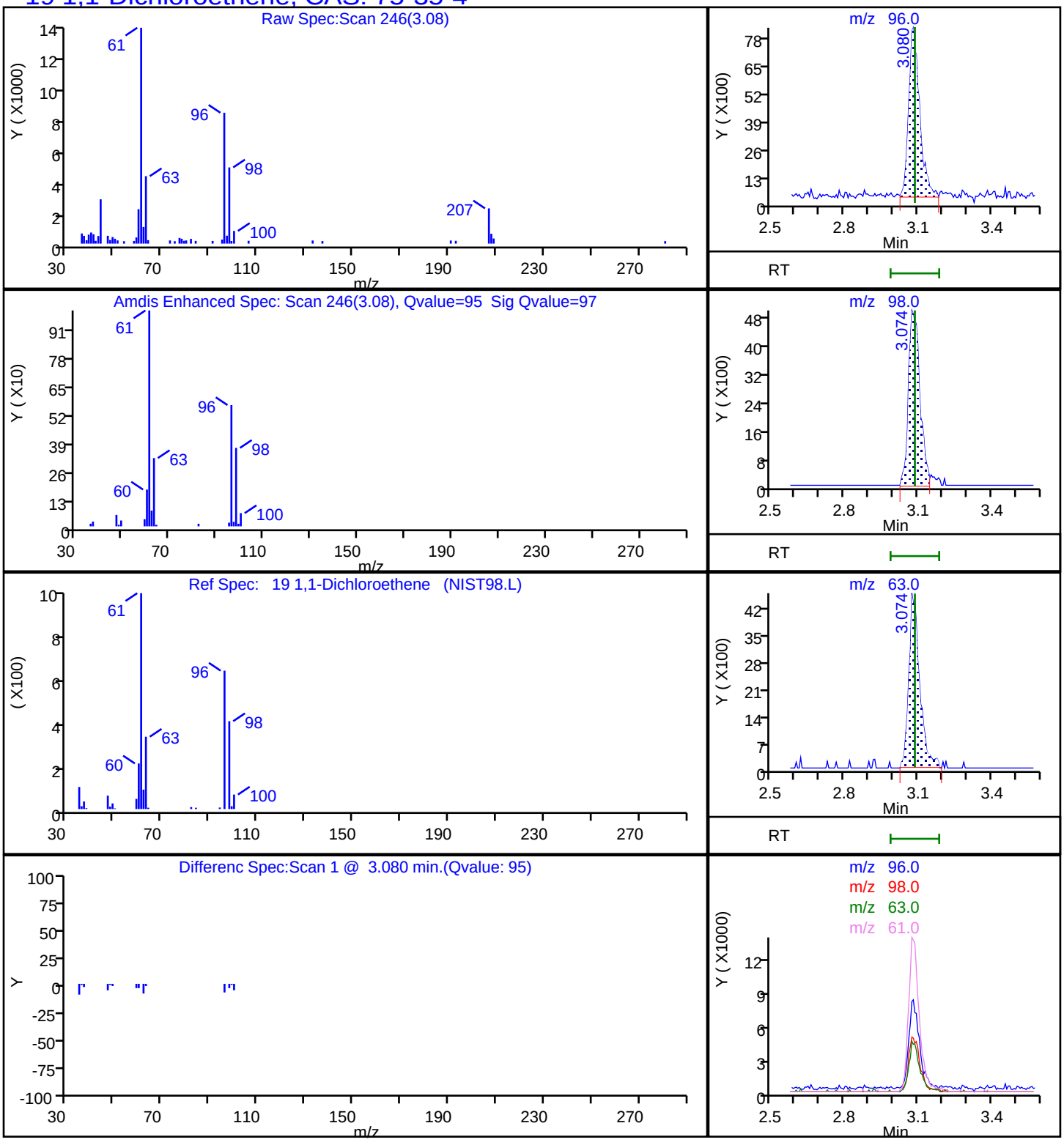
36 1,1-Dichloroethane, CAS: 75-34-3



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X21.D				
Injection Date:	28-Dec-2022 16:52:30	Instrument ID:	10193		
Lims ID:	410-110288-A-8	Lab Sample ID:	410-110288-8		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

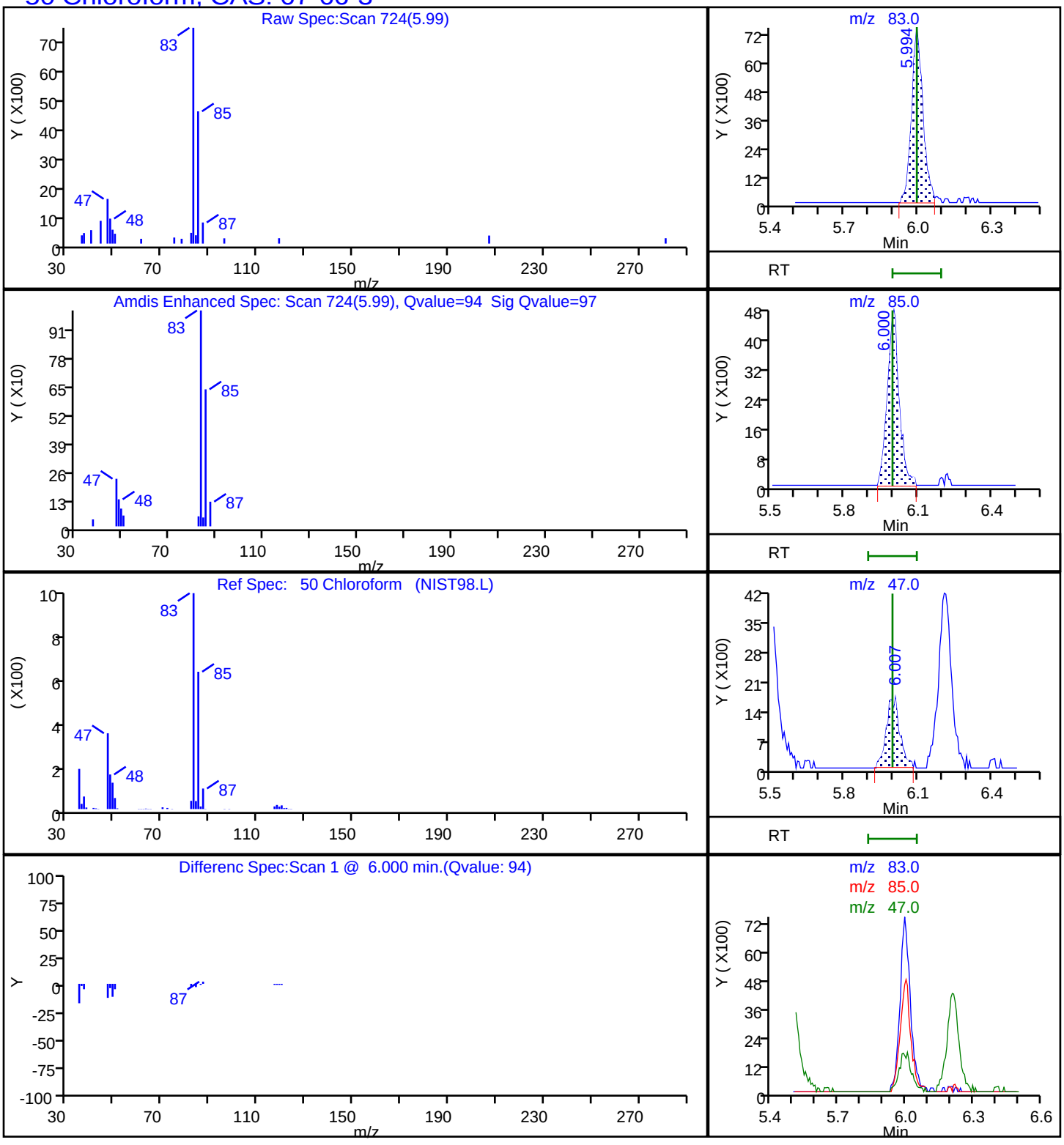
19 1,1-Dichloroethene, CAS: 75-35-4



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X21.D				
Injection Date:	28-Dec-2022 16:52:30	Instrument ID:	10193		
Lims ID:	410-110288-A-8	Lab Sample ID:	410-110288-8		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

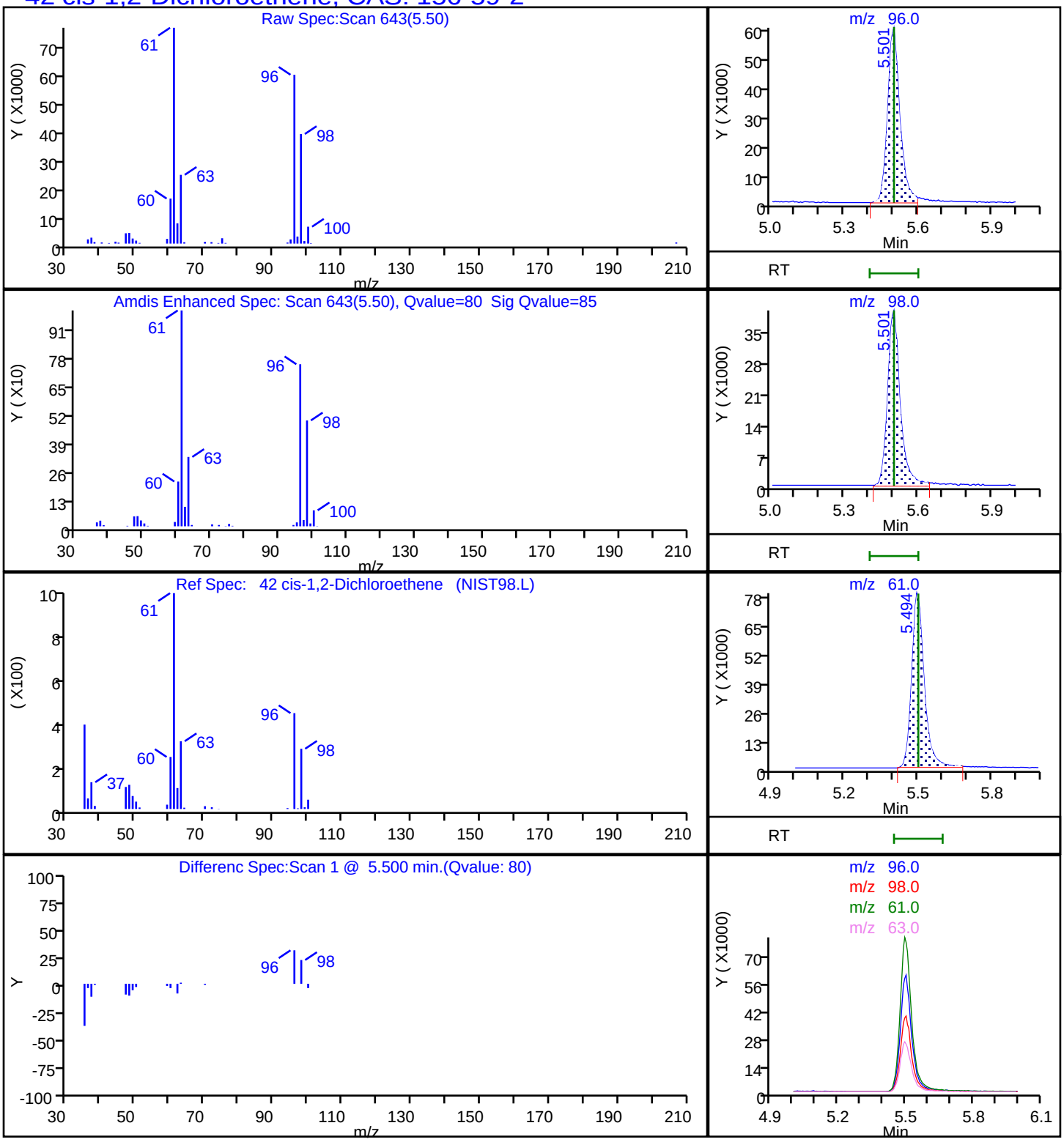
50 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X21.D				
Injection Date:	28-Dec-2022 16:52:30	Instrument ID:	10193		
Lims ID:	410-110288-A-8	Lab Sample ID:	410-110288-8		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

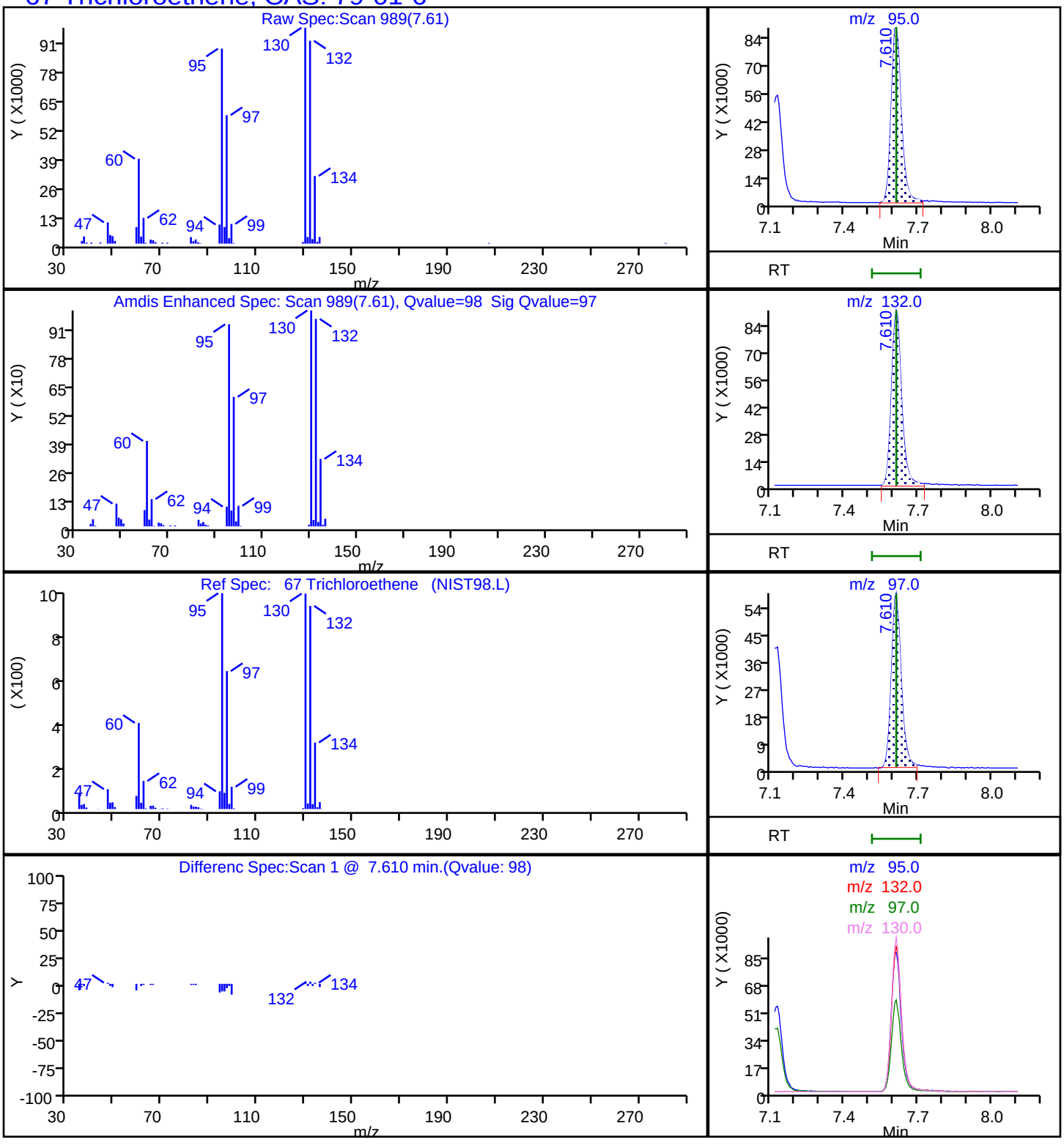
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X21.D				
Injection Date:	28-Dec-2022 16:52:30	Instrument ID:	10193		
Lims ID:	410-110288-A-8	Lab Sample ID:	410-110288-8		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6



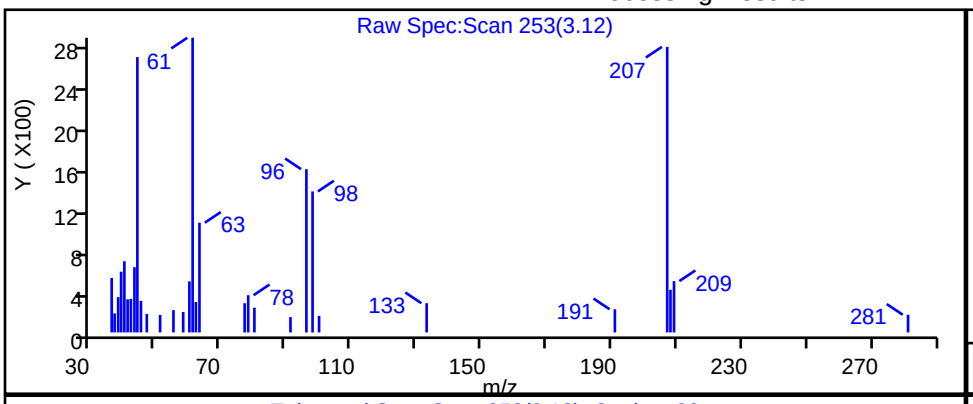
User Disabled Compound Report

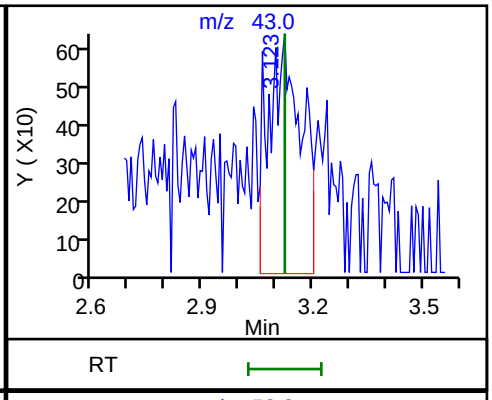
Eurofins Lancaster Laboratories Environment Testing, LLC

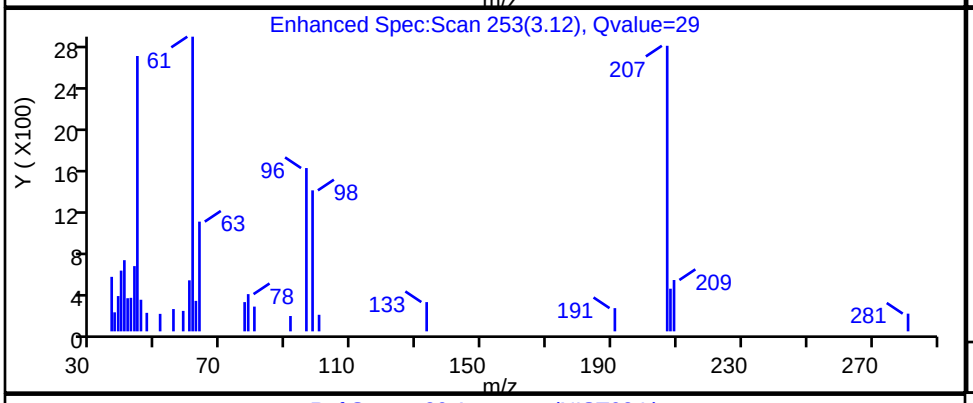
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X21.D				
Injection Date:	28-Dec-2022 16:52:30	Instrument ID:	10193		
Lims ID:	410-110288-A-8	Lab Sample ID:	410-110288-8		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

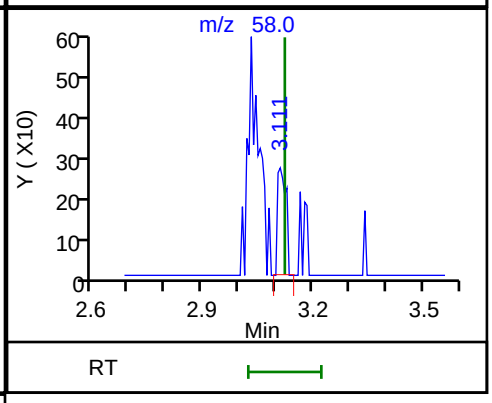
20 Acetone, CAS: 67-64-1

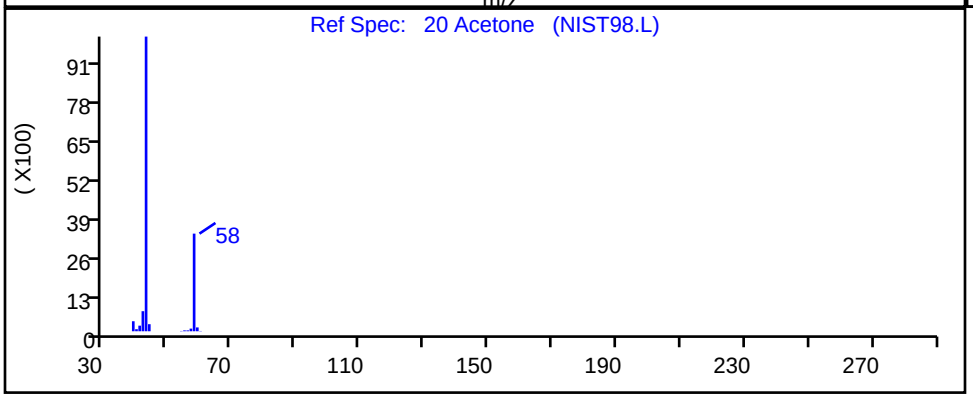
Processing Results











RT	Mass	Response	Amount
3.12	43.00	3975	0.499478
3.11	58.00	431	

Reviewer: innoonk, 29-Dec-2022 10:42:16

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

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

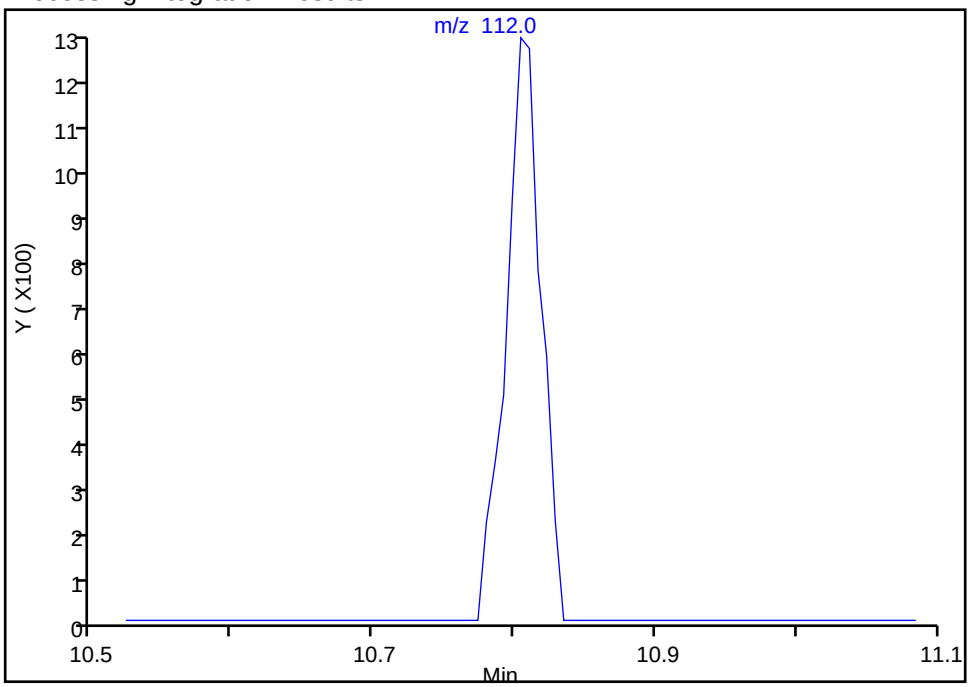
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X21.D				
Injection Date:	28-Dec-2022 16:52:30	Instrument ID:	10193		
Lims ID:	410-110288-A-8	Lab Sample ID:	410-110288-8		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

110 Chlorobenzene, CAS: 108-90-7

Signal: 1

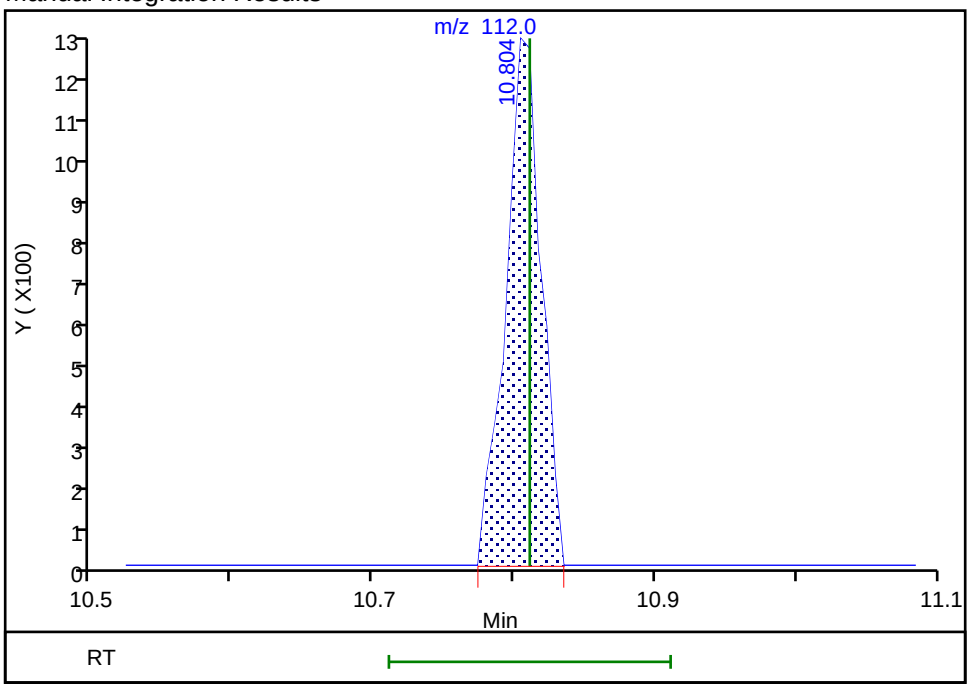
Not Detected
Expected RT: 10.81

Processing Integration Results



Manual Integration Results

RT: 10.80
Area: 2159
Amount: 0.012072
Amount Units: ug/l



Reviewer: innoonk, 29-Dec-2022 10:42:55
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

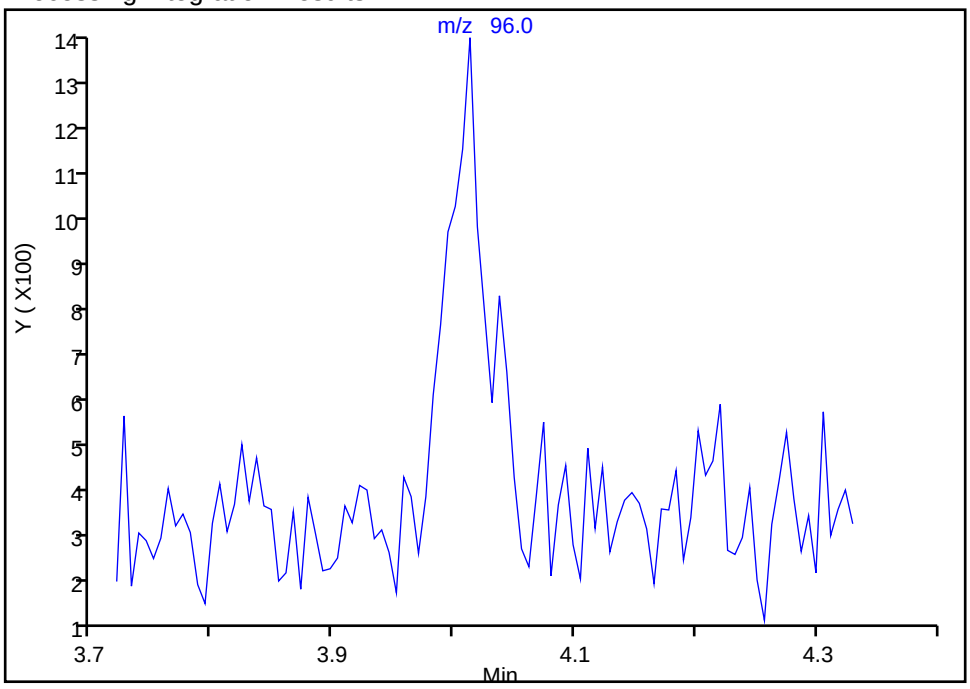
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X21.D				
Injection Date:	28-Dec-2022 16:52:30	Instrument ID:	10193		
Lims ID:	410-110288-A-8	Lab Sample ID:	410-110288-8		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

34 trans-1,2-Dichloroethene, CAS: 156-60-5

Signal: 1

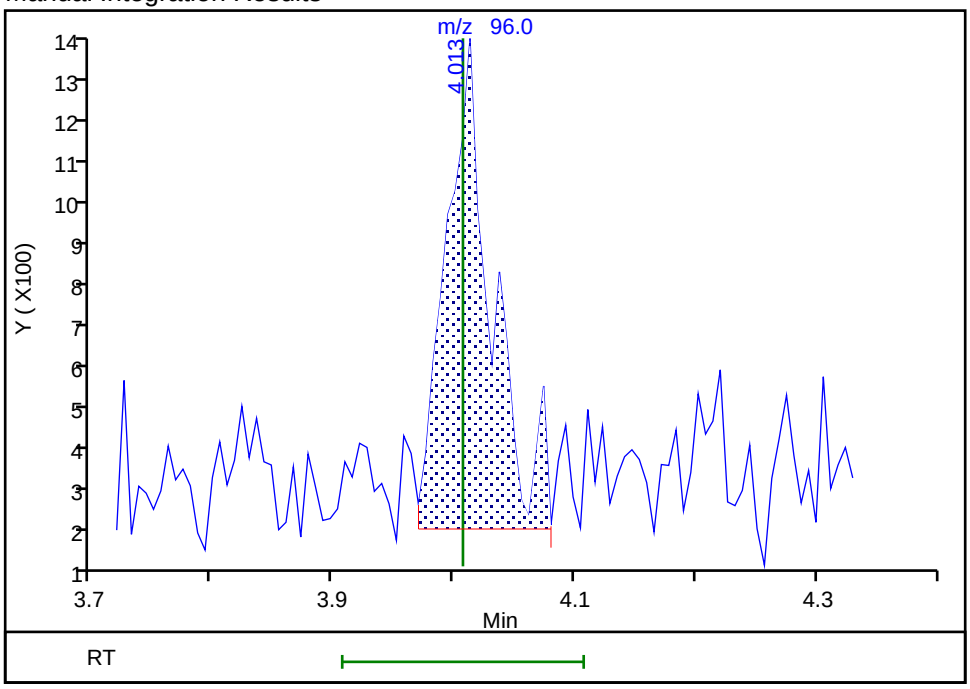
Not Detected
Expected RT: 4.01

Processing Integration Results



Manual Integration Results

RT: 4.01
Area: 2820
Amount: 0.051744
Amount Units: ug/l



Reviewer: innoonk, 29-Dec-2022 10:42:24
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-17-0/1-0 DL
Lab Sample ID: 410-110288-8 DL

Matrix: Water
Lab File ID: CD29X24.D

Analysis Method: 8260D
Date Collected: 12/21/2022 09:52

Sample wt/vol: 25(mL)
Date Analyzed: 12/29/2022 20:30

Soil Aliquot Vol:
Dilution Factor: 10

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

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

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

Analysis Batch No.: 331173
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	69		5.0	2.0

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)	100		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29X24.D
Lims ID: 410-110288-B-8 DL
Client ID: HD-COD-SW-17-0/1-0
Sample Type: Client
Inject. Date: 29-Dec-2022 20:30:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 10.0000
Sample Info: 410-0074209-025
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 30-Dec-2022 09:47:46 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1603

First Level Reviewer: innoonk Date: 30-Dec-2022 09:47:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		1.910				ND	7
6 Vinyl chloride	62		2.007				ND	
9 Bromomethane	94		2.294				ND	
10 Chloroethane	64		2.355				ND	
19 1,1-Dichloroethene	96		3.074				ND	7
20 Acetone	43	3.123	3.111	0.012	37	4781	0.6223	
25 Carbon disulfide	76		3.330				ND	
29 Methylene Chloride	84		3.641				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	3.696	3.672	0.024	99	149136	50.0	
34 trans-1,2-Dichloroethene	96		3.995				ND	
33 Methyl tert-butyl ether	73		4.001				ND	7
36 1,1-Dichloroethane	63	4.653	4.641	0.012	96	10459	0.1153	
41 2-Butanone (MEK)	43		5.470				ND	7
42 cis-1,2-Dichloroethene	96	5.501	5.494	0.007	81	17549	0.3249	
47 Chlorobromomethane	128		5.830				ND	
50 Chloroform	83	6.007	5.994	0.013	73	2372	0.0277	
52 1,1,1-Trichloroethane	97	6.208	6.214	-0.006	40	39292	0.5257	
$ 53 Dibromofluoromethane (Surr)	113	6.220	6.214	0.006	94	426959	10.0	
55 Carbon tetrachloride	117		6.421				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.677	6.671	0.006	40	87739	10.0	
59 Benzene	78		6.695				ND	
61 1,2-Dichloroethane	62		6.781				ND	
* 64 Fluorobenzene (IS)	96	7.122	7.116	0.006	99	1819043	10.0	
67 Trichloroethene	95	7.610	7.604	0.006	96	20817	0.3879	
69 1,2-Dichloropropane	63		7.945				ND	
75 Dichlorobromomethane	83		8.305				ND	
79 cis-1,3-Dichloropropene	75		8.878				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.085				ND	
$ 82 Toluene-d8 (Surr)	98	9.213	9.213	0.000	94	1833938	9.88	
83 Toluene	92		9.299				ND	7
84 trans-1,3-Dichloropropene	75		9.597				ND	
86 1,1,2-Trichloroethane	97		9.811				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
87 Tetrachloroethene	166	9.890	9.890	0.000	97	443182	6.94	
104 2-Hexanone	43		10.061				ND	
106 Chlorodibromomethane	129		10.207				ND	
107 Ethylene Dibromide	107		10.323				ND	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	85	1408895	10.0	
110 Chlorobenzene	112		10.811				ND	
111 1,1,1,2-Tetrachloroethane	131		10.896				ND	
112 Ethylbenzene	91		10.902				ND	
113 m-Xylene & p-Xylene	106		11.024				ND	
S 114 Xylenes, Total	106		11.245				ND	7
115 o-Xylene	106		11.365				ND	
116 Styrene	104		11.384				ND	
117 Bromoform	173		11.542				ND	
$ 121 4-Bromofluorobenzene (Surr)	95	11.822	11.823	-0.001	94	644095	9.38	
123 1,1,2,2-Tetrachloroethane	83		11.938				ND	
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	94	803391	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

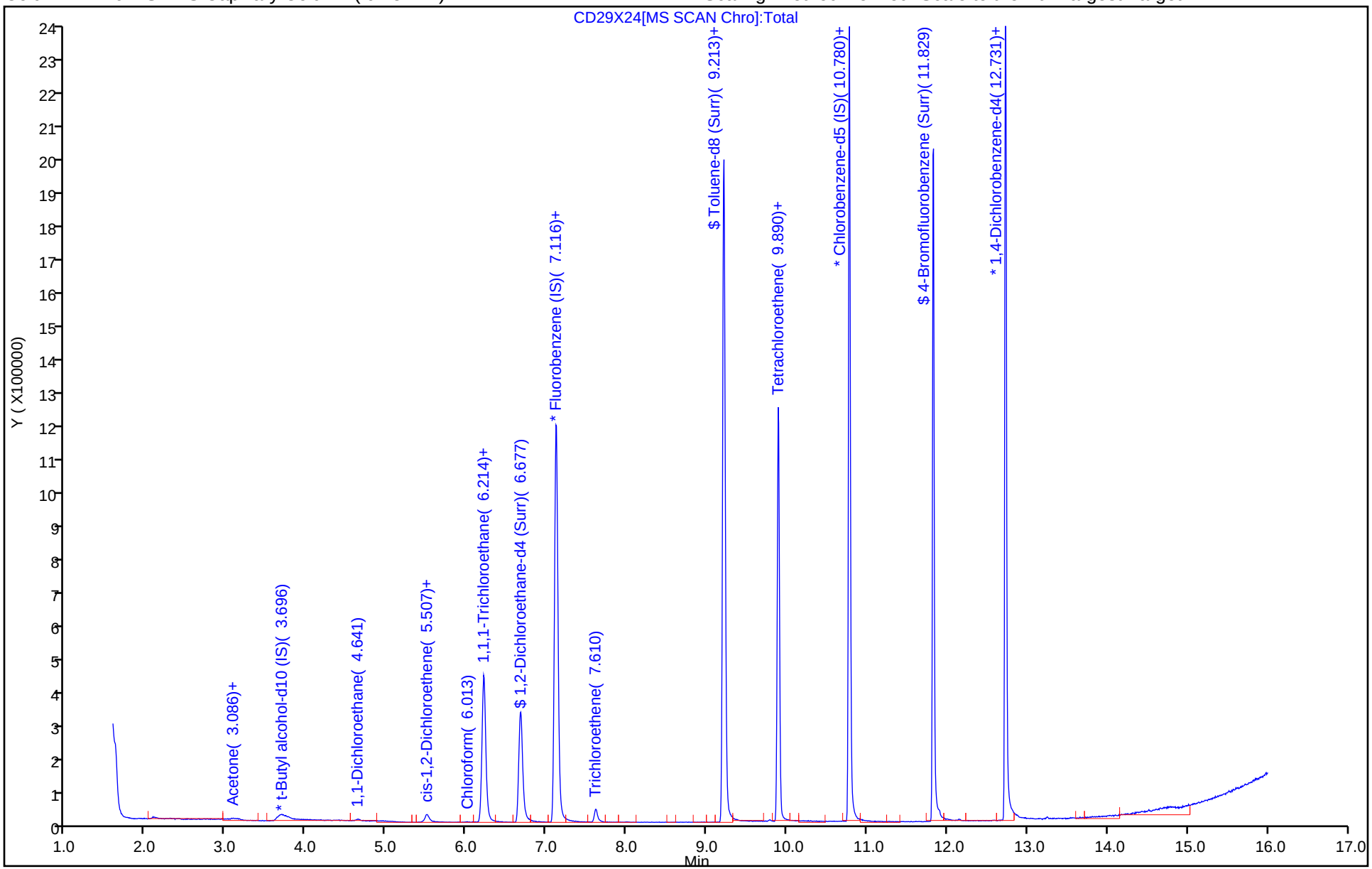
MSV_HP25_ISSS_00063 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 30-Dec-2022 09:47:47 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29X24.D				
Injection Date:	29-Dec-2022 20:30:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	410-110288-B-8 DL	Lab Sample ID:	410-110288-8	Worklist Smp#:	25
Client ID:	HD-COD-SW-17-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	24
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29X24.D
Lims ID: 410-110288-B-8 DL
Client ID: HD-COD-SW-17-0/1-0
Sample Type: Client
Inject. Date: 29-Dec-2022 20:30:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 10.0000
Sample Info: 410-0074209-025
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 30-Dec-2022 09:47:46 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1603

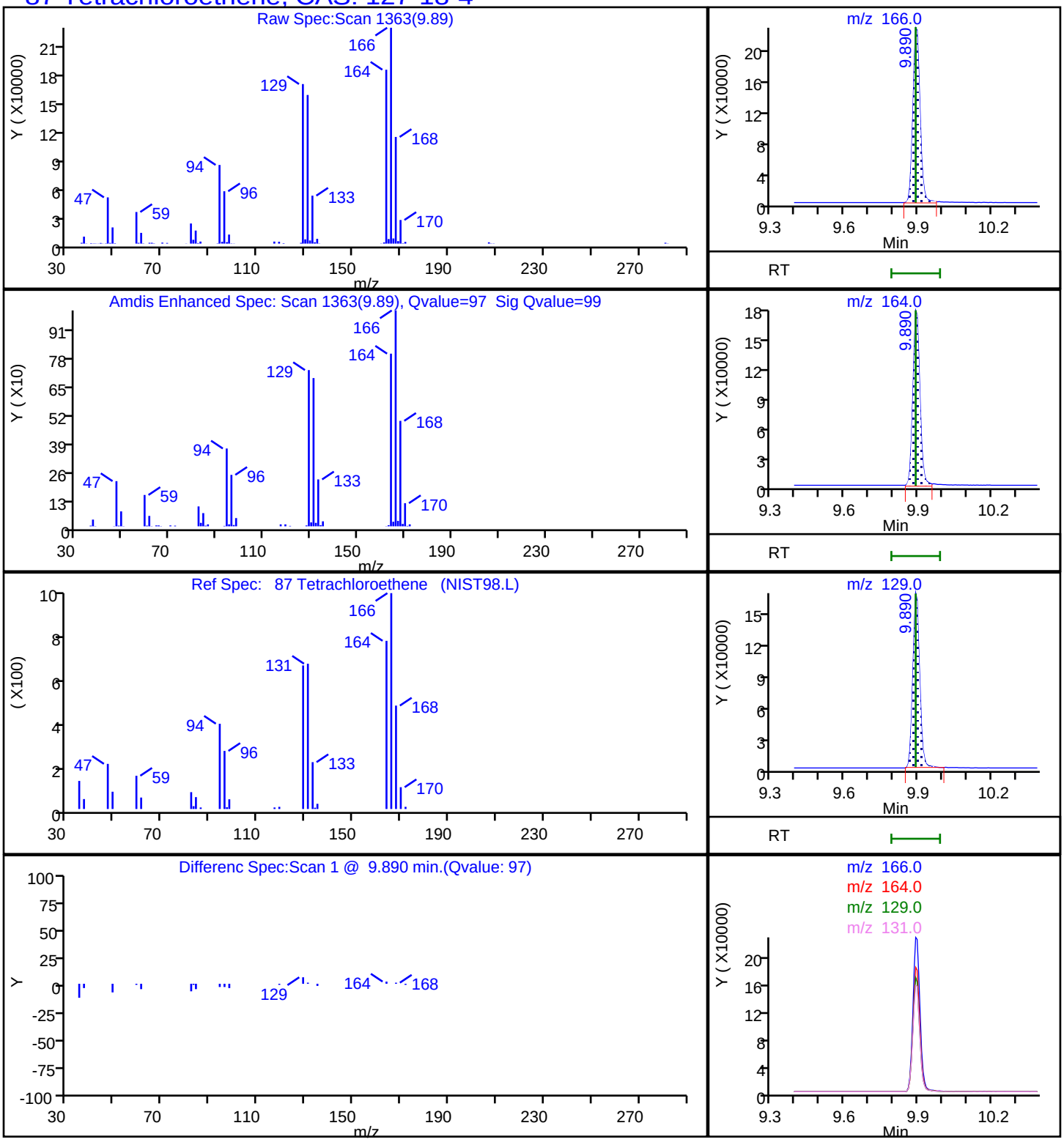
First Level Reviewer: innoonk Date: 30-Dec-2022 09:47:46

Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	10.0	100.43
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.0	100.39
$ 82 Toluene-d8 (Surr)	10.0	9.88	98.79
$ 121 4-Bromofluorobenzene (Surr)	10.0	9.38	93.75

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29X24.D				
Injection Date:	29-Dec-2022 20:30:30	Instrument ID:	10193		
Lims ID:	410-110288-B-8 DL	Lab Sample ID:	410-110288-8		
Client ID:	HD-COD-SW-17-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	10.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

87 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-26-0/1-0 Lab Sample ID: 410-110288-9

Matrix: Water Lab File ID: CD28X22.D

Analysis Method: 8260D Date Collected: 12/21/2022 10:55

Sample wt/vol: 25(mL) Date Analyzed: 12/28/2022 17:14

Soil Aliquot Vol: Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	0.13	J ^c cn	0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	ND		5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	0.42	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	2.9		0.50	0.20
108-88-3	Toluene	ND		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-26-0/1-0
Lab Sample ID: 410-110288-9

Matrix: Water
Lab File ID: CD28X22.D

Analysis Method: 8260D
Date Collected: 12/21/2022 10:55

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 17:14

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.18	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		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 Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X22.D
Lims ID: 410-110288-A-9
Client ID: HD-COD-SW-26-0/1-0
Sample Type: Client
Inject. Date: 28-Dec-2022 17:14:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074091-023
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 10:45:39 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1603

First Level Reviewer: innoonk Date: 29-Dec-2022 10:45:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	1.910	1.922	-0.012	15	4602	0.0619	
6 Vinyl chloride	62		2.020				ND	
9 Bromomethane	94		2.306				ND	7
10 Chloroethane	64		2.367				ND	
19 1,1-Dichloroethene	96	3.086	3.087	-0.001	95	5435	0.1253	
20 Acetone	43	3.123	3.123	0.000	53	5309	0.6510	
25 Carbon disulfide	76		3.343				ND	7
29 Methylene Chloride	84		3.654				ND	7
* 30 t-Butyl alcohol-d10 (IS)	65	3.666	3.684	-0.018	99	158301	50.0	
33 Methyl tert-butyl ether	73		4.001				ND	7
34 trans-1,2-Dichloroethene	96		4.007				ND	
36 1,1-Dichloroethane	63		4.647				ND	7
41 2-Butanone (MEK)	43		5.483				ND	
42 cis-1,2-Dichloroethene	96	5.519	5.501	0.018	83	4252	0.0726	a
47 Chlorobromomethane	128		5.836				ND	
50 Chloroform	83	5.994	5.995	-0.001	94	38530	0.4157	
52 1,1,1-Trichloroethane	97		6.214				ND	7
$ 53 Dibromofluoromethane (Surr)	113	6.214	6.214	0.000	94	458325	9.95	
55 Carbon tetrachloride	117		6.427				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.671	6.677	-0.006	74	95500	10.1	
59 Benzene	78		6.702				ND	7
61 1,2-Dichloroethane	62		6.781				ND	
* 64 Fluorobenzene (IS)	96	7.116	7.122	-0.006	99	1971543	10.0	
67 Trichloroethene	95	7.610	7.610	0.000	97	10242	0.1761	Ma
69 1,2-Dichloropropane	63		7.952				ND	
75 Dichlorobromomethane	83		8.311				ND	7
79 cis-1,3-Dichloropropene	75		8.878				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.085				ND	7
$ 82 Toluene-d8 (Surr)	98	9.213	9.214	-0.001	94	1983407	9.82	
83 Toluene	92		9.299				ND	7
84 trans-1,3-Dichloropropene	75		9.598				ND	
86 1,1,2-Trichloroethane	97		9.811				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
87 Tetrachloroethene	166	9.896	9.896	0.000	97	198232	2.85	
104 2-Hexanone	43		10.061				ND	
106 Chlorodibromomethane	129		10.213				ND	
107 Ethylene Dibromide	107		10.323				ND	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	85	1533111	10.0	
110 Chlorobenzene	112		10.811				ND	
111 1,1,1,2-Tetrachloroethane	131		10.896				ND	
112 Ethylbenzene	91		10.902				ND	7
113 m-Xylene & p-Xylene	106		11.024				ND	7
S 114 Xylenes, Total	106		11.245				ND	7
115 o-Xylene	106		11.366				ND	7
116 Styrene	104		11.384				ND	7
117 Bromoform	173		11.542				ND	
$ 121 4-Bromofluorobenzene (Surr)	95	11.829	11.823	0.006	94	711023	9.51	
123 1,1,2,2-Tetrachloroethane	83		11.939				ND	
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	94	874280	10.0	

QC Flag Legend

Processing Flags
7 - Failed Limit of Detection
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

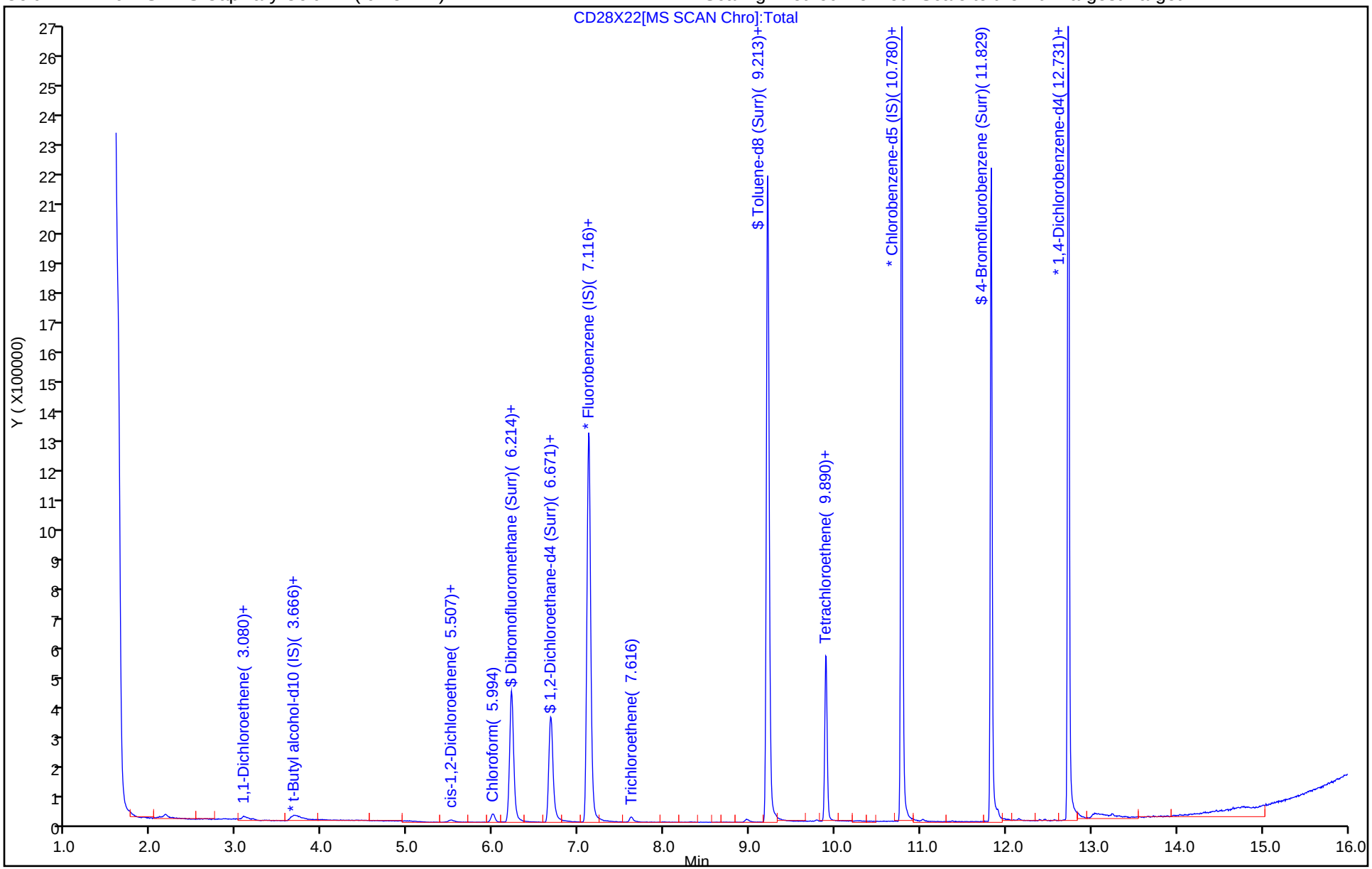
MSV_HP25_ISSS_00063 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 29-Dec-2022 10:45:40 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X22.D				
Injection Date:	28-Dec-2022 17:14:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	410-110288-A-9	Lab Sample ID:	410-110288-9	Worklist Smp#:	23
Client ID:	HD-COD-SW-26-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X22.D
Lims ID: 410-110288-A-9
Client ID: HD-COD-SW-26-0/1-0
Sample Type: Client
Inject. Date: 28-Dec-2022 17:14:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074091-023
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 10:45:39 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1603

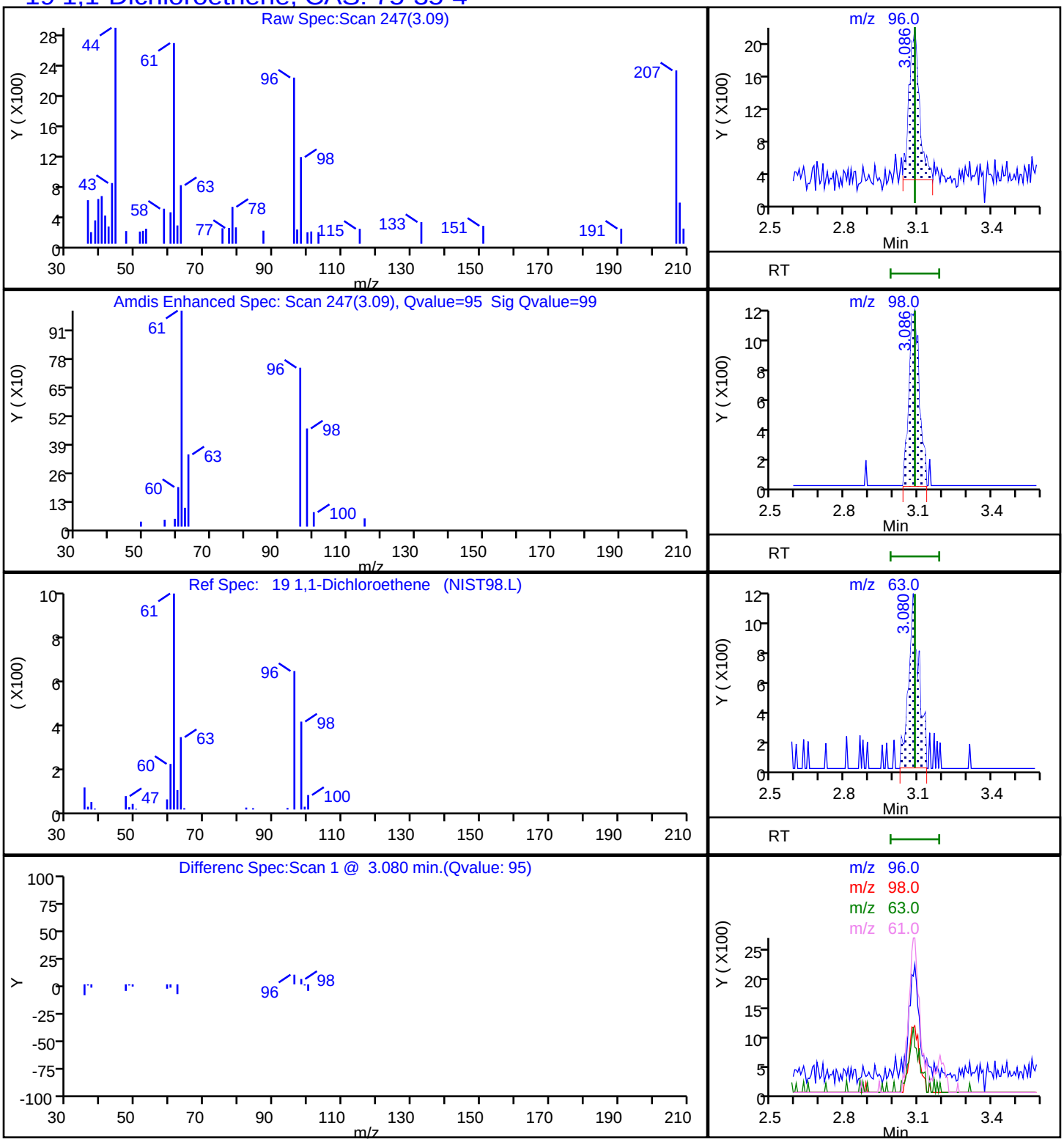
First Level Reviewer: innoonk Date: 29-Dec-2022 10:45:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	9.95	99.47
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.81
$ 82 Toluene-d8 (Surr)	10.0	9.82	98.18
$ 121 4-Bromofluorobenzene (Surr)	10.0	9.51	95.11

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X22.D				
Injection Date:	28-Dec-2022 17:14:30	Instrument ID:	10193		
Lims ID:	410-110288-A-9	Lab Sample ID:	410-110288-9		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

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

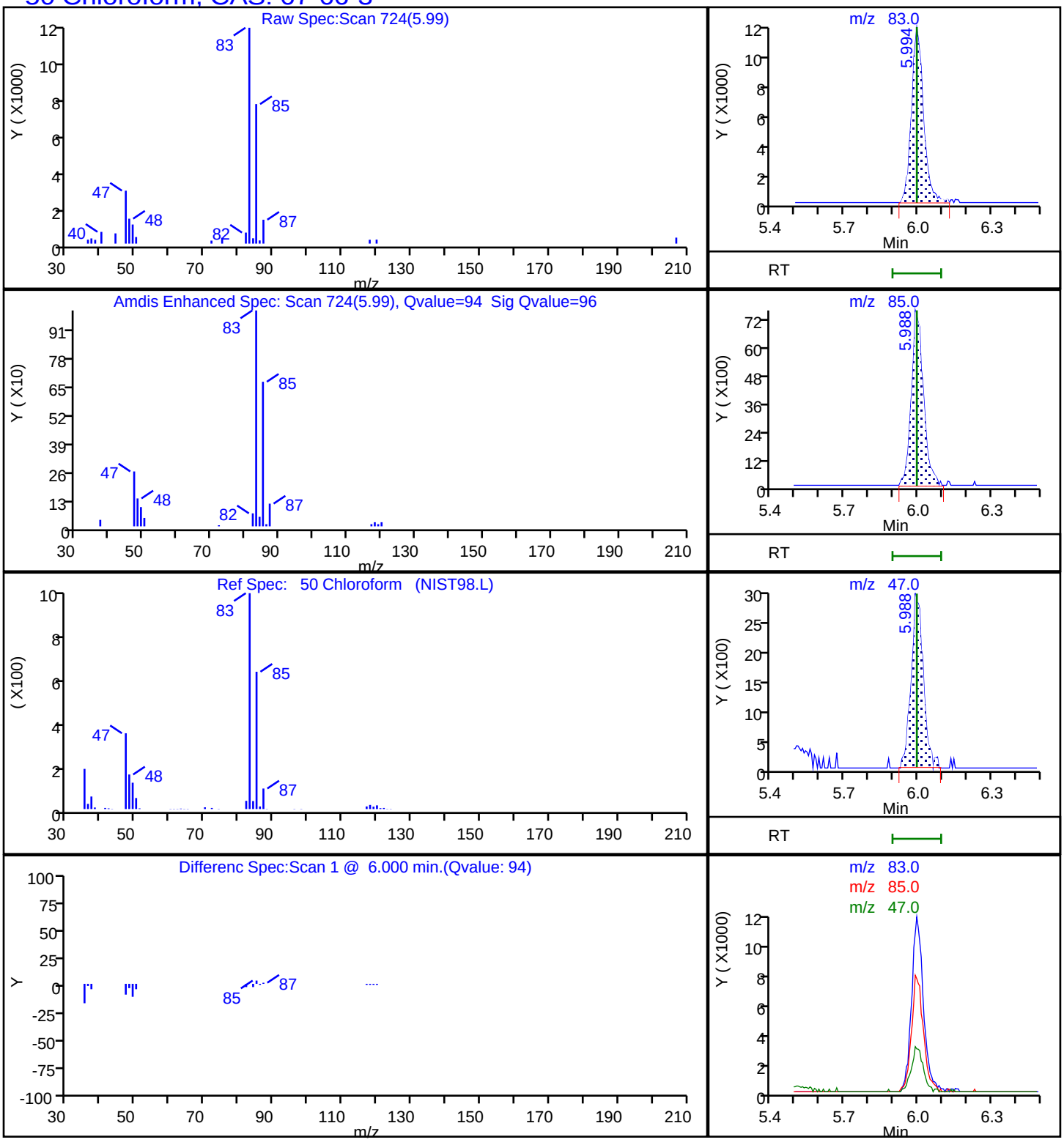


Report Date: 29-Dec-2022 10:45:40 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X22.D				
Injection Date:	28-Dec-2022 17:14:30	Instrument ID:	10193		
Lims ID:	410-110288-A-9	Lab Sample ID:	410-110288-9		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

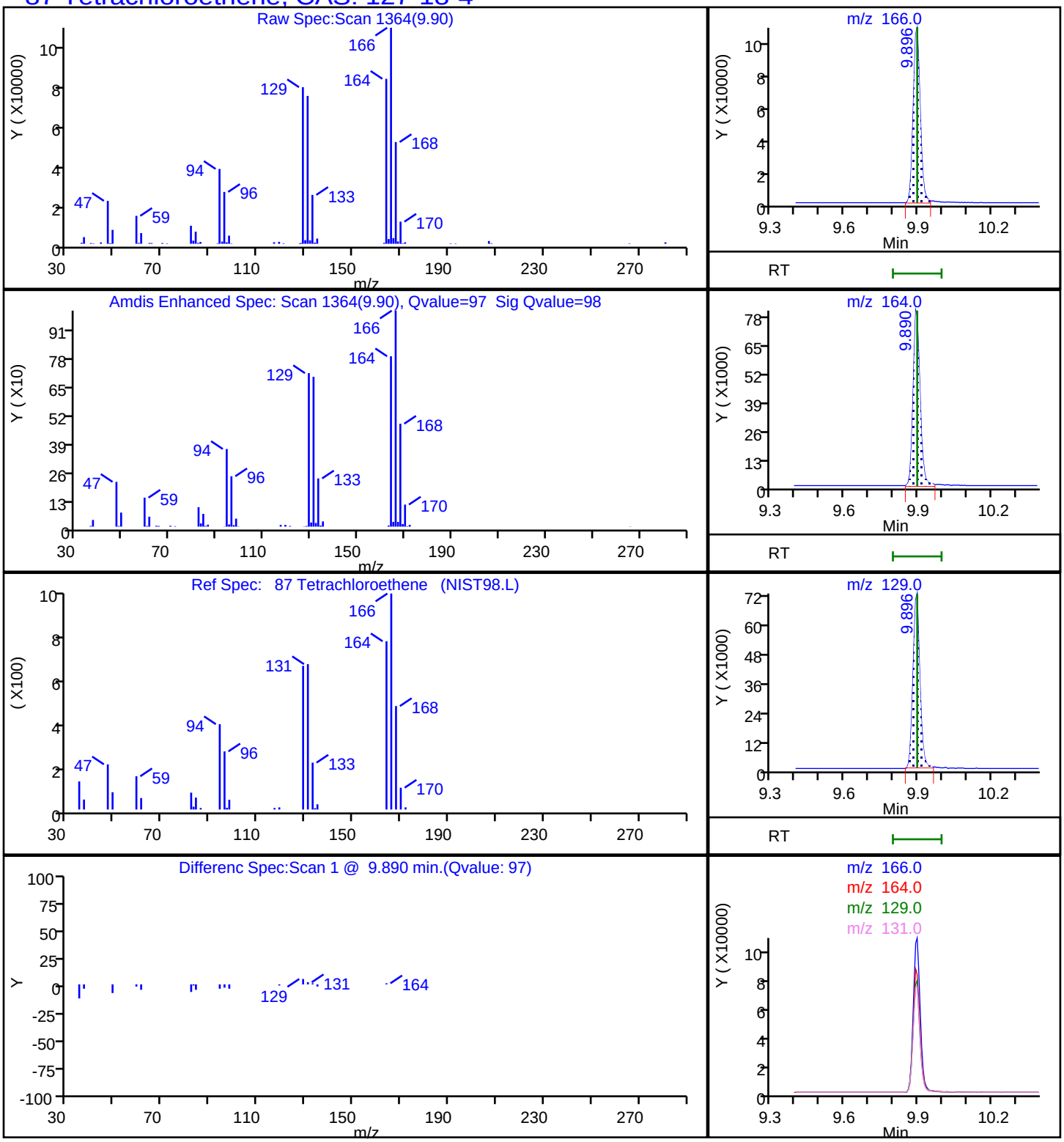
50 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X22.D				
Injection Date:	28-Dec-2022 17:14:30	Instrument ID:	10193		
Lims ID:	410-110288-A-9	Lab Sample ID:	410-110288-9		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

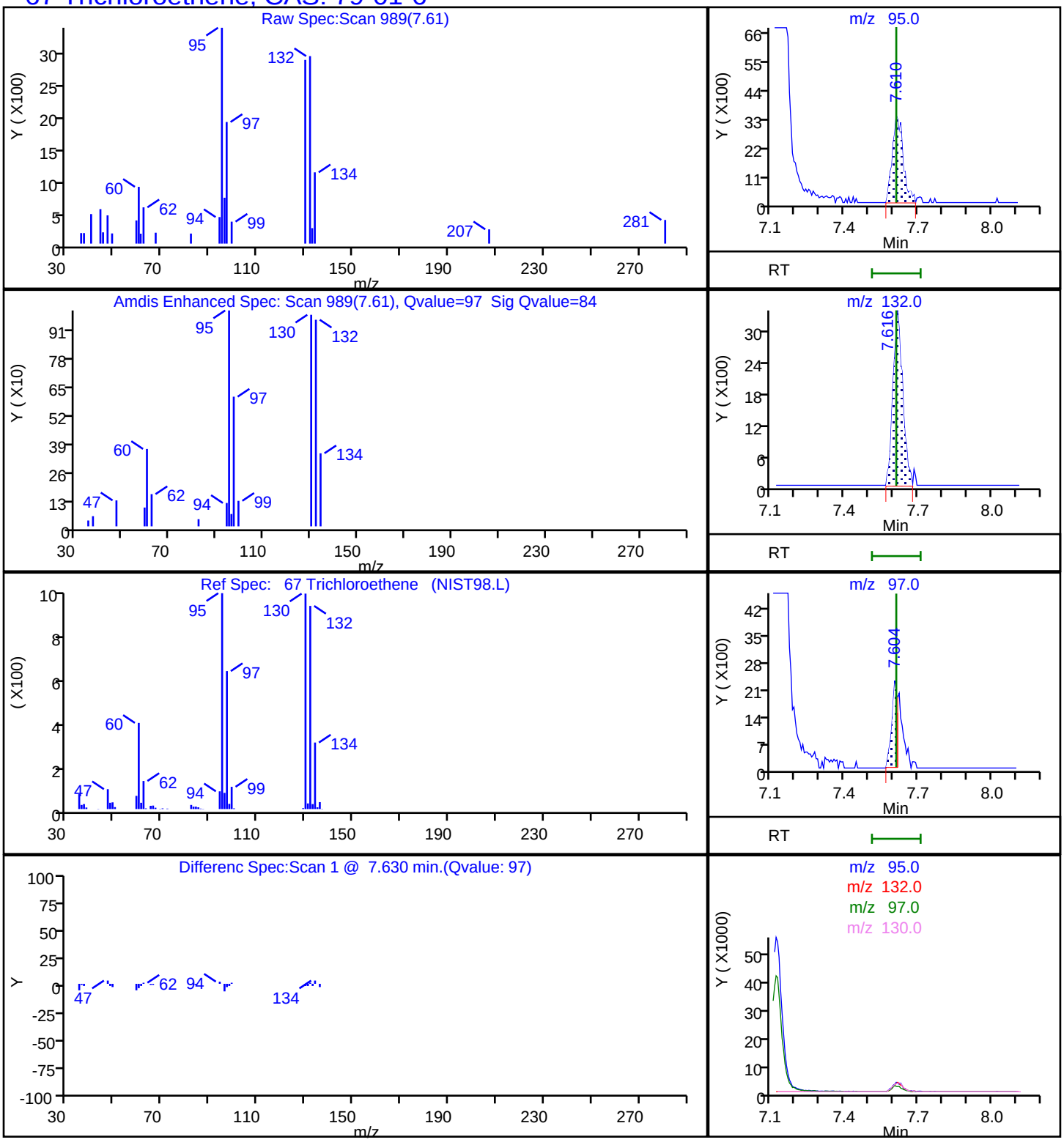
87 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X22.D				
Injection Date:	28-Dec-2022 17:14:30	Instrument ID:	10193		
Lims ID:	410-110288-A-9	Lab Sample ID:	410-110288-9		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

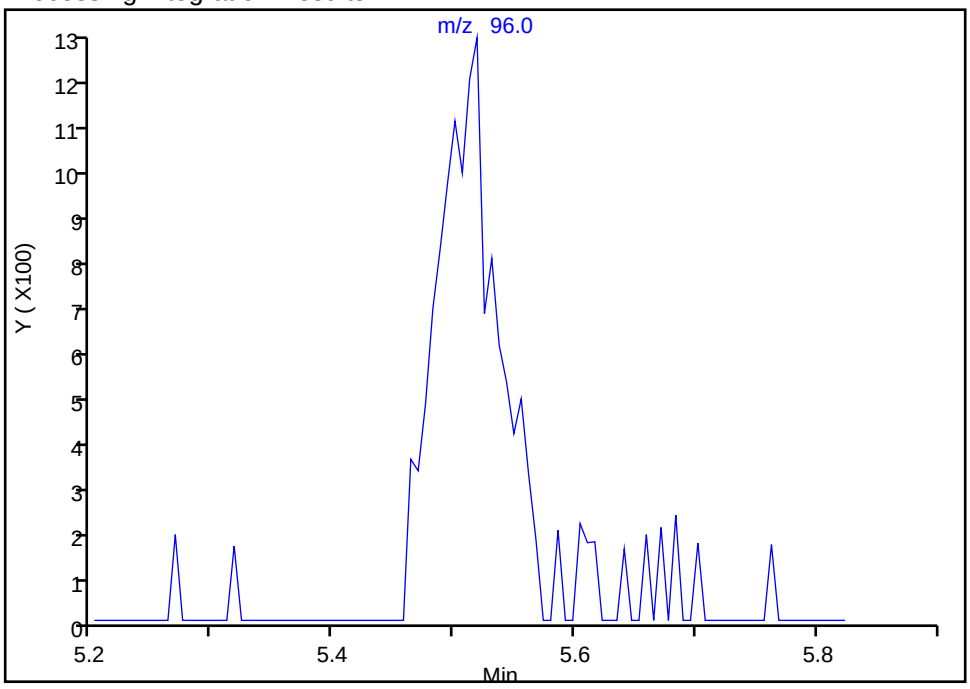
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X22.D				
Injection Date:	28-Dec-2022 17:14:30	Instrument ID:	10193		
Lims ID:	410-110288-A-9	Lab Sample ID:	410-110288-9		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

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

Signal: 1

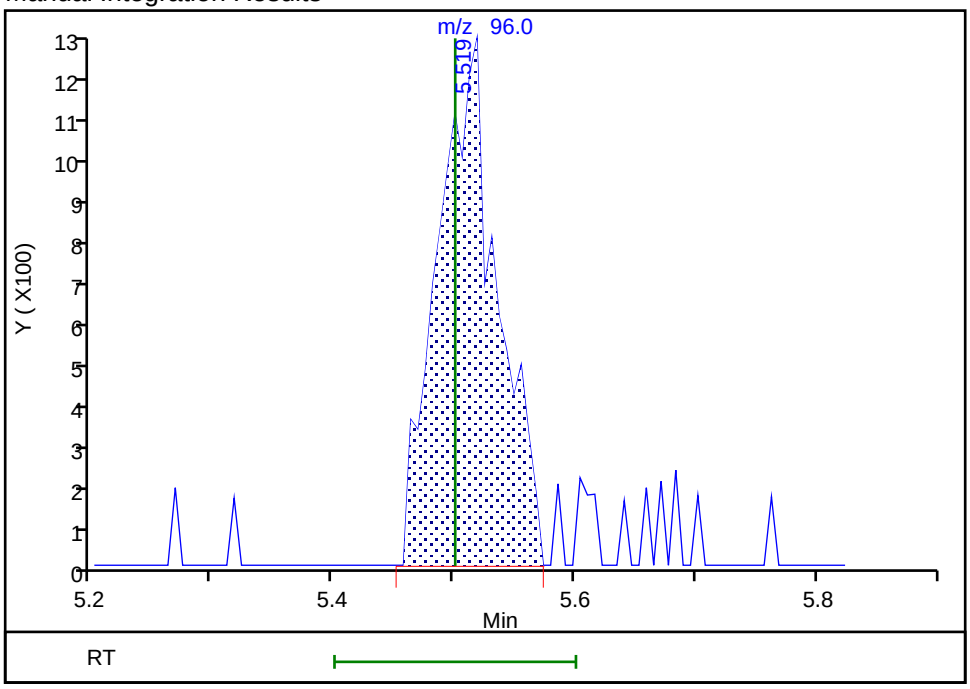
Not Detected
Expected RT: 5.50

Processing Integration Results



Manual Integration Results

RT: 5.52
Area: 4252
Amount: 0.072635
Amount Units: ug/l



Reviewer: innoonk, 29-Dec-2022 10:44:44
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

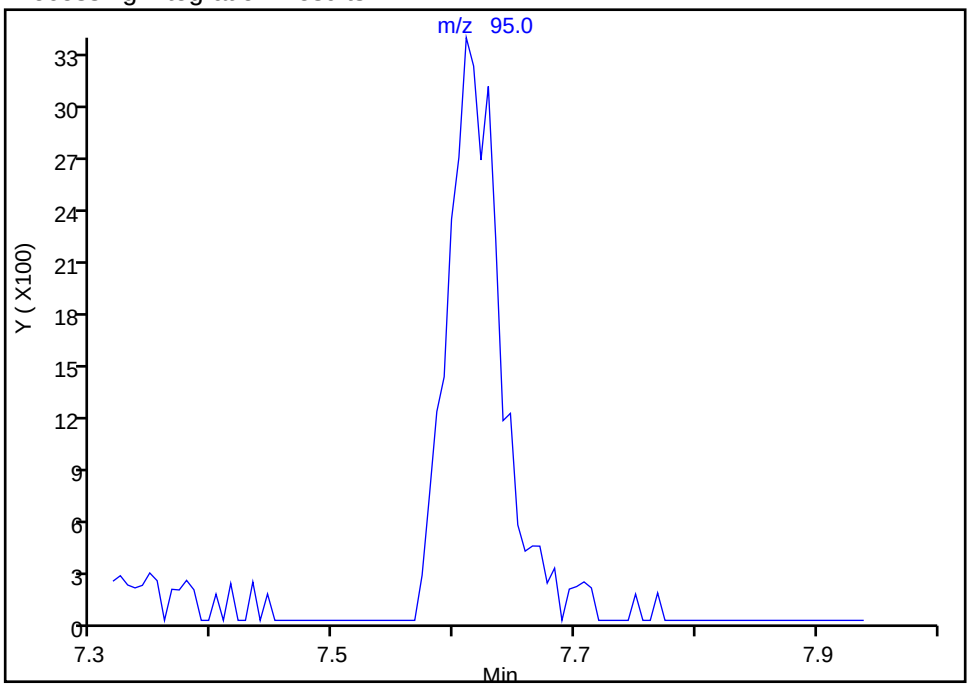
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X22.D				
Injection Date:	28-Dec-2022 17:14:30	Instrument ID:	10193		
Lims ID:	410-110288-A-9	Lab Sample ID:	410-110288-9		
Client ID:	HD-COD-SW-26-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6

Signal: 1

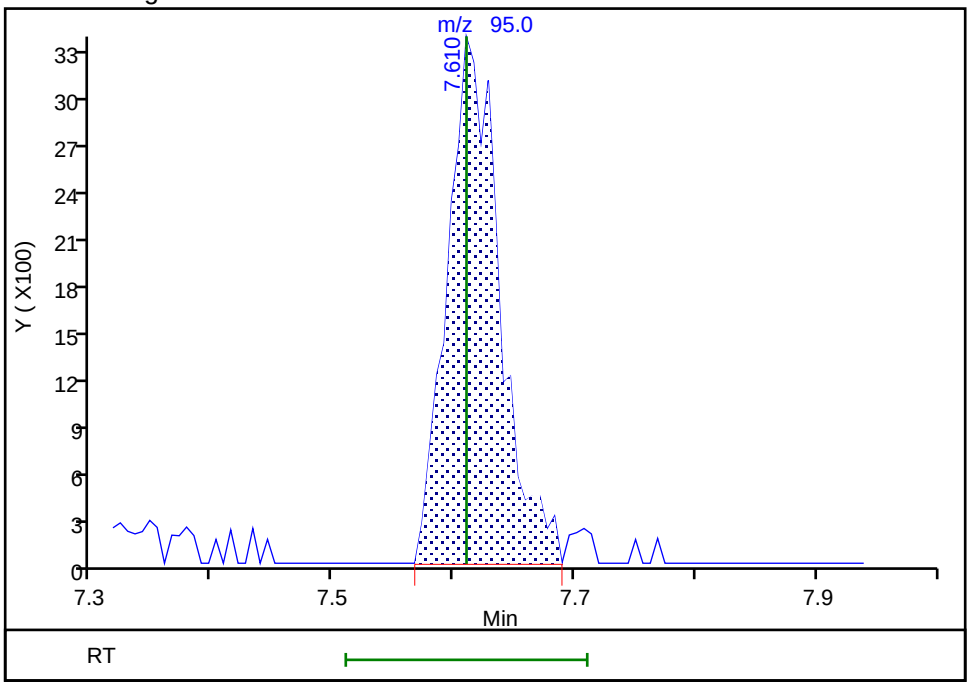
Not Detected
Expected RT: 7.61

Processing Integration Results



Manual Integration Results

RT: 7.61
Area: 10242
Amount: 0.176076
Amount Units: ug/l



Reviewer: innoonk, 29-Dec-2022 10:45:07
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-27-0/1-0 Lab Sample ID: 410-110288-10

Matrix: Water Lab File ID: CD28X23.D

Analysis Method: 8260D Date Collected: 12/21/2022 11:20

Sample wt/vol: 25(mL) Date Analyzed: 12/28/2022 17:36

Soil Aliquot Vol: Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND	^c cn	0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	2.0	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.11	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-27-0/1-0
Lab Sample ID: 410-110288-10

Matrix: Water
Lab File ID: CD28X23.D

Analysis Method: 8260D
Date Collected: 12/21/2022 11:20

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 17:36

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.14	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X23.D
Lims ID: 410-110288-A-10
Client ID: HD-COD-SW-27-0/1-0
Sample Type: Client
Inject. Date: 28-Dec-2022 17:36:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074091-024
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 10:46:36 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1603

First Level Reviewer: innoonk Date: 29-Dec-2022 10:46:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	1.910	1.922	-0.012	98	6294	0.0853	
6 Vinyl chloride	62		2.020				ND	
9 Bromomethane	94		2.306				ND	7
10 Chloroethane	64		2.367				ND	
19 1,1-Dichloroethene	96		3.087				ND	7
20 Acetone	43	3.123	3.123	0.000	97	15063	2.01	
25 Carbon disulfide	76	3.330	3.343	-0.013	99	9430	0.0708	
29 Methylene Chloride	84		3.654				ND	7
* 30 t-Butyl alcohol-d10 (IS)	65	3.684	3.684	0.000	99	145818	50.0	
33 Methyl tert-butyl ether	73		4.001				ND	
34 trans-1,2-Dichloroethene	96		4.007				ND	
36 1,1-Dichloroethane	63		4.647				ND	
41 2-Butanone (MEK)	43		5.483				ND	7
42 cis-1,2-Dichloroethene	96	5.501	5.501	0.000	81	6423	0.1105	
47 Chlorobromomethane	128		5.836				ND	
50 Chloroform	83	6.001	5.995	0.005	93	4583	0.0498	
52 1,1,1-Trichloroethane	97		6.214				ND	
$ 53 Dibromofluoromethane (Surr)	113	6.214	6.214	0.000	94	454533	9.94	
55 Carbon tetrachloride	117		6.427				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.677	6.677	0.000	41	93788	9.97	
59 Benzene	78	6.689	6.702	-0.013	40	6451	0.0286	a
61 1,2-Dichloroethane	62		6.781				ND	7
* 64 Fluorobenzene (IS)	96	7.116	7.122	-0.006	99	1957224	10.0	
67 Trichloroethene	95	7.616	7.610	0.006	95	8183	0.1417	
69 1,2-Dichloropropane	63		7.952				ND	
75 Dichlorobromomethane	83		8.311				ND	7
79 cis-1,3-Dichloropropene	75		8.878				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.085				ND	7
$ 82 Toluene-d8 (Surr)	98	9.213	9.214	-0.001	94	1971988	9.94	
83 Toluene	92	9.305	9.299	0.006	92	4044	0.0276	
84 trans-1,3-Dichloropropene	75		9.598				ND	
86 1,1,2-Trichloroethane	97		9.811				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
87 Tetrachloroethene	166	9.890	9.896	-0.006	96	4659	0.0683	
104 2-Hexanone	43		10.061				ND	7
106 Chlorodibromomethane	129		10.213				ND	
107 Ethylene Dibromide	107		10.323				ND	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	85	1504990	10.0	
110 Chlorobenzene	112		10.811				ND	
111 1,1,1,2-Tetrachloroethane	131		10.896				ND	
112 Ethylbenzene	91		10.902				ND	7
113 m-Xylene & p-Xylene	106		11.024				ND	7
S 114 Xylenes, Total	106		11.245				ND	7
115 o-Xylene	106		11.366				ND	7
116 Styrene	104		11.384				ND	7
117 Bromoform	173		11.542				ND	
$ 121 4-Bromofluorobenzene (Surr)	95	11.829	11.823	0.006	96	702047	9.57	
123 1,1,2,2-Tetrachloroethane	83		11.939				ND	
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	94	866984	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

a - User Assigned ID

Reagents:

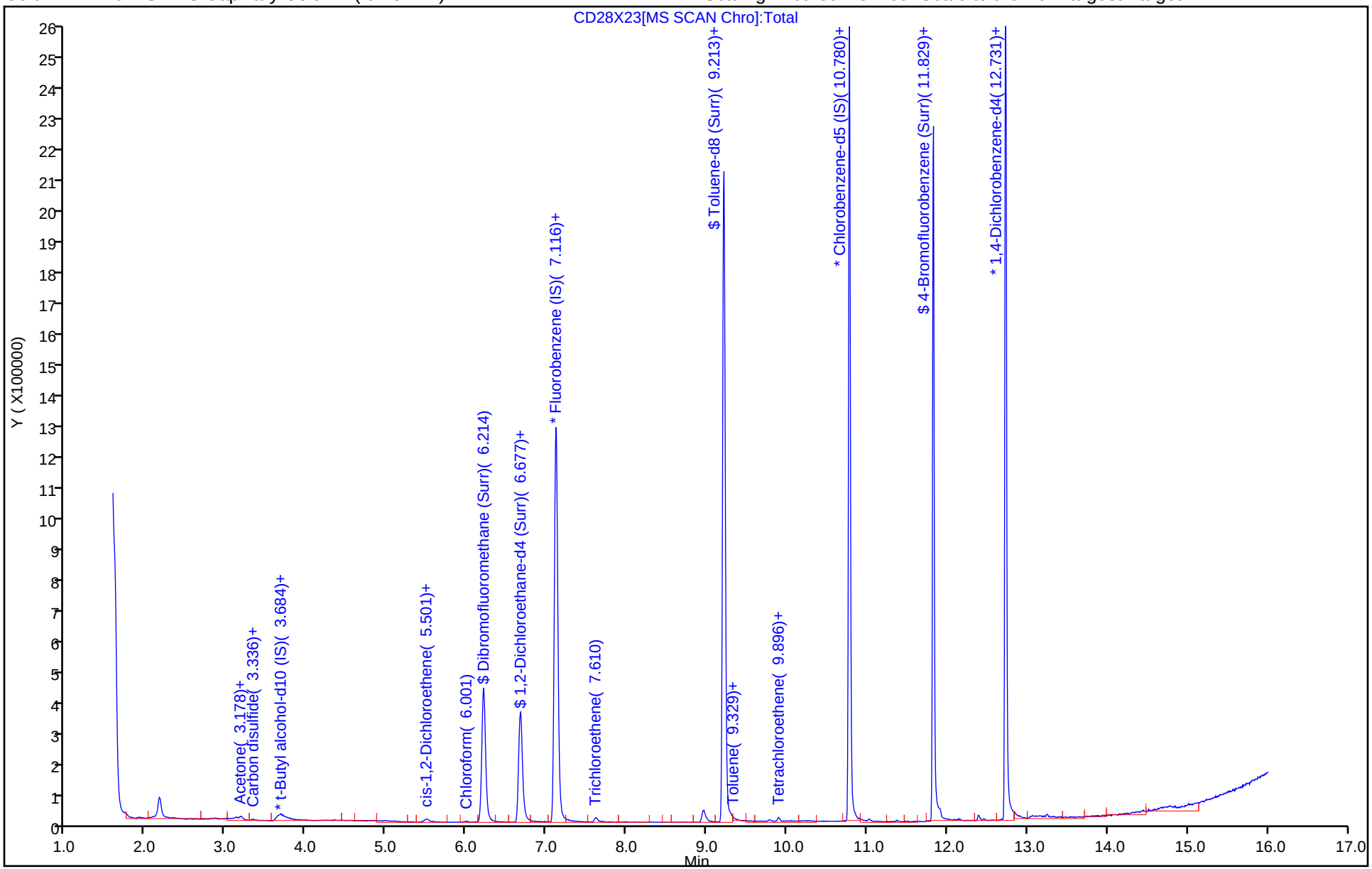
MSV_HP25_ISSS_00063 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 29-Dec-2022 10:46:37 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X23.D				
Injection Date:	28-Dec-2022 17:36:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	410-110288-A-10	Lab Sample ID:	410-110288-10	Worklist Smp#:	24
Client ID:	HD-COD-SW-27-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X23.D				
Lims ID:	410-110288-A-10				
Client ID:	HD-COD-SW-27-0/1-0				
Sample Type:	Client				
Inject. Date:	28-Dec-2022 17:36:30	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0074091-024				
Operator ID:	knk41612	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	29-Dec-2022 10:46:36	Calib Date:	22-Aug-2022 22:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1603				

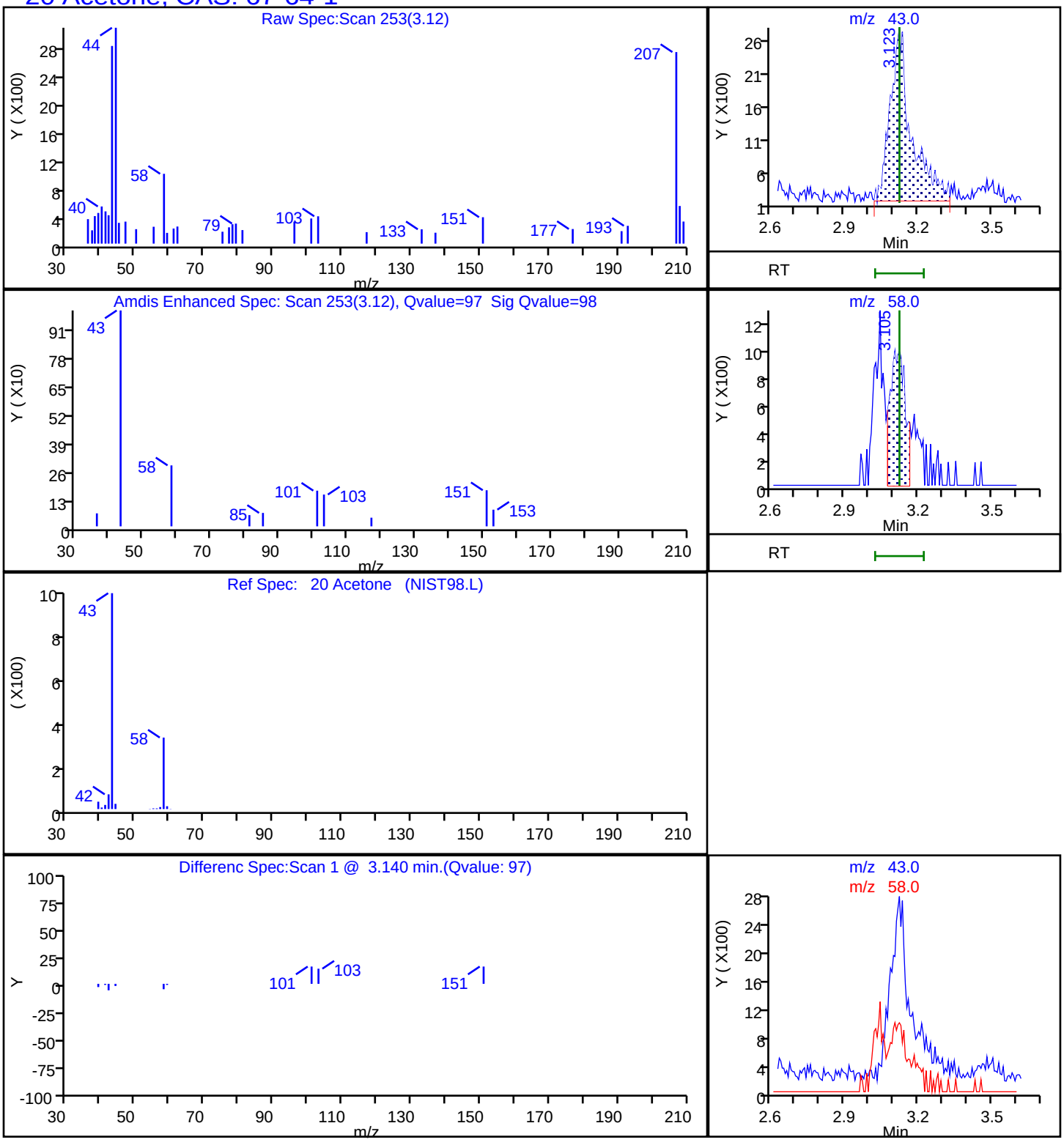
First Level Reviewer: innoonk Date: 29-Dec-2022 10:46:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	9.94	99.37
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	9.97	99.73
$ 82 Toluene-d8 (Surr)	10.0	9.94	99.44
$ 121 4-Bromofluorobenzene (Surr)	10.0	9.57	95.66

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X23.D				
Injection Date:	28-Dec-2022 17:36:30	Instrument ID:	10193		
Lims ID:	410-110288-A-10	Lab Sample ID:	410-110288-10		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

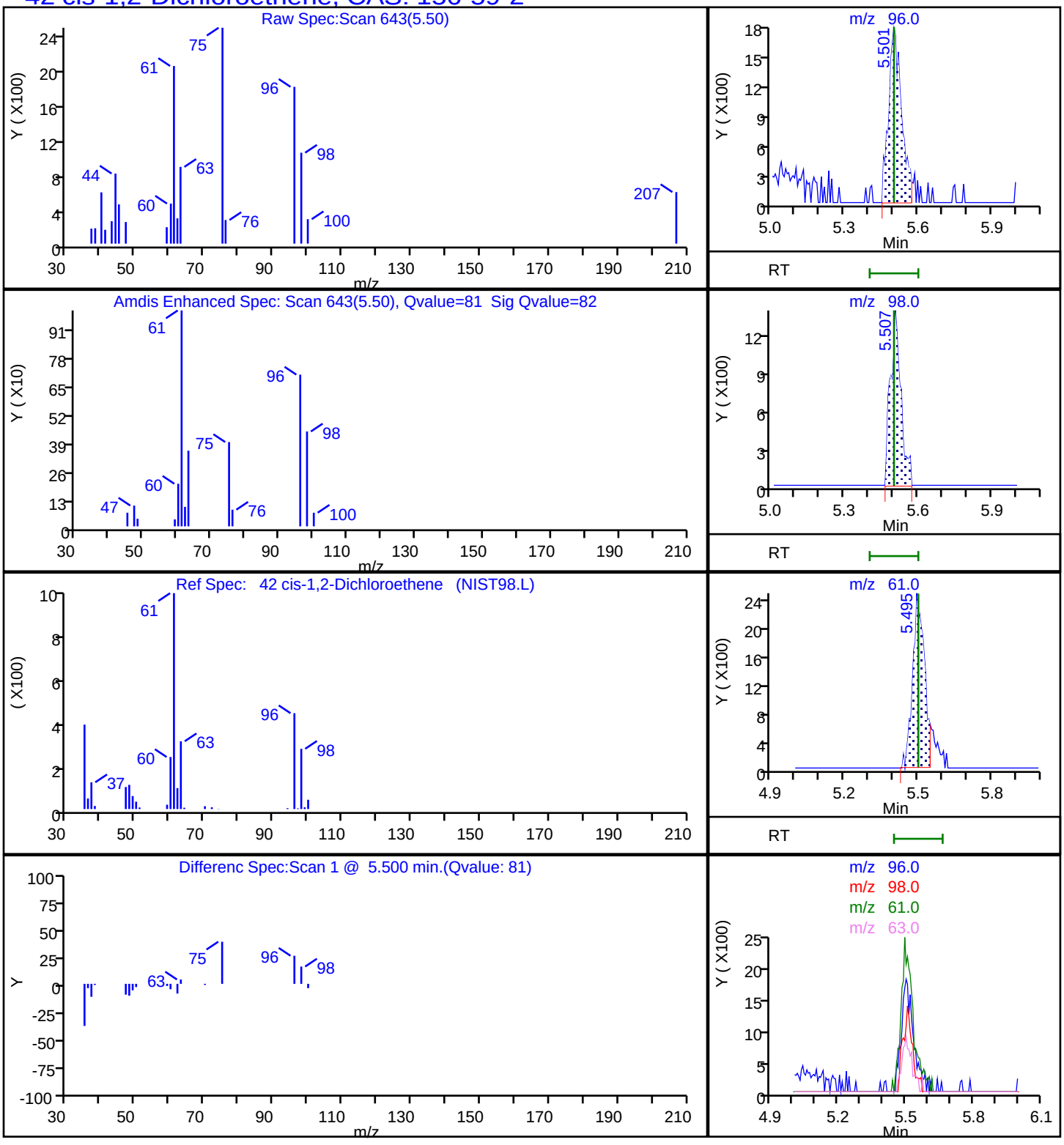
20 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X23.D				
Injection Date:	28-Dec-2022 17:36:30	Instrument ID:	10193		
Lims ID:	410-110288-A-10	Lab Sample ID:	410-110288-10		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

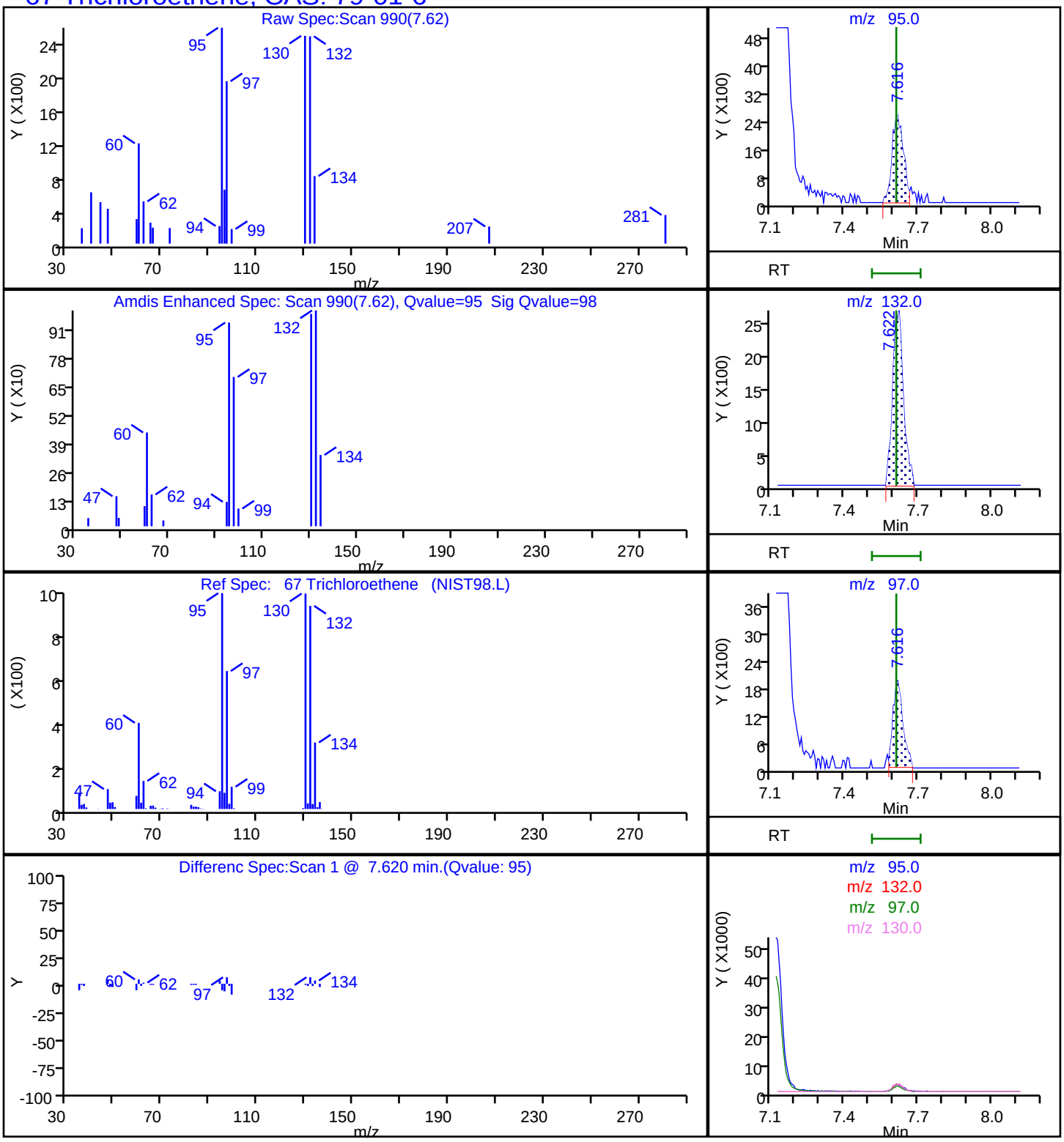
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X23.D				
Injection Date:	28-Dec-2022 17:36:30	Instrument ID:	10193		
Lims ID:	410-110288-A-10	Lab Sample ID:	410-110288-10		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

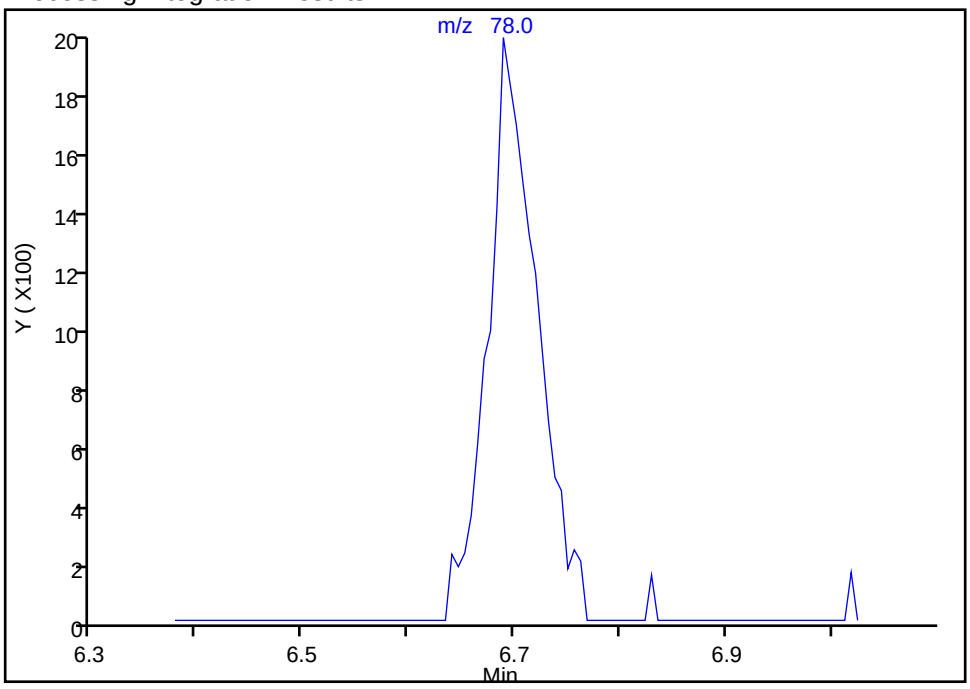
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X23.D				
Injection Date:	28-Dec-2022 17:36:30	Instrument ID:	10193		
Lims ID:	410-110288-A-10	Lab Sample ID:	410-110288-10		
Client ID:	HD-COD-SW-27-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

59 Benzene, CAS: 71-43-2

Signal: 1

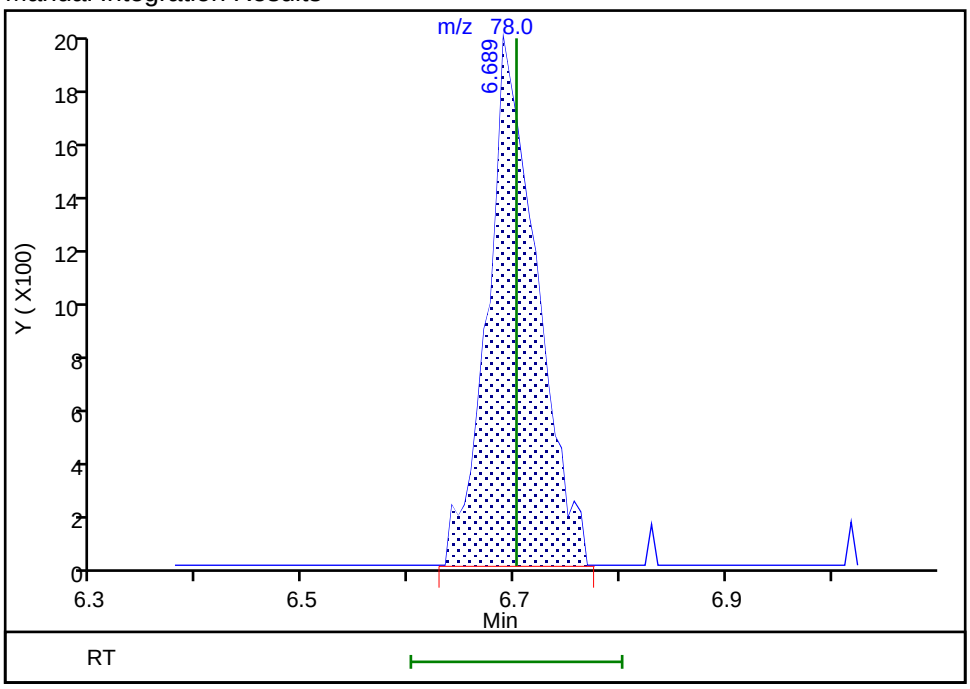
Not Detected
Expected RT: 6.70

Processing Integration Results



Manual Integration Results

RT: 6.69
Area: 6451
Amount: 0.028641
Amount Units: ug/l



Reviewer: innoonk, 29-Dec-2022 10:46:14
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-28-0/1-0
Lab Sample ID: 410-110288-11

Matrix: Water
Lab File ID: CD28X24.D

Analysis Method: 8260D
Date Collected: 12/21/2022 13:00

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 17:58

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND	^c cn	0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	3.6	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	0.15	J	0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	0.24	J	0.50	0.20
108-88-3	Toluene	ND		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-28-0/1-0
Lab Sample ID: 410-110288-11

Matrix: Water
Lab File ID: CD28X24.D

Analysis Method: 8260D
Date Collected: 12/21/2022 13:00

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 17:58

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.15	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	98		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X24.D
Lims ID: 410-110288-A-11
Client ID: HD-COD-SW-28-0/1-0
Sample Type: Client
Inject. Date: 28-Dec-2022 17:58:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074091-025
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 10:47:51 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1603

First Level Reviewer: innoonk Date: 29-Dec-2022 10:47:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	1.916	1.922	-0.006	96	4487	0.0604	
6 Vinyl chloride	62		2.020				ND	7
9 Bromomethane	94		2.306				ND	7
10 Chloroethane	64		2.367				ND	
19 1,1-Dichloroethene	96		3.087				ND	7
20 Acetone	43	3.129	3.123	0.006	98	29773	3.55	
25 Carbon disulfide	76		3.343				ND	7
29 Methylene Chloride	84	3.654	3.654	0.000	30	1664	0.0324	
* 30 t-Butyl alcohol-d10 (IS)	65	3.690	3.684	0.006	97	162608	50.0	
33 Methyl tert-butyl ether	73		4.001				ND	7
34 trans-1,2-Dichloroethene	96		4.007				ND	
36 1,1-Dichloroethane	63		4.647				ND	7
41 2-Butanone (MEK)	43		5.483				ND	
42 cis-1,2-Dichloroethene	96	5.501	5.501	0.000	82	8549	0.1461	
47 Chlorobromomethane	128		5.836				ND	
50 Chloroform	83	5.988	5.995	-0.007	94	6811	0.0735	a
52 1,1,1-Trichloroethane	97		6.214				ND	
$ 53 Dibromofluoromethane (Surr)	113	6.214	6.214	0.000	94	453308	9.84	
55 Carbon tetrachloride	117		6.427				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.671	6.677	-0.006	40	95726	10.1	
59 Benzene	78	6.696	6.702	-0.006	40	5079	0.0224	a
61 1,2-Dichloroethane	62		6.781				ND	
* 64 Fluorobenzene (IS)	96	7.116	7.122	-0.006	99	1970364	10.0	
67 Trichloroethene	95	7.616	7.610	0.006	97	8886	0.1529	a
69 1,2-Dichloropropane	63		7.952				ND	
75 Dichlorobromomethane	83		8.311				ND	7
79 cis-1,3-Dichloropropene	75		8.878				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.085				ND	7
$ 82 Toluene-d8 (Surr)	98	9.213	9.214	-0.001	94	1965222	9.94	
83 Toluene	92	9.299	9.299	0.000	99	7256	0.0497	
84 trans-1,3-Dichloropropene	75		9.598				ND	
86 1,1,2-Trichloroethane	97		9.811				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
87 Tetrachloroethene	166	9.896	9.896	0.000	97	16085	0.2366	
104 2-Hexanone	43		10.061				ND	7
106 Chlorodibromomethane	129		10.213				ND	
107 Ethylene Dibromide	107		10.323				ND	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	85	1500689	10.0	
110 Chlorobenzene	112		10.811				ND	7
111 1,1,1,2-Tetrachloroethane	131		10.896				ND	
112 Ethylbenzene	91		10.902				ND	7
113 m-Xylene & p-Xylene	106		11.024				ND	7
S 114 Xylenes, Total	106		11.245				ND	7
115 o-Xylene	106		11.366				ND	7
116 Styrene	104		11.384				ND	7
117 Bromoform	173		11.542				ND	
$ 121 4-Bromofluorobenzene (Surr)	95	11.823	11.823	0.000	93	710632	9.71	
123 1,1,2,2-Tetrachloroethane	83		11.939				ND	
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	94	864524	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

a - User Assigned ID

Reagents:

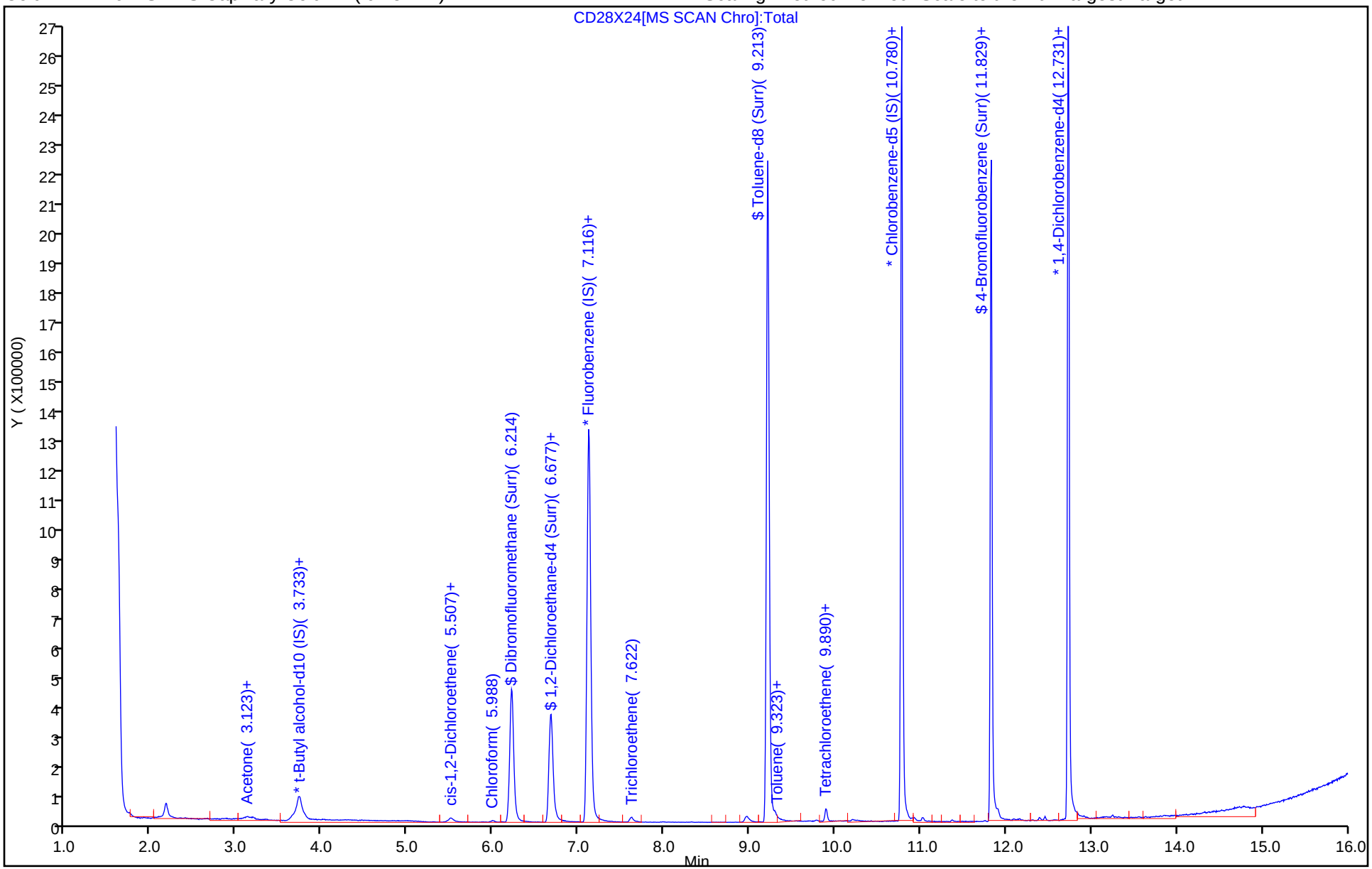
MSV_HP25_ISSS_00063 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 29-Dec-2022 10:47:51 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X24.D				
Injection Date:	28-Dec-2022 17:58:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	410-110288-A-11	Lab Sample ID:	410-110288-11	Worklist Smp#:	25
Client ID:	HD-COD-SW-28-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X24.D				
Lims ID:	410-110288-A-11				
Client ID:	HD-COD-SW-28-0/1-0				
Sample Type:	Client				
Inject. Date:	28-Dec-2022 17:58:30	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0074091-025				
Operator ID:	knk41612	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	29-Dec-2022 10:47:51	Calib Date:	22-Aug-2022 22:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1603				

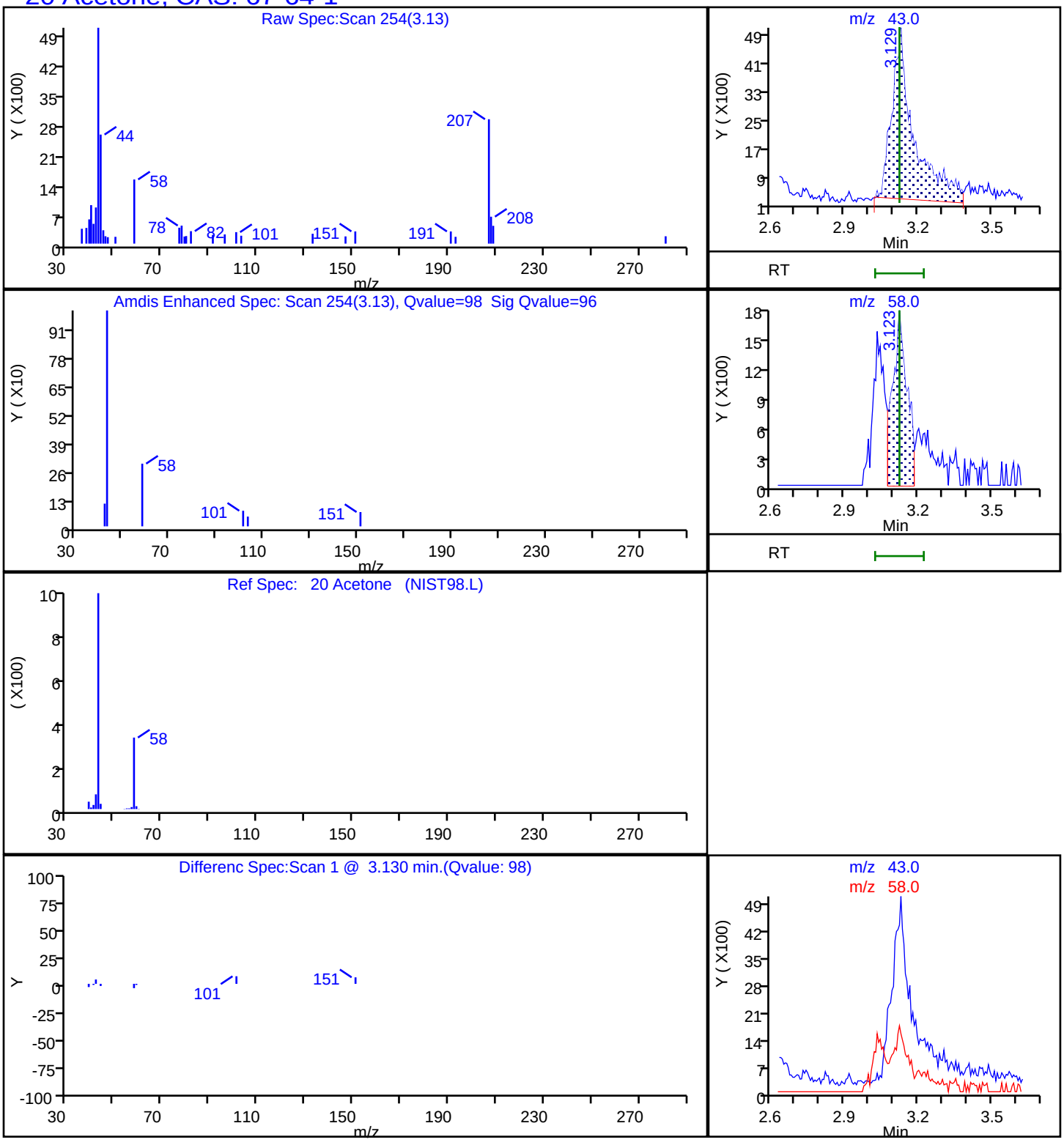
First Level Reviewer: innoonk Date: 29-Dec-2022 10:47:51

Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	9.84	98.44
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	101.11
$ 82 Toluene-d8 (Surr)	10.0	9.94	99.38
$ 121 4-Bromofluorobenzene (Surr)	10.0	9.71	97.11

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X24.D				
Injection Date:	28-Dec-2022 17:58:30	Instrument ID:	10193		
Lims ID:	410-110288-A-11	Lab Sample ID:	410-110288-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

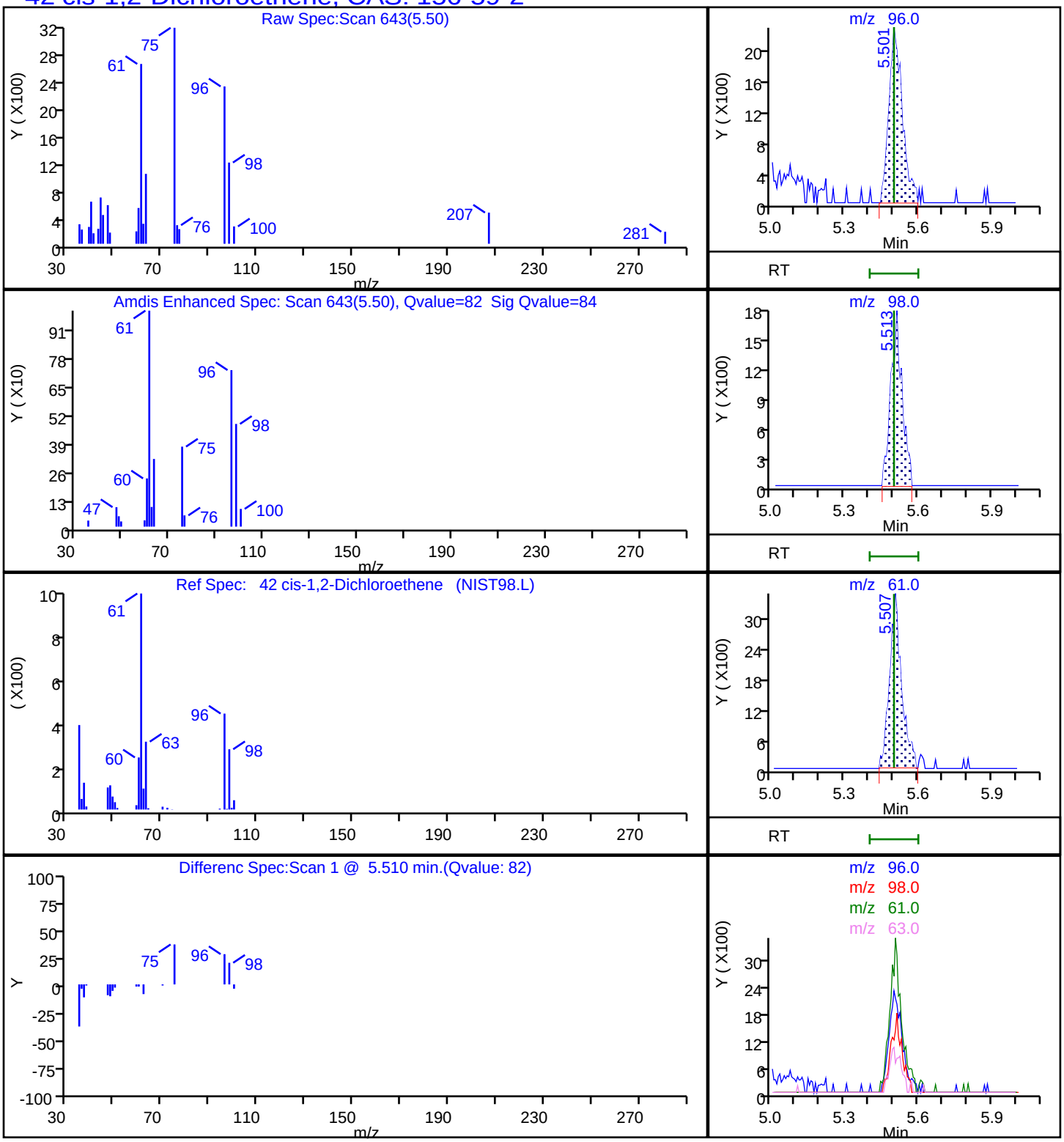
20 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X24.D				
Injection Date:	28-Dec-2022 17:58:30	Instrument ID:	10193		
Lims ID:	410-110288-A-11	Lab Sample ID:	410-110288-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

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

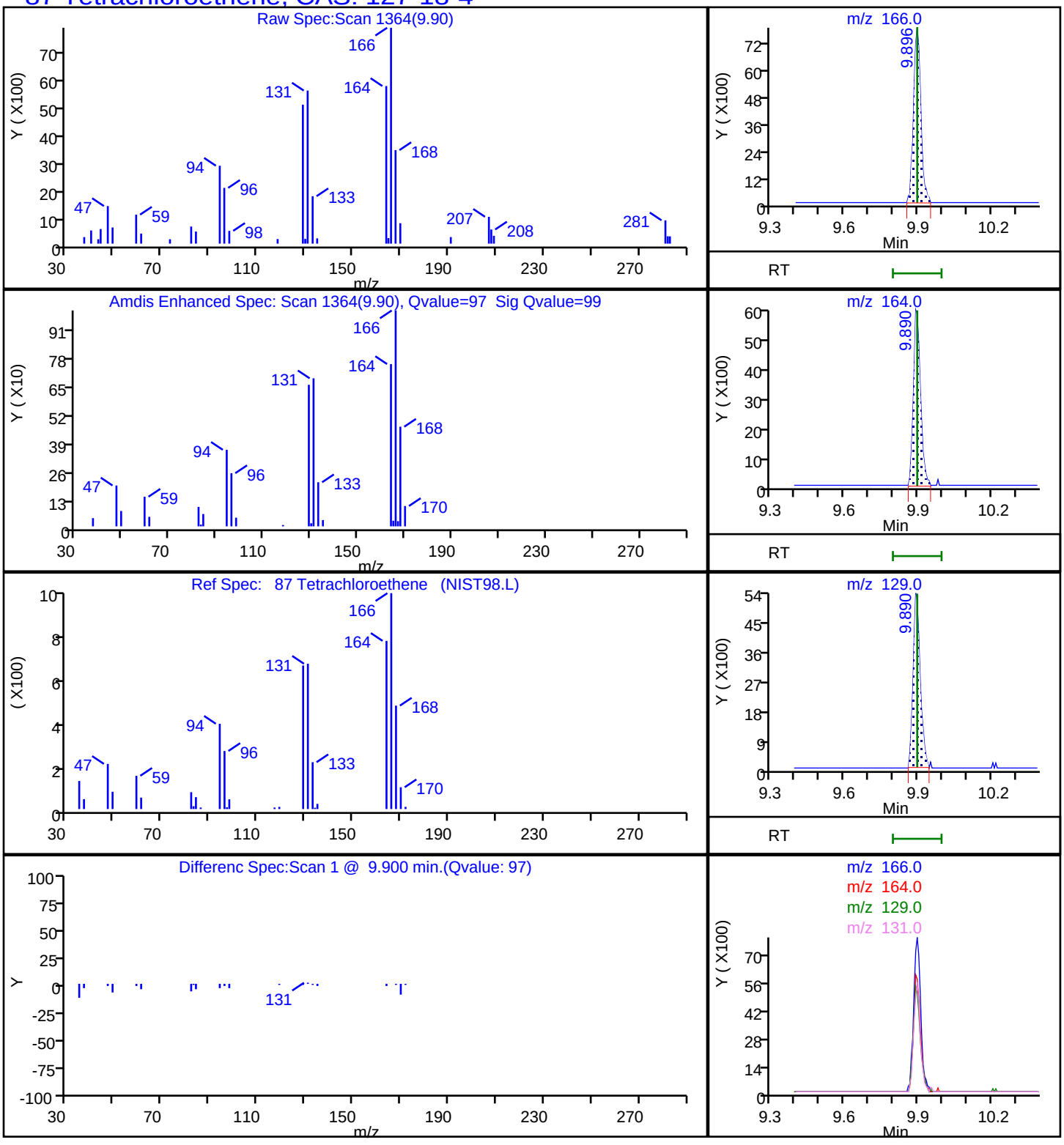


Report Date: 29-Dec-2022 10:47:52 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X24.D				
Injection Date:	28-Dec-2022 17:58:30	Instrument ID:	10193		
Lims ID:	410-110288-A-11	Lab Sample ID:	410-110288-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

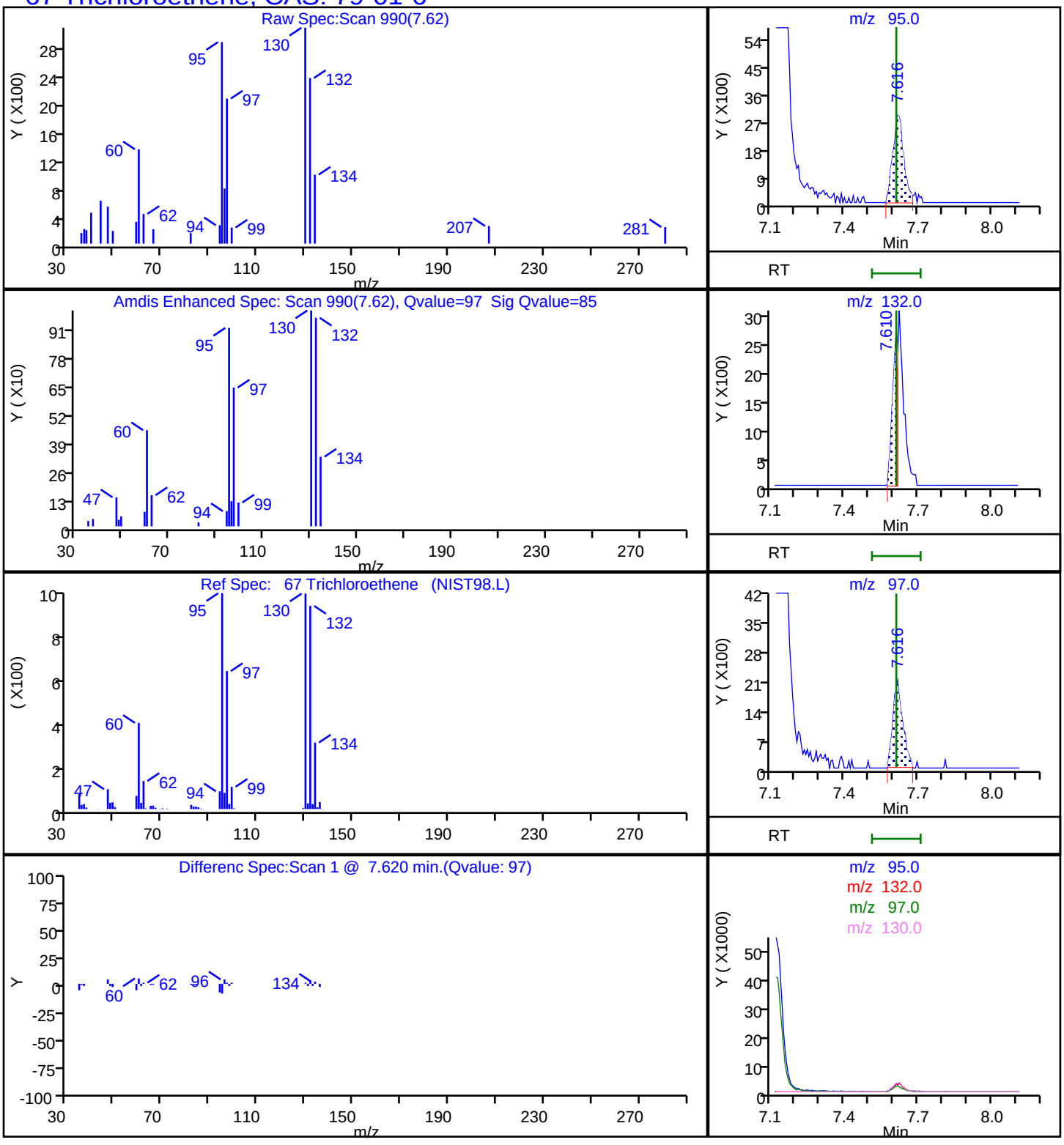
87 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X24.D				
Injection Date:	28-Dec-2022 17:58:30	Instrument ID:	10193		
Lims ID:	410-110288-A-11	Lab Sample ID:	410-110288-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

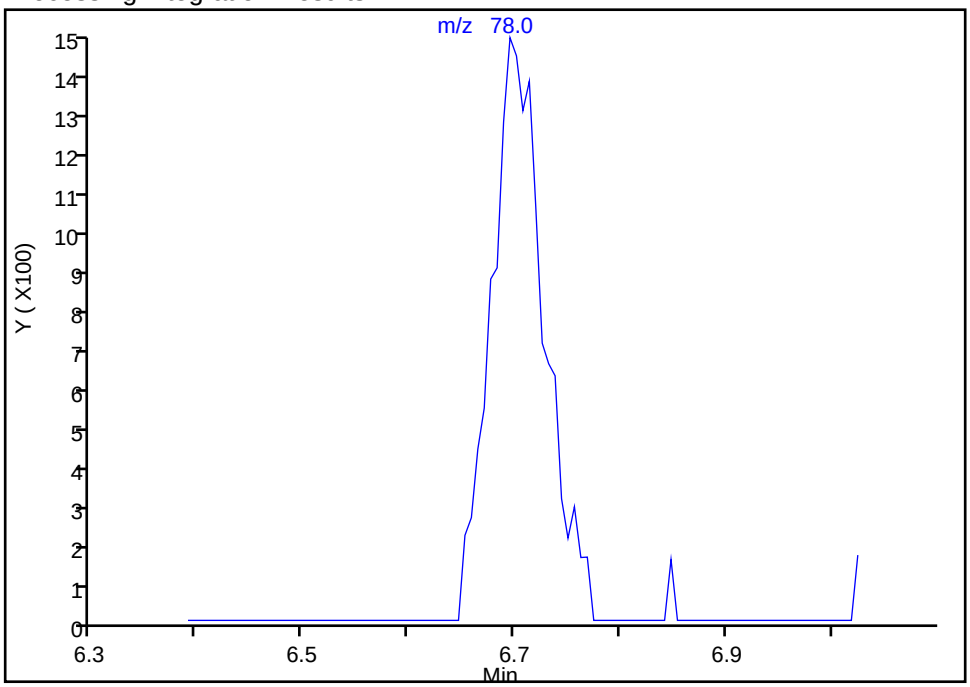
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X24.D				
Injection Date:	28-Dec-2022 17:58:30	Instrument ID:	10193		
Lims ID:	410-110288-A-11	Lab Sample ID:	410-110288-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

59 Benzene, CAS: 71-43-2

Signal: 1

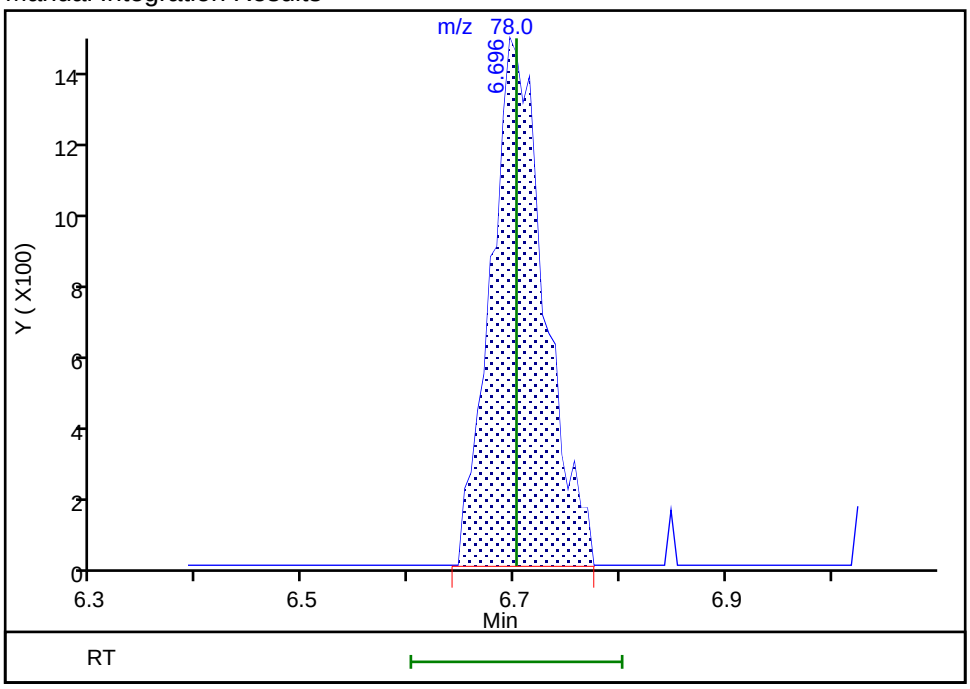
Not Detected
Expected RT: 6.70

Processing Integration Results



Manual Integration Results

RT: 6.70
Area: 5079
Amount: 0.022399
Amount Units: ug/l



Reviewer: innoonk, 29-Dec-2022 10:47:23
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

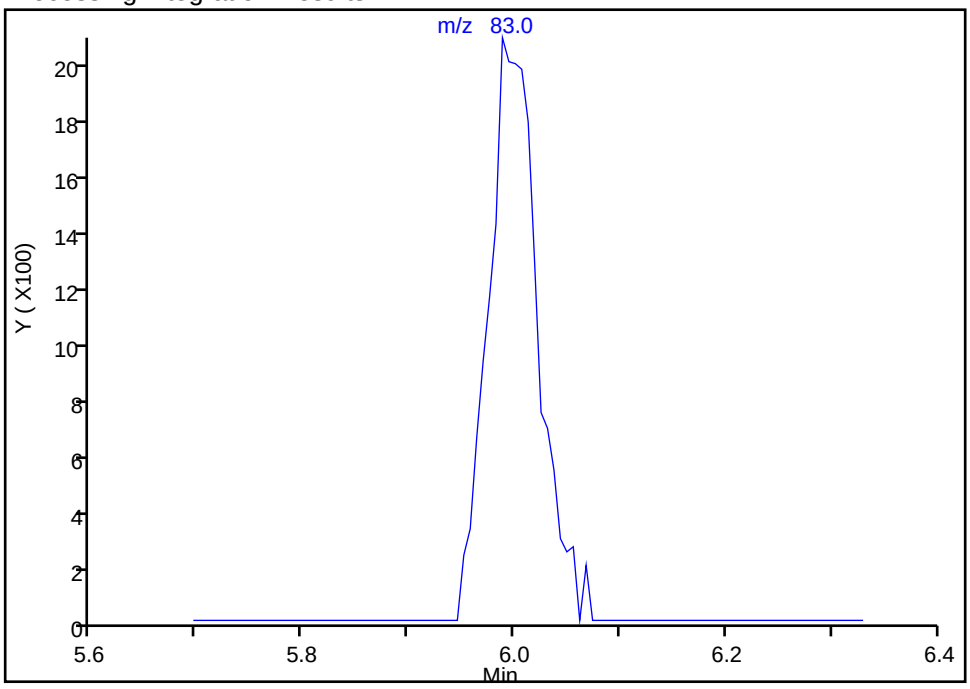
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X24.D				
Injection Date:	28-Dec-2022 17:58:30	Instrument ID:	10193		
Lims ID:	410-110288-A-11	Lab Sample ID:	410-110288-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

50 Chloroform, CAS: 67-66-3

Signal: 1

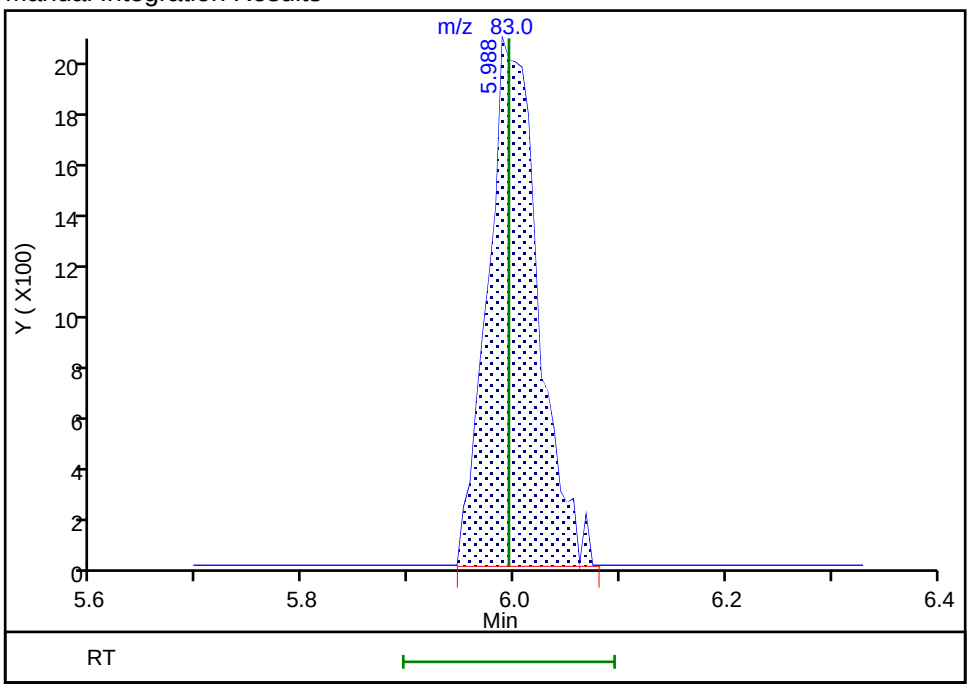
Not Detected
Expected RT: 5.99

Processing Integration Results



Manual Integration Results

RT: 5.99
Area: 6811
Amount: 0.073535
Amount Units: ug/l



Reviewer: innoonk, 29-Dec-2022 10:47:16
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

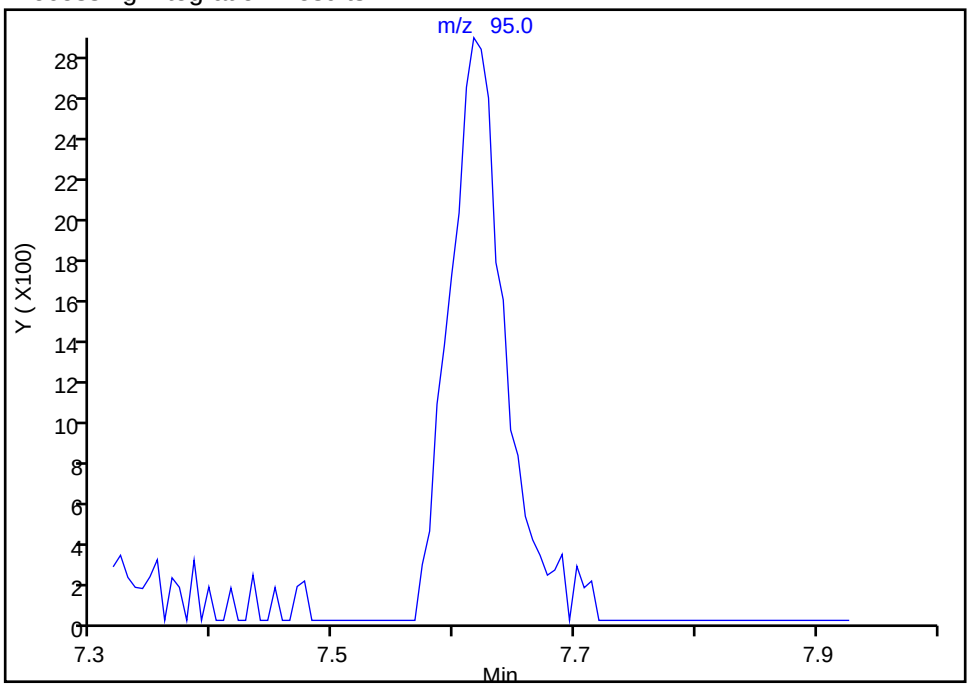
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X24.D				
Injection Date:	28-Dec-2022 17:58:30	Instrument ID:	10193		
Lims ID:	410-110288-A-11	Lab Sample ID:	410-110288-11		
Client ID:	HD-COD-SW-28-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6

Signal: 1

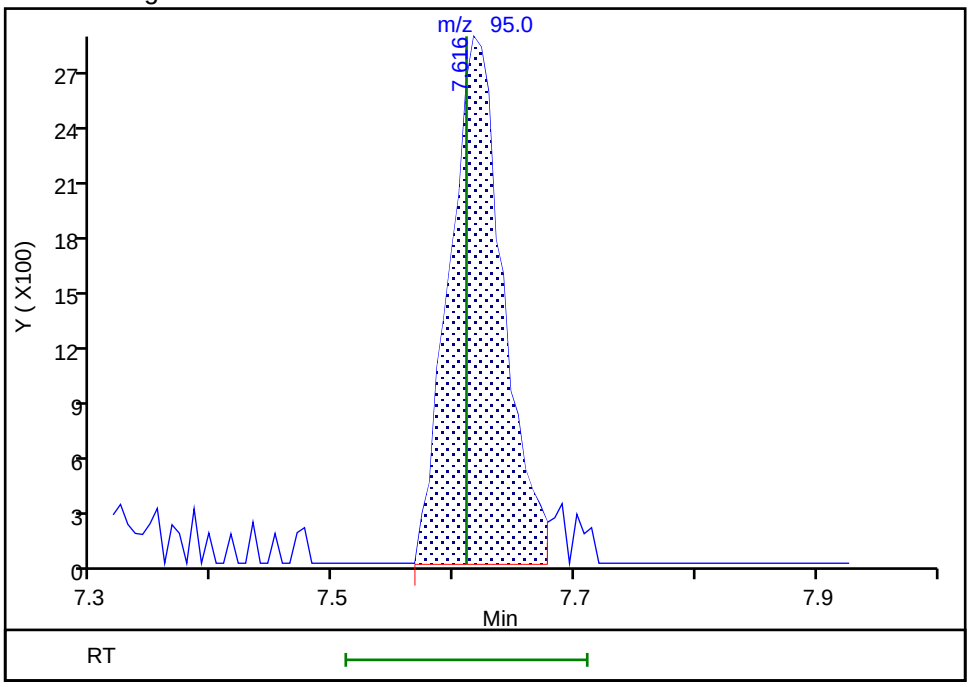
Not Detected
Expected RT: 7.61

Processing Integration Results



Manual Integration Results

RT: 7.62
Area: 8886
Amount: 0.152855
Amount Units: ug/l



Reviewer: innoonk, 29-Dec-2022 10:47:28
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-29-0/1-0
Lab Sample ID: 410-110288-12

Matrix: Water
Lab File ID: CD28X25.D

Analysis Method: 8260D
Date Collected: 12/21/2022 08:50

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 18:21

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND	^c cn	0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	2.6	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	0.12	J	0.50	0.10
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	0.28	J	0.50	0.20
108-88-3	Toluene	ND		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-29-0/1-0
Lab Sample ID: 410-110288-12

Matrix: Water
Lab File ID: CD28X25.D

Analysis Method: 8260D
Date Collected: 12/21/2022 08:50

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 18:21

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	0.14	J	0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X25.D
Lims ID: 410-110288-A-12
Client ID: HD-COD-SW-29-0/1-0
Sample Type: Client
Inject. Date: 28-Dec-2022 18:21:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074091-026
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 10:48:58 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1603

First Level Reviewer: innoonk Date: 29-Dec-2022 10:48:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	1.910	1.922	-0.012	95	8693	0.1192	
6 Vinyl chloride	62		2.020				ND	7
9 Bromomethane	94		2.306				ND	7
10 Chloroethane	64		2.367				ND	
19 1,1-Dichloroethene	96		3.087				ND	7
20 Acetone	43	3.129	3.123	0.006	79	17587	2.57	
25 Carbon disulfide	76		3.343				ND	7
29 Methylene Chloride	84		3.654				ND	7
* 30 t-Butyl alcohol-d10 (IS)	65	3.678	3.684	-0.006	99	132950	50.0	
33 Methyl tert-butyl ether	73		4.001				ND	7
34 trans-1,2-Dichloroethene	96		4.007				ND	
36 1,1-Dichloroethane	63		4.647				ND	7
41 2-Butanone (MEK)	43		5.483				ND	7
42 cis-1,2-Dichloroethene	96		5.501				ND	
47 Chlorobromomethane	128		5.836				ND	
50 Chloroform	83	6.001	5.995	0.006	92	3265	0.0359	
52 1,1,1-Trichloroethane	97		6.214				ND	7
$ 53 Dibromofluoromethane (Surr)	113	6.214	6.214	0.000	94	449424	9.94	
55 Carbon tetrachloride	117		6.427				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.677	6.677	0.000	46	94801	10.2	
59 Benzene	78	6.714	6.702	0.012	44	5063	0.0227	a
61 1,2-Dichloroethane	62		6.781				ND	
* 64 Fluorobenzene (IS)	96	7.116	7.122	-0.006	99	1934252	10.0	
67 Trichloroethene	95	7.610	7.610	0.000	93	7871	0.1379	
69 1,2-Dichloropropane	63		7.952				ND	
75 Dichlorobromomethane	83		8.311				ND	7
79 cis-1,3-Dichloropropene	75		8.878				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.085				ND	7
$ 82 Toluene-d8 (Surr)	98	9.214	9.214	0.000	94	1950128	9.93	
83 Toluene	92	9.299	9.299	0.000	98	3968	0.0274	
84 trans-1,3-Dichloropropene	75		9.598				ND	
86 1,1,2-Trichloroethane	97		9.811				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
87 Tetrachloroethene	166	9.896	9.896	0.000	98	19094	0.2829	
104 2-Hexanone	43		10.061				ND	7
106 Chlorodibromomethane	129		10.213				ND	
107 Ethylene Dibromide	107		10.323				ND	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	85	1489807	10.0	
110 Chlorobenzene	112		10.811				ND	
111 1,1,1,2-Tetrachloroethane	131		10.896				ND	
112 Ethylbenzene	91		10.902				ND	7
113 m-Xylene & p-Xylene	106		11.024				ND	7
S 114 Xylenes, Total	106		11.245				ND	7
115 o-Xylene	106		11.366				ND	7
116 Styrene	104		11.384				ND	7
117 Bromoform	173		11.542				ND	
$ 121 4-Bromofluorobenzene (Surr)	95	11.823	11.823	0.000	94	697630	9.60	
123 1,1,2,2-Tetrachloroethane	83		11.939				ND	
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	94	851770	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

a - User Assigned ID

Reagents:

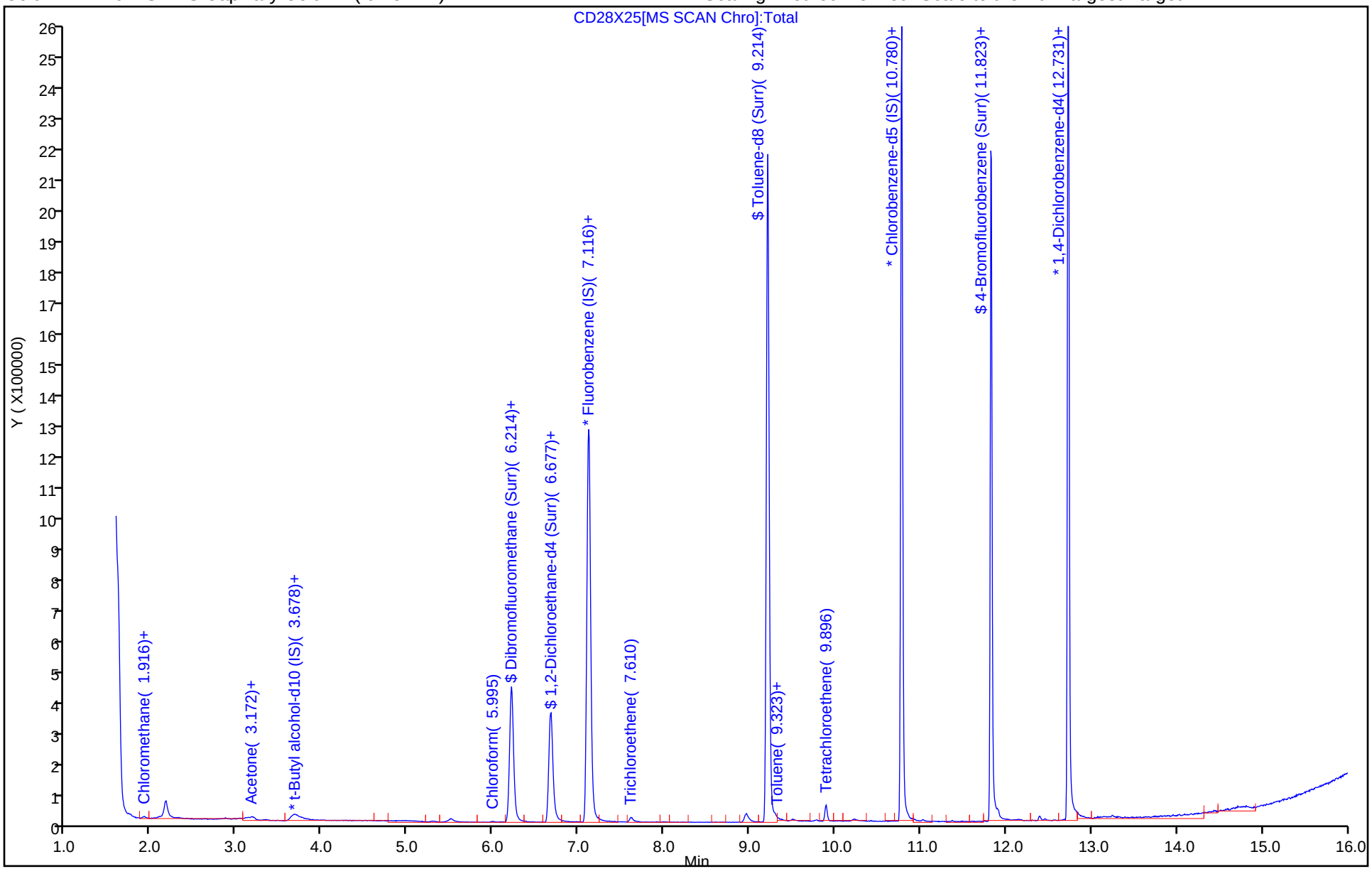
MSV_HP25_ISSS_00063 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 29-Dec-2022 10:48:58 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X25.D				
Injection Date:	28-Dec-2022 18:21:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	410-110288-A-12	Lab Sample ID:	410-110288-12	Worklist Smp#:	26
Client ID:	HD-COD-SW-29-0/1-0				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X25.D				
Lims ID:	410-110288-A-12				
Client ID:	HD-COD-SW-29-0/1-0				
Sample Type:	Client				
Inject. Date:	28-Dec-2022 18:21:30	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0074091-026				
Operator ID:	knk41612	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	29-Dec-2022 10:48:58	Calib Date:	22-Aug-2022 22:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1603				

First Level Reviewer: innoonk Date: 29-Dec-2022 10:48:58

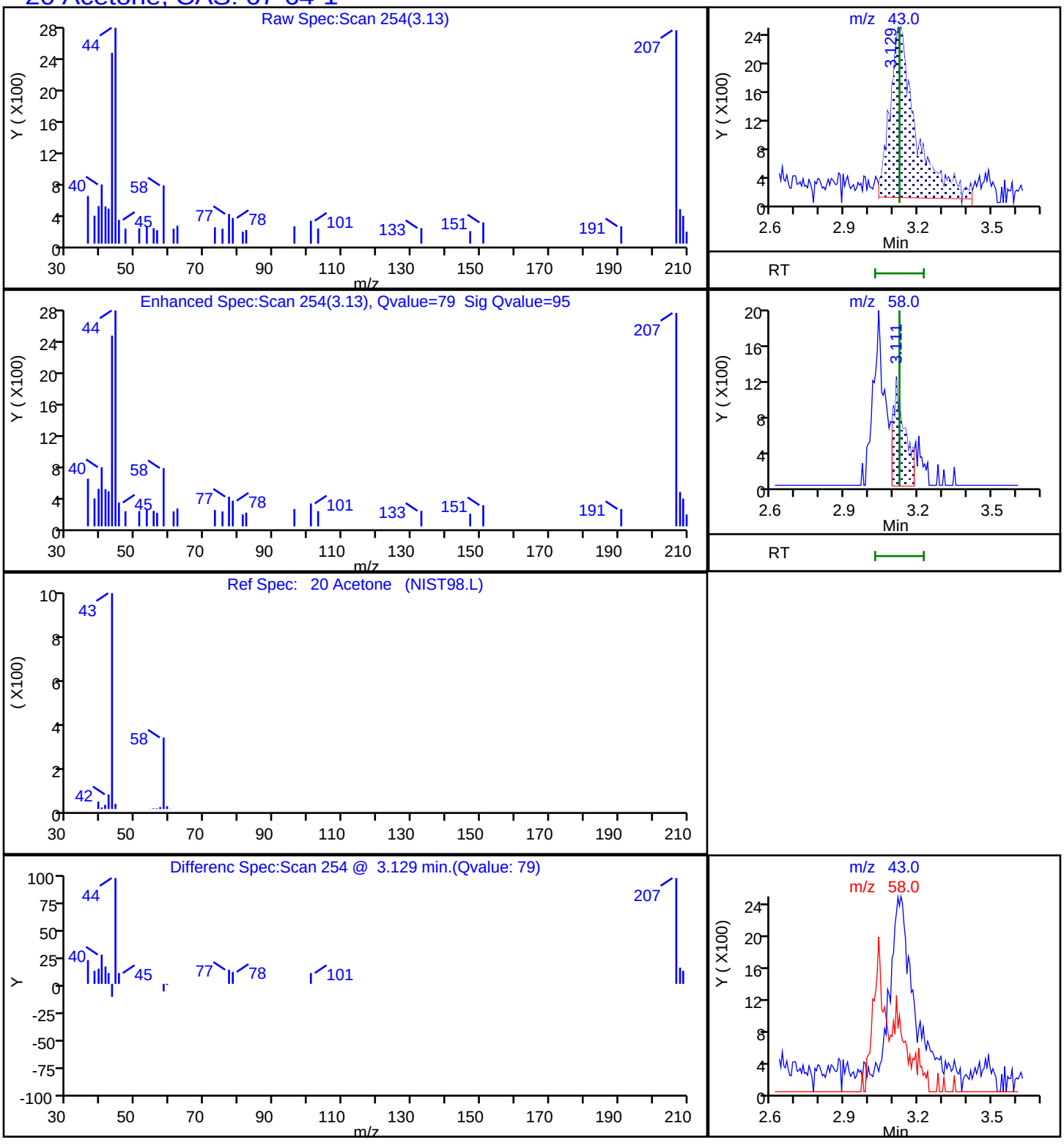
Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	9.94	99.42
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.00
$ 82 Toluene-d8 (Surr)	10.0	9.93	99.34
$ 121 4-Bromofluorobenzene (Surr)	10.0	9.60	96.03

Report Date: 29-Dec-2022 10:48:58 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X25.D				
Injection Date:	28-Dec-2022 18:21:30	Instrument ID:	10193		
Lims ID:	410-110288-A-12	Lab Sample ID:	410-110288-12		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

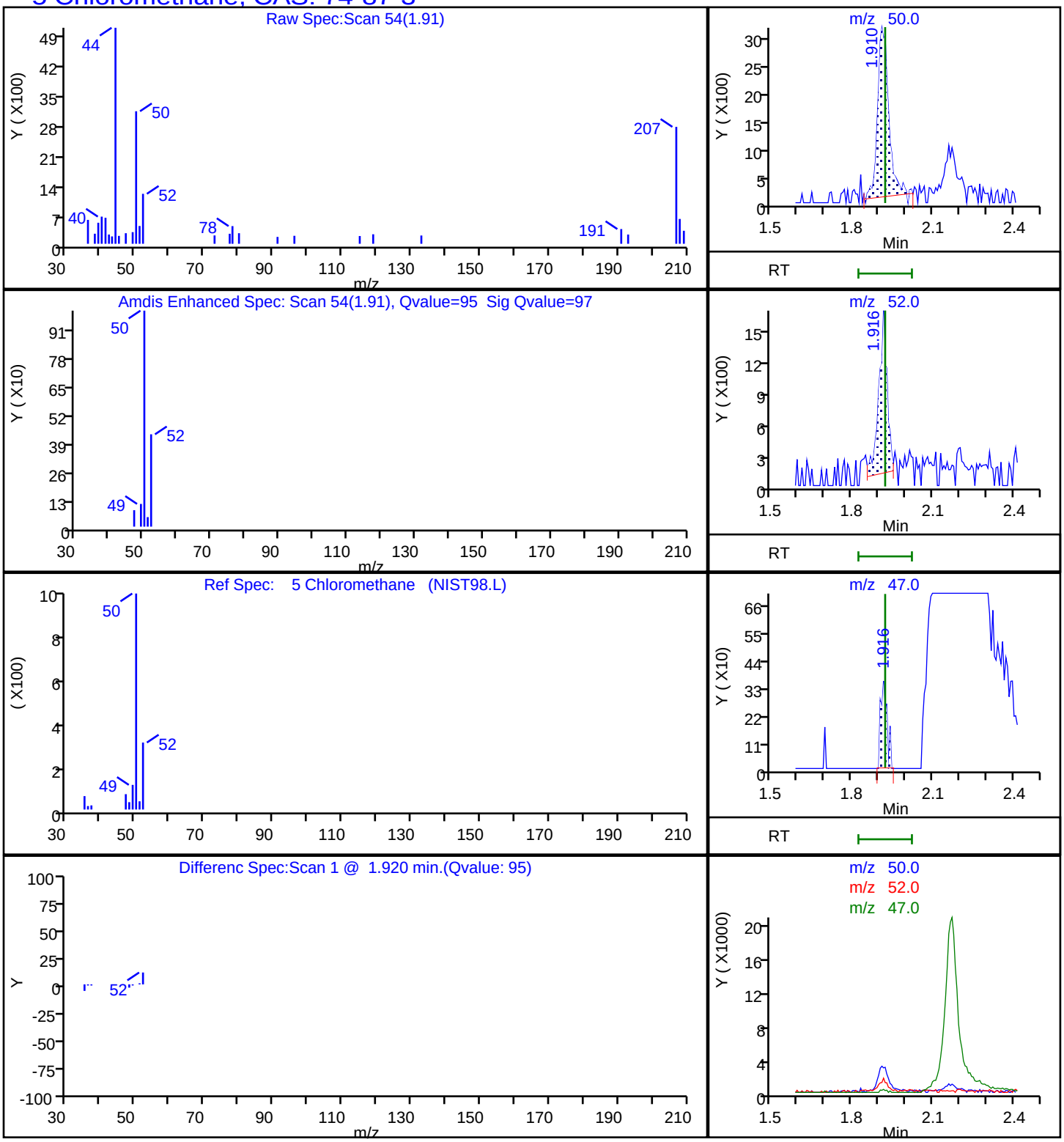
20 Acetone, CAS: 67-64-1



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X25.D				
Injection Date:	28-Dec-2022 18:21:30	Instrument ID:	10193		
Lims ID:	410-110288-A-12	Lab Sample ID:	410-110288-12		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

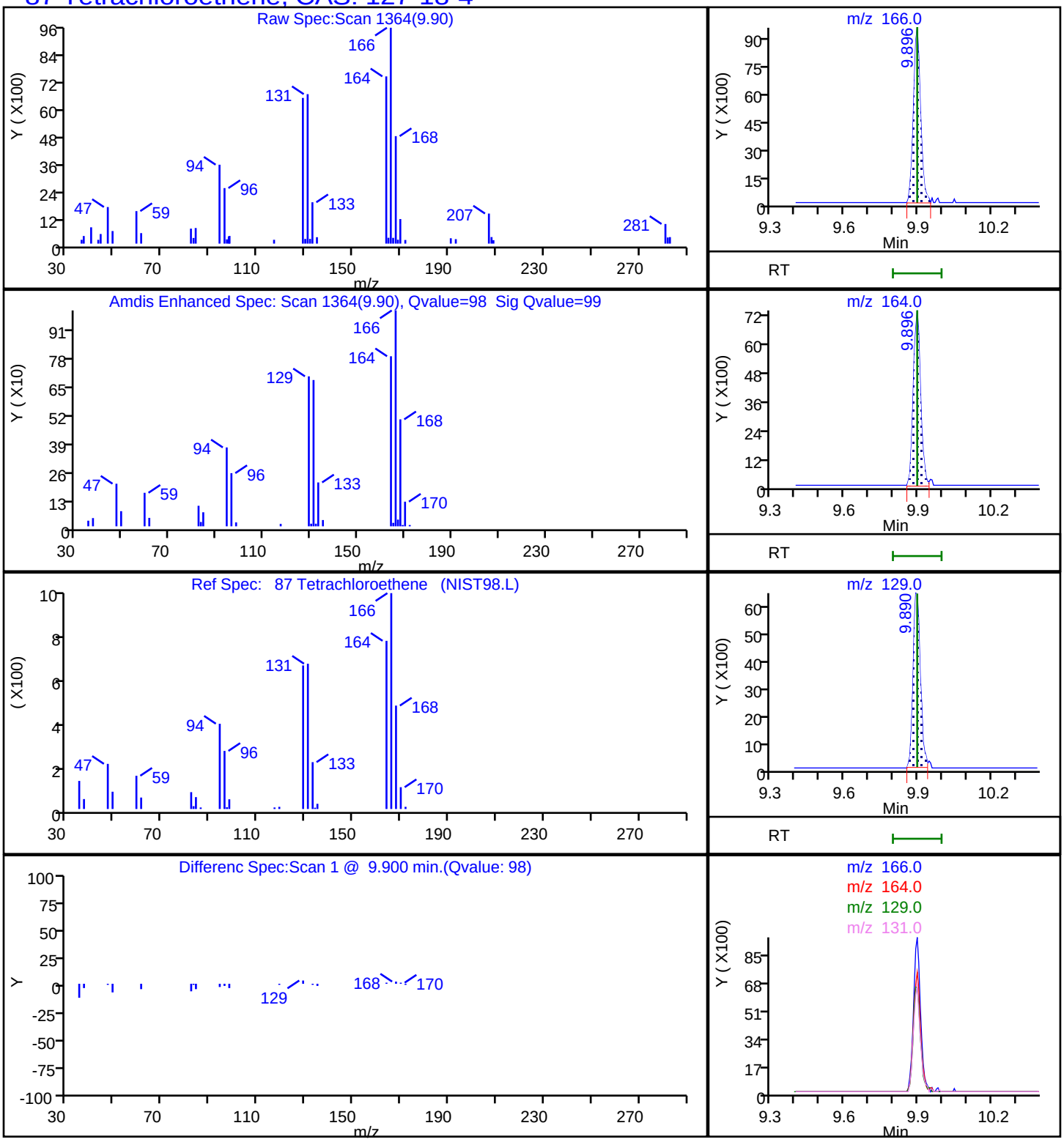
5 Chloromethane, CAS: 74-87-3



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X25.D				
Injection Date:	28-Dec-2022 18:21:30	Instrument ID:	10193		
Lims ID:	410-110288-A-12	Lab Sample ID:	410-110288-12		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

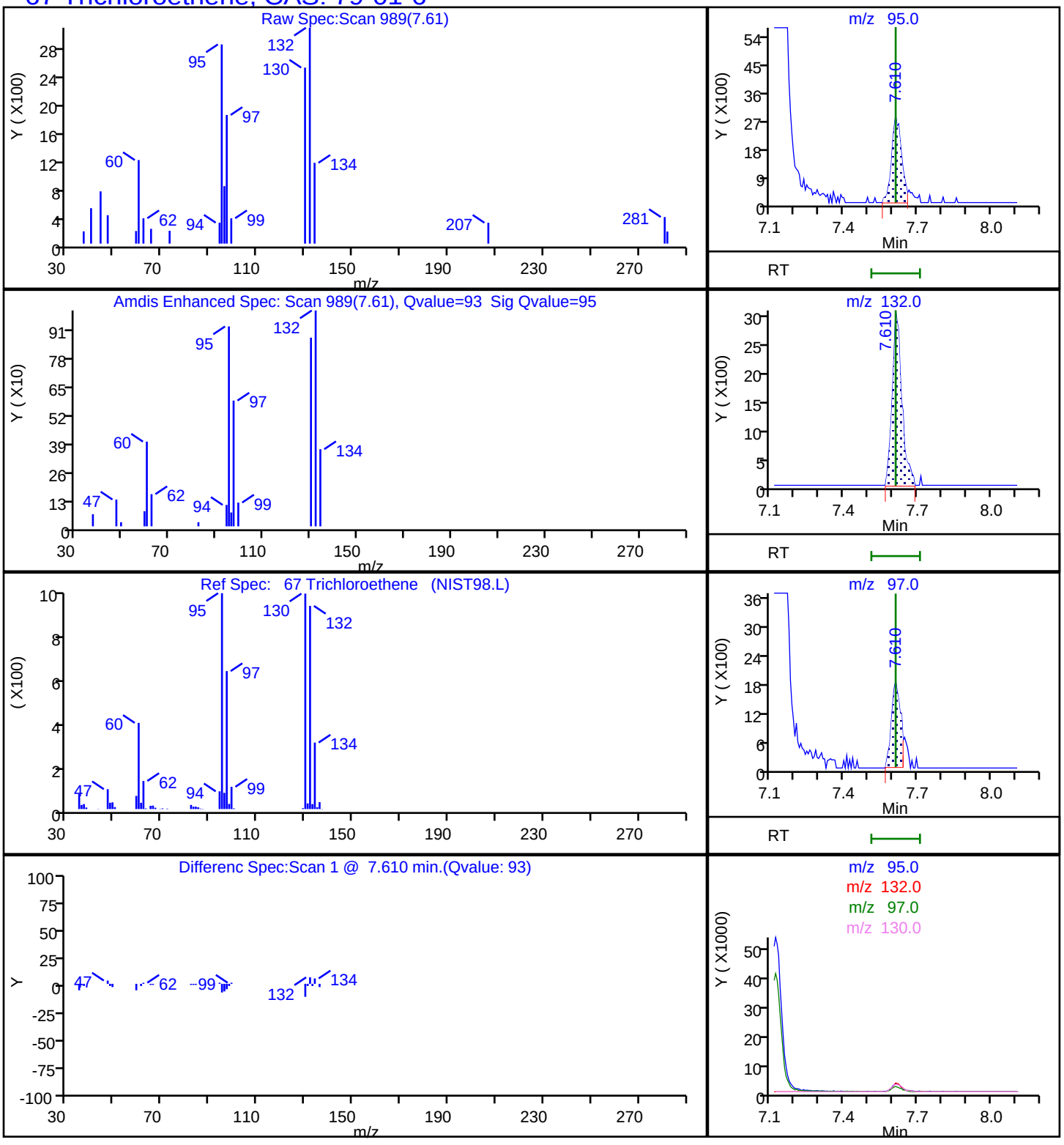
87 Tetrachloroethene, CAS: 127-18-4



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X25.D				
Injection Date:	28-Dec-2022 18:21:30	Instrument ID:	10193		
Lims ID:	410-110288-A-12	Lab Sample ID:	410-110288-12		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

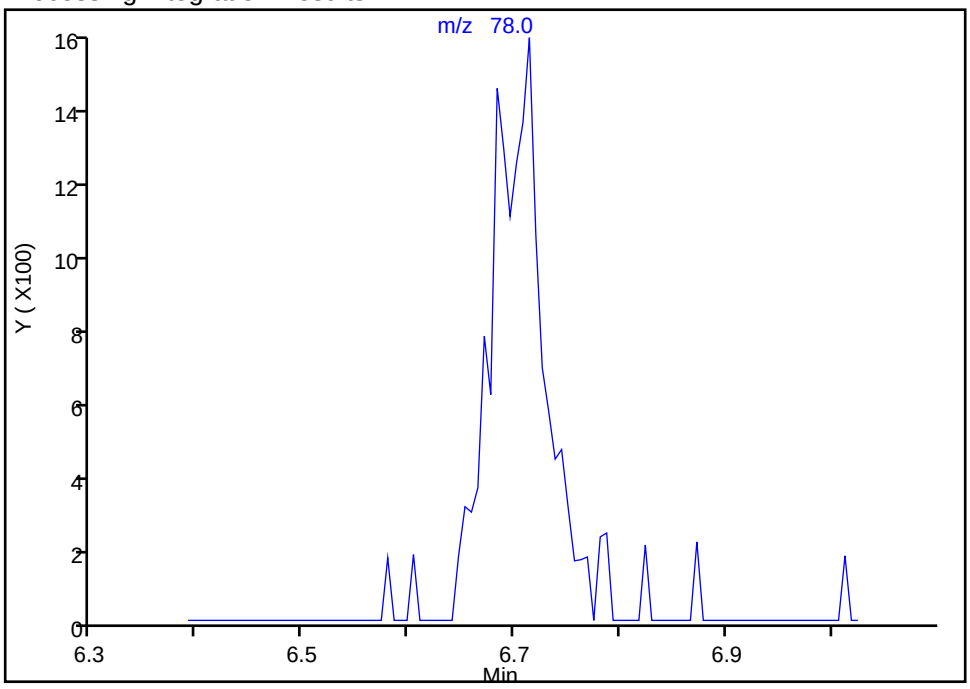
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X25.D				
Injection Date:	28-Dec-2022 18:21:30	Instrument ID:	10193		
Lims ID:	410-110288-A-12	Lab Sample ID:	410-110288-12		
Client ID:	HD-COD-SW-29-0/1-0				
Operator ID:	knk41612	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

59 Benzene, CAS: 71-43-2

Signal: 1

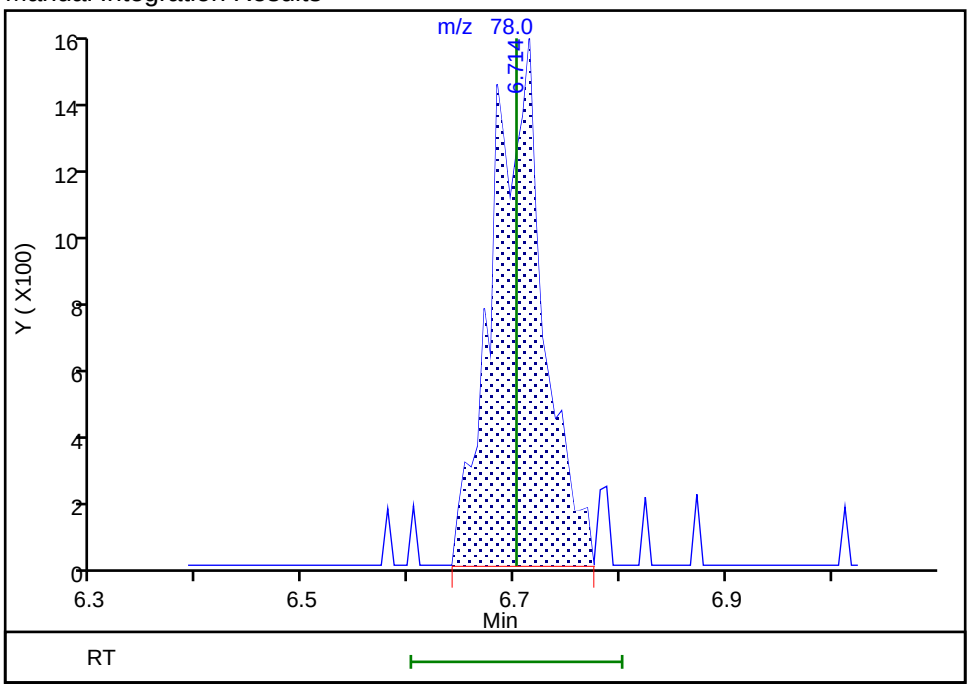
Not Detected
Expected RT: 6.70

Processing Integration Results



Manual Integration Results

RT: 6.71
Area: 5063
Amount: 0.022746
Amount Units: ug/l



Reviewer: innoonk, 29-Dec-2022 10:48:37
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-QC1-0/1-1
Lab Sample ID: 410-110288-13

Matrix: Water
Lab File ID: CD28X26.D

Analysis Method: 8260D
Date Collected: 12/21/2022 08:00

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 18:43

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
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	6.3		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	1.2		0.50	0.10
75-35-4	1,1-Dichloroethene	0.56	^c cn	0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	ND		5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	0.27	J	0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	3.7		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
108-88-3	Toluene	ND		0.50	0.080
156-60-5	trans-1,2-Dichloroethene	ND		0.50	0.10

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-QC1-0/1-1
Lab Sample ID: 410-110288-13

Matrix: Water
Lab File ID: CD28X26.D

Analysis Method: 8260D
Date Collected: 12/21/2022 08:00

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 18:43

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-02-6	trans-1,3-Dichloropropene	ND		0.50	0.080
79-01-6	Trichloroethene	4.4		0.50	0.080
75-01-4	Vinyl chloride	ND		0.50	0.10
1330-20-7	Xylenes, Total	ND		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	97		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X26.D
Lims ID: 410-110288-A-13
Client ID: HD-QC1-0/1-1
Sample Type: Client
Inject. Date: 28-Dec-2022 18:43:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074091-027
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 10:48:58 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1603

First Level Reviewer: innoonk Date: 29-Dec-2022 10:49:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	1.916	1.922	-0.006	97	6656	0.0909	
6 Vinyl chloride	62		2.020				ND	7
9 Bromomethane	94		2.306				ND	7
10 Chloroethane	64		2.367				ND	
19 1,1-Dichloroethene	96	3.087	3.087	0.000	96	23938	0.5602	
20 Acetone	43	3.129	3.123	0.006	33	5396	0.6973	
25 Carbon disulfide	76		3.343				ND	7
29 Methylene Chloride	84		3.654				ND	7
* 30 t-Butyl alcohol-d10 (IS)	65	3.684	3.684	0.000	99	150203	50.0	
33 Methyl tert-butyl ether	73	4.001	4.001	0.000	81	6159	0.0475	
34 trans-1,2-Dichloroethene	96	3.995	4.007	-0.012	92	3037	0.0577	
36 1,1-Dichloroethane	63	4.641	4.647	-0.006	96	120479	1.24	
41 2-Butanone (MEK)	43		5.483				ND	7
42 cis-1,2-Dichloroethene	96	5.501	5.501	0.000	80	213768	3.71	
47 Chlorobromomethane	128		5.836				ND	
50 Chloroform	83	6.001	5.995	0.006	93	24377	0.2670	
52 1,1,1-Trichloroethane	97	6.208	6.214	-0.006	99	503490	6.31	
$ 53 Dibromofluoromethane (Surr)	113	6.214	6.214	0.000	94	452298	9.96	
55 Carbon tetrachloride	117	6.427	6.427	0.000	43	3017	0.0450	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.671	6.677	-0.006	45	95038	10.2	
59 Benzene	78		6.702				ND	7
61 1,2-Dichloroethane	62		6.781				ND	
* 64 Fluorobenzene (IS)	96	7.122	7.122	0.000	99	1942497	10.0	
67 Trichloroethene	95	7.610	7.610	0.000	98	252794	4.41	
69 1,2-Dichloropropane	63		7.952				ND	
75 Dichlorobromomethane	83		8.311				ND	
79 cis-1,3-Dichloropropene	75		8.878				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.085				ND	
$ 82 Toluene-d8 (Surr)	98	9.213	9.214	-0.001	94	1959346	9.74	
83 Toluene	92		9.299				ND	7
84 trans-1,3-Dichloropropene	75		9.598				ND	
86 1,1,2-Trichloroethane	97	9.817	9.811	0.006	80	1141	0.0277	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
87 Tetrachloroethene	166	9.890	9.896	-0.006	97	5991212	86.6	E
104 2-Hexanone	43		10.061				ND	
106 Chlorodibromomethane	129		10.213				ND	
107 Ethylene Dibromide	107		10.323				ND	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	85	1527207	10.0	
110 Chlorobenzene	112		10.811				ND	
111 1,1,1,2-Tetrachloroethane	131		10.896				ND	7
112 Ethylbenzene	91		10.902				ND	7
113 m-Xylene & p-Xylene	106		11.024				ND	7
S 114 Xylenes, Total	106		11.245				ND	7
115 o-Xylene	106		11.366				ND	7
116 Styrene	104		11.384				ND	7
117 Bromoform	173		11.542				ND	
$ 121 4-Bromofluorobenzene (Surr)	95	11.823	11.823	0.000	93	698224	9.38	
123 1,1,2,2-Tetrachloroethane	83		11.939				ND	
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	94	867520	10.0	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

7 - Failed Limit of Detection

Reagents:

MSV_HP25_ISSS_00063 Amount Added: 1.00 Units: uL Run Reagent

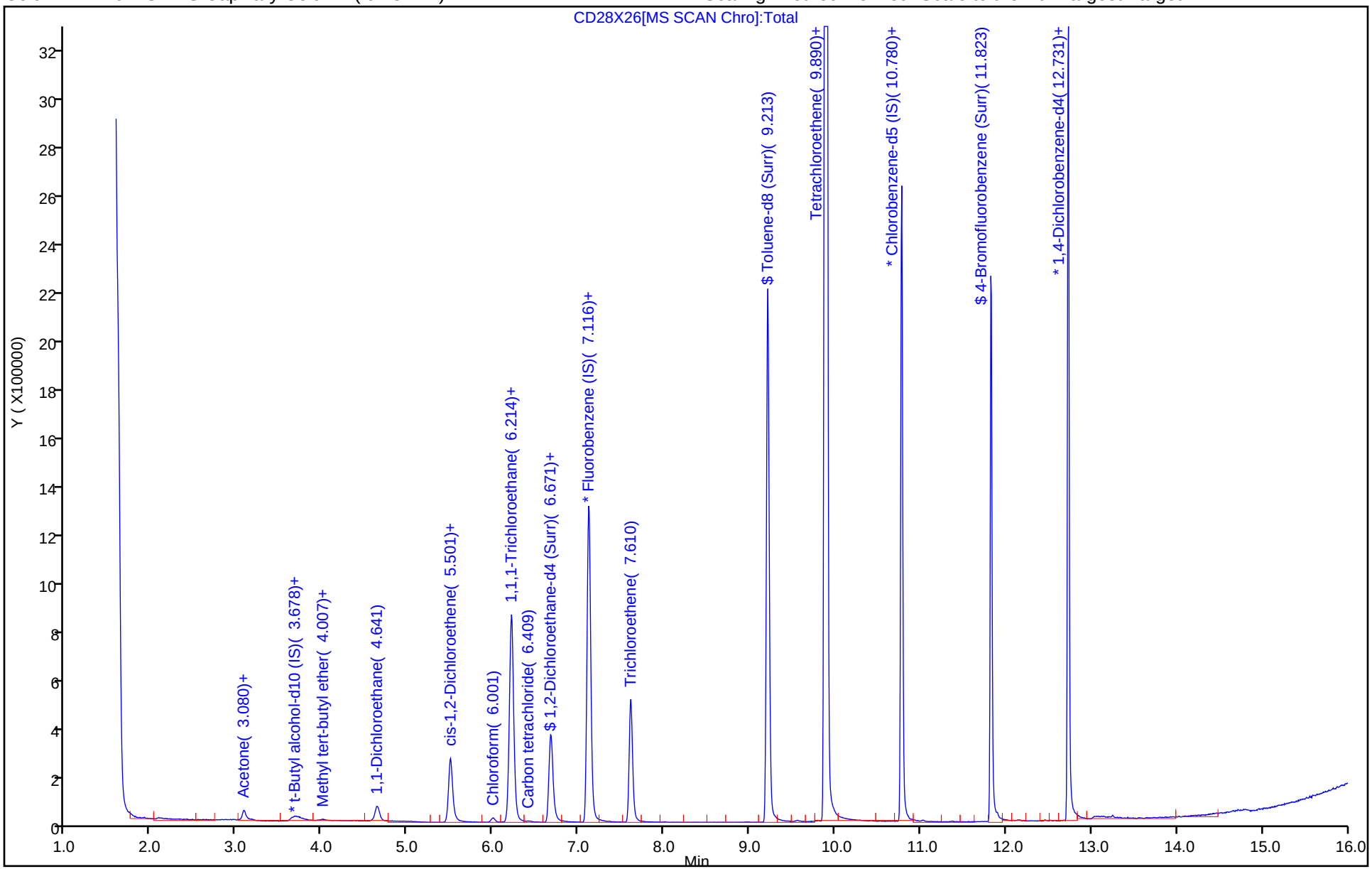
Report Date: 29-Dec-2022 10:49:48 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X26.D

Injection Date:	28-Dec-2022 18:43:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	410-110288-A-13	Lab Sample ID:	410-110288-13	Worklist Smp#:	27
Client ID:	HD-QC1-0/1-1				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X26.D				
Lims ID:	410-110288-A-13				
Client ID:	HD-QC1-0/1-1				
Sample Type:	Client				
Inject. Date:	28-Dec-2022 18:43:30	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0074091-027				
Operator ID:	knk41612	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	29-Dec-2022 10:48:58	Calib Date:	22-Aug-2022 22:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1603				

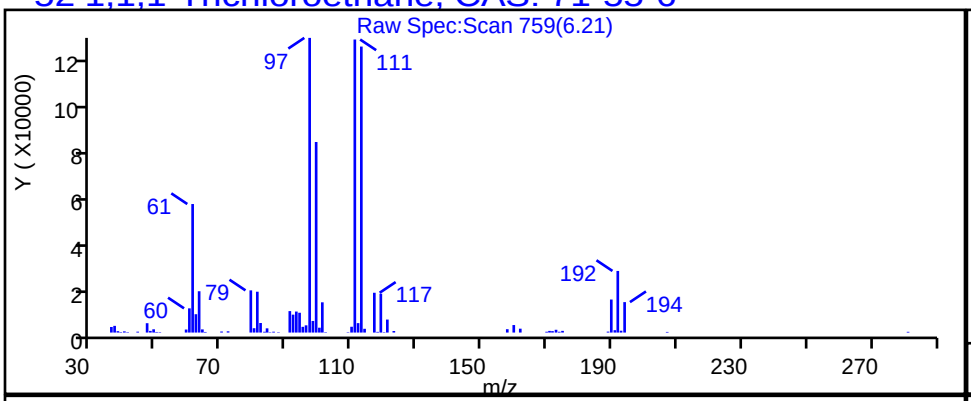
First Level Reviewer: innoonk Date: 29-Dec-2022 10:49:48

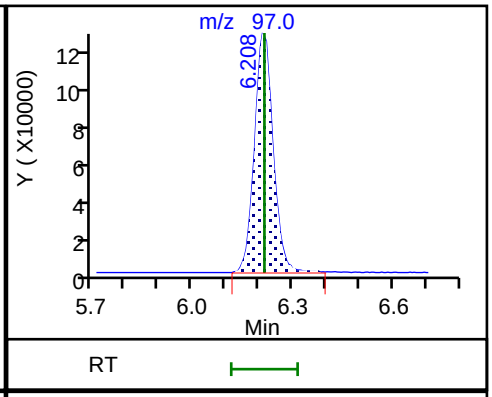
Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	9.96	99.63
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.83
$ 82 Toluene-d8 (Surr)	10.0	9.74	97.37
$ 121 4-Bromofluorobenzene (Surr)	10.0	9.38	93.76

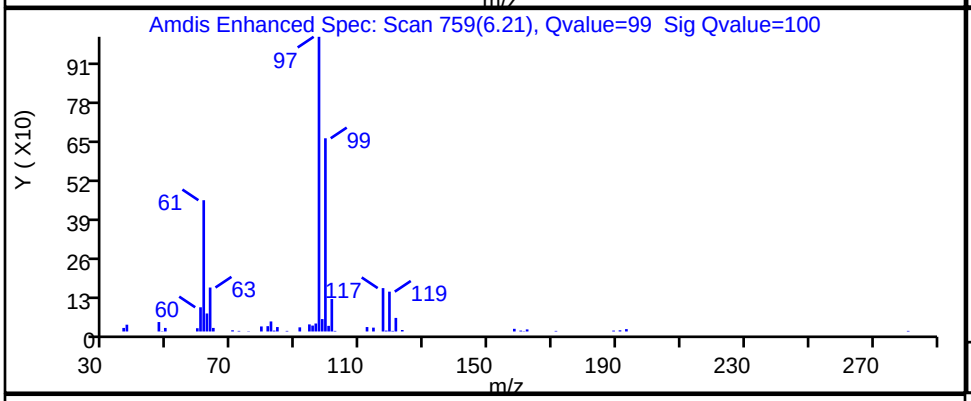
Eurofins Lancaster Laboratories Environment Testing, LLC

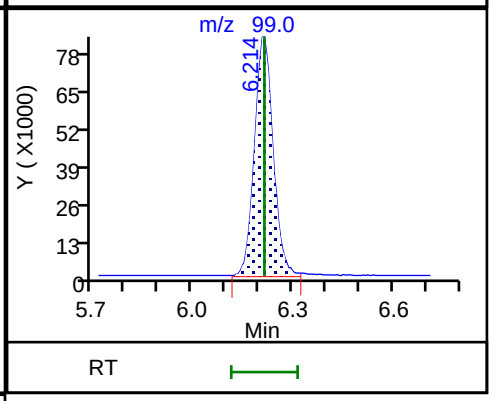
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X26.D				
Injection Date:	28-Dec-2022 18:43:30	Instrument ID:	10193		
Lims ID:	410-110288-A-13	Lab Sample ID:	410-110288-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	knk41612	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

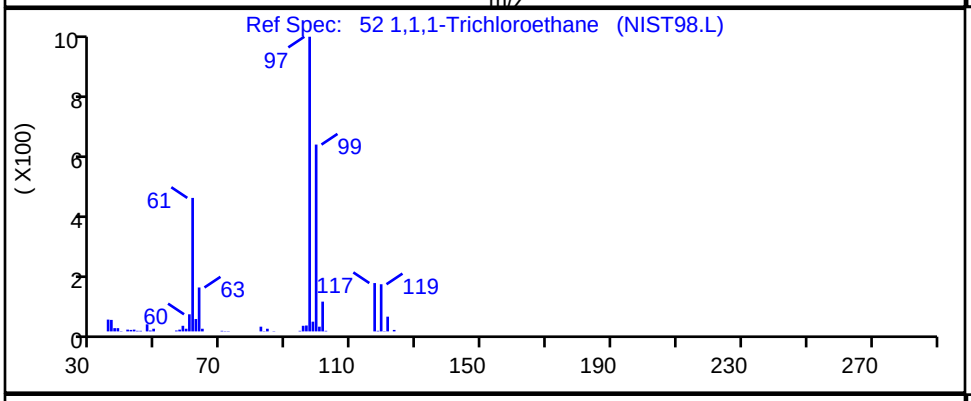
52 1,1,1-Trichloroethane, CAS: 71-55-6

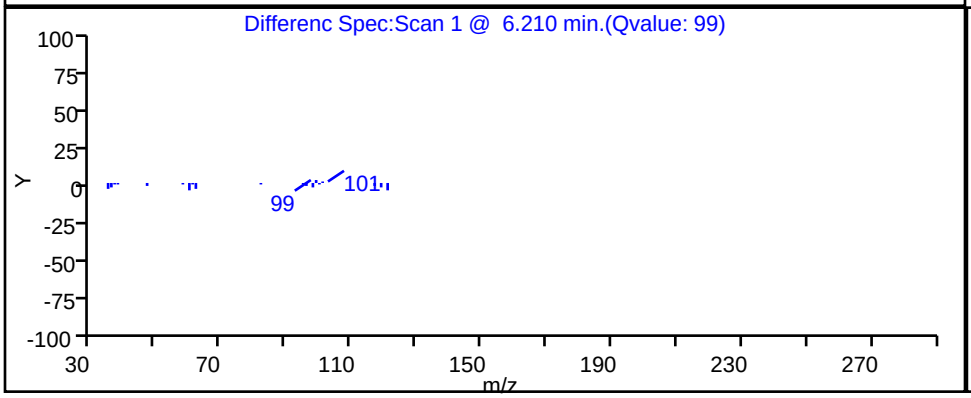


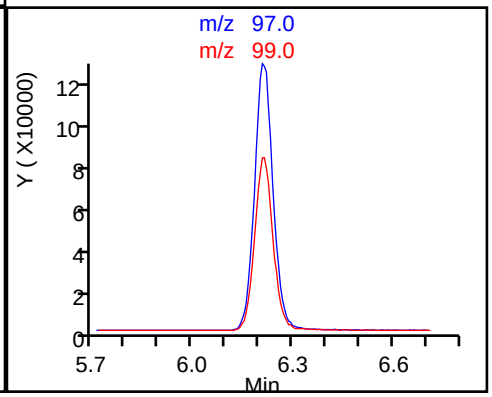








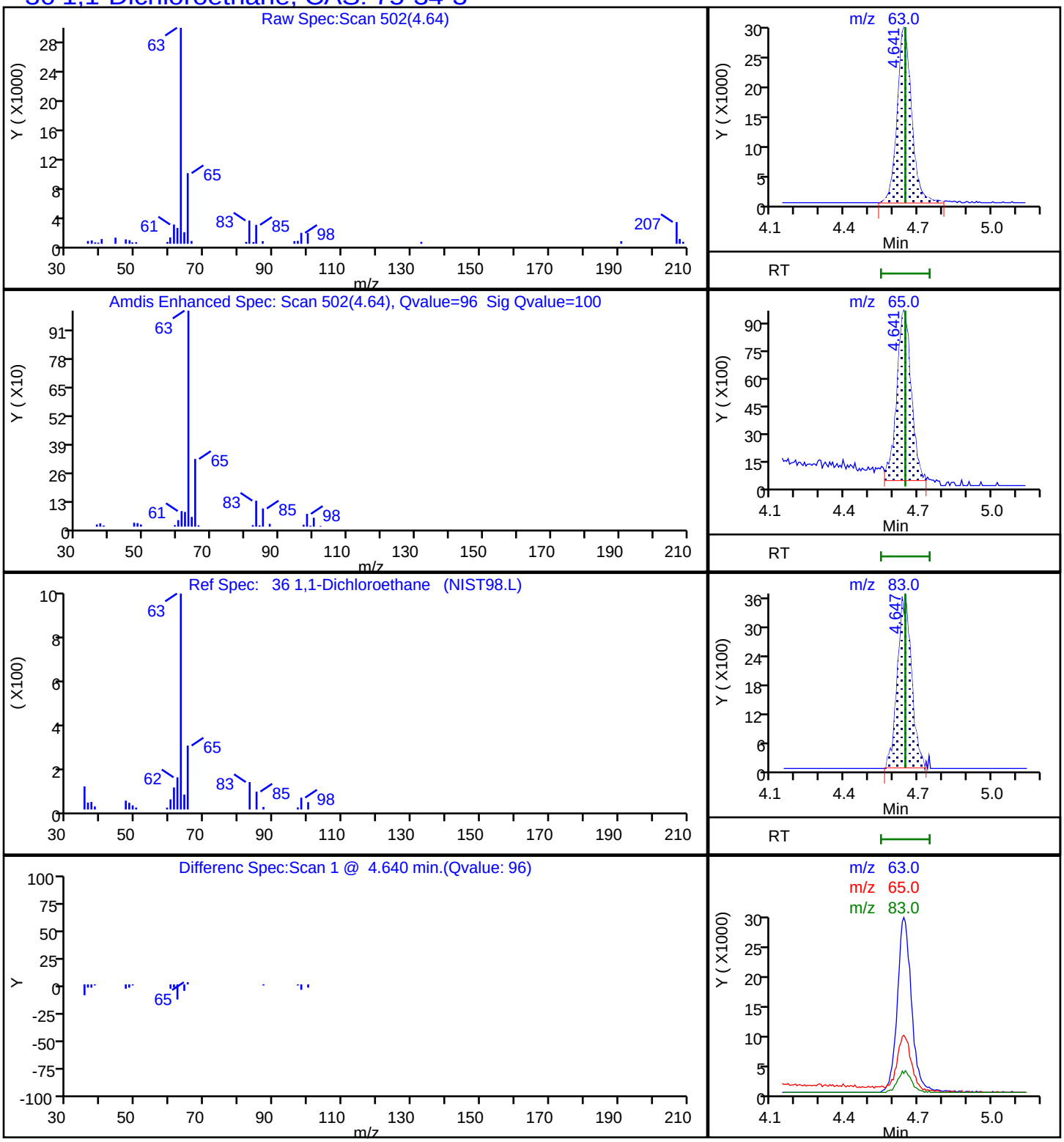




Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X26.D				
Injection Date:	28-Dec-2022 18:43:30	Instrument ID:	10193		
Lims ID:	410-110288-A-13	Lab Sample ID:	410-110288-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	knk41612	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

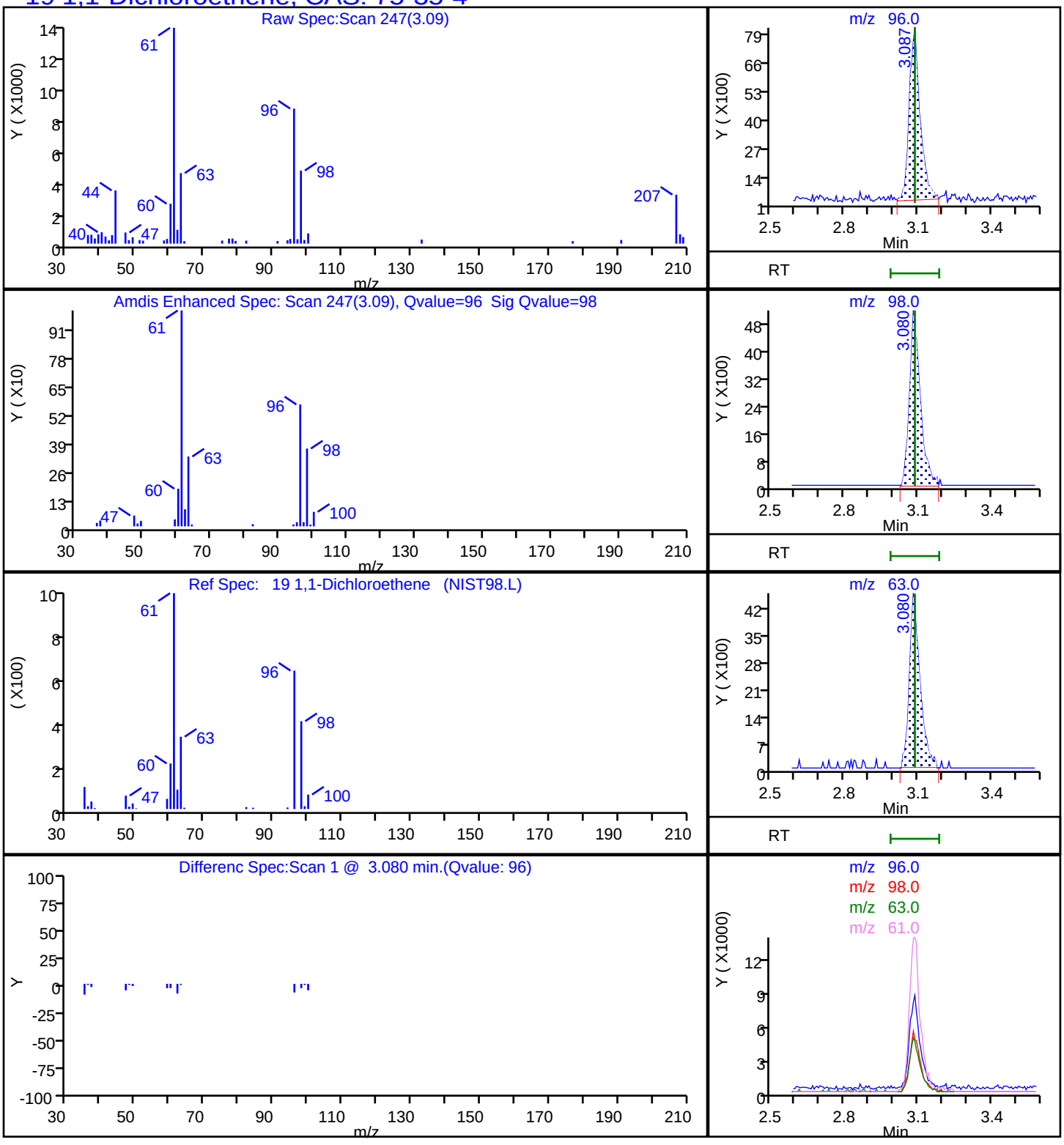
36 1,1-Dichloroethane, CAS: 75-34-3



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X26.D				
Injection Date:	28-Dec-2022 18:43:30	Instrument ID:	10193		
Lims ID:	410-110288-A-13	Lab Sample ID:	410-110288-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	knk41612	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X26.D				
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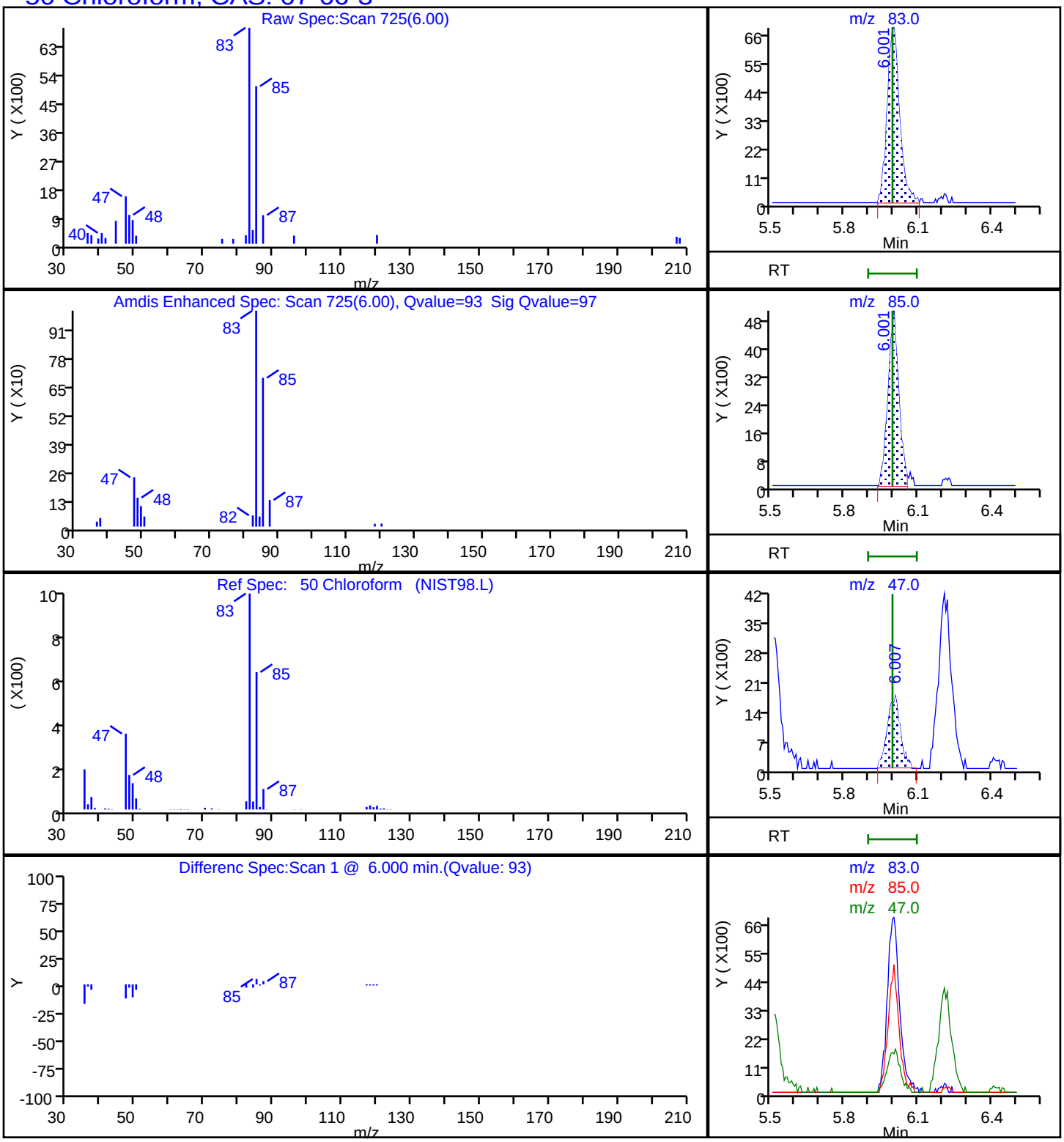
Lims ID:	410-110288-A-13	Lab Sample ID:	410-110288-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	knk41612	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

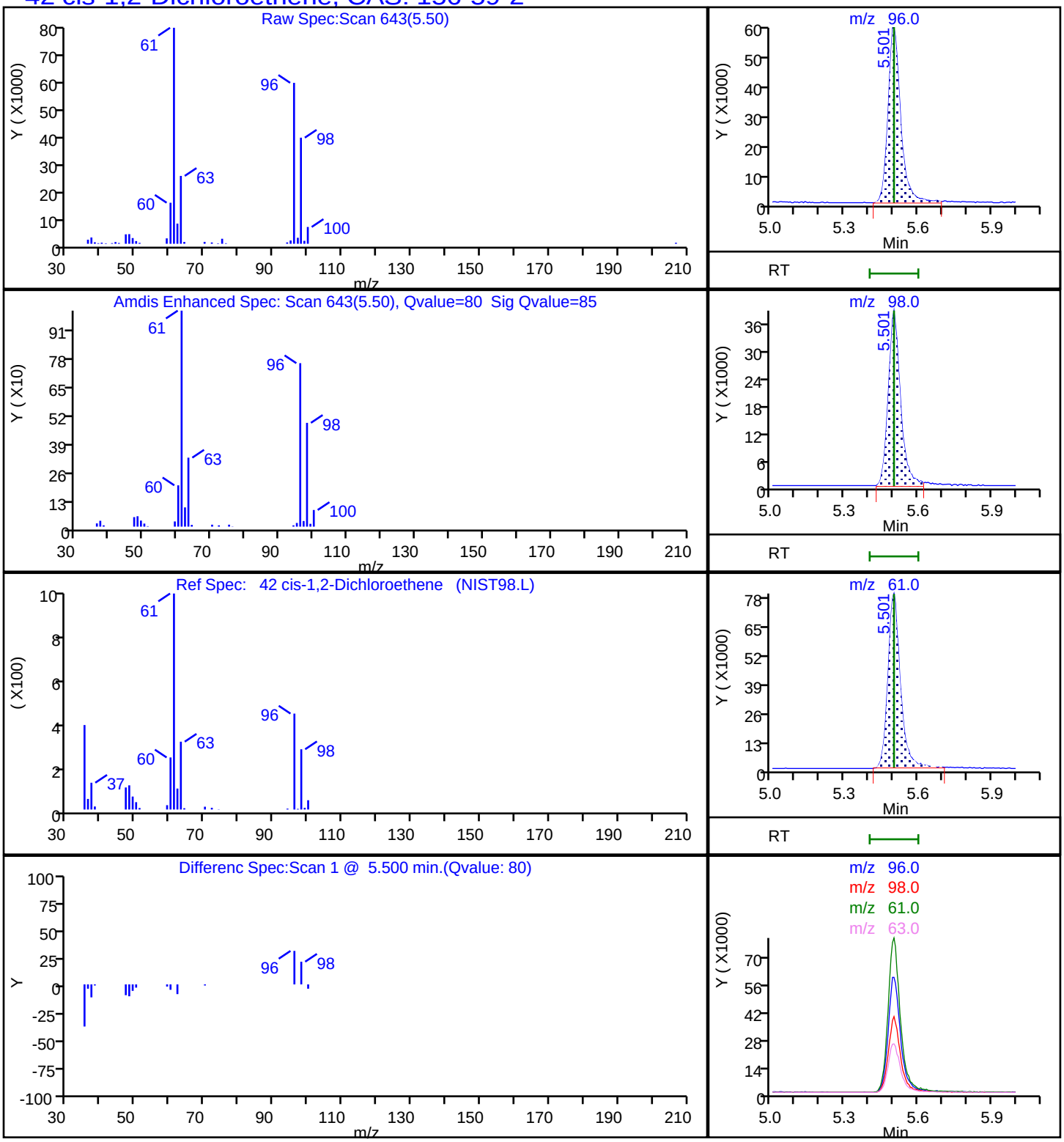
50 Chloroform, CAS: 67-66-3



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X26.D				
Injection Date:	28-Dec-2022 18:43:30	Instrument ID:	10193		
Lims ID:	410-110288-A-13	Lab Sample ID:	410-110288-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	knk41612	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

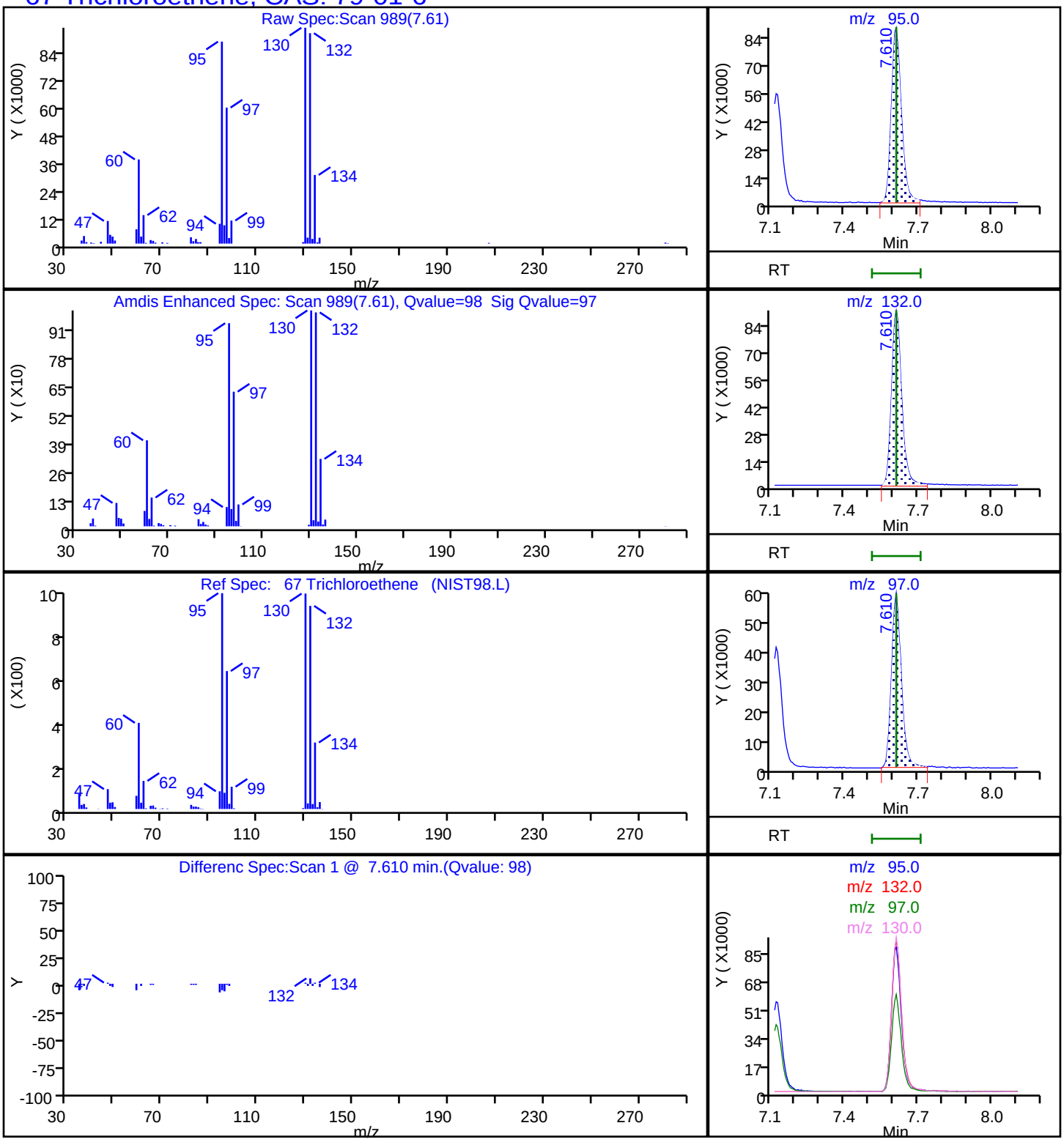
42 cis-1,2-Dichloroethene, CAS: 156-59-2



Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X26.D				
Injection Date:	28-Dec-2022 18:43:30	Instrument ID:	10193		
Lims ID:	410-110288-A-13	Lab Sample ID:	410-110288-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	knk41612	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25 mm)	Detector	MS Quad		

67 Trichloroethene, CAS: 79-01-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-QC1-0/1-1 DL
Lab Sample ID: 410-110288-13 DL

Matrix: Water
Lab File ID: CD29X25.D

Analysis Method: 8260D
Date Collected: 12/21/2022 08:00

Sample wt/vol: 25(mL)
Date Analyzed: 12/29/2022 20:53

Soil Aliquot Vol:
Dilution Factor: 10

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

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

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

Analysis Batch No.: 331173
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
127-18-4	Tetrachloroethene	70		5.0	2.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29X25.D
Lims ID: 410-110288-B-13 DL
Client ID: HD-QC1-0/1-1
Sample Type: Client
Inject. Date: 29-Dec-2022 20:53:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 25.000 mL Dil. Factor: 10.0000
Sample Info: 410-0074209-026
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 30-Dec-2022 09:48:36 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1603

First Level Reviewer: innoonk Date: 30-Dec-2022 09:48:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50		1.910				ND	
6 Vinyl chloride	62		2.007				ND	7
9 Bromomethane	94		2.294				ND	7
10 Chloroethane	64		2.355				ND	
19 1,1-Dichloroethene	96	3.093	3.074	0.019	94	2202	0.0550	
20 Acetone	43		3.111				ND	U
25 Carbon disulfide	76		3.330				ND	
29 Methylene Chloride	84		3.641				ND	
* 30 t-Butyl alcohol-d10 (IS)	65	3.696	3.672	0.024	98	118880	50.0	
34 trans-1,2-Dichloroethene	96		3.995				ND	
33 Methyl tert-butyl ether	73		4.001				ND	7
36 1,1-Dichloroethane	63	4.635	4.641	-0.006	96	9983	0.1099	
41 2-Butanone (MEK)	43		5.470				ND	
42 cis-1,2-Dichloroethene	96	5.507	5.494	0.013	81	17489	0.3235	
47 Chlorobromomethane	128		5.830				ND	
50 Chloroform	83	5.994	5.994	0.000	17	2221	0.0260	
52 1,1,1-Trichloroethane	97	6.208	6.214	-0.006	40	39784	0.5318	
$ 53 Dibromofluoromethane (Surr)	113	6.214	6.214	0.000	94	426645	10.0	
55 Carbon tetrachloride	117		6.421				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.671	6.671	0.000	47	88477	10.1	
59 Benzene	78		6.695				ND	
61 1,2-Dichloroethane	62		6.781				ND	
* 64 Fluorobenzene (IS)	96	7.116	7.116	0.000	99	1820705	10.0	
67 Trichloroethene	95	7.616	7.604	0.012	97	20453	0.3807	
69 1,2-Dichloropropane	63		7.945				ND	
75 Dichlorobromomethane	83		8.305				ND	
79 cis-1,3-Dichloropropene	75		8.878				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.085				ND	
$ 82 Toluene-d8 (Surr)	98	9.207	9.213	-0.006	94	1832396	9.76	
83 Toluene	92		9.299				ND	7
84 trans-1,3-Dichloropropene	75		9.597				ND	
86 1,1,2-Trichloroethane	97		9.811				ND	U

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
87 Tetrachloroethene	166	9.890	9.890	0.000	98	453262	7.02	
104 2-Hexanone	43		10.061				ND	
106 Chlorodibromomethane	129		10.207				ND	
107 Ethylene Dibromide	107		10.323				ND	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	85	1424677	10.0	
110 Chlorobenzene	112		10.811				ND	
111 1,1,1,2-Tetrachloroethane	131		10.896				ND	
112 Ethylbenzene	91		10.902				ND	
113 m-Xylene & p-Xylene	106		11.024				ND	
S 114 Xylenes, Total	106		11.245				ND	7
115 o-Xylene	106		11.365				ND	
116 Styrene	104		11.384				ND	
117 Bromoform	173		11.542				ND	
$ 121 4-Bromofluorobenzene (Surr)	95	11.823	11.823	0.000	94	645494	9.29	
123 1,1,2,2-Tetrachloroethane	83		11.938				ND	
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	94	798248	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

U - Marked Undetected

Reagents:

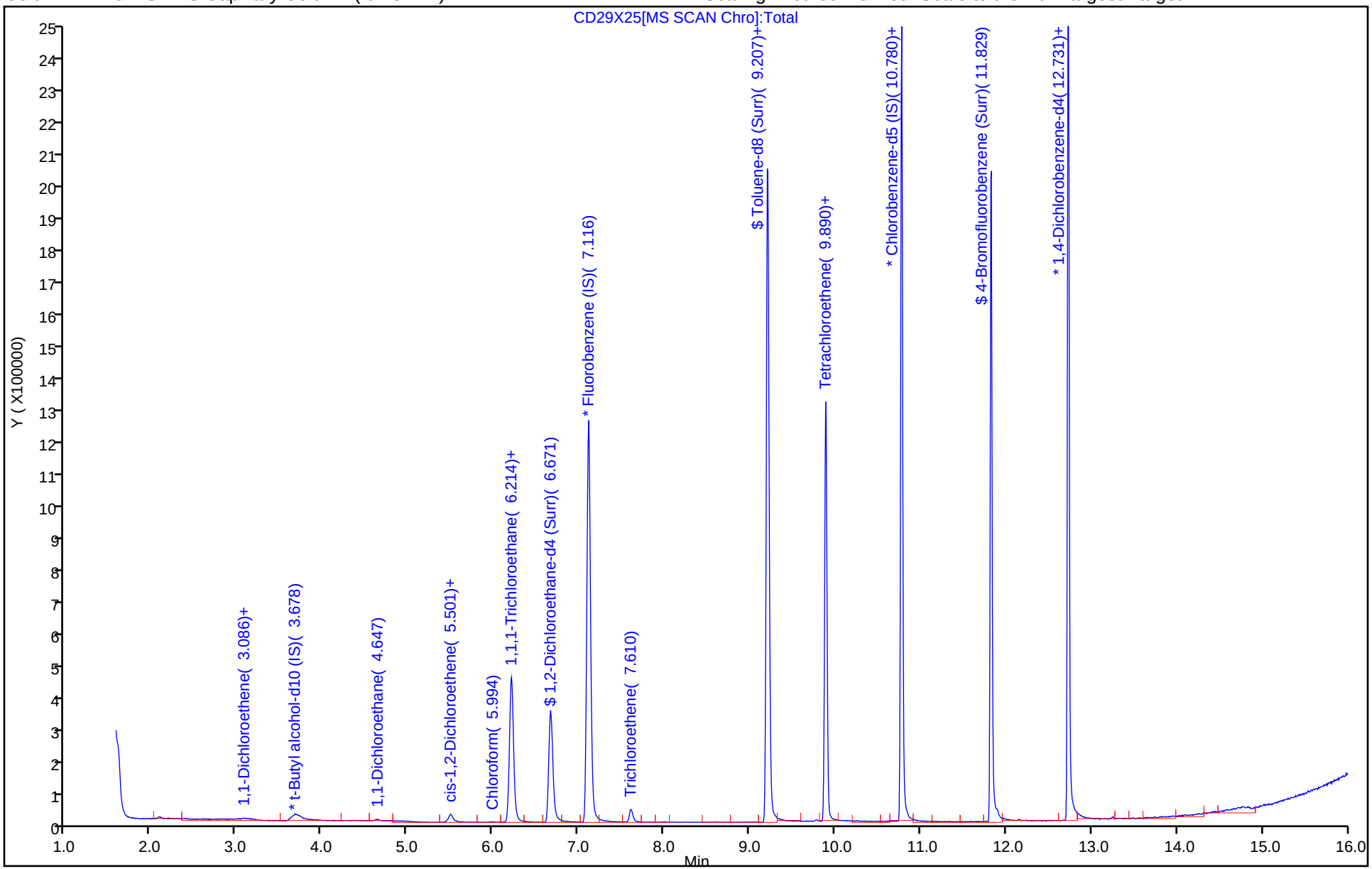
MSV_HP25_ISSS_00063 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 30-Dec-2022 09:48:37 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29X25.D				
Injection Date:	29-Dec-2022 20:53:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	410-110288-B-13 DL	Lab Sample ID:	410-110288-13	Worklist Smp#:	26
Client ID:	HD-QC1-0/1-1				
Purge Vol:	25.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	25
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29X25.D
Lims ID: 410-110288-B-13 DL
Client ID: HD-QC1-0/1-1
Sample Type: Client
Inject. Date: 29-Dec-2022 20:53:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 25.000 mL Dil. Factor: 10.0000
Sample Info: 410-0074209-026
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 30-Dec-2022 09:48:36 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1603

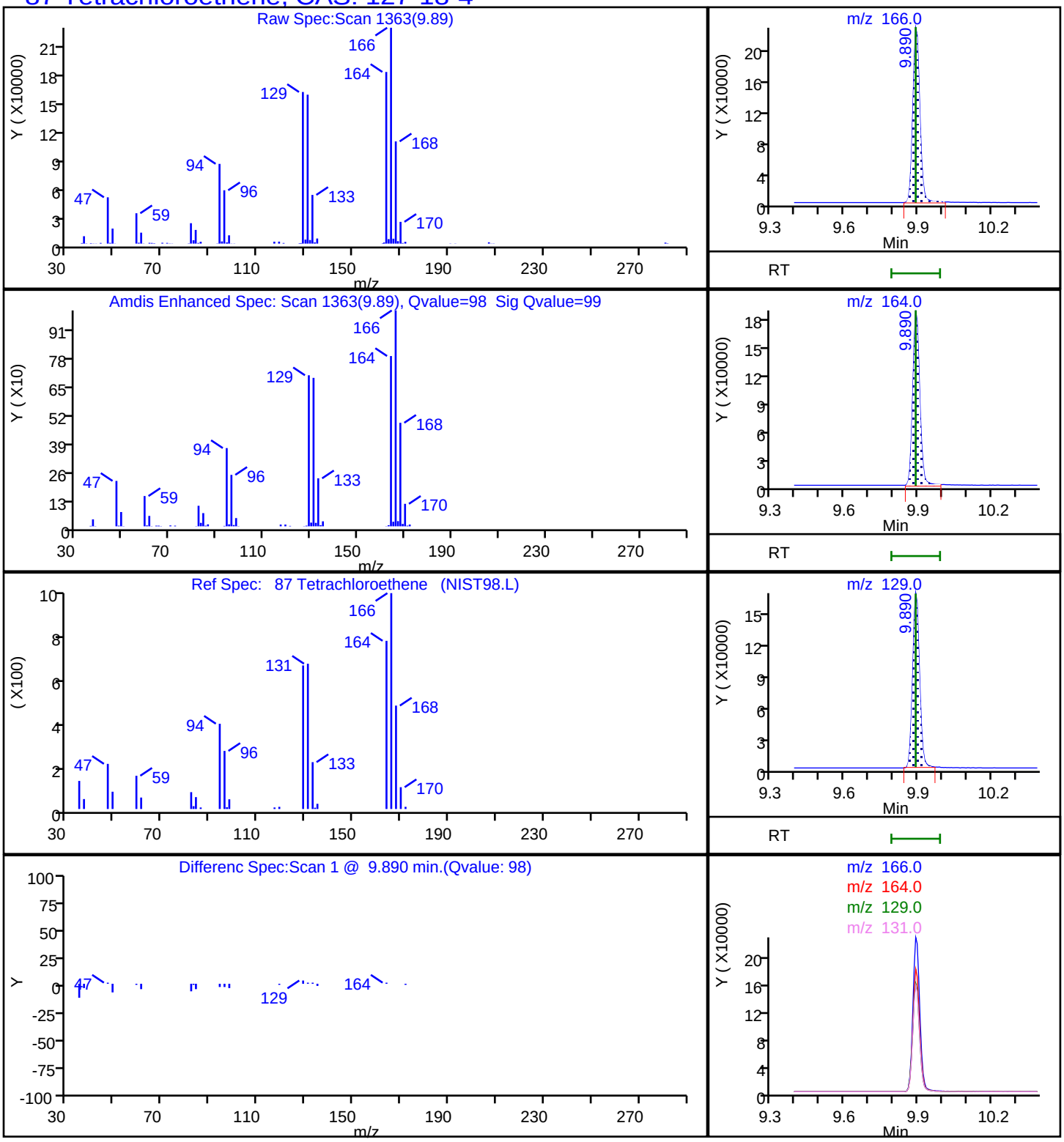
First Level Reviewer: innoonk Date: 30-Dec-2022 09:48:36

Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	10.0	100.27
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	101.14
$ 82 Toluene-d8 (Surr)	10.0	9.76	97.61
$ 121 4-Bromofluorobenzene (Surr)	10.0	9.29	92.92

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29X25.D				
Injection Date:	29-Dec-2022 20:53:30	Instrument ID:	10193		
Lims ID:	410-110288-B-13 DL	Lab Sample ID:	410-110288-13		
Client ID:	HD-QC1-0/1-1				
Operator ID:	knk41612	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	25.000 mL	Dil. Factor:	10.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

87 Tetrachloroethene, CAS: 127-18-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-QC1-0/1-2 Lab Sample ID: 410-110288-14

Matrix: Water Lab File ID: CD28X11.D

Analysis Method: 8260D Date Collected: 12/21/2022 00:00

Sample wt/vol: 25(mL) Date Analyzed: 12/28/2022 13:09

Soil Aliquot Vol: Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		0.50	0.070
71-55-6	1,1,1-Trichloroethane	ND		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.50	0.10
79-00-5	1,1,2-Trichloroethane	ND		0.50	0.080
75-34-3	1,1-Dichloroethane	ND		0.50	0.10
75-35-4	1,1-Dichloroethene	ND	^c cn	0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	ND		0.50	0.080
107-06-2	1,2-Dichloroethane	ND		0.50	0.070
78-87-5	1,2-Dichloropropane	ND		0.50	0.10
78-93-3	2-Butanone (MEK)	ND		5.0	1.0
591-78-6	2-Hexanone	ND		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0
67-64-1	Acetone	1.9	J	5.0	1.0
71-43-2	Benzene	ND		0.50	0.10
74-97-5	Bromochloromethane	ND		0.50	0.080
75-27-4	Bromodichloromethane	ND		0.50	0.080
75-25-2	Bromoform	ND		1.0	0.30
74-83-9	Bromomethane	ND		0.50	0.10
75-15-0	Carbon disulfide	ND		1.0	0.10
56-23-5	Carbon tetrachloride	ND		0.50	0.10
108-90-7	Chlorobenzene	ND		0.50	0.070
75-00-3	Chloroethane	ND		0.50	0.10
67-66-3	Chloroform	ND		0.50	0.090
74-87-3	Chloromethane	ND		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	ND		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	ND		0.50	0.10
124-48-1	Dibromochloromethane	ND		0.50	0.080
100-41-4	Ethylbenzene	ND		0.50	0.080
1634-04-4	Methyl tert-butyl ether	ND		0.50	0.080
75-09-2	Methylene Chloride	ND		0.50	0.10
100-42-5	Styrene	ND		0.50	0.070
127-18-4	Tetrachloroethene	ND		0.50	0.20
108-88-3	Toluene	ND		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-QC1-0/1-2
Lab Sample ID: 410-110288-14

Matrix: Water
Lab File ID: CD28X11.D

Analysis Method: 8260D
Date Collected: 12/21/2022 00:00

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 13:09

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	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)	99		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X11.D
Lims ID: 410-110288-A-14
Client ID: HD-QC1-0/1-2
Sample Type: Client
Inject. Date: 28-Dec-2022 13:09:30 ALS Bottle#: 11 Worklist Smp#: 12
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074091-012
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 28-Dec-2022 19:17:21 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1603

First Level Reviewer: innoonk Date: 29-Dec-2022 10:31:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
5 Chloromethane	50	1.904	1.922	-0.018	95	2648	0.0347	
6 Vinyl chloride	62		2.020				ND	7
9 Bromomethane	94		2.306				ND	7
10 Chloroethane	64		2.367				ND	7
19 1,1-Dichloroethene	96		3.087				ND	7
20 Acetone	43	3.117	3.123	-0.006	74	12879	1.90	
25 Carbon disulfide	76		3.343				ND	7
29 Methylene Chloride	84		3.654				ND	7
* 30 t-Butyl alcohol-d10 (IS)	65	3.672	3.684	-0.012	98	131879	50.0	
33 Methyl tert-butyl ether	73		4.001				ND	
34 trans-1,2-Dichloroethene	96		4.007				ND	
36 1,1-Dichloroethane	63		4.647				ND	
41 2-Butanone (MEK)	43		5.483				ND	
42 cis-1,2-Dichloroethene	96		5.501				ND	
47 Chlorobromomethane	128		5.836				ND	
50 Chloroform	83		5.995				ND	
52 1,1,1-Trichloroethane	97		6.214				ND	
$ 53 Dibromofluoromethane (Surr)	113	6.214	6.214	0.000	94	466170	9.87	
55 Carbon tetrachloride	117		6.427				ND	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.671	6.677	-0.006	72	96578	9.94	
59 Benzene	78		6.702				ND	
61 1,2-Dichloroethane	62		6.781				ND	7
* 64 Fluorobenzene (IS)	96	7.116	7.122	-0.006	99	2021472	10.0	
67 Trichloroethene	95		7.610				ND	
69 1,2-Dichloropropane	63		7.952				ND	
75 Dichlorobromomethane	83		8.311				ND	
79 cis-1,3-Dichloropropene	75		8.878				ND	
81 4-Methyl-2-pentanone (MIBK)	43		9.085				ND	7
$ 82 Toluene-d8 (Surr)	98	9.213	9.214	-0.001	93	2001441	9.86	
83 Toluene	92	9.305	9.299	0.006	98	9842	0.0657	
84 trans-1,3-Dichloropropene	75		9.598				ND	
86 1,1,2-Trichloroethane	97		9.811				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
87 Tetrachloroethene	166		9.896				ND	
104 2-Hexanone	43		10.061				ND	7
106 Chlorodibromomethane	129		10.213				ND	
107 Ethylene Dibromide	107		10.323				ND	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	85	1540466	10.0	
110 Chlorobenzene	112		10.811				ND	
111 1,1,1,2-Tetrachloroethane	131		10.896				ND	
112 Ethylbenzene	91		10.902				ND	7
113 m-Xylene & p-Xylene	106	11.024	11.024	0.000	96	4670	0.0400	
S 114 Xylenes, Total	106		11.245				ND	7
115 o-Xylene	106		11.366				ND	7
116 Styrene	104		11.384				ND	7
117 Bromoform	173		11.542				ND	
$ 121 4-Bromofluorobenzene (Surr)	95	11.823	11.823	0.000	94	719434	9.58	
123 1,1,2,2-Tetrachloroethane	83		11.939				ND	
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	94	875169	10.0	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

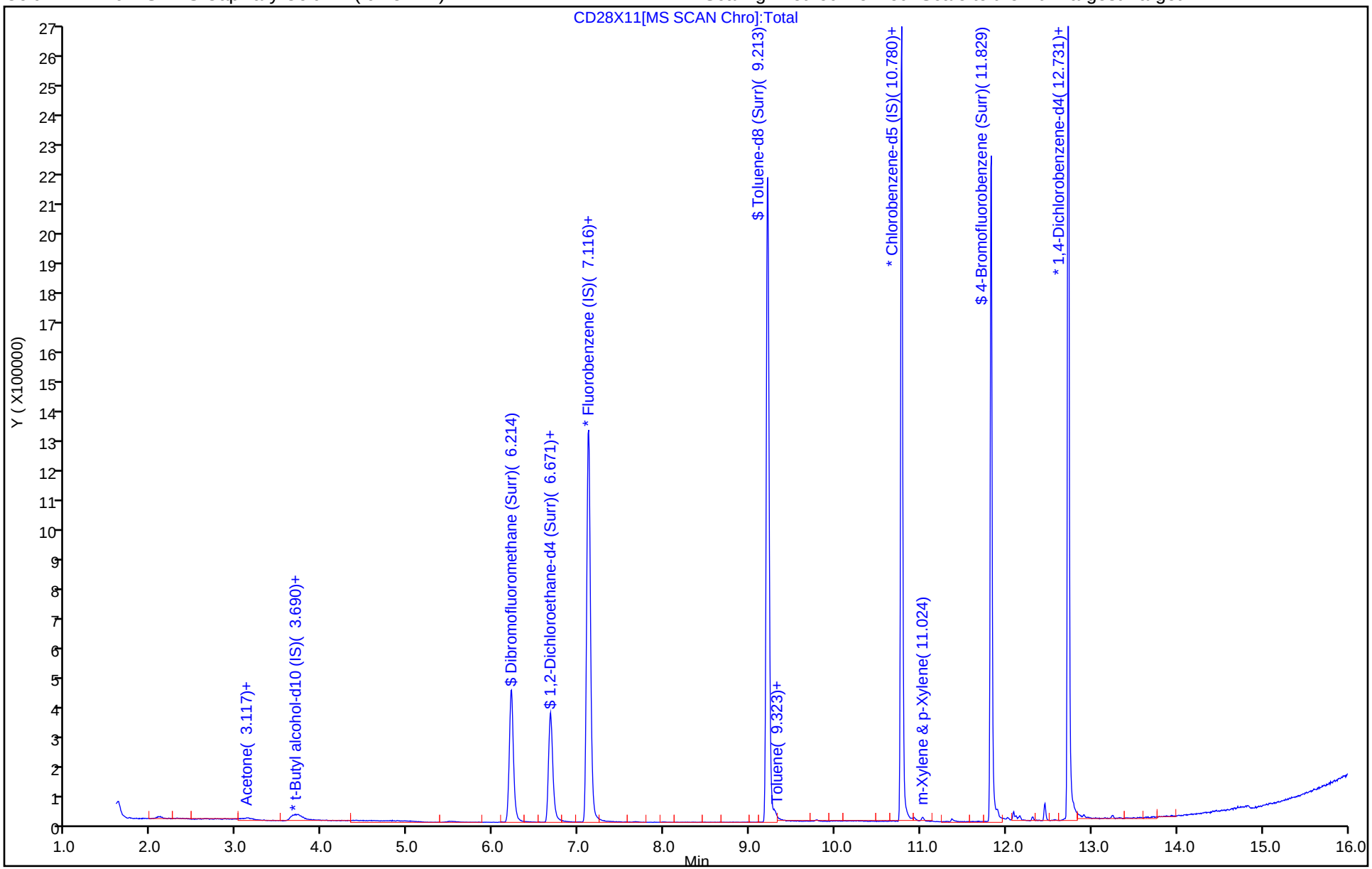
MSV_HP25_ISSS_00063 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 29-Dec-2022 10:31:55 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X11.D				
Injection Date:	28-Dec-2022 13:09:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	410-110288-A-14	Lab Sample ID:	410-110288-14	Worklist Smp#:	12
Client ID:	HD-QC1-0/1-2				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X11.D				
Lims ID:	410-110288-A-14				
Client ID:	HD-QC1-0/1-2				
Sample Type:	Client				
Inject. Date:	28-Dec-2022 13:09:30	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0074091-012				
Operator ID:	knk41612	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	28-Dec-2022 19:17:21	Calib Date:	22-Aug-2022 22:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1603				

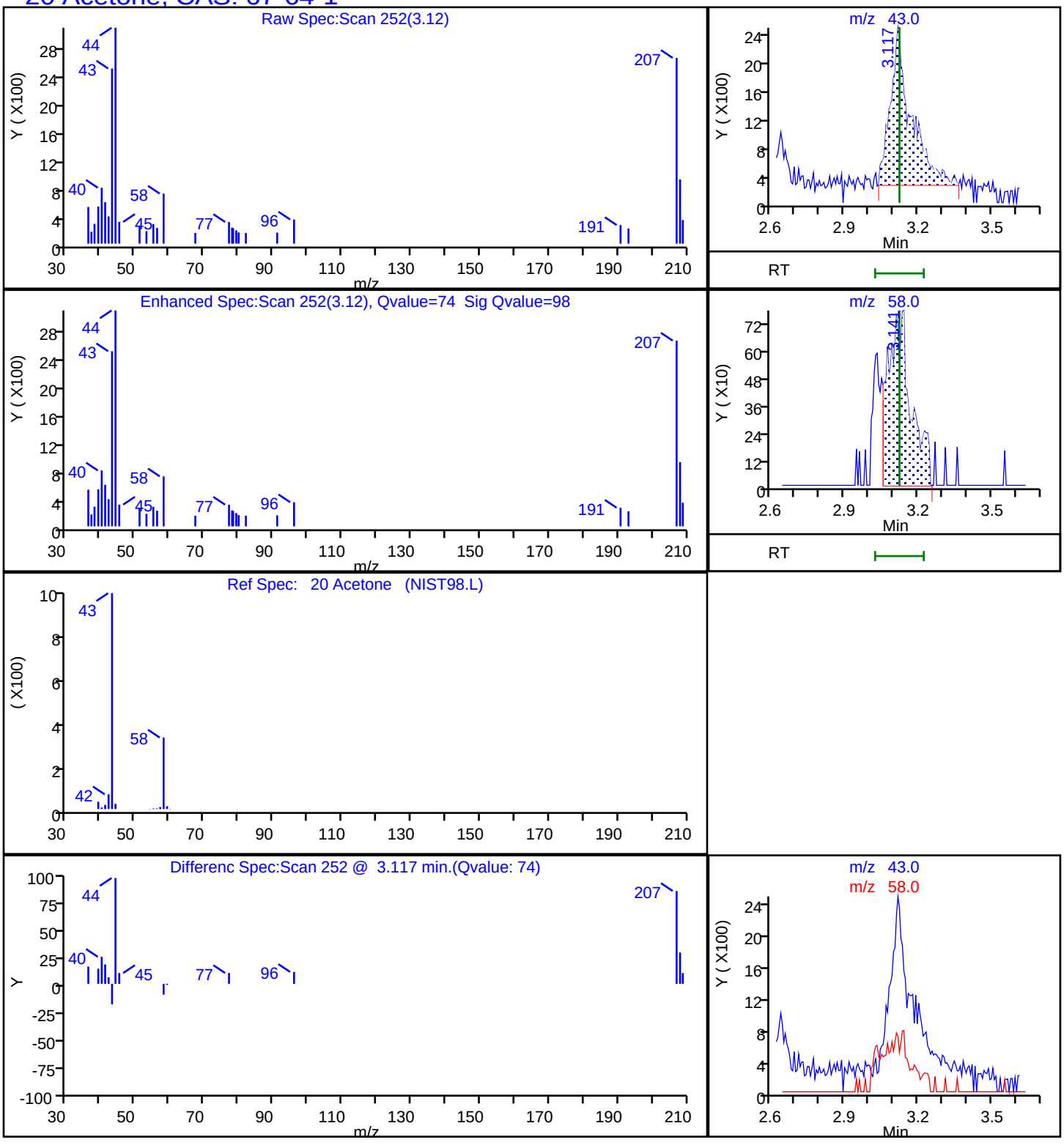
First Level Reviewer: innoonk Date: 29-Dec-2022 10:31:54

Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	9.87	98.68
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	9.94	99.43
$ 82 Toluene-d8 (Surr)	10.0	9.86	98.60
$ 121 4-Bromofluorobenzene (Surr)	10.0	9.58	95.78

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X11.D				
Injection Date:	28-Dec-2022 13:09:30	Instrument ID:	10193		
Lims ID:	410-110288-A-14	Lab Sample ID:	410-110288-14		
Client ID:	HD-QC1-0/1-2				
Operator ID:	knk41612	ALS Bottle#:	11	Worklist Smp#:	12
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

20 Acetone, CAS: 67-64-1



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1 Analy Batch No.: 288300

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2022 20:12 Calibration End Date: 08/22/2022 22:26 Calibration ID: 41918

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-288300/13	CG22X12.D
Level 2	IC 410-288300/14	CG22X13.D
Level 3	IC 410-288300/15	CG22X14.D
Level 4	IC 410-288300/16	CG22X15.D
Level 5	IC 410-288300/17	CG22X16.D
Level 6	ICIS 410-288300/18	CG22X17.D
Level 7	IC 410-288300/19	CG22X18.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2752 0.2773	0.2748 0.2802	0.2940	0.2972	0.2988	Ave		0.2854			0.1000	3.8		20.0			
Chloromethane	0.3855 0.3532	0.4080 0.3535	0.3876	0.3801	0.3721	Ave		0.3771			0.1000	5.2		20.0			
Vinyl chloride	0.3490 0.3360	0.3541 0.3406	0.3416	0.3625	0.3655	Ave		0.3499			0.1000	3.2		20.0			
1,3-Butadiene	0.4023 0.3559	0.3593 0.3566	0.3730	0.3856	0.3861	Ave		0.3741				4.8		20.0			
Bromomethane	0.2352 0.2251	0.2368 0.2278	0.2307	0.2367	0.2372	Ave		0.2328			0.1000	2.1		20.0			
Chloroethane	0.2084 0.1920	0.2122 0.1914	0.2097	0.2054	0.2049	Ave		0.2034			0.1000	4.1		20.0			
Dichlorofluoromethane	0.4670 0.4442	0.5114 0.4487	0.4692	0.4750	0.4730	Ave		0.4698			0.1000	4.7		20.0			
Trichlorofluoromethane	0.3757 0.3865	0.3873 0.3973	0.3987	0.4168	0.4162	Ave		0.3969			0.1000	3.9		20.0			
Ethyl ether	0.1977 0.2030	0.2014 0.2027	0.1993	0.2147	0.2059	Ave		0.2035				2.7		20.0			
Freon 123a	0.3350 0.2906	0.3199 0.2979	0.3037	0.3099	0.3071	Ave		0.3092				4.7		20.0			
Acrolein	2.1221 2.2195	2.4146 2.2615	2.4911	2.4841	2.0524	Ave		2.2922				7.6		20.0			
1,1-Dichloroethene	0.2210 0.2113	0.2380 0.2138	0.2157	0.2195	0.2206	Ave		0.2200			0.1000	4.0		20.0			
Acetone	2.9885 2.2622	3.1775 2.2235	2.6155	2.6101	2.1536	Ave		2.5758			0.1000	15.3		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1 Analy Batch No.: 288300

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2022 20:12 Calibration End Date: 08/22/2022 22:26 Calibration ID: 41918

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Freon 113	0.1916 0.1968	0.2121 0.2069	0.2090	0.2133	0.2205	Ave		0.2072			0.1000	4.8		20.0			
Methyl iodide	0.3774 0.3999	0.4274 0.4027	0.3985	0.4149	0.4133	Ave		0.4049				3.9		20.0			
Carbon disulfide	0.6129 0.6820	0.7060 0.6962	0.6697	0.6911	0.7050	Ave		0.6804			0.1000	4.8		20.0			
Methyl acetate	7.9880 7.1756	7.6361 7.5985	7.2101	9.0682	6.4689	Ave		7.5922			0.1000	10.6		20.0			
Allyl chloride	0.3904 0.3978	0.4276 0.4021	0.3978	0.4112	0.4126	Ave		0.4056				3.1		20.0			
Methylene Chloride	0.2544 0.2549	0.2786 0.2540	0.2582	0.2641	0.2616	Ave		0.2608			0.1000	3.3		20.0			
t-Butyl alcohol	0.9523 0.9491	1.2870 0.9653	1.2271	1.0620	0.8519	Ave		1.0421				15.3		20.0			
Acrylonitrile	3.5906 3.6644	4.0883 3.7096	4.3571	4.1274	3.6077	Ave		3.8779				7.9		20.0			
Methyl tert-butyl ether	0.6303 0.6625	0.7000 0.6606	0.6539	0.6888	0.6804	Ave		0.6681			0.1000	3.5		20.0			
trans-1,2-Dichloroethene	0.2591 0.2625	0.2911 0.2645	0.2688	0.2772	0.2736	Ave		0.2710			0.1000	4.0		20.0			
n-Hexane	0.3507 0.3509	0.3865 0.3628	0.3548	0.3567	0.3823	Ave		0.3635				4.1		20.0			
1,1-Dichloroethane	0.4631 0.4903	0.5245 0.4926	0.4979	0.5136	0.5102	Ave		0.4989			0.2000	4.0		20.0			
di-Isopropyl ether	0.8681 0.9014	0.9679 0.9076	0.9061	0.9369	0.9321	Ave		0.9172				3.5		20.0			
2-Chloro-1,3-butadiene	0.3663 0.3876	0.4052 0.3969	0.3856	0.3913	0.3950	Ave		0.3897				3.1		20.0			
Ethyl t-butyl ether	0.7982 0.8443	0.8720 0.8425	0.8412	0.8648	0.8667	Ave		0.8471				3.0		20.0			
2-Butanone (MEK)	4.9464 5.0610	5.2654 5.1543	5.6740	5.6960	4.9868	Ave		5.2548			0.1000	5.9		20.0			
cis-1,2-Dichloroethene	0.2696 0.2929	0.3197 0.2928	0.2977	0.3006	0.3051	Ave		0.2969			0.1000	5.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1 Analy Batch No.: 288300

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2022 20:12 Calibration End Date: 08/22/2022 22:26 Calibration ID: 41918

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2,2-Dichloropropane	0.3775 0.3845	0.4037 0.3891	0.3862	0.4154	0.4015	Ave		0.3940				3.4		20.0			
Propionitrile	1.1450 1.3123	1.3681 1.2486	1.3794	1.3619	1.3394	Ave		1.3078				6.5		20.0			
Methacrylonitrile	4.6167 5.4468	5.4630 5.7588	6.0657	6.0771	5.4391	Ave		5.5525				9.0		20.0			
Bromochloromethane	0.1172 0.1301	0.1407 0.1321	0.1312	0.1345	0.1348	Ave		0.1315				5.5		20.0			
Tetrahydrofuran	1.4977 1.4056	1.4663 1.4698	1.6355	1.5486	1.4014	Ave		1.4893				5.5		20.0			
Chloroform	0.4552 0.4597	0.4893 0.4634	0.4731	0.4761	0.4738	Ave		0.4701			0.2000	2.5		20.0			
1,1,1-Trichloroethane	0.3727 0.4030	0.4286 0.4101	0.4182	0.4216	0.4219	Ave		0.4109			0.1000	4.6		20.0			
Cyclohexane	0.4187 0.4533	0.4784 0.4762	0.4574	0.4665	0.4857	Ave		0.4623			0.1000	4.9		20.0			
Carbon tetrachloride	0.3080 0.3456	0.3477 0.3604	0.3394	0.3538	0.3601	Ave		0.3450			0.1000	5.2		20.0			
1,1-Dichloropropene	0.3706 0.3766	0.4060 0.3867	0.3735	0.3848	0.3903	Ave		0.3841				3.1		20.0			
Isobutyl alcohol	0.3996 0.3545	0.3931 0.3438	0.3863	0.3671	0.3448	Ave		0.3699				6.3		20.0			
Benzene	1.1203 1.1231	1.2015 1.1354	1.1375	1.1646	1.1732	Ave		1.1508			0.5000	2.6		20.0			
1,2-Dichloroethane	0.3038 0.2783	0.3143 0.2777	0.2928	0.2976	0.2764	Ave		0.2916			0.1000	5.1		20.0			
t-Amyl methyl ether	0.7010 0.7657	0.7912 0.7629	0.7629	0.7863	0.7779	Ave		0.7640				3.9		20.0			
n-Heptane	0.4143 0.4053	0.4265 0.4061	0.4011	0.4141	0.4253	Ave		0.4132				2.4		20.0			
n-Butanol	0.2216 0.3233	0.2946 0.3099	0.3123	0.2933	0.3213	Ave		0.2966				11.8		20.0			
Trichloroethene	0.2727 0.2916	0.3101 0.2957	0.2864	0.3062	0.3026	Ave		0.2950			0.2000	4.4		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1 Analy Batch No.: 288300

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2022 20:12 Calibration End Date: 08/22/2022 22:26 Calibration ID: 41918

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Methylcyclohexane	0.4466 0.4837	0.4994 0.5039	0.4809	0.4961	0.5239	Ave		0.4906			0.1000	4.9		20.0			
1,2-Dichloropropane	0.2859 0.3011	0.3225 0.3010	0.3045	0.3147	0.3108	Ave		0.3058			0.1000	3.8		20.0			
Methyl methacrylate	7.2082 10.408	9.7657 11.513	11.022	10.900	10.051	Ave		10.124				14.0		20.0			
1,4-Dioxane	0.0214 0.0711	0.0811 0.0613	0.0689	0.0737	0.0744	Qua	-0.315	0.0787	-0.000014		0.0050				1.0000		0.9900
Dibromomethane	0.1328 0.1340	0.1415 0.1347	0.1328	0.1404	0.1387	Ave		0.1364				2.7		20.0			
Bromodichloromethane	0.3011 0.3385	0.3424 0.3436	0.3330	0.3472	0.3452	Ave		0.3358			0.2000	4.8		20.0			
2-Nitropropane	3.1099 2.8091	2.7882 3.0020	2.8097	2.9413	2.7159	Ave		2.8823				4.8		20.0			
cis-1,3-Dichloropropene	0.3819 0.4595	0.4469 0.4596	0.4226	0.4468	0.4643	Ave		0.4402			0.2000	6.6		20.0			
4-Methyl-2-pentanone (MIBK)	12.118 14.041	13.968 14.880	15.142	15.328	14.040	Ave		14.217			0.1000	7.6		20.0			
Toluene	0.9195 0.9535	1.0057 0.9763	0.9723	0.9903	0.9886	Ave		0.9723			0.4000	2.9		20.0			
trans-1,3-Dichloropropene	0.3901 0.4922	0.4556 0.5051	0.4579	0.4806	0.4931	Ave		0.4678			0.1000	8.3		20.0			
Ethyl methacrylate	0.3232 0.4004	0.3809 0.4029	0.3578	0.3843	0.3978	Ave		0.3782				7.6		20.0			
1,1,2-Trichloroethane	0.2565 0.2656	0.2782 0.2645	0.2690	0.2787	0.2726	Ave		0.2693			0.1000	2.9		20.0			
Tetrachloroethene	0.4264 0.4479	0.4612 0.4555	0.4481	0.4651	0.4668	Ave		0.4530			0.2000	3.1		20.0			
1,3-Dichloropropane	0.4333 0.4632	0.4764 0.4582	0.4633	0.4802	0.4806	Ave		0.4650				3.6		20.0			
2-Hexanone	7.8205 10.257	9.3596 11.049	10.917	10.848	10.232	Ave		10.069			0.1000	11.4		20.0			
Dibromochloromethane	0.2795 0.3362	0.3236 0.3403	0.3078	0.3258	0.3386	Ave		0.3217				6.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1 Analy Batch No.: 288300

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2022 20:12 Calibration End Date: 08/22/2022 22:26 Calibration ID: 41918

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2-Dibromoethane (EDB)	0.2248 0.2588	0.2609 0.2585	0.2454	0.2638	0.2615	Ave		0.2534			0.1000	5.5		20.0			
1-Chlorohexane	0.5806 0.5324	0.5701 0.5492	0.5373	0.5551	0.5548	Ave		0.5542				3.1		20.0			
Chlorobenzene	1.0979 1.1281	1.1928 1.1373	1.1468	1.1657	1.1590	Ave		1.1468			0.5000	2.6		20.0			
1,1,1,2-Tetrachloroethane	0.3515 0.3839	0.3829 0.3914	0.3663	0.3916	0.3921	Ave		0.3800				4.1		20.0			
Ethylbenzene	1.7277 1.9027	1.9296 1.9309	1.8711	1.9412	1.9328	Ave		1.8909			0.1000	4.0		20.0			
m&p-Xylene	0.6904 0.7610	0.7628 0.7722	0.7627	0.7763	0.7796	Ave		0.7579			0.1000	4.0		20.0			
o-Xylene	0.6847 0.7547	0.7718 0.7680	0.7485	0.7661	0.7764	Ave		0.7529			0.3000	4.2		20.0			
Styrene	1.1127 1.2670	1.2144 1.2868	1.1927	1.2728	1.2787	Ave		1.2321			0.3000	5.2		20.0			
Bromoform	0.1592 0.2001	0.1837 0.2082	0.1743	0.1903	0.1977	Ave		0.1877			0.1000	8.9		20.0			
Isopropylbenzene	1.7306 1.9259	1.9519 1.9365	1.9162	1.9512	1.9799	Ave		1.9132			0.1000	4.3		20.0			
1,1,2,2-Tetrachloroethane	0.5441 0.5793	0.6318 0.5764	0.5990	0.6109	0.5972	Ave		0.5912			0.3000	4.7		20.0			
Bromobenzene	0.8027 0.8210	0.8742 0.8097	0.8309	0.8516	0.8305	Ave		0.8315				3.0		20.0			
trans-1,4-Dichloro-2-butene	0.1237 0.1461	0.1468 0.1482	0.1404	0.1476	0.1469	Ave		0.1428				6.2		20.0			
1,2,3-Trichloropropane	0.1543 0.1509	0.1625 0.1462	0.1573	0.1565	0.1549	Ave		0.1547				3.3		20.0			
N-Propylbenzene	3.6496 3.9560	4.1634 3.8577	4.0516	4.1202	4.1005	Ave		3.9856				4.6		20.0			
2-Chlorotoluene	0.8037 0.8244	0.8669 0.8112	0.8460	0.8485	0.8448	Ave		0.8351				2.7		20.0			
1,3,5-Trimethylbenzene	2.5659 2.8889	3.0020 2.8829	2.8619	2.9468	2.9411	Ave		2.8700				5.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1 Analy Batch No.: 288300

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2022 20:12 Calibration End Date: 08/22/2022 22:26 Calibration ID: 41918

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
4-Chlorotoluene	0.7788 0.8466	0.9051 0.8559	0.8563	0.8682	0.8863	Ave		0.8567				4.6		20.0			
tert-Butylbenzene	0.5865 0.6265	0.6350 0.6333	0.6286	0.6374	0.6830	Ave		0.6329				4.4		20.0			
Pentachloroethane	0.4083 0.5022	0.4690 0.5119	0.4631	0.4812	0.5110	Ave		0.4781				7.6		20.0			
1,2,4-Trimethylbenzene	2.6445 2.9974	3.1000 2.9834	3.0053	3.0574	3.0759	Ave		2.9806				5.2		20.0			
sec-Butylbenzene	3.2801 3.6384	3.7995 3.5896	3.7117	3.7431	3.7738	Ave		3.6480				4.9		20.0			
1,3-Dichlorobenzene	1.5906 1.6924	1.7774 1.6851	1.7159	1.7428	1.7277	Ave		1.7046			0.6000	3.5		20.0			
p-Isopropyltoluene	3.0038 3.2564	3.3544 3.2213	3.2351	3.3259	3.3345	Ave		3.2473				3.7		20.0			
1,4-Dichlorobenzene	1.6665 1.7320	1.8314 1.6890	1.7498	1.7659	1.7492	Ave		1.7405			0.5000	3.1		20.0			
1,2,3-Trimethylbenzene	1.2900 1.3358	1.4345 1.3324	1.3606	1.3863	1.3704	Ave		1.3586				3.4		20.0			
Benzyl chloride	0.1979 0.2631	0.2408 0.2667	0.2292	0.2495	0.2631	Ave		0.2443				10.1		20.0			
n-Butylbenzene	1.4751 1.6424	1.6800 1.6423	1.6435	1.6759	1.6924	Ave		1.6359				4.5		20.0			
1,2-Dichlorobenzene	1.4407 1.5679	1.6394 1.5565	1.5796	1.6091	1.5817	Ave		1.5679			0.4000	4.0		20.0			
1,2-Dibromo-3-Chloropropane	0.0734 0.0877	0.0860 0.0891	0.0729	0.0838	0.0912	Ave		0.0835			0.0500	8.9		20.0			
1,3,5-Trichlorobenzene	1.1868 1.3515	1.4213 1.3557	1.3332	1.3697	1.3810	Ave		1.3427				5.5		20.0			
1,2,4-Trichlorobenzene	0.9826 1.1686	1.1648 1.1821	1.1040	1.1460	1.1776	Ave		1.1322			0.2000	6.3		20.0			
Hexachlorobutadiene	0.5405 0.5839	0.6158 0.5823	0.5810	0.5964	0.5926	Ave		0.5847				3.9		20.0			
Naphthalene	1.5150 1.9258	1.7717 1.9498	1.7123	1.8096	1.9227	Ave		1.8010				8.6		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1 Analy Batch No.: 288300

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2022 20:12 Calibration End Date: 08/22/2022 22:26 Calibration ID: 41918

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,3-Trichlorobenzene	0.8010 0.9519	0.9042 0.9615	0.8833	0.9232	0.9603	Ave		0.9122				6.3		20.0			
Dibromofluoromethane (Surr)	0.2332 0.2342	0.2336 0.2353	0.2341	0.2321	0.2332	Ave		0.2337				0.4		20.0			
1,2-Dichloroethane-d4 (Surr)	0.0488 0.0488	0.0487 0.0479	0.0475	0.0475	0.0471	Ave		0.0480				1.5		20.0			
Toluene-d8 (Surr)	1.3105 1.3164	1.3060 1.3350	1.3215	1.3199	1.3145	Ave		1.3177				0.7		20.0			
4-Bromofluorobenzene (Surr)	0.4860 0.4899	0.4836 0.4917	0.4880	0.4865	0.4876	Ave		0.4876				0.5		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Envirc Job No.: 410-110288-1 Analy Batch No.: 288300

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2022 20:12 Calibration End Date: 08/22/2022 22:26 Calibration ID: 41918

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-288300/13	CG22X12.D
Level 2	IC 410-288300/14	CG22X13.D
Level 3	IC 410-288300/15	CG22X14.D
Level 4	IC 410-288300/16	CG22X15.D
Level 5	IC 410-288300/17	CG22X16.D
Level 6	ICIS 410-288300/18	CG22X17.D
Level 7	IC 410-288300/19	CG22X18.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	10972 551391	27289 1410396	58173	117468	293800	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloromethane	FB	Ave	15369 702218	40512 1779819	76690	150217	365920	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Vinyl chloride	FB	Ave	13917 668019	35160 1714605	67575	143251	359428	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Butadiene	FB	Ave	16039 707641	35671 1795374	73797	152389	379643	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromomethane	FB	Ave	9377 447646	23511 1146630	45642	93538	233256	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chloroethane	FB	Ave	8309 381713	21071 963317	41484	81164	201473	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dichlorofluoromethane	FB	Ave	18620 883302	50779 2258999	92839	187748	465102	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Trichlorofluoromethane	FB	Ave	14979 768569	38458 1999820	78889	164716	409286	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl ether	FB	Ave	7885 403748	20000 1020863	39448	84873	202566	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Freon 123a	FB	Ave	13359 577792	31764 1499422	60094	122486	302027	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acrolein	TBAd 10	Ave	57965 2878823	159412 6770476	281866	584522	1353279	10.00 500	25.0 1250	50.0	100.0	250
1,1-Dichloroethene	FB	Ave	8812 420214	23632 1076196	42670	86755	216909	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Acetone	TBAd 10	Ave	16327	41957	59190	122838	284011	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 Envirc Job No.: 410-110288-1 Analy Batch No.: 288300

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2022 20:12 Calibration End Date: 08/22/2022 22:26 Calibration ID: 41918

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
			586839	1331375				100	250			
Freon 113	FB	Ave	7638 391381	21059 1041622	41348	84297	216833	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl iodide	FB	Ave	15047 795081	42438 2027086	78848	163985	406462	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon disulfide	FB	Ave	24439 1356041	70097 3504627	132499	273138	693267	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl acetate	TBAd 10	Ave	4364 186144	10083 454980	16317	42677	85311	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Allyl chloride	FB	Ave	15566 790937	42455 2024085	78695	162533	405717	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylene Chloride	FB	Ave	10145 506891	27666 1278708	51086	104369	257199	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Butyl alcohol	TBAd 10	Ave	10405 492429	33987 1155957	55542	99960	224704	4.00 200	10.0 500	20.0	40.0	100
Acrylonitrile	TBAd 10	Ave	4904 237647	13496 555307	24651	48561	118945	0.500 25.0	1.25 62.5	2.50	5.00	12.5
Methyl tert-butyl ether	FB	Ave	25132 1317373	69506 3325509	129375	272217	669039	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,2-Dichloroethene	FB	Ave	10331 522027	28906 1331383	53191	109559	269017	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Hexane	FB	Ave	13985 697755	38374 1826385	70201	140977	375986	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloroethane	FB	Ave	18464 974846	52080 2479604	98507	203004	501664	0.200 10.0	0.500 25.0	1.00	2.00	5.00
di-Isopropyl ether	FB	Ave	34613 1792406	96103 4568886	179263	370270	916612	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chloro-1,3-butadiene	FB	Ave	14606 770625	40233 1997924	76284	154635	388421	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl t-butyl ether	FB	Ave	31825 1678851	86577 4241387	166424	341793	852261	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Butanone (MEK)	TBAd 10	Ave	27023	69526	128408	268068	657655	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 Envirc Job No.: 410-110288-1 Analy Batch No.: 288300

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2022 20:12 Calibration End Date: 08/22/2022 22:26 Calibration ID: 41918

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
			1312882	3086272				100	250			
cis-1,2-Dichloroethene	FB	Ave	10751 582324	31743 1473992	58902	118805	300063	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2,2-Dichloropropane	FB	Ave	15053 764497	40087 1959021	76415	164164	394862	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Propionitrile	TBAd 10	Ave	12511 680863	36131 1495301	62435	128191	353271	4.00 200	10.0 500	20.0	40.0	100
Methacrylonitrile	TBAd 10	Ave	25222 1412977	72136 3448269	137272	286005	717302	2.00 100	5.00 250	10.0	20.0	50.0
Bromochloromethane	FB	Ave	4671 258754	13968 664992	25966	53176	132568	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrahydrofuran	TBAd 10	Ave	4091 182320	9681 440047	18506	36440	92407	1.00 50.0	2.50 125	5.00	10.0	25.0
Chloroform	FB	Ave	18150 914023	48580 2332920	93605	188148	465915	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1-Trichloroethane	FB	Ave	14862 801358	42559 2064391	82747	166622	414918	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Cyclohexane	FB	Ave	16693 901372	47497 2397181	90500	184387	477600	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Carbon tetrachloride	FB	Ave	12280 687136	34521 1814532	67141	139848	354085	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1-Dichloropropene	FB	Ave	14777 748768	40312 1946573	73903	152069	383816	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isobutyl alcohol	TBAd 10	Ave	10915 459860	25955 1029246	43717	86391	227353	10.0 500	25.0 1250	50.0	100	250
Benzene	FB	Ave	44669 2233141	119293 5715737	225053	460268	1153651	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloroethane	FB	Ave	12113 553463	31210 1397962	57929	117609	271805	0.200 10.0	0.500 25.0	1.00	2.00	5.00
t-Amyl methyl ether	FB	Ave	27951 1522599	78561 3840751	150940	310776	764987	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Heptane	FB	Ave	16517	42342	79351	163653	418190	0.200	0.500	1.00	2.00	5.00

Lab Name: Eurofins Lancaster Laboratories Envirc Job No.: 410-110288-1 Analy Batch No.: 288300

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2022 20:12 Calibration End Date: 08/22/2022 22:26 Calibration ID: 41918

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
			805860	2044456				10.0	25.0			
n-Butanol	TBAd 10	Ave	10591 733904	34033 1623603	61837	120790	370766	17.5 875	43.8 2188	87.5	175	438
Trichloroethene	FB	Ave	10874 579842	30791 1488472	56668	121006	297519	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methylcyclohexane	FB	Ave	17806 961769	49585 2536741	95136	196076	515209	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichloropropane	FB	Ave	11398 598697	32023 1515441	60237	124387	305654	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Methyl methacrylate	TBAd 10	Ave	3938 269988	12895 689382	24944	51296	132554	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,4-Dioxane	TBAd 10	Qua	585 92194	5353 183524	7798	17348	49073	10.0 500	25.0 1250	50.0	100	250
Dibromomethane	FB	Ave	5293 266367	14045 678275	26280	55503	136357	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromodichloromethane	FB	Ave	12007 673095	33992 1729627	65882	137205	339449	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Nitropropane	TBAd 10	Ave	8495 364359	18408 898761	31793	69212	179082	1.00 50.0	2.50 125	5.00	10.0	25.0
cis-1,3-Dichloropropene	FB	Ave	15229 913681	44371 2313525	83617	176574	456604	0.200 10.0	0.500 25.0	1.00	2.00	5.00
4-Methyl-2-pentanone (MIBK)	TBAd 10	Ave	66201 3642524	184444 8909564	342665	721350	1851510	2.00 100	5.00 250	10.0	20.0	50.0
Toluene	CBZd 5	Ave	28361 1452698	77261 3764778	146835	299255	752839	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,3-Dichloropropene	CBZd 5	Ave	12033 749823	34999 1947599	69149	145243	375505	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethyl methacrylate	CBZd 5	Ave	9967	29264	54040	116133	302935	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 Envirc Job No.: 410-110288-1 Analy Batch No.: 288300

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2022 20:12 Calibration End Date: 08/22/2022 22:26 Calibration ID: 41918

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
			610058	1553687				10.0	25.0			
1,1,2-Trichloroethane	CBZd 5	Ave	7912 404572	21374 1020101	40627	84210	207585	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Tetrachloroethene	CBZd 5	Ave	13152 682338	35433 1756341	67675	140565	355454	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichloropropane	CBZd 5	Ave	13365 705748	36600 1766895	69965	145113	366005	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Hexanone	TBAd 10	Ave	42725 2660875	123588 6616151	247070	510532	1349331	2.00 100	5.00 250	10.0	20.0	50.0
Dibromochloromethane	CBZd 5	Ave	8621 512238	24859 1312207	46481	98443	257820	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromoethane (EDB)	CBZd 5	Ave	6933 394261	20044 996887	37064	79714	199120	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1-Chlorohexane	CBZd 5	Ave	17906 811122	43798 2117826	81147	167760	422503	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Chlorobenzene	CBZd 5	Ave	33861 1718683	91634 4385755	173193	352259	882611	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,1,2-Tetrachloroethane	CBZd 5	Ave	10842 584797	29412 1509448	55325	118338	298570	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Ethylbenzene	CBZd 5	Ave	53287 2898705	148239 7445839	282580	586626	1471927	0.200 10.0	0.500 25.0	1.00	2.00	5.00
m&p-Xylene	CBZd 5	Ave	42590 2318735	117197 5955366	230360	469217	1187447	0.400 20.0	1.00 50.0	2.00	4.00	10.0
o-Xylene	CBZd 5	Ave	21117	59292	113031	231506	591255	0.200	0.500	1.00	2.00	5.00

Lab Name: Eurofins Lancaster Laboratories Envirc Job No.: 410-110288-1 Analy Batch No.: 288300

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2022 20:12 Calibration End Date: 08/22/2022 22:26 Calibration ID: 41918

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
			1149776	2961699				10.0	25.0			
Styrene	CBZd 5	Ave	34317 1930190	93291 4961998	180116	384630	973785	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromoform	CBZd 5	Ave	4911 304772	14114 802862	26326	57517	150577	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Isopropylbenzene	CBZd 5	Ave	53375 2934036	149953 7467245	289388	589633	1507786	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	9593 521855	27538 1335844	51538	106640	264788	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Bromobenzene	DCBd 4	Ave	14153 739659	38100 1876425	71493	148658	368252	0.200 10.0	0.500 25.0	1.00	2.00	5.00
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	21808 1316632	63969 3434592	120833	257721	651340	2.00 100	5.00 250	10.0	20.0	50.0
1,2,3-Trichloropropane	DCBd 4	Ave	2720 135978	7083 338831	13537	27317	68664	0.200 10.0	0.500 25.0	1.00	2.00	5.00
N-Propylbenzene	DCBd 4	Ave	64351 3563972	181457 8940228	348619	719215	1818248	0.200 10.0	0.500 25.0	1.00	2.00	5.00
2-Chlorotoluene	DCBd 4	Ave	14171 742687	37785 1879996	72794	148112	374593	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3,5-Trimethylbenzene	DCBd 4	Ave	45244 2602668	130841 6681135	246256	514383	1304146	0.200 10.0	0.500 25.0	1.00	2.00	5.00
4-Chlorotoluene	DCBd 4	Ave	13732 762667	39446 1983516	73677	151548	392996	0.200 10.0	0.500 25.0	1.00	2.00	5.00
tert-Butylbenzene	DCBd 4	Ave	10341	27675	54084	111261	302846	0.200	0.500	1.00	2.00	5.00

Lab Name: Eurofins Lancaster Laboratories Envirc Job No.: 410-110288-1 Analy Batch No.: 288300

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2022 20:12 Calibration End Date: 08/22/2022 22:26 Calibration ID: 41918

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
			564379	1467578				10.0	25.0			
Pentachloroethane	DCBd 4	Ave	7199 452438	20442 1186327	39851	83992	226588	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,4-Trimethylbenzene	DCBd 4	Ave	46630 2700369	135109 6914040	258595	533692	1363905	0.200 10.0	0.500 25.0	1.00	2.00	5.00
sec-Butylbenzene	DCBd 4	Ave	57837 3277891	165597 8318844	319377	653385	1673386	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3-Dichlorobenzene	DCBd 4	Ave	28046 1524668	77468 3905280	147649	304220	766080	0.200 10.0	0.500 25.0	1.00	2.00	5.00
p-Isopropyltoluene	DCBd 4	Ave	52964 2933697	146197 7465264	278362	580567	1478589	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,4-Dichlorobenzene	DCBd 4	Ave	29384 1560415	79820 3914272	150564	308250	775609	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,3-Trimethylbenzene	DCBd 4	Ave	22746 1203438	62523 3087805	117073	241995	607653	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Benzyl chloride	DCBd 4	Ave	3489 237062	10497 618066	19724	43555	116673	0.200 10.0	0.500 25.0	1.00	2.00	5.00
n-Butylbenzene	DCBd 4	Ave	26009 1479651	73222 3805919	141416	292535	750462	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dichlorobenzene	DCBd 4	Ave	25403 1412566	71451 3607202	135919	280876	701375	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1295 78968	3750 206473	6274	14627	40444	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,3,5-Trichlorobenzene	DCBd 4	Ave	20926	61945	114715	239094	612369	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 Envirc Job No.: 410-110288-1 Analy Batch No.: 288300

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2022 20:12 Calibration End Date: 08/22/2022 22:26 Calibration ID: 41918

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
			1217566	3141786				10.0	25.0			
1,2,4-Trichlorobenzene	DCBd 4	Ave	17325 1052807	50765 2739507	94997	200037	522154	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Hexachlorobutadiene	DCBd 4	Ave	9531 526010	26841 1349576	49990	104110	262775	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Naphthalene	DCBd 4	Ave	26713 1734949	77218 4518703	147337	315886	852539	0.200 10.0	0.500 25.0	1.00	2.00	5.00
1,2,3-Trichlorobenzene	DCBd 4	Ave	14124 857542	39407 2228217	76007	161145	425824	0.200 10.0	0.500 25.0	1.00	2.00	5.00
Dibromofluoromethane (Surr)	FB	Ave	464989 465740	463908 473798	463253	458737	458730	10.0 10.0	10.0 10.0	10.0	10.0	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	97289 96949	96790 96466	94021	93896	92628	10.0 10.0	10.0 10.0	10.0	10.0	10.0
Toluene-d8 (Surr)	CBZd 5	Ave	2020876 2005572	2006585 2059118	1995655	1994377	2002030	10.0 10.0	10.0 10.0	10.0	10.0	10.0
4-Bromofluorobenzene (Surr)	CBZd 5	Ave	749498 746355	743073 758454	737027	735025	742687	10.0 10.0	10.0 10.0	10.0	10.0	10.0

Curve Type Legend
Ave = Average ISTD
Qua = Quadratic ISTD

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Envirc Job No.: 410-110288-1 Analy Batch No.: 288300

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2022 20:12 Calibration End Date: 08/22/2022 22:26 Calibration ID: 41918

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-288300/13	CG22X12.D
Level 2	IC 410-288300/14	CG22X13.D
Level 3	IC 410-288300/15	CG22X14.D
Level 4	IC 410-288300/16	CG22X15.D
Level 5	IC 410-288300/17	CG22X16.D
Level 6	ICIS 410-288300/18	CG22X17.D
Level 7	IC 410-288300/19	CG22X18.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	-3.6 -1.8	-3.7	3.0	4.2	4.7	-2.8	50 30	30	30	30	30	30
Chloromethane	2.2 -6.3	8.2	2.8	0.8	-1.3	-6.4	50 30	30	30	30	30	30
Vinyl chloride	-0.2 -2.7	1.2	-2.4	3.6	4.5	-4.0	50 30	30	30	30	30	30
1,3-Butadiene	7.5 -4.7	-4.0	-0.3	3.1	3.2	-4.9	50 30	30	30	30	30	30
Bromomethane	1.0 -2.2	1.7	-0.9	1.7	1.9	-3.3	50 30	30	30	30	30	30
Chloroethane	2.5 -5.9	4.3	3.1	1.0	0.7	-5.6	50 30	30	30	30	30	30
Dichlorofluoromethane	-0.6 -4.5	8.9	-0.1	1.1	0.7	-5.4	50 30	30	30	30	30	30
Trichlorofluoromethane	-5.4 0.1	-2.4	0.5	5.0	4.9	-2.6	50 30	30	30	30	30	30
Ethyl ether	-2.9 -0.4	-1.1	-2.1	5.5	1.2	-0.3	50 30	30	30	30	30	30
Freon 123a	8.4 -3.7	3.5	-1.8	0.2	-0.7	-6.0	50 30	30	30	30	30	30
Acrolein	-7.4 -1.3	5.3	8.7	8.4	-10.5	-3.2	50 30	30	30	30	30	30
1,1-Dichloroethene	0.5 -2.8	8.2	-2.0	-0.2	0.3	-3.9	50 30	30	30	30	30	30
Acetone	16.0 -13.7	23.4	1.5	1.3	-16.4	-12.2	50 30	30	30	30	30	30
Freon 113	-7.5 -0.1	2.4	0.9	3.0	6.4	-5.0	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 Envirc Job No.: 410-110288-1 Analy Batch No.: 288300

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2022 20:12 Calibration End Date: 08/22/2022 22:26 Calibration ID: 41918

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	-6.8 -0.5	5.6	-1.6	2.5	2.1	-1.2	50 30	30	30	30	30	30
Carbon disulfide	-9.9 2.3	3.8	-1.6	1.6	3.6	0.2	50 30	30	30	30	30	30
Methyl acetate	5.2 0.1	0.6	-5.0	19.4	-14.8	-5.5	50 30	30	30	30	30	30
Allyl chloride	-3.8 -0.9	5.4	-1.9	1.4	1.7	-1.9	50 30	30	30	30	30	30
Methylene Chloride	-2.5 -2.6	6.8	-1.0	1.2	0.3	-2.3	50 30	30	30	30	30	30
t-Butyl alcohol	-8.6 -7.4	23.5	17.8	1.9	-18.2	-8.9	50 30	30	30	30	30	30
Acrylonitrile	-7.4 -4.3	5.4	12.4	6.4	-7.0	-5.5	50 30	30	30	30	30	30
Methyl tert-butyl ether	-5.7 -1.1	4.8	-2.1	3.1	1.8	-0.8	50 30	30	30	30	30	30
trans-1,2-Dichloroethene	-4.4 -2.4	7.4	-0.8	2.3	1.0	-3.1	50 30	30	30	30	30	30
n-Hexane	-3.5 -0.2	6.3	-2.4	-1.9	5.2	-3.5	50 30	30	30	30	30	30
1,1-Dichloroethane	-7.2 -1.3	5.1	-0.2	3.0	2.3	-1.7	50 30	30	30	30	30	30
di-Isopropyl ether	-5.3 -1.0	5.5	-1.2	2.1	1.6	-1.7	50 30	30	30	30	30	30
2-Chloro-1,3-butadiene	-6.0 1.8	4.0	-1.1	0.4	1.4	-0.5	50 30	30	30	30	30	30
Ethyl t-butyl ether	-5.8 -0.5	2.9	-0.7	2.1	2.3	-0.3	50 30	30	30	30	30	30
2-Butanone (MEK)	-5.9 -1.9	0.2	8.0	8.4	-5.1	-3.7	50 30	30	30	30	30	30
cis-1,2-Dichloroethene	-9.2 -1.4	7.7	0.3	1.2	2.8	-1.4	50 30	30	30	30	30	30
2,2-Dichloropropane	-4.2 -1.2	2.5	-2.0	5.4	1.9	-2.4	50 30	30	30	30	30	30
Propionitrile	-12.4 -4.5	4.6	5.5	4.1	2.4	0.3	50 30	30	30	30	30	30
Methacrylonitrile	-16.9 3.7	-1.6	9.2	9.4	-2.0	-1.9	50 30	30	30	30	30	30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins Lancaster Laboratories Envirc Job No.: 410-110288-1 Analy Batch No.: 288300

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2022 20:12 Calibration End Date: 08/22/2022 22:26 Calibration ID: 41918

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	-10.9 0.4	7.0	-0.2	2.3	2.5	-1.1	50 30	30	30	30	30	30
Tetrahydrofuran	0.6 -1.3	-1.5	9.8	4.0	-5.9	-5.6	50 30	30	30	30	30	30
Chloroform	-3.2 -1.4	4.1	0.6	1.3	0.8	-2.2	50 30	30	30	30	30	30
1,1,1-Trichloroethane	-9.3 -0.2	4.3	1.8	2.6	2.7	-1.9	50 30	30	30	30	30	30
Cyclohexane	-9.4 3.0	3.5	-1.1	0.9	5.1	-1.9	50 30	30	30	30	30	30
Carbon tetrachloride	-10.7 4.5	0.8	-1.6	2.6	4.4	0.2	50 30	30	30	30	30	30
1,1-Dichloropropene	-3.5 0.7	5.7	-2.7	0.2	1.6	-2.0	50 30	30	30	30	30	30
Isobutyl alcohol	8.0 -7.1	6.3	4.4	-0.7	-6.8	-4.2	50 30	30	30	30	30	30
Benzene	-2.6 -1.3	4.4	-1.2	1.2	1.9	-2.4	50 30	30	30	30	30	30
1,2-Dichloroethane	4.2 -4.8	7.8	0.4	2.1	-5.2	-4.5	50 30	30	30	30	30	30
t-Amyl methyl ether	-8.2 -0.1	3.6	-0.1	2.9	1.8	0.2	50 30	30	30	30	30	30
n-Heptane	0.3 -1.7	3.2	-2.9	0.2	2.9	-1.9	50 30	30	30	30	30	30
n-Butanol	-25.3 4.5	-0.7	5.3	-1.1	8.3	9.0	50 30	30	30	30	30	30
Trichloroethene	-7.6 0.2	5.1	-2.9	3.8	2.5	-1.2	50 30	30	30	30	30	30
Methylcyclohexane	-9.0 2.7	1.8	-2.0	1.1	6.8	-1.4	50 30	30	30	30	30	30
1,2-Dichloropropane	-6.5 -1.6	5.5	-0.4	2.9	1.6	-1.5	50 30	30	30	30	30	30
Methyl methacrylate	-28.8 13.7	-3.5	8.9	7.7	-0.7	2.8	50 30	30	30	30	30	30
1,4-Dioxane	-32.6 0.0	19.7	-3.6	-0.6	0.6	-0.2	50 30	30	30	30	30	30
Dibromomethane	-2.7 -1.2	3.7	-2.6	3.0	1.7	-1.8	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 Envirc Job No.: 410-110288-1 Analy Batch No.: 288300

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2022 20:12 Calibration End Date: 08/22/2022 22:26 Calibration ID: 41918

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	-10.3 2.3	1.9	-0.8	3.4	2.8	0.8	50 30	30	30	30	30	30
2-Nitropropane	7.9 4.2	-3.3	-2.5	2.0	-5.8	-2.5	50 30	30	30	30	30	30
cis-1,3-Dichloropropene	-13.2 4.4	1.5	-4.0	1.5	5.5	4.4	50 30	30	30	30	30	30
4-Methyl-2-pentanone (MIBK)	-14.8 4.7	-1.7	6.5	7.8	-1.2	-1.2	50 30	30	30	30	30	30
Toluene	-5.4 0.4	3.4	0.0	1.8	1.7	-1.9	50 30	30	30	30	30	30
trans-1,3-Dichloropropene	-16.6 8.0	-2.6	-2.1	2.7	5.4	5.2	50 30	30	30	30	30	30
Ethyl methacrylate	-14.6 6.5	0.7	-5.4	1.6	5.2	5.9	50 30	30	30	30	30	30
1,1,2-Trichloroethane	-4.7 -1.8	3.3	-0.1	3.5	1.2	-1.4	50 30	30	30	30	30	30
Tetrachloroethene	-5.9 0.5	1.8	-1.1	2.7	3.0	-1.1	50 30	30	30	30	30	30
1,3-Dichloropropane	-6.8 -1.5	2.4	-0.4	3.3	3.3	-0.4	50 30	30	30	30	30	30
2-Hexanone	-22.3 9.7	-7.0	8.4	7.7	1.6	1.9	50 30	30	30	30	30	30
Dibromochloromethane	-13.1 5.8	0.6	-4.3	1.3	5.2	4.5	50 30	30	30	30	30	30
1,2-Dibromoethane (EDB)	-11.3 2.0	3.0	-3.1	4.1	3.2	2.1	50 30	30	30	30	30	30
1-Chlorohexane	4.8 -0.9	2.9	-3.0	0.2	0.1	-3.9	50 30	30	30	30	30	30
Chlorobenzene	-4.3 -0.8	4.0	0.0	1.6	1.1	-1.6	50 30	30	30	30	30	30
1,1,1,2-Tetrachloroethane	-7.5 3.0	0.8	-3.6	3.1	3.2	1.0	50 30	30	30	30	30	30
Ethylbenzene	-8.6 2.1	2.0	-1.0	2.7	2.2	0.6	50 30	30	30	30	30	30
m&p-Xylene	-8.9 1.9	0.6	0.6	2.4	2.9	0.4	50 30	30	30	30	30	30
o-Xylene	-9.1 2.0	2.5	-0.6	1.8	3.1	0.2	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 Envirc Job No.: 410-110288-1 Analy Batch No.: 288300

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2022 20:12 Calibration End Date: 08/22/2022 22:26 Calibration ID: 41918

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	-9.7 4.4	-1.4	-3.2	3.3	3.8	2.8	50 30	30	30	30	30	30
Bromoform	-15.1 11.0	-2.1	-7.1	1.4	5.4	6.6	50 30	30	30	30	30	30
Isopropylbenzene	-9.5 1.2	2.0	0.2	2.0	3.5	0.7	50 30	30	30	30	30	30
1,1,2,2-Tetrachloroethane	-8.0 -2.5	6.9	1.3	3.3	1.0	-2.0	50 30	30	30	30	30	30
Bromobenzene	-3.5 -2.6	5.1	-0.1	2.4	-0.1	-1.3	50 30	30	30	30	30	30
trans-1,4-Dichloro-2-butene	-13.4 3.8	2.8	-1.7	3.4	2.8	2.3	50 30	30	30	30	30	30
1,2,3-Trichloropropane	-0.3 -5.5	5.1	1.7	1.2	0.1	-2.4	50 30	30	30	30	30	30
N-Propylbenzene	-8.4 -3.2	4.5	1.7	3.4	2.9	-0.7	50 30	30	30	30	30	30
2-Chlorotoluene	-3.8 -2.9	3.8	1.3	1.6	1.2	-1.3	50 30	30	30	30	30	30
1,3,5-Trimethylbenzene	-10.6 0.5	4.6	-0.3	2.7	2.5	0.7	50 30	30	30	30	30	30
4-Chlorotoluene	-9.1 -0.1	5.6	-0.1	1.3	3.5	-1.2	50 30	30	30	30	30	30
tert-Butylbenzene	-7.3 0.1	0.3	-0.7	0.7	7.9	-1.0	50 30	30	30	30	30	30
Pentachloroethane	-14.6 7.1	-1.9	-3.1	0.6	6.9	5.0	50 30	30	30	30	30	30
1,2,4-Trimethylbenzene	-11.3 0.1	4.0	0.8	2.6	3.2	0.6	50 30	30	30	30	30	30
sec-Butylbenzene	-10.1 -1.6	4.2	1.7	2.6	3.4	-0.3	50 30	30	30	30	30	30
1,3-Dichlorobenzene	-6.7 -1.1	4.3	0.7	2.2	1.4	-0.7	50 30	30	30	30	30	30
p-Isopropyltoluene	-7.5 -0.8	3.3	-0.4	2.4	2.7	0.3	50 30	30	30	30	30	30
1,4-Dichlorobenzene	-4.3 -3.0	5.2	0.5	1.5	0.5	-0.5	50 30	30	30	30	30	30
1,2,3-Trimethylbenzene	-5.0 -1.9	5.6	0.1	2.0	0.9	-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 Envirc Job No.: 410-110288-1 Analy Batch No.: 288300

SDG No.:

Instrument ID: 10193 GC Column: R-624SilMS 3 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2022 20:12 Calibration End Date: 08/22/2022 22:26 Calibration ID: 41918

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	-19.0 9.1	-1.4	-6.2	2.1	7.7	7.7	50 30	30	30	30	30	30
n-Butylbenzene	-9.8 0.4	2.7	0.5	2.4	3.5	0.4	50 30	30	30	30	30	30
1,2-Dichlorobenzene	-8.1 -0.7	4.6	0.8	2.6	0.9	0.0	50 30	30	30	30	30	30
1,2-Dibromo-3-Chloropropane	-12.0 6.8	3.1	-12.6	0.4	9.3	5.0	50 30	30	30	30	30	30
1,3,5-Trichlorobenzene	-11.6 1.0	5.8	-0.7	2.0	2.9	0.7	50 30	30	30	30	30	30
1,2,4-Trichlorobenzene	-13.2 4.4	2.9	-2.5	1.2	4.0	3.2	50 30	30	30	30	30	30
Hexachlorobutadiene	-7.5 -0.4	5.3	-0.6	2.0	1.4	-0.1	50 30	30	30	30	30	30
Naphthalene	-15.9 8.3	-1.6	-4.9	0.5	6.8	6.9	50 30	30	30	30	30	30
1,2,3-Trichlorobenzene	-12.2 5.4	-0.9	-3.2	1.2	5.3	4.3	50 30	30	30	30	30	30
Dibromofluoromethane (Surr)	-0.2 0.7	0.0	0.2	-0.7	-0.2	0.2	50 30	30	30	30	30	30
1,2-Dichloroethane-d4 (Surr)	1.6 -0.3	1.4	-1.1	-1.1	-2.0	1.5	50 30	30	30	30	30	30
Toluene-d8 (Surr)	-0.5 1.3	-0.9	0.3	0.2	-0.2	-0.1	50 30	30	30	30	30	30
4-Bromofluorobenzene (Surr)	-0.3 0.8	-0.8	0.1	-0.2	0.0	0.5	50 30	30	30	30	30	30

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X12.D
Lims ID: IC std1 0.2
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 22-Aug-2022 20:12:30 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0064657-013
Misc. Info.: IC STD.2 LG
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 31-Aug-2022 08:31:20 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1647

First Level Reviewer: DVW2 Date: 23-Aug-2022 07:44:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.757	1.764	-0.007	97	10972	0.2000	0.1929	
5 Chloromethane	50	1.940	1.940	0.000	98	15369	0.2000	0.2044	
6 Vinyl chloride	62	2.044	2.038	0.006	92	13917	0.2000	0.1995	
7 Butadiene	39	2.044	2.050	-0.006	90	16039	0.2000	0.2151	M
9 Bromomethane	94	2.324	2.331	-0.007	89	9377	0.2000	0.2021	M
10 Chloroethane	64	2.392	2.398	-0.006	99	8309	0.2000	0.2049	
11 Dichlorofluoromethane	67	2.611	2.617	-0.006	97	18620	0.2000	0.1988	
12 Trichlorofluoromethane	101	2.672	2.672	0.000	65	14979	0.2000	0.1893	
13 Pentane	43	2.684	2.678	0.006	98	15693	0.2000	0.2237	M
15 Ethyl ether	59	2.861	2.861	0.000	56	7885	0.2001	0.1943	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.965	2.959	0.006	94	13359	0.2000	0.2167	
17 Acrolein	56	3.019	3.013	0.006	99	57965	10.0	9.26	
19 1,1-Dichloroethene	96	3.135	3.135	0.000	97	8812	0.2000	0.2009	
20 Acetone	43	3.166	3.166	0.000	89	16327	2.00	2.32	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.178	3.178	0.000	90	7638	0.2000	0.1849	
22 Iodomethane	142	3.306	3.300	0.006	99	15047	0.2000	0.1864	
23 Isopropyl alcohol	45	3.324	3.318	0.006	31	7348	4.00	4.73	M
24 Ethyl bromide	108	3.324	3.324	0.000	97	7653	0.2000	0.1854	
25 Carbon disulfide	76	3.391	3.391	0.000	100	24439	0.2000	0.1802	
27 Methyl acetate	43	3.532	3.532	0.000	28	4364	0.2000	0.2104	
28 3-Chloro-1-propene	41	3.550	3.544	0.006	94	15566	0.2000	0.1925	
29 Methylene Chloride	84	3.714	3.708	0.006	86	10145	0.2000	0.1951	
* 30 t-Butyl alcohol-d10 (IS)	65	3.745	3.739	0.006	90	136580	50.0	50.0	
31 2-Methyl-2-propanol	59	3.830	3.849	-0.019	24	10405	4.00	3.66	
32 Acrylonitrile	53	4.056	4.019	0.037	22	4904	0.5000	0.4630	
33 Methyl tert-butyl ether	73	4.080	4.068	0.012	86	25132	0.2000	0.1887	
34 trans-1,2-Dichloroethene	96	4.068	4.074	-0.006	97	10331	0.2000	0.1912	
35 Hexane	57	4.483	4.470	0.013	91	13985	0.2000	0.1930	
36 1,1-Dichloroethane	63	4.726	4.720	0.006	95	18464	0.2000	0.1857	
38 Isopropyl ether	45	4.781	4.787	-0.006	93	34613	0.2000	0.1893	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 2-Chloro-1,3-butadiene	53	4.836	4.830	0.006	90	14606	0.2000	0.1880	M
40 Tert-butyl ethyl ether	59	5.336	5.330	0.006	97	31825	0.2000	0.1885	
41 2-Butanone (MEK)	43	5.580	5.543	0.037	85	27023	2.00	1.88	
42 cis-1,2-Dichloroethene	96	5.574	5.574	0.000	83	10751	0.2000	0.1816	
43 2,2-Dichloropropane	77	5.592	5.586	0.006	61	15053	0.2000	0.1916	M
45 Propionitrile	54	5.690	5.635	0.055	90	12511	4.00	3.50	M
46 Methacrylonitrile	67	5.866	5.860	0.006	91	25222	2.00	1.66	
47 Chlorobromomethane	128	5.909	5.909	0.000	98	4671	0.2000	0.1781	
48 Tetrahydrofuran	71	5.927	5.927	0.000	47	4091	1.00	1.01	M
50 Chloroform	83	6.080	6.074	0.006	93	18150	0.2000	0.1937	
S 51 1,2-Dichloroethene, Total	100				0			0.3729	
52 1,1,1-Trichloroethane	97	6.293	6.293	0.000	37	14862	0.2000	0.1814	
$ 53 Dibromofluoromethane (Surr)	113	6.293	6.293	0.000	94	464989	10.0	9.98	
54 Cyclohexane	56	6.379	6.385	-0.006	92	16693	0.2000	0.1811	
55 Carbon tetrachloride	117	6.507	6.501	0.006	79	12280	0.2000	0.1785	
56 1,1-Dichloropropene	75	6.513	6.513	0.000	94	14777	0.2000	0.1930	M
57 Isobutyl alcohol	41	6.726	6.708	0.018	78	10915	10.0	10.8	a
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.750	6.757	-0.007	78	97289	10.0	10.2	
59 Benzene	78	6.775	6.775	0.000	93	44669	0.2000	0.1947	
61 1,2-Dichloroethane	62	6.854	6.860	-0.006	95	12113	0.2000	0.2084	
63 Tert-amyl methyl ether	73	6.976	6.982	-0.006	99	27951	0.2000	0.1835	M
* 64 Fluorobenzene (IS)	96	7.195	7.196	-0.001	99	1993587	10.0	10.0	
65 n-Heptane	43	7.214	7.208	0.006	51	16517	0.2000	0.2005	
66 n-Butanol	56	7.665	7.622	0.043	87	10591	17.5	13.1	
67 Trichloroethene	95	7.683	7.683	0.000	98	10874	0.2000	0.1849	
68 Methylcyclohexane	83	7.982	7.982	0.000	88	17806	0.2000	0.1820	
69 1,2-Dichloropropane	63	8.025	8.025	0.000	96	11398	0.2000	0.1870	
70 2-ethoxy-2-methyl butane	87	8.043	8.043	0.000	93	16589	0.2000	0.1867	
71 Methyl methacrylate	69	8.140	8.128	0.012	85	3938	0.2000	0.1424	
72 1,4-Dioxane	88	8.134	8.134	0.000	31	585	10.0	6.74	
73 Dibromomethane	93	8.146	8.134	0.012	97	5293	0.2000	0.1946	
75 Dichlorobromomethane	83	8.384	8.384	0.000	98	12007	0.2000	0.1793	
76 2-Nitropropane	41	8.671	8.665	0.006	93	8495	1.00	1.08	M
78 1-Bromo-2-chloroethane	63	8.781	8.774	0.006	96	11426	0.2000	0.1879	
79 cis-1,3-Dichloropropene	75	8.963	8.951	0.012	96	15229	0.2000	0.1735	
81 4-Methyl-2-pentanone (MIBK)	43	9.158	9.159	-0.001	97	66201	2.00	1.70	
$ 82 Toluene-d8 (Surr)	98	9.280	9.280	0.000	93	2020876	10.0	9.95	
83 Toluene	92	9.372	9.366	0.006	98	28361	0.2000	0.1891	
84 trans-1,3-Dichloropropene	75	9.677	9.658	0.019	91	12033	0.2000	0.1668	
85 Ethyl methacrylate	69	9.750	9.738	0.012	91	9967	0.2000	0.1709	
86 1,1,2-Trichloroethane	97	9.878	9.872	0.006	91	7912	0.2000	0.1905	
87 Tetrachloroethene	166	9.957	9.951	0.006	96	13152	0.2000	0.1883	
102 1,3-Dichloropropane	76	10.049	10.043	0.007	90	13365	0.2000	0.1864	
S 103 1,3-Dichloropropene, Total	100				0			0.3403	
104 2-Hexanone	43	10.128	10.116	0.012	96	42725	2.00	1.55	
106 Chlorodibromomethane	129	10.268	10.268	0.000	89	8621	0.2000	0.1738	
107 Ethylene Dibromide	107	10.378	10.378	0.000	98	6933	0.2000	0.1774	
* 108 Chlorobenzene-d5 (IS)	117	10.835	10.835	0.000	85	1542113	10.0	10.0	
109 1-Chlorohexane	91	10.853	10.853	0.000	89	17906	0.2000	0.2095	
110 Chlorobenzene	112	10.859	10.859	0.000	96	33861	0.2000	0.1915	
111 1,1,1,2-Tetrachloroethane	131	10.951	10.951	0.000	94	10842	0.2000	0.1850	
112 Ethylbenzene	91	10.957	10.957	0.000	98	53287	0.2000	0.1827	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
113 m-Xylene & p-Xylene	106	11.079	11.079	0.000	100	42590	0.4000	0.3644	
S 114 Xylenes, Total	106				0			0.5463	
115 o-Xylene	106	11.420	11.414	0.006	95	21117	0.2000	0.1819	
116 Styrene	104	11.439	11.432	0.007	94	34317	0.2000	0.1806	
117 Bromoform	173	11.591	11.591	0.000	95	4911	0.2000	0.1697	
118 Isopropylbenzene	105	11.725	11.725	0.000	96	53375	0.2000	0.1809	
$ 121 4-Bromofluorobenzene (Surr)	95	11.871	11.871	0.000	92	749498	10.0	9.97	
123 1,1,2,2-Tetrachloroethane	83	11.987	11.987	0.000	71	9593	0.2000	0.1840	
122 Bromobenzene	156	11.993	11.987	0.006	85	14153	0.2000	0.1931	
124 trans-1,4-Dichloro-2-butene	53	12.018	12.012	0.006	91	21808	2.00	1.73	
125 1,2,3-Trichloropropane	110	12.030	12.030	0.000	77	2720	0.2000	0.1995	
126 N-Propylbenzene	91	12.066	12.067	0.000	98	64351	0.2000	0.1831	
127 2-Chlorotoluene	126	12.140	12.140	0.000	97	14171	0.2000	0.1925	
128 1,3,5-Trimethylbenzene	105	12.207	12.207	0.000	95	45244	0.2000	0.1788	
129 4-Chlorotoluene	126	12.237	12.237	0.000	96	13732	0.2000	0.1818	
130 tert-Butylbenzene	134	12.451	12.451	0.000	93	10341	0.2000	0.1853	
131 Pentachloroethane	167	12.481	12.481	0.000	83	7199	0.2000	0.1708	
132 1,2,4-Trimethylbenzene	105	12.499	12.493	0.006	96	46630	0.2000	0.1775	
133 sec-Butylbenzene	105	12.621	12.621	0.000	94	57837	0.2000	0.1798	
134 1,3-Dichlorobenzene	146	12.719	12.719	0.000	99	28046	0.2000	0.1866	
135 4-Isopropyltoluene	119	12.731	12.731	0.000	97	52964	0.2000	0.1850	
* 136 1,4-Dichlorobenzene-d4	152	12.774	12.774	0.000	94	881628	10.0	10.0	
137 1,4-Dichlorobenzene	146	12.792	12.792	0.000	93	29384	0.2000	0.1915	
138 1,2,3-Trimethylbenzene	120	12.804	12.804	0.000	97	22746	0.2000	0.1899	
139 Benzyl chloride	126	12.877	12.877	0.000	98	3489	0.2000	0.1620	
140 n-Butylbenzene	92	13.030	13.030	0.000	98	26009	0.2000	0.1803	
141 1,2-Dichlorobenzene	146	13.060	13.054	0.006	98	25403	0.2000	0.1838	
142 p-Diethylbenzene	119	13.085	13.085	0.000	87	27713	0.2000	0.1898	
145 1,2-Dibromo-3-Chloropropane	155	13.615	13.609	0.006	78	1295	0.2000	0.1760	
146 1,3,5-Trichlorobenzene	180	13.737	13.737	0.000	97	20926	0.2000	0.1768	
147 1,2,4-Trichlorobenzene	180	14.170	14.164	0.006	94	17325	0.2000	0.1736	
148 Hexachlorobutadiene	225	14.249	14.249	0.000	95	9531	0.2000	0.1849	
149 Naphthalene	128	14.353	14.347	0.006	96	26713	0.2000	0.1682	
150 1,2,3-Trichlorobenzene	180	14.493	14.493	0.000	95	14124	0.2000	0.1756	
151 2-Methylnaphthalene	142	15.096	15.090	0.006	94	10457	0.2000	0.1395	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_LL_#1_826_00053	Amount Added:	2.00	Units: uL	
MSV_LL_#2_826_00057	Amount Added:	2.00	Units: uL	
MSV_LL_GAS826_00109	Amount Added:	2.00	Units: uL	
MSV_HP25_ISSS_00058	Amount Added:	1.00	Units: uL	Run Reagent

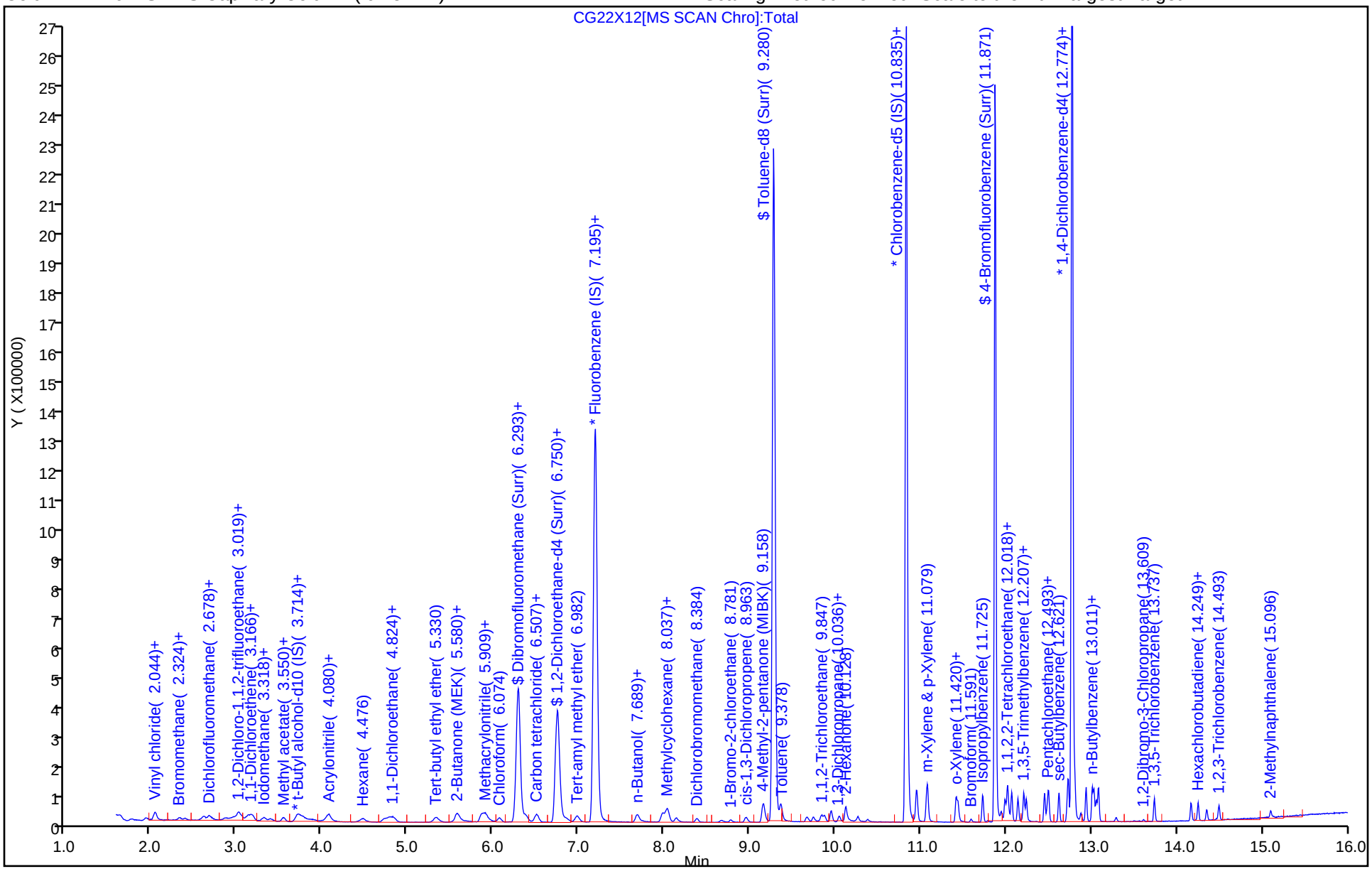
Report Date: 31-Aug-2022 08:31:21 Chrom Revision: 2.3 25-Aug-2022 20:53:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X12.D

Injection Date:	22-Aug-2022 20:12:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	IC std1 0.2			Worklist Smp#:	13
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

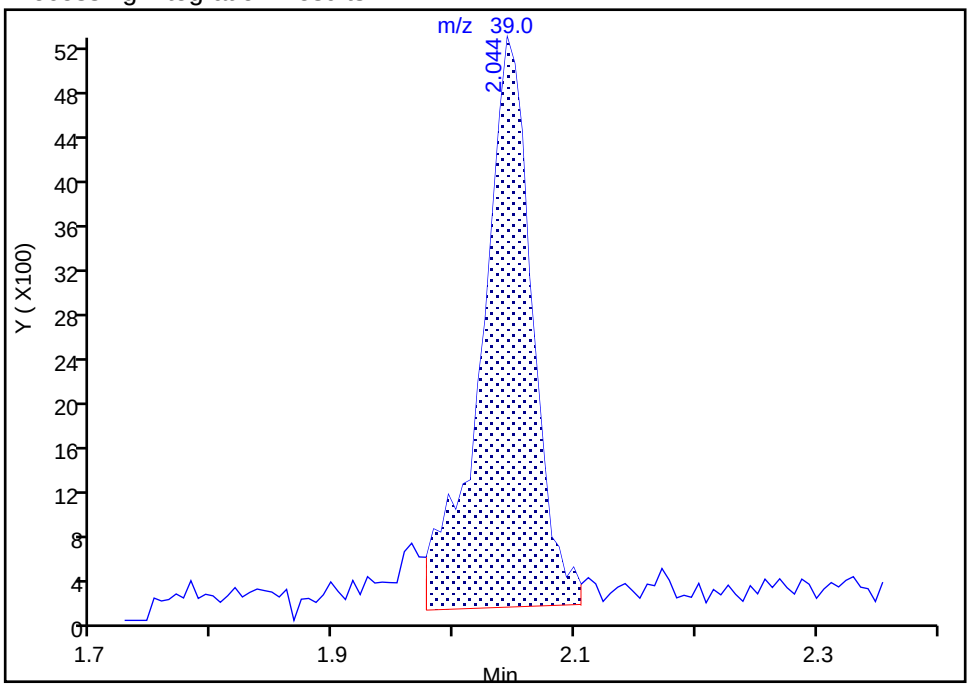
Data File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X12.D				
Injection Date:	22-Aug-2022 20:12:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

7 Butadiene, CAS: 106-99-0

Signal: 1

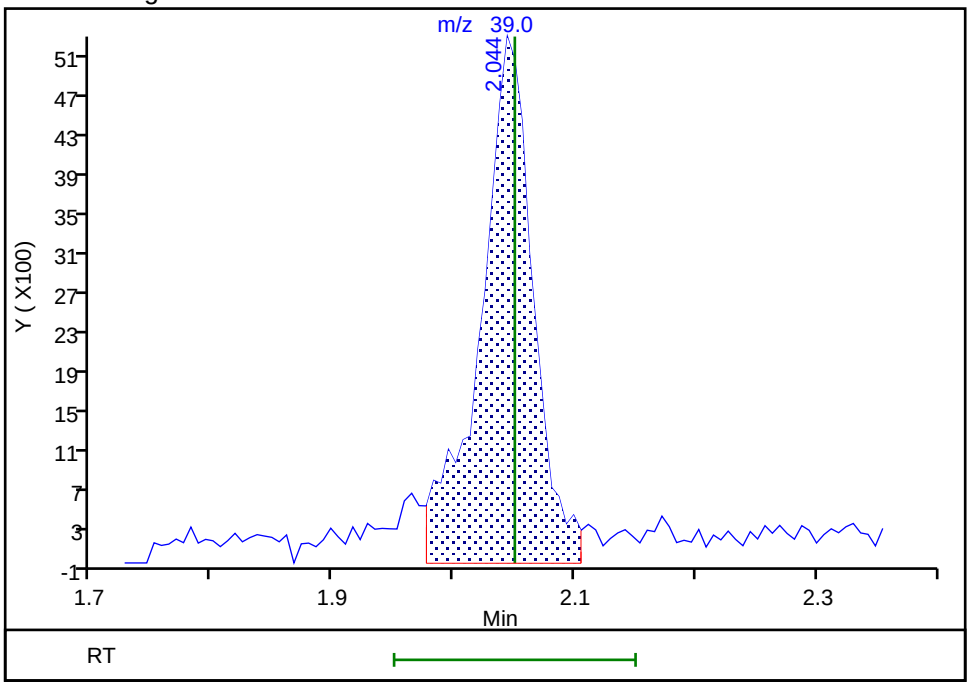
Processing Integration Results

RT: 2.04
Area: 15070
Amount: 0.203958
Amount Units: ug/l



Manual Integration Results

RT: 2.04
Area: 16039
Amount: 0.215058
Amount Units: ug/l



Reviewer: DVW2, 23-Aug-2022 09:23:09
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

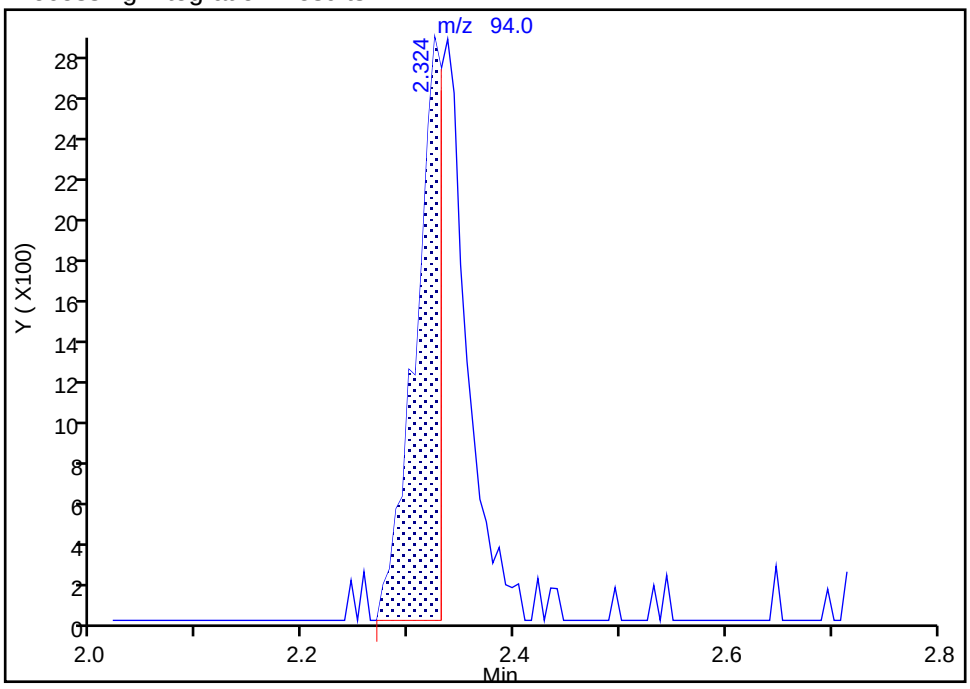
Data File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X12.D				
Injection Date:	22-Aug-2022 20:12:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

9 Bromomethane, CAS: 74-83-9

Signal: 1

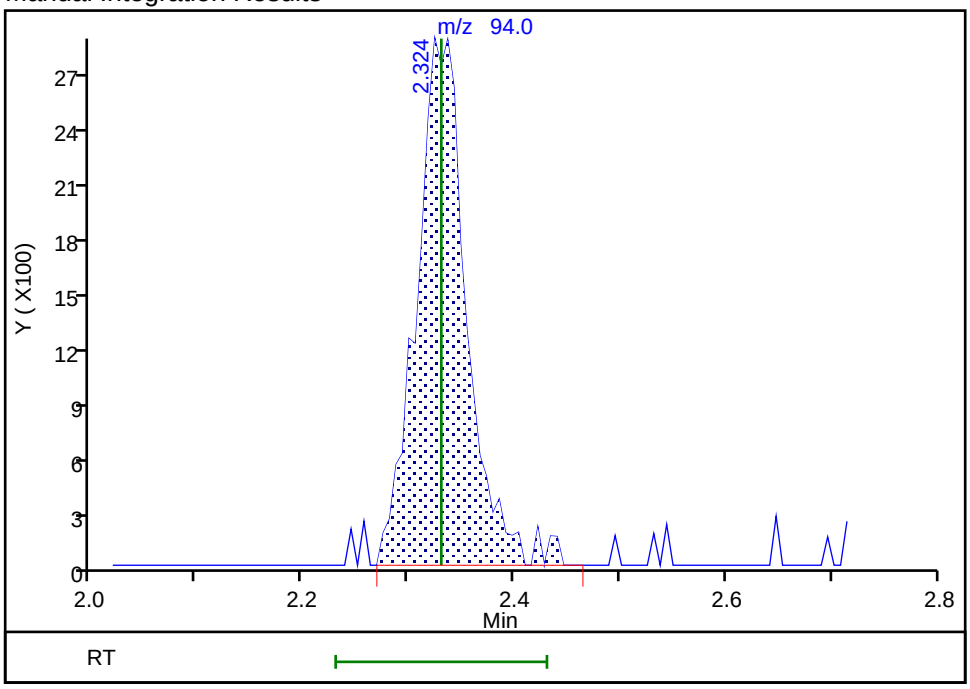
Processing Integration Results

RT: 2.32
Area: 4986
Amount: 0.115231
Amount Units: ug/l



Manual Integration Results

RT: 2.32
Area: 9377
Amount: 0.202064
Amount Units: ug/l



Reviewer: DVW2, 23-Aug-2022 09:23:14
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

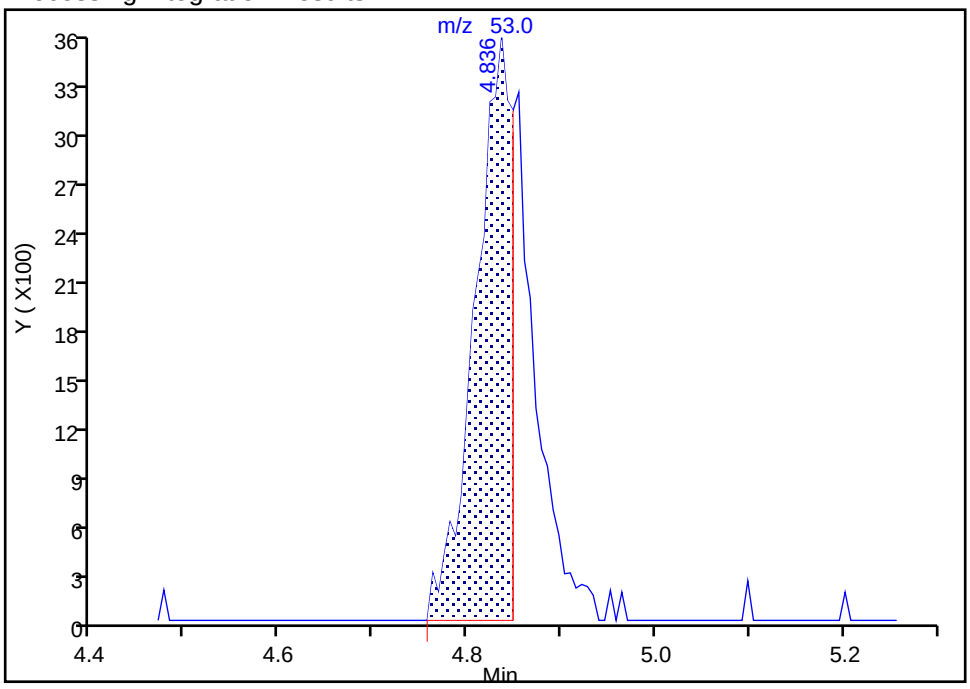
Data File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X12.D				
Injection Date:	22-Aug-2022 20:12:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

39 2-Chloro-1,3-butadiene, CAS: 126-99-8

Signal: 1

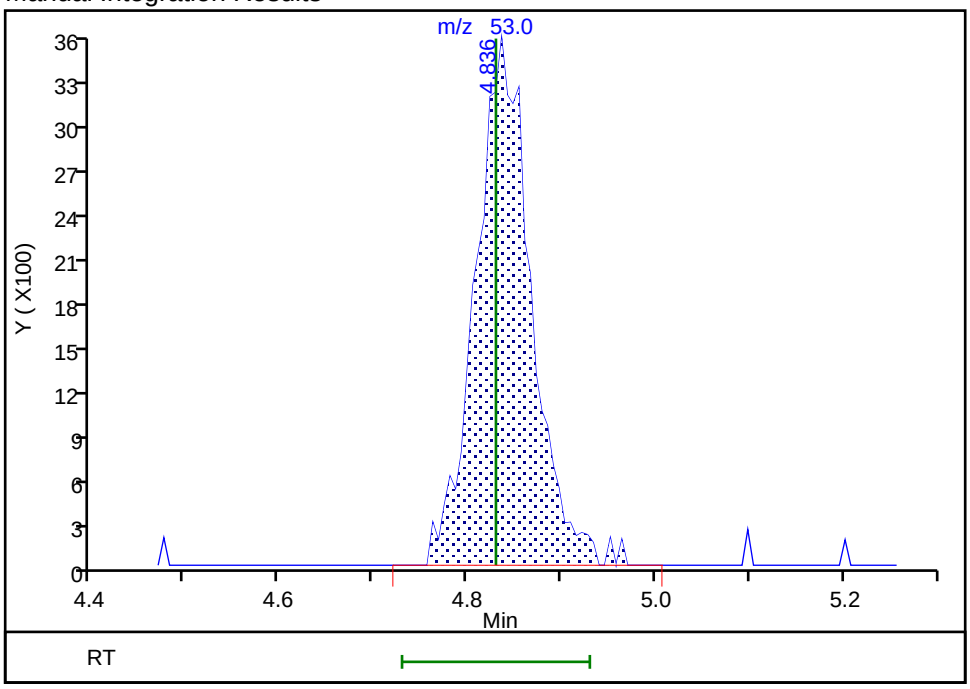
Processing Integration Results

RT: 4.84
Area: 9670
Amount: 0.130774
Amount Units: ug/l



Manual Integration Results

RT: 4.84
Area: 14606
Amount: 0.188011
Amount Units: ug/l



Reviewer: DVW2, 23-Aug-2022 09:24:06

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

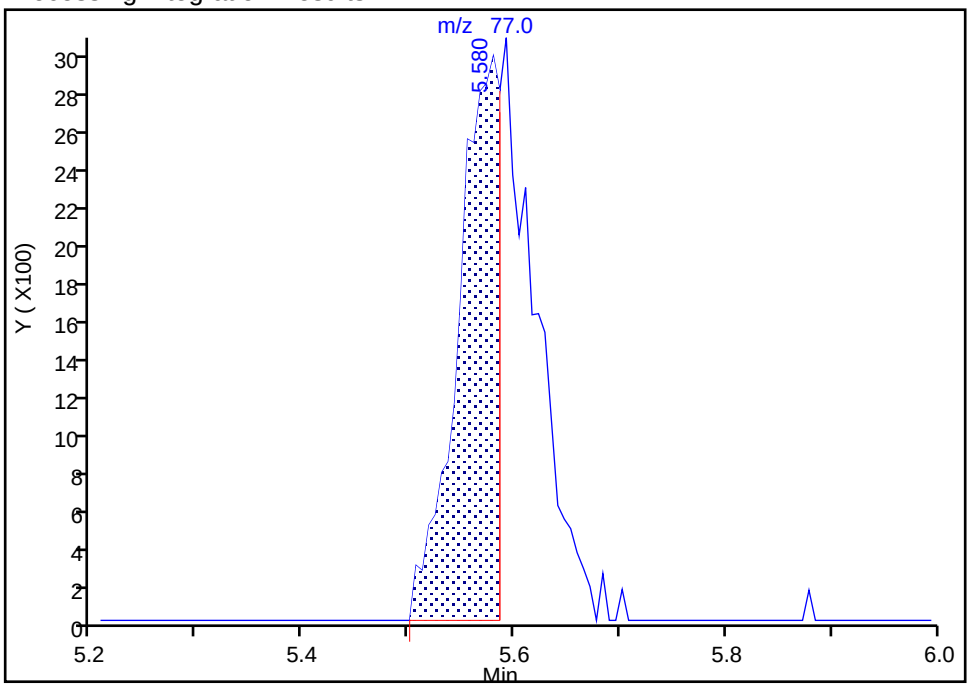
Data File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X12.D				
Injection Date:	22-Aug-2022 20:12:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

43 2,2-Dichloropropane, CAS: 594-20-7

Signal: 1

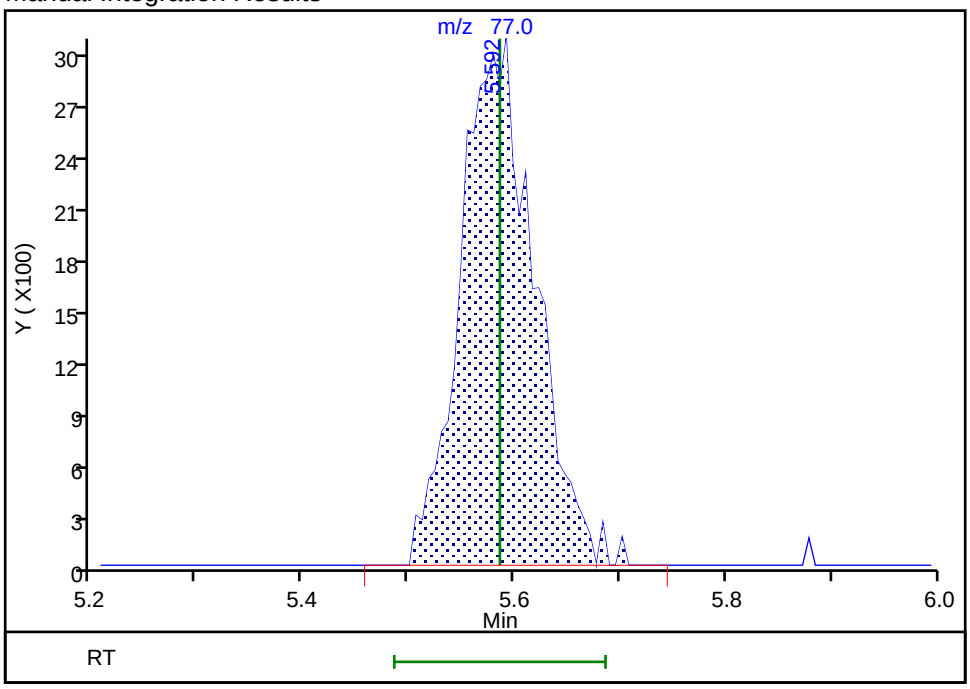
Processing Integration Results

RT: 5.58
Area: 8296
Amount: 0.112531
Amount Units: ug/l



Manual Integration Results

RT: 5.59
Area: 15053
Amount: 0.191639
Amount Units: ug/l



Reviewer: DVW2, 23-Aug-2022 09:24:11
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

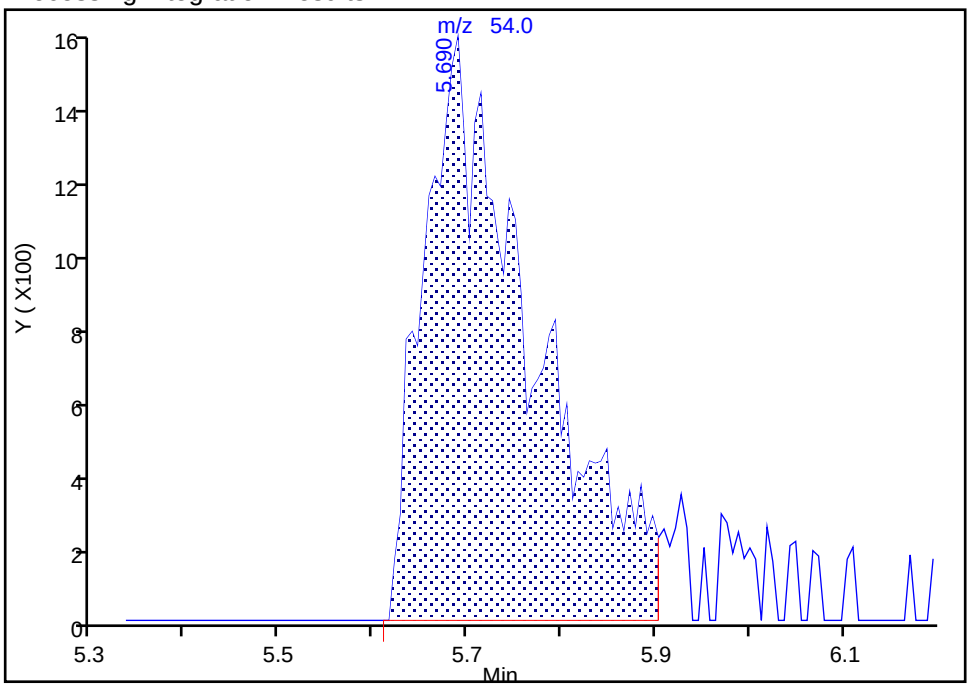
Data File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X12.D				
Injection Date:	22-Aug-2022 20:12:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

45 Propionitrile, CAS: 107-12-0

Signal: 1

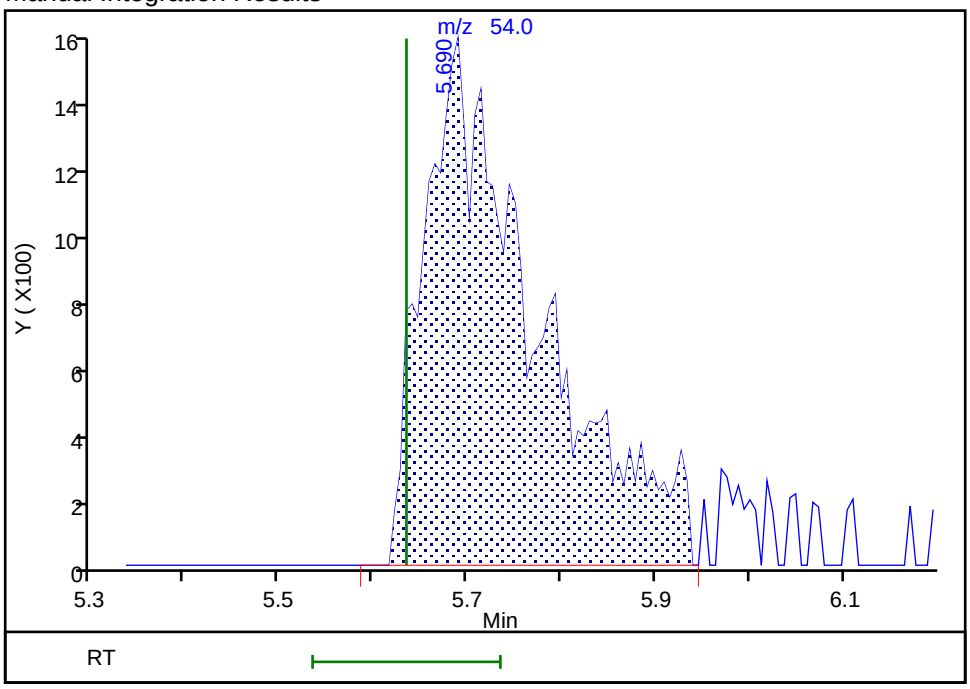
Processing Integration Results

RT: 5.69
Area: 12062
Amount: 3.395544
Amount Units: ug/l



Manual Integration Results

RT: 5.69
Area: 12511
Amount: 3.502050
Amount Units: ug/l



Reviewer: DVW2, 23-Aug-2022 09:24:16
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

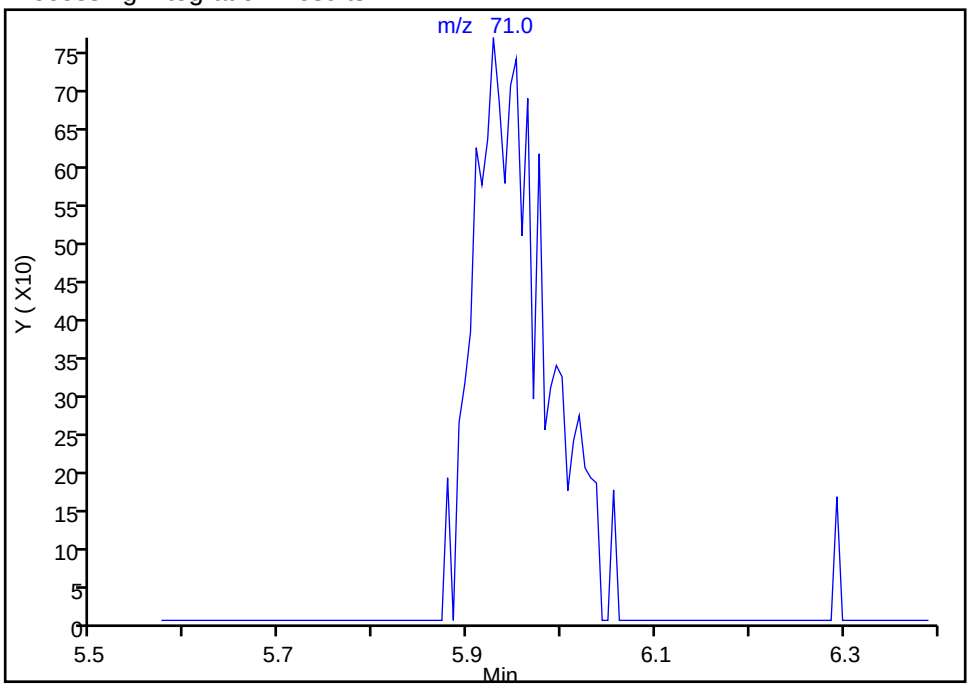
Data File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X12.D
Injection Date: 22-Aug-2022 20:12:30 Instrument ID: 10193
Lims ID: IC std1 0.2
Client ID:
Operator ID: knk41612 ALS Bottle#: 12 Worklist Smp#: 13
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

48 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

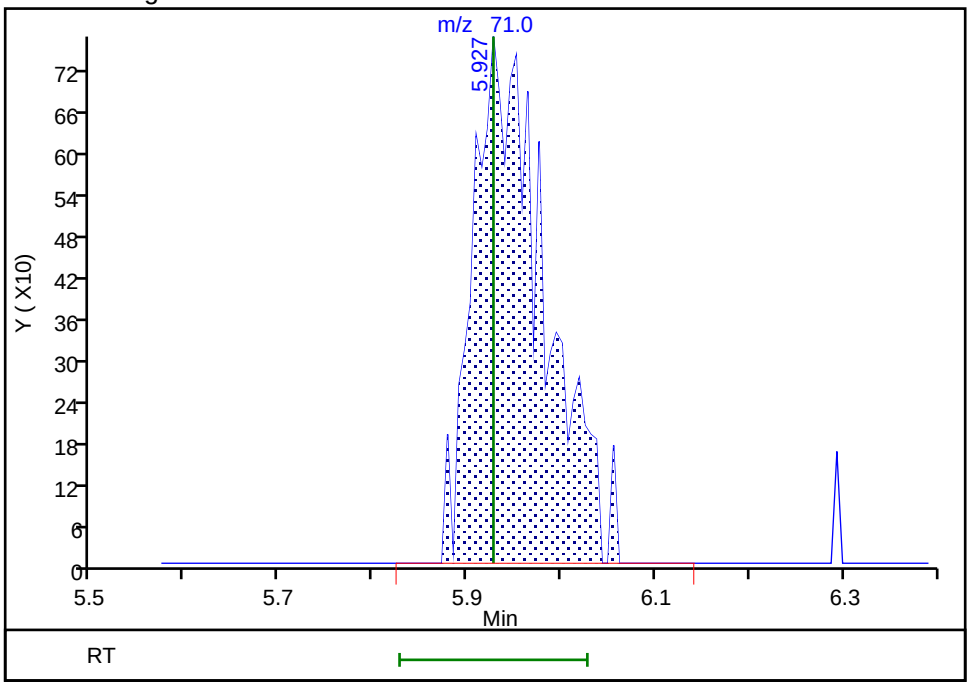
Not Detected
Expected RT: 5.93

Processing Integration Results



Manual Integration Results

RT: 5.93
Area: 4091
Amount: 1.005632
Amount Units: ug/l



Reviewer: DVW2, 23-Aug-2022 09:24:21
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

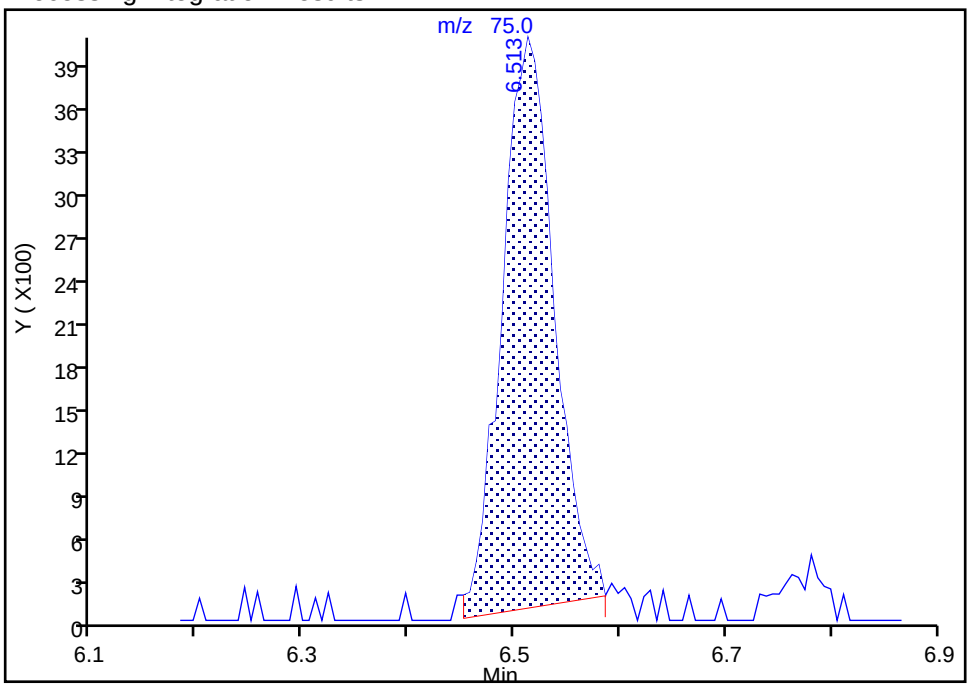
Data File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X12.D				
Injection Date:	22-Aug-2022 20:12:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

56 1,1-Dichloropropene, CAS: 563-58-6

Signal: 1

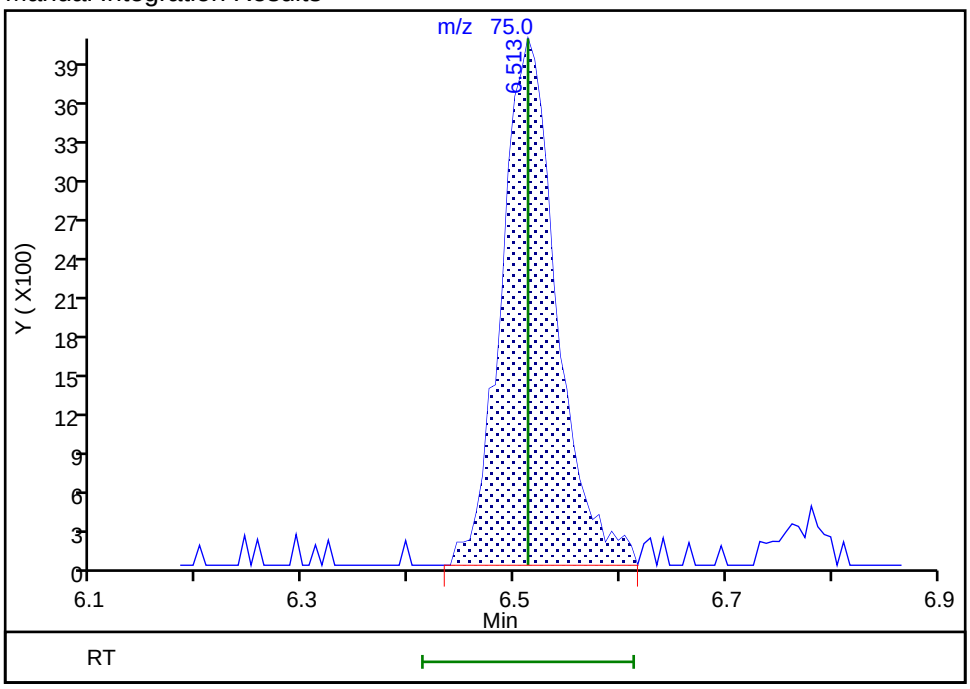
Processing Integration Results

RT: 6.51
Area: 13632
Amount: 0.179962
Amount Units: ug/l



Manual Integration Results

RT: 6.51
Area: 14777
Amount: 0.192994
Amount Units: ug/l



Reviewer: DVW2, 23-Aug-2022 09:24:34

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

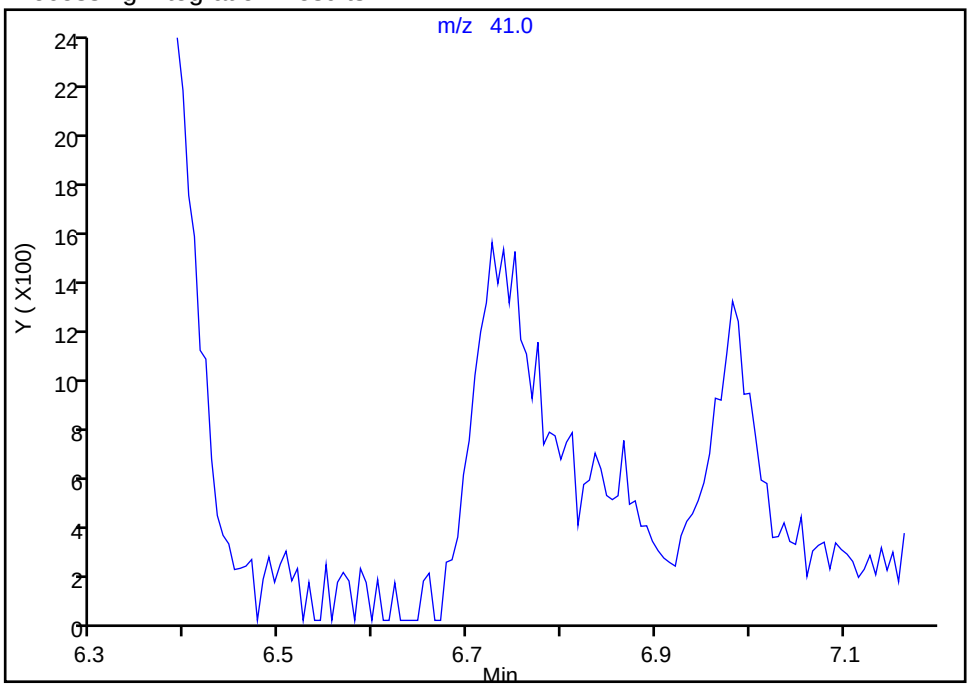
Data File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X12.D				
Injection Date:	22-Aug-2022 20:12:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

57 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

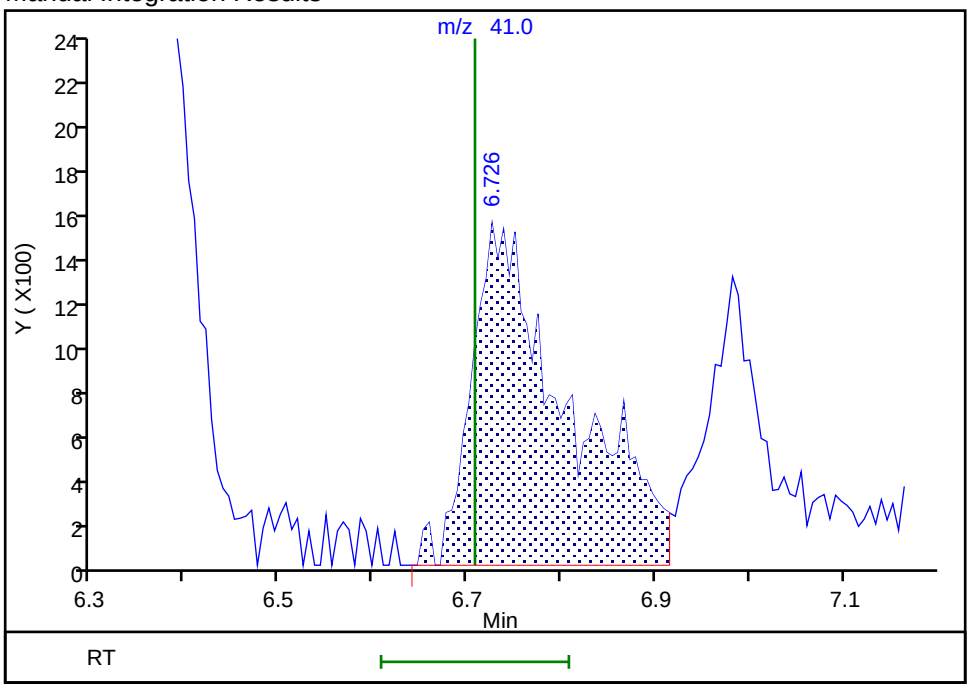
Not Detected
Expected RT: 6.71

Processing Integration Results



Manual Integration Results

RT: 6.73
Area: 10915
Amount: 10.802434
Amount Units: ug/l



Reviewer: DVW2, 23-Aug-2022 09:24:37
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

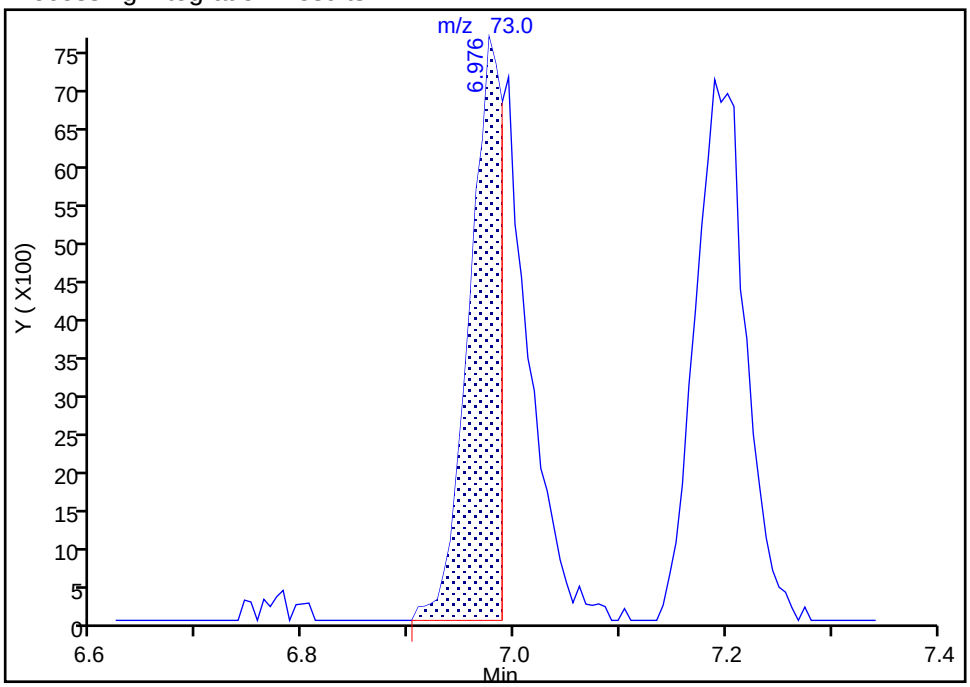
Data File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X12.D				
Injection Date:	22-Aug-2022 20:12:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

63 Tert-amyl methyl ether, CAS: 994-05-8

Signal: 1

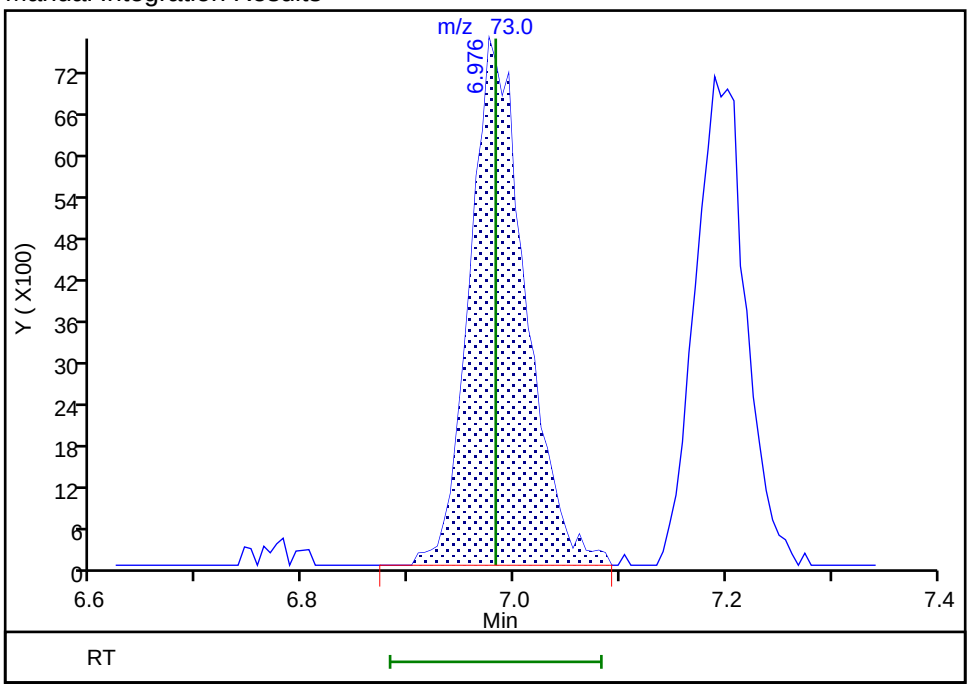
Processing Integration Results

RT: 6.98
Area: 16602
Amount: 0.115126
Amount Units: ug/l



Manual Integration Results

RT: 6.98
Area: 27951
Amount: 0.183510
Amount Units: ug/l



Reviewer: DVW2, 23-Aug-2022 09:24:54
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

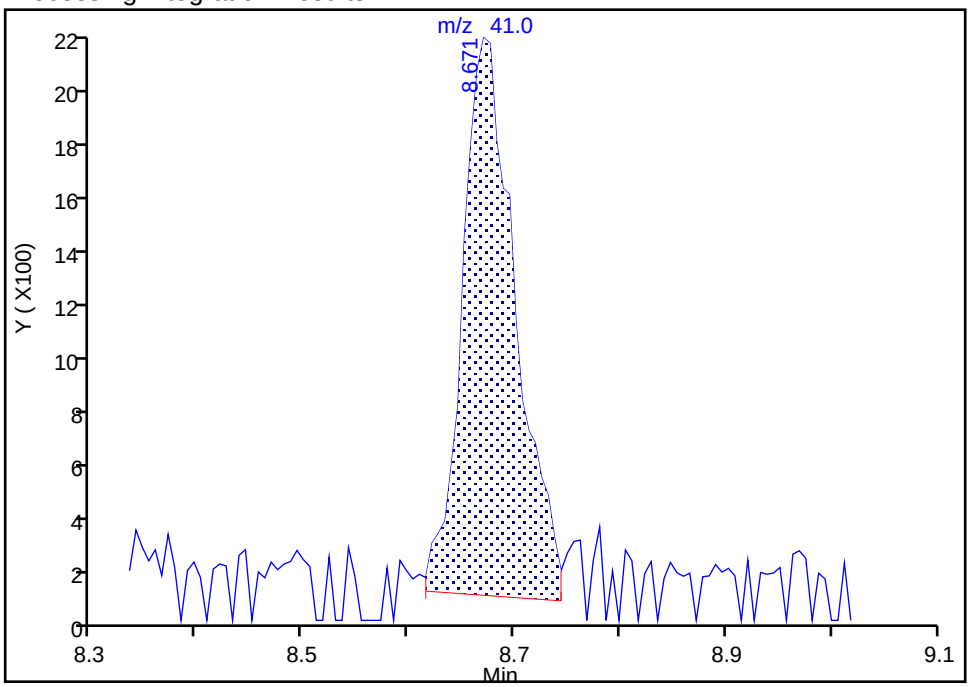
Data File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X12.D				
Injection Date:	22-Aug-2022 20:12:30	Instrument ID:	10193		
Lims ID:	IC std1 0.2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	12	Worklist Smp#:	13
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

76 2-Nitropropane, CAS: 79-46-9

Signal: 1

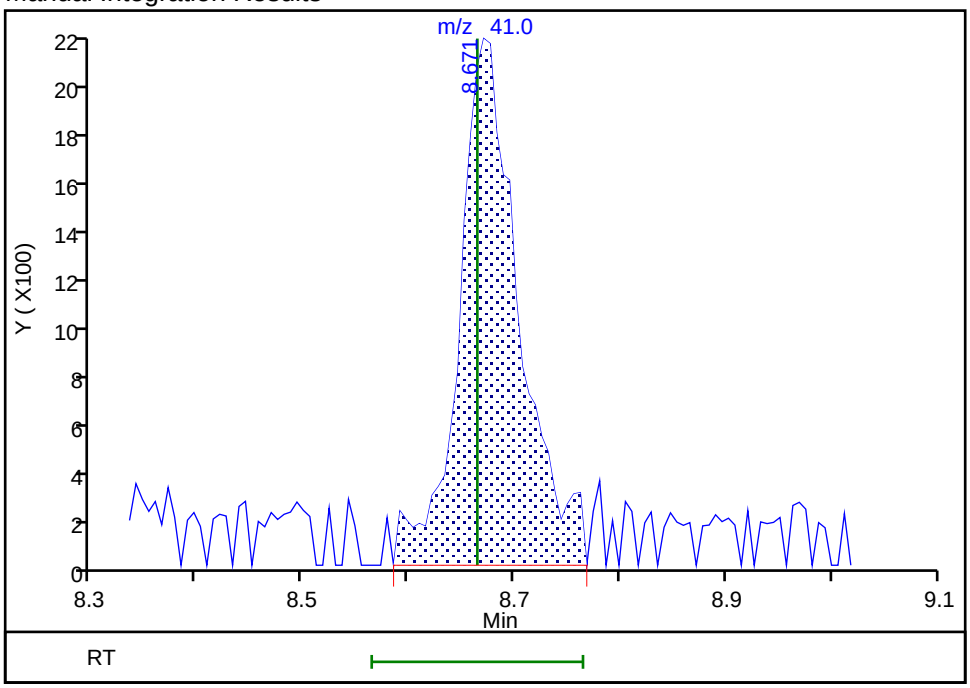
Processing Integration Results

RT: 8.67
Area: 7199
Amount: 0.937410
Amount Units: ug/l



Manual Integration Results

RT: 8.67
Area: 8495
Amount: 1.078970
Amount Units: ug/l



Reviewer: DVW2, 23-Aug-2022 09:25:18

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X13.D
Lims ID: IC std2 0.5
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 22-Aug-2022 20:34:30 ALS Bottle#: 13 Worklist Smp#: 14
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0064657-014
Misc. Info.: IC STD.5 LG
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 31-Aug-2022 08:31:27 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1647

First Level Reviewer: DVW2 Date: 23-Aug-2022 09:27:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.751	1.764	-0.013	99	27289	0.5000	0.4816	
5 Chloromethane	50	1.922	1.940	-0.018	99	40512	0.5000	0.5409	
6 Vinyl chloride	62	2.026	2.038	-0.012	97	35160	0.5000	0.5060	
7 Butadiene	39	2.038	2.050	-0.012	92	35671	0.5000	0.4802	
9 Bromomethane	94	2.324	2.331	-0.007	89	23511	0.5000	0.5086	
10 Chloroethane	64	2.391	2.398	-0.007	99	21071	0.5000	0.5217	
11 Dichlorofluoromethane	67	2.605	2.617	-0.012	97	50779	0.5000	0.5443	
12 Trichlorofluoromethane	101	2.666	2.672	-0.006	93	38458	0.5000	0.4879	
13 Pentane	43	2.672	2.678	-0.006	95	33146	0.5000	0.4743	
15 Ethyl ether	59	2.855	2.861	-0.006	93	20000	0.5001	0.4948	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.952	2.959	-0.007	92	31764	0.5000	0.5174	
17 Acrolein	56	3.013	3.013	0.000	99	159412	25.0	26.3	
19 1,1-Dichloroethene	96	3.123	3.135	-0.012	97	23632	0.5000	0.5410	
20 Acetone	43	3.160	3.166	-0.006	92	41957	5.00	6.17	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.172	3.178	-0.006	90	21059	0.5000	0.5119	
22 Iodomethane	142	3.300	3.300	0.000	99	42438	0.5000	0.5278	
23 Isopropyl alcohol	45	3.294	3.318	-0.024	30	18168	10.0	12.1	M
24 Ethyl bromide	108	3.312	3.324	-0.012	97	20645	0.4999	0.5022	M
25 Carbon disulfide	76	3.385	3.391	-0.006	99	70097	0.5000	0.5188	
27 Methyl acetate	43	3.538	3.532	0.006	26	10083	0.5000	0.5029	
28 3-Chloro-1-propene	41	3.531	3.544	-0.013	93	42455	0.5000	0.5271	
29 Methylene Chloride	84	3.702	3.708	-0.006	93	27666	0.5000	0.5341	
* 30 t-Butyl alcohol-d10 (IS)	65	3.739	3.739	0.000	47	132044	50.0	50.0	M
31 2-Methyl-2-propanol	59	3.848	3.849	-0.001	97	33987	10.0	12.3	
32 Acrylonitrile	53	4.019	4.019	0.000	36	13496	1.25	1.32	
33 Methyl tert-butyl ether	73	4.062	4.068	-0.006	88	69506	0.5000	0.5239	
34 trans-1,2-Dichloroethene	96	4.062	4.074	-0.012	98	28906	0.5000	0.5372	
35 Hexane	57	4.464	4.470	-0.006	91	38374	0.5000	0.5316	
36 1,1-Dichloroethane	63	4.714	4.720	-0.006	96	52080	0.5000	0.5257	
38 Isopropyl ether	45	4.781	4.787	-0.006	96	96103	0.5000	0.5277	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 2-Chloro-1,3-butadiene	53	4.830	4.830	0.000	90	40233	0.5000	0.5199	Ma
40 Tert-butyl ethyl ether	59	5.318	5.330	-0.012	98	86577	0.5000	0.5147	
41 2-Butanone (MEK)	43	5.555	5.543	0.012	99	69526	5.00	5.01	
42 cis-1,2-Dichloroethene	96	5.568	5.574	-0.006	82	31743	0.5000	0.5384	
43 2,2-Dichloropropane	77	5.568	5.586	-0.018	60	40087	0.5000	0.5124	
45 Propionitrile	54	5.671	5.635	0.036	98	36131	10.0	10.5	
46 Methacrylonitrile	67	5.854	5.860	-0.006	92	72136	5.00	4.92	
47 Chlorobromomethane	128	5.897	5.909	-0.012	95	13968	0.5000	0.5348	
48 Tetrahydrofuran	71	5.909	5.927	-0.018	57	9681	2.50	2.46	
50 Chloroform	83	6.074	6.074	0.000	93	48580	0.5000	0.5204	
S 51 1,2-Dichloroethene, Total	100				0			1.08	
52 1,1,1-Trichloroethane	97	6.281	6.293	-0.012	41	42559	0.5000	0.5216	
$ 53 Dibromofluoromethane (Surr)	113	6.287	6.293	-0.006	94	463908	10.0	10.0	
54 Cyclohexane	56	6.385	6.385	0.000	91	47497	0.5000	0.5174	
55 Carbon tetrachloride	117	6.494	6.501	-0.007	78	34521	0.5000	0.5039	
56 1,1-Dichloropropene	75	6.506	6.513	-0.007	97	40312	0.5000	0.5286	
57 Isobutyl alcohol	41	6.720	6.708	0.012	93	25955	25.0	26.6	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.744	6.757	-0.013	79	96790	10.0	10.1	
59 Benzene	78	6.769	6.775	-0.006	94	119293	0.5000	0.5220	
61 1,2-Dichloroethane	62	6.848	6.860	-0.012	97	31210	0.5000	0.5391	
63 Tert-amyl methyl ether	73	6.976	6.982	-0.006	99	78561	0.5000	0.5178	
* 64 Fluorobenzene (IS)	96	7.189	7.196	-0.007	99	1985770	10.0	10.0	
65 n-Heptane	43	7.201	7.208	-0.007	92	42342	0.5000	0.5160	
66 n-Butanol	56	7.640	7.622	0.018	90	34033	43.8	43.4	
67 Trichloroethene	95	7.683	7.683	0.000	98	30791	0.5000	0.5256	
68 Methylcyclohexane	83	7.982	7.982	0.000	89	49585	0.5000	0.5089	
69 1,2-Dichloropropane	63	8.018	8.025	-0.007	96	32023	0.5000	0.5274	
70 2-ethoxy-2-methyl butane	87	8.043	8.043	0.000	95	44896	0.5000	0.5072	
71 Methyl methacrylate	69	8.134	8.128	0.006	89	12895	0.5000	0.4823	
72 1,4-Dioxane	88	8.134	8.134	0.000	31	5353	25.0	29.9	M
73 Dibromomethane	93	8.140	8.134	0.006	93	14045	0.5000	0.5185	
75 Dichlorobromomethane	83	8.384	8.384	0.000	99	33992	0.5000	0.5097	
76 2-Nitropropane	41	8.665	8.665	0.000	98	18408	2.50	2.42	
78 1-Bromo-2-chloroethane	63	8.780	8.774	0.006	99	30105	0.5000	0.4971	
79 cis-1,3-Dichloropropene	75	8.951	8.951	0.000	97	44371	0.5000	0.5076	
81 4-Methyl-2-pentanone (MIBK)	43	9.152	9.159	-0.007	97	184444	5.00	4.91	
$ 82 Toluene-d8 (Surr)	98	9.280	9.280	0.000	93	2006585	10.0	9.91	
83 Toluene	92	9.366	9.366	0.000	97	77261	0.5000	0.5172	
84 trans-1,3-Dichloropropene	75	9.664	9.658	0.006	92	34999	0.5000	0.4869	
85 Ethyl methacrylate	69	9.744	9.738	0.006	90	29264	0.5000	0.5036	
86 1,1,2-Trichloroethane	97	9.878	9.872	0.006	90	21374	0.5000	0.5166	
87 Tetrachloroethene	166	9.951	9.951	0.000	97	35433	0.5000	0.5091	
102 1,3-Dichloropropane	76	10.048	10.043	0.006	91	36600	0.5000	0.5122	
S 103 1,3-Dichloropropene, Total	100				0			0.99	
104 2-Hexanone	43	10.122	10.116	0.006	97	123588	5.00	4.65	
106 Chlorodibromomethane	129	10.268	10.268	0.000	90	24859	0.5000	0.5030	
107 Ethylene Dibromide	107	10.378	10.378	0.000	98	20044	0.5000	0.5149	
* 108 Chlorobenzene-d5 (IS)	117	10.835	10.835	0.000	85	1536465	10.0	10.0	
109 1-Chlorohexane	91	10.853	10.853	0.000	96	43798	0.5000	0.5143	
110 Chlorobenzene	112	10.859	10.859	0.000	97	91634	0.5000	0.5201	
111 1,1,1,2-Tetrachloroethane	131	10.951	10.951	0.000	95	29412	0.5000	0.5038	
112 Ethylbenzene	91	10.957	10.957	0.000	98	148239	0.5000	0.5102	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
113 m-Xylene & p-Xylene	106	11.079	11.079	0.000	100	117197	1.00	1.01	
S 114 Xylenes, Total	106				0			1.52	
115 o-Xylene	106	11.414	11.414	0.000	98	59292	0.5000	0.5126	
116 Styrene	104	11.438	11.432	0.006	95	93291	0.5000	0.4928	
117 Bromoform	173	11.591	11.591	0.000	97	14114	0.5000	0.4895	
118 Isopropylbenzene	105	11.725	11.725	0.000	95	149953	0.5000	0.5101	
$ 121 4-Bromofluorobenzene (Surr)	95	11.871	11.871	0.000	92	743073	10.0	9.92	
123 1,1,2,2-Tetrachloroethane	83	11.987	11.987	0.000	78	27538	0.5000	0.5343	
122 Bromobenzene	156	11.987	11.987	0.000	90	38100	0.5000	0.5257	
124 trans-1,4-Dichloro-2-butene	53	12.018	12.012	0.006	91	63969	5.00	5.14	
125 1,2,3-Trichloropropane	110	12.030	12.030	0.000	79	7083	0.5000	0.5254	
126 N-Propylbenzene	91	12.066	12.067	0.000	99	181457	0.5000	0.5223	
127 2-Chlorotoluene	126	12.140	12.140	0.000	97	37785	0.5000	0.5191	
128 1,3,5-Trimethylbenzene	105	12.207	12.207	0.000	95	130841	0.5000	0.5230	
129 4-Chlorotoluene	126	12.237	12.237	0.000	97	39446	0.5000	0.5282	
130 tert-Butylbenzene	134	12.450	12.451	-0.001	93	27675	0.5000	0.5017	
131 Pentachloroethane	167	12.487	12.481	0.006	83	20442	0.5000	0.4905	
132 1,2,4-Trimethylbenzene	105	12.499	12.493	0.006	97	135109	0.5000	0.5200	
133 sec-Butylbenzene	105	12.621	12.621	0.000	94	165597	0.5000	0.5208	
134 1,3-Dichlorobenzene	146	12.719	12.719	0.000	97	77468	0.5000	0.5214	
135 4-Isopropyltoluene	119	12.731	12.731	0.000	97	146197	0.5000	0.5165	
* 136 1,4-Dichlorobenzene-d4	152	12.774	12.774	0.000	94	871682	10.0	10.0	
137 1,4-Dichlorobenzene	146	12.792	12.792	0.000	95	79820	0.5000	0.5261	
138 1,2,3-Trimethylbenzene	120	12.804	12.804	0.000	98	62523	0.5000	0.5280	
139 Benzyl chloride	126	12.877	12.877	0.000	98	10497	0.5000	0.4928	
140 n-Butylbenzene	92	13.030	13.030	0.000	97	73222	0.5000	0.5135	
141 1,2-Dichlorobenzene	146	13.060	13.054	0.006	99	71451	0.5000	0.5228	
142 p-Diethylbenzene	119	13.084	13.085	-0.001	86	75145	0.5000	0.5207	
145 1,2-Dibromo-3-Chloropropane	155	13.609	13.609	0.000	86	3750	0.5000	0.5155	
146 1,3,5-Trichlorobenzene	180	13.737	13.737	0.000	97	61945	0.5000	0.5292	
147 1,2,4-Trichlorobenzene	180	14.164	14.164	0.000	94	50765	0.5000	0.5144	
148 Hexachlorobutadiene	225	14.249	14.249	0.000	95	26841	0.5000	0.5267	
149 Naphthalene	128	14.346	14.347	-0.001	97	77218	0.5000	0.4919	
150 1,2,3-Trichlorobenzene	180	14.493	14.493	0.000	95	39407	0.5000	0.4956	
151 2-Methylnaphthalene	142	15.096	15.090	0.006	92	32162	0.5000	0.4340	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MSV_LL_#1_826_00053	Amount Added:	2.00	Units: uL	
MSV_LL_#2_826_00057	Amount Added:	2.00	Units: uL	
MSV_LL_GAS826_00109	Amount Added:	2.00	Units: uL	
MSV_HP25_ISSS_00058	Amount Added:	1.00	Units: uL	Run Reagent

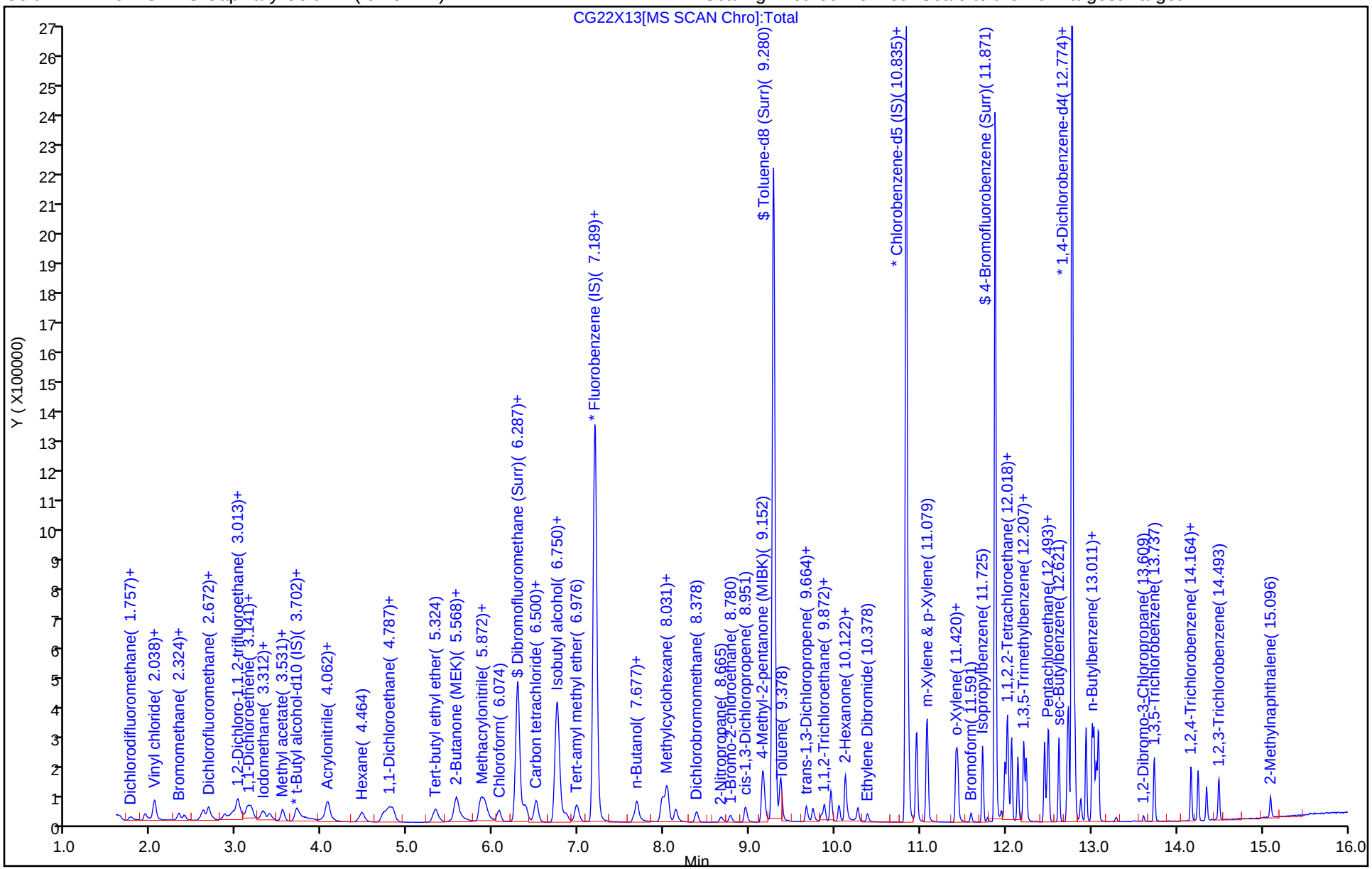
Report Date: 31-Aug-2022 08:31:27 Chrom Revision: 2.3 25-Aug-2022 20:53:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X13.D

Injection Date:	22-Aug-2022 20:34:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	IC std2 0.5			Worklist Smp#:	14
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

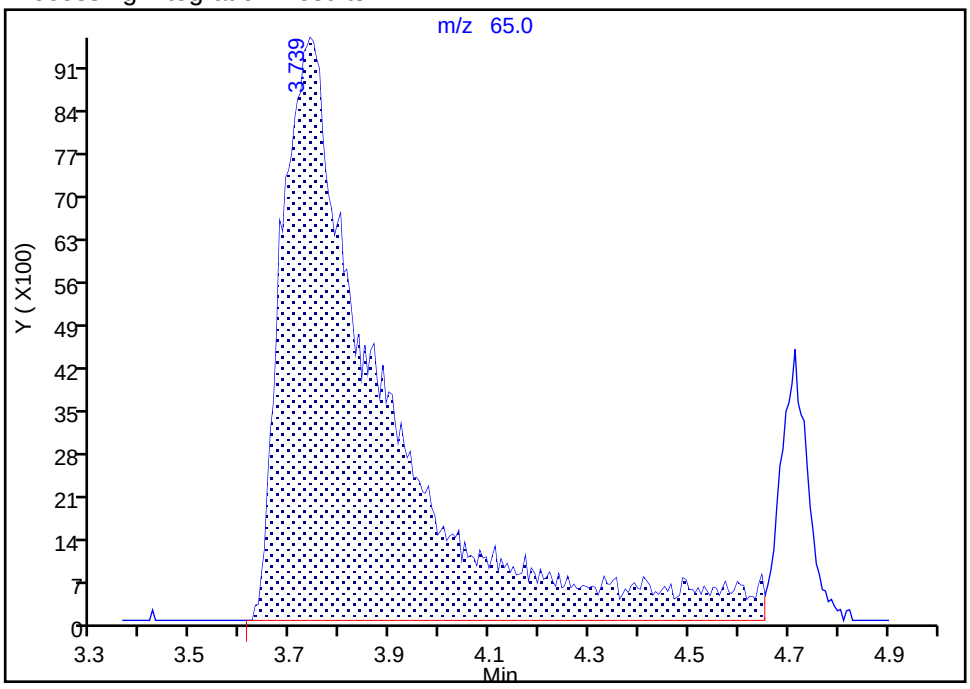
Data File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X13.D				
Injection Date:	22-Aug-2022 20:34:30	Instrument ID:	10193		
Lims ID:	IC std2 0.5				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

* 30 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

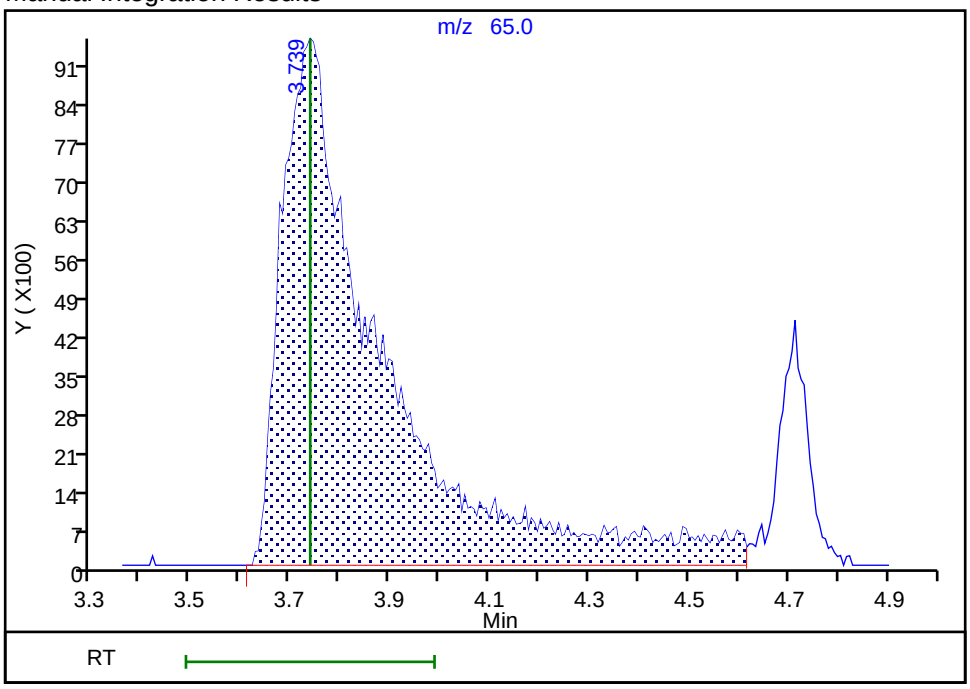
Processing Integration Results

RT: 3.74
Area: 133076
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 3.74
Area: 132044
Amount: 50.000000
Amount Units: ug/l



Reviewer: DVW2, 23-Aug-2022 09:26:45
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

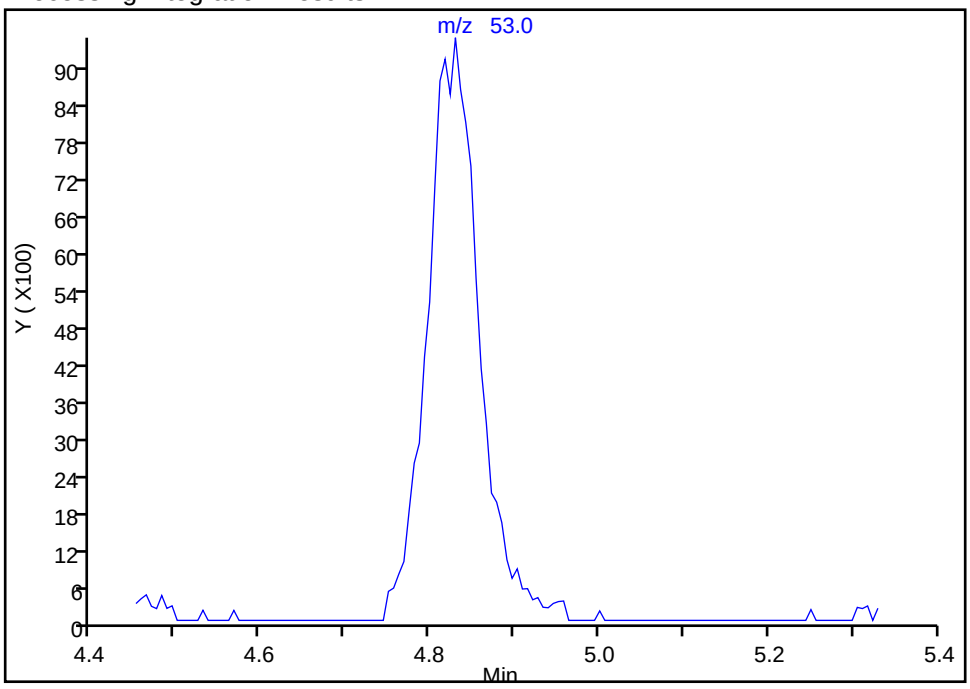
Data File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X13.D				
Injection Date:	22-Aug-2022 20:34:30	Instrument ID:	10193		
Lims ID:	IC std2 0.5				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

39 2-Chloro-1,3-butadiene, CAS: 126-99-8

Signal: 1

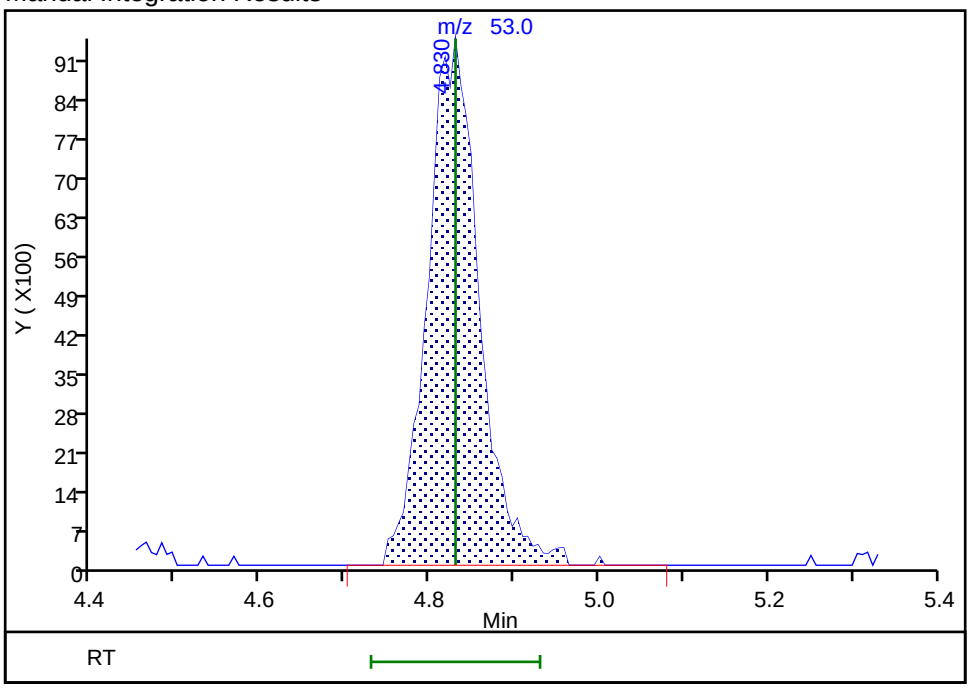
Not Detected
Expected RT: 4.83

Processing Integration Results



Manual Integration Results

RT: 4.83
Area: 40233
Amount: 0.519925
Amount Units: ug/l



Reviewer: DVW2, 23-Aug-2022 09:26:56
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

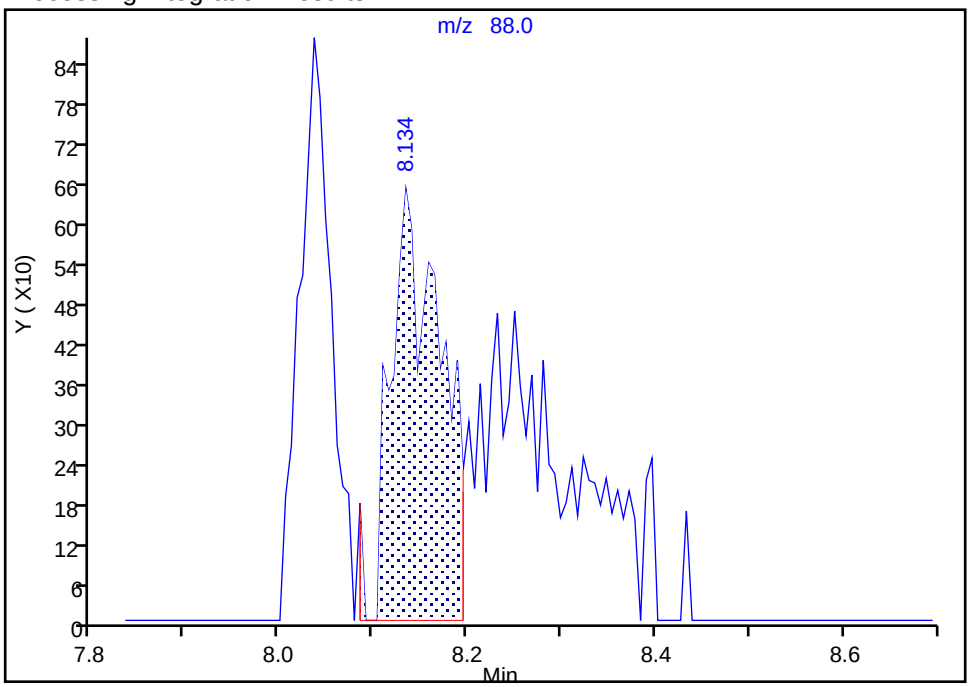
Data File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X13.D				
Injection Date:	22-Aug-2022 20:34:30	Instrument ID:	10193		
Lims ID:	IC std2 0.5				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	13	Worklist Smp#:	14
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

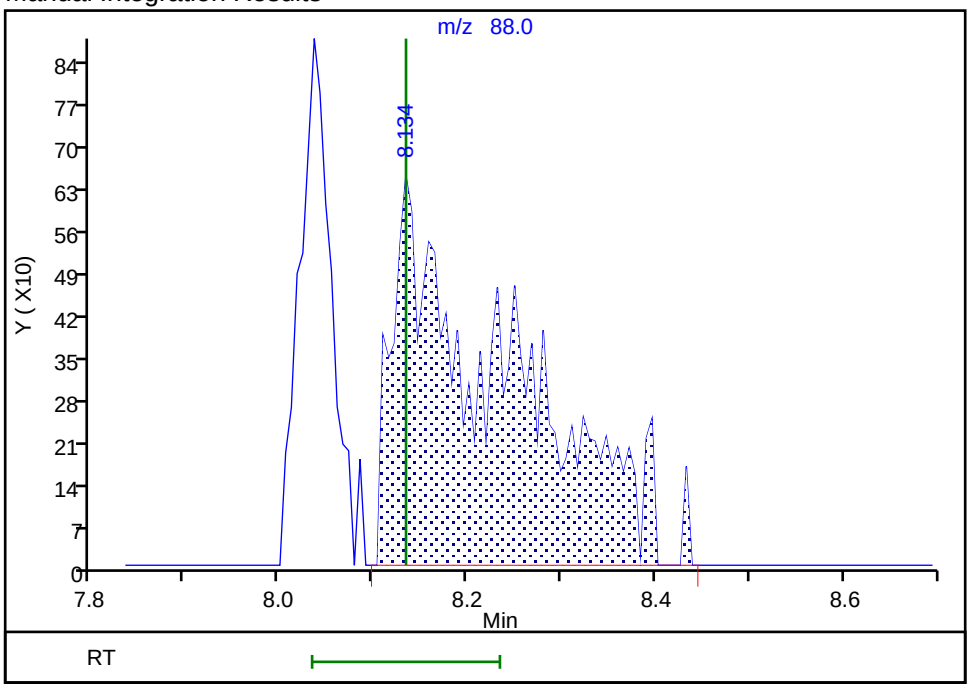
Processing Integration Results

RT: 8.13
Area: 2417
Amount: 19.433552
Amount Units: ug/l



Manual Integration Results

RT: 8.13
Area: 5353
Amount: 29.926719
Amount Units: ug/l



Reviewer: DVW2, 23-Aug-2022 09:27:16

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X14.D
Lims ID: IC std3 1
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 22-Aug-2022 20:57:30 ALS Bottle#: 14 Worklist Smp#: 15
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0064657-015
Misc. Info.: IC STD1 LG
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 31-Aug-2022 08:31:32 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1647

First Level Reviewer: DVW2 Date: 23-Aug-2022 09:28:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.758	1.764	-0.006	99	58173	1.00	1.03	
5 Chloromethane	50	1.934	1.940	-0.006	99	76690	1.00	1.03	
6 Vinyl chloride	62	2.032	2.038	-0.006	97	67575	1.00	0.9762	
7 Butadiene	39	2.044	2.050	-0.006	91	73797	1.00	1.00	
9 Bromomethane	94	2.325	2.331	-0.007	90	45642	1.00	0.99	
10 Chloroethane	64	2.385	2.398	-0.013	100	41484	1.00	1.03	
11 Dichlorofluoromethane	67	2.611	2.617	-0.006	97	92839	1.00	1.00	
12 Trichlorofluoromethane	101	2.666	2.672	-0.006	97	78889	1.00	1.00	
13 Pentane	43	2.672	2.678	-0.006	97	67620	1.00	0.9712	
15 Ethyl ether	59	2.861	2.861	0.000	94	39448	1.00	0.9796	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.946	2.959	-0.013	92	60094	1.00	0.9824	
17 Acrolein	56	3.013	3.013	0.000	100	281866	50.0	54.3	
19 1,1-Dichloroethene	96	3.129	3.135	-0.006	98	42670	1.00	0.9804	
20 Acetone	43	3.166	3.166	0.000	86	59190	10.0	10.2	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.166	3.178	-0.012	91	41348	1.00	1.01	
22 Iodomethane	142	3.294	3.300	-0.006	98	78848	1.00	0.9843	
23 Isopropyl alcohol	45	3.318	3.318	0.000	37	23037	20.0	17.9	
24 Ethyl bromide	108	3.318	3.324	-0.006	98	41770	1.00	1.02	
25 Carbon disulfide	76	3.391	3.391	0.000	100	132499	1.00	0.9843	
27 Methyl acetate	43	3.532	3.532	0.000	33	16317	1.00	0.9497	
28 3-Chloro-1-propene	41	3.538	3.544	-0.006	94	78695	1.00	0.9806	
29 Methylene Chloride	84	3.702	3.708	-0.006	92	51086	1.00	0.9899	
* 30 t-Butyl alcohol-d10 (IS)	65	3.751	3.739	0.012	89	113154	50.0	50.0	
31 2-Methyl-2-propanol	59	3.830	3.849	-0.019	99	55542	20.0	23.6	
32 Acrylonitrile	53	4.038	4.019	0.019	29	24651	2.50	2.81	
33 Methyl tert-butyl ether	73	4.062	4.068	-0.006	90	129375	1.00	0.9788	
34 trans-1,2-Dichloroethene	96	4.068	4.074	-0.006	98	53191	1.00	0.99	
35 Hexane	57	4.464	4.470	-0.006	93	70201	1.00	0.9760	
36 1,1-Dichloroethane	63	4.720	4.720	0.000	96	98507	1.00	1.00	
38 Isopropyl ether	45	4.775	4.787	-0.012	95	179263	1.00	0.9879	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 2-Chloro-1,3-butadiene	53	4.824	4.830	-0.006	90	76284	1.00	0.9894	
40 Tert-butyl ethyl ether	59	5.324	5.330	-0.006	98	166424	1.00	0.99	
41 2-Butanone (MEK)	43	5.549	5.543	0.006	99	128408	10.0	10.8	
42 cis-1,2-Dichloroethene	96	5.568	5.574	-0.006	81	58902	1.00	1.00	
43 2,2-Dichloropropane	77	5.580	5.586	-0.006	65	76415	1.00	0.9803	
45 Propionitrile	54	5.641	5.635	0.006	98	62435	20.0	21.1	
46 Methacrylonitrile	67	5.848	5.860	-0.012	92	137272	10.0	10.9	
47 Chlorobromomethane	128	5.909	5.909	0.000	95	25966	1.00	1.00	
48 Tetrahydrofuran	71	5.921	5.927	-0.006	77	18506	5.00	5.49	a
50 Chloroform	83	6.068	6.074	-0.006	93	93605	1.00	1.01	
S 51 1,2-Dichloroethene, Total	100				0			1.99	
52 1,1,1-Trichloroethane	97	6.281	6.293	-0.012	96	82747	1.00	1.02	
$ 53 Dibromofluoromethane (Surr)	113	6.293	6.293	0.000	94	463253	10.0	10.0	
54 Cyclohexane	56	6.385	6.385	0.000	91	90500	1.00	0.9894	
55 Carbon tetrachloride	117	6.494	6.501	-0.007	83	67141	1.00	0.9837	
56 1,1-Dichloropropene	75	6.507	6.513	-0.006	96	73903	1.00	0.9726	
57 Isobutyl alcohol	41	6.714	6.708	0.006	95	43717	50.0	52.2	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.750	6.757	-0.007	93	94021	10.0	9.89	
59 Benzene	78	6.769	6.775	-0.006	94	225053	1.00	0.9885	
61 1,2-Dichloroethane	62	6.854	6.860	-0.006	97	57929	1.00	1.00	
63 Tert-amyl methyl ether	73	6.982	6.982	0.000	99	150940	1.00	1.00	
* 64 Fluorobenzene (IS)	96	7.189	7.196	-0.007	99	1978464	10.0	10.0	
65 n-Heptane	43	7.208	7.208	0.000	94	79351	1.00	0.9706	
66 n-Butanol	56	7.634	7.622	0.012	91	61837	87.5	92.1	
67 Trichloroethene	95	7.677	7.683	-0.006	97	56668	1.00	0.9708	
68 Methylcyclohexane	83	7.982	7.982	0.000	90	95136	1.00	0.9801	
69 1,2-Dichloropropane	63	8.019	8.025	-0.006	97	60237	1.00	1.00	
70 2-ethoxy-2-methyl butane	87	8.043	8.043	0.000	92	85851	1.00	0.9735	
71 Methyl methacrylate	69	8.134	8.128	0.006	92	24944	1.00	1.09	
72 1,4-Dioxane	88	8.147	8.134	0.013	32	7798	50.0	48.2	M
73 Dibromomethane	93	8.134	8.134	0.000	94	26280	1.00	0.9738	
75 Dichlorobromomethane	83	8.378	8.384	-0.006	99	65882	1.00	0.99	
76 2-Nitropropane	41	8.671	8.665	0.006	98	31793	5.00	4.87	
78 1-Bromo-2-chloroethane	63	8.774	8.774	0.000	98	60548	1.00	1.00	
79 cis-1,3-Dichloropropene	75	8.951	8.951	0.000	97	83617	1.00	0.9600	
81 4-Methyl-2-pentanone (MIBK)	43	9.152	9.159	-0.007	97	342665	10.0	10.7	
$ 82 Toluene-d8 (Surr)	98	9.280	9.280	0.000	93	1995655	10.0	10.0	
83 Toluene	92	9.366	9.366	0.000	98	146835	1.00	1.00	
84 trans-1,3-Dichloropropene	75	9.665	9.658	0.007	92	69149	1.00	0.9788	
85 Ethyl methacrylate	69	9.738	9.738	0.000	90	54040	1.00	0.9462	
86 1,1,2-Trichloroethane	97	9.872	9.872	0.000	90	40627	1.00	1.00	
87 Tetrachloroethene	166	9.951	9.951	0.000	97	67675	1.00	0.9892	
102 1,3-Dichloropropane	76	10.043	10.043	0.001	90	69965	1.00	1.00	
S 103 1,3-Dichloropropene, Total	100				0			1.94	
104 2-Hexanone	43	10.116	10.116	0.000	97	247070	10.0	10.8	
106 Chlorodibromomethane	129	10.268	10.268	0.000	90	46481	1.00	0.9568	
107 Ethylene Dibromide	107	10.378	10.378	0.000	99	37064	1.00	0.9686	
* 108 Chlorobenzene-d5 (IS)	117	10.835	10.835	0.000	85	1510198	10.0	10.0	
109 1-Chlorohexane	91	10.853	10.853	0.000	97	81147	1.00	0.9695	
110 Chlorobenzene	112	10.859	10.859	0.000	96	173193	1.00	1.00	
111 1,1,1,2-Tetrachloroethane	131	10.951	10.951	0.000	96	55325	1.00	0.9642	
112 Ethylbenzene	91	10.957	10.957	0.000	98	282580	1.00	0.9896	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
113 m-Xylene & p-Xylene	106	11.079	11.079	0.000	100	230360	2.00	2.01	
S 114 Xylenes, Total	106				0			3.01	
115 o-Xylene	106	11.414	11.414	0.000	96	113031	1.00	0.99	
116 Styrene	104	11.432	11.432	0.000	94	180116	1.00	0.9680	
117 Bromoform	173	11.591	11.591	0.000	98	26326	1.00	0.9289	
118 Isopropylbenzene	105	11.725	11.725	0.000	95	289388	1.00	1.00	
$ 121 4-Bromofluorobenzene (Surr)	95	11.871	11.871	0.000	92	737027	10.0	10.0	
123 1,1,2,2-Tetrachloroethane	83	11.987	11.987	0.000	78	51538	1.00	1.01	
122 Bromobenzene	156	11.987	11.987	0.000	91	71493	1.00	1.00	
124 trans-1,4-Dichloro-2-butene	53	12.018	12.012	0.006	92	120833	10.0	9.83	
125 1,2,3-Trichloropropane	110	12.030	12.030	0.000	78	13537	1.00	1.02	
126 N-Propylbenzene	91	12.067	12.067	0.000	99	348619	1.00	1.02	
127 2-Chlorotoluene	126	12.140	12.140	0.000	97	72794	1.00	1.01	
128 1,3,5-Trimethylbenzene	105	12.207	12.207	0.000	94	246256	1.00	1.00	
129 4-Chlorotoluene	126	12.237	12.237	0.000	97	73677	1.00	1.00	
130 tert-Butylbenzene	134	12.451	12.451	0.000	93	54084	1.00	0.99	
131 Pentachloroethane	167	12.481	12.481	0.000	87	39851	1.00	0.9687	
132 1,2,4-Trimethylbenzene	105	12.499	12.493	0.006	96	258595	1.00	1.01	
133 sec-Butylbenzene	105	12.621	12.621	0.000	94	319377	1.00	1.02	
134 1,3-Dichlorobenzene	146	12.719	12.719	0.000	98	147649	1.00	1.01	
135 4-Isopropyltoluene	119	12.731	12.731	0.000	97	278362	1.00	1.00	
* 136 1,4-Dichlorobenzene-d4	152	12.774	12.774	0.000	94	860455	10.0	10.0	
137 1,4-Dichlorobenzene	146	12.792	12.792	0.000	96	150564	1.00	1.01	
138 1,2,3-Trimethylbenzene	120	12.804	12.804	0.000	98	117073	1.00	1.00	
139 Benzyl chloride	126	12.877	12.877	0.000	98	19724	1.00	0.9381	
140 n-Butylbenzene	92	13.030	13.030	0.000	98	141416	1.00	1.00	
141 1,2-Dichlorobenzene	146	13.054	13.054	0.000	99	135919	1.00	1.01	
142 p-Diethylbenzene	119	13.085	13.085	0.000	86	142120	1.00	1.00	
145 1,2-Dibromo-3-Chloropropane	155	13.609	13.609	0.000	85	6274	1.00	0.8738	
146 1,3,5-Trichlorobenzene	180	13.737	13.737	0.000	98	114715	1.00	0.99	
147 1,2,4-Trichlorobenzene	180	14.164	14.164	0.000	94	94997	1.00	0.9751	
148 Hexachlorobutadiene	225	14.249	14.249	0.000	97	49990	1.00	0.99	
149 Naphthalene	128	14.347	14.347	0.000	97	147337	1.00	0.9508	
150 1,2,3-Trichlorobenzene	180	14.493	14.493	0.000	96	76007	1.00	0.9684	
151 2-Methylnaphthalene	142	15.096	15.090	0.006	93	63748	1.00	0.8714	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

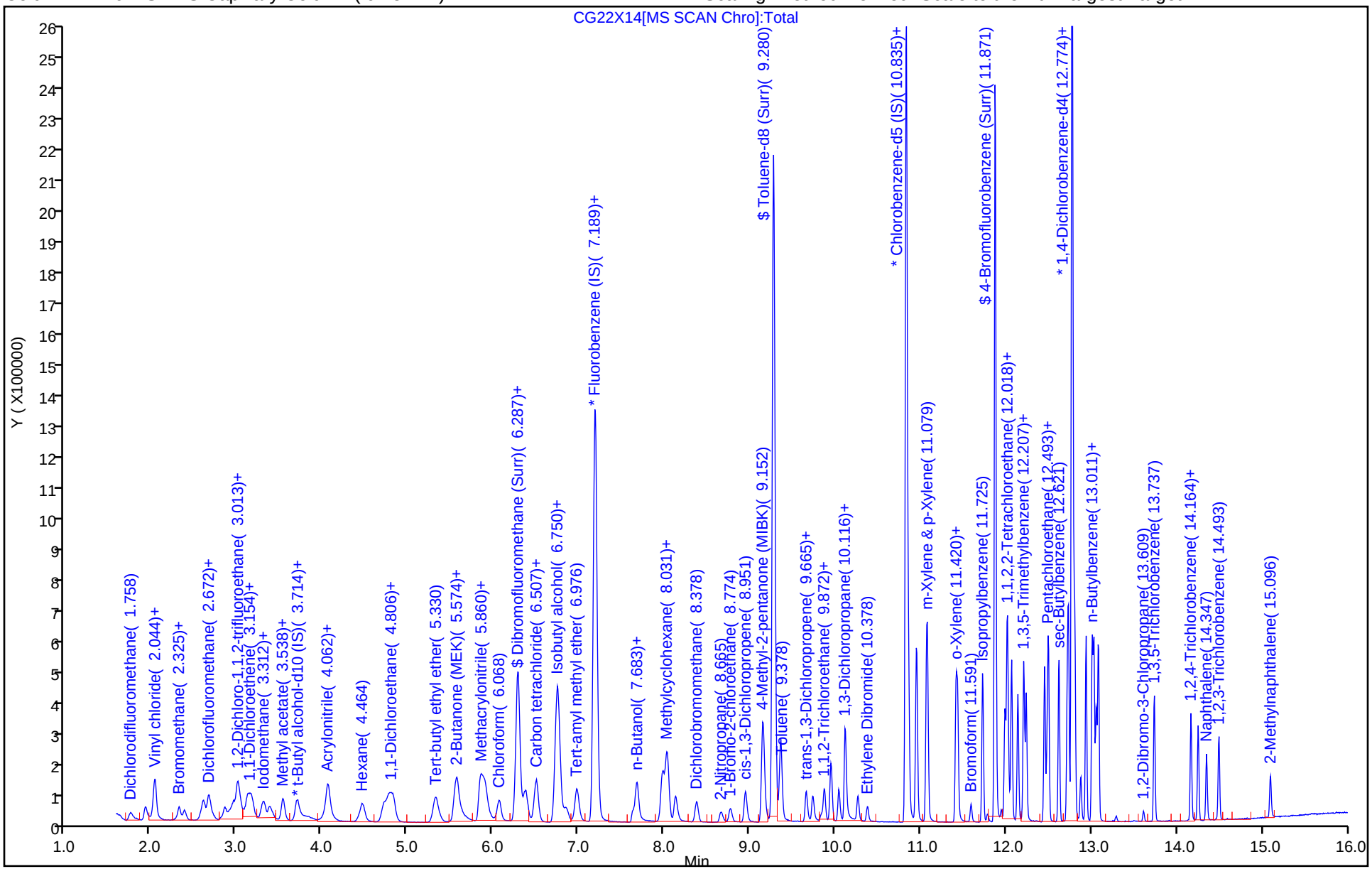
MSV_LL_#1_826_00053	Amount Added:	2.00	Units: uL	
MSV_LL_#2_826_00057	Amount Added:	2.00	Units: uL	
MSV_LL_GAS826_00109	Amount Added:	2.00	Units: uL	
MSV_HP25_ISSS_00058	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 31-Aug-2022 08:31:33 Chrom Revision: 2.3 25-Aug-2022 20:53:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X14.D				
Injection Date:	22-Aug-2022 20:57:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	IC std3 1			Worklist Smp#:	15
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

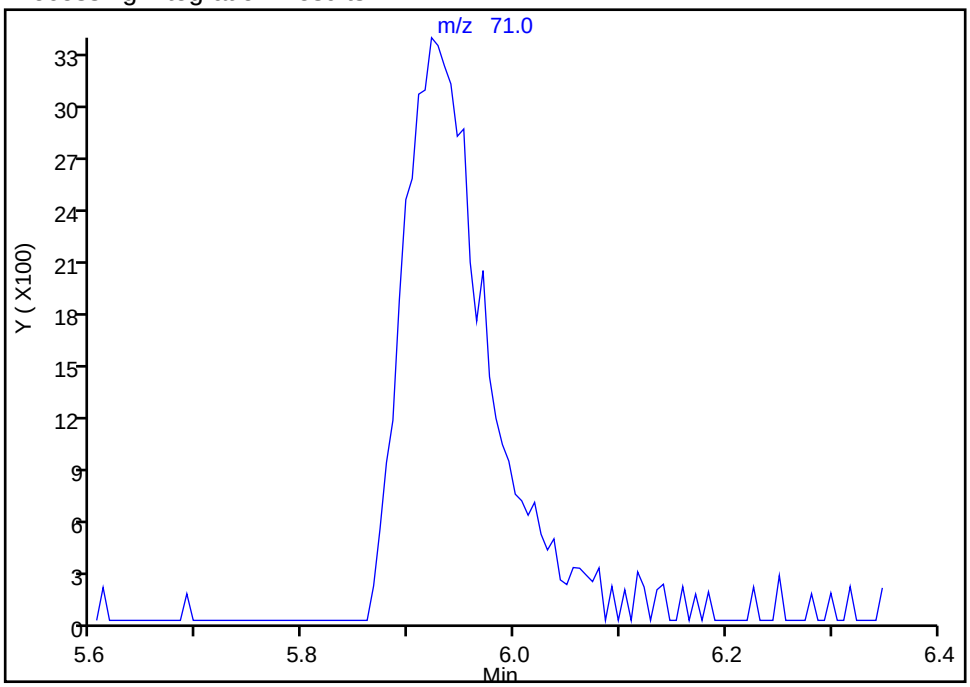
Data File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X14.D				
Injection Date:	22-Aug-2022 20:57:30	Instrument ID:	10193		
Lims ID:	IC std3 1				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

48 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

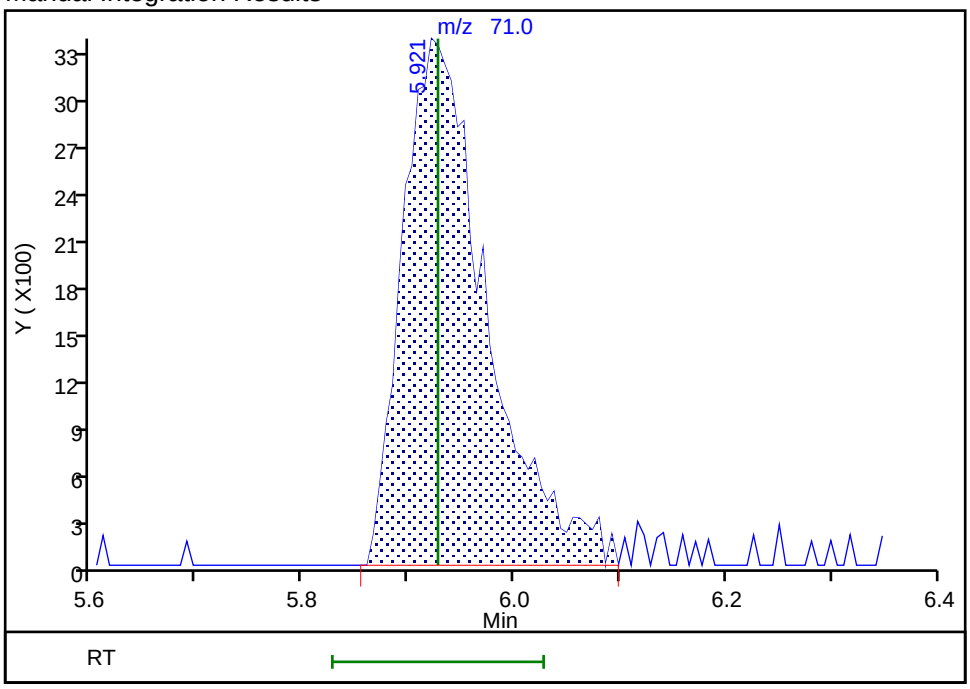
Not Detected
Expected RT: 5.93

Processing Integration Results



Manual Integration Results

RT: 5.92
Area: 18506
Amount: 5.490850
Amount Units: ug/l



Reviewer: DVW2, 23-Aug-2022 09:28:17
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

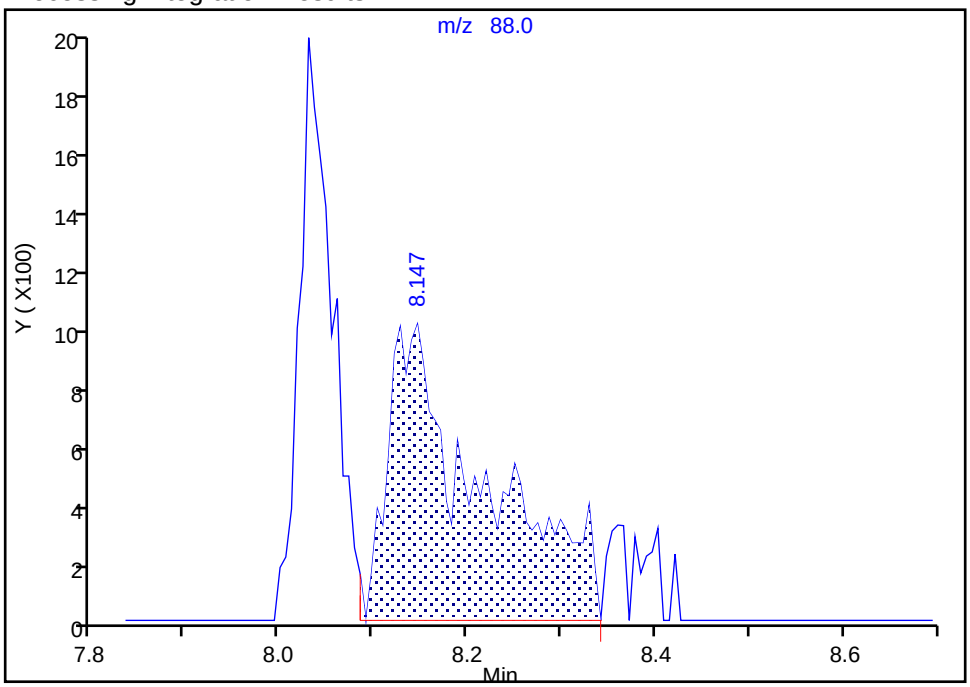
Data File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X14.D				
Injection Date:	22-Aug-2022 20:57:30	Instrument ID:	10193		
Lims ID:	IC std3 1				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	14	Worklist Smp#:	15
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

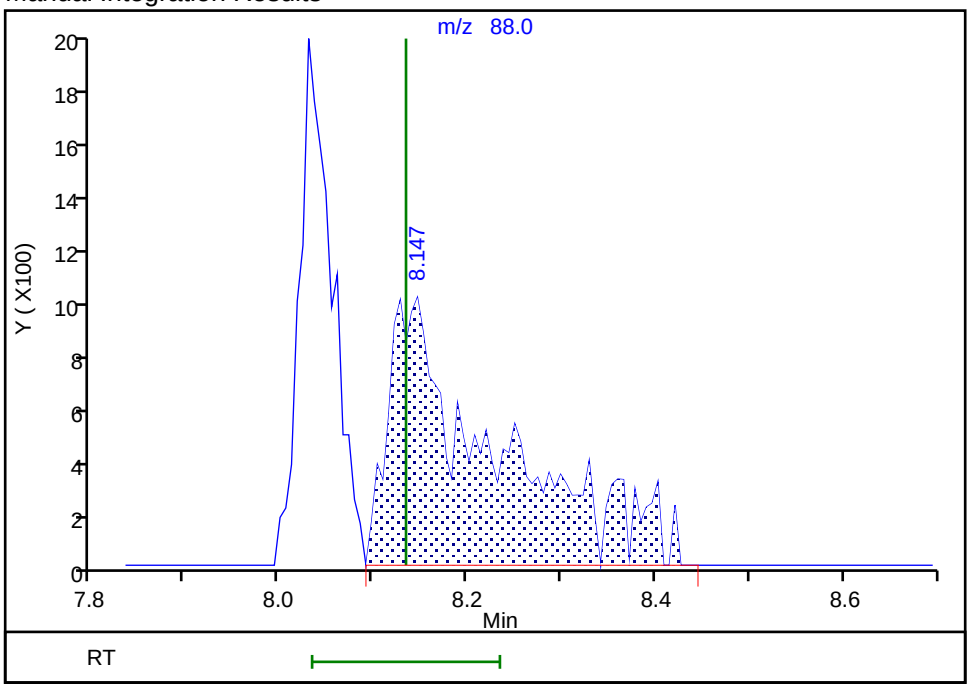
Processing Integration Results

RT: 8.15
Area: 6917
Amount: 47.271840
Amount Units: ug/l



Manual Integration Results

RT: 8.15
Area: 7798
Amount: 48.207501
Amount Units: ug/l



Reviewer: DVW2, 23-Aug-2022 09:28:35

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X15.D
Lims ID: IC std4 2
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 22-Aug-2022 21:19:30 ALS Bottle#: 15 Worklist Smp#: 16
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0064657-016
Misc. Info.: IC STD2 LG
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 31-Aug-2022 08:31:38 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1647

First Level Reviewer: DVW2 Date: 23-Aug-2022 07:39:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.764	1.764	0.000	99	117468	2.00	2.08	
5 Chloromethane	50	1.940	1.940	0.000	99	150217	2.00	2.02	
6 Vinyl chloride	62	2.038	2.038	0.000	98	143251	2.00	2.07	
7 Butadiene	39	2.050	2.050	0.000	91	152389	2.00	2.06	
9 Bromomethane	94	2.331	2.331	0.000	91	93538	2.00	2.03	
10 Chloroethane	64	2.391	2.391	0.000	99	81164	2.00	2.02	
11 Dichlorofluoromethane	67	2.611	2.611	0.000	97	187748	2.00	2.02	
12 Trichlorofluoromethane	101	2.672	2.672	0.000	97	164716	2.00	2.10	
13 Pentane	43	2.678	2.678	0.000	98	142039	2.00	2.04	
15 Ethyl ether	59	2.867	2.867	0.000	92	84873	2.00	2.11	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.958	2.958	0.000	92	122486	2.00	2.00	
17 Acrolein	56	3.013	3.013	0.000	99	584522	100.0	108.4	
19 1,1-Dichloroethene	96	3.135	3.135	0.000	97	86755	2.00	2.00	
20 Acetone	43	3.166	3.166	0.000	95	122838	20.0	20.3	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.178	3.178	0.000	91	84297	2.00	2.06	
22 Iodomethane	142	3.306	3.306	0.000	97	163985	2.00	2.05	
23 Isopropyl alcohol	45	3.300	3.300	0.000	30	51494	40.0	38.5	
24 Ethyl bromide	108	3.330	3.330	0.000	97	83677	2.00	2.05	
25 Carbon disulfide	76	3.397	3.397	0.000	100	273138	2.00	2.03	
27 Methyl acetate	43	3.538	3.538	0.000	24	42677	2.00	2.39	M
28 3-Chloro-1-propene	41	3.550	3.550	0.000	94	162533	2.00	2.03	
29 Methylene Chloride	84	3.708	3.708	0.000	96	104369	2.00	2.02	
* 30 t-Butyl alcohol-d10 (IS)	65	3.751	3.751	0.000	90	117656	50.0	50.0	
31 2-Methyl-2-propanol	59	3.873	3.873	0.000	99	99960	40.0	40.8	
32 Acrylonitrile	53	4.031	4.031	0.000	96	48561	5.00	5.32	
33 Methyl tert-butyl ether	73	4.068	4.068	0.000	94	272217	2.00	2.06	
34 trans-1,2-Dichloroethene	96	4.068	4.068	0.000	98	109559	2.00	2.05	
35 Hexane	57	4.476	4.476	0.000	93	140977	2.00	1.96	
36 1,1-Dichloroethane	63	4.720	4.720	0.000	96	203004	2.00	2.06	
38 Isopropyl ether	45	4.793	4.793	0.000	96	370270	2.00	2.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 2-Chloro-1,3-butadiene	53	4.836	4.836	0.000	90	154635	2.00	2.01	
40 Tert-butyl ethyl ether	59	5.330	5.330	0.000	98	341793	2.00	2.04	
41 2-Butanone (MEK)	43	5.549	5.549	0.000	100	268068	20.0	21.7	
42 cis-1,2-Dichloroethene	96	5.574	5.574	0.000	82	118805	2.00	2.02	
43 2,2-Dichloropropane	77	5.580	5.580	0.000	61	164164	2.00	2.11	
45 Propionitrile	54	5.653	5.653	0.000	99	128191	40.0	41.7	
46 Methacrylonitrile	67	5.860	5.860	0.000	92	286005	20.0	21.9	
47 Chlorobromomethane	128	5.909	5.909	0.000	96	53176	2.00	2.05	
48 Tetrahydrofuran	71	5.915	5.915	0.000	64	36440	10.0	10.4	
50 Chloroform	83	6.074	6.074	0.000	93	188148	2.00	2.03	
S 51 1,2-Dichloroethene, Total	100				0			4.07	
52 1,1,1-Trichloroethane	97	6.287	6.287	0.000	55	166622	2.00	2.05	
$ 53 Dibromofluoromethane (Surr)	113	6.293	6.293	0.000	94	458737	10.0	9.93	
54 Cyclohexane	56	6.379	6.379	0.000	91	184387	2.00	2.02	
55 Carbon tetrachloride	117	6.500	6.500	0.000	96	139848	2.00	2.05	
56 1,1-Dichloropropene	75	6.513	6.513	0.000	98	152069	2.00	2.00	
57 Isobutyl alcohol	41	6.714	6.714	0.000	94	86391	100.0	99.3	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.744	6.744	0.000	81	93896	10.0	9.89	
59 Benzene	78	6.775	6.775	0.000	96	460268	2.00	2.02	
61 1,2-Dichloroethane	62	6.854	6.854	0.000	97	117609	2.00	2.04	
63 Tert-amyl methyl ether	73	6.982	6.982	0.000	99	310776	2.00	2.06	
* 64 Fluorobenzene (IS)	96	7.195	7.195	0.000	98	1976130	10.0	10.0	
65 n-Heptane	43	7.208	7.208	0.000	93	163653	2.00	2.00	
66 n-Butanol	56	7.628	7.628	0.000	88	120790	175.0	173.1	
67 Trichloroethene	95	7.683	7.683	0.000	98	121006	2.00	2.08	
68 Methylcyclohexane	83	7.982	7.982	0.000	91	196076	2.00	2.02	
69 1,2-Dichloropropane	63	8.025	8.025	0.000	97	124387	2.00	2.06	
70 2-ethoxy-2-methyl butane	87	8.043	8.043	0.000	93	179004	2.00	2.03	
71 Methyl methacrylate	69	8.128	8.128	0.000	92	51296	2.00	2.15	
72 1,4-Dioxane	88	8.122	8.122	0.000	29	17348	100.0	99.4	
73 Dibromomethane	93	8.134	8.134	0.000	93	55503	2.00	2.06	
75 Dichlorobromomethane	83	8.378	8.378	0.000	99	137205	2.00	2.07	
76 2-Nitropropane	41	8.665	8.665	0.000	99	69212	10.0	10.2	
78 1-Bromo-2-chloroethane	63	8.774	8.774	0.000	98	123589	2.00	2.05	
79 cis-1,3-Dichloropropene	75	8.951	8.951	0.000	97	176574	2.00	2.03	
81 4-Methyl-2-pentanone (MIBK)	43	9.158	9.158	0.000	97	721350	20.0	21.6	
$ 82 Toluene-d8 (Surr)	98	9.280	9.280	0.000	93	1994377	10.0	10.0	
83 Toluene	92	9.366	9.366	0.000	98	299255	2.00	2.04	
84 trans-1,3-Dichloropropene	75	9.664	9.664	0.000	92	145243	2.00	2.05	
85 Ethyl methacrylate	69	9.738	9.738	0.000	90	116133	2.00	2.03	
86 1,1,2-Trichloroethane	97	9.872	9.872	0.000	89	84210	2.00	2.07	
87 Tetrachloroethene	166	9.951	9.951	0.000	97	140565	2.00	2.05	
102 1,3-Dichloropropane	76	10.042	10.042	0.000	90	145113	2.00	2.07	
S 103 1,3-Dichloropropene, Total	100				0			4.08	
104 2-Hexanone	43	10.116	10.116	0.000	97	510532	20.0	21.5	
106 Chlorodibromomethane	129	10.268	10.268	0.000	90	98443	2.00	2.03	
107 Ethylene Dibromide	107	10.378	10.378	0.000	99	79714	2.00	2.08	
* 108 Chlorobenzene-d5 (IS)	117	10.835	10.835	0.000	85	1510978	10.0	10.0	
109 1-Chlorohexane	91	10.853	10.853	0.000	98	167760	2.00	2.00	
110 Chlorobenzene	112	10.859	10.859	0.000	97	352259	2.00	2.03	
111 1,1,1,2-Tetrachloroethane	131	10.951	10.951	0.000	96	118338	2.00	2.06	
112 Ethylbenzene	91	10.951	10.951	0.000	98	586626	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
113 m-Xylene & p-Xylene	106	11.079	11.079	0.000	100	469217	4.00	4.10	
S 114 Xylenes, Total	106				0			6.13	
115 o-Xylene	106	11.414	11.414	0.000	97	231506	2.00	2.04	
116 Styrene	104	11.432	11.432	0.000	95	384630	2.00	2.07	
117 Bromoform	173	11.591	11.591	0.000	97	57517	2.00	2.03	
118 Isopropylbenzene	105	11.725	11.725	0.000	95	589633	2.00	2.04	
$ 121 4-Bromofluorobenzene (Surr)	95	11.871	11.871	0.000	93	735025	10.0	9.98	
123 1,1,2,2-Tetrachloroethane	83	11.987	11.987	0.000	78	106640	2.00	2.07	
122 Bromobenzene	156	11.987	11.987	0.000	92	148658	2.00	2.05	
124 trans-1,4-Dichloro-2-butene	53	12.012	12.012	0.000	92	257721	20.0	20.7	
125 1,2,3-Trichloropropane	110	12.030	12.030	0.000	77	27317	2.00	2.02	
126 N-Propylbenzene	91	12.066	12.066	0.000	98	719215	2.00	2.07	
127 2-Chlorotoluene	126	12.140	12.140	0.000	97	148112	2.00	2.03	
128 1,3,5-Trimethylbenzene	105	12.207	12.207	0.000	94	514383	2.00	2.05	
129 4-Chlorotoluene	126	12.237	12.237	0.000	97	151548	2.00	2.03	
130 tert-Butylbenzene	134	12.451	12.451	0.000	93	111261	2.00	2.01	
131 Pentachloroethane	167	12.481	12.481	0.000	93	83992	2.00	2.01	
132 1,2,4-Trimethylbenzene	105	12.499	12.499	0.000	97	533692	2.00	2.05	
133 sec-Butylbenzene	105	12.621	12.621	0.000	94	653385	2.00	2.05	
134 1,3-Dichlorobenzene	146	12.719	12.719	0.000	98	304220	2.00	2.04	
135 4-Isopropyltoluene	119	12.731	12.731	0.000	97	580567	2.00	2.05	
* 136 1,4-Dichlorobenzene-d4	152	12.774	12.774	0.000	93	872795	10.0	10.0	
137 1,4-Dichlorobenzene	146	12.792	12.792	0.000	96	308250	2.00	2.03	
138 1,2,3-Trimethylbenzene	120	12.804	12.804	0.000	98	241995	2.00	2.04	
139 Benzyl chloride	126	12.877	12.877	0.000	98	43555	2.00	2.04	
140 n-Butylbenzene	92	13.030	13.030	0.000	97	292535	2.00	2.05	
141 1,2-Dichlorobenzene	146	13.054	13.054	0.000	99	280876	2.00	2.05	
142 p-Diethylbenzene	119	13.085	13.085	0.000	86	292366	2.00	2.02	
145 1,2-Dibromo-3-Chloropropane	155	13.609	13.609	0.000	88	14627	2.00	2.01	
146 1,3,5-Trichlorobenzene	180	13.737	13.737	0.000	97	239094	2.00	2.04	
147 1,2,4-Trichlorobenzene	180	14.164	14.164	0.000	94	200037	2.00	2.02	
148 Hexachlorobutadiene	225	14.249	14.249	0.000	96	104110	2.00	2.04	
149 Naphthalene	128	14.346	14.346	0.000	96	315886	2.00	2.01	
150 1,2,3-Trichlorobenzene	180	14.493	14.493	0.000	96	161145	2.00	2.02	
151 2-Methylnaphthalene	142	15.096	15.096	0.000	93	146301	2.00	1.97	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00053	Amount Added:	2.00	Units: uL	
MSV_LL_#2_826_00057	Amount Added:	2.00	Units: uL	
MSV_LL_GAS826_00109	Amount Added:	2.00	Units: uL	
MSV_HP25_ISSS_00058	Amount Added:	1.00	Units: uL	Run Reagent

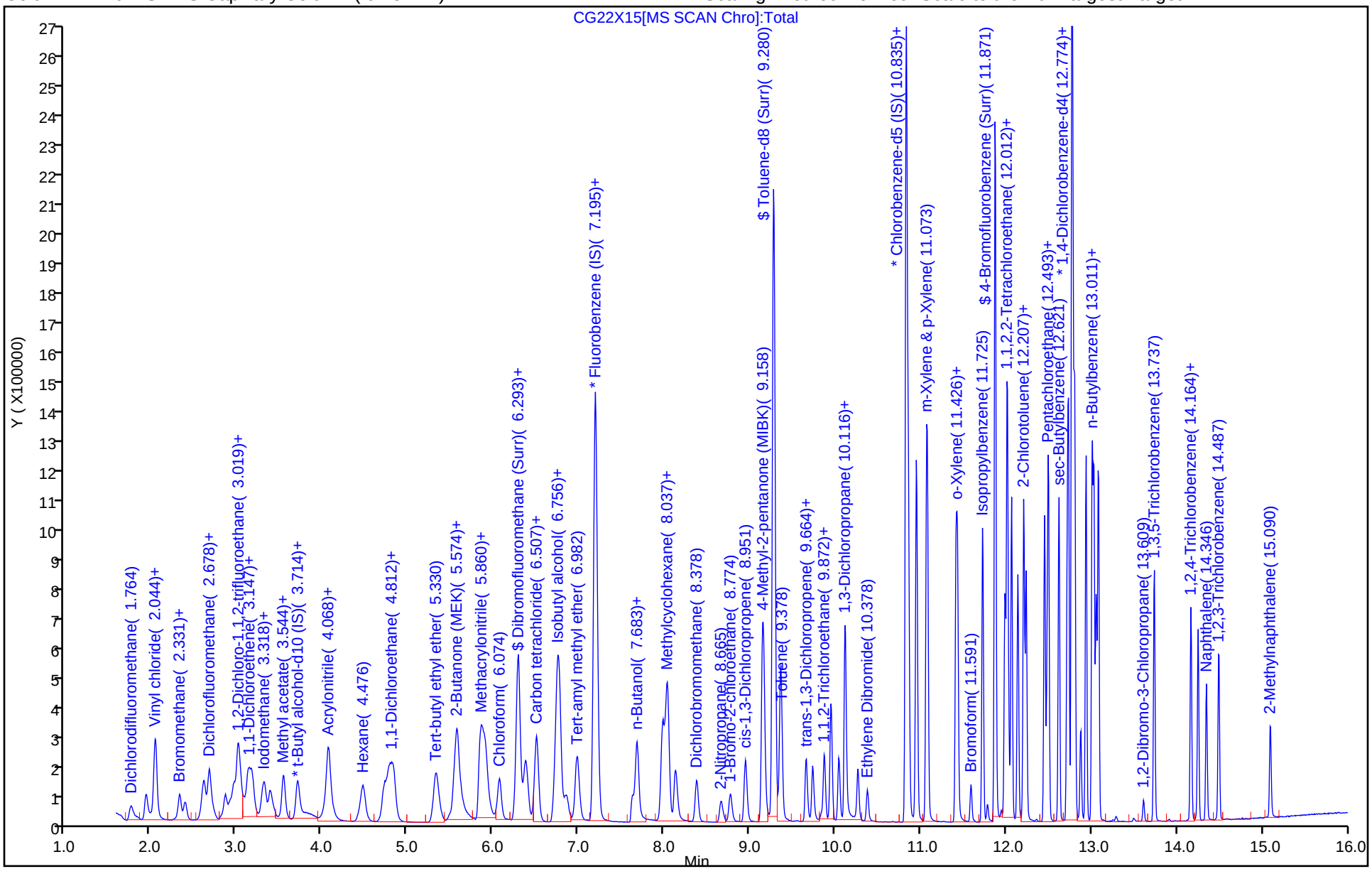
Report Date: 31-Aug-2022 08:31:38 Chrom Revision: 2.3 25-Aug-2022 20:53:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X15.D

Injection Date:	22-Aug-2022 21:19:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	IC std4 2			Worklist Smp#:	16
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

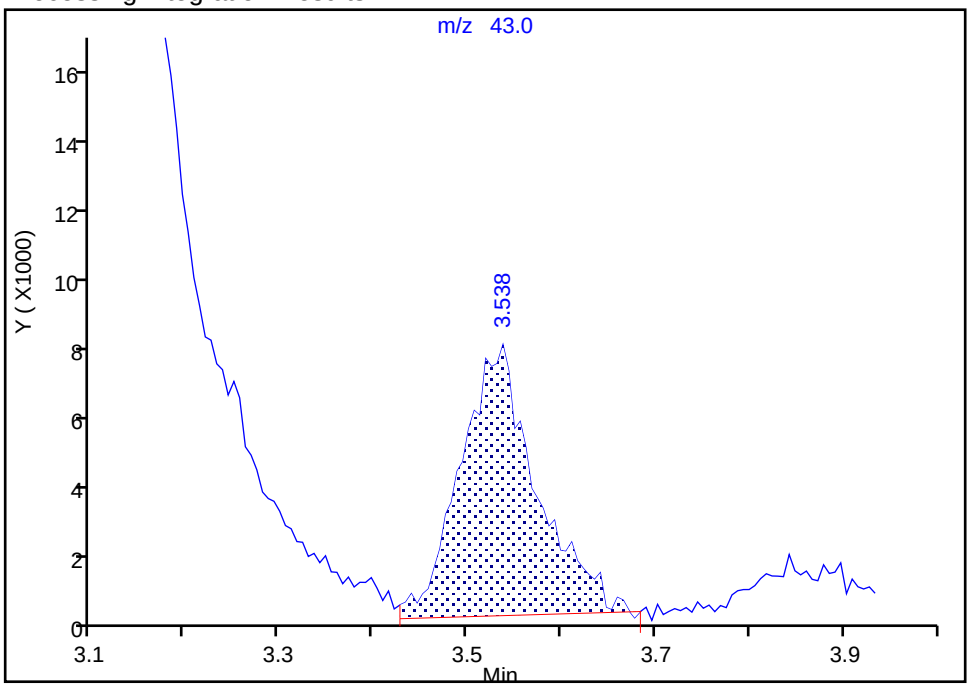
Data File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X15.D				
Injection Date:	22-Aug-2022 21:19:30	Instrument ID:	10193		
Lims ID:	IC std4 2				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	15	Worklist Smp#:	16
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

27 Methyl acetate, CAS: 79-20-9

Signal: 1

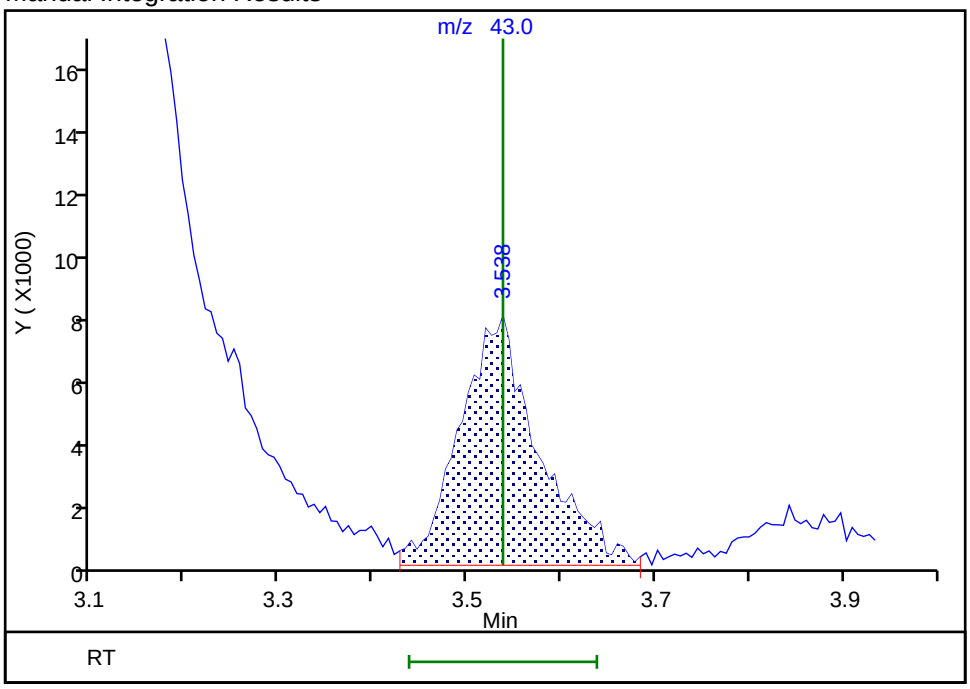
Processing Integration Results

RT: 3.54
Area: 40262
Amount: 2.275613
Amount Units: ug/l



Manual Integration Results

RT: 3.54
Area: 42677
Amount: 2.388818
Amount Units: ug/l



Reviewer: DVW2, 23-Aug-2022 09:29:27
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X16.D
Lims ID: IC std5 5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 22-Aug-2022 21:41:30 ALS Bottle#: 16 Worklist Smp#: 17
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0064657-017
Misc. Info.: IC STD5 LG
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 31-Aug-2022 08:31:44 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1647

First Level Reviewer: DVW2 Date: 23-Aug-2022 09:31:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.764	1.764	0.000	99	293800	5.00	5.24	
5 Chloromethane	50	1.941	1.940	0.000	99	365920	5.00	4.93	
6 Vinyl chloride	62	2.038	2.038	0.000	98	359428	5.00	5.22	
7 Butadiene	39	2.050	2.050	0.000	92	379643	5.00	5.16	
9 Bromomethane	94	2.331	2.331	0.000	90	233256	5.00	5.10	
10 Chloroethane	64	2.398	2.391	0.007	100	201473	5.00	5.04	
11 Dichlorofluoromethane	67	2.617	2.611	0.006	97	465102	5.00	5.03	
12 Trichlorofluoromethane	101	2.678	2.672	0.006	98	409286	5.00	5.24	
13 Pentane	43	2.678	2.678	0.000	97	359545	5.00	5.19	
15 Ethyl ether	59	2.867	2.867	0.000	92	202566	5.00	5.06	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.959	2.958	0.001	94	302027	5.00	4.97	
17 Acrolein	56	3.013	3.013	0.000	100	1353279	250.0	223.8	
19 1,1-Dichloroethene	96	3.135	3.135	0.000	98	216909	5.00	5.01	
20 Acetone	43	3.172	3.166	0.006	77	284011	50.0	41.8	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.178	3.178	0.000	92	216833	5.00	5.32	
23 Isopropyl alcohol	45	3.318	3.300	0.018	37	131430	100.0	87.6	
22 Iodomethane	142	3.306	3.306	0.000	97	406462	5.00	5.10	
24 Ethyl bromide	108	3.330	3.330	0.000	98	209712	5.00	5.15	
25 Carbon disulfide	76	3.391	3.397	-0.006	99	693267	5.00	5.18	
27 Methyl acetate	43	3.526	3.538	-0.012	96	85311	5.00	4.26	
28 3-Chloro-1-propene	41	3.544	3.550	-0.006	93	405717	5.00	5.09	
29 Methylene Chloride	84	3.708	3.708	0.000	94	257199	5.00	5.01	
* 30 t-Butyl alcohol-d10 (IS)	65	3.745	3.751	-0.006	45	131878	50.0	50.0	
31 2-Methyl-2-propanol	59	3.849	3.873	-0.024	99	224704	100.0	81.8	
32 Acrylonitrile	53	4.019	4.031	-0.012	99	118945	12.5	11.6	
33 Methyl tert-butyl ether	73	4.068	4.068	0.000	95	669039	5.00	5.09	
34 trans-1,2-Dichloroethene	96	4.074	4.068	0.006	98	269017	5.00	5.05	
35 Hexane	57	4.477	4.476	0.001	92	375986	5.00	5.26	
36 1,1-Dichloroethane	63	4.720	4.720	0.000	96	501664	5.00	5.11	
38 Isopropyl ether	45	4.781	4.793	-0.012	95	916612	5.00	5.08	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 2-Chloro-1,3-butadiene	53	4.830	4.836	-0.006	90	388421	5.00	5.07	
40 Tert-butyl ethyl ether	59	5.336	5.330	0.006	98	852261	5.00	5.12	
41 2-Butanone (MEK)	43	5.543	5.549	-0.006	100	657655	50.0	47.5	
42 cis-1,2-Dichloroethene	96	5.580	5.574	0.006	82	300063	5.00	5.14	
43 2,2-Dichloropropane	77	5.580	5.580	0.000	86	394862	5.00	5.10	
45 Propionitrile	54	5.641	5.653	-0.012	99	353271	100.0	102.4	
46 Methacrylonitrile	67	5.860	5.860	0.000	92	717302	50.0	49.0	
47 Chlorobromomethane	128	5.915	5.909	0.006	93	132568	5.00	5.13	
48 Tetrahydrofuran	71	5.915	5.915	0.000	78	92407	25.0	23.5	
50 Chloroform	83	6.074	6.074	0.000	93	465915	5.00	5.04	
S 51 1,2-Dichloroethene, Total	100				0			10.2	
52 1,1,1-Trichloroethane	97	6.287	6.287	0.000	98	414918	5.00	5.13	
$ 53 Dibromofluoromethane (Surr)	113	6.293	6.293	0.000	94	458730	10.0	9.98	
54 Cyclohexane	56	6.385	6.379	0.007	91	477600	5.00	5.25	
55 Carbon tetrachloride	117	6.501	6.500	0.001	96	354085	5.00	5.22	
56 1,1-Dichloropropene	75	6.513	6.513	0.000	98	383816	5.00	5.08	
57 Isobutyl alcohol	41	6.714	6.714	0.000	93	227353	250.0	233.0	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.751	6.744	0.007	95	92628	10.0	9.80	
59 Benzene	78	6.775	6.775	0.000	97	1153651	5.00	5.10	
61 1,2-Dichloroethane	62	6.854	6.854	0.000	97	271805	5.00	4.74	
63 Tert-amyl methyl ether	73	6.982	6.982	0.000	99	764987	5.00	5.09	
* 64 Fluorobenzene (IS)	96	7.196	7.195	0.001	99	1966718	10.0	10.0	
65 n-Heptane	43	7.214	7.208	0.006	95	418190	5.00	5.15	
66 n-Butanol	56	7.622	7.628	-0.006	88	370766	437.5	473.9	
67 Trichloroethene	95	7.683	7.683	0.000	98	297519	5.00	5.13	
68 Methylcyclohexane	83	7.982	7.982	0.000	90	515209	5.00	5.34	
69 1,2-Dichloropropane	63	8.019	8.025	-0.006	98	305654	5.00	5.08	
70 2-ethoxy-2-methyl butane	87	8.043	8.043	0.000	92	449657	5.00	5.13	
72 1,4-Dioxane	88	8.134	8.122	0.012	32	49073	250.0	251.5	M
71 Methyl methacrylate	69	8.128	8.128	0.000	92	132554	5.00	4.96	
73 Dibromomethane	93	8.134	8.134	0.000	94	136357	5.00	5.08	
75 Dichlorobromomethane	83	8.378	8.378	0.000	99	339449	5.00	5.14	
76 2-Nitropropane	41	8.665	8.665	0.000	98	179082	25.0	23.6	
78 1-Bromo-2-chloroethane	63	8.775	8.774	0.001	98	312292	5.00	5.21	
79 cis-1,3-Dichloropropene	75	8.951	8.951	0.000	97	456604	5.00	5.27	
81 4-Methyl-2-pentanone (MIBK)	43	9.159	9.158	0.001	96	1851510	50.0	49.4	
$ 82 Toluene-d8 (Surr)	98	9.281	9.280	0.001	93	2002030	10.0	9.98	
83 Toluene	92	9.366	9.366	0.000	98	752839	5.00	5.08	
84 trans-1,3-Dichloropropene	75	9.659	9.664	-0.006	92	375505	5.00	5.27	
85 Ethyl methacrylate	69	9.738	9.738	0.000	90	302935	5.00	5.26	
86 1,1,2-Trichloroethane	97	9.872	9.872	0.000	90	207585	5.00	5.06	
87 Tetrachloroethene	166	9.957	9.951	0.006	97	355454	5.00	5.15	
102 1,3-Dichloropropane	76	10.043	10.042	0.001	90	366005	5.00	5.17	
S 103 1,3-Dichloropropene, Total	100				0			10.5	
104 2-Hexanone	43	10.116	10.116	0.000	96	1349331	50.0	50.8	
106 Chlorodibromomethane	129	10.268	10.268	0.000	89	257820	5.00	5.26	
107 Ethylene Dibromide	107	10.378	10.378	0.000	99	199120	5.00	5.16	
* 108 Chlorobenzene-d5 (IS)	117	10.835	10.835	0.000	84	1523078	10.0	10.0	
109 1-Chlorohexane	91	10.853	10.853	0.000	98	422503	5.00	5.01	
110 Chlorobenzene	112	10.859	10.859	0.000	96	882611	5.00	5.05	
111 1,1,1,2-Tetrachloroethane	131	10.951	10.951	0.000	97	298570	5.00	5.16	
112 Ethylbenzene	91	10.957	10.951	0.006	98	1471927	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
113 m-Xylene & p-Xylene	106	11.079	11.079	0.000	100	1187447	10.0	10.3	
S 114 Xylenes, Total	106				0			15.4	
115 o-Xylene	106	11.414	11.414	0.000	96	591255	5.00	5.16	
116 Styrene	104	11.433	11.432	0.001	95	973785	5.00	5.19	
117 Bromoform	173	11.591	11.591	0.000	98	150577	5.00	5.27	
118 Isopropylbenzene	105	11.725	11.725	0.000	95	1507786	5.00	5.17	
$ 121 4-Bromofluorobenzene (Surr)	95	11.871	11.871	0.000	92	742687	10.0	10.0	
123 1,1,2,2-Tetrachloroethane	83	11.987	11.987	0.000	71	264788	5.00	5.05	
122 Bromobenzene	156	11.987	11.987	0.000	91	368252	5.00	4.99	
124 trans-1,4-Dichloro-2-butene	53	12.012	12.012	0.000	90	651340	50.0	51.4	
125 1,2,3-Trichloropropane	110	12.030	12.030	0.000	78	68664	5.00	5.01	
126 N-Propylbenzene	91	12.067	12.066	0.001	99	1818248	5.00	5.14	
127 2-Chlorotoluene	126	12.140	12.140	0.000	97	374593	5.00	5.06	
128 1,3,5-Trimethylbenzene	105	12.207	12.207	0.000	94	1304146	5.00	5.12	
129 4-Chlorotoluene	126	12.237	12.237	0.000	96	392996	5.00	5.17	
130 tert-Butylbenzene	134	12.451	12.451	0.001	93	302846	5.00	5.40	
131 Pentachloroethane	167	12.481	12.481	0.000	94	226588	5.00	5.34	
132 1,2,4-Trimethylbenzene	105	12.499	12.499	0.000	96	1363905	5.00	5.16	
133 sec-Butylbenzene	105	12.621	12.621	0.000	94	1673386	5.00	5.17	
134 1,3-Dichlorobenzene	146	12.719	12.719	0.000	98	766080	5.00	5.07	
135 4-Isopropyltoluene	119	12.731	12.731	0.000	97	1478589	5.00	5.13	
* 136 1,4-Dichlorobenzene-d4	152	12.774	12.774	0.000	94	886836	10.0	10.0	
137 1,4-Dichlorobenzene	146	12.792	12.792	0.000	95	775609	5.00	5.02	
138 1,2,3-Trimethylbenzene	120	12.804	12.804	0.000	98	607653	5.00	5.04	
139 Benzyl chloride	126	12.877	12.877	0.000	98	116673	5.00	5.38	
140 n-Butylbenzene	92	13.030	13.030	0.000	97	750462	5.00	5.17	
141 1,2-Dichlorobenzene	146	13.054	13.054	0.000	99	701375	5.00	5.04	
142 p-Diethylbenzene	119	13.085	13.085	0.000	86	746795	5.00	5.09	
145 1,2-Dibromo-3-Chloropropane	155	13.609	13.609	0.000	89	40444	5.00	5.46	
146 1,3,5-Trichlorobenzene	180	13.737	13.737	0.000	98	612369	5.00	5.14	
147 1,2,4-Trichlorobenzene	180	14.164	14.164	0.000	94	522154	5.00	5.20	
148 Hexachlorobutadiene	225	14.249	14.249	0.000	96	262775	5.00	5.07	
149 Naphthalene	128	14.347	14.346	0.001	97	852539	5.00	5.34	
150 1,2,3-Trichlorobenzene	180	14.493	14.493	0.000	96	425824	5.00	5.26	
151 2-Methylnaphthalene	142	15.090	15.096	-0.006	92	437968	5.00	5.81	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00053	Amount Added:	5.00	Units: uL	
MSV_LL_#2_826_00057	Amount Added:	5.00	Units: uL	
MSV_LL_GAS826_00109	Amount Added:	5.00	Units: uL	
MSV_HP25_ISSS_00058	Amount Added:	1.00	Units: uL	Run Reagent

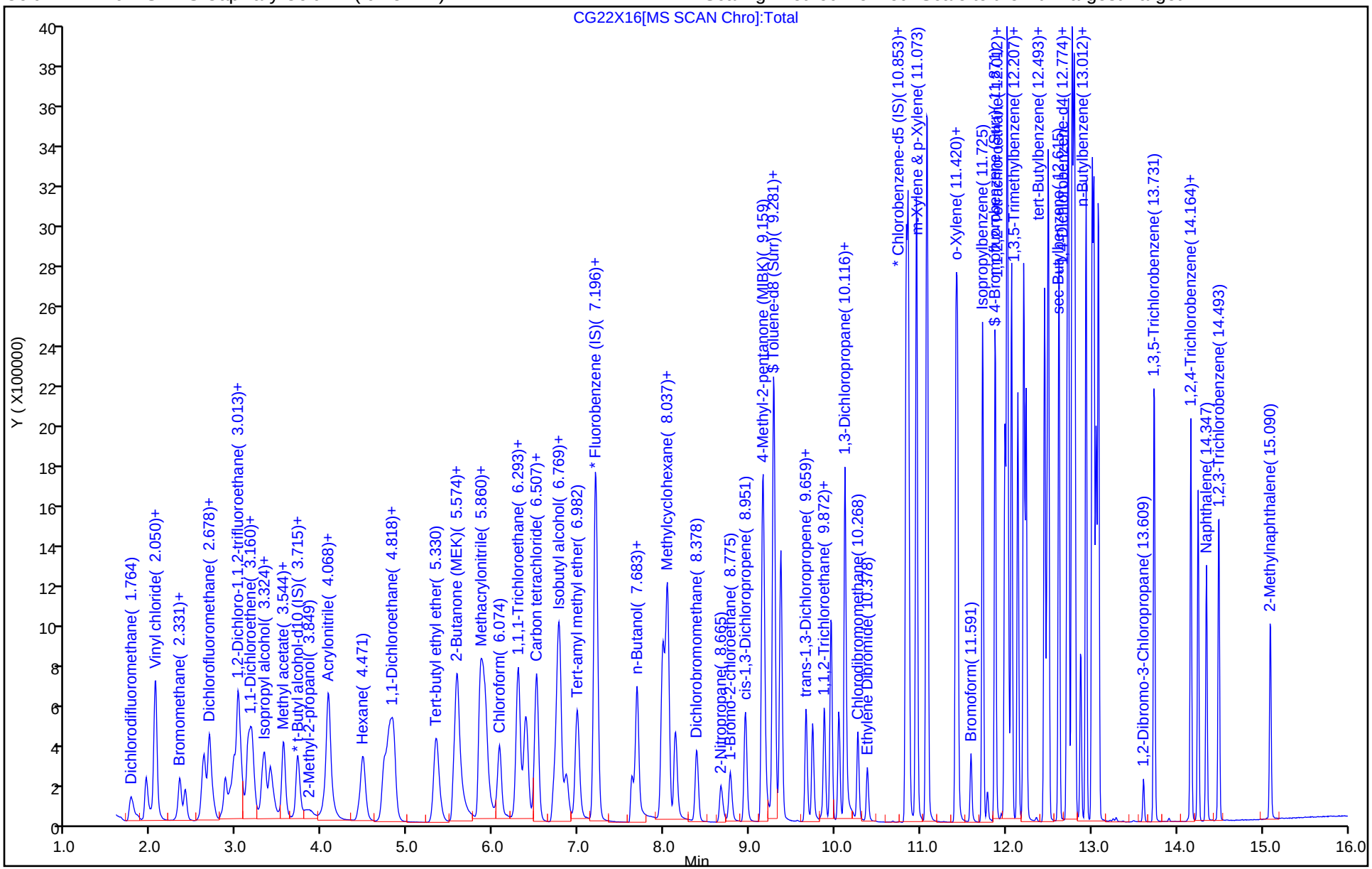
Report Date: 31-Aug-2022 08:31:44 Chrom Revision: 2.3 25-Aug-2022 20:53:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X16.D

Injection Date:	22-Aug-2022 21:41:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	IC std5 5			Worklist Smp#:	17
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

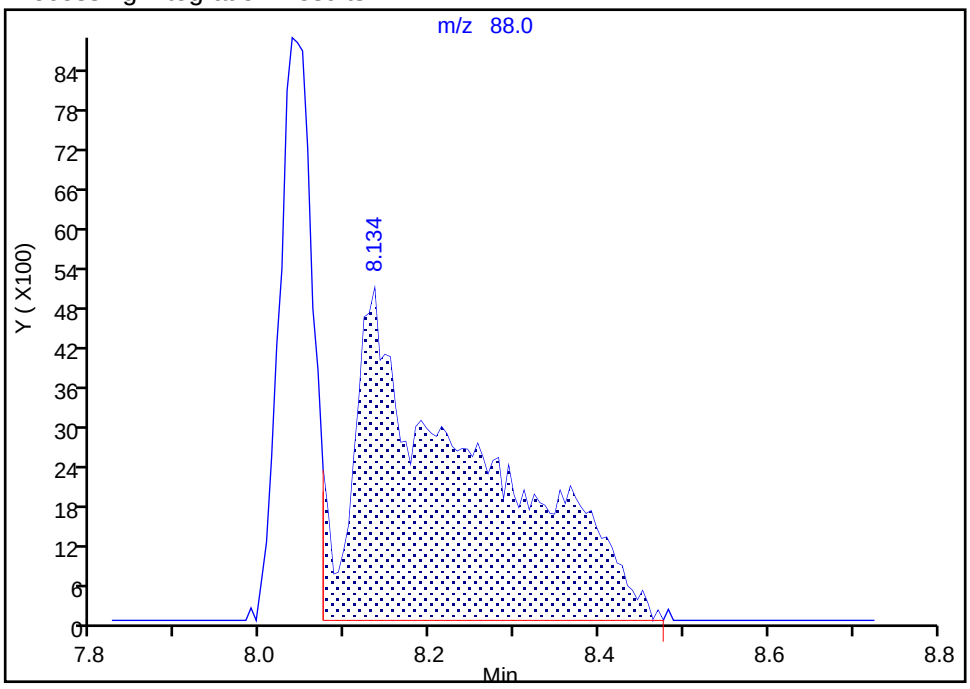
Data File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X16.D				
Injection Date:	22-Aug-2022 21:41:30	Instrument ID:	10193		
Lims ID:	IC std5 5				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	16	Worklist Smp#:	17
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

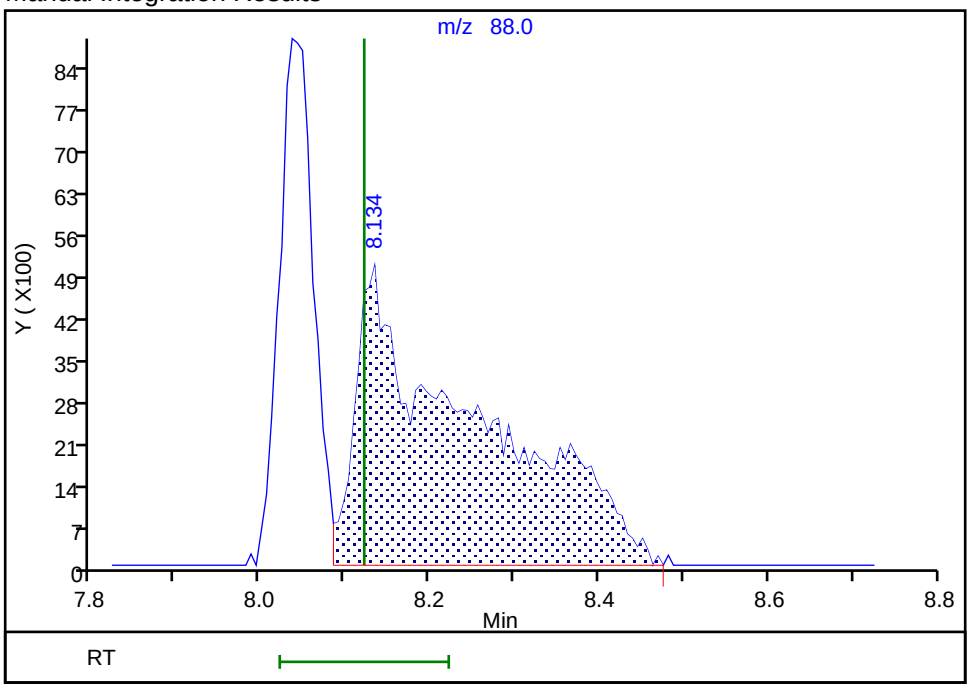
Processing Integration Results

RT: 8.13
Area: 50492
Amount: 258.2894
Amount Units: ug/l



Manual Integration Results

RT: 8.13
Area: 49073
Amount: 251.4945
Amount Units: ug/l



Reviewer: DVW2, 23-Aug-2022 09:31:22

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

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X17.D
Lims ID: ICIS 10
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 22-Aug-2022 22:04:30 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0064657-018
Misc. Info.: IC STD10 LG
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 31-Aug-2022 08:31:49 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1647

First Level Reviewer: DVW2 Date: 23-Aug-2022 09:20:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.764	1.764	0.000	99	551391	10.0	9.72	
5 Chloromethane	50	1.940	1.940	0.000	99	702218	10.0	9.36	
6 Vinyl chloride	62	2.038	2.038	0.000	98	668019	10.0	9.60	
7 Butadiene	39	2.050	2.050	0.000	91	707641	10.0	9.51	
9 Bromomethane	94	2.331	2.331	0.000	89	447646	10.0	9.67	
10 Chloroethane	64	2.398	2.398	0.000	100	381713	10.0	9.44	
11 Dichlorofluoromethane	67	2.617	2.617	0.000	97	883302	10.0	9.46	
12 Trichlorofluoromethane	101	2.672	2.672	0.000	96	768569	10.0	9.74	
13 Pentane	43	2.678	2.678	0.000	97	652133	10.0	9.32	
15 Ethyl ether	59	2.861	2.861	0.000	92	403748	10.0	9.98	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.959	2.959	0.000	93	577792	10.0	9.40	
17 Acrolein	56	3.013	3.013	0.000	100	2878823	500.0	484.1	
19 1,1-Dichloroethene	96	3.135	3.135	0.000	98	420214	10.0	9.61	
20 Acetone	43	3.166	3.166	0.000	100	586839	100.0	87.8	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.178	3.178	0.000	92	391381	10.0	9.50	
23 Isopropyl alcohol	45	3.318	3.318	0.000	37	274962	200.0	186.4	
22 Iodomethane	142	3.300	3.300	0.000	97	795081	10.0	9.88	
24 Ethyl bromide	108	3.324	3.324	0.000	98	406210	10.0	9.87	
25 Carbon disulfide	76	3.391	3.391	0.000	99	1356041	10.0	10.0	
27 Methyl acetate	43	3.532	3.532	0.000	36	186144	10.0	9.45	
28 3-Chloro-1-propene	41	3.544	3.544	0.000	93	790937	10.0	9.81	
29 Methylene Chloride	84	3.708	3.708	0.000	94	506891	10.0	9.77	
* 30 t-Butyl alcohol-d10 (IS)	65	3.745	3.745	0.000	47	129707	50.0	50.0	M
31 2-Methyl-2-propanol	59	3.849	3.849	0.000	100	492429	200.0	182.2	M
32 Acrylonitrile	53	4.019	4.019	0.000	97	237647	25.0	23.6	
33 Methyl tert-butyl ether	73	4.068	4.068	0.000	91	1317373	10.0	9.92	
34 trans-1,2-Dichloroethene	96	4.074	4.074	0.000	99	522027	10.0	9.69	
35 Hexane	57	4.470	4.470	0.000	92	697755	10.0	9.65	
36 1,1-Dichloroethane	63	4.720	4.720	0.000	96	974846	10.0	9.83	
38 Isopropyl ether	45	4.787	4.787	0.000	95	1792406	10.0	9.83	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 2-Chloro-1,3-butadiene	53	4.830	4.830	0.000	90	770625	10.0	9.95	
40 Tert-butyl ethyl ether	59	5.330	5.330	0.000	98	1678851	10.0	9.97	
41 2-Butanone (MEK)	43	5.543	5.543	0.000	100	1312882	100.0	96.3	
42 cis-1,2-Dichloroethene	96	5.574	5.574	0.000	82	582324	10.0	9.86	
43 2,2-Dichloropropane	77	5.586	5.586	0.000	90	764497	10.0	9.76	
45 Propionitrile	54	5.635	5.635	0.000	99	680863	200.0	200.7	
46 Methacrylonitrile	67	5.860	5.860	0.000	93	1412977	100.0	98.1	
47 Chlorobromomethane	128	5.909	5.909	0.000	95	258754	10.0	9.89	
48 Tetrahydrofuran	71	5.927	5.927	0.000	88	182320	50.0	47.2	
50 Chloroform	83	6.074	6.074	0.000	93	914023	10.0	9.78	
52 1,1,1-Trichloroethane	97	6.293	6.293	0.000	98	801358	10.0	9.81	
$ 53 Dibromofluoromethane (Surr)	113	6.293	6.293	0.000	80	465740	10.0	10.0	
54 Cyclohexane	56	6.385	6.385	0.000	91	901372	10.0	9.81	
55 Carbon tetrachloride	117	6.501	6.501	0.000	97	687136	10.0	10.0	
56 1,1-Dichloropropene	75	6.513	6.513	0.000	97	748768	10.0	9.80	
57 Isobutyl alcohol	41	6.708	6.708	0.000	95	459860	500.0	479.2	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.757	6.757	0.000	91	96949	10.0	10.1	
59 Benzene	78	6.775	6.775	0.000	97	2233141	10.0	9.76	
61 1,2-Dichloroethane	62	6.860	6.860	0.000	97	553463	10.0	9.55	
63 Tert-amyl methyl ether	73	6.982	6.982	0.000	99	1522599	10.0	10.0	
* 64 Fluorobenzene (IS)	96	7.196	7.196	0.000	99	1988424	10.0	10.0	
65 n-Heptane	43	7.208	7.208	0.000	93	805860	10.0	9.81	
66 n-Butanol	56	7.622	7.622	0.000	89	733904	875.0	953.8	
67 Trichloroethene	95	7.683	7.683	0.000	98	579842	10.0	9.88	
68 Methylcyclohexane	83	7.982	7.982	0.000	90	961769	10.0	9.86	
69 1,2-Dichloropropane	63	8.025	8.025	0.000	98	598697	10.0	9.85	
70 2-ethoxy-2-methyl butane	87	8.043	8.043	0.000	92	900733	10.0	10.2	
72 1,4-Dioxane	88	8.134	8.134	0.000	31	92194	500.0	499.1	
71 Methyl methacrylate	69	8.128	8.128	0.000	93	269988	10.0	10.3	
73 Dibromomethane	93	8.134	8.134	0.000	92	266367	10.0	9.82	
75 Dichlorobromomethane	83	8.384	8.384	0.000	99	673095	10.0	10.1	
76 2-Nitropropane	41	8.665	8.665	0.000	97	364359	50.0	48.7	
78 1-Bromo-2-chloroethane	63	8.774	8.774	0.000	98	605618	10.0	9.99	
79 cis-1,3-Dichloropropene	75	8.951	8.951	0.000	97	913681	10.0	10.4	
81 4-Methyl-2-pentanone (MIBK)	43	9.159	9.159	0.000	96	3642524	100.0	98.8	
$ 82 Toluene-d8 (Surr)	98	9.280	9.280	0.000	93	2005572	10.0	10.0	
83 Toluene	92	9.366	9.366	0.000	98	1452698	10.0	9.81	
84 trans-1,3-Dichloropropene	75	9.658	9.658	0.000	92	749823	10.0	10.5	
85 Ethyl methacrylate	69	9.738	9.738	0.000	90	610058	10.0	10.6	
86 1,1,2-Trichloroethane	97	9.872	9.872	0.000	90	404572	10.0	9.86	
87 Tetrachloroethene	166	9.951	9.951	0.000	97	682338	10.0	9.89	
102 1,3-Dichloropropane	76	10.043	10.043	0.000	90	705748	10.0	9.96	
104 2-Hexanone	43	10.116	10.116	0.000	96	2660875	100.0	101.9	
106 Chlorodibromomethane	129	10.268	10.268	0.000	90	512238	10.0	10.5	
107 Ethylene Dibromide	107	10.378	10.378	0.000	99	394261	10.0	10.2	
* 108 Chlorobenzene-d5 (IS)	117	10.835	10.835	0.000	85	1523479	10.0	10.0	
109 1-Chlorohexane	91	10.853	10.853	0.000	98	811122	10.0	9.61	
110 Chlorobenzene	112	10.859	10.859	0.000	96	1718683	10.0	9.84	
111 1,1,1,2-Tetrachloroethane	131	10.951	10.951	0.000	97	584797	10.0	10.1	
112 Ethylbenzene	91	10.957	10.957	0.000	98	2898705	10.0	10.1	
113 m-Xylene & p-Xylene	106	11.079	11.079	0.000	100	2318735	20.0	20.1	
115 o-Xylene	106	11.414	11.414	0.000	96	1149776	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
116 Styrene	104	11.432	11.432	0.000	95	1930190	10.0	10.3	
117 Bromoform	173	11.591	11.591	0.000	98	304772	10.0	10.7	
118 Isopropylbenzene	105	11.725	11.725	0.000	95	2934036	10.0	10.1	
$ 121 4-Bromofluorobenzene (Surr)	95	11.871	11.871	0.000	93	746355	10.0	10.0	
123 1,1,2,2-Tetrachloroethane	83	11.987	11.987	0.000	71	521855	10.0	9.80	
122 Bromobenzene	156	11.987	11.987	0.000	91	739659	10.0	9.87	
124 trans-1,4-Dichloro-2-butene	53	12.012	12.012	0.000	89	1316632	100.0	102.3	
125 1,2,3-Trichloropropane	110	12.030	12.030	0.000	78	135978	10.0	9.76	
126 N-Propylbenzene	91	12.067	12.067	0.000	99	3563972	10.0	9.93	
127 2-Chlorotoluene	126	12.140	12.140	0.000	97	742687	10.0	9.87	
128 1,3,5-Trimethylbenzene	105	12.207	12.207	0.000	94	2602668	10.0	10.1	
129 4-Chlorotoluene	126	12.237	12.237	0.000	97	762667	10.0	9.88	
130 tert-Butylbenzene	134	12.451	12.451	0.000	93	564379	10.0	9.90	
131 Pentachloroethane	167	12.481	12.481	0.000	94	452438	10.0	10.5	
132 1,2,4-Trimethylbenzene	105	12.493	12.493	0.000	97	2700369	10.0	10.1	
133 sec-Butylbenzene	105	12.621	12.621	0.000	94	3277891	10.0	9.97	
134 1,3-Dichlorobenzene	146	12.719	12.719	0.000	98	1524668	10.0	9.93	
135 4-Isopropyltoluene	119	12.731	12.731	0.000	97	2933697	10.0	10.0	
* 136 1,4-Dichlorobenzene-d4	152	12.774	12.774	0.000	93	900908	10.0	10.0	
137 1,4-Dichlorobenzene	146	12.792	12.792	0.000	95	1560415	10.0	9.95	
138 1,2,3-Trimethylbenzene	120	12.804	12.804	0.000	98	1203438	10.0	9.83	
139 Benzyl chloride	126	12.877	12.877	0.000	98	237062	10.0	10.8	
140 n-Butylbenzene	92	13.030	13.030	0.000	97	1479651	10.0	10.0	
141 1,2-Dichlorobenzene	146	13.054	13.054	0.000	99	1412566	10.0	10.0	
142 p-Diethylbenzene	119	13.085	13.085	0.000	86	1474273	10.0	9.88	
145 1,2-Dibromo-3-Chloropropane	155	13.609	13.609	0.000	89	78968	10.0	10.5	
146 1,3,5-Trichlorobenzene	180	13.737	13.737	0.000	98	1217566	10.0	10.1	
147 1,2,4-Trichlorobenzene	180	14.164	14.164	0.000	94	1052807	10.0	10.3	
148 Hexachlorobutadiene	225	14.249	14.249	0.000	96	526010	10.0	9.99	
149 Naphthalene	128	14.347	14.347	0.000	96	1734949	10.0	10.7	
150 1,2,3-Trichlorobenzene	180	14.493	14.493	0.000	96	857542	10.0	10.4	
151 2-Methylnaphthalene	142	15.090	15.090	0.000	92	909593	10.0	11.9	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#1_826_00053	Amount Added: 10.00	Units: uL	
MSV_LL_#2_826_00057	Amount Added: 10.00	Units: uL	
MSV_LL_GAS826_00109	Amount Added: 10.00	Units: uL	
MSV_HP25_ISSS_00058	Amount Added: 1.00	Units: uL	Run Reagent

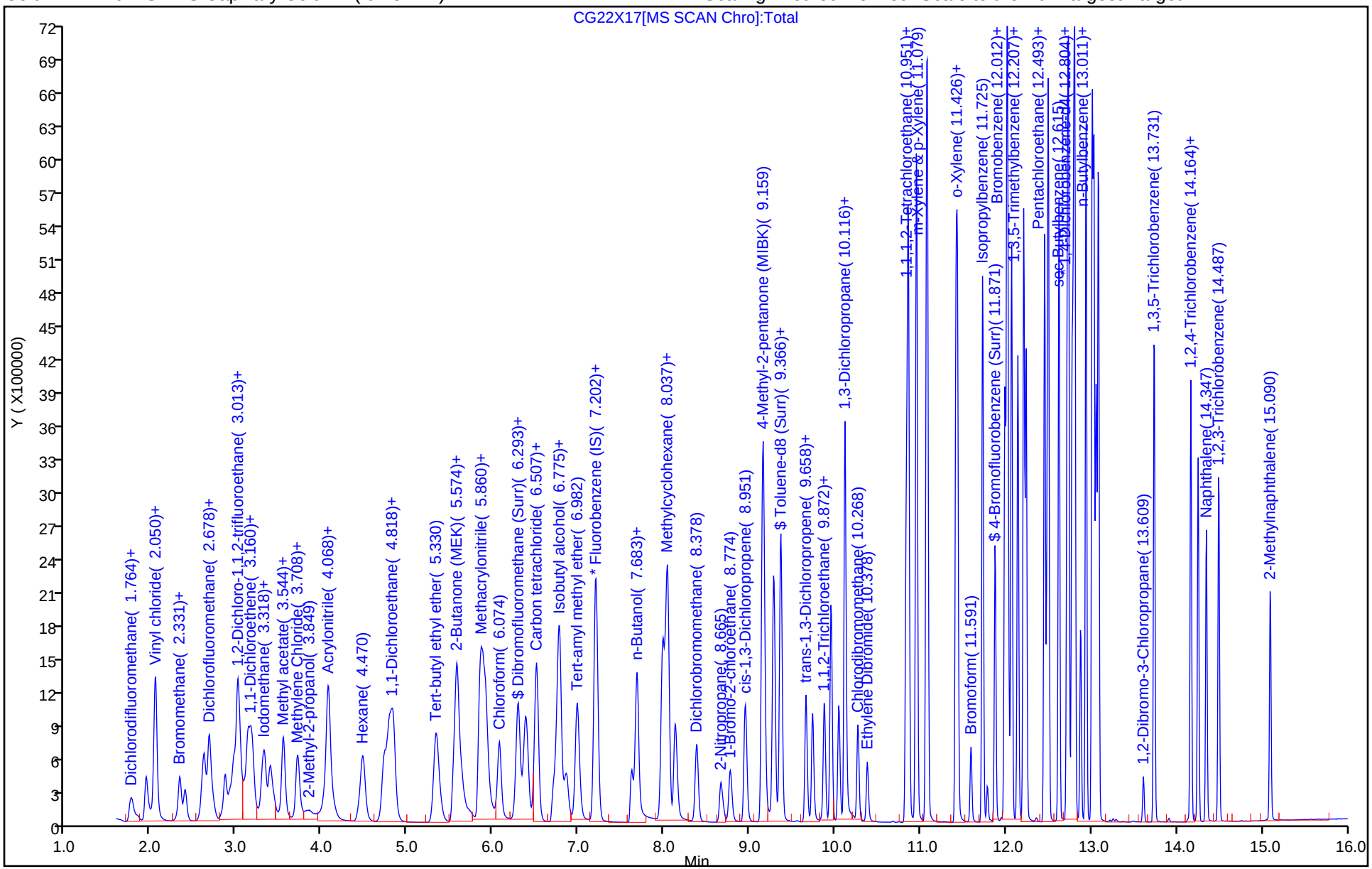
Report Date: 31-Aug-2022 08:31:50 Chrom Revision: 2.3 25-Aug-2022 20:53:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X17.D

Injection Date:	22-Aug-2022 22:04:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	ICIS 10			Worklist Smp#:	18
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

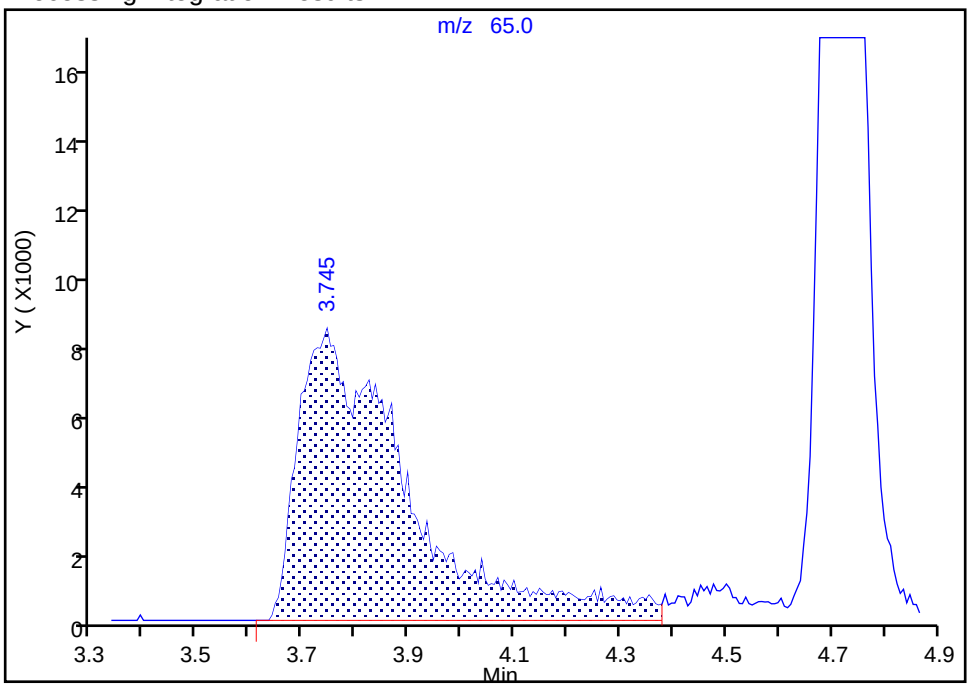
Data File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X17.D
Injection Date: 22-Aug-2022 22:04:30 Instrument ID: 10193
Lims ID: ICIS 10
Client ID:
Operator ID: knk41612 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

* 30 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

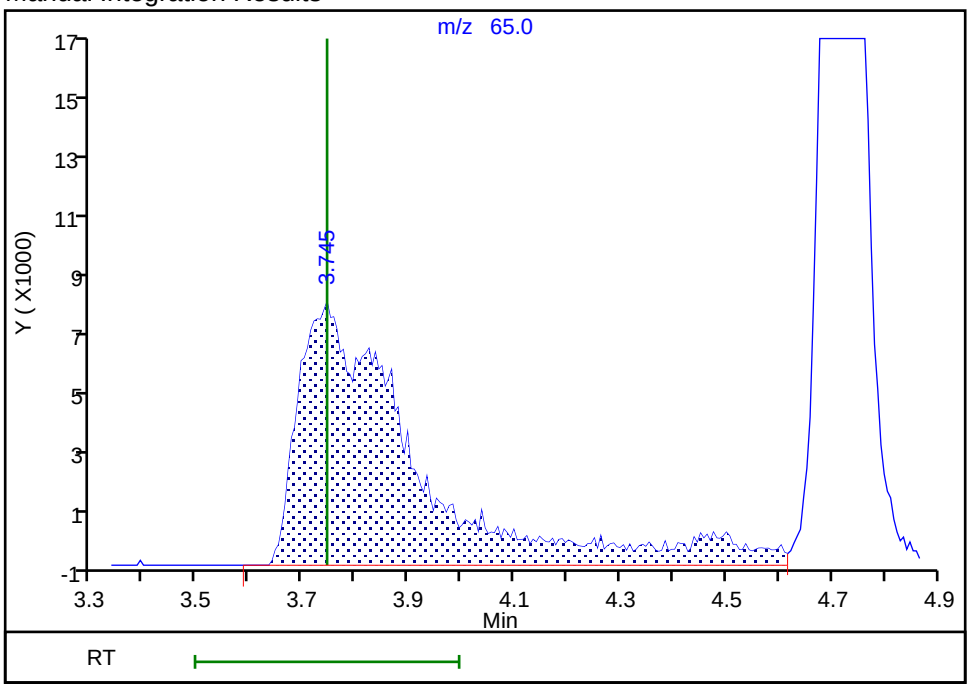
Processing Integration Results

RT: 3.74
Area: 120301
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 3.74
Area: 129707
Amount: 50.000000
Amount Units: ug/l



Reviewer: DVW2, 23-Aug-2022 09:19:14
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

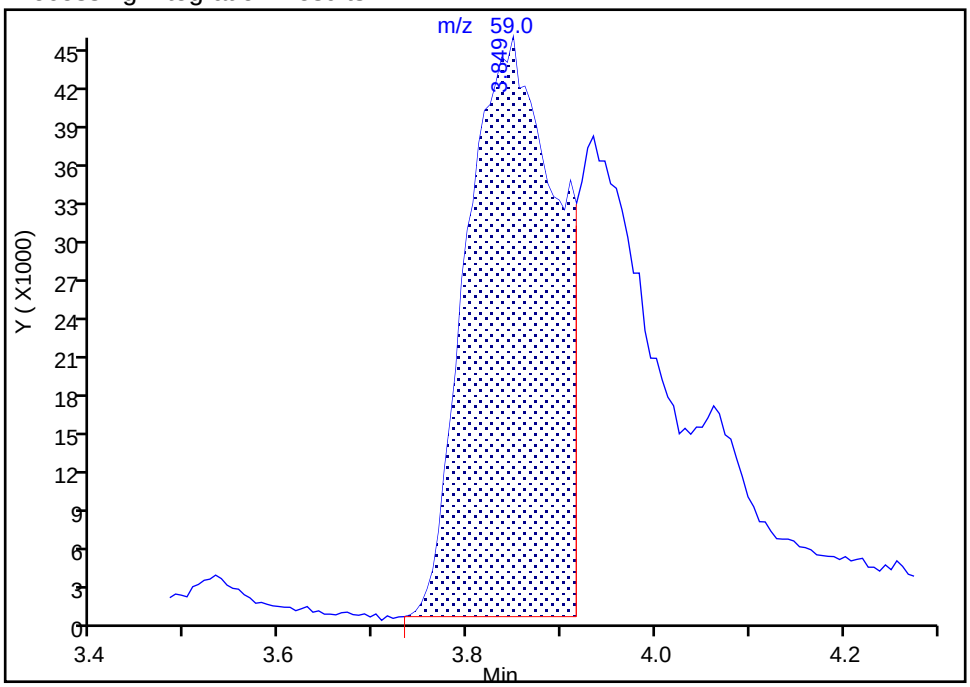
Data File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X17.D
Injection Date: 22-Aug-2022 22:04:30 Instrument ID: 10193
Lims ID: ICIS 10
Client ID:
Operator ID: knk41612 ALS Bottle#: 17 Worklist Smp#: 18
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

31 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

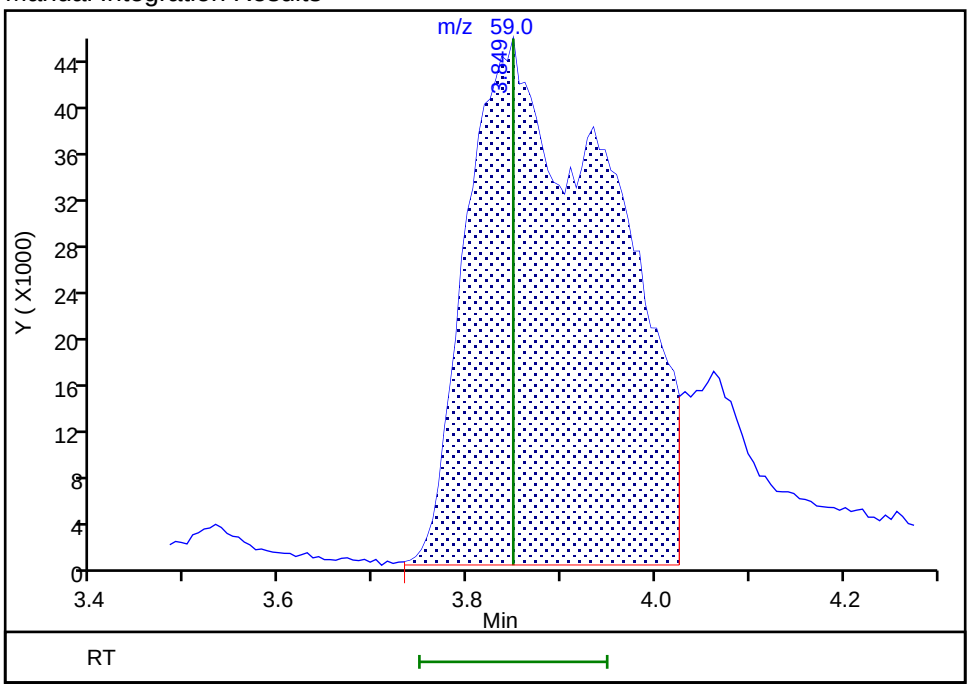
Processing Integration Results

RT: 3.85
Area: 306915
Amount: 117.2326
Amount Units: ug/l



Manual Integration Results

RT: 3.85
Area: 492429
Amount: 182.1553
Amount Units: ug/l



Reviewer: DVW2, 23-Aug-2022 09:19:40
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D
Lims ID: IC std7 25
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 22-Aug-2022 22:26:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0064657-019
Misc. Info.: IC STD25 LG
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 31-Aug-2022 08:31:55 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1647

First Level Reviewer: UJML Date: 31-Aug-2022 08:30:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.757	1.764	-0.007	99	1410396	25.0	24.5	
5 Chloromethane	50	1.934	1.940	-0.006	99	1779819	25.0	23.4	
6 Vinyl chloride	62	2.032	2.038	-0.006	98	1714605	25.0	24.3	
7 Butadiene	39	2.044	2.050	-0.006	91	1795374	25.0	23.8	
9 Bromomethane	94	2.324	2.331	-0.007	90	1146630	25.0	24.5	
10 Chloroethane	64	2.385	2.398	-0.013	100	963317	25.0	23.5	
11 Dichlorofluoromethane	67	2.611	2.617	-0.006	97	2258999	25.0	23.9	
12 Trichlorofluoromethane	101	2.666	2.672	-0.006	99	1999820	25.0	25.0	
13 Pentane	43	2.672	2.678	-0.006	97	1717969	25.0	24.2	
15 Ethyl ether	59	2.855	2.861	-0.006	92	1020863	25.0	24.9	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.952	2.959	-0.007	93	1499422	25.0	24.1	
17 Acrolein	56	3.007	3.013	-0.006	100	6770476	1250.0	1233.2	
19 1,1-Dichloroethene	96	3.123	3.135	-0.012	98	1076196	25.0	24.3	
20 Acetone	43	3.154	3.166	-0.012	99	1331375	250.0	215.8	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.172	3.178	-0.006	92	1041622	25.0	25.0	
22 Iodomethane	142	3.294	3.300	-0.006	97	2027086	25.0	24.9	
23 Isopropyl alcohol	45	3.318	3.318	0.000	39	640851	500.0	470.6	
24 Ethyl bromide	108	3.318	3.324	-0.006	98	1050082	25.0	25.2	
25 Carbon disulfide	76	3.385	3.391	-0.006	99	3504627	25.0	25.6	
27 Methyl acetate	43	3.519	3.532	-0.013	98	454980	25.0	25.0	
28 3-Chloro-1-propene	41	3.538	3.544	-0.006	98	2024085	25.0	24.8	
29 Methylene Chloride	84	3.702	3.708	-0.006	93	1278708	25.0	24.3	
* 30 t-Butyl alcohol-d10 (IS)	65	3.751	3.745	0.006	88	119756	50.0	50.0	
31 2-Methyl-2-propanol	59	3.848	3.849	-0.001	100	1155957	500.0	463.1	
32 Acrylonitrile	53	4.013	4.019	-0.006	98	555307	62.5	59.8	
33 Methyl tert-butyl ether	73	4.062	4.068	-0.006	93	3325509	25.0	24.7	
34 trans-1,2-Dichloroethene	96	4.062	4.074	-0.012	99	1331383	25.0	24.4	
35 Hexane	57	4.464	4.470	-0.006	92	1826385	25.0	24.9	
36 1,1-Dichloroethane	63	4.708	4.720	-0.012	96	2479604	25.0	24.7	
38 Isopropyl ether	45	4.775	4.787	-0.012	95	4568886	25.0	24.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 2-Chloro-1,3-butadiene	53	4.824	4.830	-0.006	90	1997924	25.0	25.5	
40 Tert-butyl ethyl ether	59	5.330	5.330	0.000	98	4241387	25.0	24.9	
41 2-Butanone (MEK)	43	5.543	5.543	0.000	100	3086272	250.0	245.2	
42 cis-1,2-Dichloroethene	96	5.568	5.574	-0.006	82	1473992	25.0	24.7	
43 2,2-Dichloropropane	77	5.586	5.586	0.000	87	1959021	25.0	24.7	
45 Propionitrile	54	5.641	5.635	0.006	99	1495301	500.0	477.4	
46 Methacrylonitrile	67	5.860	5.860	0.000	92	3448269	250.0	259.3	
47 Chlorobromomethane	128	5.909	5.909	0.000	97	664992	25.0	25.1	
48 Tetrahydrofuran	71	5.915	5.927	-0.012	86	440047	125.0	123.4	
50 Chloroform	83	6.068	6.074	-0.006	93	2332920	25.0	24.6	
S 51 1,2-Dichloroethene, Total	100				0			49.1	
52 1,1,1-Trichloroethane	97	6.281	6.293	-0.012	98	2064391	25.0	25.0	
$ 53 Dibromofluoromethane (Surr)	113	6.287	6.293	-0.006	94	473798	10.0	10.1	
54 Cyclohexane	56	6.378	6.385	-0.007	91	2397181	25.0	25.8	
55 Carbon tetrachloride	117	6.494	6.501	-0.007	95	1814532	25.0	26.1	
56 1,1-Dichloropropene	75	6.507	6.513	-0.007	98	1946573	25.0	25.2	
57 Isobutyl alcohol	41	6.708	6.708	0.000	96	1029246	1250.0	1161.7	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.750	6.757	-0.007	87	96466	10.0	9.97	
59 Benzene	78	6.775	6.775	0.000	96	5715737	25.0	24.7	
61 1,2-Dichloroethane	62	6.854	6.860	-0.006	97	1397962	25.0	23.8	
63 Tert-amyl methyl ether	73	6.982	6.982	0.000	99	3840751	25.0	25.0	
* 64 Fluorobenzene (IS)	96	7.189	7.196	-0.007	99	2013656	10.0	10.0	
65 n-Heptane	43	7.208	7.208	0.000	93	2044456	25.0	24.6	
66 n-Butanol	56	7.616	7.622	-0.006	88	1623603	2187.5	2285.5	
67 Trichloroethene	95	7.677	7.683	-0.006	98	1488472	25.0	25.1	
68 Methylcyclohexane	83	7.982	7.982	0.000	92	2536741	25.0	25.7	
69 1,2-Dichloropropane	63	8.018	8.025	-0.007	98	1515441	25.0	24.6	
70 2-ethoxy-2-methyl butane	87	8.043	8.043	0.000	93	2289397	25.0	25.5	
71 Methyl methacrylate	69	8.122	8.128	-0.006	93	689382	25.0	28.4	
72 1,4-Dioxane	88	8.128	8.134	-0.006	85	183524	1250.0	1250.1	M
73 Dibromomethane	93	8.128	8.134	-0.006	93	678275	25.0	24.7	
75 Dichlorobromomethane	83	8.378	8.384	-0.006	99	1729627	25.0	25.6	
76 2-Nitropropane	41	8.665	8.665	0.000	97	898761	125.0	130.2	
78 1-Bromo-2-chloroethane	63	8.774	8.774	0.000	98	1531442	25.0	24.9	
79 cis-1,3-Dichloropropene	75	8.951	8.951	0.000	97	2313525	25.0	26.1	
81 4-Methyl-2-pentanone (MIBK)	43	9.158	9.159	-0.001	96	8909564	250.0	261.7	
$ 82 Toluene-d8 (Surr)	98	9.280	9.280	0.000	93	2059118	10.0	10.1	
83 Toluene	92	9.366	9.366	0.000	98	3764778	25.0	25.1	
84 trans-1,3-Dichloropropene	75	9.658	9.658	0.000	92	1947599	25.0	27.0	
85 Ethyl methacrylate	69	9.738	9.738	0.000	90	1553687	25.0	26.6	
86 1,1,2-Trichloroethane	97	9.872	9.872	0.000	90	1020101	25.0	24.6	
87 Tetrachloroethene	166	9.951	9.951	0.000	97	1756341	25.0	25.1	
102 1,3-Dichloropropane	76	10.042	10.043	0.000	90	1766895	25.0	24.6	
S 103 1,3-Dichloropropene, Total	100				0			53.1	
104 2-Hexanone	43	10.116	10.116	0.000	96	6616151	250.0	274.3	
106 Chlorodibromomethane	129	10.268	10.268	0.000	90	1312207	25.0	26.4	
107 Ethylene Dibromide	107	10.378	10.378	0.000	99	996887	25.0	25.5	
* 108 Chlorobenzene-d5 (IS)	117	10.835	10.835	0.000	86	1542455	10.0	10.0	
109 1-Chlorohexane	91	10.853	10.853	0.000	98	2117826	25.0	24.8	
110 Chlorobenzene	112	10.859	10.859	0.000	96	4385755	25.0	24.8	
111 1,1,1,2-Tetrachloroethane	131	10.951	10.951	0.000	98	1509448	25.0	25.8	
112 Ethylbenzene	91	10.957	10.957	0.000	98	7445839	25.0	25.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
113 m-Xylene & p-Xylene	106	11.073	11.079	-0.006	100	5955366	50.0	50.9	
S 114 Xylenes, Total	106				0			76.4	
115 o-Xylene	106	11.414	11.414	0.000	97	2961699	25.0	25.5	
116 Styrene	104	11.432	11.432	0.000	95	4961998	25.0	26.1	
117 Bromoform	173	11.591	11.591	0.000	98	802862	25.0	27.7	
118 Isopropylbenzene	105	11.725	11.725	0.000	96	7467245	25.0	25.3	
$ 121 4-Bromofluorobenzene (Surr)	95	11.871	11.871	0.000	92	758454	10.0	10.1	
123 1,1,2,2-Tetrachloroethane	83	11.987	11.987	0.000	92	1335844	25.0	24.4	
122 Bromobenzene	156	11.987	11.987	0.000	91	1876425	25.0	24.3	
124 trans-1,4-Dichloro-2-butene	53	12.012	12.012	0.000	89	3434592	250.0	259.4	
125 1,2,3-Trichloropropane	110	12.030	12.030	0.000	82	338831	25.0	23.6	
126 N-Propylbenzene	91	12.066	12.067	0.000	98	8940228	25.0	24.2	
127 2-Chlorotoluene	126	12.140	12.140	0.000	97	1879996	25.0	24.3	
128 1,3,5-Trimethylbenzene	105	12.207	12.207	0.000	94	6681135	25.0	25.1	
129 4-Chlorotoluene	126	12.237	12.237	0.000	97	1983516	25.0	25.0	
130 tert-Butylbenzene	134	12.450	12.451	-0.001	93	1467578	25.0	25.0	
131 Pentachloroethane	167	12.481	12.481	0.000	95	1186327	25.0	26.8	
132 1,2,4-Trimethylbenzene	105	12.499	12.493	0.006	97	6914040	25.0	25.0	
133 sec-Butylbenzene	105	12.621	12.621	0.000	94	8318844	25.0	24.6	
134 1,3-Dichlorobenzene	146	12.719	12.719	0.000	98	3905280	25.0	24.7	
135 4-Isopropyltoluene	119	12.731	12.731	0.000	97	7465264	25.0	24.8	
* 136 1,4-Dichlorobenzene-d4	152	12.774	12.774	0.000	93	926990	10.0	10.0	
137 1,4-Dichlorobenzene	146	12.792	12.792	0.000	95	3914272	25.0	24.3	
138 1,2,3-Trimethylbenzene	120	12.804	12.804	0.000	98	3087805	25.0	24.5	
139 Benzyl chloride	126	12.871	12.877	-0.006	98	618066	25.0	27.3	
140 n-Butylbenzene	92	13.030	13.030	0.000	97	3805919	25.0	25.1	
141 1,2-Dichlorobenzene	146	13.054	13.054	0.000	99	3607202	25.0	24.8	
142 p-Diethylbenzene	119	13.084	13.085	-0.001	86	3817301	25.0	24.9	
145 1,2-Dibromo-3-Chloropropane	155	13.609	13.609	0.000	89	206473	25.0	26.7	
146 1,3,5-Trichlorobenzene	180	13.737	13.737	0.000	98	3141786	25.0	25.2	
147 1,2,4-Trichlorobenzene	180	14.164	14.164	0.000	94	2739507	25.0	26.1	
148 Hexachlorobutadiene	225	14.249	14.249	0.000	97	1349576	25.0	24.9	
149 Naphthalene	128	14.346	14.347	-0.001	96	4518703	25.0	27.1	
150 1,2,3-Trichlorobenzene	180	14.493	14.493	0.000	96	2228217	25.0	26.4	
151 2-Methylnaphthalene	142	15.090	15.090	0.000	93	2420259	25.0	30.7	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

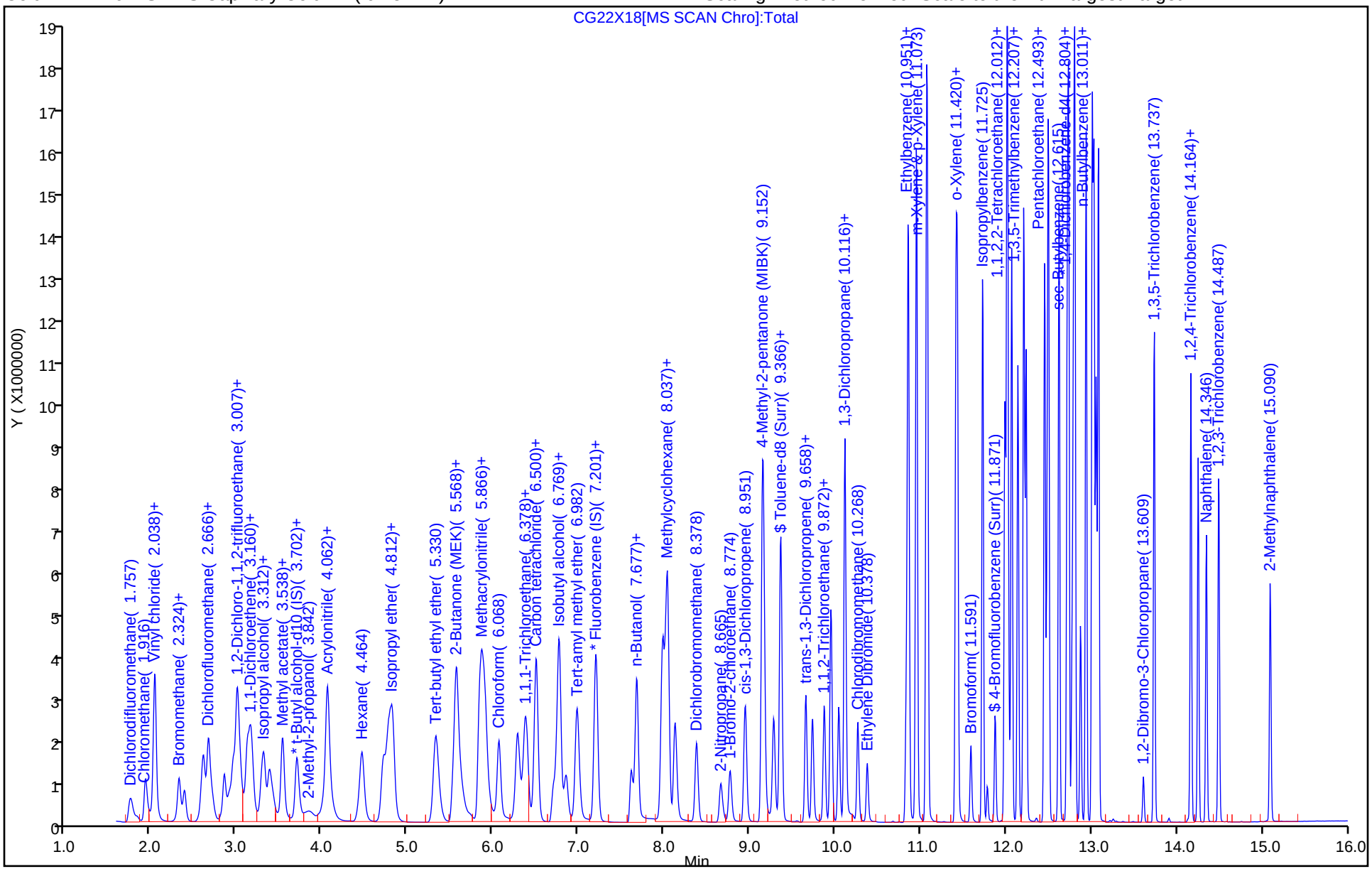
MSV_LL_#1_826_00053	Amount Added: 25.00	Units: uL	
MSV_LL_#2_826_00057	Amount Added: 25.00	Units: uL	
MSV_LL_GAS826_00109	Amount Added: 25.00	Units: uL	
MSV_HP25_ISSS_00058	Amount Added: 1.00	Units: uL	Run Reagent

Report Date: 31-Aug-2022 08:31:56 Chrom Revision: 2.3 25-Aug-2022 20:53:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D				
Injection Date:	22-Aug-2022 22:26:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	IC std7 25			Worklist Smp#:	19
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

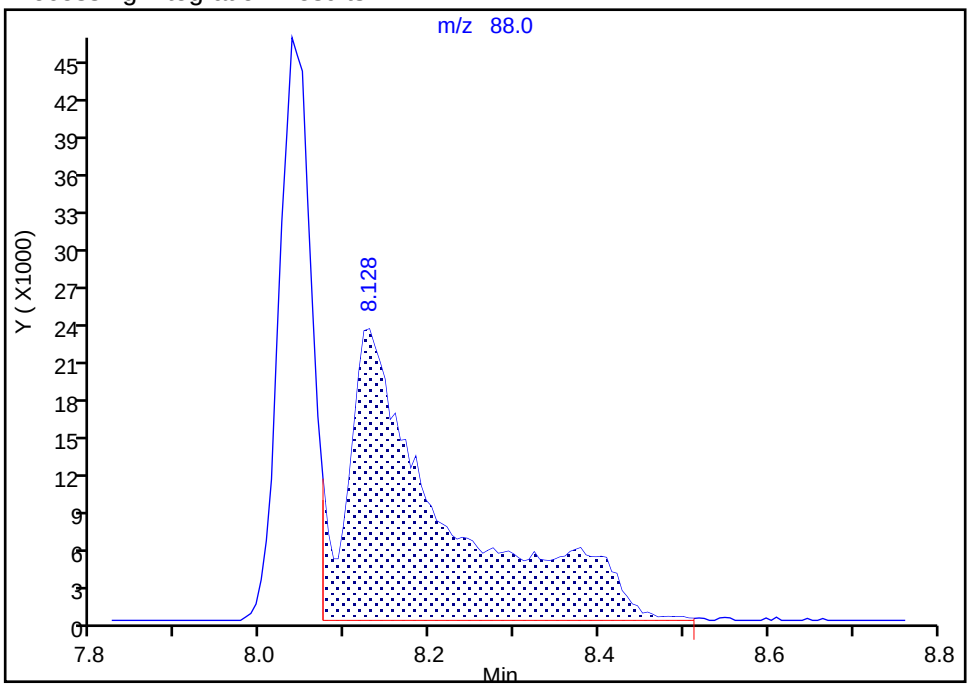
Data File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D				
Injection Date:	22-Aug-2022 22:26:30	Instrument ID:	10193		
Lims ID:	IC std7 25				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

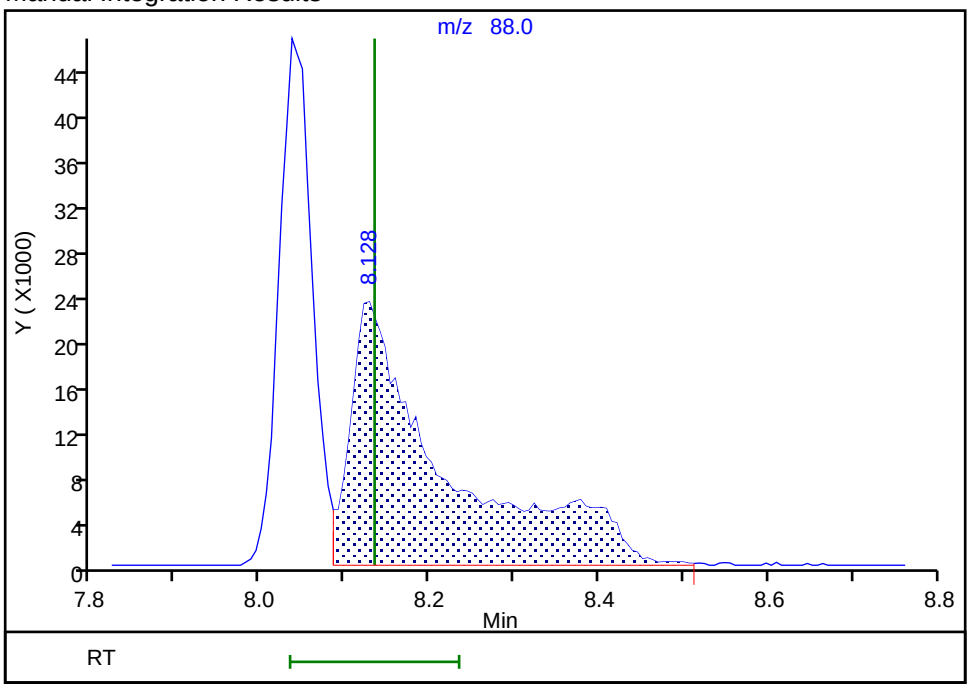
Processing Integration Results

RT: 8.13
Area: 190279
Amount: 1250.2793
Amount Units: ug/l



Manual Integration Results

RT: 8.13
Area: 183524
Amount: 1250.1240
Amount Units: ug/l



Reviewer: DVW2, 23-Aug-2022 09:32:37
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

Calibration / Dichlorodifluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

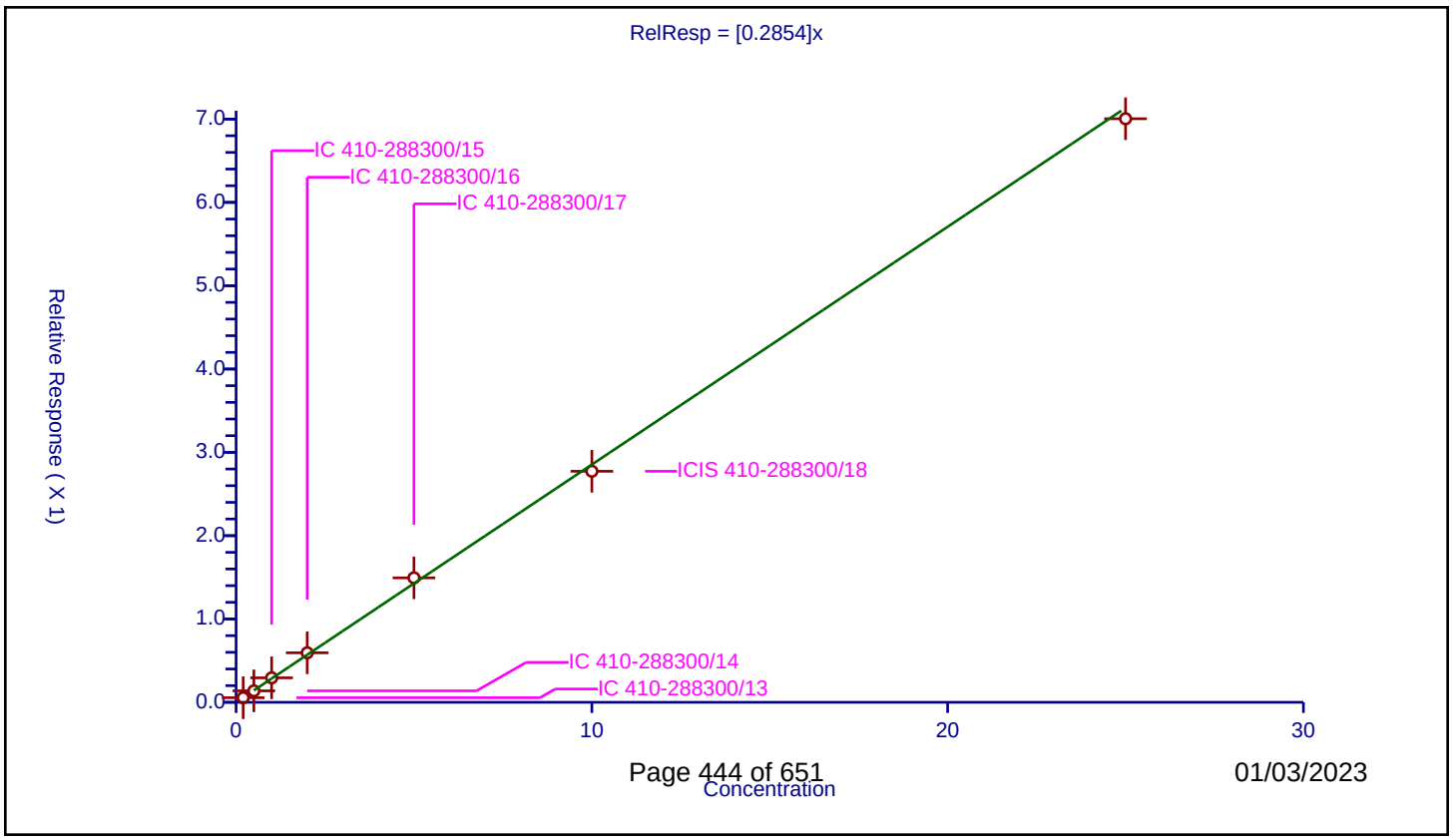
Curve Coefficients

Intercept:	0
Slope:	0.2854

Error Coefficients

Standard Error:	632000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.2	0.055036	10.0	1993587.0	0.275182	Y
2	IC 410-288300/14	0.5	0.137423	10.0	1985770.0	0.274846	Y
3	IC 410-288300/15	1.0	0.294031	10.0	1978464.0	0.294031	Y
4	IC 410-288300/16	2.0	0.594435	10.0	1976130.0	0.297217	Y
5	IC 410-288300/17	5.0	1.493859	10.0	1966718.0	0.298772	Y
6	ICIS 410-288300/18	10.0	2.773005	10.0	1988424.0	0.277301	Y
7	IC 410-288300/19	25.0	7.004156	10.0	2013656.0	0.280166	Y



Calibration / Chloromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

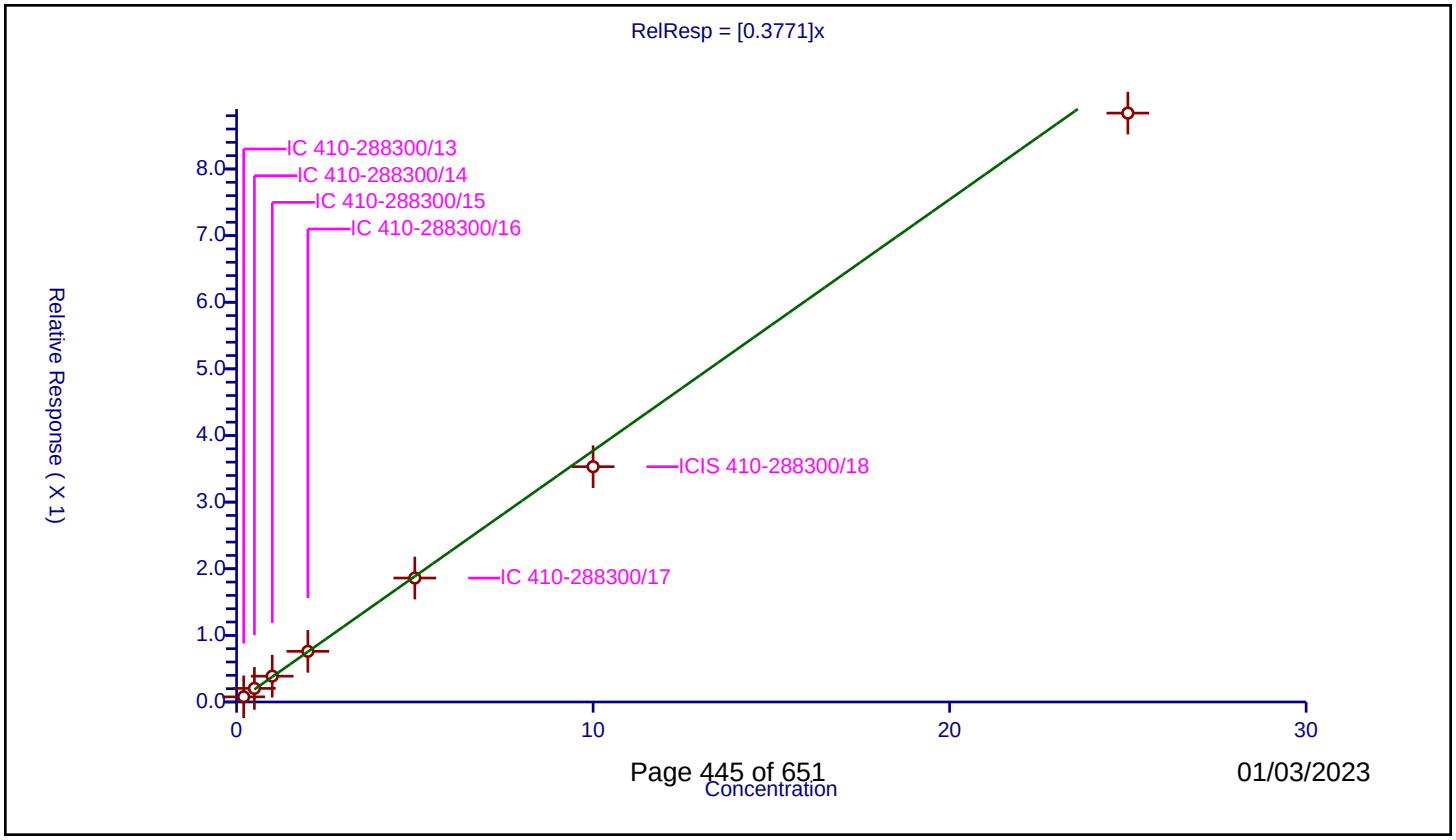
Curve Coefficients

Intercept:	0
Slope:	0.3771

Error Coefficients

Standard Error:	798000
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 410-288300/13	0.2	0.077092	10.0	1993587.0	0.385461	Y
2	IC 410-288300/14	0.5	0.204012	10.0	1985770.0	0.408023	Y
3	IC 410-288300/15	1.0	0.387624	10.0	1978464.0	0.387624	Y
4	IC 410-288300/16	2.0	0.760157	10.0	1976130.0	0.380079	Y
5	IC 410-288300/17	5.0	1.860562	10.0	1966718.0	0.372112	Y
6	ICIS 410-288300/18	10.0	3.53153	10.0	1988424.0	0.353153	Y
7	IC 410-288300/19	25.0	8.838744	10.0	2013656.0	0.35355	Y



Calibration / Vinyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

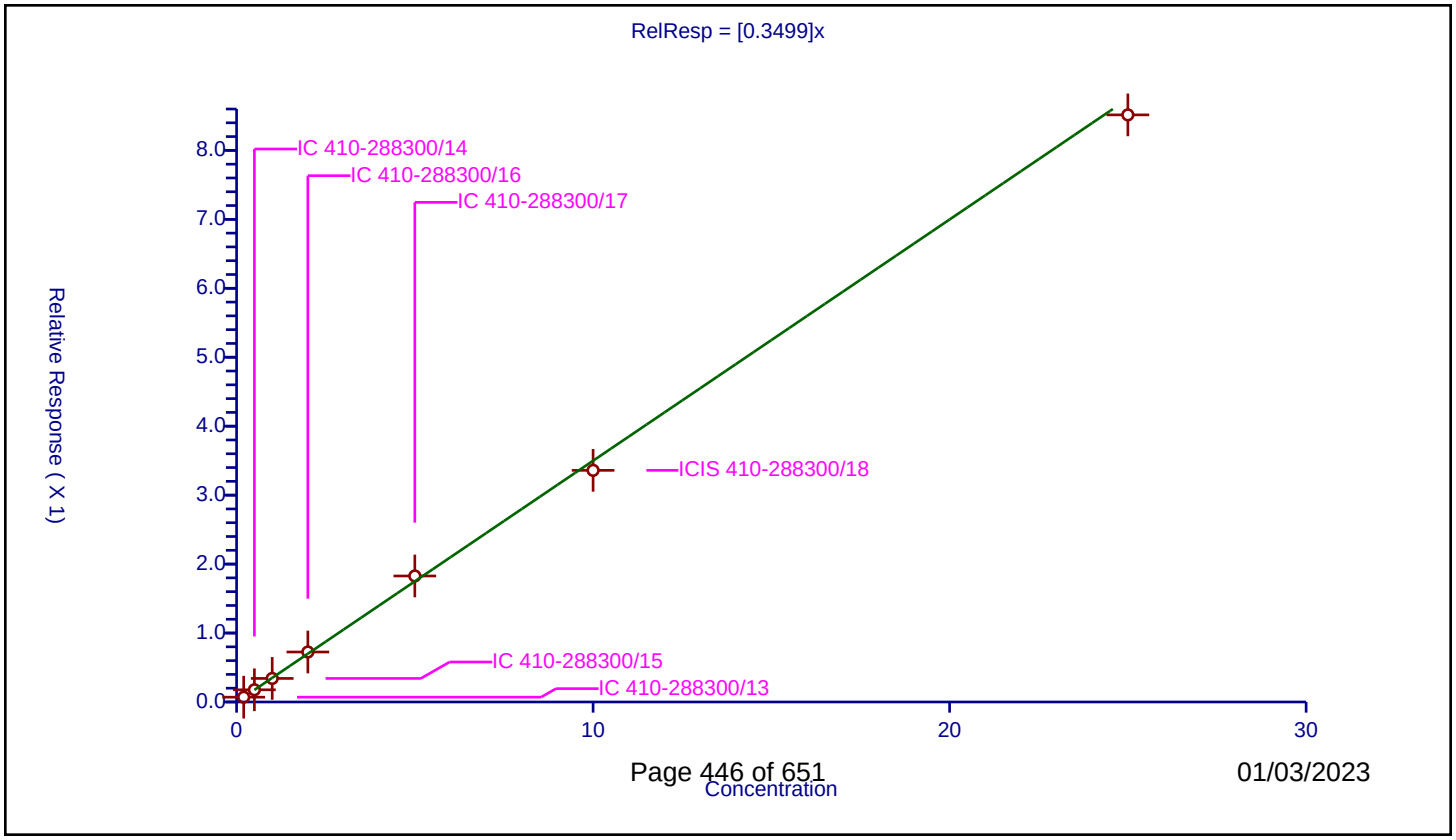
Curve Coefficients

Intercept:	0
Slope:	0.3499

Error Coefficients

Standard Error:	768000
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 410-288300/13	0.2	0.069809	10.0	1993587.0	0.349044	Y
2	IC 410-288300/14	0.5	0.17706	10.0	1985770.0	0.35412	Y
3	IC 410-288300/15	1.0	0.341553	10.0	1978464.0	0.341553	Y
4	IC 410-288300/16	2.0	0.724907	10.0	1976130.0	0.362453	Y
5	IC 410-288300/17	5.0	1.827552	10.0	1966718.0	0.36551	Y
6	ICIS 410-288300/18	10.0	3.35954	10.0	1988424.0	0.335954	Y
7	IC 410-288300/19	25.0	8.514885	10.0	2013656.0	0.340595	Y



Calibration / Butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

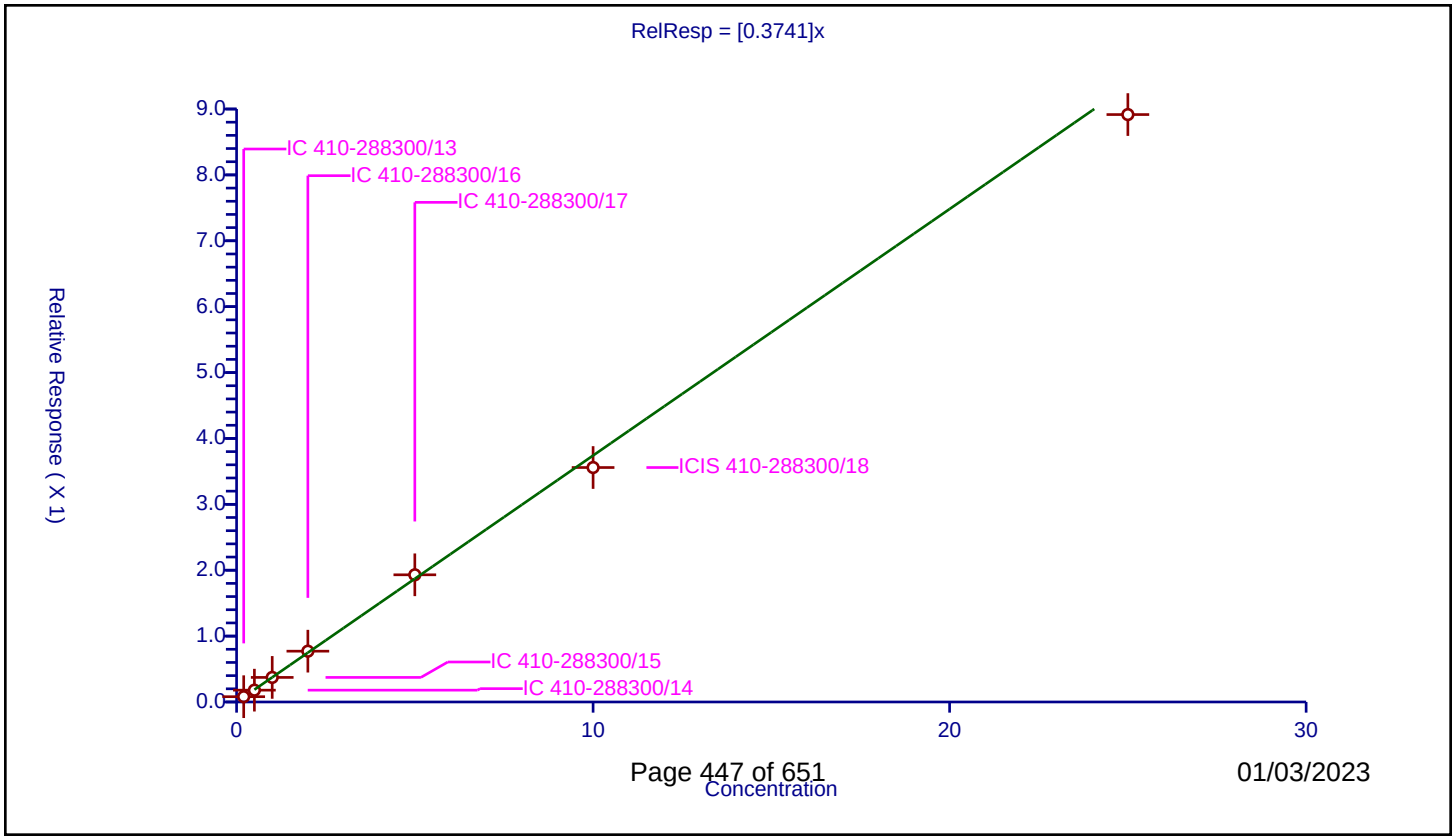
Curve Coefficients

Intercept:	0
Slope:	0.3741

Error Coefficients

Standard Error:	806000
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.2	0.080453	10.0	1993587.0	0.402265	Y
2	IC 410-288300/14	0.5	0.179633	10.0	1985770.0	0.359266	Y
3	IC 410-288300/15	1.0	0.373001	10.0	1978464.0	0.373001	Y
4	IC 410-288300/16	2.0	0.771149	10.0	1976130.0	0.385574	Y
5	IC 410-288300/17	5.0	1.930338	10.0	1966718.0	0.386068	Y
6	ICIS 410-288300/18	10.0	3.558803	10.0	1988424.0	0.35588	Y
7	IC 410-288300/19	25.0	8.915992	10.0	2013656.0	0.35664	Y



Calibration / Bromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

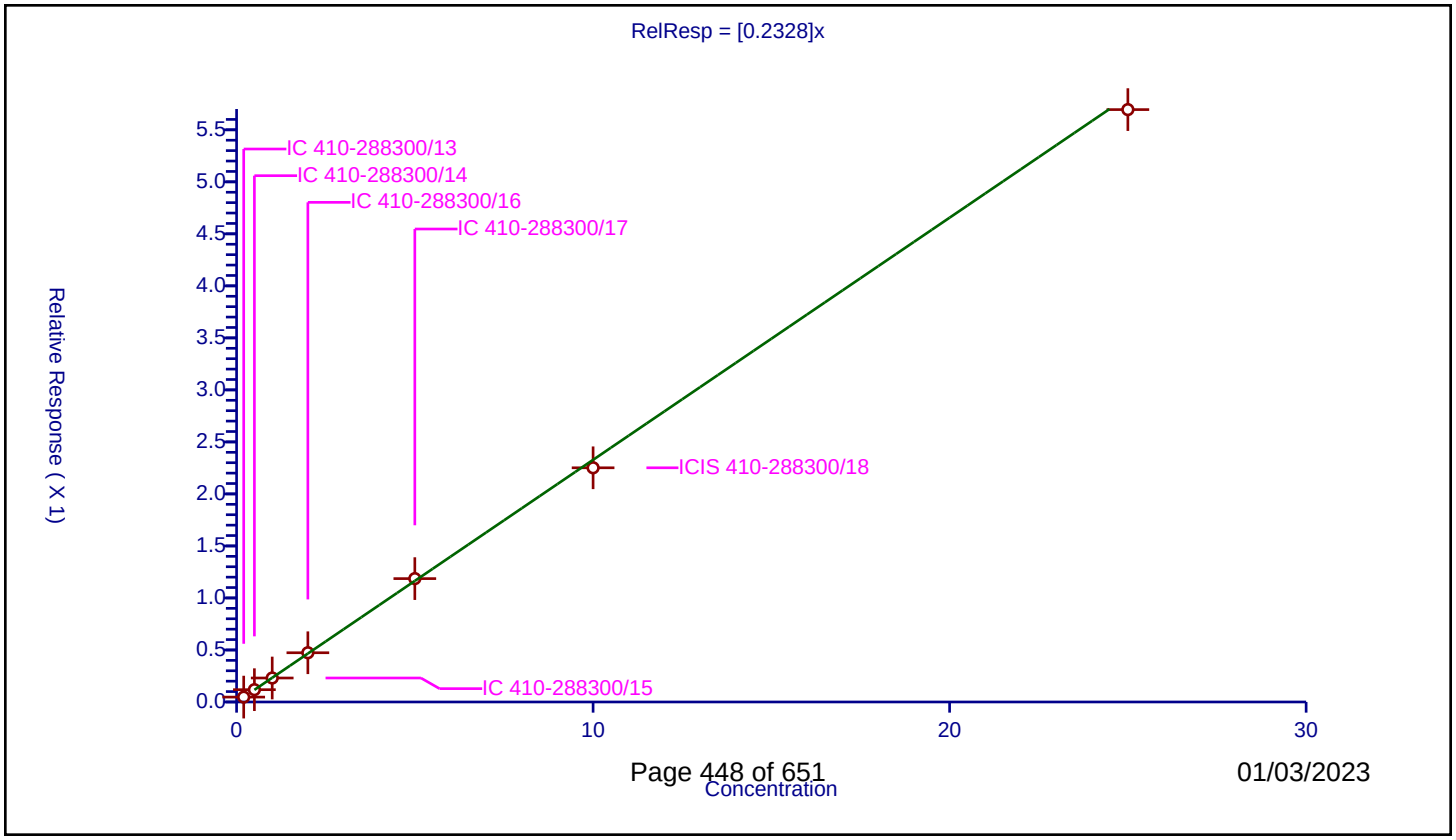
Curve Coefficients

Intercept:	0
Slope:	0.2328

Error Coefficients

Standard Error:	513000
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 410-288300/13	0.2	0.047036	10.0	1993587.0	0.235179	Y
2	IC 410-288300/14	0.5	0.118397	10.0	1985770.0	0.236795	Y
3	IC 410-288300/15	1.0	0.230694	10.0	1978464.0	0.230694	Y
4	IC 410-288300/16	2.0	0.473339	10.0	1976130.0	0.23667	Y
5	IC 410-288300/17	5.0	1.186017	10.0	1966718.0	0.237203	Y
6	ICIS 410-288300/18	10.0	2.25126	10.0	1988424.0	0.225126	Y
7	IC 410-288300/19	25.0	5.69427	10.0	2013656.0	0.227771	Y



Calibration / Chloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

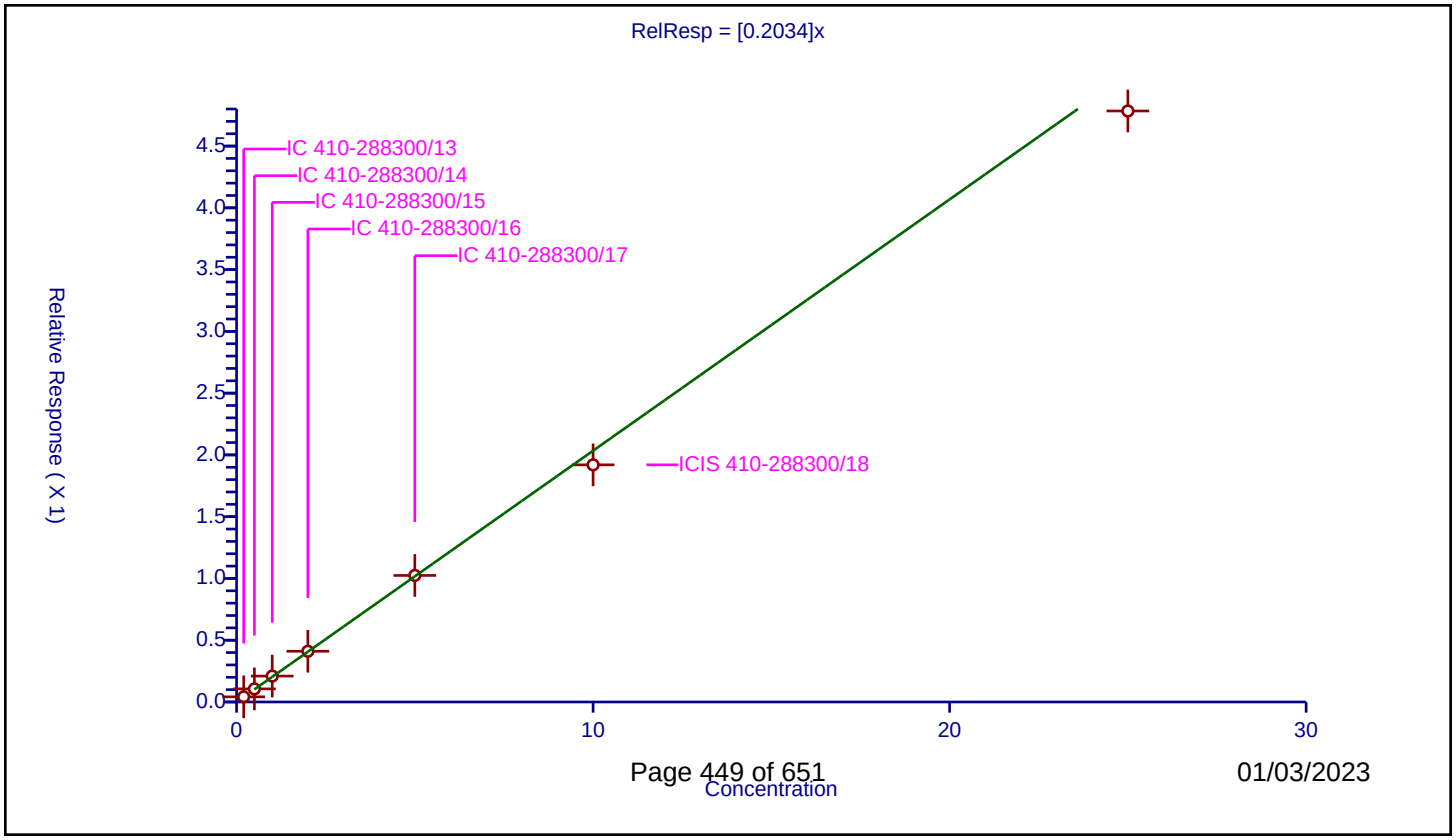
Curve Coefficients

Intercept:	0
Slope:	0.2034

Error Coefficients

Standard Error:	433000
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 410-288300/13	0.2	0.041679	10.0	1993587.0	0.208393	Y
2	IC 410-288300/14	0.5	0.10611	10.0	1985770.0	0.21222	Y
3	IC 410-288300/15	1.0	0.209678	10.0	1978464.0	0.209678	Y
4	IC 410-288300/16	2.0	0.410722	10.0	1976130.0	0.205361	Y
5	IC 410-288300/17	5.0	1.024412	10.0	1966718.0	0.204882	Y
6	ICIS 410-288300/18	10.0	1.919676	10.0	1988424.0	0.191968	Y
7	IC 410-288300/19	25.0	4.78392	10.0	2013656.0	0.191357	Y



Calibration / Dichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

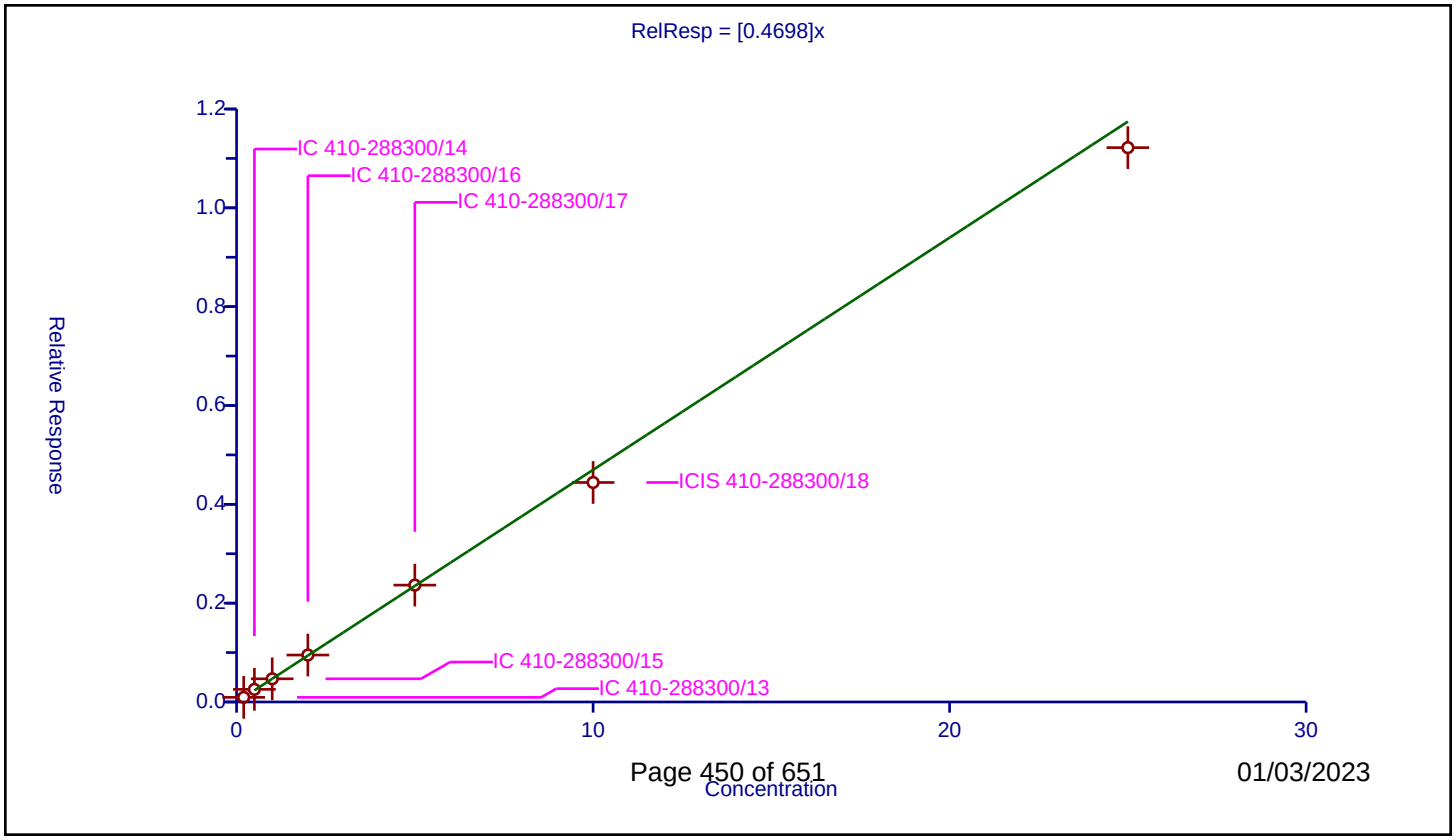
Curve Coefficients

Intercept:	0
Slope:	0.4698

Error Coefficients

Standard Error:	1010000
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 410-288300/13	0.2	0.093399	10.0	1993587.0	0.466997	Y
2	IC 410-288300/14	0.5	0.255714	10.0	1985770.0	0.511429	Y
3	IC 410-288300/15	1.0	0.469248	10.0	1978464.0	0.469248	Y
4	IC 410-288300/16	2.0	0.950079	10.0	1976130.0	0.47504	Y
5	IC 410-288300/17	5.0	2.364864	10.0	1966718.0	0.472973	Y
6	ICIS 410-288300/18	10.0	4.442222	10.0	1988424.0	0.444222	Y
7	IC 410-288300/19	25.0	11.218396	10.0	2013656.0	0.448736	Y



Calibration / Trichlorofluoromethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

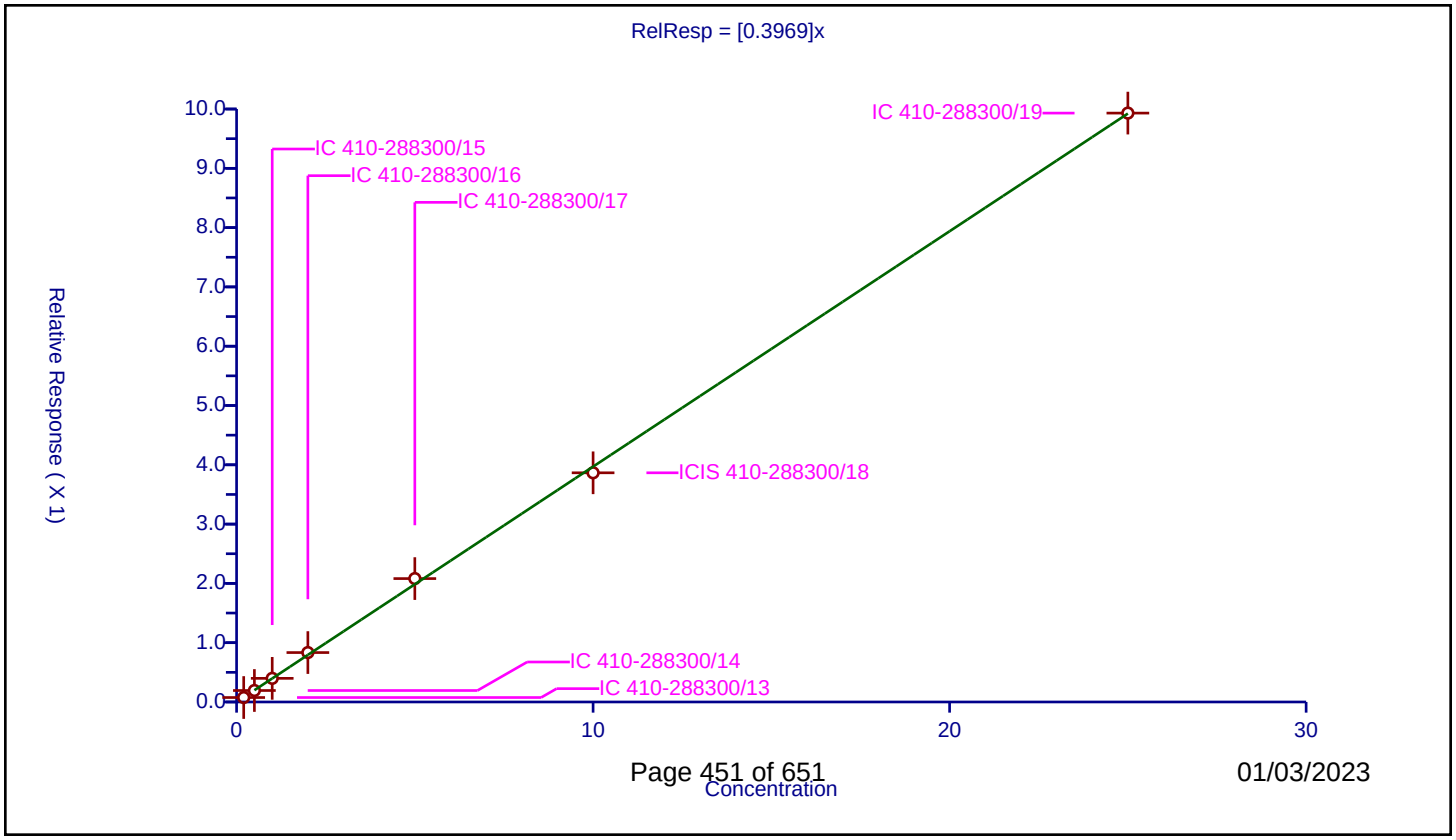
Curve Coefficients

Intercept:	0
Slope:	0.3969

Error Coefficients

Standard Error:	894000
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 410-288300/13	0.2	0.075136	10.0	1993587.0	0.37568	Y
2	IC 410-288300/14	0.5	0.193668	10.0	1985770.0	0.387336	Y
3	IC 410-288300/15	1.0	0.398739	10.0	1978464.0	0.398739	Y
4	IC 410-288300/16	2.0	0.833528	10.0	1976130.0	0.416764	Y
5	IC 410-288300/17	5.0	2.081061	10.0	1966718.0	0.416212	Y
6	ICIS 410-288300/18	10.0	3.865217	10.0	1988424.0	0.386522	Y
7	IC 410-288300/19	25.0	9.931289	10.0	2013656.0	0.397252	Y



Calibration / Ethyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

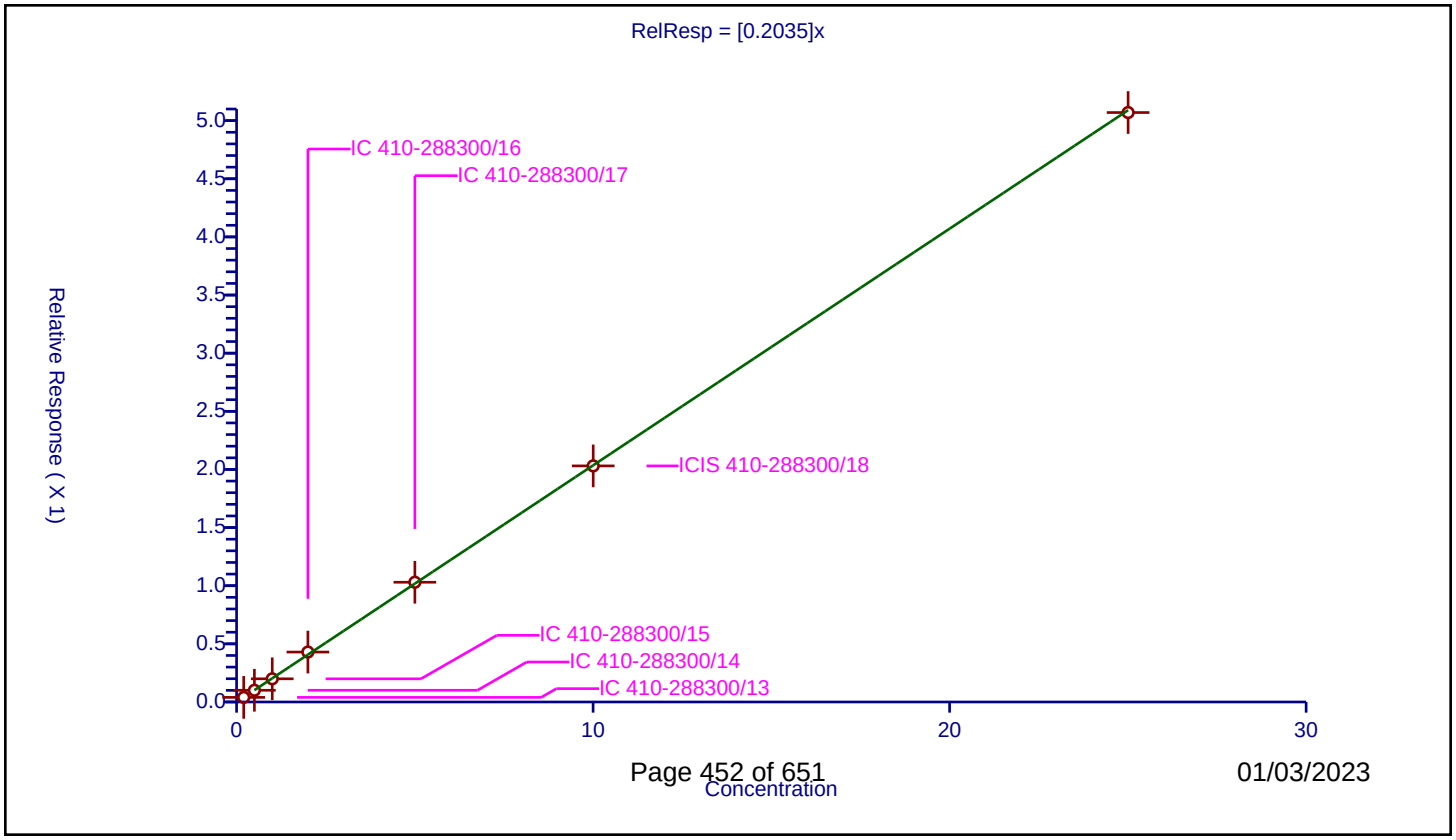
Curve Coefficients

Intercept:	0
Slope:	0.2035

Error Coefficients

Standard Error:	457000
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 410-288300/13	0.200057	0.039552	10.0	1993587.0	0.197703	Y
2	IC 410-288300/14	0.500143	0.100717	10.0	1985770.0	0.201376	Y
3	IC 410-288300/15	1.000286	0.199387	10.0	1978464.0	0.19933	Y
4	IC 410-288300/16	2.000572	0.429491	10.0	1976130.0	0.214684	Y
5	IC 410-288300/17	5.00143	1.02997	10.0	1966718.0	0.205935	Y
6	ICIS 410-288300/18	10.00286	2.030492	10.0	1988424.0	0.202991	Y
7	IC 410-288300/19	25.00715	5.069699	10.0	2013656.0	0.20273	Y



Calibration / 1,2-Dichloro-1,1,2-trifluoroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

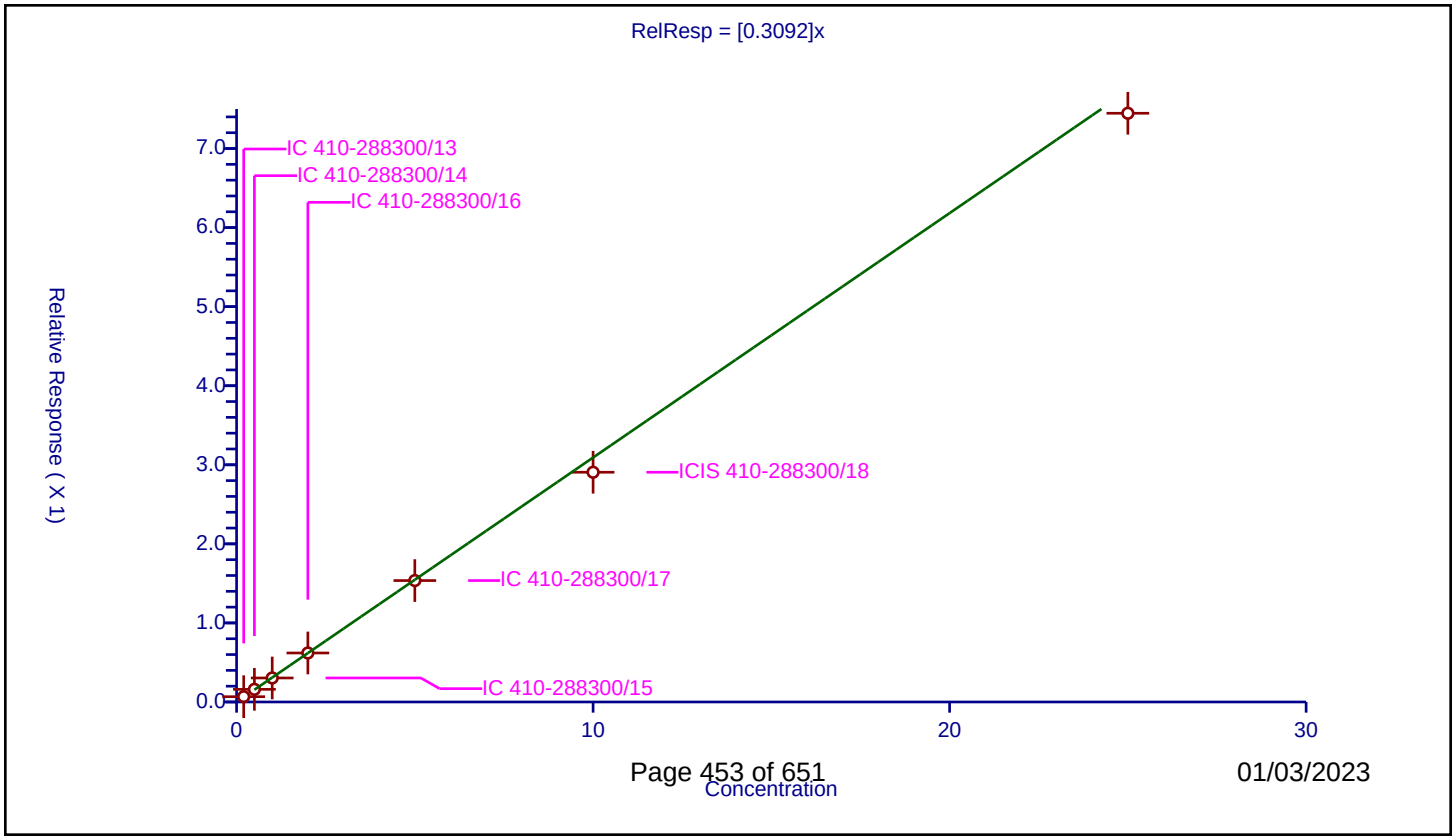
Curve Coefficients

Intercept:	0
Slope:	0.3092

Error Coefficients

Standard Error:	670000
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 410-288300/13	0.2	0.06701	10.0	1993587.0	0.335049	Y
2	IC 410-288300/14	0.5	0.159958	10.0	1985770.0	0.319916	Y
3	IC 410-288300/15	1.0	0.303741	10.0	1978464.0	0.303741	Y
4	IC 410-288300/16	2.0	0.619828	10.0	1976130.0	0.309914	Y
5	IC 410-288300/17	5.0	1.53569	10.0	1966718.0	0.307138	Y
6	ICIS 410-288300/18	10.0	2.905779	10.0	1988424.0	0.290578	Y
7	IC 410-288300/19	25.0	7.446267	10.0	2013656.0	0.297851	Y



Calibration / Acrolein

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

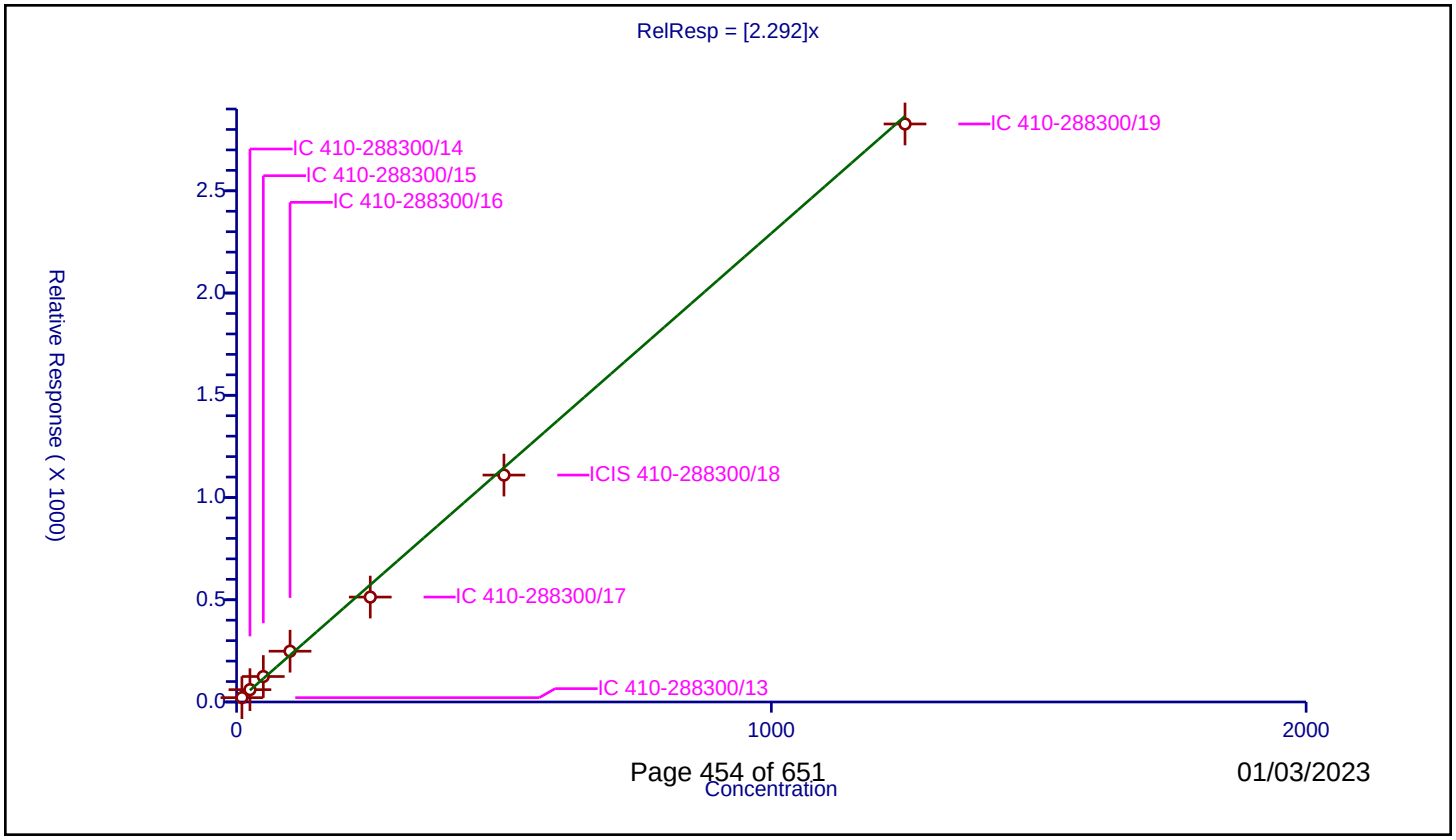
Curve Coefficients

Intercept:	0
Slope:	2.292

Error Coefficients

Standard Error:	3060000
Relative Standard Error:	7.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	9.999752	21.220164	50.0	136580.0	2.122069	Y
2	IC 410-288300/14	24.999381	60.363212	50.0	132044.0	2.414588	Y
3	IC 410-288300/15	49.998762	124.549729	50.0	113154.0	2.491056	Y
4	IC 410-288300/16	99.997523	248.402971	50.0	117656.0	2.484091	Y
5	IC 410-288300/17	249.993808	513.079892	50.0	131878.0	2.05237	Y
6	ICIS 410-288300/18	499.987617	1109.7408	50.0	129707.0	2.219537	Y
7	IC 410-288300/19	1249.969042	2826.779452	50.0	119756.0	2.26148	Y



Calibration / 1,1-Dichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

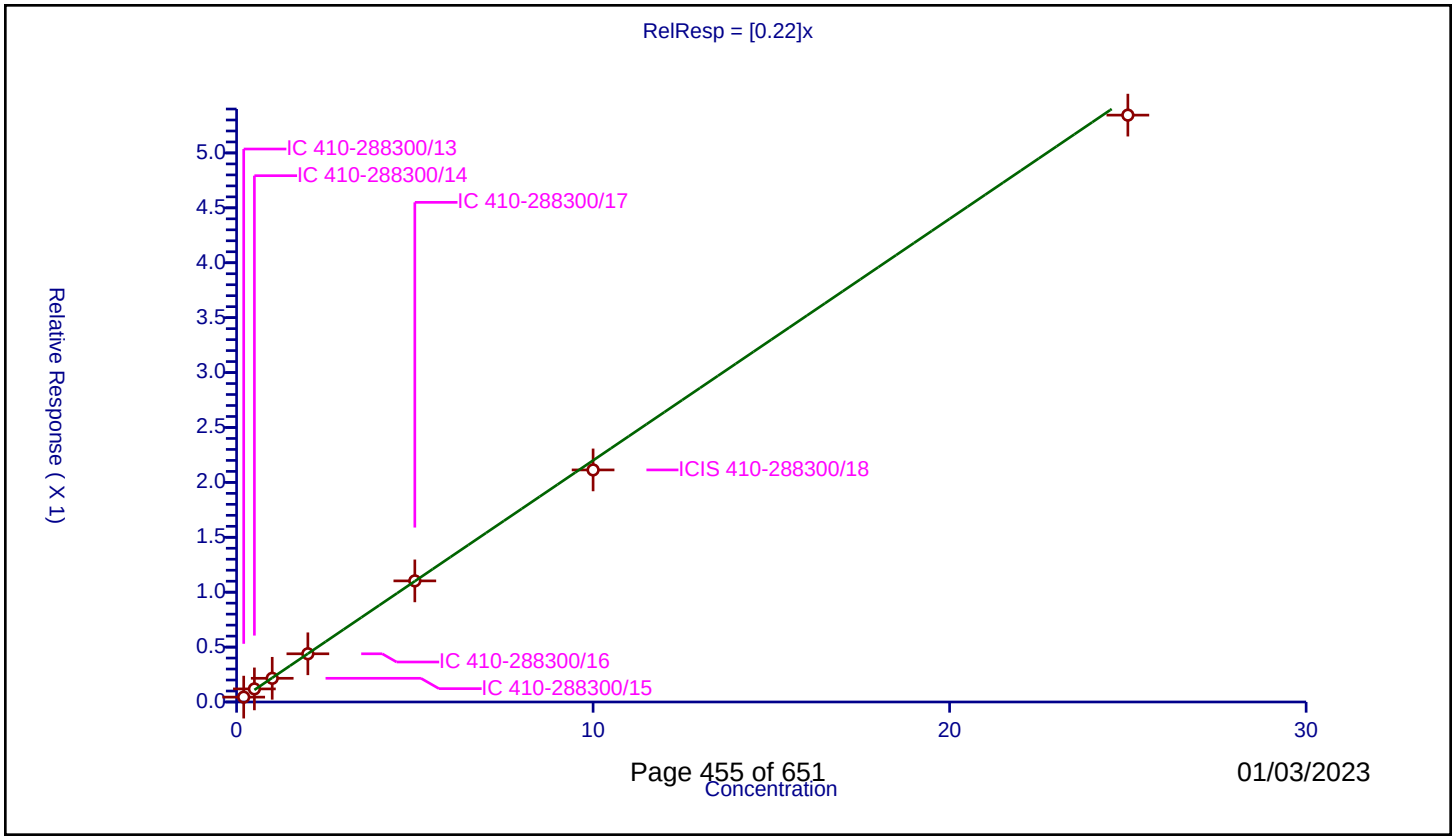
Curve Coefficients

Intercept:	0
Slope:	0.22

Error Coefficients

Standard Error:	482000
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 410-288300/13	0.2	0.044202	10.0	1993587.0	0.221009	Y
2	IC 410-288300/14	0.5	0.119007	10.0	1985770.0	0.238013	Y
3	IC 410-288300/15	1.0	0.215672	10.0	1978464.0	0.215672	Y
4	IC 410-288300/16	2.0	0.439015	10.0	1976130.0	0.219507	Y
5	IC 410-288300/17	5.0	1.102898	10.0	1966718.0	0.22058	Y
6	ICIS 410-288300/18	10.0	2.113302	10.0	1988424.0	0.21133	Y
7	IC 410-288300/19	25.0	5.344488	10.0	2013656.0	0.21378	Y



Calibration / Acetone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

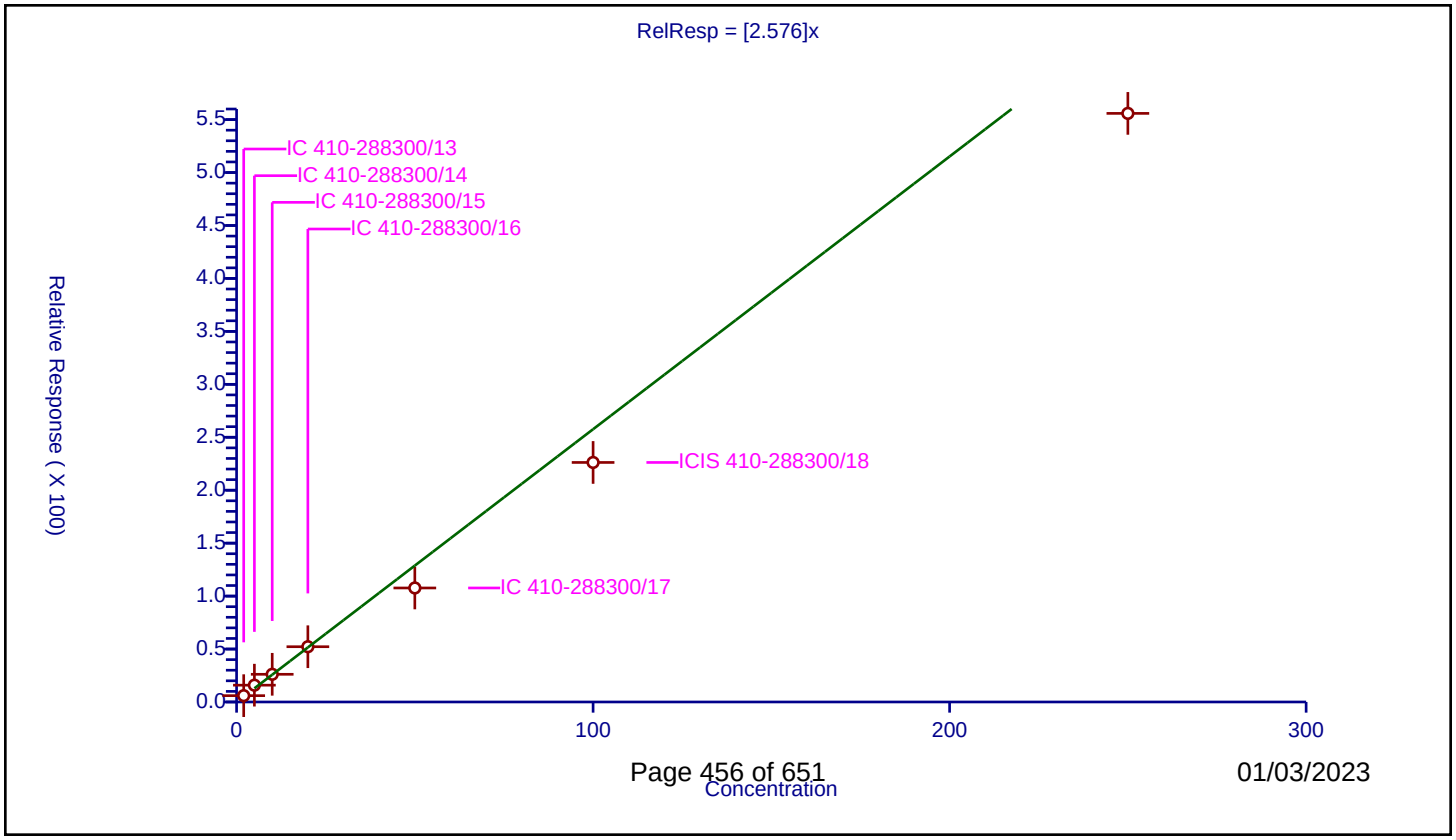
Curve Coefficients

Intercept:	0
Slope:	2.576

Error Coefficients

Standard Error:	608000
Relative Standard Error:	15.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.963

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	2.0	5.977083	50.0	136580.0	2.988542	Y
2	IC 410-288300/14	5.0	15.887507	50.0	132044.0	3.177501	Y
3	IC 410-288300/15	10.0	26.154621	50.0	113154.0	2.615462	Y
4	IC 410-288300/16	20.0	52.202183	50.0	117656.0	2.610109	Y
5	IC 410-288300/17	50.0	107.679446	50.0	131878.0	2.153589	Y
6	ICIS 410-288300/18	100.0	226.217166	50.0	129707.0	2.262172	Y
7	IC 410-288300/19	250.0	555.869852	50.0	119756.0	2.223479	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

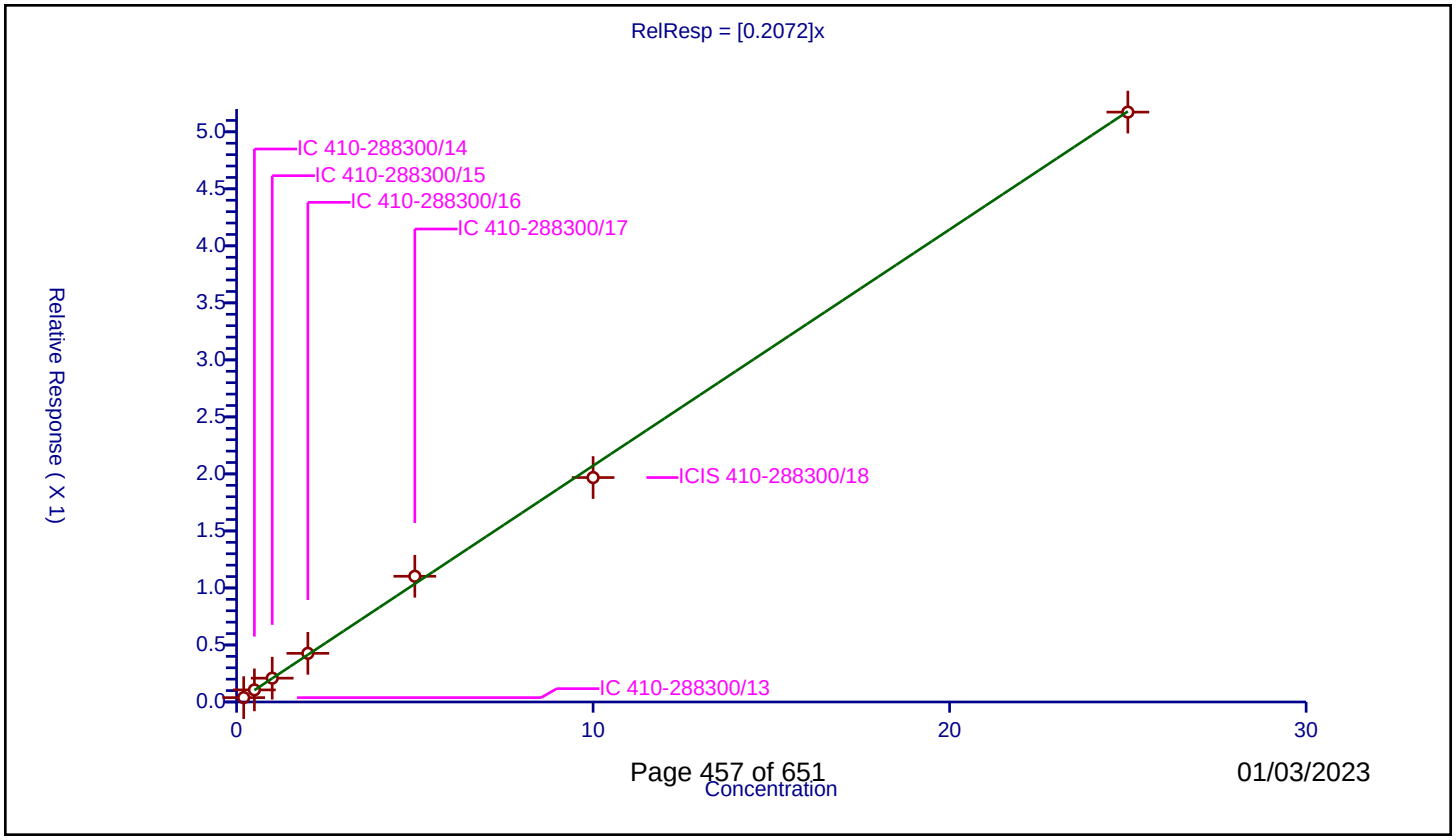
Curve Coefficients

Intercept:	0
Slope:	0.2072

Error Coefficients

Standard Error:	464000
Relative Standard Error:	4.8
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.2	0.038313	10.0	1993587.0	0.191564	Y
2	IC 410-288300/14	0.5	0.10605	10.0	1985770.0	0.212099	Y
3	IC 410-288300/15	1.0	0.20899	10.0	1978464.0	0.20899	Y
4	IC 410-288300/16	2.0	0.426576	10.0	1976130.0	0.213288	Y
5	IC 410-288300/17	5.0	1.102512	10.0	1966718.0	0.220502	Y
6	ICIS 410-288300/18	10.0	1.968298	10.0	1988424.0	0.19683	Y
7	IC 410-288300/19	25.0	5.17279	10.0	2013656.0	0.206912	Y



Calibration / Iodomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

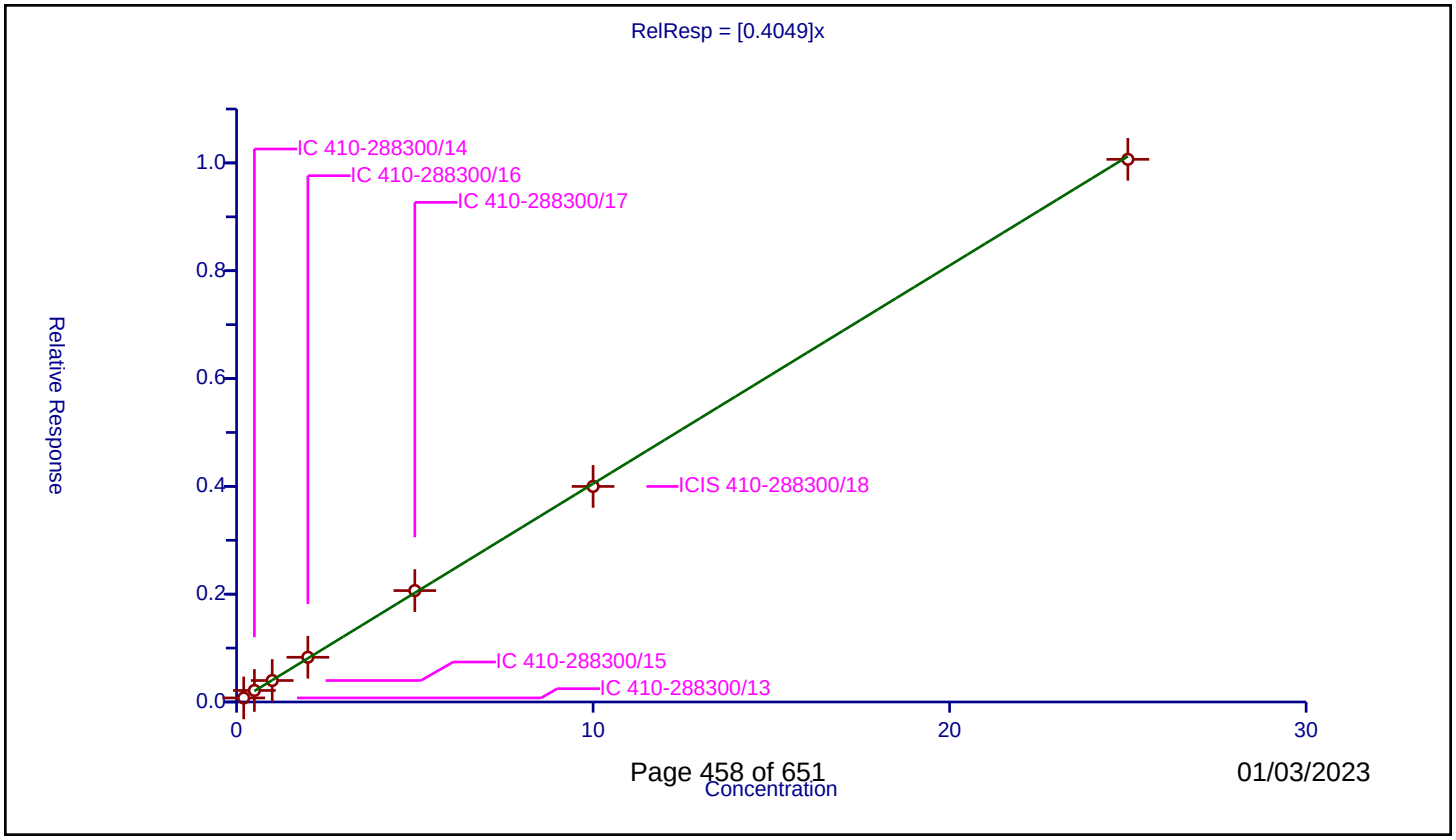
Curve Coefficients

Intercept:	0
Slope:	0.4049

Error Coefficients

Standard Error:	908000
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 410-288300/13	0.2	0.075477	10.0	1993587.0	0.377385	Y
2	IC 410-288300/14	0.5	0.213711	10.0	1985770.0	0.427421	Y
3	IC 410-288300/15	1.0	0.398531	10.0	1978464.0	0.398531	Y
4	IC 410-288300/16	2.0	0.829829	10.0	1976130.0	0.414915	Y
5	IC 410-288300/17	5.0	2.066702	10.0	1966718.0	0.41334	Y
6	ICIS 410-288300/18	10.0	3.998549	10.0	1988424.0	0.399855	Y
7	IC 410-288300/19	25.0	10.066695	10.0	2013656.0	0.402668	Y



Calibration / Carbon disulfide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

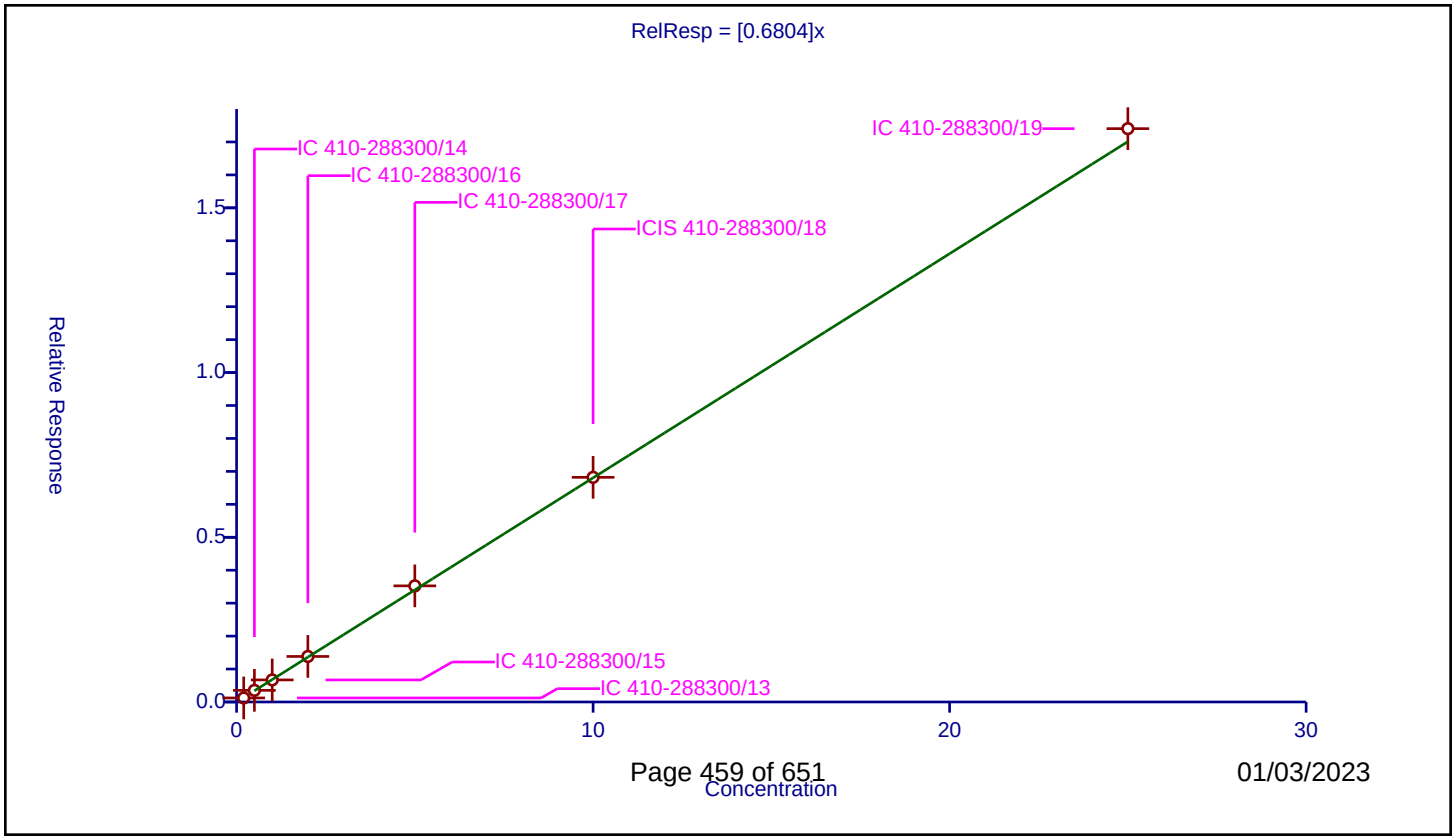
Curve Coefficients

Intercept:	0
Slope:	0.6804

Error Coefficients

Standard Error:	1570000
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.2	0.122588	10.0	1993587.0	0.61294	Y
2	IC 410-288300/14	0.5	0.352997	10.0	1985770.0	0.705993	Y
3	IC 410-288300/15	1.0	0.669706	10.0	1978464.0	0.669706	Y
4	IC 410-288300/16	2.0	1.382186	10.0	1976130.0	0.691093	Y
5	IC 410-288300/17	5.0	3.524994	10.0	1966718.0	0.704999	Y
6	ICIS 410-288300/18	10.0	6.819677	10.0	1988424.0	0.681968	Y
7	IC 410-288300/19	25.0	17.404298	10.0	2013656.0	0.696172	Y



Calibration / Methyl acetate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

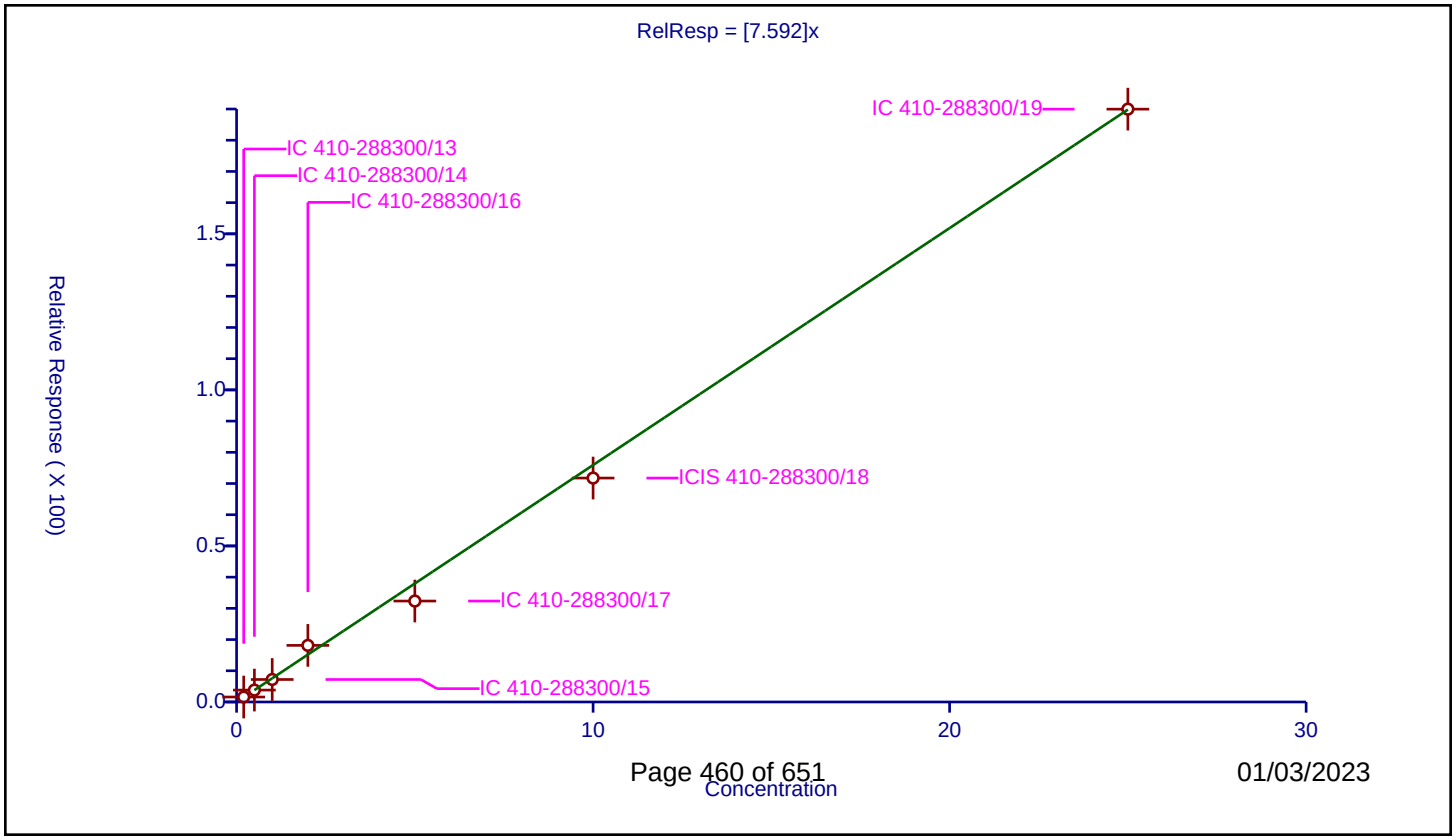
Curve Coefficients

Intercept:	0
Slope:	7.592

Error Coefficients

Standard Error:	205000
Relative Standard Error:	10.6
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.2	1.597598	50.0	136580.0	7.987992	Y
2	IC 410-288300/14	0.5	3.818045	50.0	132044.0	7.636091	Y
3	IC 410-288300/15	1.0	7.210085	50.0	113154.0	7.210085	Y
4	IC 410-288300/16	2.0	18.136347	50.0	117656.0	9.068173	Y
5	IC 410-288300/17	5.0	32.344667	50.0	131878.0	6.468933	Y
6	ICIS 410-288300/18	10.0	71.755572	50.0	129707.0	7.175557	Y
7	IC 410-288300/19	25.0	189.961255	50.0	119756.0	7.59845	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

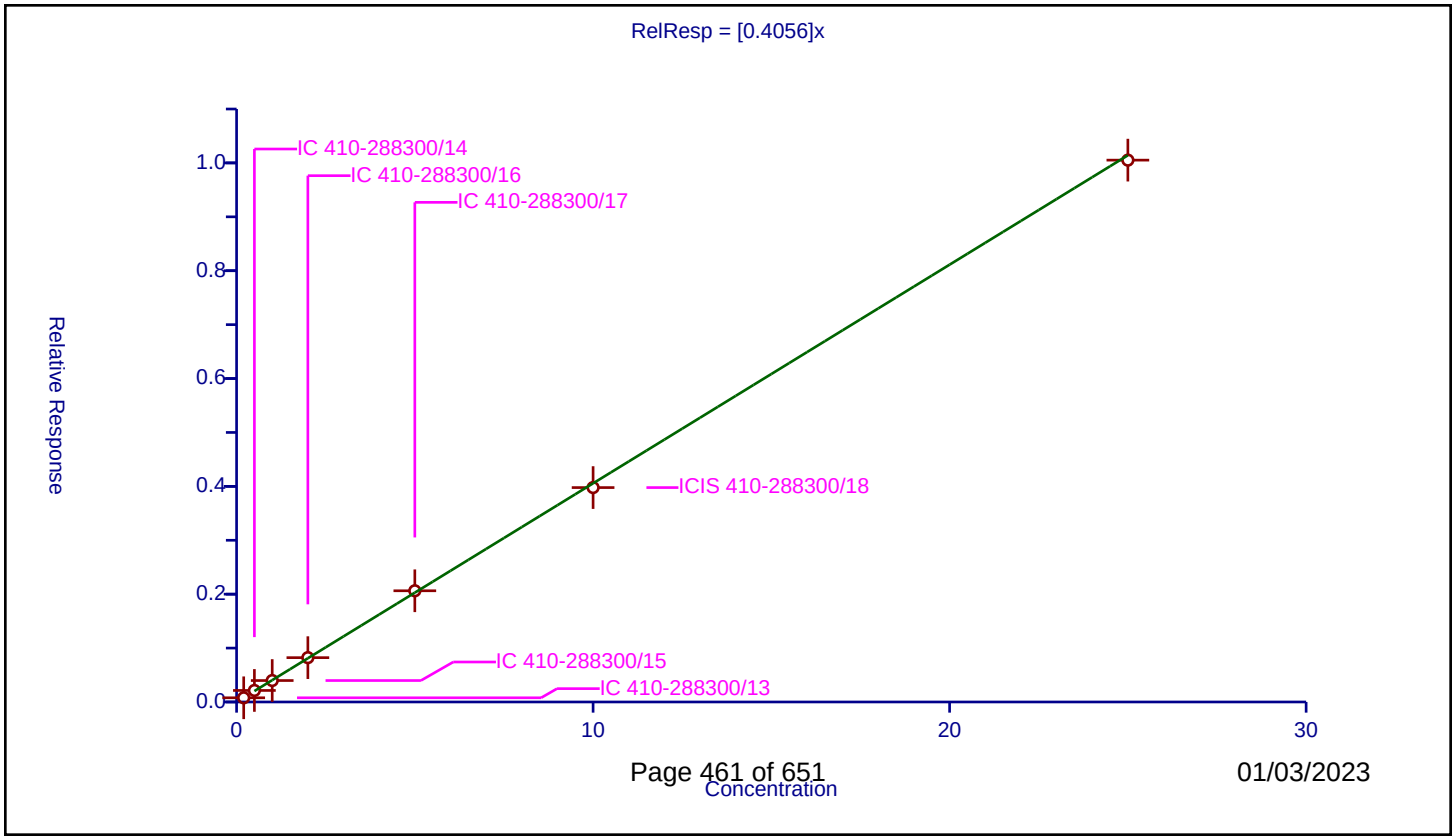
Curve Coefficients

Intercept:	0
Slope:	0.4056

Error Coefficients

Standard Error:	906000
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 410-288300/13	0.2	0.07808	10.0	1993587.0	0.390402	Y
2	IC 410-288300/14	0.5	0.213796	10.0	1985770.0	0.427592	Y
3	IC 410-288300/15	1.0	0.397758	10.0	1978464.0	0.397758	Y
4	IC 410-288300/16	2.0	0.822481	10.0	1976130.0	0.411241	Y
5	IC 410-288300/17	5.0	2.062914	10.0	1966718.0	0.412583	Y
6	ICIS 410-288300/18	10.0	3.977708	10.0	1988424.0	0.397771	Y
7	IC 410-288300/19	25.0	10.051791	10.0	2013656.0	0.402072	Y



Calibration / Methylene Chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

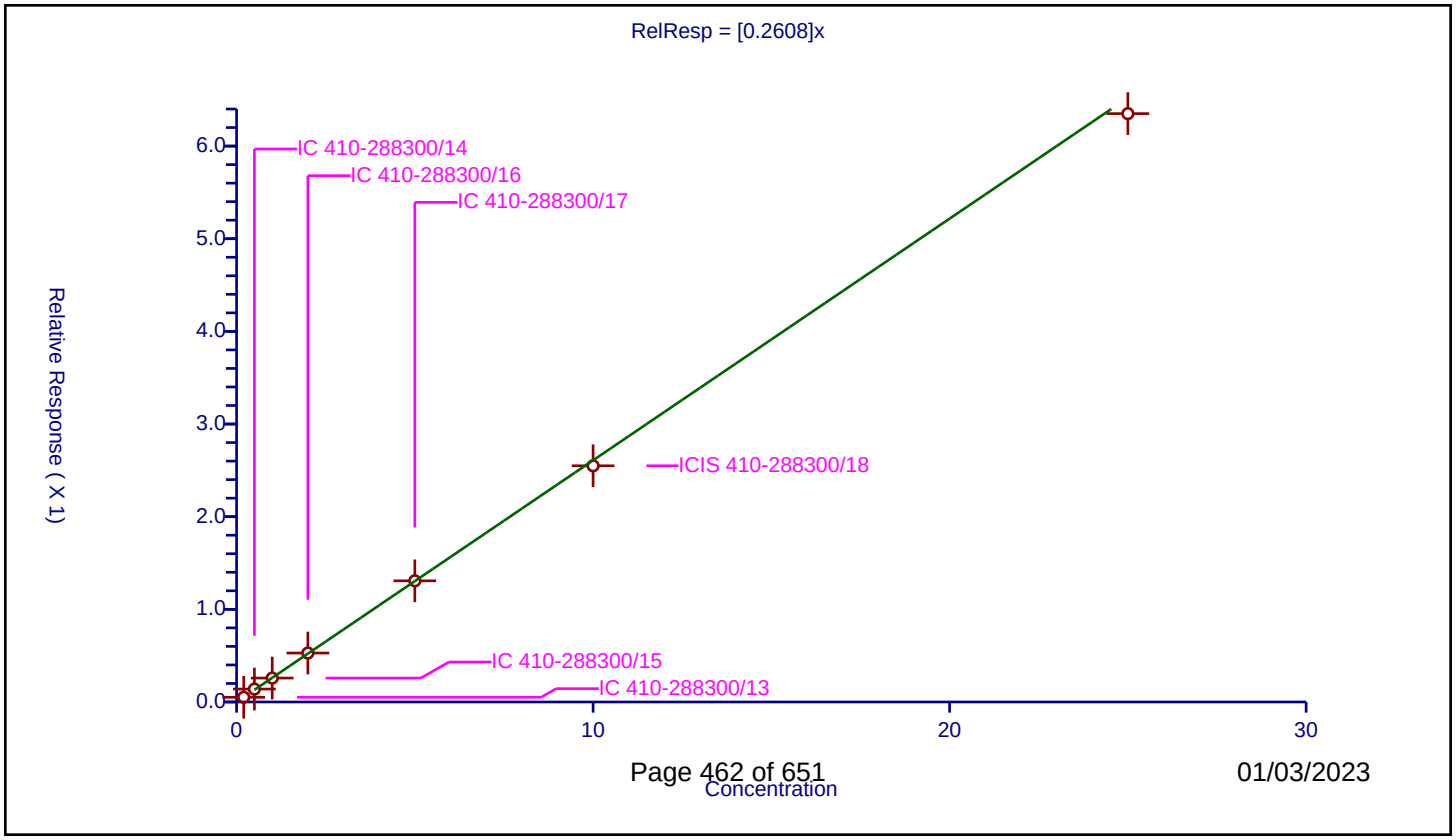
Curve Coefficients

Intercept:	0
Slope:	0.2608

Error Coefficients

Standard Error:	573000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.2	0.050888	10.0	1993587.0	0.254441	Y
2	IC 410-288300/14	0.5	0.139321	10.0	1985770.0	0.278643	Y
3	IC 410-288300/15	1.0	0.25821	10.0	1978464.0	0.25821	Y
4	IC 410-288300/16	2.0	0.528148	10.0	1976130.0	0.264074	Y
5	IC 410-288300/17	5.0	1.307757	10.0	1966718.0	0.261551	Y
6	ICIS 410-288300/18	10.0	2.54921	10.0	1988424.0	0.254921	Y
7	IC 410-288300/19	25.0	6.350181	10.0	2013656.0	0.254007	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

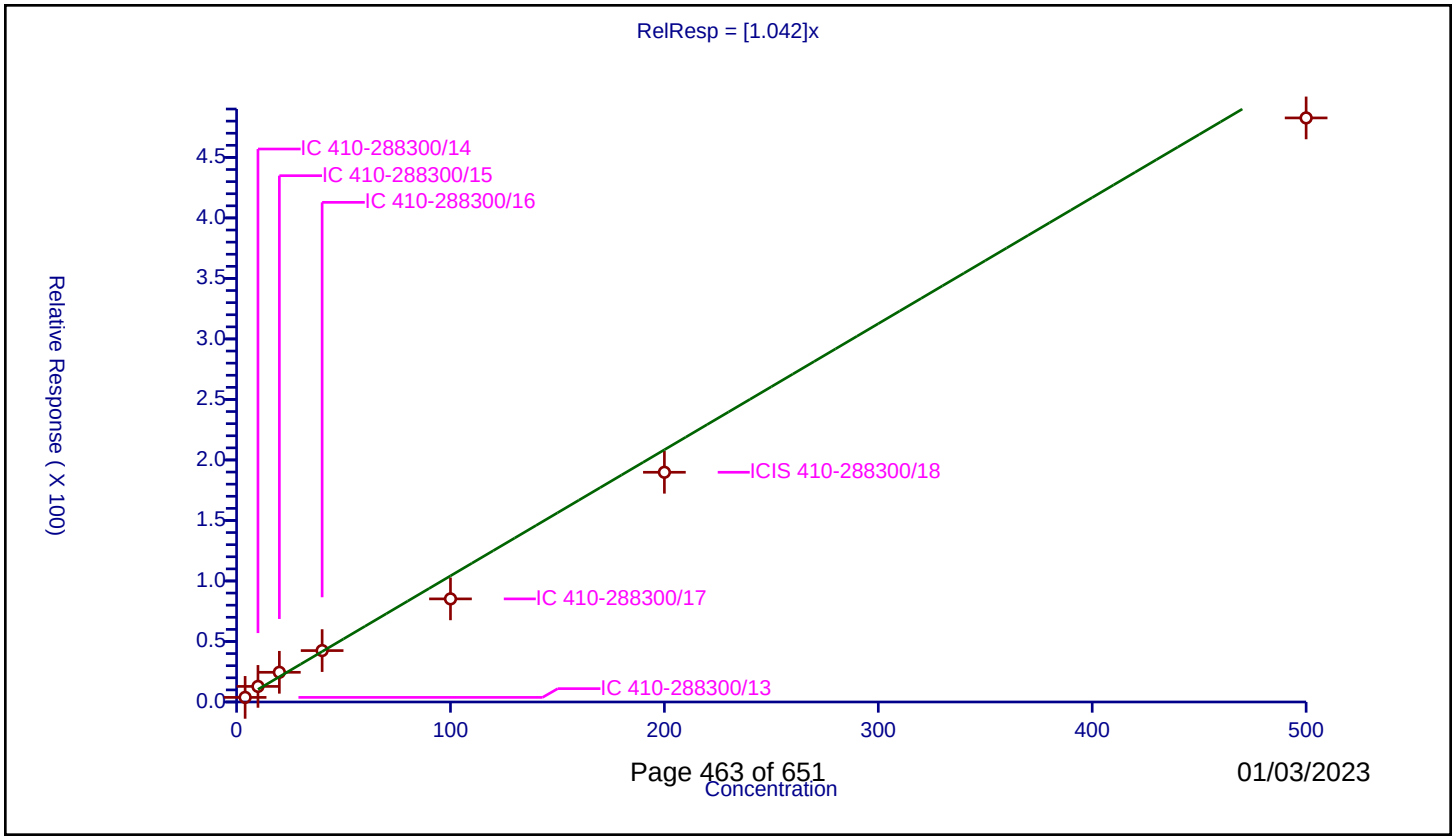
Curve Coefficients

Intercept:	0
Slope:	1.042

Error Coefficients

Standard Error:	523000
Relative Standard Error:	15.3
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.968

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	4.0	3.809123	50.0	136580.0	0.952281	Y
2	IC 410-288300/14	10.0	12.869574	50.0	132044.0	1.286957	Y
3	IC 410-288300/15	20.0	24.542659	50.0	113154.0	1.227133	Y
4	IC 410-288300/16	40.0	42.479772	50.0	117656.0	1.061994	Y
5	IC 410-288300/17	100.0	85.193891	50.0	131878.0	0.851939	Y
6	ICIS 410-288300/18	200.0	189.823602	50.0	129707.0	0.949118	Y
7	IC 410-288300/19	500.0	482.630098	50.0	119756.0	0.96526	Y



Calibration / Acrylonitrile

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

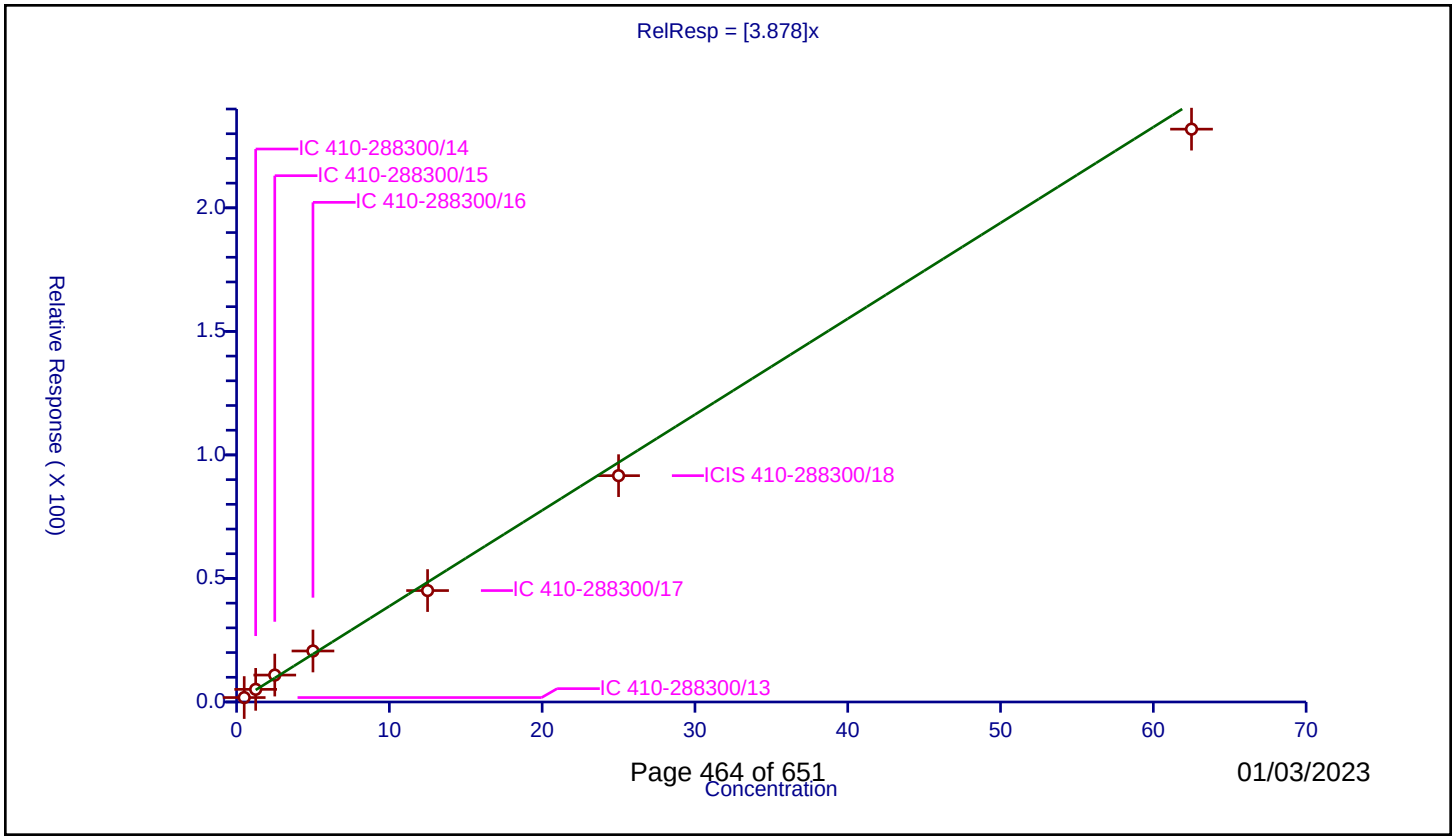
Curve Coefficients

Intercept:	0
Slope:	3.878

Error Coefficients

Standard Error:	252000
Relative Standard Error:	7.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.5	1.795285	50.0	136580.0	3.59057	Y
2	IC 410-288300/14	1.25	5.110418	50.0	132044.0	4.088334	Y
3	IC 410-288300/15	2.5	10.892677	50.0	113154.0	4.357071	Y
4	IC 410-288300/16	5.0	20.636857	50.0	117656.0	4.127371	Y
5	IC 410-288300/17	12.5	45.096604	50.0	131878.0	3.607728	Y
6	ICIS 410-288300/18	25.0	91.609165	50.0	129707.0	3.664367	Y
7	IC 410-288300/19	62.5	231.849344	50.0	119756.0	3.709589	Y



Calibration / Methyl tert-butyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

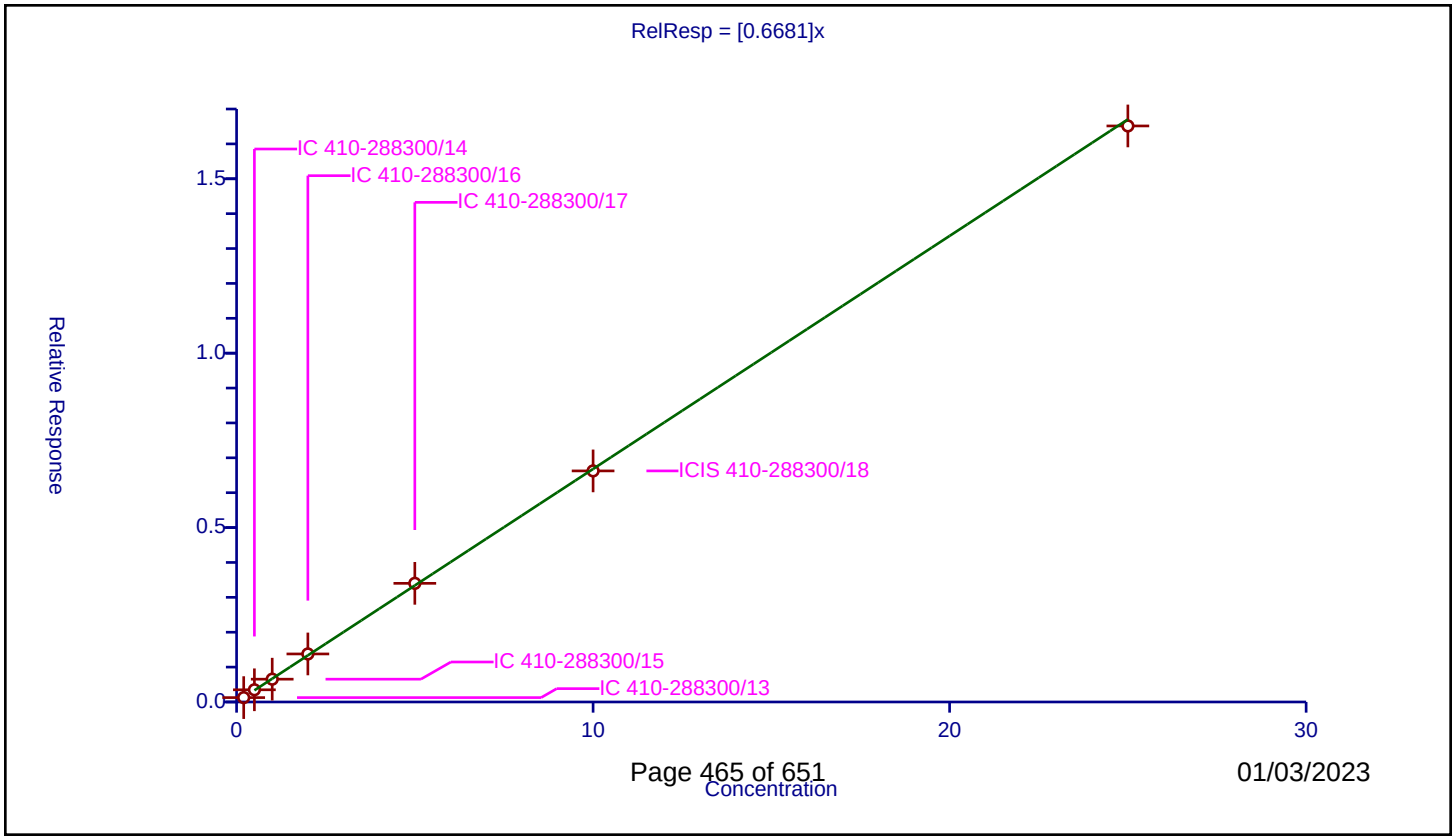
Curve Coefficients

Intercept:	0
Slope:	0.6681

Error Coefficients

Standard Error:	1490000
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 410-288300/13	0.2	0.126064	10.0	1993587.0	0.630321	Y
2	IC 410-288300/14	0.5	0.35002	10.0	1985770.0	0.700041	Y
3	IC 410-288300/15	1.0	0.653916	10.0	1978464.0	0.653916	Y
4	IC 410-288300/16	2.0	1.377526	10.0	1976130.0	0.688763	Y
5	IC 410-288300/17	5.0	3.401804	10.0	1966718.0	0.680361	Y
6	ICIS 410-288300/18	10.0	6.625212	10.0	1988424.0	0.662521	Y
7	IC 410-288300/19	25.0	16.514782	10.0	2013656.0	0.660591	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

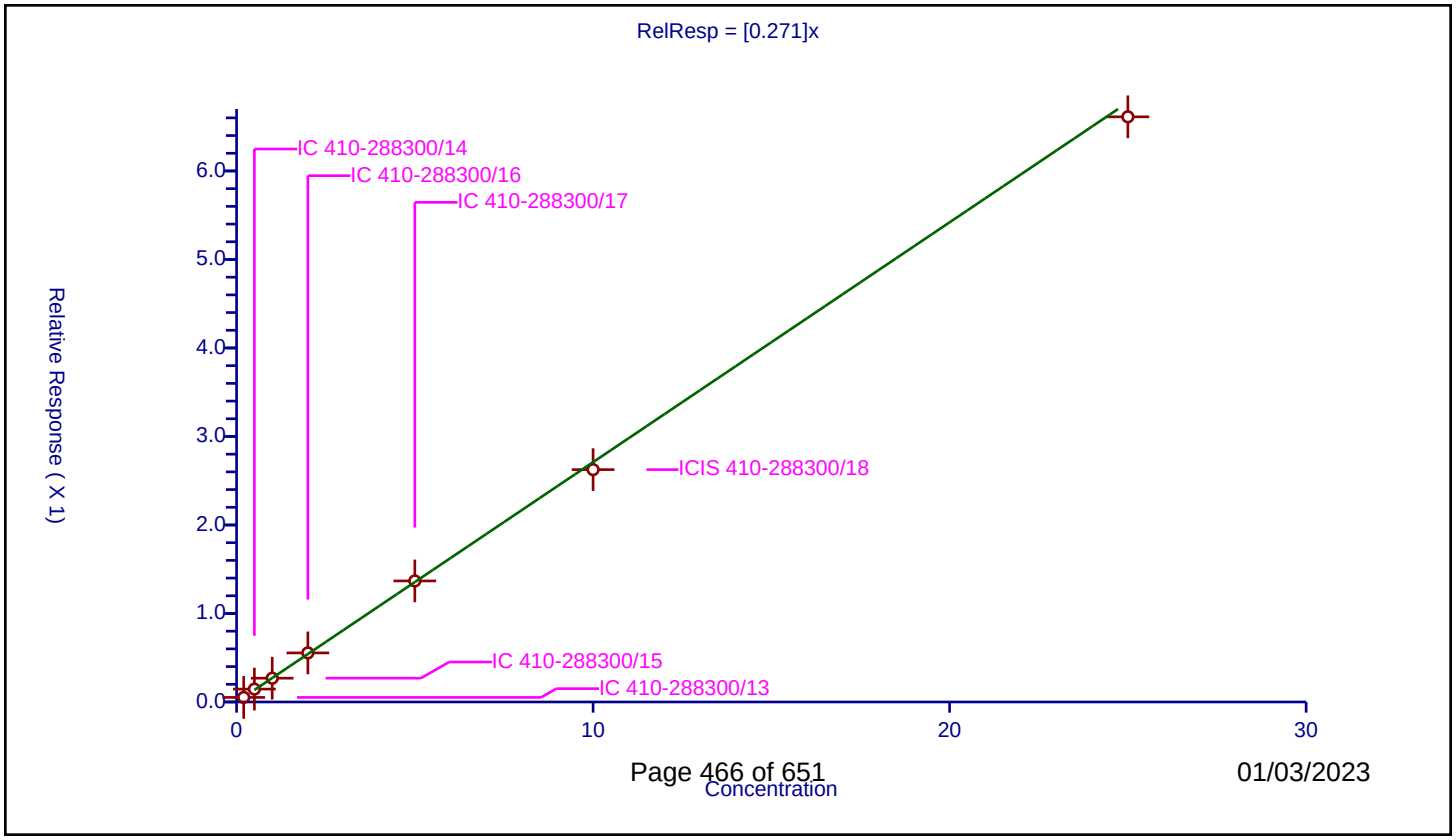
Curve Coefficients

Intercept:	0
Slope:	0.271

Error Coefficients

Standard Error:	596000
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 410-288300/13	0.2	0.051821	10.0	1993587.0	0.259106	Y
2	IC 410-288300/14	0.5	0.145566	10.0	1985770.0	0.291131	Y
3	IC 410-288300/15	1.0	0.26885	10.0	1978464.0	0.26885	Y
4	IC 410-288300/16	2.0	0.554412	10.0	1976130.0	0.277206	Y
5	IC 410-288300/17	5.0	1.367847	10.0	1966718.0	0.273569	Y
6	ICIS 410-288300/18	10.0	2.62533	10.0	1988424.0	0.262533	Y
7	IC 410-288300/19	25.0	6.61177	10.0	2013656.0	0.264471	Y



Calibration / Hexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

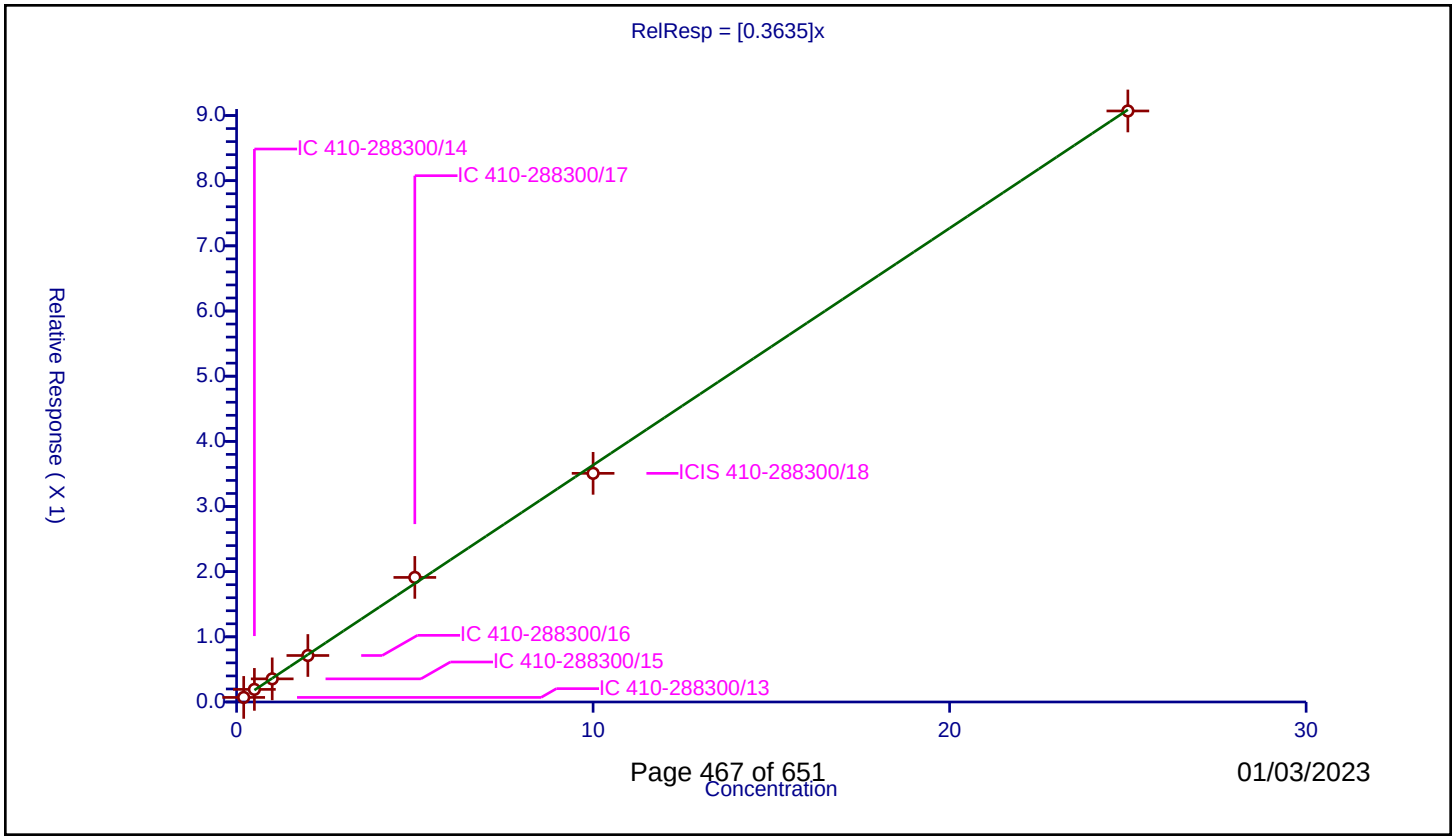
Curve Coefficients

Intercept:	0
Slope:	0.3635

Error Coefficients

Standard Error:	816000
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 410-288300/13	0.2	0.07015	10.0	1993587.0	0.35075	Y
2	IC 410-288300/14	0.5	0.193245	10.0	1985770.0	0.38649	Y
3	IC 410-288300/15	1.0	0.354826	10.0	1978464.0	0.354826	Y
4	IC 410-288300/16	2.0	0.713399	10.0	1976130.0	0.3567	Y
5	IC 410-288300/17	5.0	1.911743	10.0	1966718.0	0.382349	Y
6	ICIS 410-288300/18	10.0	3.509086	10.0	1988424.0	0.350909	Y
7	IC 410-288300/19	25.0	9.069995	10.0	2013656.0	0.3628	Y



Calibration / 1,1-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

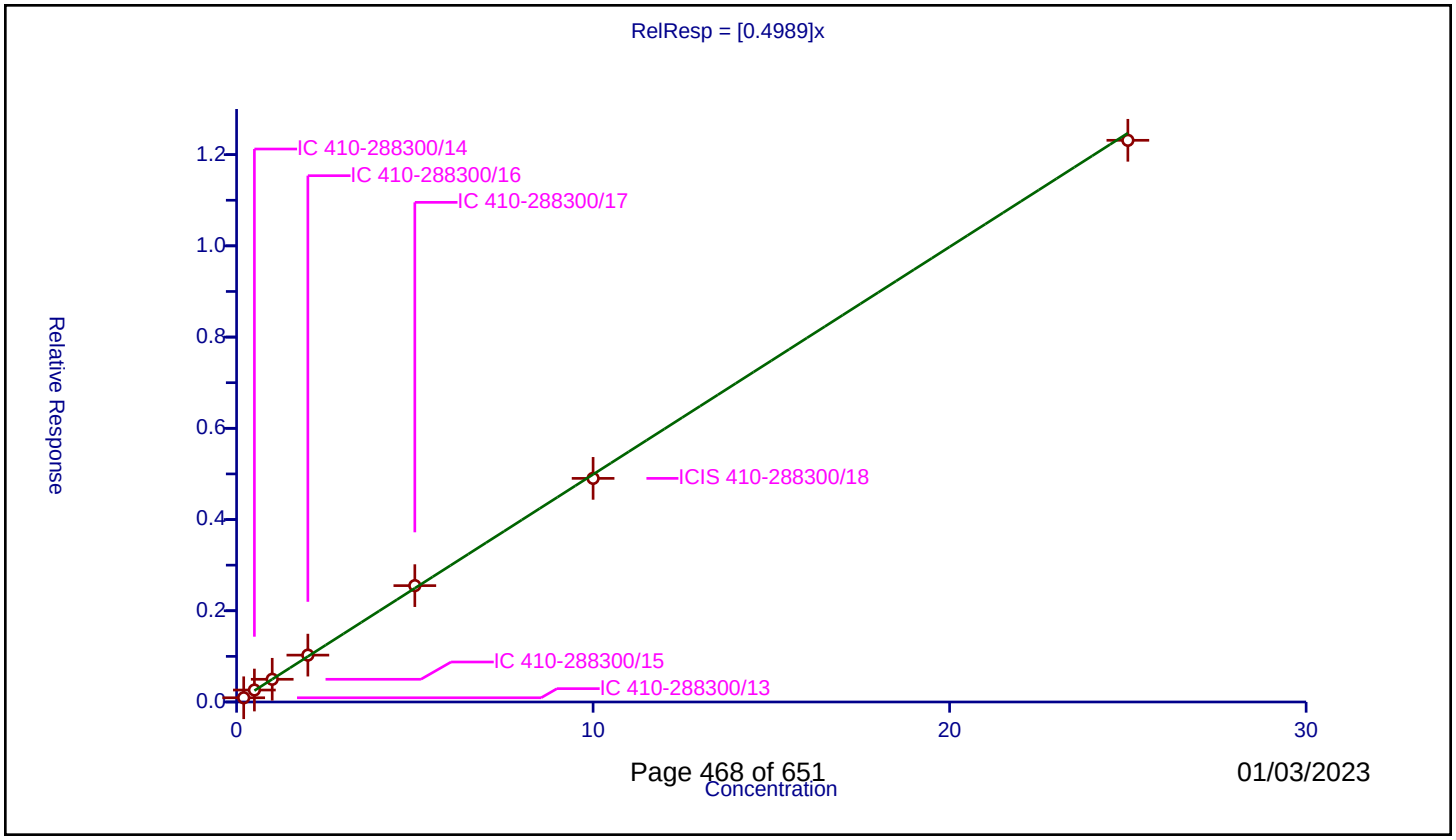
Curve Coefficients

Intercept:	0
Slope:	0.4989

Error Coefficients

Standard Error:	1110000
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 410-288300/13	0.2	0.092617	10.0	1993587.0	0.463085	Y
2	IC 410-288300/14	0.5	0.262266	10.0	1985770.0	0.524532	Y
3	IC 410-288300/15	1.0	0.497896	10.0	1978464.0	0.497896	Y
4	IC 410-288300/16	2.0	1.027281	10.0	1976130.0	0.51364	Y
5	IC 410-288300/17	5.0	2.550767	10.0	1966718.0	0.510153	Y
6	ICIS 410-288300/18	10.0	4.902606	10.0	1988424.0	0.490261	Y
7	IC 410-288300/19	25.0	12.31394	10.0	2013656.0	0.492558	Y



Calibration / Isopropyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

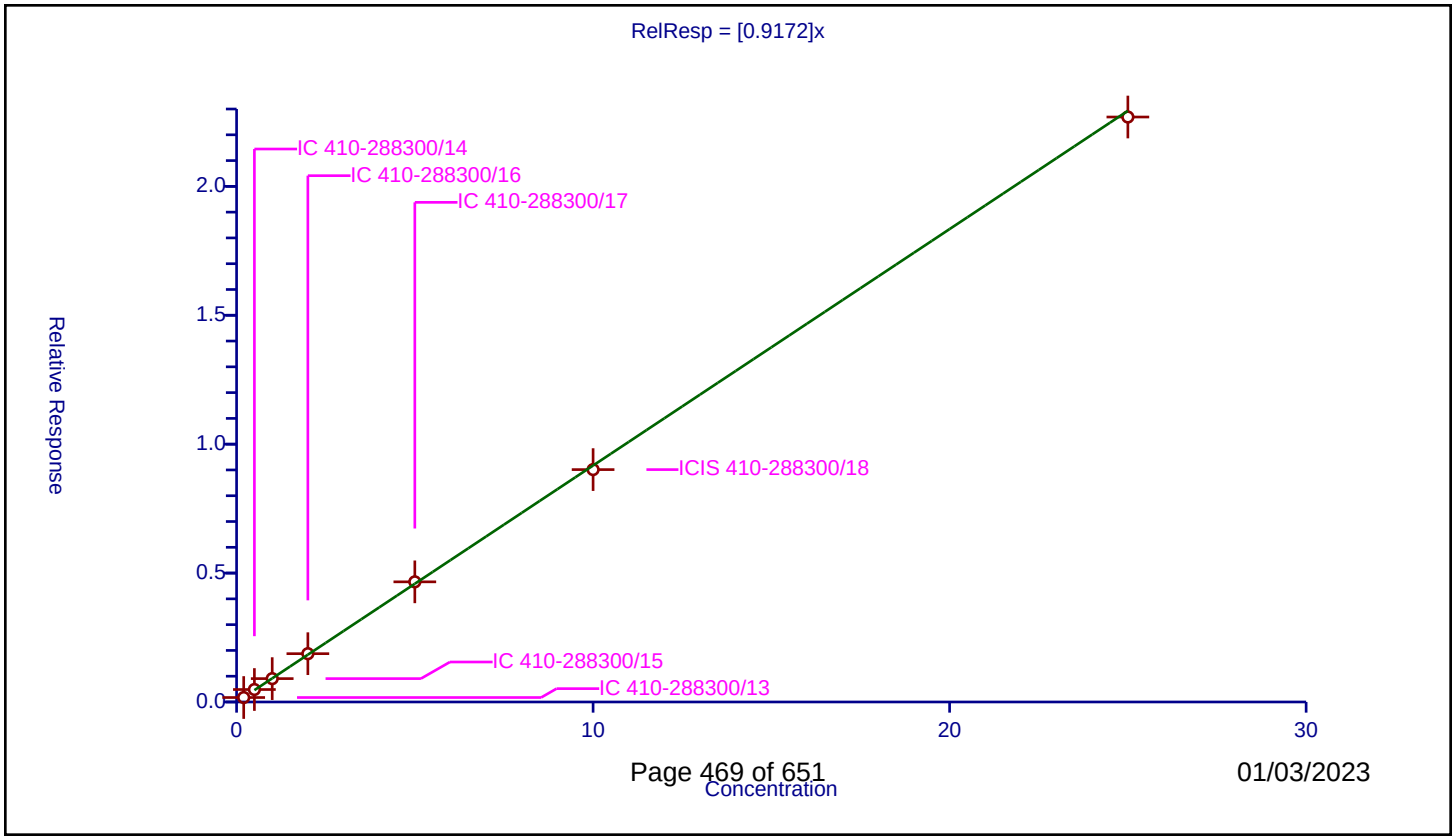
Curve Coefficients

Intercept:	0
Slope:	0.9172

Error Coefficients

Standard Error:	2050000
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 410-288300/13	0.2	0.173622	10.0	1993587.0	0.868109	Y
2	IC 410-288300/14	0.5	0.483958	10.0	1985770.0	0.967917	Y
3	IC 410-288300/15	1.0	0.906072	10.0	1978464.0	0.906072	Y
4	IC 410-288300/16	2.0	1.873713	10.0	1976130.0	0.936856	Y
5	IC 410-288300/17	5.0	4.660617	10.0	1966718.0	0.932123	Y
6	ICIS 410-288300/18	10.0	9.014204	10.0	1988424.0	0.90142	Y
7	IC 410-288300/19	25.0	22.689506	10.0	2013656.0	0.90758	Y



Calibration / 2-Chloro-1,3-butadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

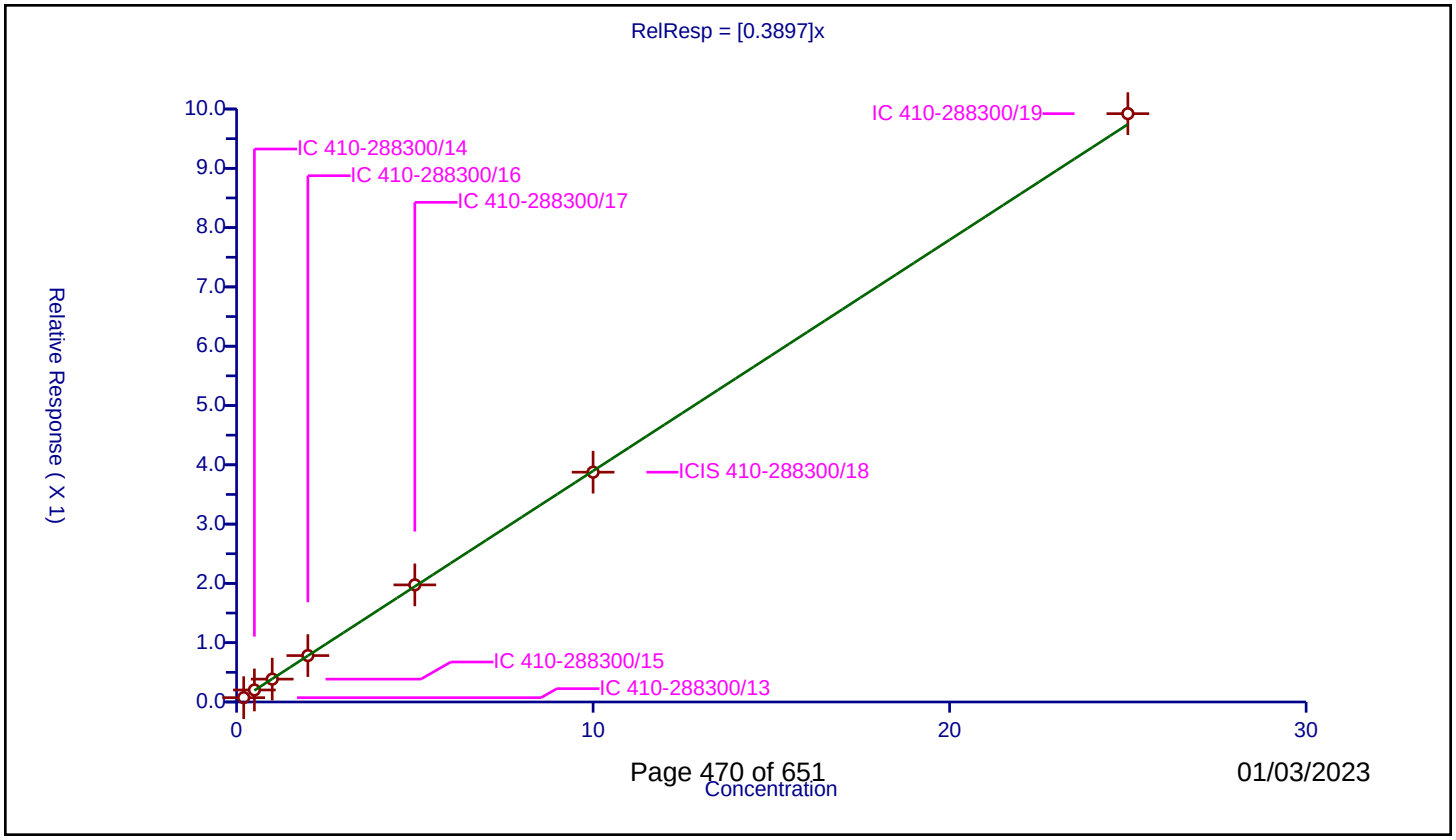
Curve Coefficients

Intercept:	0
Slope:	0.3897

Error Coefficients

Standard Error:	891000
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 410-288300/13	0.2	0.073265	10.0	1993587.0	0.366325	Y
2	IC 410-288300/14	0.5	0.202607	10.0	1985770.0	0.405213	Y
3	IC 410-288300/15	1.0	0.385572	10.0	1978464.0	0.385572	Y
4	IC 410-288300/16	2.0	0.782514	10.0	1976130.0	0.391257	Y
5	IC 410-288300/17	5.0	1.97497	10.0	1966718.0	0.394994	Y
6	ICIS 410-288300/18	10.0	3.875557	10.0	1988424.0	0.387556	Y
7	IC 410-288300/19	25.0	9.921873	10.0	2013656.0	0.396875	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

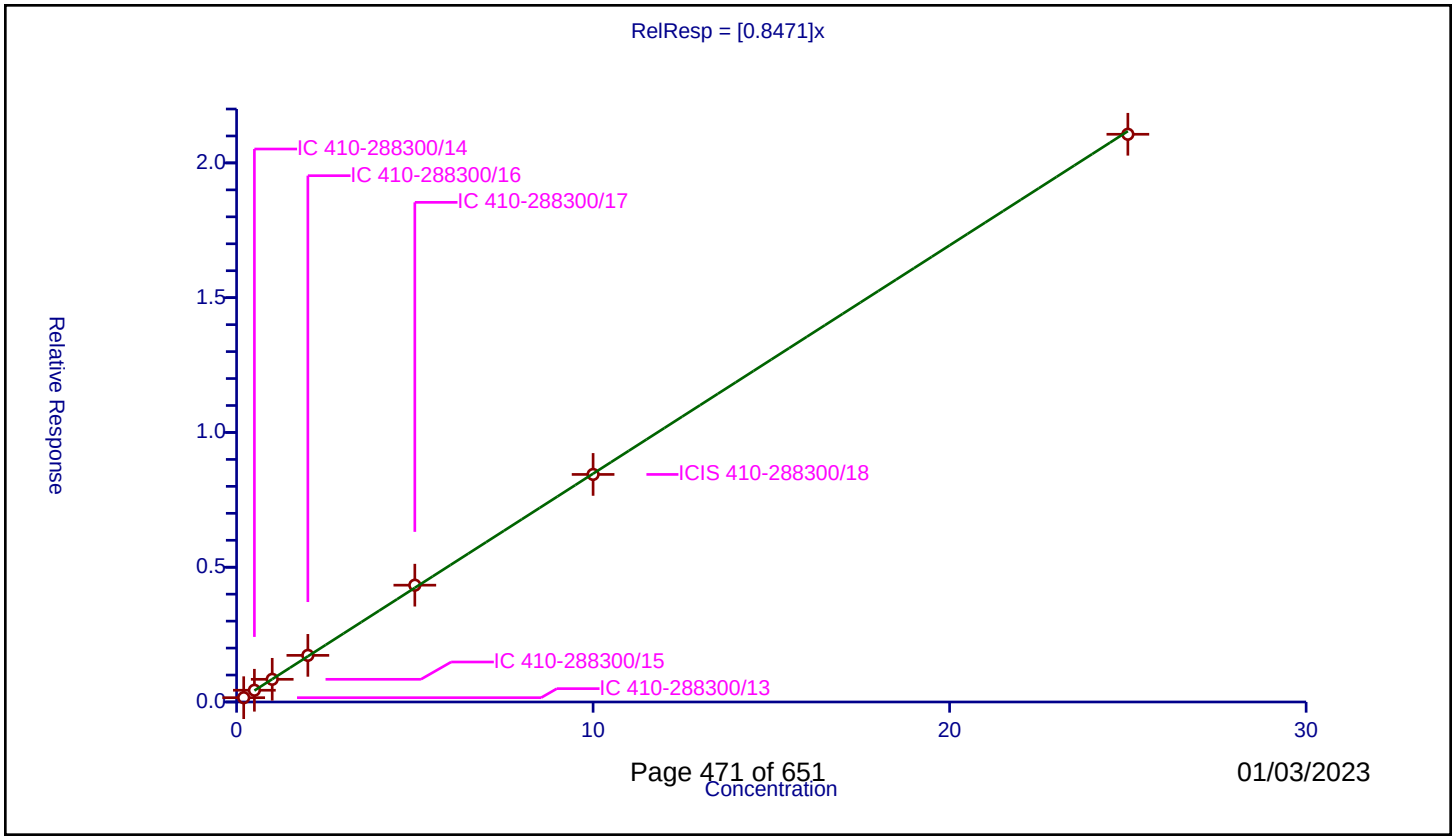
Curve Coefficients

Intercept:	0
Slope:	0.8471

Error Coefficients

Standard Error:	1900000
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 410-288300/13	0.2	0.159637	10.0	1993587.0	0.798184	Y
2	IC 410-288300/14	0.5	0.435987	10.0	1985770.0	0.871974	Y
3	IC 410-288300/15	1.0	0.841178	10.0	1978464.0	0.841178	Y
4	IC 410-288300/16	2.0	1.729608	10.0	1976130.0	0.864804	Y
5	IC 410-288300/17	5.0	4.333417	10.0	1966718.0	0.866683	Y
6	ICIS 410-288300/18	10.0	8.443124	10.0	1988424.0	0.844312	Y
7	IC 410-288300/19	25.0	21.063116	10.0	2013656.0	0.842525	Y



Calibration / 2-Butanone (MEK)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

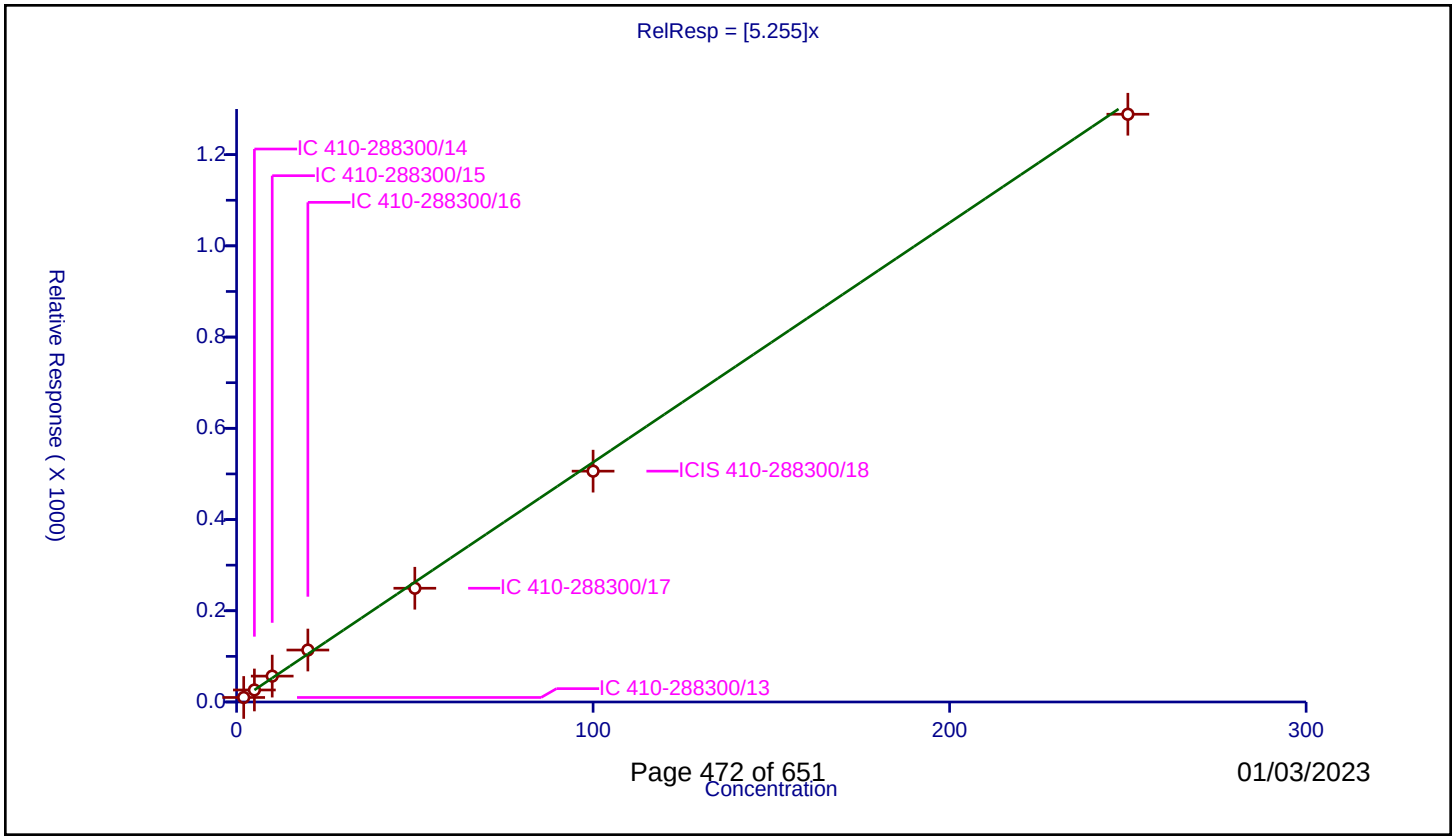
Curve Coefficients

Intercept:	0
Slope:	5.255

Error Coefficients

Standard Error:	1400000
Relative Standard Error:	5.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	2.0	9.892737	50.0	136580.0	4.946368	Y
2	IC 410-288300/14	5.0	26.32683	50.0	132044.0	5.265366	Y
3	IC 410-288300/15	10.0	56.740372	50.0	113154.0	5.674037	Y
4	IC 410-288300/16	20.0	113.920242	50.0	117656.0	5.696012	Y
5	IC 410-288300/17	50.0	249.342195	50.0	131878.0	4.986844	Y
6	ICIS 410-288300/18	100.0	506.095276	50.0	129707.0	5.060953	Y
7	IC 410-288300/19	250.0	1288.566752	50.0	119756.0	5.154267	Y



Calibration / 2,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

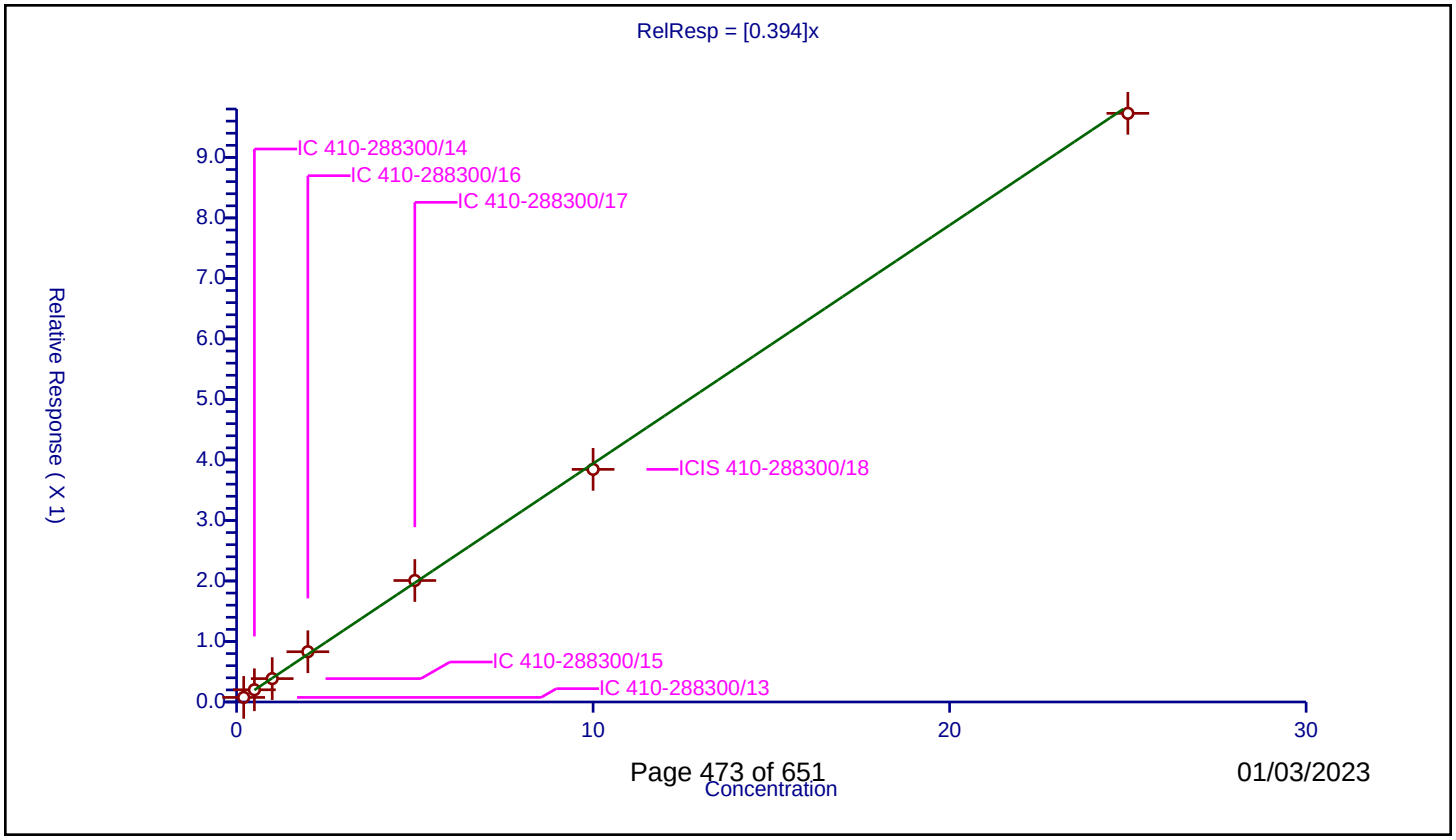
Curve Coefficients

Intercept:	0
Slope:	0.394

Error Coefficients

Standard Error:	877000
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 410-288300/13	0.2	0.075507	10.0	1993587.0	0.377536	Y
2	IC 410-288300/14	0.5	0.201871	10.0	1985770.0	0.403743	Y
3	IC 410-288300/15	1.0	0.386234	10.0	1978464.0	0.386234	Y
4	IC 410-288300/16	2.0	0.830735	10.0	1976130.0	0.415367	Y
5	IC 410-288300/17	5.0	2.00772	10.0	1966718.0	0.401544	Y
6	ICIS 410-288300/18	10.0	3.844738	10.0	1988424.0	0.384474	Y
7	IC 410-288300/19	25.0	9.728678	10.0	2013656.0	0.389147	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

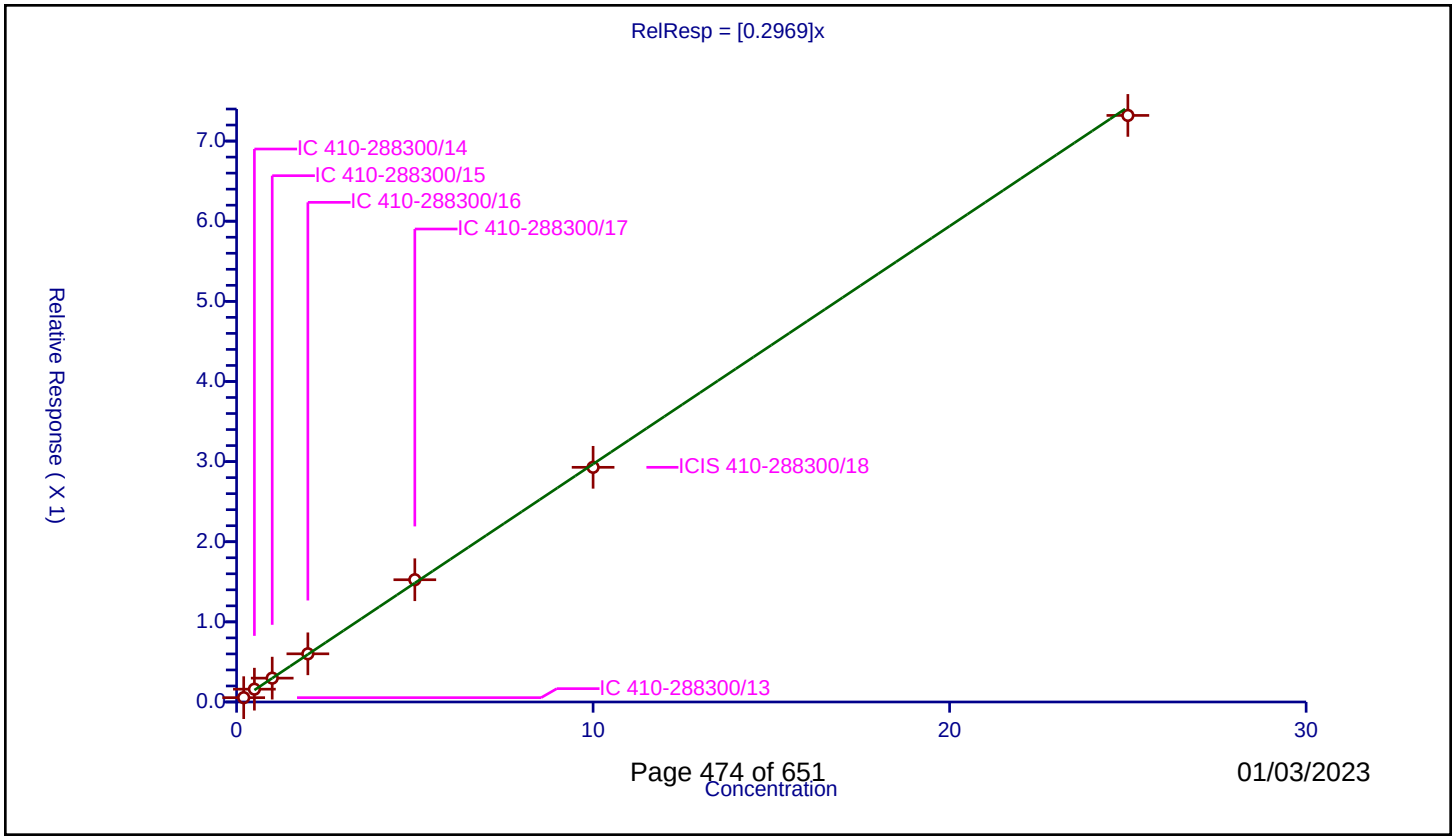
Curve Coefficients

Intercept:	0
Slope:	0.2969

Error Coefficients

Standard Error:	661000
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 410-288300/13	0.2	0.053928	10.0	1993587.0	0.26964	Y
2	IC 410-288300/14	0.5	0.159852	10.0	1985770.0	0.319705	Y
3	IC 410-288300/15	1.0	0.297716	10.0	1978464.0	0.297716	Y
4	IC 410-288300/16	2.0	0.6012	10.0	1976130.0	0.3006	Y
5	IC 410-288300/17	5.0	1.525704	10.0	1966718.0	0.305141	Y
6	ICIS 410-288300/18	10.0	2.928571	10.0	1988424.0	0.292857	Y
7	IC 410-288300/19	25.0	7.319979	10.0	2013656.0	0.292799	Y



Calibration / Propionitrile

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

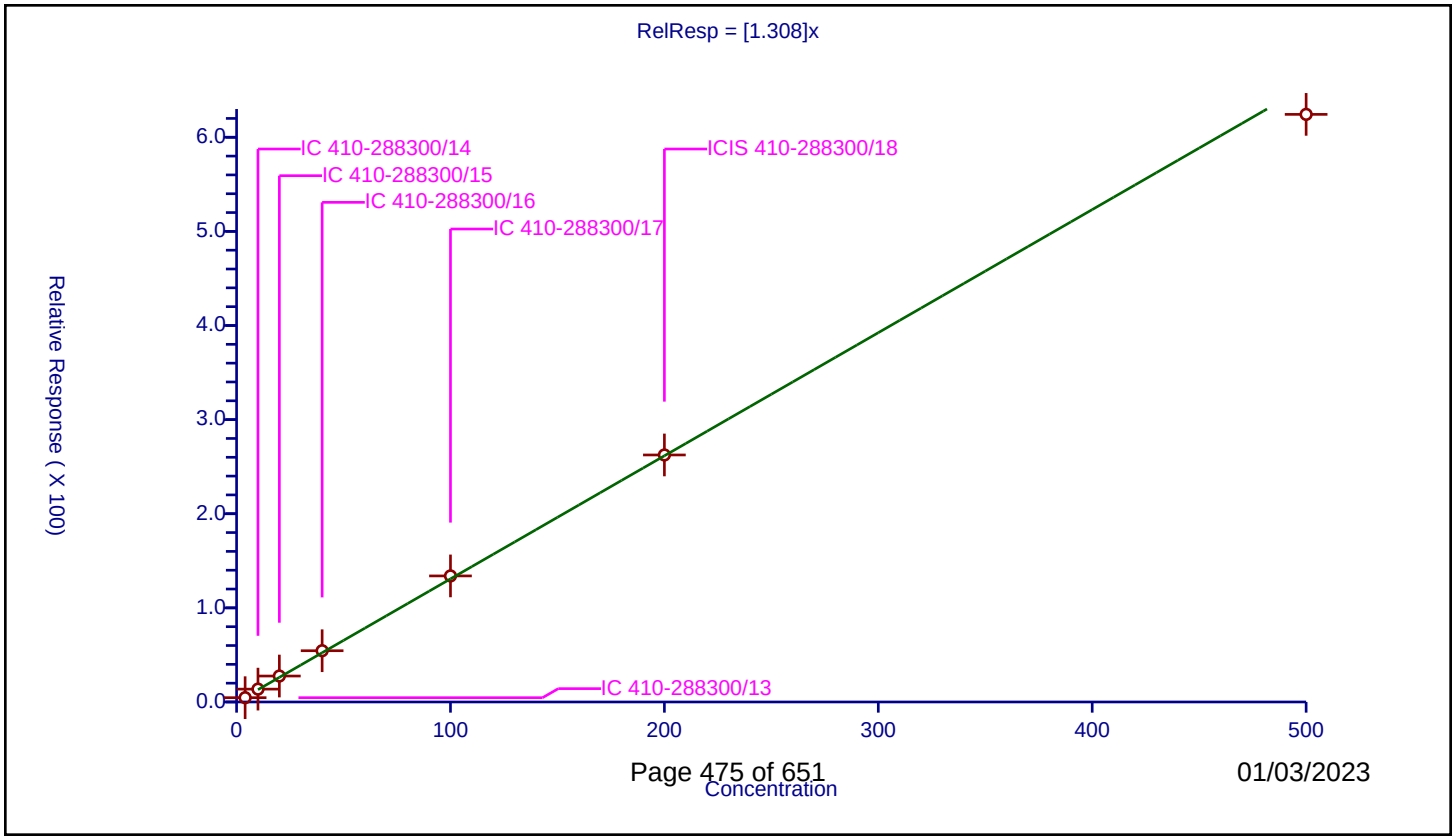
Curve Coefficients

Intercept:	0
Slope:	1.308

Error Coefficients

Standard Error:	688000
Relative Standard Error:	6.5
Correlation Coefficient:	0.996
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	4.0	4.5801	50.0	136580.0	1.145025	Y
2	IC 410-288300/14	10.0	13.681424	50.0	132044.0	1.368142	Y
3	IC 410-288300/15	20.0	27.588508	50.0	113154.0	1.379425	Y
4	IC 410-288300/16	40.0	54.477035	50.0	117656.0	1.361926	Y
5	IC 410-288300/17	100.0	133.938564	50.0	131878.0	1.339386	Y
6	ICIS 410-288300/18	200.0	262.461933	50.0	129707.0	1.31231	Y
7	IC 410-288300/19	500.0	624.311517	50.0	119756.0	1.248623	Y



Calibration / Methacrylonitrile

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

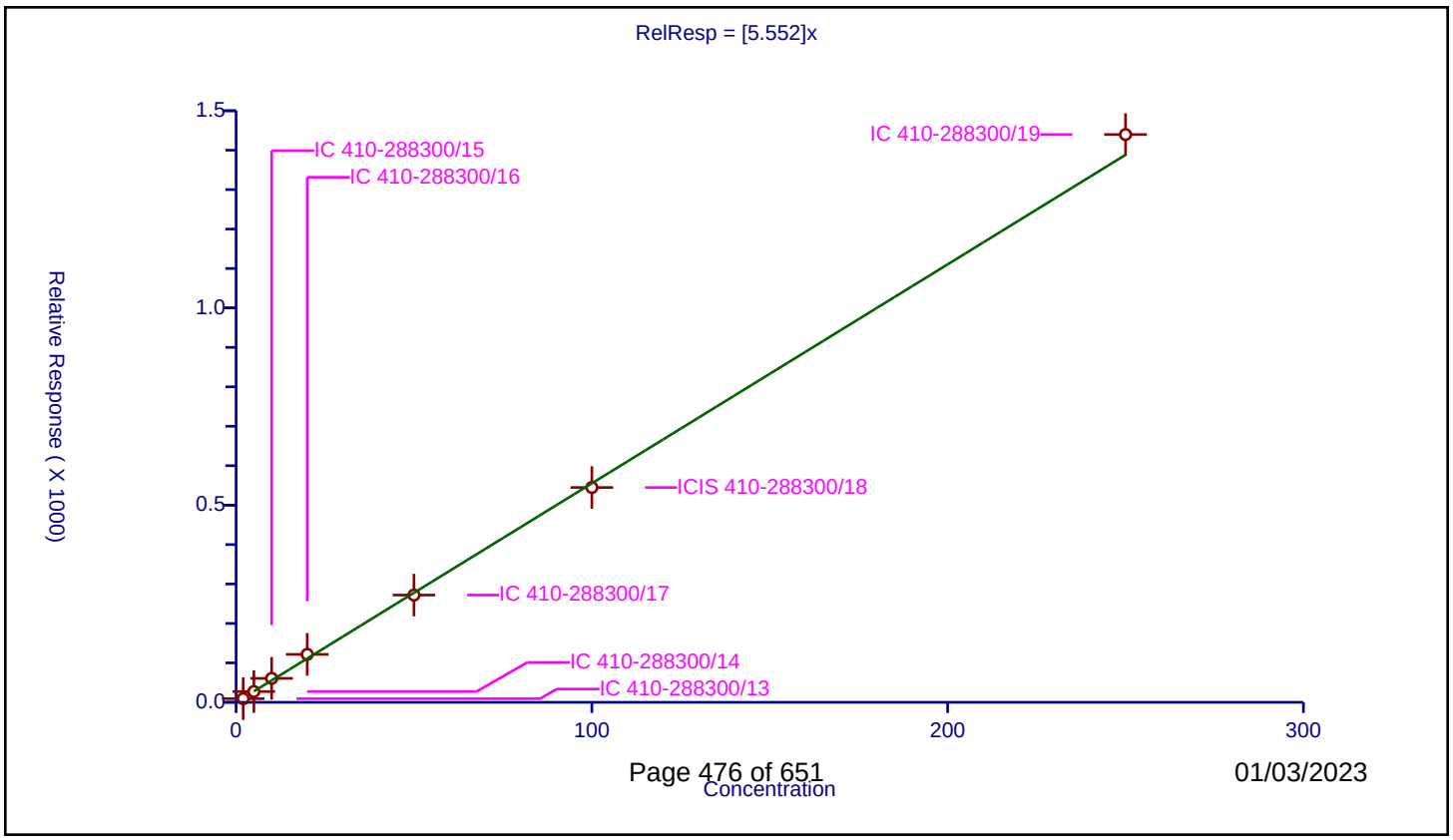
Curve Coefficients

Intercept:	0
Slope:	5.552

Error Coefficients

Standard Error:	1550000
Relative Standard Error:	9.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	2.0	9.233416	50.0	136580.0	4.616708	Y
2	IC 410-288300/14	5.0	27.315137	50.0	132044.0	5.463027	Y
3	IC 410-288300/15	10.0	60.657158	50.0	113154.0	6.065716	Y
4	IC 410-288300/16	20.0	121.542888	50.0	117656.0	6.077144	Y
5	IC 410-288300/17	50.0	271.956657	50.0	131878.0	5.439133	Y
6	ICIS 410-288300/18	100.0	544.680318	50.0	129707.0	5.446803	Y
7	IC 410-288300/19	250.0	1439.706153	50.0	119756.0	5.758825	Y



Calibration / Chlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

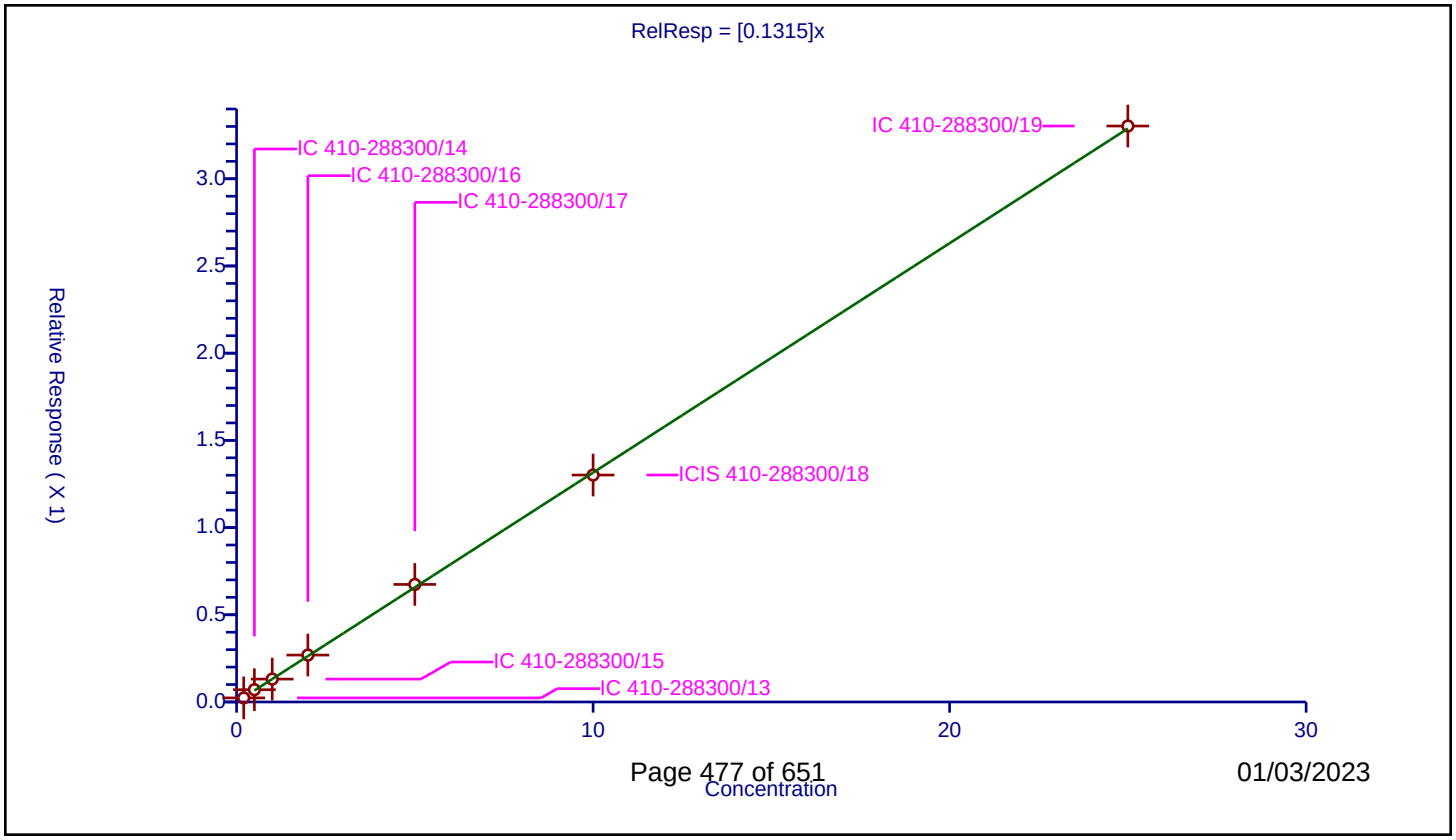
Curve Coefficients

Intercept:	0
Slope:	0.1315

Error Coefficients

Standard Error:	297000
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 410-288300/13	0.2	0.02343	10.0	1993587.0	0.117151	Y
2	IC 410-288300/14	0.5	0.07034	10.0	1985770.0	0.140681	Y
3	IC 410-288300/15	1.0	0.131243	10.0	1978464.0	0.131243	Y
4	IC 410-288300/16	2.0	0.269092	10.0	1976130.0	0.134546	Y
5	IC 410-288300/17	5.0	0.674057	10.0	1966718.0	0.134811	Y
6	ICIS 410-288300/18	10.0	1.301302	10.0	1988424.0	0.13013	Y
7	IC 410-288300/19	25.0	3.302411	10.0	2013656.0	0.132096	Y



Calibration / Tetrahydrofuran

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

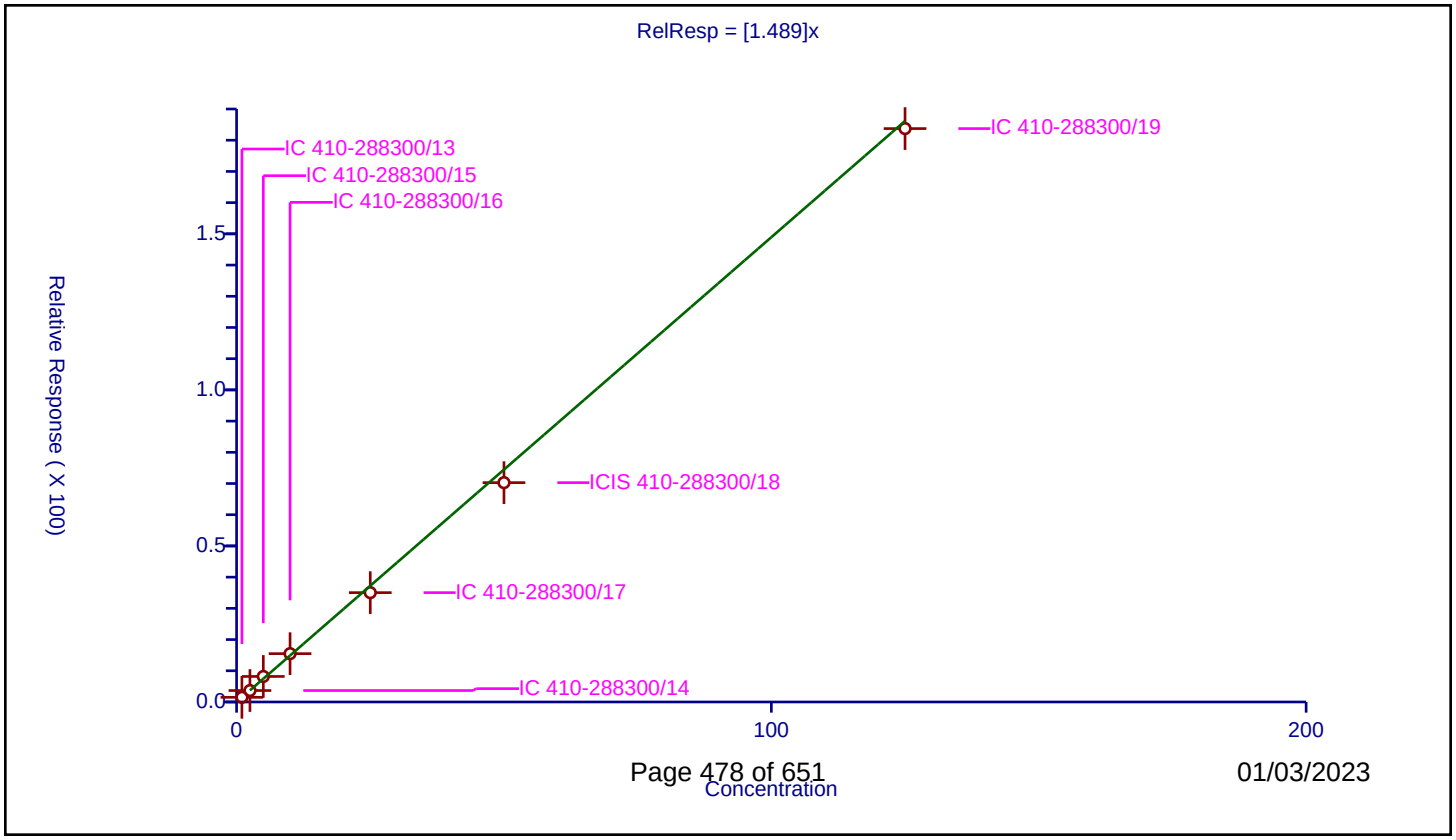
Curve Coefficients

Intercept:	0
Slope:	1.489

Error Coefficients

Standard Error:	199000
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 410-288300/13	1.0	1.497657	50.0	136580.0	1.497657	Y
2	IC 410-288300/14	2.5	3.665824	50.0	132044.0	1.466329	Y
3	IC 410-288300/15	5.0	8.177351	50.0	113154.0	1.63547	Y
4	IC 410-288300/16	10.0	15.485823	50.0	117656.0	1.548582	Y
5	IC 410-288300/17	25.0	35.035032	50.0	131878.0	1.401401	Y
6	ICIS 410-288300/18	50.0	70.281481	50.0	129707.0	1.40563	Y
7	IC 410-288300/19	125.0	183.726494	50.0	119756.0	1.469812	Y



Calibration / Chloroform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

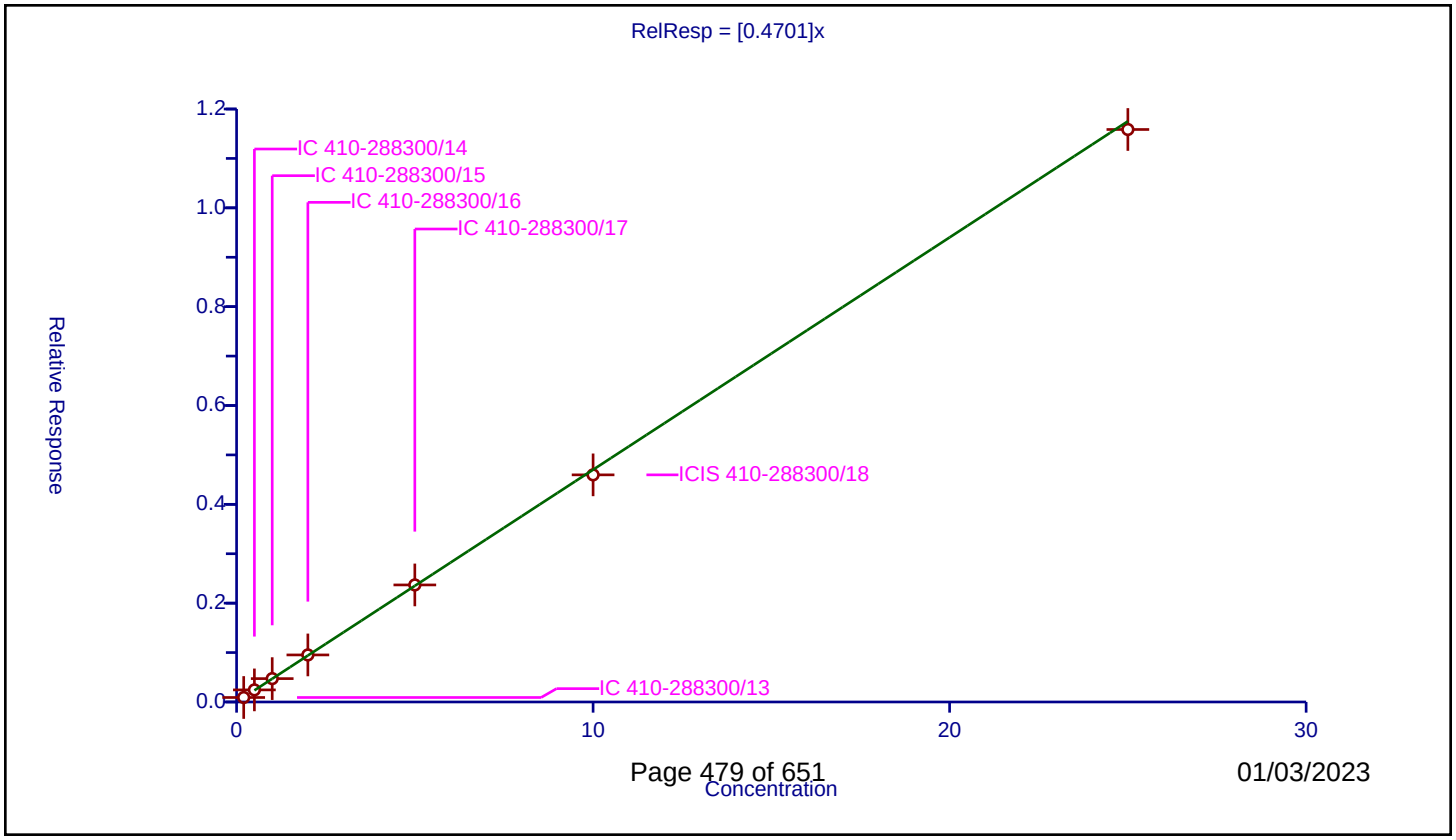
Curve Coefficients

Intercept:	0
Slope:	0.4701

Error Coefficients

Standard Error:	1040000
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 410-288300/13	0.2	0.091042	10.0	1993587.0	0.45521	Y
2	IC 410-288300/14	0.5	0.244641	10.0	1985770.0	0.489281	Y
3	IC 410-288300/15	1.0	0.47312	10.0	1978464.0	0.47312	Y
4	IC 410-288300/16	2.0	0.952103	10.0	1976130.0	0.476052	Y
5	IC 410-288300/17	5.0	2.368997	10.0	1966718.0	0.473799	Y
6	ICIS 410-288300/18	10.0	4.596721	10.0	1988424.0	0.459672	Y
7	IC 410-288300/19	25.0	11.585494	10.0	2013656.0	0.46342	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

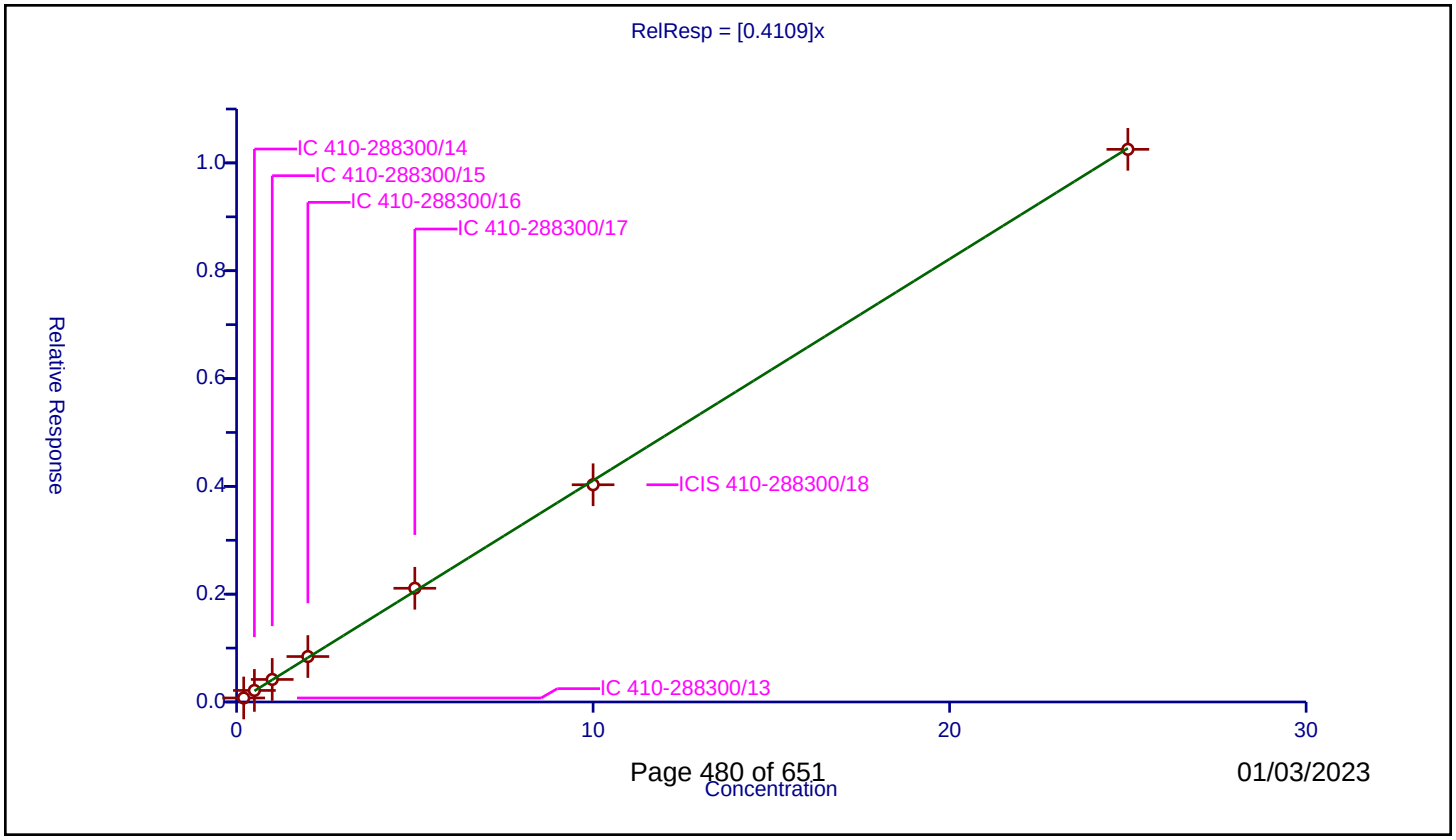
Curve Coefficients

Intercept:	0
Slope:	0.4109

Error Coefficients

Standard Error:	923000
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 410-288300/13	0.2	0.074549	10.0	1993587.0	0.372745	Y
2	IC 410-288300/14	0.5	0.21432	10.0	1985770.0	0.42864	Y
3	IC 410-288300/15	1.0	0.418239	10.0	1978464.0	0.418239	Y
4	IC 410-288300/16	2.0	0.843173	10.0	1976130.0	0.421587	Y
5	IC 410-288300/17	5.0	2.109697	10.0	1966718.0	0.421939	Y
6	ICIS 410-288300/18	10.0	4.030116	10.0	1988424.0	0.403012	Y
7	IC 410-288300/19	25.0	10.251955	10.0	2013656.0	0.410078	Y



Calibration / Dibromofluoromethane (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

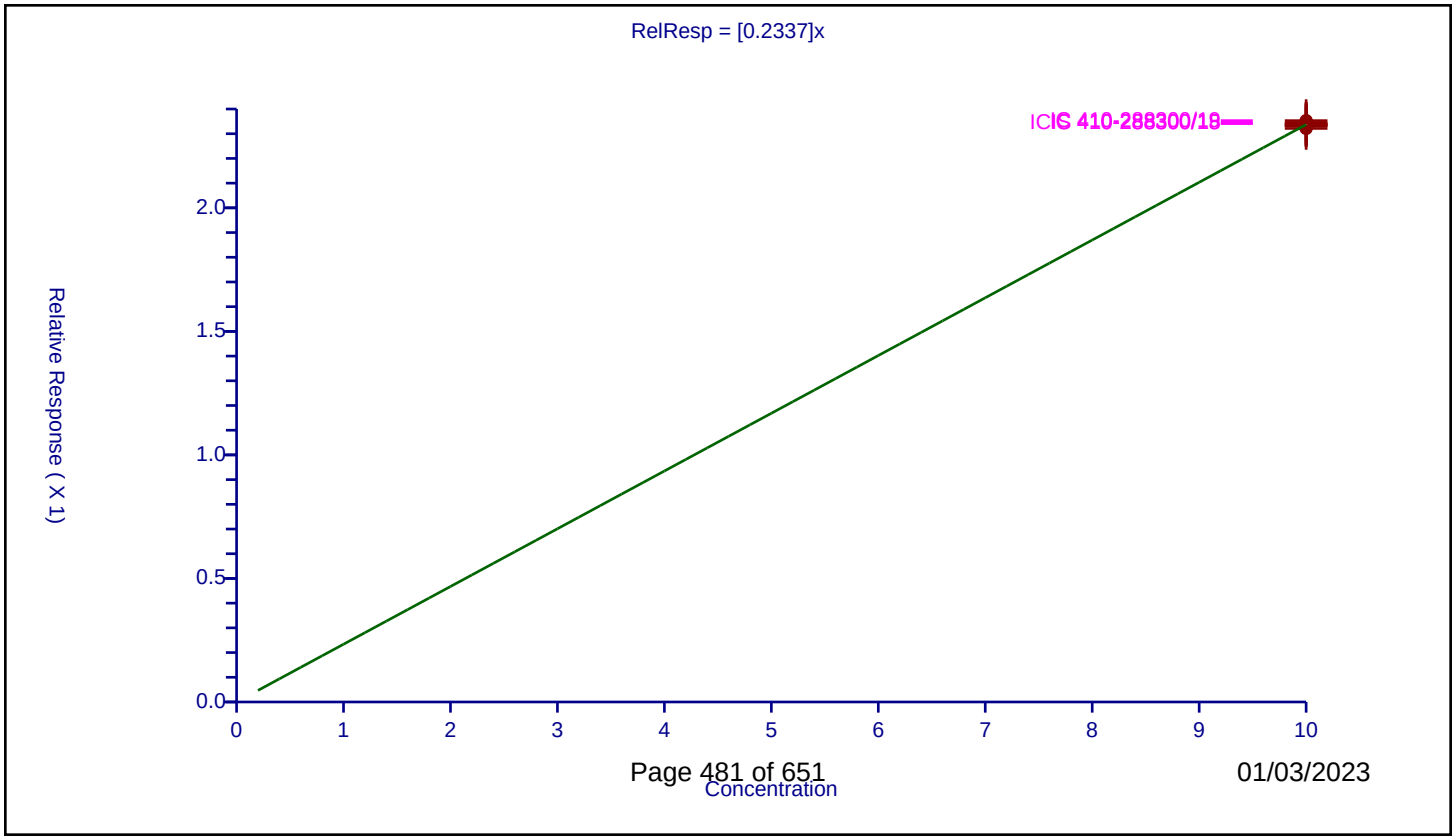
Curve Coefficients

Intercept:	0
Slope:	0.2337

Error Coefficients

Standard Error:	501000
Relative Standard Error:	0.4
Correlation Coefficient:	0
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	10.0	2.332424	10.0	1993587.0	0.233242	Y
2	IC 410-288300/14	10.0	2.336162	10.0	1985770.0	0.233616	Y
3	IC 410-288300/15	10.0	2.341478	10.0	1978464.0	0.234148	Y
4	IC 410-288300/16	10.0	2.321391	10.0	1976130.0	0.232139	Y
5	IC 410-288300/17	10.0	2.332465	10.0	1966718.0	0.233246	Y
6	ICIS 410-288300/18	10.0	2.342257	10.0	1988424.0	0.234226	Y
7	IC 410-288300/19	10.0	2.352924	10.0	2013656.0	0.235292	Y



Calibration / Cyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

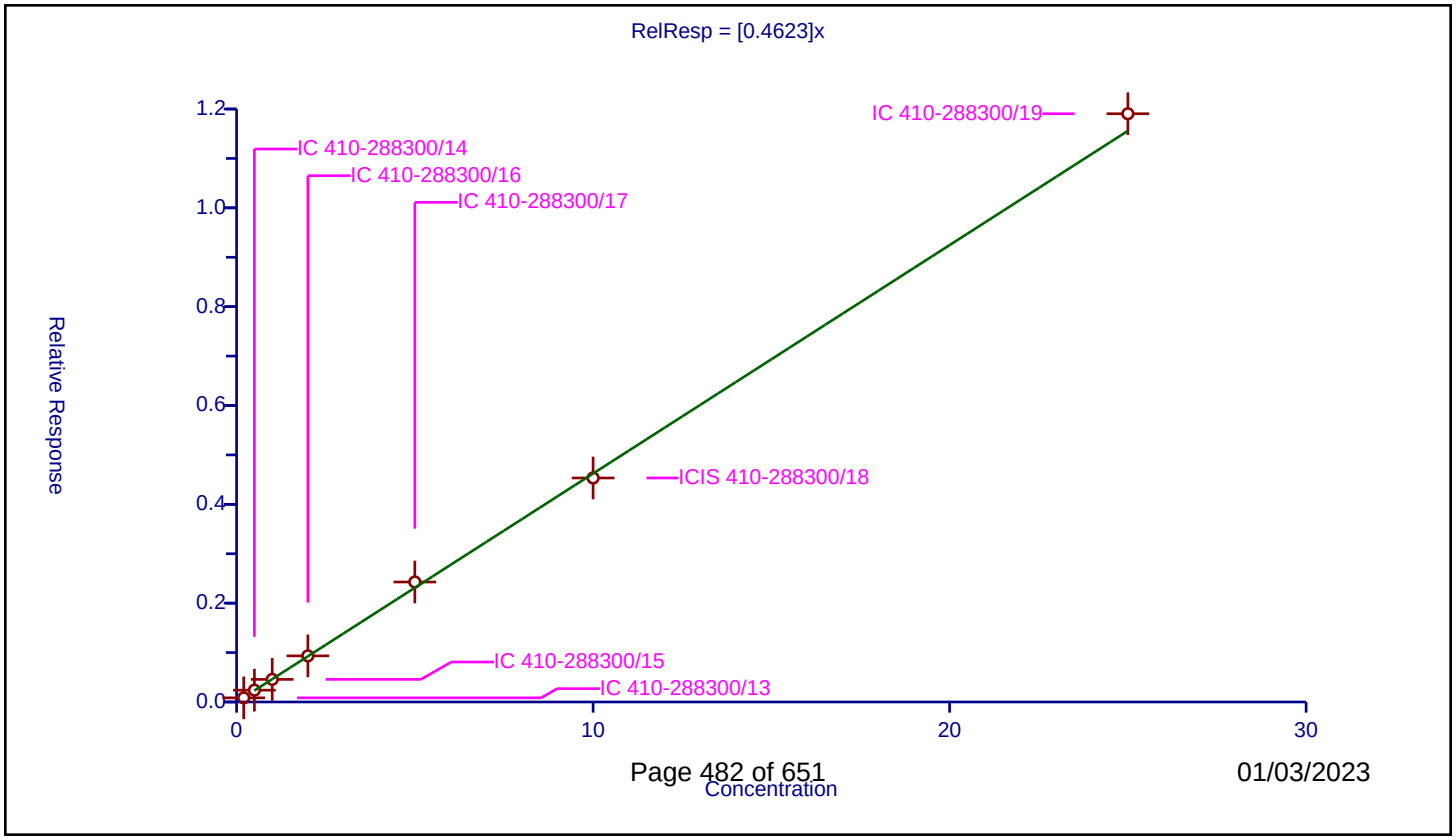
Curve Coefficients

Intercept:	0
Slope:	0.4623

Error Coefficients

Standard Error:	1070000
Relative Standard Error:	4.9
Correlation Coefficient:	0.999
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.2	0.083733	10.0	1993587.0	0.418667	Y
2	IC 410-288300/14	0.5	0.239187	10.0	1985770.0	0.478374	Y
3	IC 410-288300/15	1.0	0.457426	10.0	1978464.0	0.457426	Y
4	IC 410-288300/16	2.0	0.933071	10.0	1976130.0	0.466536	Y
5	IC 410-288300/17	5.0	2.428411	10.0	1966718.0	0.485682	Y
6	ICIS 410-288300/18	10.0	4.533098	10.0	1988424.0	0.45331	Y
7	IC 410-288300/19	25.0	11.90462	10.0	2013656.0	0.476185	Y



Calibration / Carbon tetrachloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

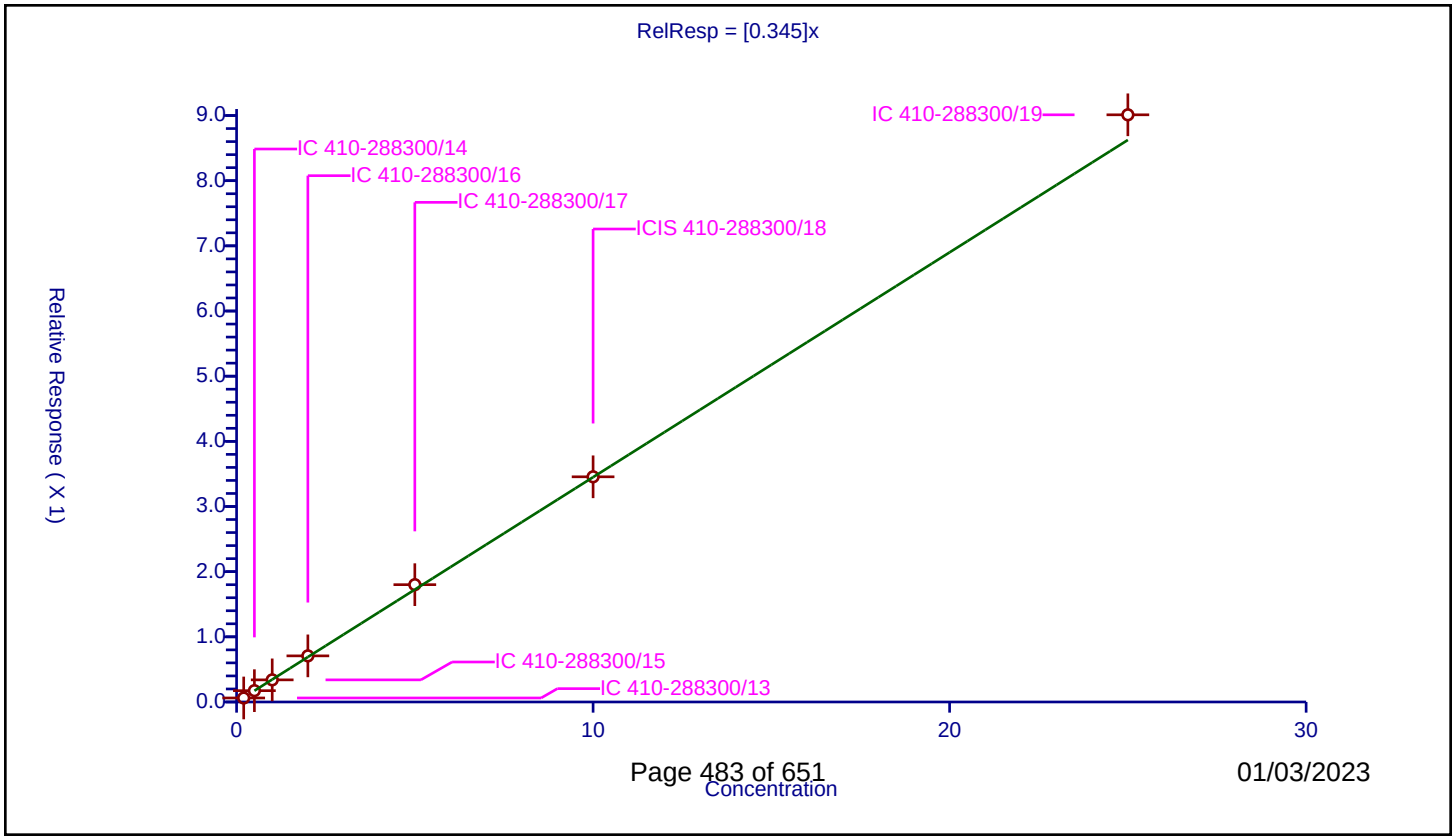
Curve Coefficients

Intercept:	0
Slope:	0.345

Error Coefficients

Standard Error:	808000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.2	0.061598	10.0	1993587.0	0.307988	Y
2	IC 410-288300/14	0.5	0.173842	10.0	1985770.0	0.347684	Y
3	IC 410-288300/15	1.0	0.339359	10.0	1978464.0	0.339359	Y
4	IC 410-288300/16	2.0	0.707686	10.0	1976130.0	0.353843	Y
5	IC 410-288300/17	5.0	1.800385	10.0	1966718.0	0.360077	Y
6	ICIS 410-288300/18	10.0	3.455681	10.0	1988424.0	0.345568	Y
7	IC 410-288300/19	25.0	9.011132	10.0	2013656.0	0.360445	Y



Calibration / 1,1-Dichloropropene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

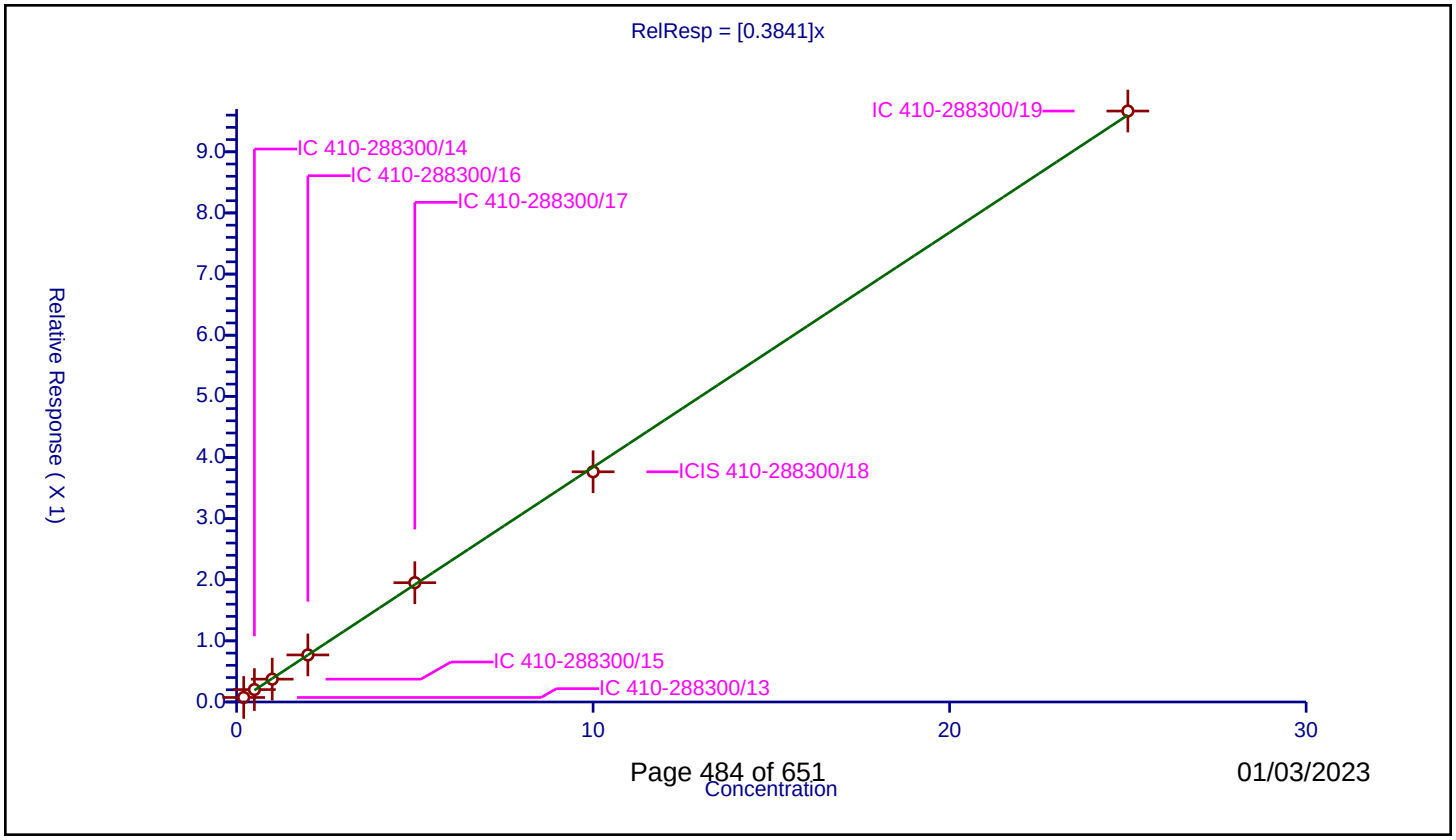
Curve Coefficients

Intercept:	0
Slope:	0.3841

Error Coefficients

Standard Error:	869000
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 410-288300/13	0.2	0.074123	10.0	1993587.0	0.370613	Y
2	IC 410-288300/14	0.5	0.203004	10.0	1985770.0	0.406009	Y
3	IC 410-288300/15	1.0	0.373537	10.0	1978464.0	0.373537	Y
4	IC 410-288300/16	2.0	0.769529	10.0	1976130.0	0.384765	Y
5	IC 410-288300/17	5.0	1.951556	10.0	1966718.0	0.390311	Y
6	ICIS 410-288300/18	10.0	3.765635	10.0	1988424.0	0.376564	Y
7	IC 410-288300/19	25.0	9.66686	10.0	2013656.0	0.386674	Y



Calibration / Isobutyl alcohol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

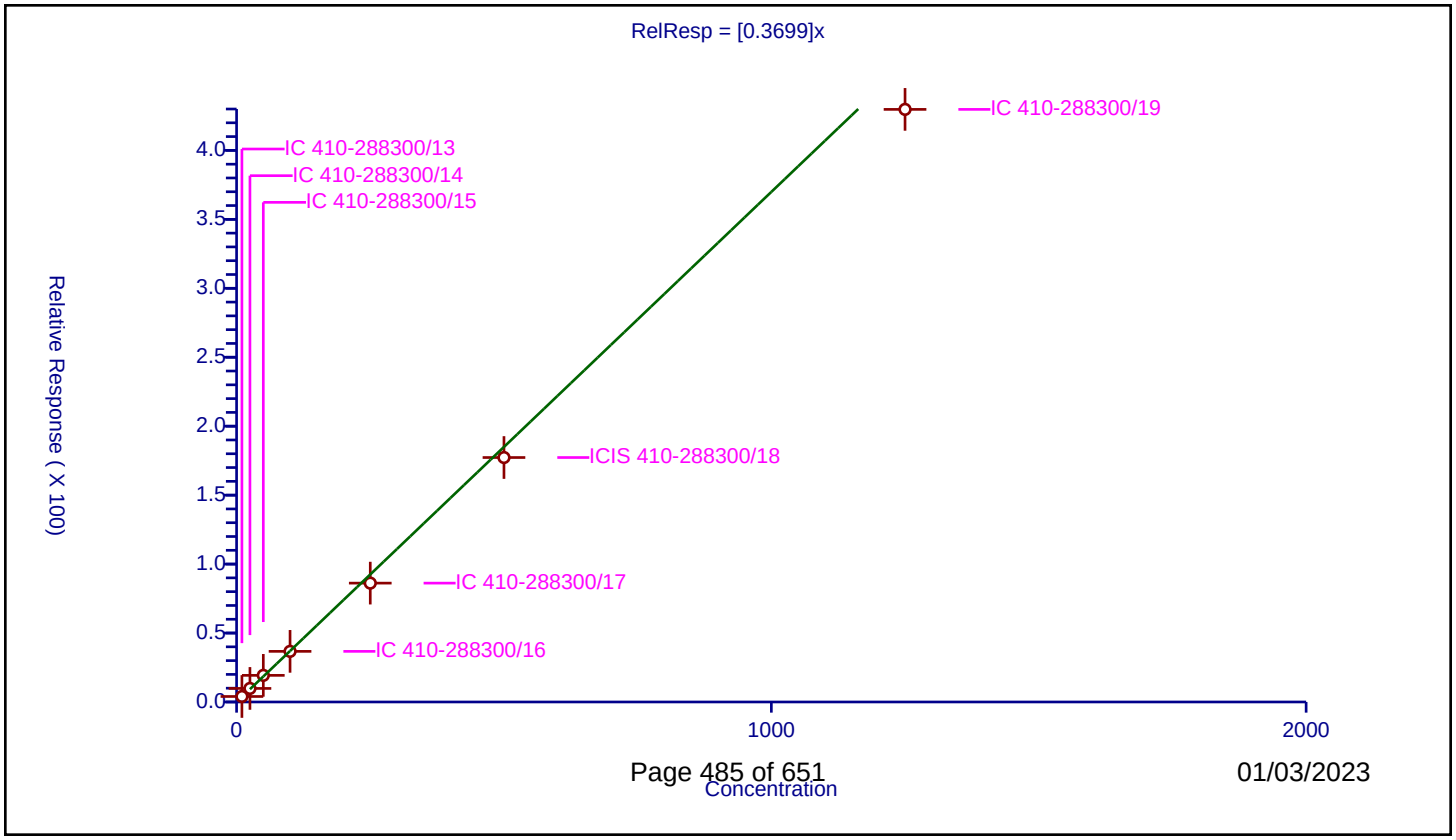
Curve Coefficients

Intercept:	0
Slope:	0.3699

Error Coefficients

Standard Error:	471000
Relative Standard Error:	6.3
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	0.994

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	10.0	3.995827	50.0	136580.0	0.399583	Y
2	IC 410-288300/14	25.0	9.828163	50.0	132044.0	0.393127	Y
3	IC 410-288300/15	50.0	19.317479	50.0	113154.0	0.38635	Y
4	IC 410-288300/16	100.0	36.713385	50.0	117656.0	0.367134	Y
5	IC 410-288300/17	250.0	86.198229	50.0	131878.0	0.344793	Y
6	ICIS 410-288300/18	500.0	177.268767	50.0	129707.0	0.354538	Y
7	IC 410-288300/19	1250.0	429.726277	50.0	119756.0	0.343781	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

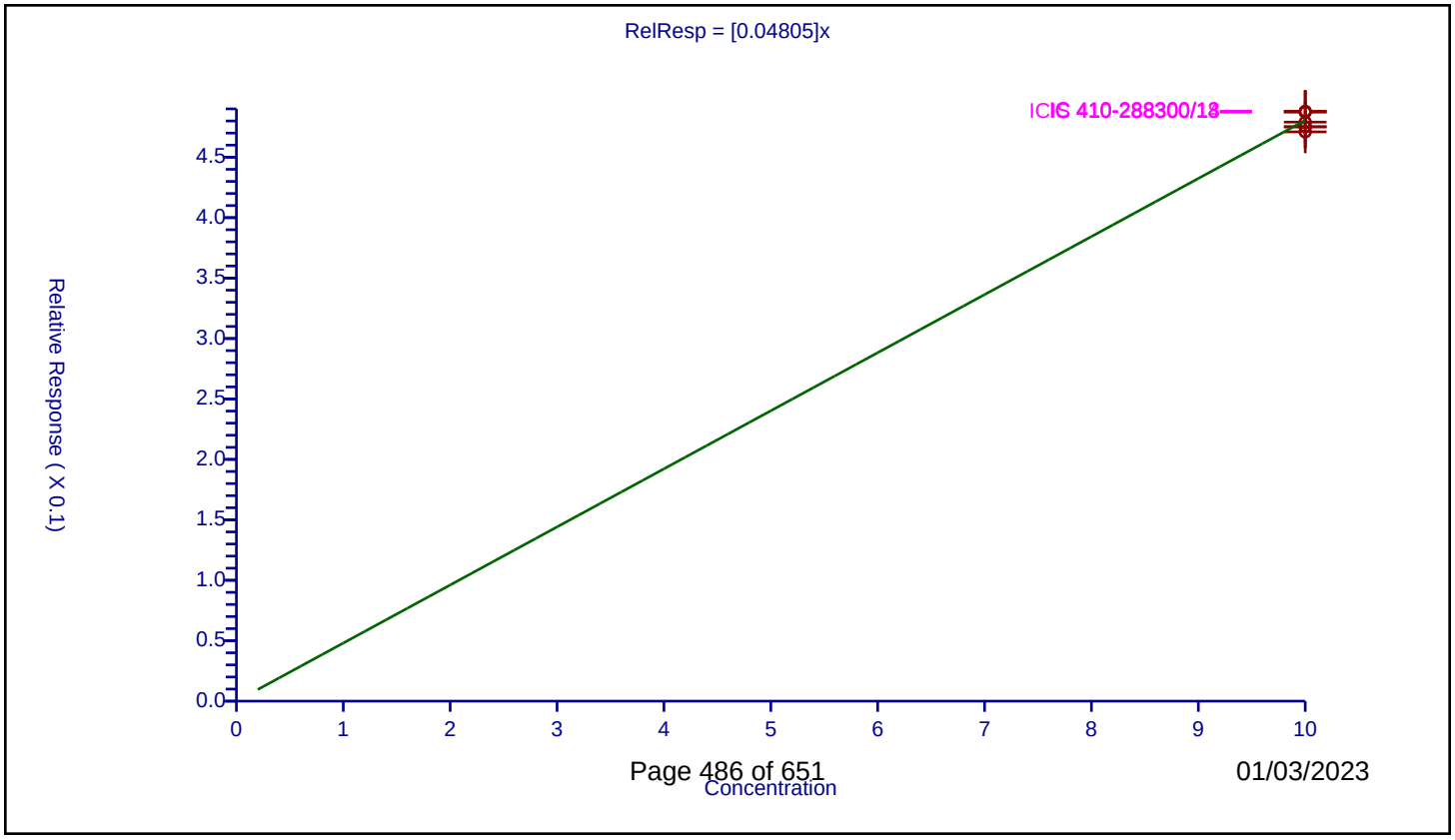
Curve Coefficients

Intercept:	0
Slope:	0.04805

Error Coefficients

Standard Error:	103000
Relative Standard Error:	1.5
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0.00000000000000000111

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	10.0	0.48801	10.0	1993587.0	0.048801	Y
2	IC 410-288300/14	10.0	0.487418	10.0	1985770.0	0.048742	Y
3	IC 410-288300/15	10.0	0.475222	10.0	1978464.0	0.047522	Y
4	IC 410-288300/16	10.0	0.475151	10.0	1976130.0	0.047515	Y
5	IC 410-288300/17	10.0	0.470978	10.0	1966718.0	0.047098	Y
6	ICIS 410-288300/18	10.0	0.487567	10.0	1988424.0	0.048757	Y
7	IC 410-288300/19	10.0	0.479059	10.0	2013656.0	0.047906	Y



Calibration / Benzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

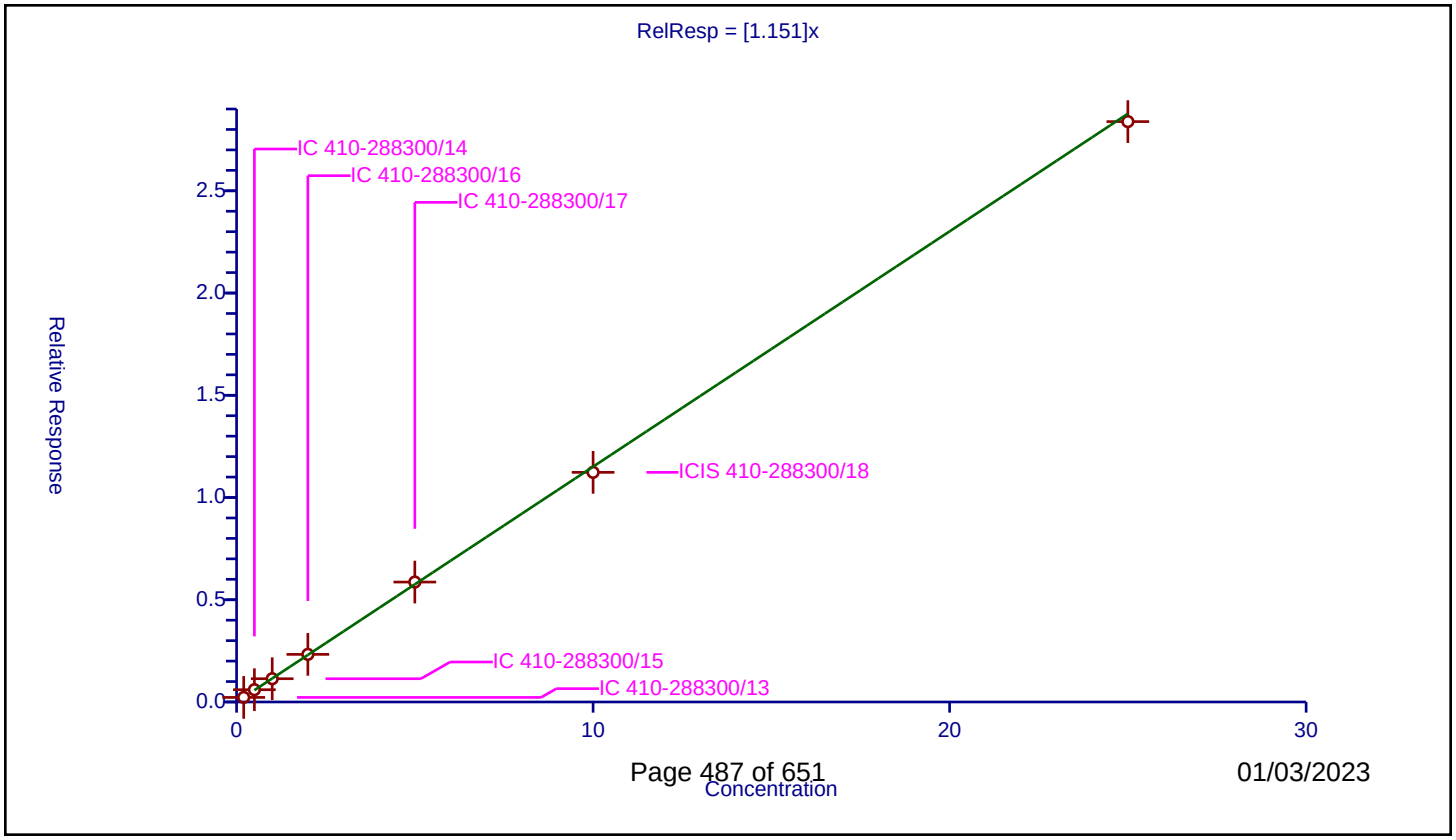
Curve Coefficients

Intercept:	0
Slope:	1.151

Error Coefficients

Standard Error:	2560000
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 410-288300/13	0.2	0.224063	10.0	1993587.0	1.120317	Y
2	IC 410-288300/14	0.5	0.600739	10.0	1985770.0	1.201479	Y
3	IC 410-288300/15	1.0	1.137514	10.0	1978464.0	1.137514	Y
4	IC 410-288300/16	2.0	2.329138	10.0	1976130.0	1.164569	Y
5	IC 410-288300/17	5.0	5.865869	10.0	1966718.0	1.173174	Y
6	ICIS 410-288300/18	10.0	11.230708	10.0	1988424.0	1.123071	Y
7	IC 410-288300/19	25.0	28.384873	10.0	2013656.0	1.135395	Y



Calibration / 1,2-Dichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

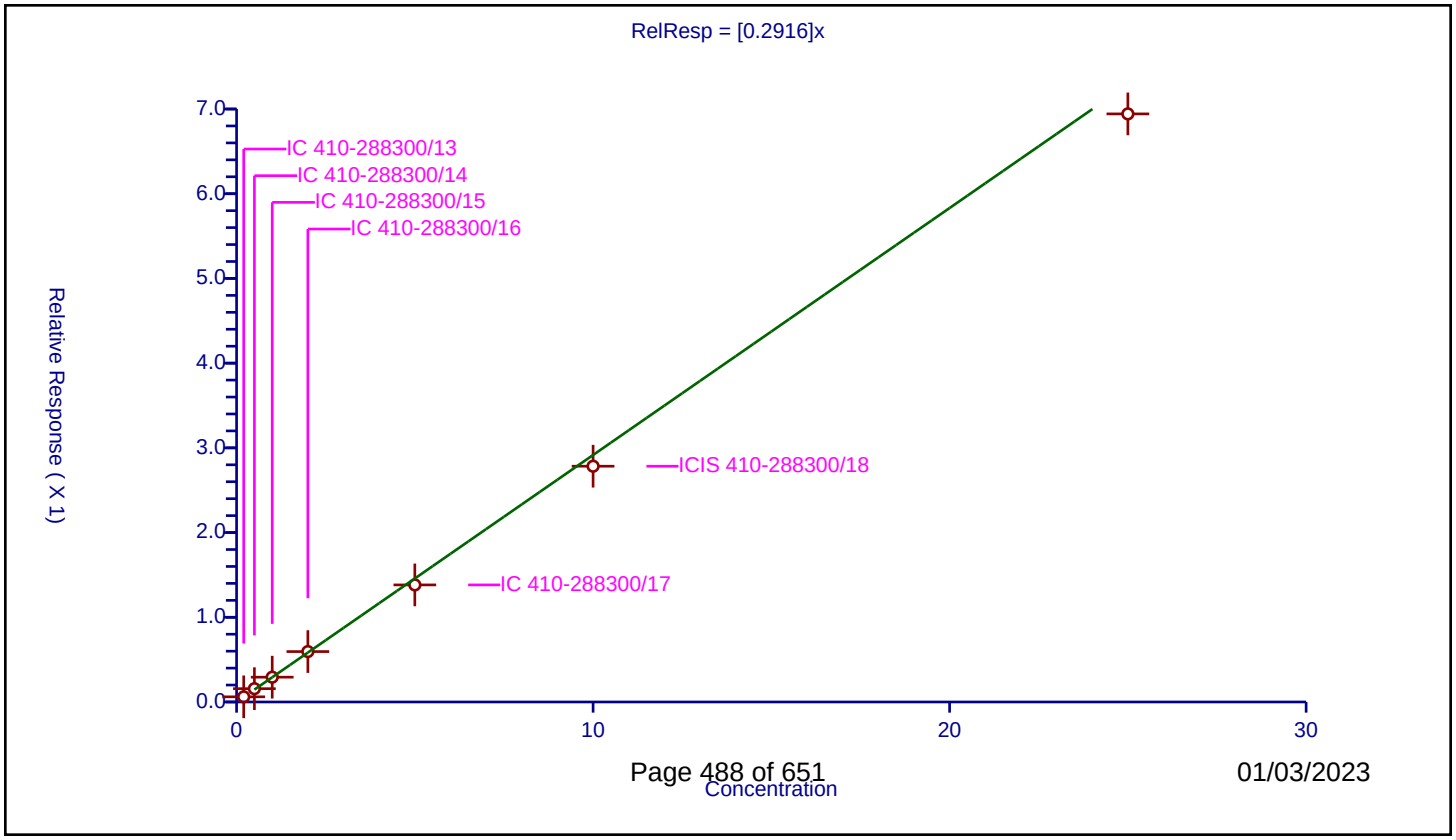
Curve Coefficients

Intercept:	0
Slope:	0.2916

Error Coefficients

Standard Error:	626000
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 410-288300/13	0.2	0.06076	10.0	1993587.0	0.303799	Y
2	IC 410-288300/14	0.5	0.157168	10.0	1985770.0	0.314337	Y
3	IC 410-288300/15	1.0	0.292798	10.0	1978464.0	0.292798	Y
4	IC 410-288300/16	2.0	0.595148	10.0	1976130.0	0.297574	Y
5	IC 410-288300/17	5.0	1.382023	10.0	1966718.0	0.276405	Y
6	ICIS 410-288300/18	10.0	2.783425	10.0	1988424.0	0.278343	Y
7	IC 410-288300/19	25.0	6.942407	10.0	2013656.0	0.277696	Y



Calibration / Tert-amyl methyl ether

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

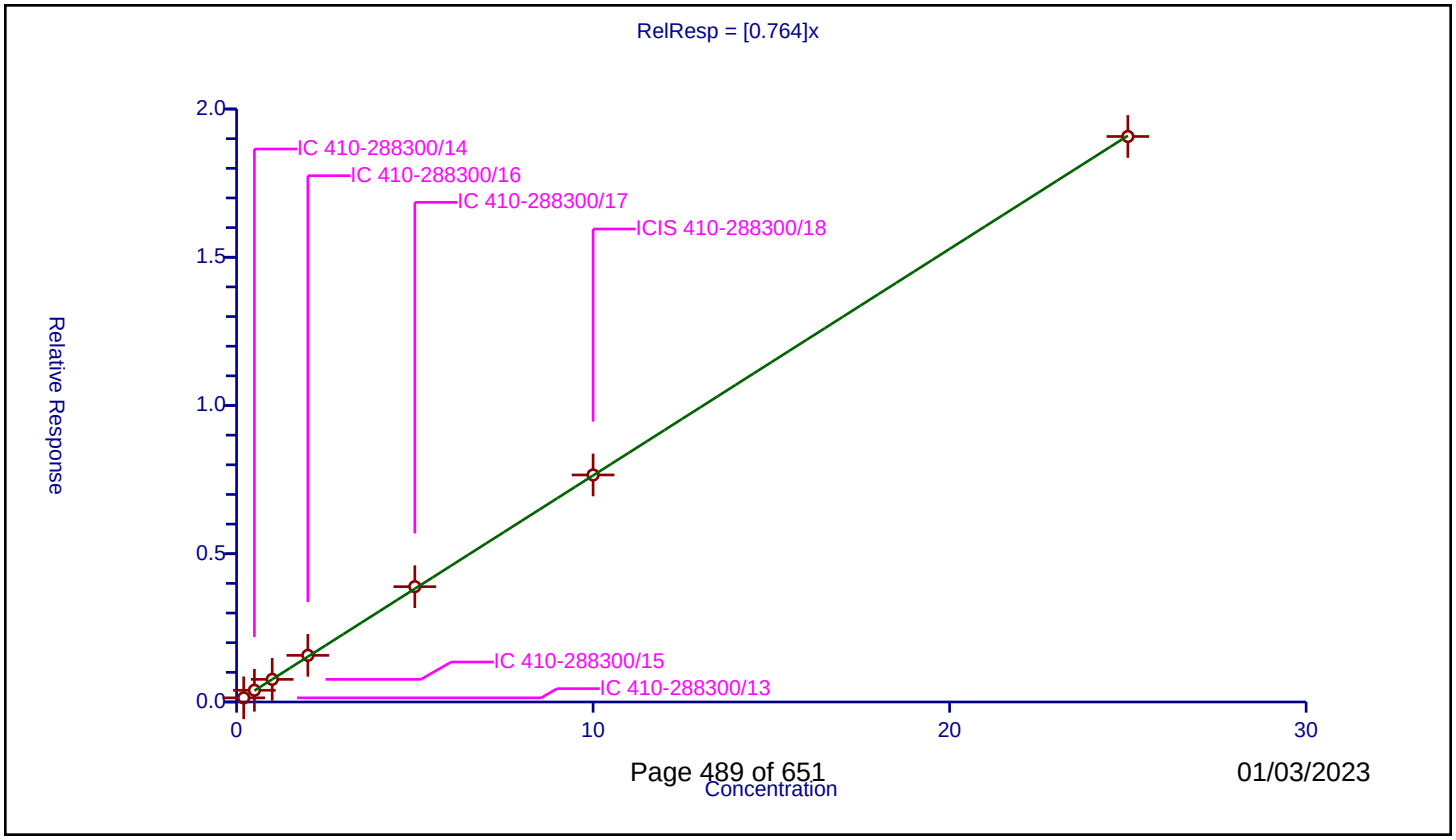
Curve Coefficients

Intercept:	0
Slope:	0.764

Error Coefficients

Standard Error:	1720000
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 410-288300/13	0.2	0.140205	10.0	1993587.0	0.701023	Y
2	IC 410-288300/14	0.5	0.39562	10.0	1985770.0	0.79124	Y
3	IC 410-288300/15	1.0	0.762915	10.0	1978464.0	0.762915	Y
4	IC 410-288300/16	2.0	1.57265	10.0	1976130.0	0.786325	Y
5	IC 410-288300/17	5.0	3.889663	10.0	1966718.0	0.777933	Y
6	ICIS 410-288300/18	10.0	7.657316	10.0	1988424.0	0.765732	Y
7	IC 410-288300/19	25.0	19.073521	10.0	2013656.0	0.762941	Y



Calibration / n-Heptane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

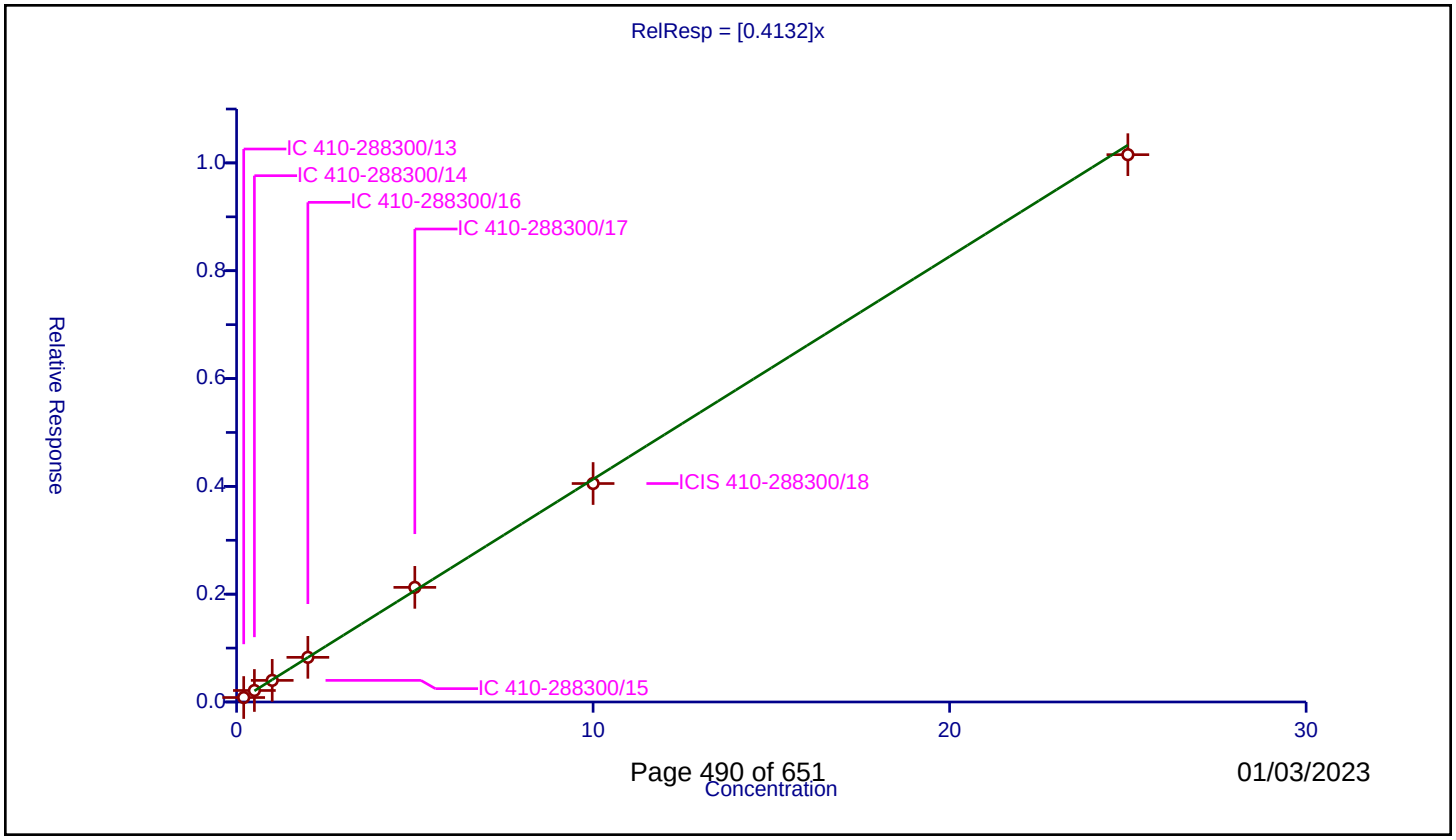
Curve Coefficients

Intercept:	0
Slope:	0.4132

Error Coefficients

Standard Error:	916000
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 410-288300/13	0.2	0.082851	10.0	1993587.0	0.414253	Y
2	IC 410-288300/14	0.5	0.213227	10.0	1985770.0	0.426454	Y
3	IC 410-288300/15	1.0	0.401074	10.0	1978464.0	0.401074	Y
4	IC 410-288300/16	2.0	0.828149	10.0	1976130.0	0.414074	Y
5	IC 410-288300/17	5.0	2.126334	10.0	1966718.0	0.425267	Y
6	ICIS 410-288300/18	10.0	4.052757	10.0	1988424.0	0.405276	Y
7	IC 410-288300/19	25.0	10.152956	10.0	2013656.0	0.406118	Y



Calibration / n-Butanol

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

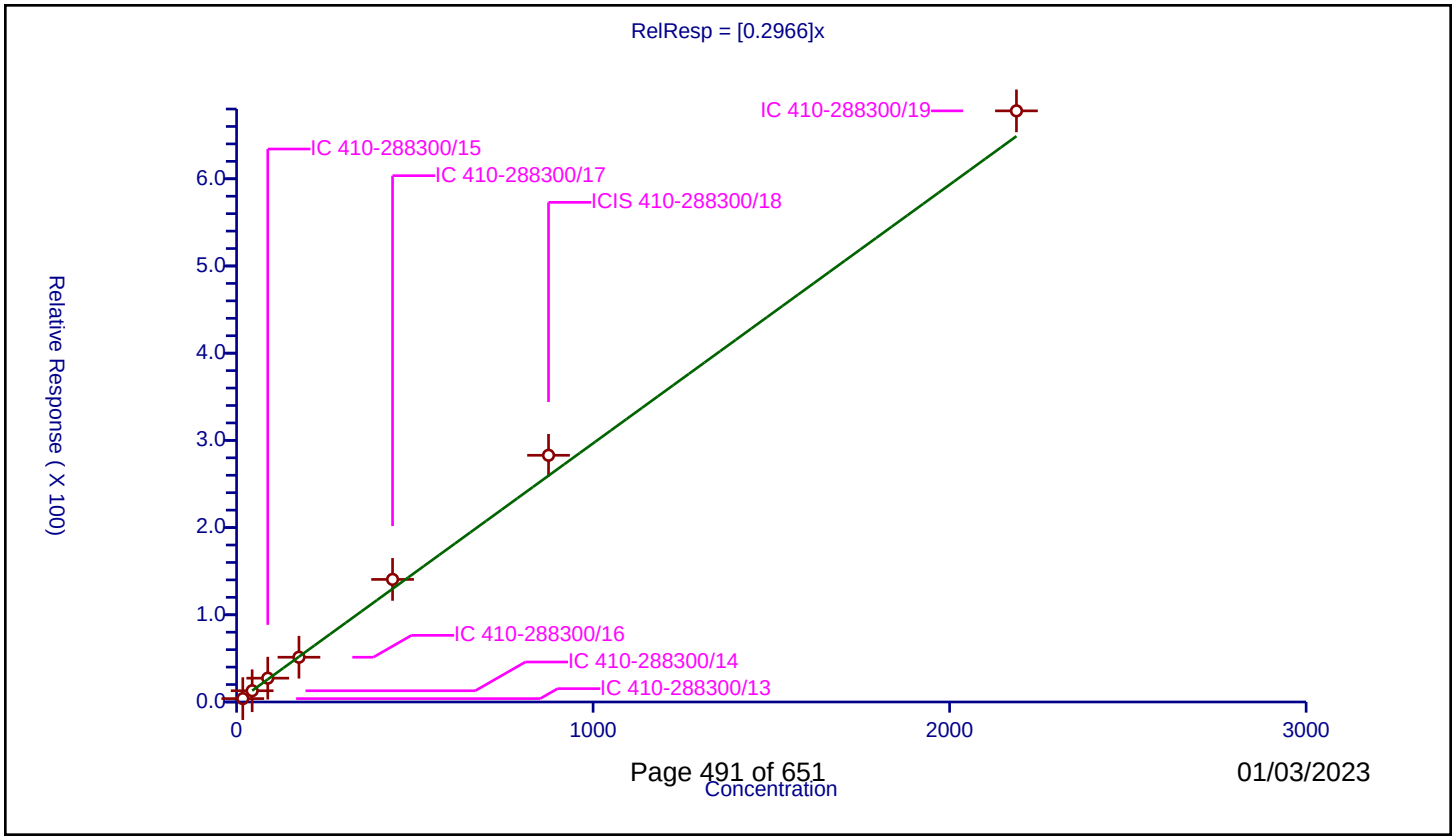
Curve Coefficients

Intercept:	0
Slope:	0.2966

Error Coefficients

Standard Error:	745000
Relative Standard Error:	11.8
Correlation Coefficient:	0.997
Coefficient of Determination (Adjusted):	0.984

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	17.5	3.877215	50.0	136580.0	0.221555	Y
2	IC 410-288300/14	43.75	12.886992	50.0	132044.0	0.29456	Y
3	IC 410-288300/15	87.5	27.324266	50.0	113154.0	0.312277	Y
4	IC 410-288300/16	175.0	51.331849	50.0	117656.0	0.293325	Y
5	IC 410-288300/17	437.5	140.571589	50.0	131878.0	0.321306	Y
6	ICIS 410-288300/18	875.0	282.908401	50.0	129707.0	0.323324	Y
7	IC 410-288300/19	2187.5	677.879605	50.0	119756.0	0.309888	Y



Calibration / Trichloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

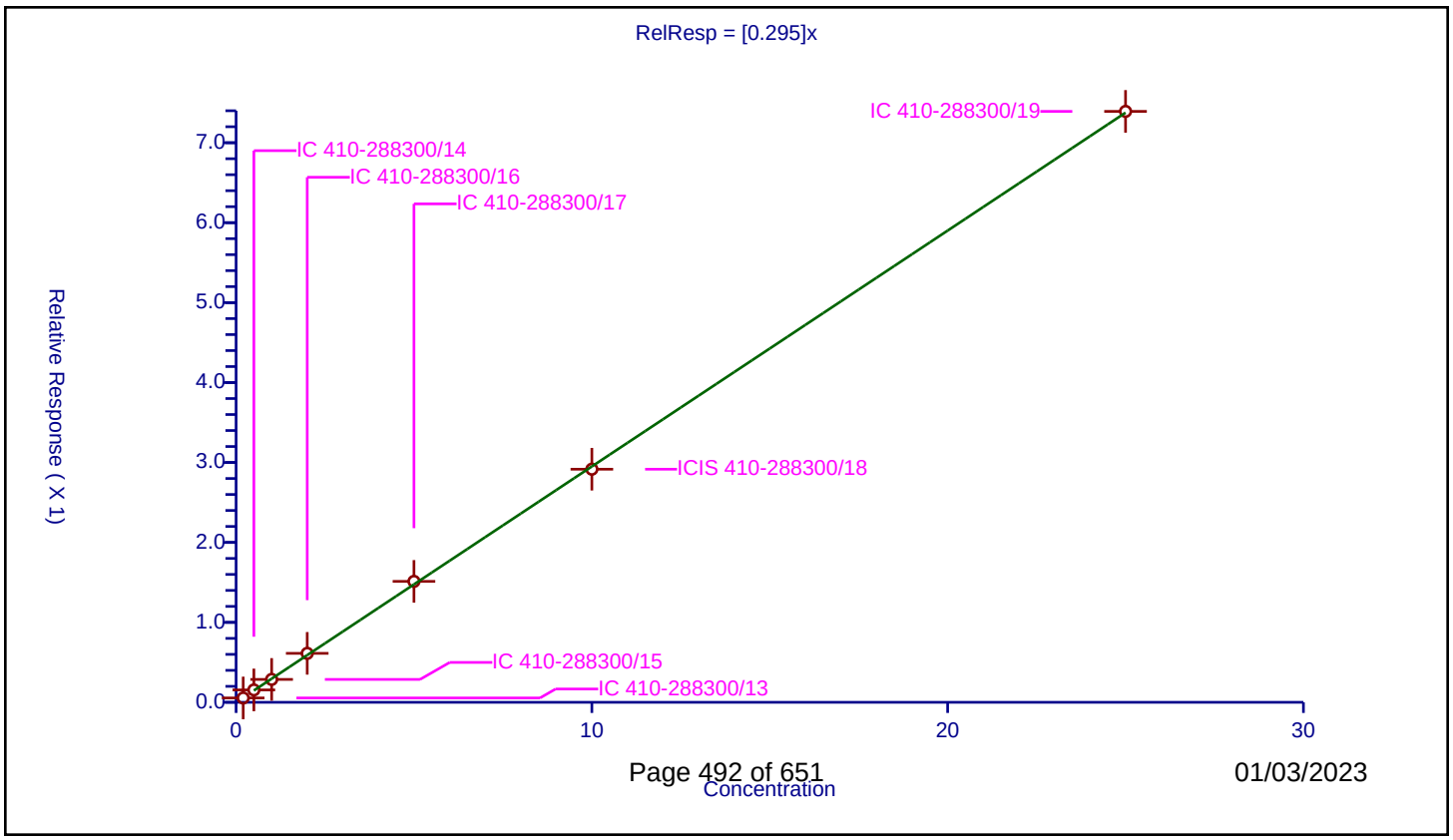
Curve Coefficients

Intercept:	0
Slope:	0.295

Error Coefficients

Standard Error:	666000
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 410-288300/13	0.2	0.054545	10.0	1993587.0	0.272724	Y
2	IC 410-288300/14	0.5	0.155058	10.0	1985770.0	0.310116	Y
3	IC 410-288300/15	1.0	0.286424	10.0	1978464.0	0.286424	Y
4	IC 410-288300/16	2.0	0.612338	10.0	1976130.0	0.306169	Y
5	IC 410-288300/17	5.0	1.512769	10.0	1966718.0	0.302554	Y
6	ICIS 410-288300/18	10.0	2.916088	10.0	1988424.0	0.291609	Y
7	IC 410-288300/19	25.0	7.391888	10.0	2013656.0	0.295676	Y



Calibration / Methylcyclohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

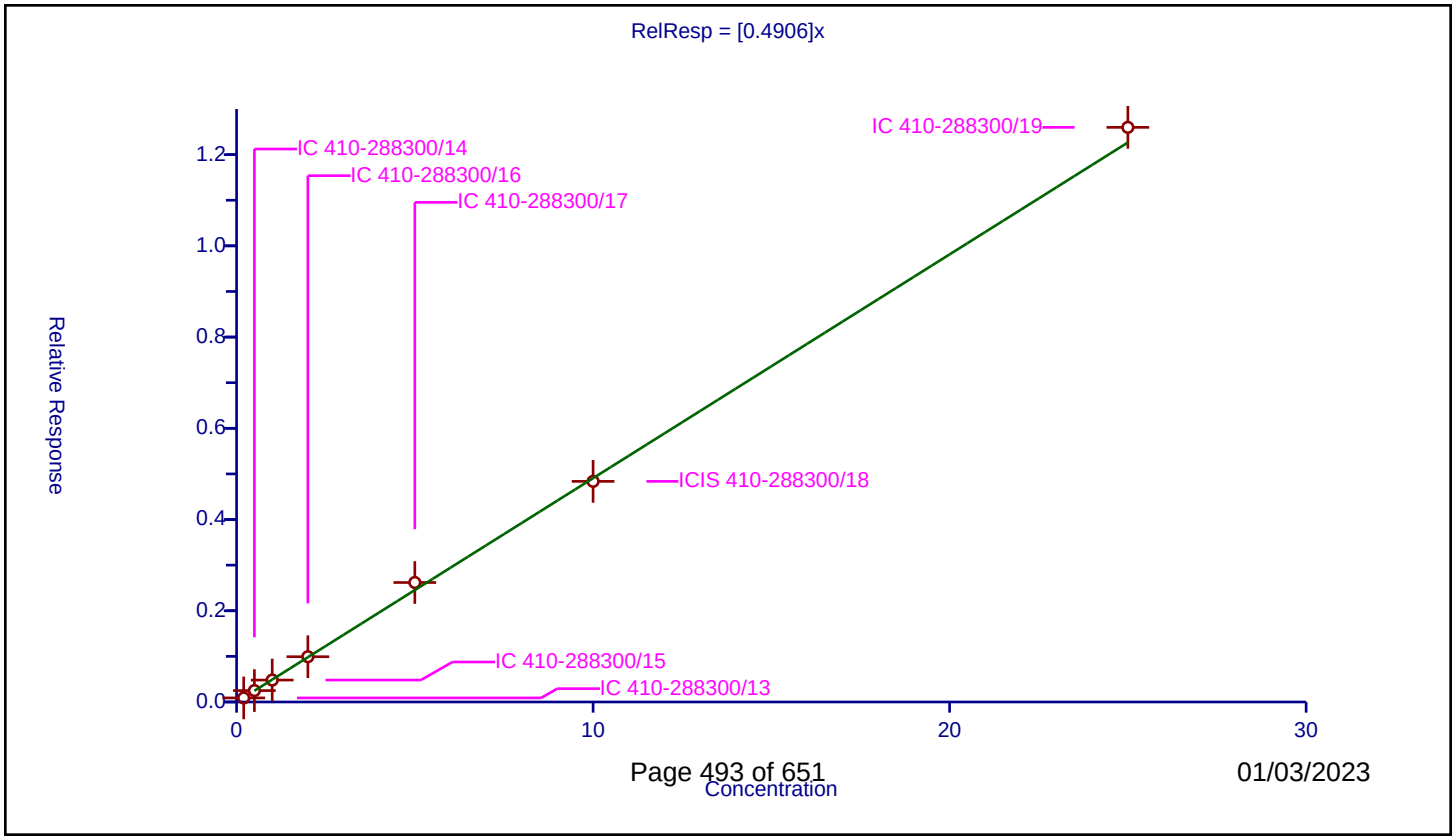
Curve Coefficients

Intercept:	0
Slope:	0.4906

Error Coefficients

Standard Error:	1130000
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 410-288300/13	0.2	0.089316	10.0	1993587.0	0.446582	Y
2	IC 410-288300/14	0.5	0.249702	10.0	1985770.0	0.499403	Y
3	IC 410-288300/15	1.0	0.480858	10.0	1978464.0	0.480858	Y
4	IC 410-288300/16	2.0	0.992222	10.0	1976130.0	0.496111	Y
5	IC 410-288300/17	5.0	2.619638	10.0	1966718.0	0.523928	Y
6	ICIS 410-288300/18	10.0	4.836841	10.0	1988424.0	0.483684	Y
7	IC 410-288300/19	25.0	12.597688	10.0	2013656.0	0.503908	Y



Calibration / 1,2-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

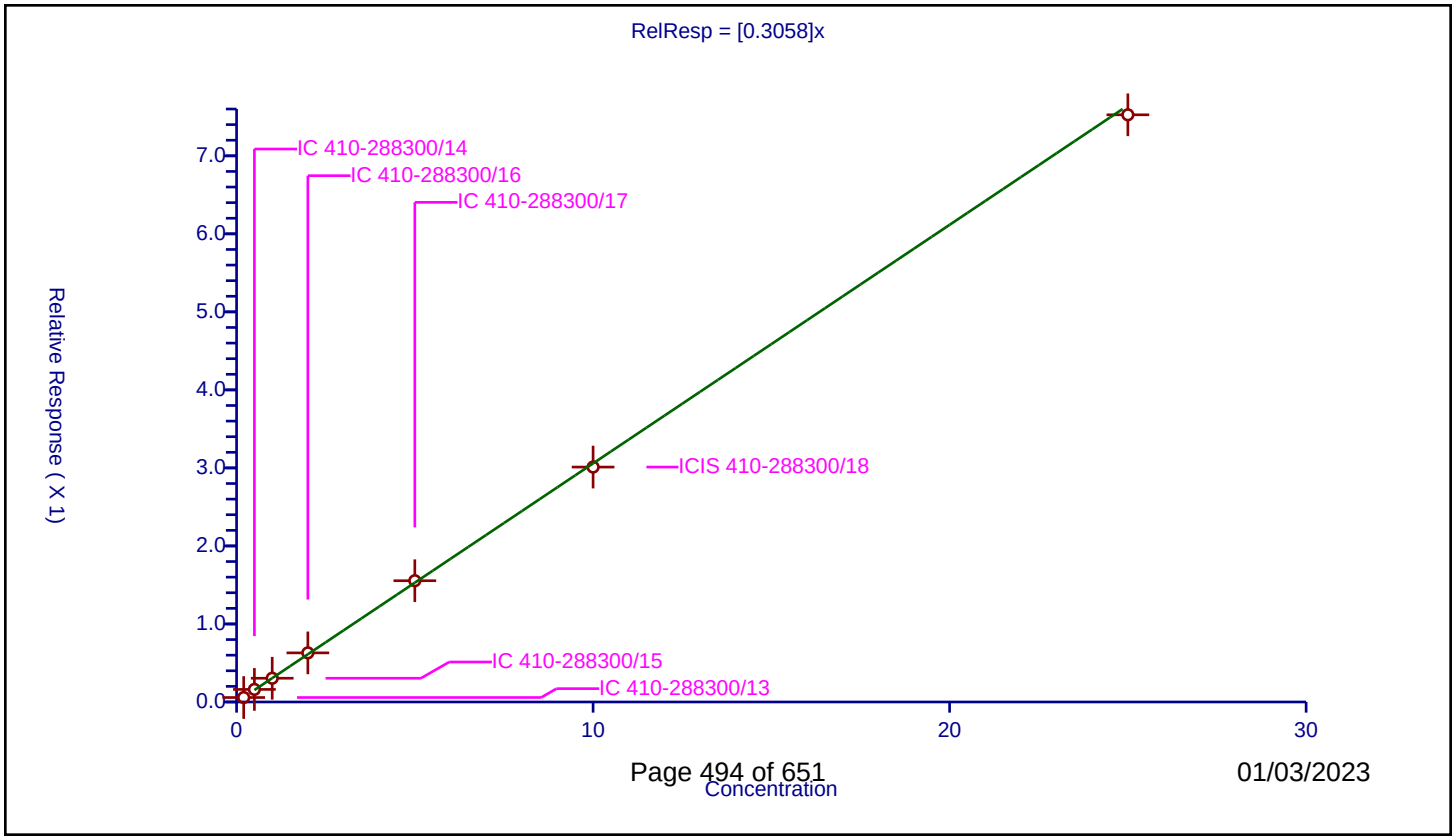
Curve Coefficients

Intercept:	0
Slope:	0.3058

Error Coefficients

Standard Error:	679000
Relative Standard Error:	3.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.2	0.057173	10.0	1993587.0	0.285867	Y
2	IC 410-288300/14	0.5	0.161262	10.0	1985770.0	0.322525	Y
3	IC 410-288300/15	1.0	0.304463	10.0	1978464.0	0.304463	Y
4	IC 410-288300/16	2.0	0.629447	10.0	1976130.0	0.314724	Y
5	IC 410-288300/17	5.0	1.554132	10.0	1966718.0	0.310826	Y
6	ICIS 410-288300/18	10.0	3.010912	10.0	1988424.0	0.301091	Y
7	IC 410-288300/19	25.0	7.525819	10.0	2013656.0	0.301033	Y



Calibration / 1,4-Dioxane

Curve Type:	Quadratic
Weighting:	None
Origin:	None
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

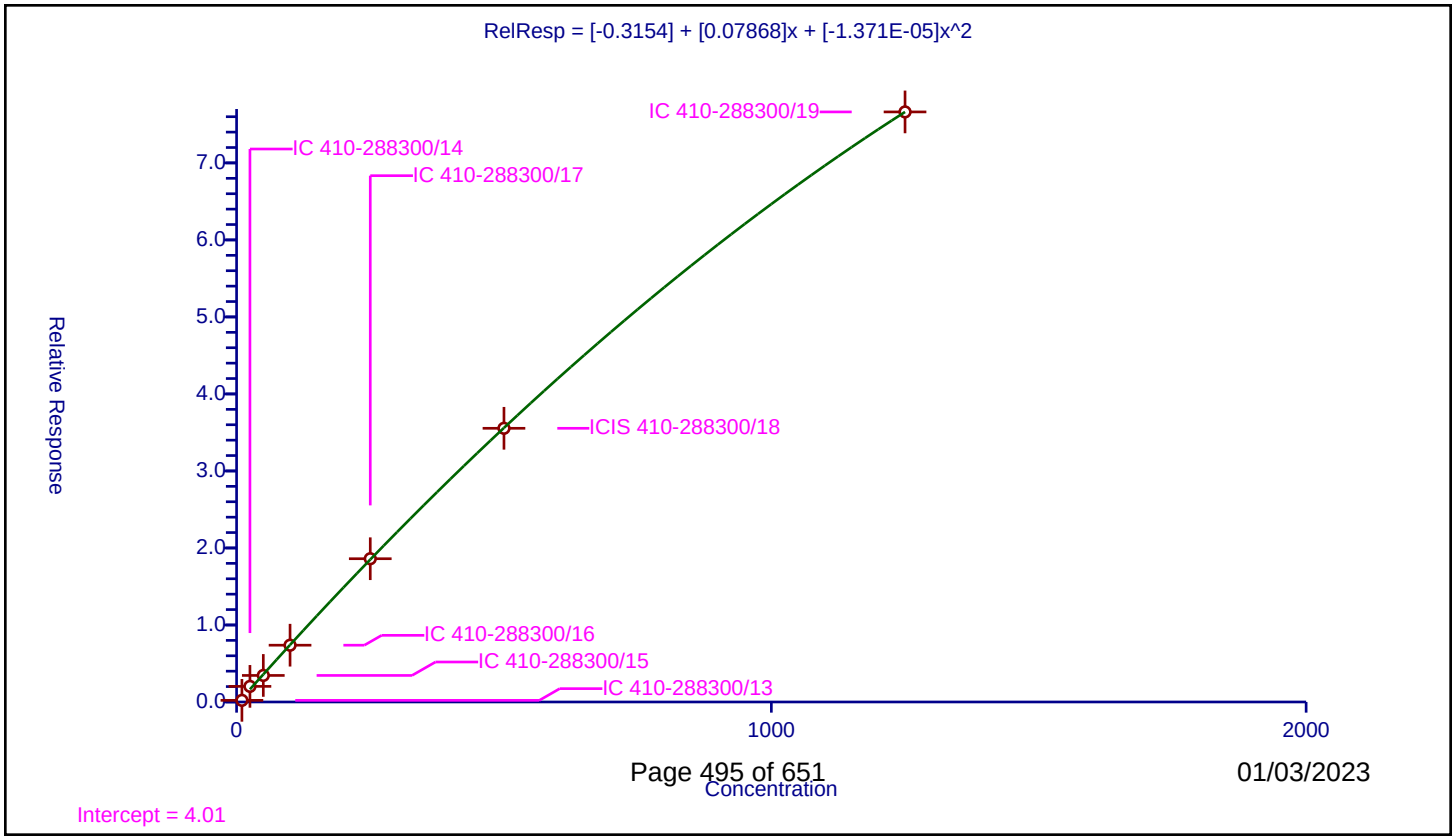
Curve Coefficients

Intercept:	-0.3154
Slope:	0.07868
Second Order:	-1.371E-05

Error Coefficients

Standard Error:	106000
Relative Standard Error:	19.1
Correlation Coefficient:	0.998
Coefficient of Determination (Adjusted):	1.000

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	10.0	0.21416	50.0	136580.0	0.021416	Y
2	IC 410-288300/14	25.0	2.026976	50.0	132044.0	0.081079	Y
3	IC 410-288300/15	50.0	3.445747	50.0	113154.0	0.068915	Y
4	IC 410-288300/16	100.0	7.37234	50.0	117656.0	0.073723	Y
5	IC 410-288300/17	250.0	18.605454	50.0	131878.0	0.074422	Y
6	ICIS 410-288300/18	500.0	35.539331	50.0	129707.0	0.071079	Y
7	IC 410-288300/19	1250.0	76.624136	50.0	119756.0	0.061299	Y



Calibration / Methyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

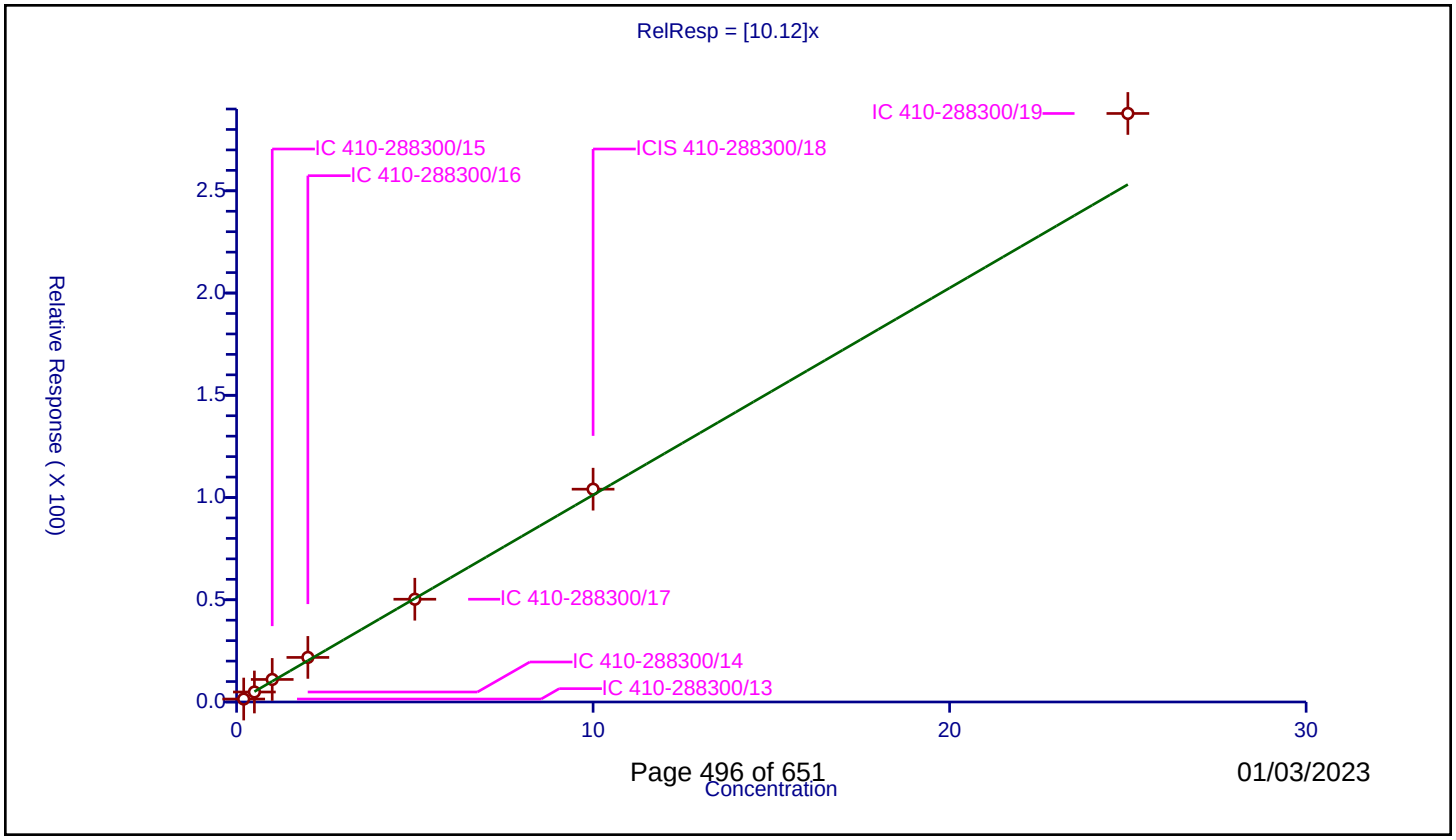
Curve Coefficients

Intercept:	0
Slope:	10.12

Error Coefficients

Standard Error:	308000
Relative Standard Error:	14.0
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.978

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.2	1.441646	50.0	136580.0	7.20823	Y
2	IC 410-288300/14	0.5	4.882842	50.0	132044.0	9.765684	Y
3	IC 410-288300/15	1.0	11.022147	50.0	113154.0	11.022147	Y
4	IC 410-288300/16	2.0	21.799143	50.0	117656.0	10.899572	Y
5	IC 410-288300/17	5.0	50.256297	50.0	131878.0	10.051259	Y
6	ICIS 410-288300/18	10.0	104.07611	50.0	129707.0	10.407611	Y
7	IC 410-288300/19	25.0	287.82775	50.0	119756.0	11.51311	Y



Calibration / Dibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

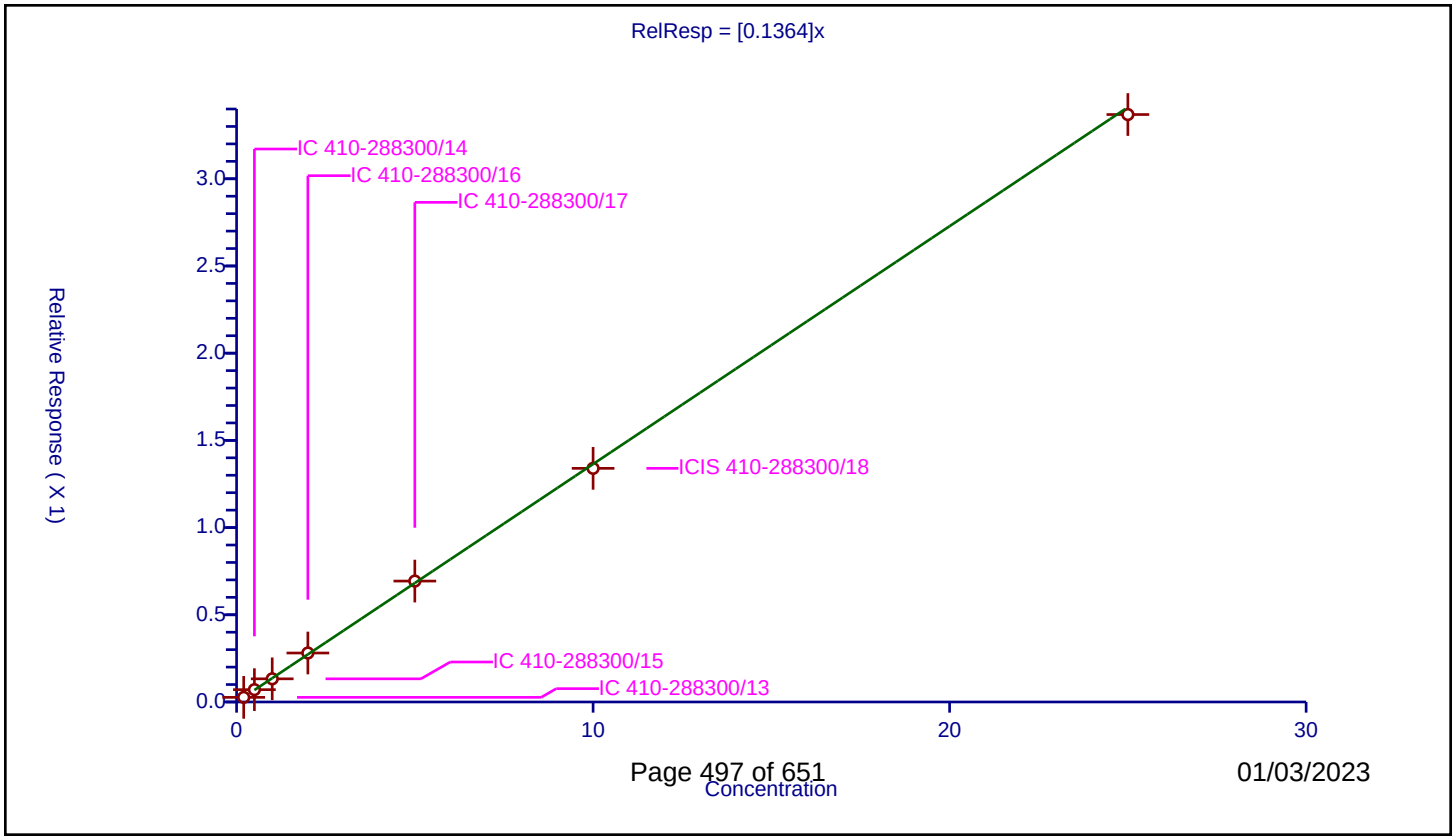
Curve Coefficients

Intercept:	0
Slope:	0.1364

Error Coefficients

Standard Error:	304000
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 410-288300/13	0.2	0.02655	10.0	1993587.0	0.132751	Y
2	IC 410-288300/14	0.5	0.070728	10.0	1985770.0	0.141456	Y
3	IC 410-288300/15	1.0	0.13283	10.0	1978464.0	0.13283	Y
4	IC 410-288300/16	2.0	0.280867	10.0	1976130.0	0.140434	Y
5	IC 410-288300/17	5.0	0.693323	10.0	1966718.0	0.138665	Y
6	ICIS 410-288300/18	10.0	1.339589	10.0	1988424.0	0.133959	Y
7	IC 410-288300/19	25.0	3.368376	10.0	2013656.0	0.134735	Y



Calibration / Dichlorobromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

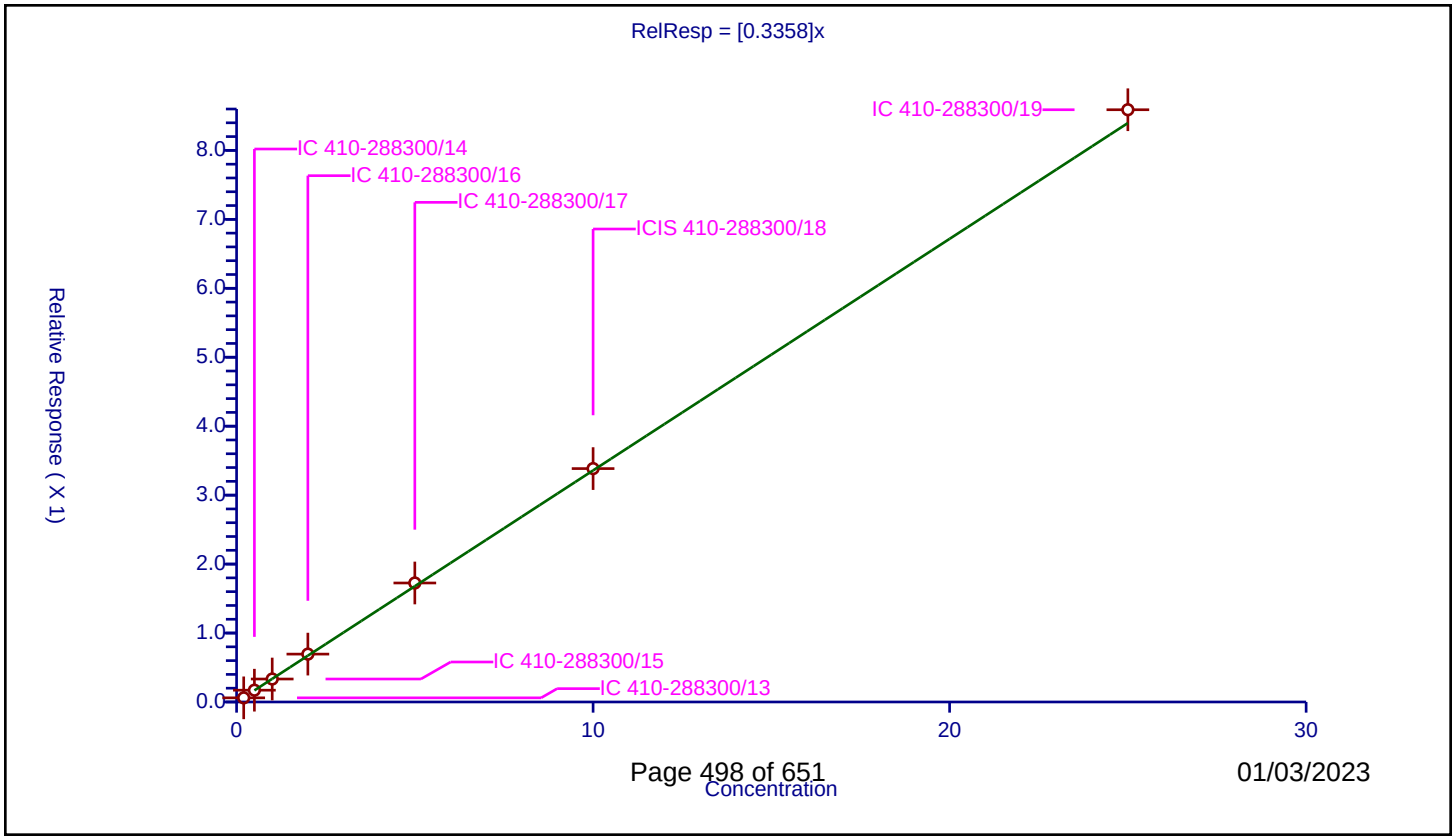
Curve Coefficients

Intercept:	0
Slope:	0.3358

Error Coefficients

Standard Error:	773000
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.2	0.060228	10.0	1993587.0	0.301141	Y
2	IC 410-288300/14	0.5	0.171178	10.0	1985770.0	0.342356	Y
3	IC 410-288300/15	1.0	0.332996	10.0	1978464.0	0.332996	Y
4	IC 410-288300/16	2.0	0.694312	10.0	1976130.0	0.347156	Y
5	IC 410-288300/17	5.0	1.725967	10.0	1966718.0	0.345193	Y
6	ICIS 410-288300/18	10.0	3.385068	10.0	1988424.0	0.338507	Y
7	IC 410-288300/19	25.0	8.589486	10.0	2013656.0	0.343579	Y



Calibration / 2-Nitropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

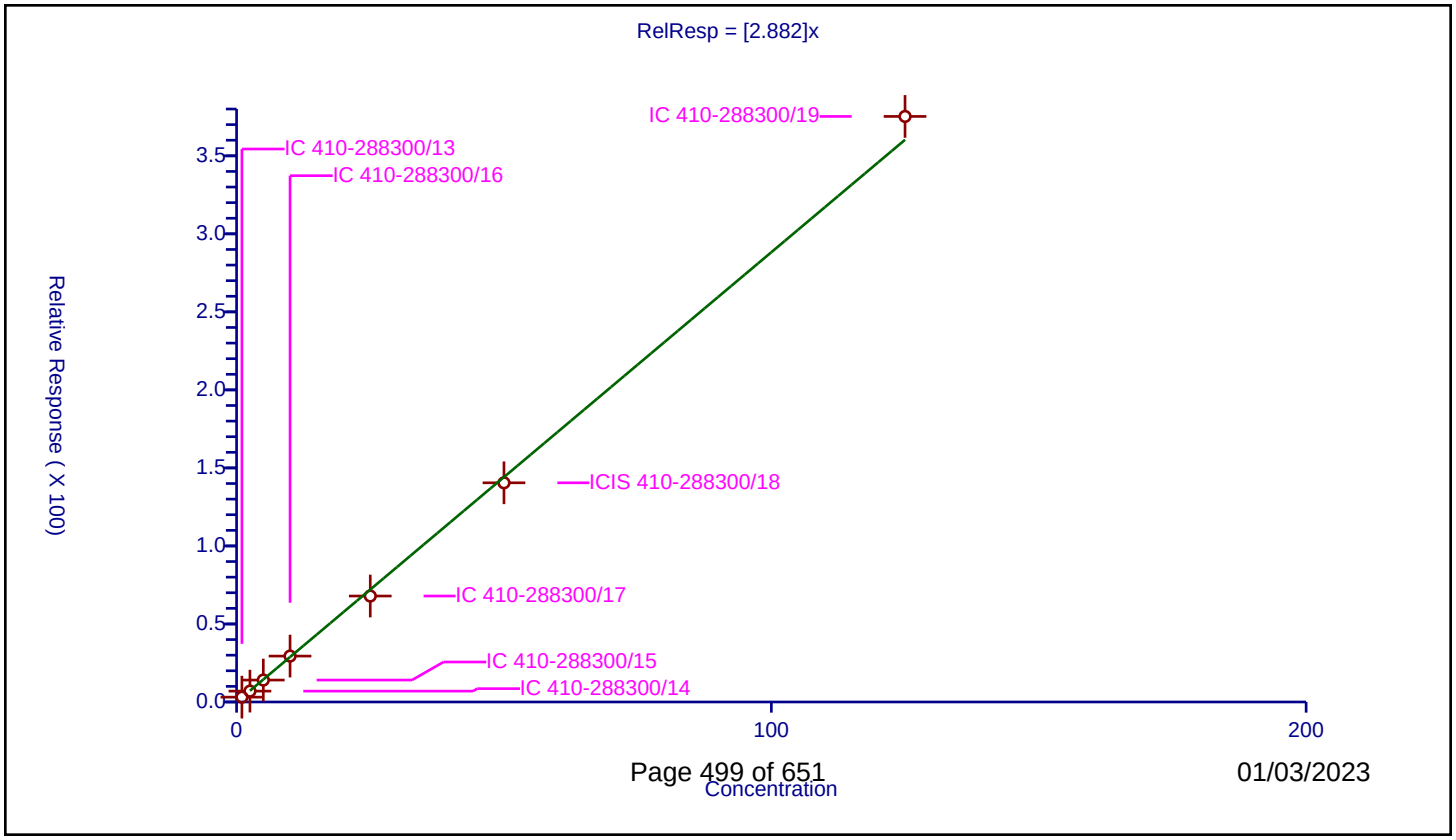
Curve Coefficients

Intercept:	0
Slope:	2.882

Error Coefficients

Standard Error:	404000
Relative Standard Error:	4.8
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	1.0	3.109899	50.0	136580.0	3.109899	Y
2	IC 410-288300/14	2.5	6.970404	50.0	132044.0	2.788162	Y
3	IC 410-288300/15	5.0	14.048553	50.0	113154.0	2.809711	Y
4	IC 410-288300/16	10.0	29.412865	50.0	117656.0	2.941286	Y
5	IC 410-288300/17	25.0	67.896844	50.0	131878.0	2.715874	Y
6	ICIS 410-288300/18	50.0	140.45464	50.0	129707.0	2.809093	Y
7	IC 410-288300/19	125.0	375.246752	50.0	119756.0	3.001974	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

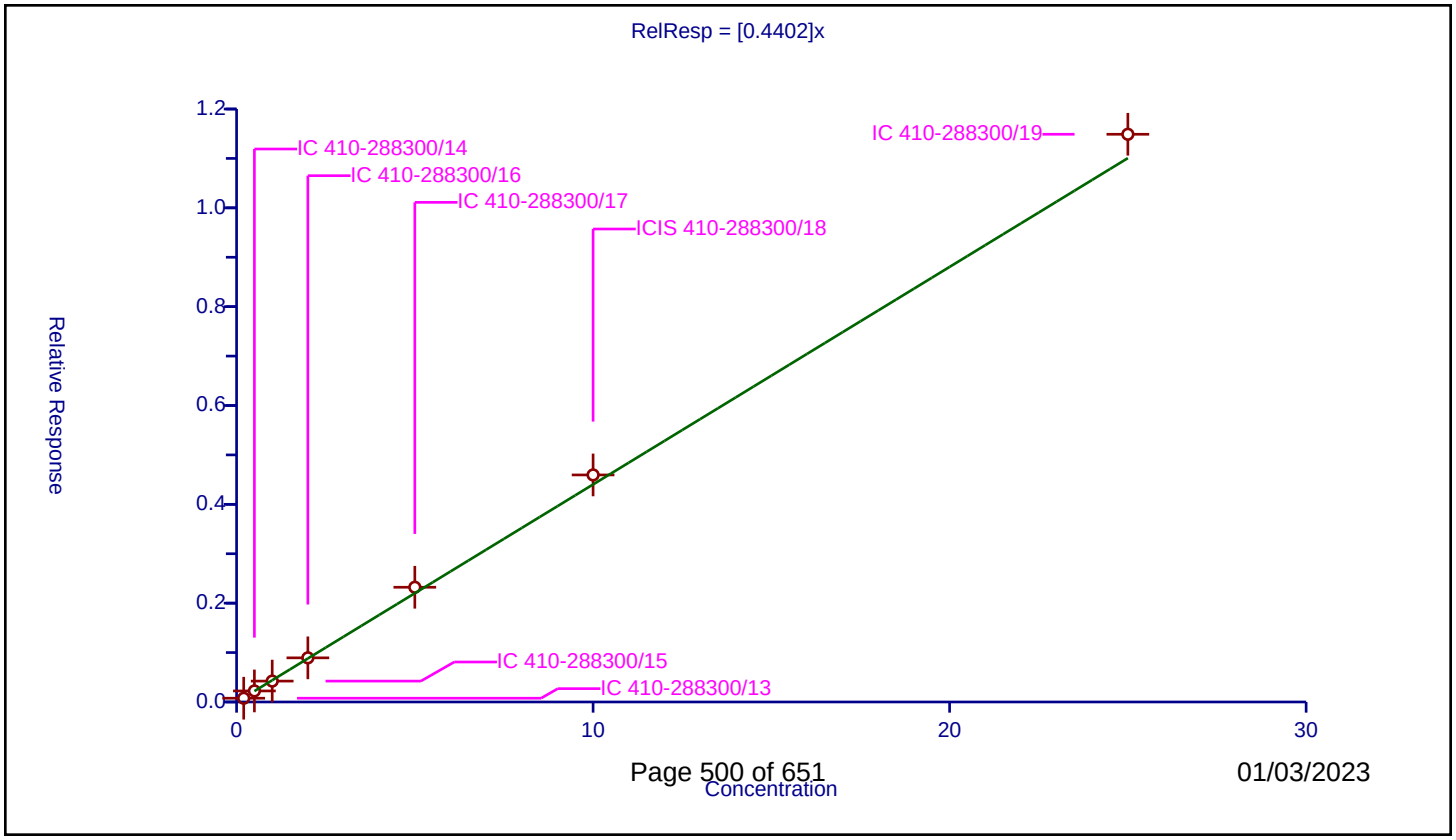
Curve Coefficients

Intercept:	0
Slope:	0.4402

Error Coefficients

Standard Error:	1040000
Relative Standard Error:	6.6
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.2	0.07639	10.0	1993587.0	0.38195	Y
2	IC 410-288300/14	0.5	0.223445	10.0	1985770.0	0.44689	Y
3	IC 410-288300/15	1.0	0.422636	10.0	1978464.0	0.422636	Y
4	IC 410-288300/16	2.0	0.893534	10.0	1976130.0	0.446767	Y
5	IC 410-288300/17	5.0	2.321655	10.0	1966718.0	0.464331	Y
6	ICIS 410-288300/18	10.0	4.595001	10.0	1988424.0	0.4595	Y
7	IC 410-288300/19	25.0	11.489177	10.0	2013656.0	0.459567	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

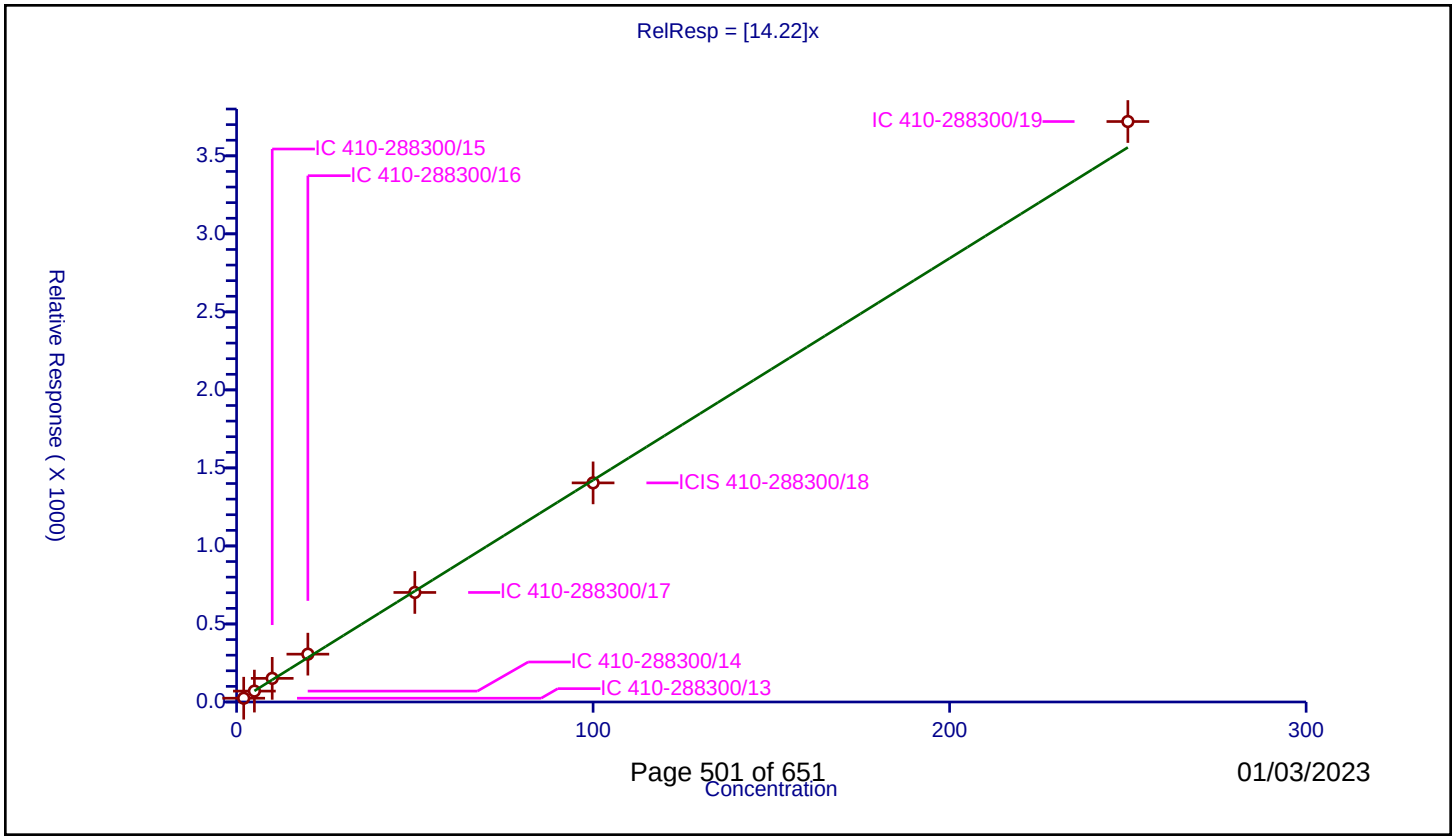
Curve Coefficients

Intercept:	0
Slope:	14.22

Error Coefficients

Standard Error:	4010000
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 410-288300/13	2.0	24.235247	50.0	136580.0	12.117623	Y
2	IC 410-288300/14	5.0	69.841871	50.0	132044.0	13.968374	Y
3	IC 410-288300/15	10.0	151.415328	50.0	113154.0	15.141533	Y
4	IC 410-288300/16	20.0	306.550452	50.0	117656.0	15.327523	Y
5	IC 410-288300/17	50.0	701.978344	50.0	131878.0	14.039567	Y
6	ICIS 410-288300/18	100.0	1404.135475	50.0	129707.0	14.041355	Y
7	IC 410-288300/19	250.0	3719.882094	50.0	119756.0	14.879528	Y



Calibration / Toluene-d8 (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

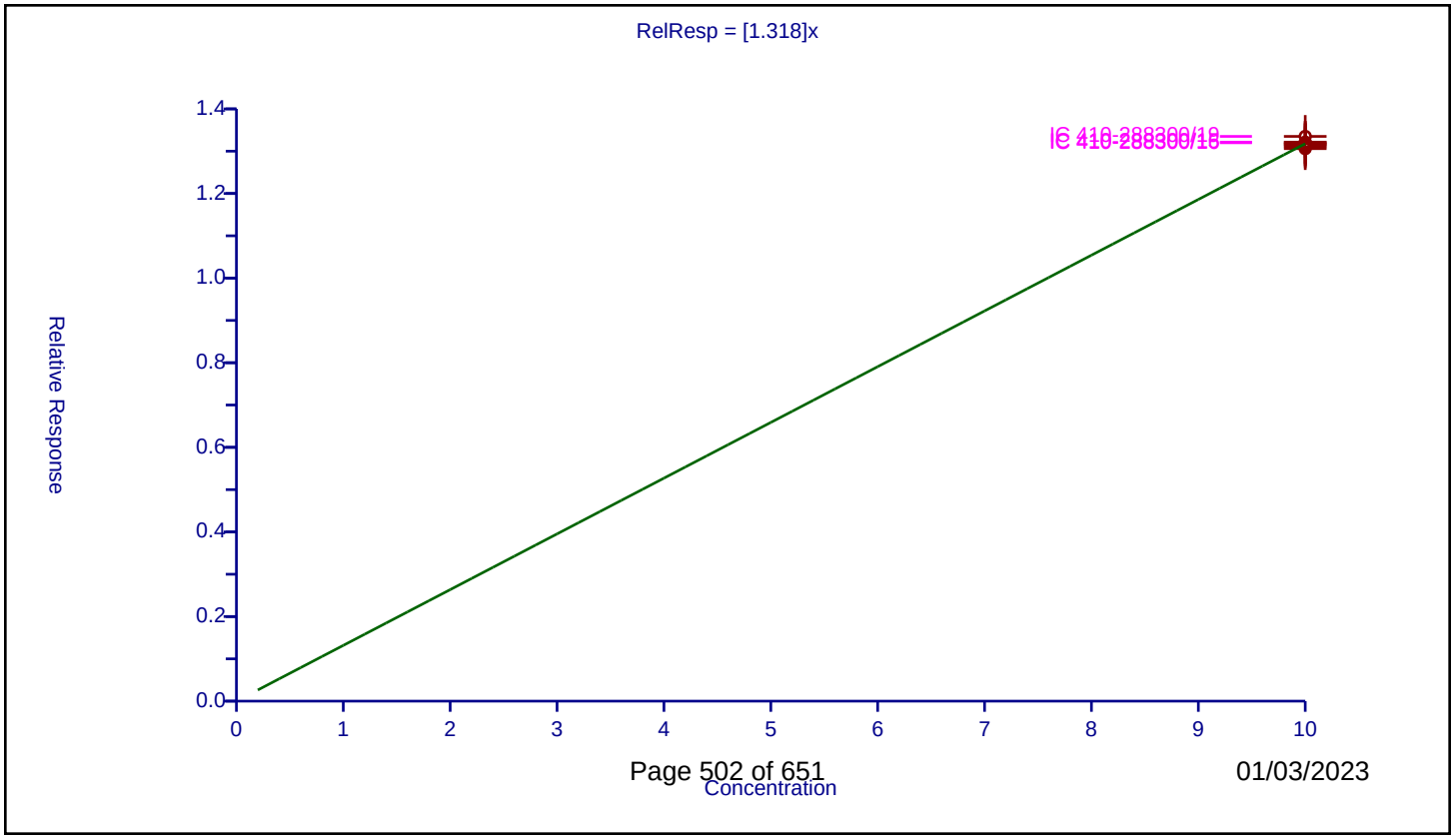
Curve Coefficients

Intercept:	0
Slope:	1.318

Error Coefficients

Standard Error:	2170000
Relative Standard Error:	0.7
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	10.0	13.104591	10.0	1542113.0	1.310459	Y
2	IC 410-288300/14	10.0	13.059751	10.0	1536465.0	1.305975	Y
3	IC 410-288300/15	10.0	13.214526	10.0	1510198.0	1.321453	Y
4	IC 410-288300/16	10.0	13.199246	10.0	1510978.0	1.319925	Y
5	IC 410-288300/17	10.0	13.144632	10.0	1523078.0	1.314463	Y
6	ICIS 410-288300/18	10.0	13.164422	10.0	1523479.0	1.316442	Y
7	IC 410-288300/19	10.0	13.349615	10.0	1542455.0	1.334961	Y



Calibration / Toluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

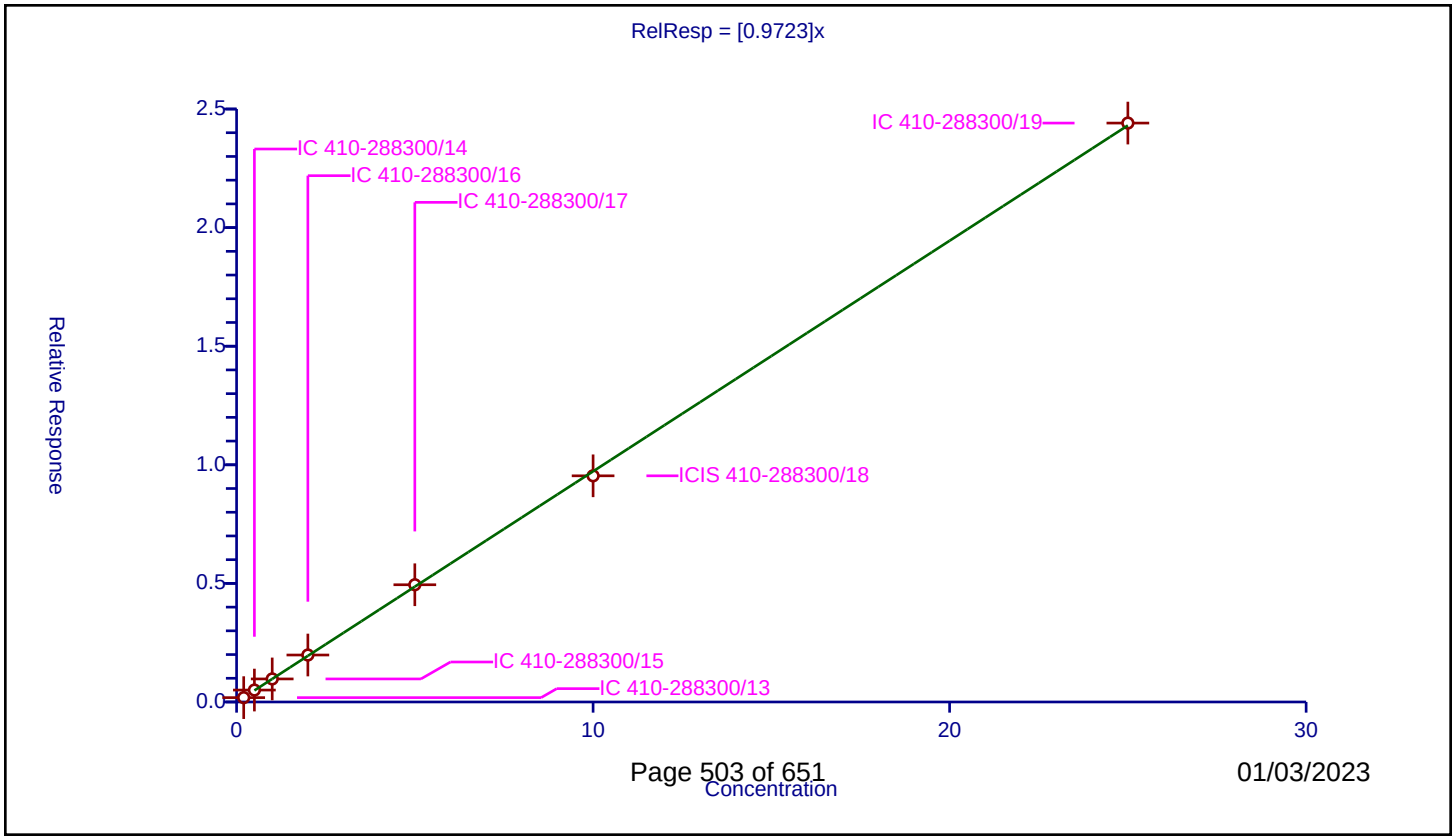
Curve Coefficients

Intercept:	0
Slope:	0.9723

Error Coefficients

Standard Error:	1680000
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 410-288300/13	0.2	0.18391	10.0	1542113.0	0.91955	Y
2	IC 410-288300/14	0.5	0.502849	10.0	1536465.0	1.005698	Y
3	IC 410-288300/15	1.0	0.97229	10.0	1510198.0	0.97229	Y
4	IC 410-288300/16	2.0	1.980538	10.0	1510978.0	0.990269	Y
5	IC 410-288300/17	5.0	4.942879	10.0	1523078.0	0.988576	Y
6	ICIS 410-288300/18	10.0	9.535399	10.0	1523479.0	0.95354	Y
7	IC 410-288300/19	25.0	24.407701	10.0	1542455.0	0.976308	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

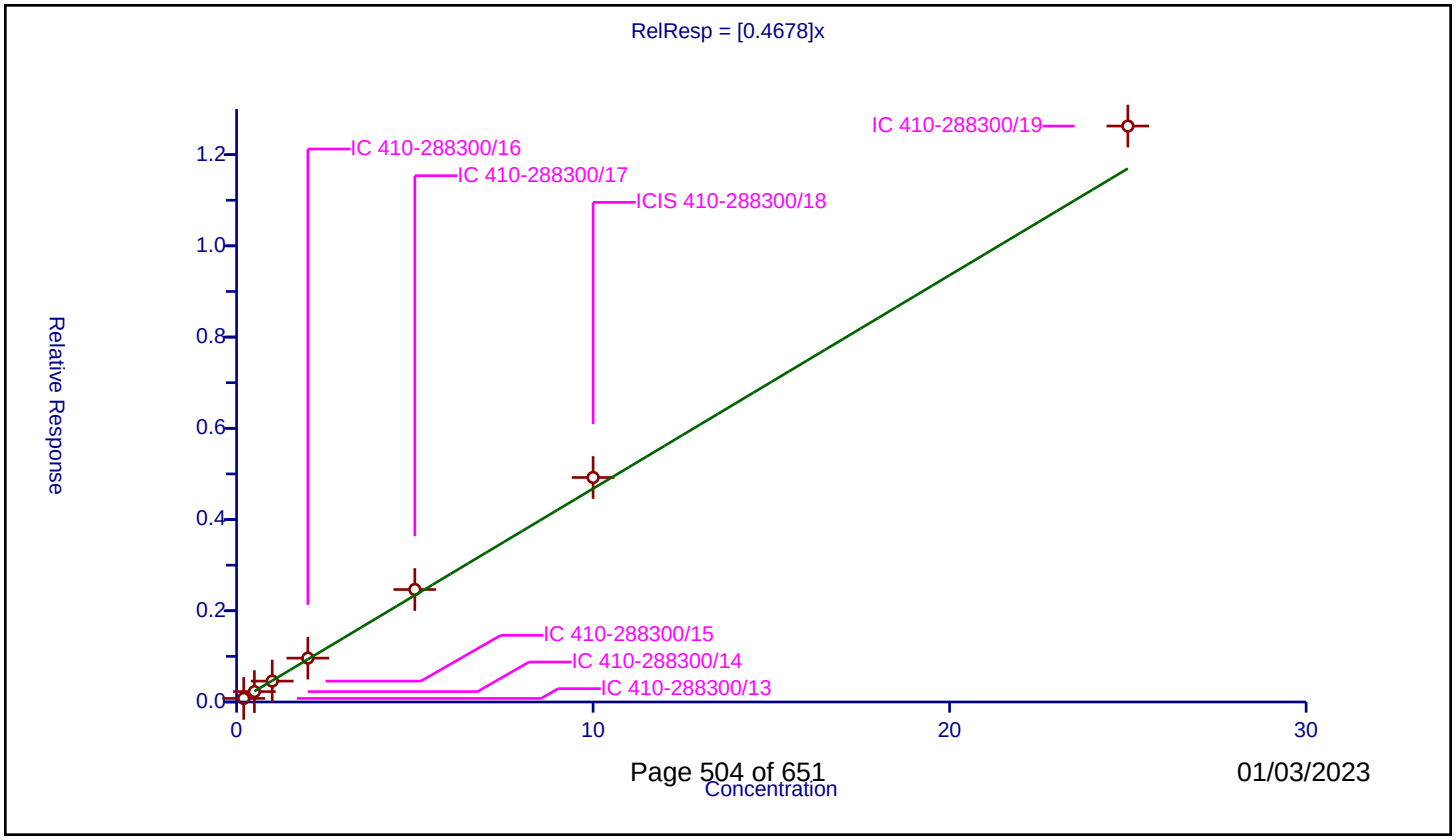
Curve Coefficients

Intercept:	0
Slope:	0.4678

Error Coefficients

Standard Error:	868000
Relative Standard Error:	8.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.992

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.2	0.078029	10.0	1542113.0	0.390147	Y
2	IC 410-288300/14	0.5	0.227789	10.0	1536465.0	0.455578	Y
3	IC 410-288300/15	1.0	0.45788	10.0	1510198.0	0.45788	Y
4	IC 410-288300/16	2.0	0.961252	10.0	1510978.0	0.480626	Y
5	IC 410-288300/17	5.0	2.465435	10.0	1523078.0	0.493087	Y
6	ICIS 410-288300/18	10.0	4.921781	10.0	1523479.0	0.492178	Y
7	IC 410-288300/19	25.0	12.626618	10.0	1542455.0	0.505065	Y



Calibration / Ethyl methacrylate

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

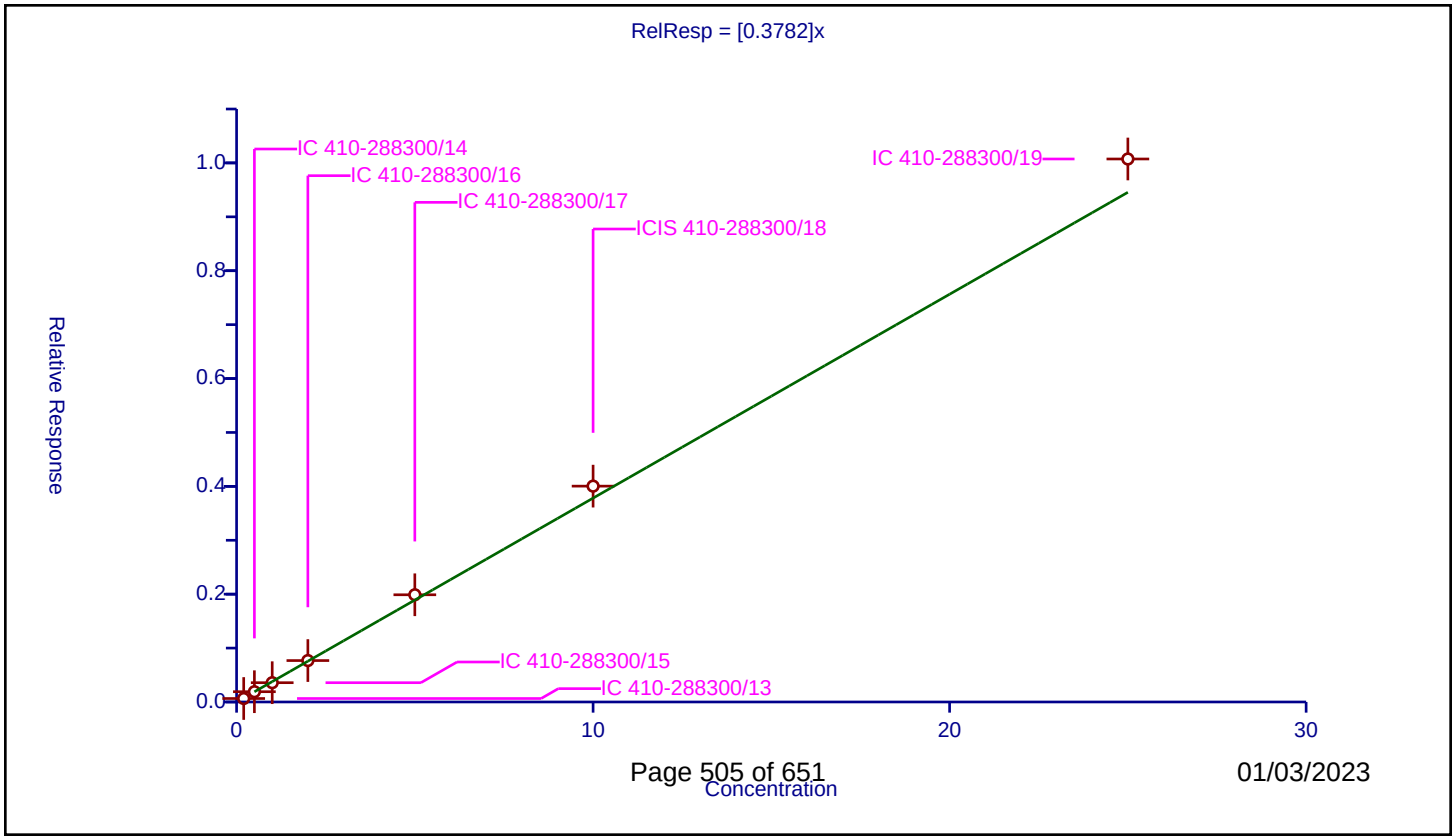
Curve Coefficients

Intercept:	0
Slope:	0.3782

Error Coefficients

Standard Error:	695000
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 410-288300/13	0.2	0.064632	10.0	1542113.0	0.32316	Y
2	IC 410-288300/14	0.5	0.190463	10.0	1536465.0	0.380926	Y
3	IC 410-288300/15	1.0	0.357834	10.0	1510198.0	0.357834	Y
4	IC 410-288300/16	2.0	0.768595	10.0	1510978.0	0.384297	Y
5	IC 410-288300/17	5.0	1.988966	10.0	1523078.0	0.397793	Y
6	ICIS 410-288300/18	10.0	4.004374	10.0	1523479.0	0.400437	Y
7	IC 410-288300/19	25.0	10.072819	10.0	1542455.0	0.402913	Y



Calibration / 1,1,2-Trichloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

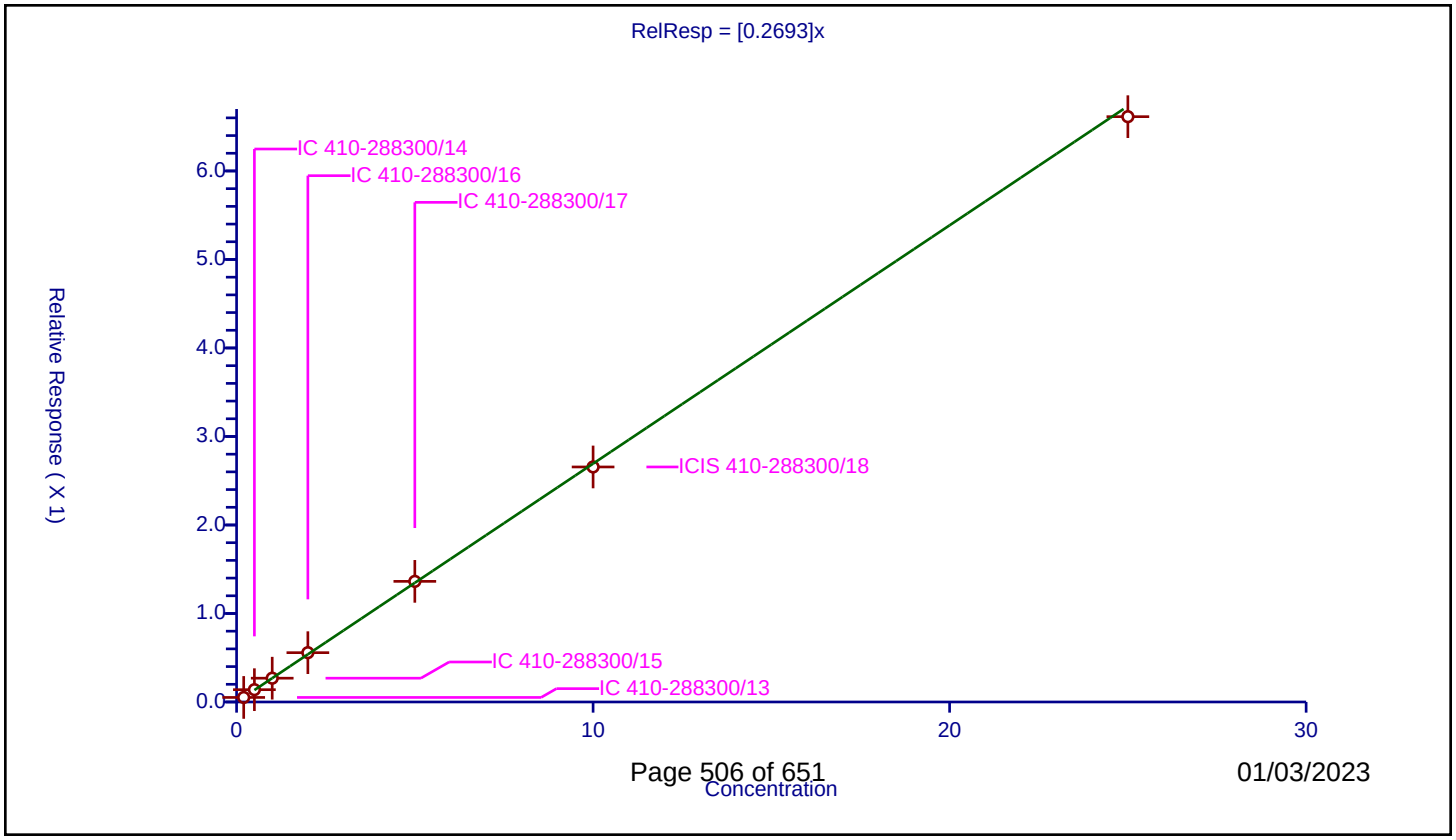
Curve Coefficients

Intercept:	0
Slope:	0.2693

Error Coefficients

Standard Error:	458000
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 410-288300/13	0.2	0.051306	10.0	1542113.0	0.256531	Y
2	IC 410-288300/14	0.5	0.139112	10.0	1536465.0	0.278223	Y
3	IC 410-288300/15	1.0	0.269018	10.0	1510198.0	0.269018	Y
4	IC 410-288300/16	2.0	0.557321	10.0	1510978.0	0.278661	Y
5	IC 410-288300/17	5.0	1.362931	10.0	1523078.0	0.272586	Y
6	ICIS 410-288300/18	10.0	2.65558	10.0	1523479.0	0.265558	Y
7	IC 410-288300/19	25.0	6.61349	10.0	1542455.0	0.26454	Y



Calibration / Tetrachloroethene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

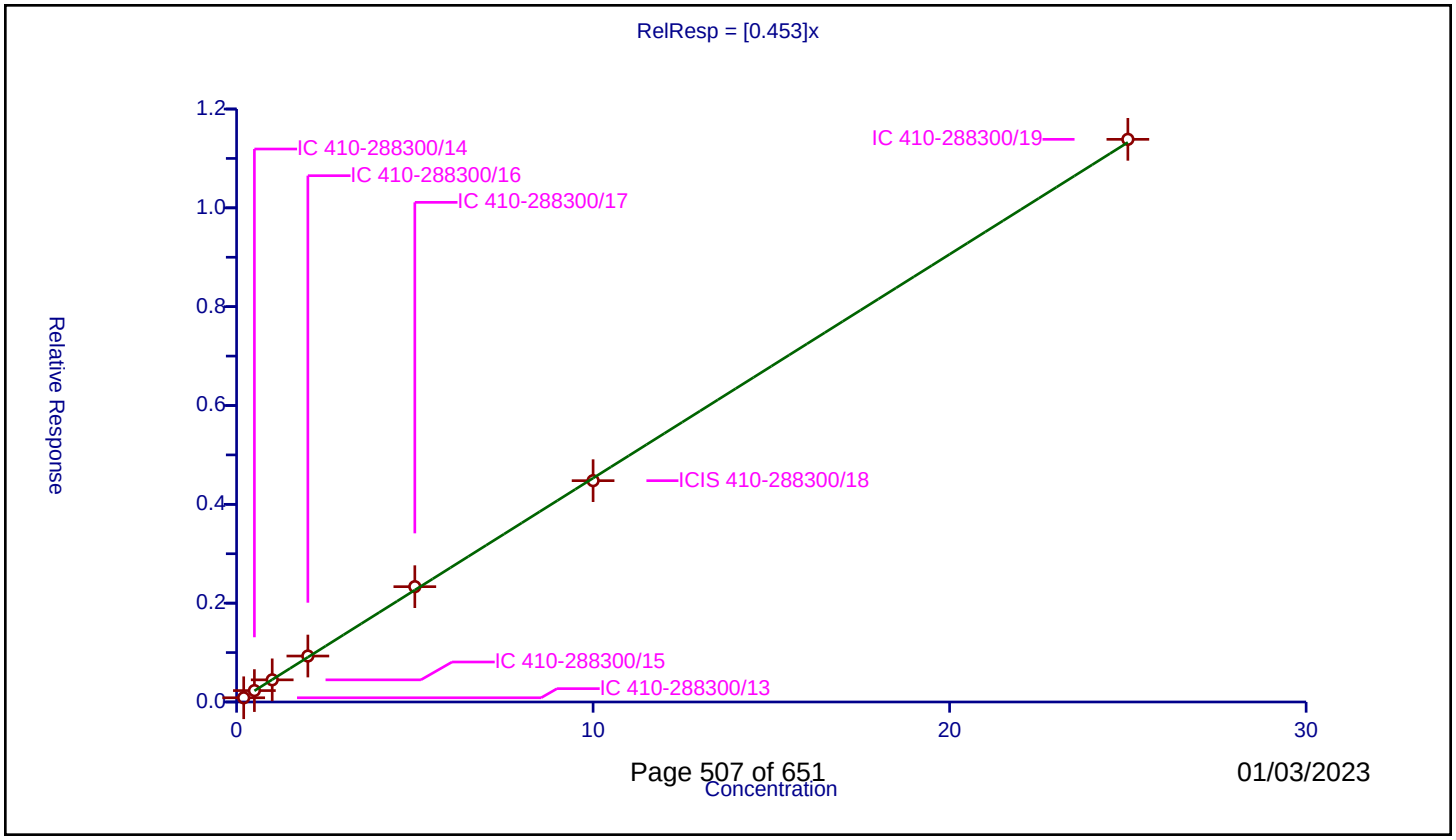
Curve Coefficients

Intercept:	0
Slope:	0.453

Error Coefficients

Standard Error:	786000
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 410-288300/13	0.2	0.085286	10.0	1542113.0	0.426428	Y
2	IC 410-288300/14	0.5	0.230614	10.0	1536465.0	0.461228	Y
3	IC 410-288300/15	1.0	0.44812	10.0	1510198.0	0.44812	Y
4	IC 410-288300/16	2.0	0.930292	10.0	1510978.0	0.465146	Y
5	IC 410-288300/17	5.0	2.333787	10.0	1523078.0	0.466757	Y
6	ICIS 410-288300/18	10.0	4.478815	10.0	1523479.0	0.447881	Y
7	IC 410-288300/19	25.0	11.38666	10.0	1542455.0	0.455466	Y



Calibration / 1,3-Dichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

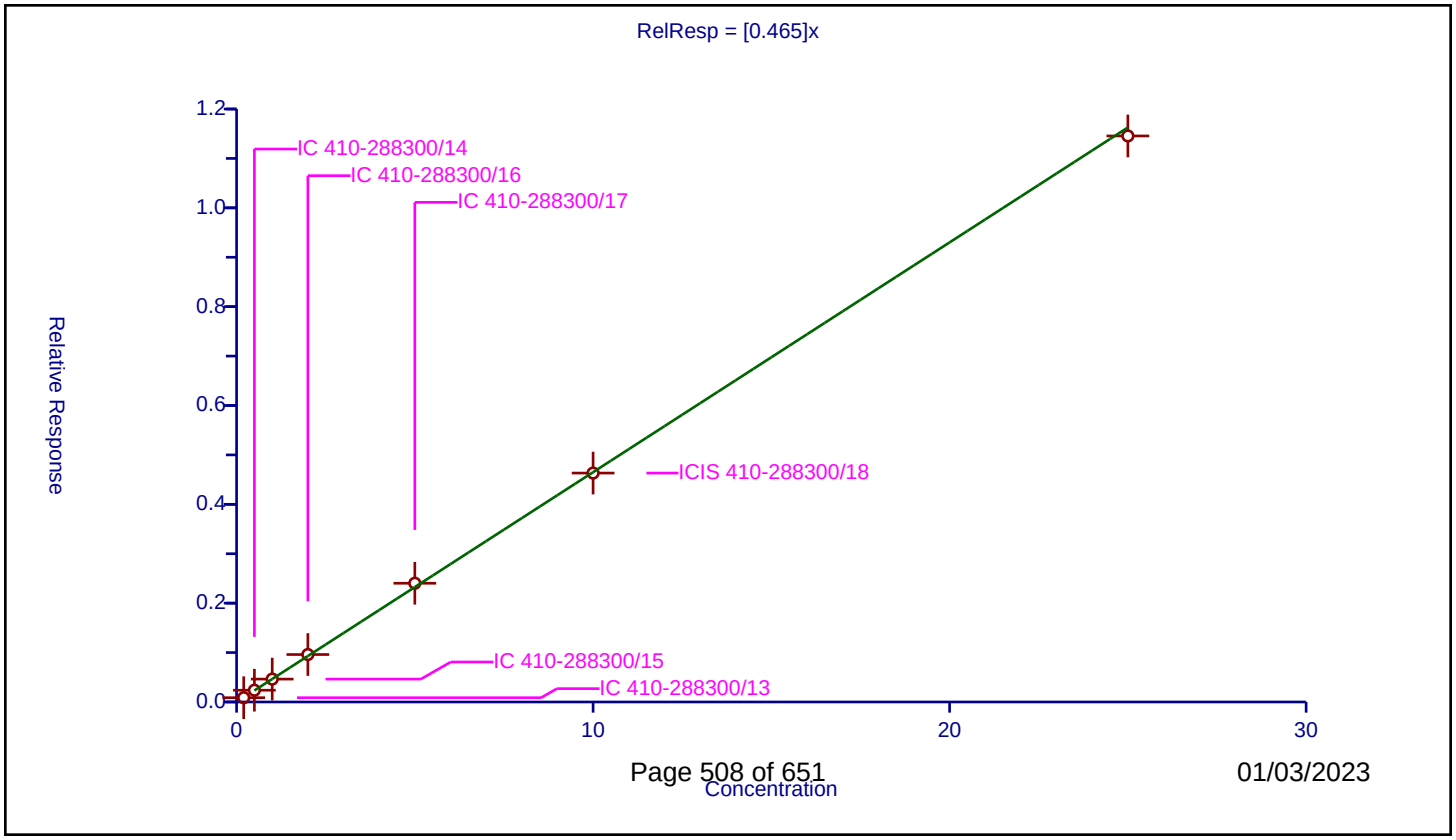
Curve Coefficients

Intercept:	0
Slope:	0.465

Error Coefficients

Standard Error:	794000
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 410-288300/13	0.2	0.086667	10.0	1542113.0	0.433334	Y
2	IC 410-288300/14	0.5	0.238209	10.0	1536465.0	0.476418	Y
3	IC 410-288300/15	1.0	0.463284	10.0	1510198.0	0.463284	Y
4	IC 410-288300/16	2.0	0.960391	10.0	1510978.0	0.480196	Y
5	IC 410-288300/17	5.0	2.403061	10.0	1523078.0	0.480612	Y
6	ICIS 410-288300/18	10.0	4.632476	10.0	1523479.0	0.463248	Y
7	IC 410-288300/19	25.0	11.455083	10.0	1542455.0	0.458203	Y



Calibration / 2-Hexanone

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

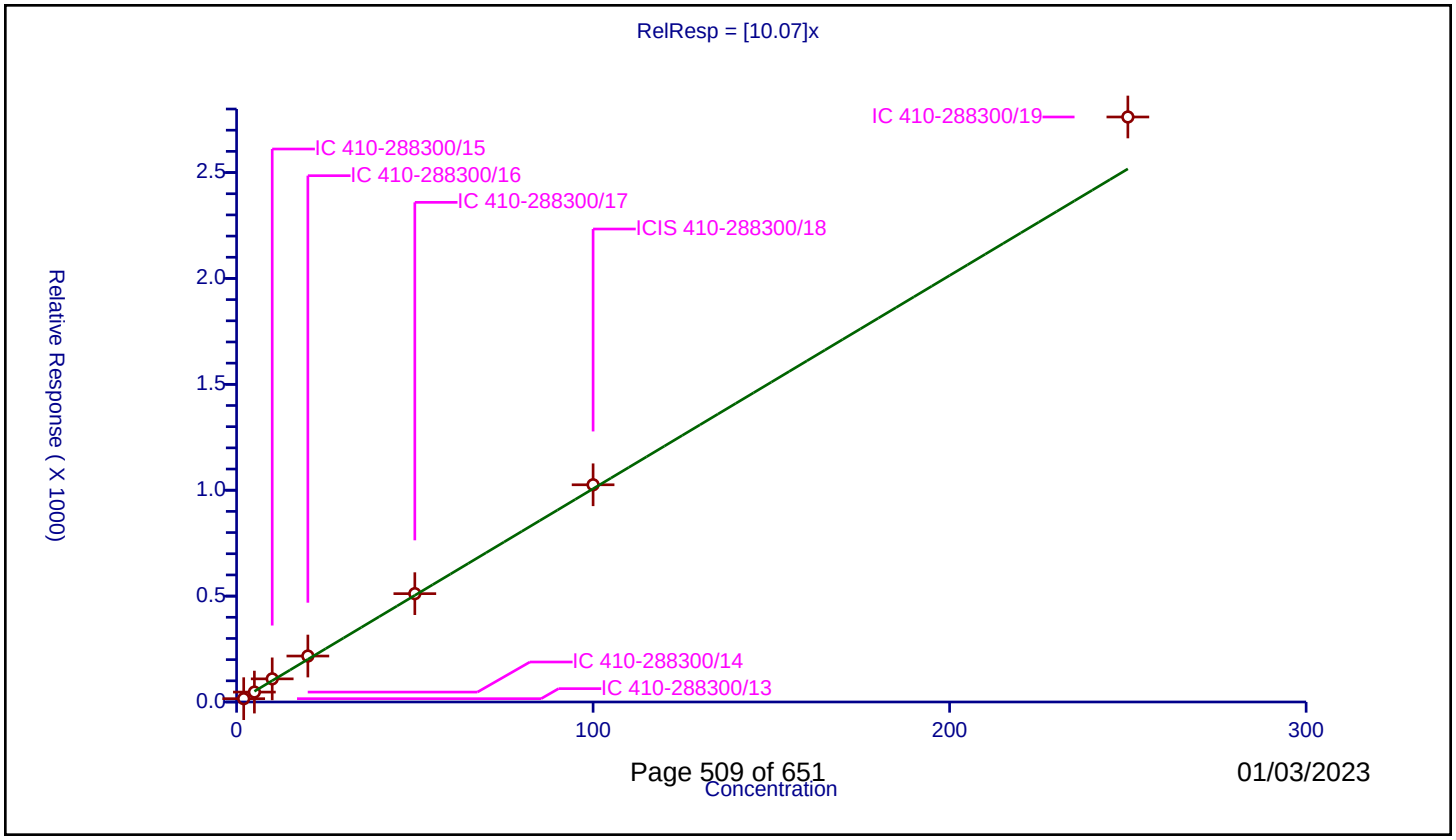
Curve Coefficients

Intercept:	0
Slope:	10.07

Error Coefficients

Standard Error:	2970000
Relative Standard Error:	11.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.985

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	2.0	15.641016	50.0	136580.0	7.820508	Y
2	IC 410-288300/14	5.0	46.798037	50.0	132044.0	9.359607	Y
3	IC 410-288300/15	10.0	109.174223	50.0	113154.0	10.917422	Y
4	IC 410-288300/16	20.0	216.959611	50.0	117656.0	10.847981	Y
5	IC 410-288300/17	50.0	511.583054	50.0	131878.0	10.231661	Y
6	ICIS 410-288300/18	100.0	1025.725289	50.0	129707.0	10.257253	Y
7	IC 410-288300/19	250.0	2762.346354	50.0	119756.0	11.049385	Y



Calibration / Chlorodibromomethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

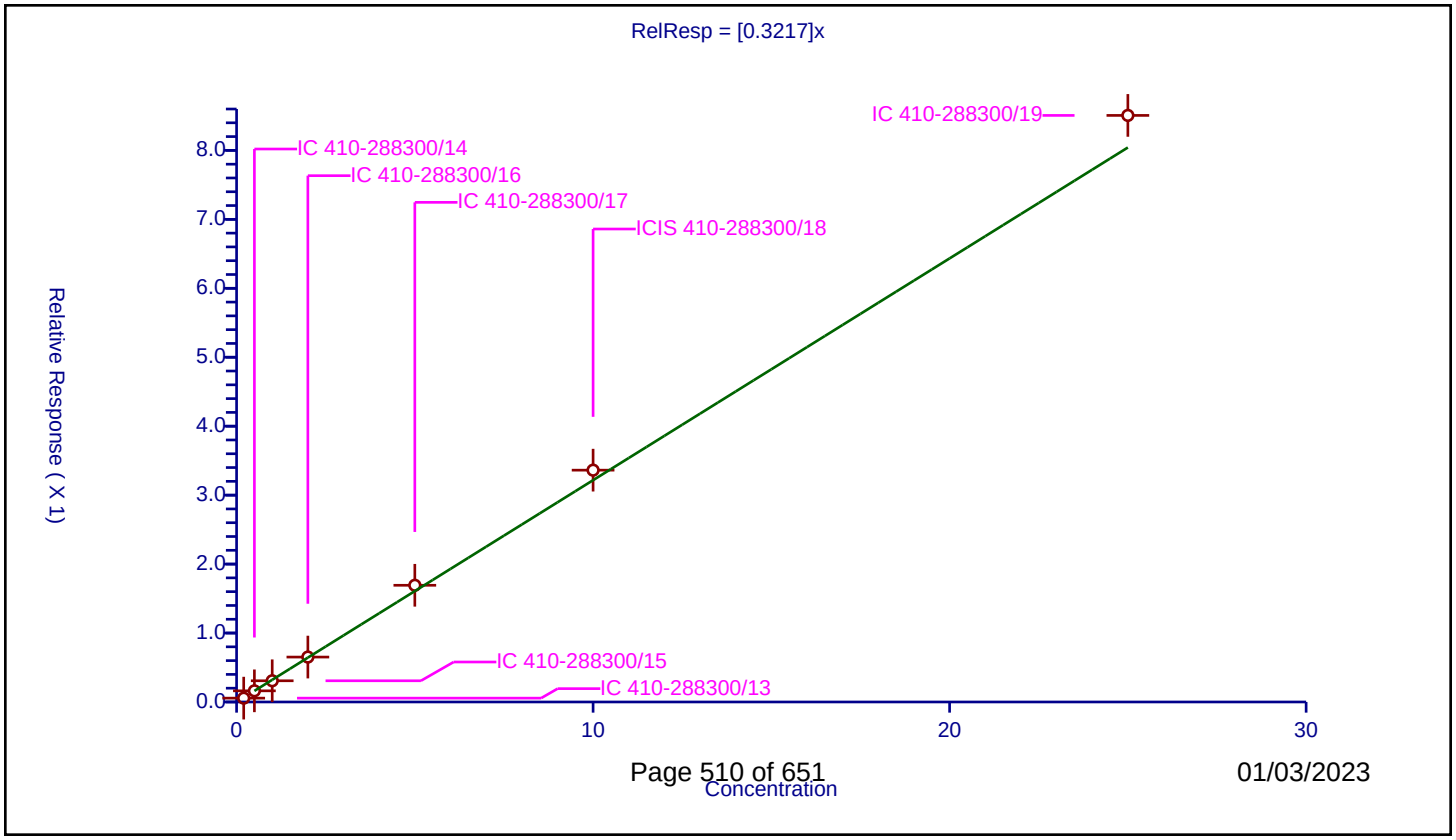
Curve Coefficients

Intercept:	0
Slope:	0.3217

Error Coefficients

Standard Error:	586000
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 410-288300/13	0.2	0.055904	10.0	1542113.0	0.279519	Y
2	IC 410-288300/14	0.5	0.161793	10.0	1536465.0	0.323587	Y
3	IC 410-288300/15	1.0	0.307781	10.0	1510198.0	0.307781	Y
4	IC 410-288300/16	2.0	0.651518	10.0	1510978.0	0.325759	Y
5	IC 410-288300/17	5.0	1.692756	10.0	1523078.0	0.338551	Y
6	ICIS 410-288300/18	10.0	3.362291	10.0	1523479.0	0.336229	Y
7	IC 410-288300/19	25.0	8.507263	10.0	1542455.0	0.340291	Y



Calibration / Ethylene Dibromide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

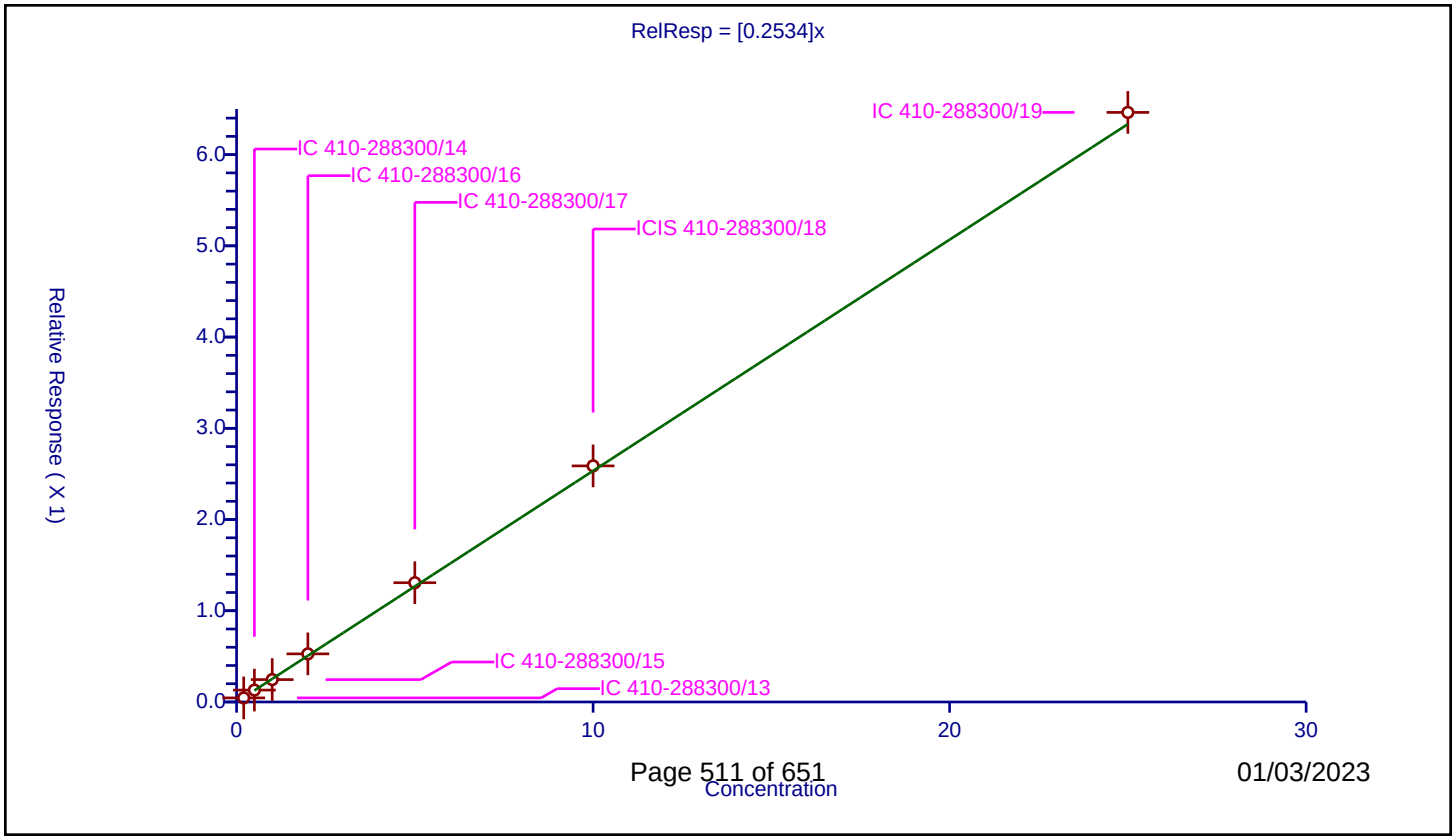
Curve Coefficients

Intercept:	0
Slope:	0.2534

Error Coefficients

Standard Error:	447000
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 410-288300/13	0.2	0.044958	10.0	1542113.0	0.224789	Y
2	IC 410-288300/14	0.5	0.130455	10.0	1536465.0	0.260911	Y
3	IC 410-288300/15	1.0	0.245425	10.0	1510198.0	0.245425	Y
4	IC 410-288300/16	2.0	0.527566	10.0	1510978.0	0.263783	Y
5	IC 410-288300/17	5.0	1.307353	10.0	1523078.0	0.261471	Y
6	ICIS 410-288300/18	10.0	2.587899	10.0	1523479.0	0.25879	Y
7	IC 410-288300/19	25.0	6.462989	10.0	1542455.0	0.25852	Y



Calibration / 1-Chlorohexane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

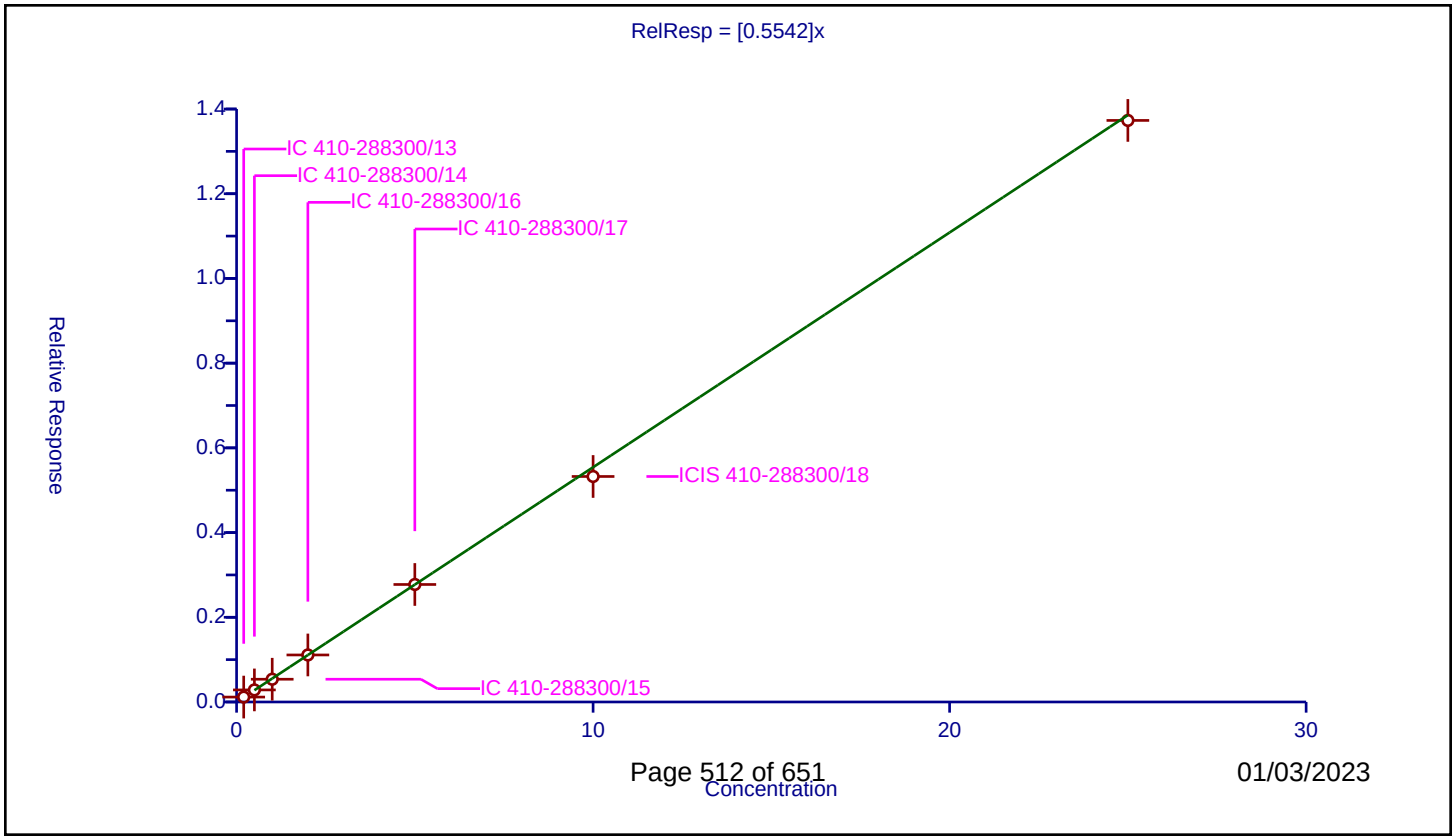
Curve Coefficients

Intercept:	0
Slope:	0.5542

Error Coefficients

Standard Error:	945000
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 410-288300/13	0.2	0.116113	10.0	1542113.0	0.580567	Y
2	IC 410-288300/14	0.5	0.285057	10.0	1536465.0	0.570114	Y
3	IC 410-288300/15	1.0	0.537327	10.0	1510198.0	0.537327	Y
4	IC 410-288300/16	2.0	1.110274	10.0	1510978.0	0.555137	Y
5	IC 410-288300/17	5.0	2.774008	10.0	1523078.0	0.554802	Y
6	ICIS 410-288300/18	10.0	5.324143	10.0	1523479.0	0.532414	Y
7	IC 410-288300/19	25.0	13.730229	10.0	1542455.0	0.549209	Y



Calibration / Chlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

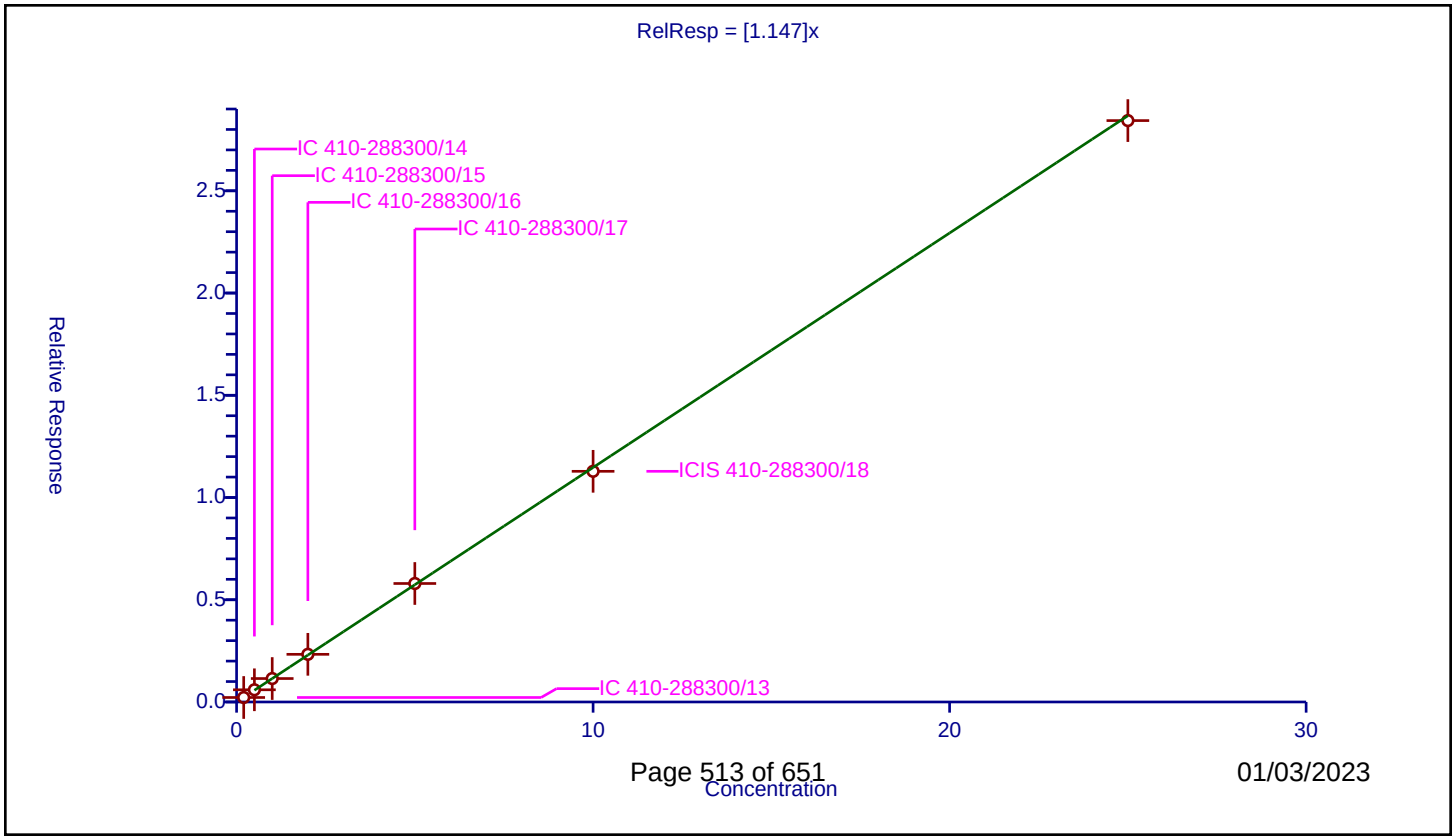
Curve Coefficients

Intercept:	0
Slope:	1.147

Error Coefficients

Standard Error:	1960000
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 410-288300/13	0.2	0.219575	10.0	1542113.0	1.097877	Y
2	IC 410-288300/14	0.5	0.596395	10.0	1536465.0	1.19279	Y
3	IC 410-288300/15	1.0	1.146823	10.0	1510198.0	1.146823	Y
4	IC 410-288300/16	2.0	2.331331	10.0	1510978.0	1.165666	Y
5	IC 410-288300/17	5.0	5.794917	10.0	1523078.0	1.158983	Y
6	ICIS 410-288300/18	10.0	11.281304	10.0	1523479.0	1.12813	Y
7	IC 410-288300/19	25.0	28.433601	10.0	1542455.0	1.137344	Y



Calibration / 1,1,1,2-Tetrachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

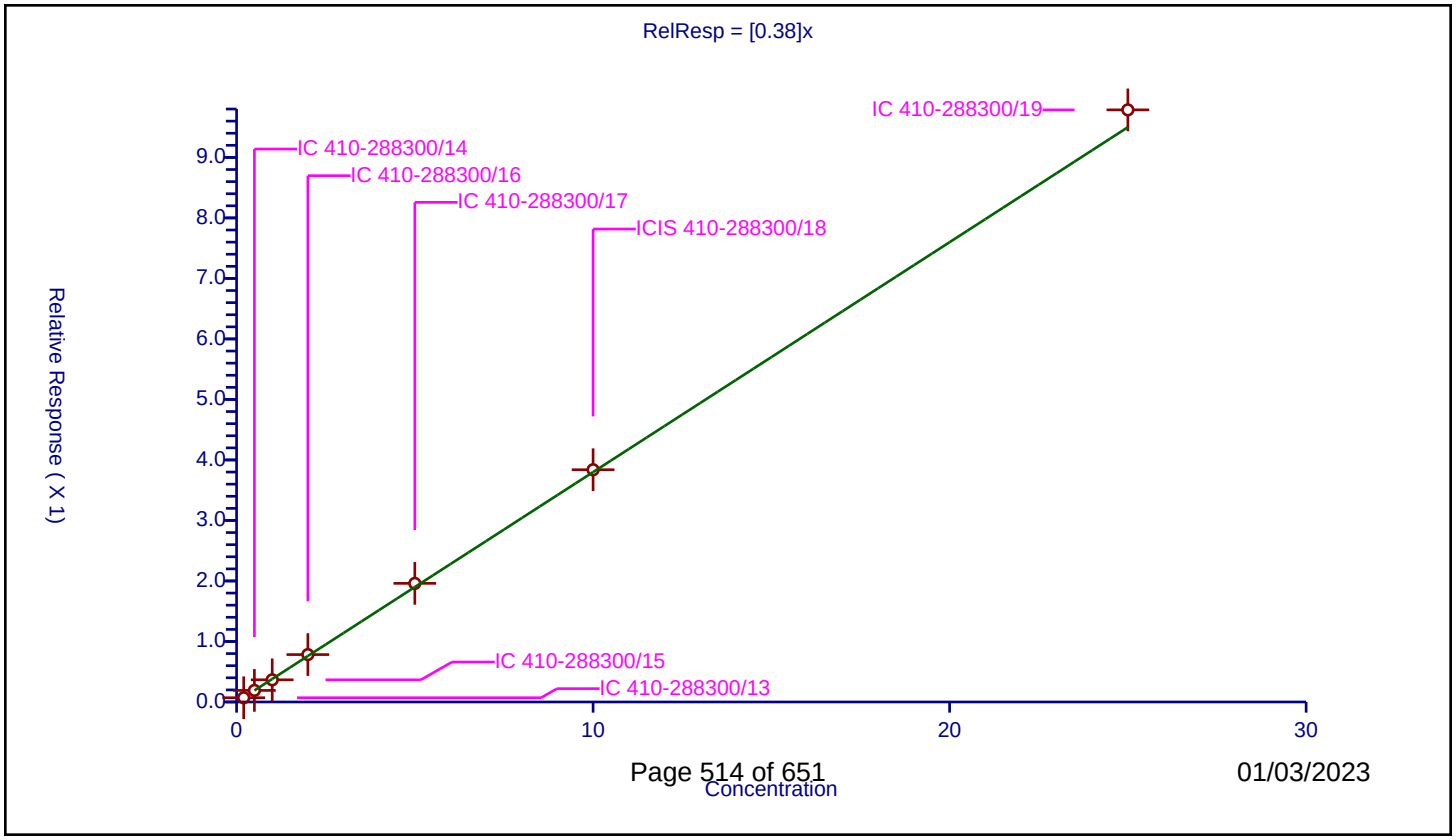
Curve Coefficients

Intercept:	0
Slope:	0.38

Error Coefficients

Standard Error:	674000
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 410-288300/13	0.2	0.070306	10.0	1542113.0	0.351531	Y
2	IC 410-288300/14	0.5	0.191426	10.0	1536465.0	0.382853	Y
3	IC 410-288300/15	1.0	0.366343	10.0	1510198.0	0.366343	Y
4	IC 410-288300/16	2.0	0.783188	10.0	1510978.0	0.391594	Y
5	IC 410-288300/17	5.0	1.960307	10.0	1523078.0	0.392061	Y
6	ICIS 410-288300/18	10.0	3.838563	10.0	1523479.0	0.383856	Y
7	IC 410-288300/19	25.0	9.78601	10.0	1542455.0	0.39144	Y



Calibration / Ethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

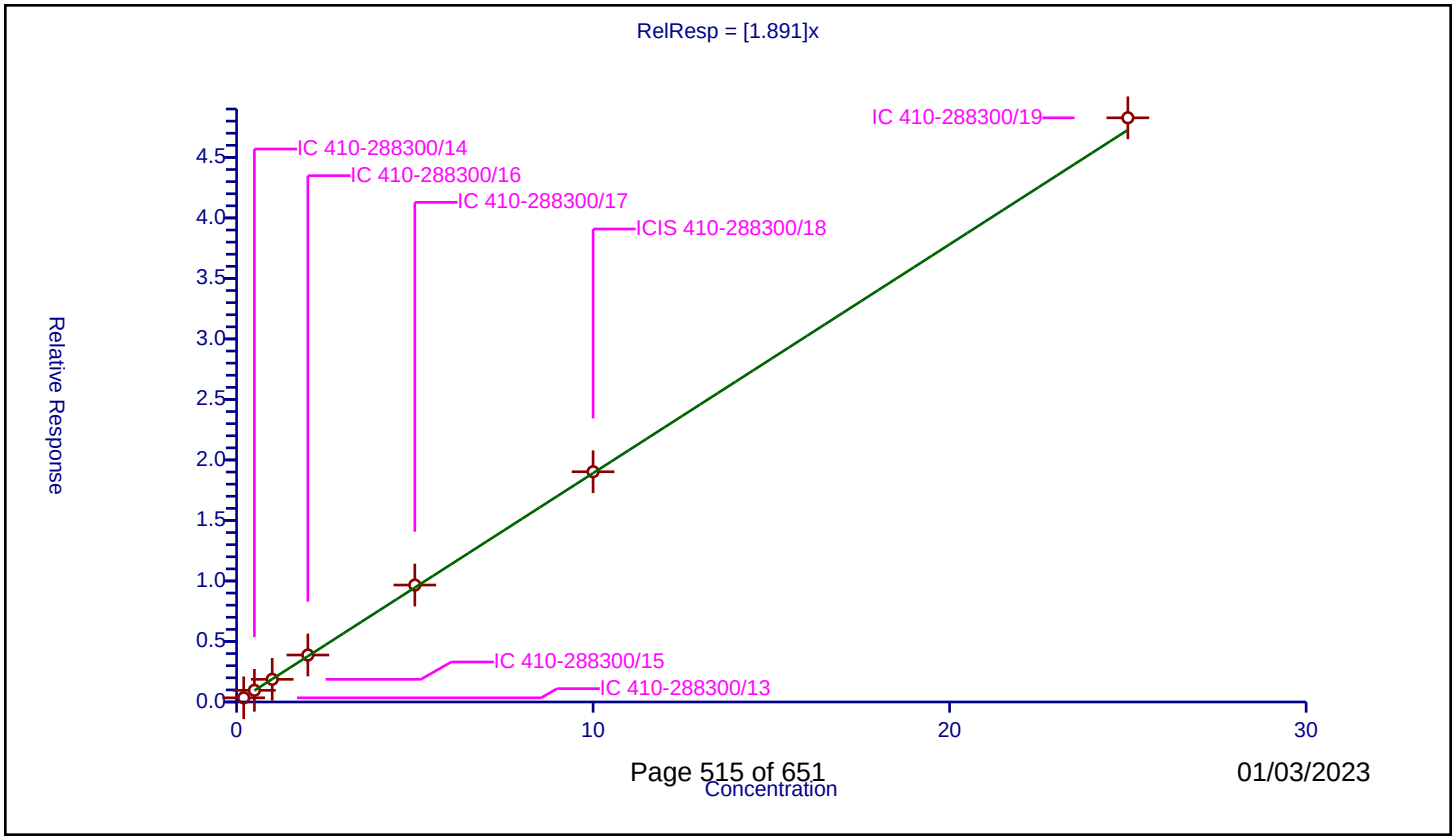
Curve Coefficients

Intercept:	0
Slope:	1.891

Error Coefficients

Standard Error:	3330000
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 410-288300/13	0.2	0.345545	10.0	1542113.0	1.727727	Y
2	IC 410-288300/14	0.5	0.964806	10.0	1536465.0	1.929611	Y
3	IC 410-288300/15	1.0	1.871145	10.0	1510198.0	1.871145	Y
4	IC 410-288300/16	2.0	3.882426	10.0	1510978.0	1.941213	Y
5	IC 410-288300/17	5.0	9.66416	10.0	1523078.0	1.932832	Y
6	ICIS 410-288300/18	10.0	19.026879	10.0	1523479.0	1.902688	Y
7	IC 410-288300/19	25.0	48.27265	10.0	1542455.0	1.930906	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

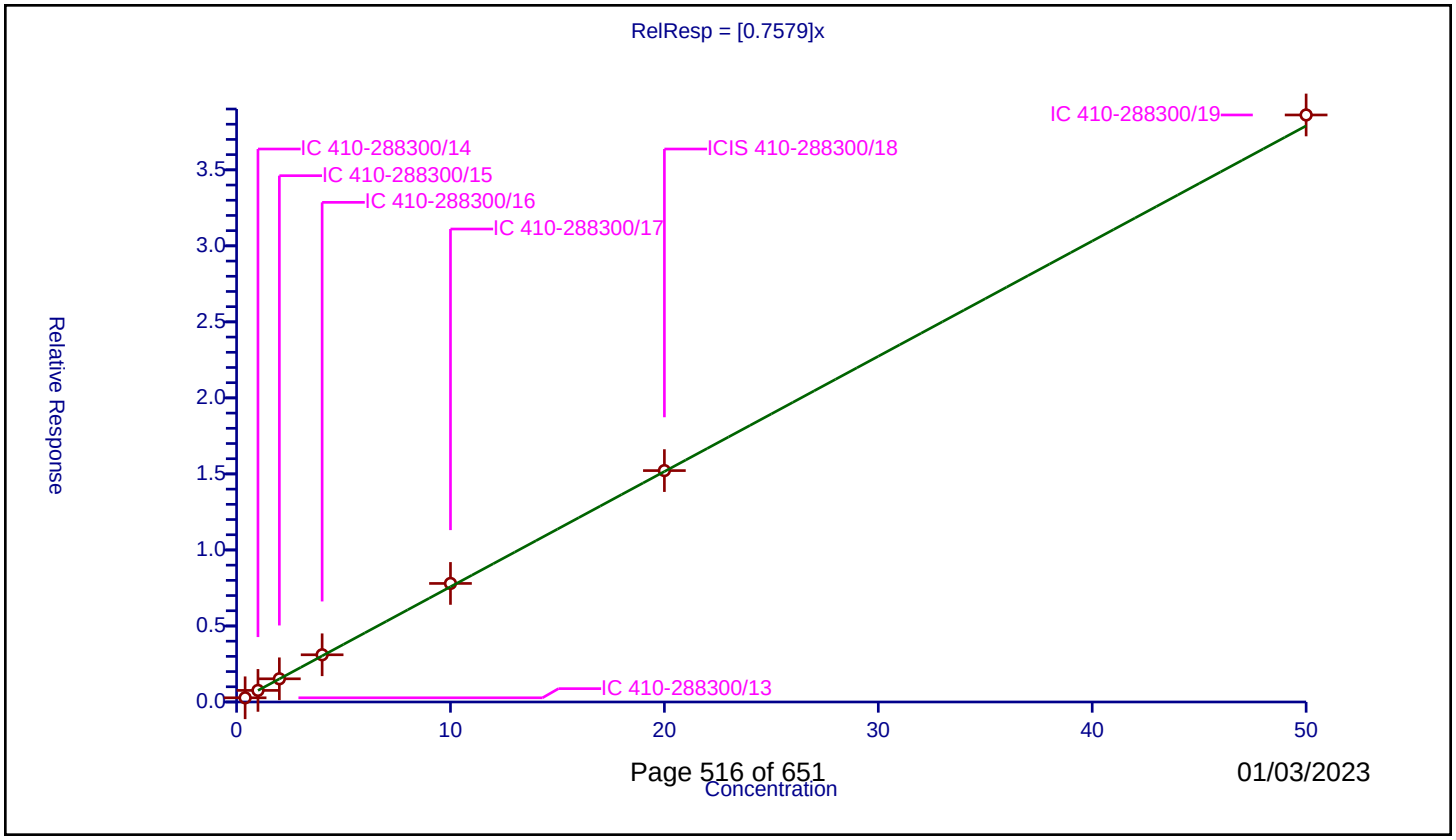
Curve Coefficients

Intercept:	0
Slope:	0.7579

Error Coefficients

Standard Error:	2660000
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 410-288300/13	0.4	0.27618	10.0	1542113.0	0.690449	Y
2	IC 410-288300/14	1.0	0.76277	10.0	1536465.0	0.76277	Y
3	IC 410-288300/15	2.0	1.525363	10.0	1510198.0	0.762681	Y
4	IC 410-288300/16	4.0	3.105386	10.0	1510978.0	0.776347	Y
5	IC 410-288300/17	10.0	7.796364	10.0	1523078.0	0.779636	Y
6	ICIS 410-288300/18	20.0	15.22	10.0	1523479.0	0.761	Y
7	IC 410-288300/19	50.0	38.609658	10.0	1542455.0	0.772193	Y



Calibration / o-Xylene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

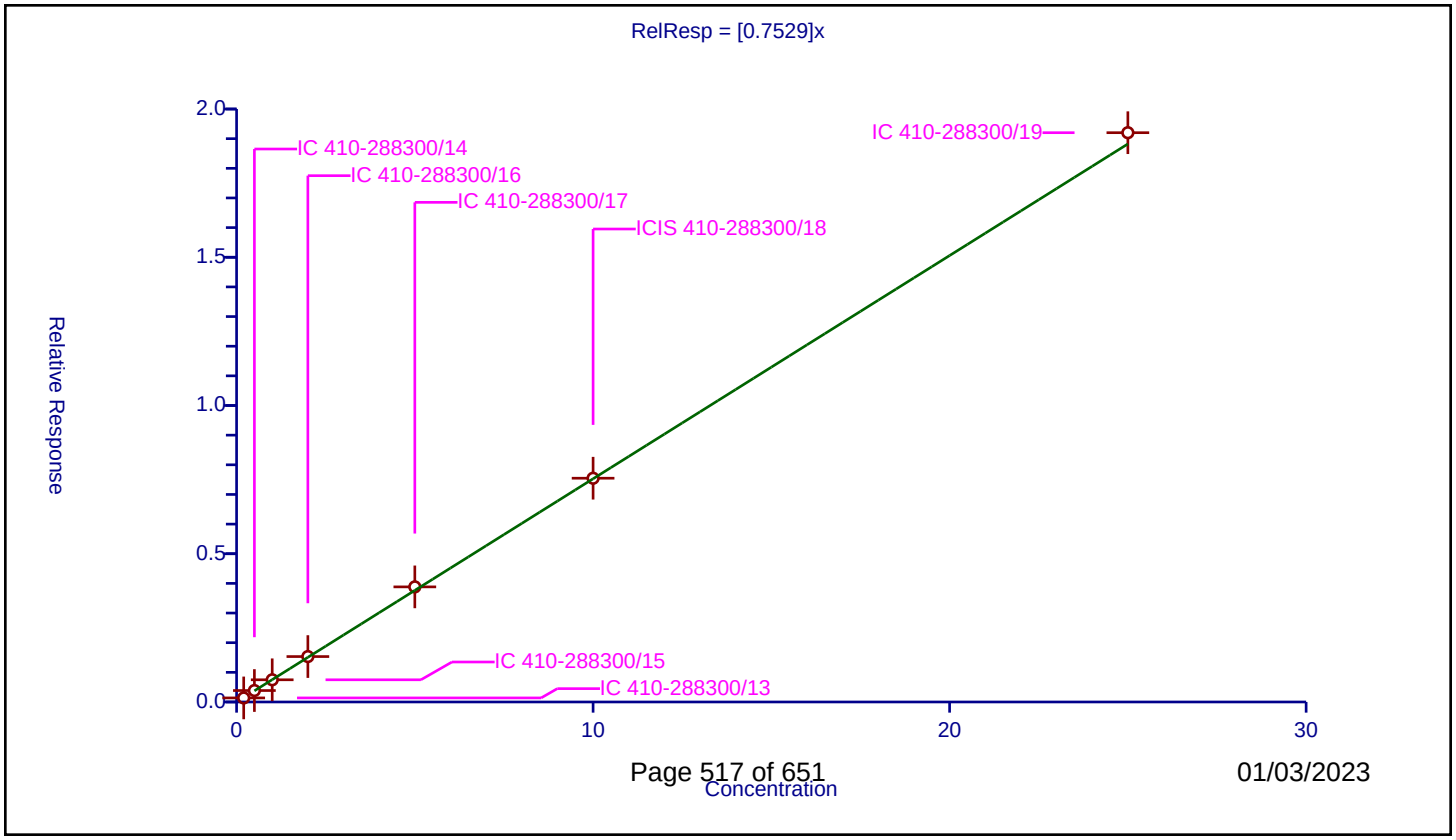
Curve Coefficients

Intercept:	0
Slope:	0.7529

Error Coefficients

Standard Error:	1320000
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 410-288300/13	0.2	0.136935	10.0	1542113.0	0.684677	Y
2	IC 410-288300/14	0.5	0.385899	10.0	1536465.0	0.771798	Y
3	IC 410-288300/15	1.0	0.748452	10.0	1510198.0	0.748452	Y
4	IC 410-288300/16	2.0	1.53216	10.0	1510978.0	0.76608	Y
5	IC 410-288300/17	5.0	3.881975	10.0	1523078.0	0.776395	Y
6	ICIS 410-288300/18	10.0	7.547042	10.0	1523479.0	0.754704	Y
7	IC 410-288300/19	25.0	19.201202	10.0	1542455.0	0.768048	Y



Calibration / Styrene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

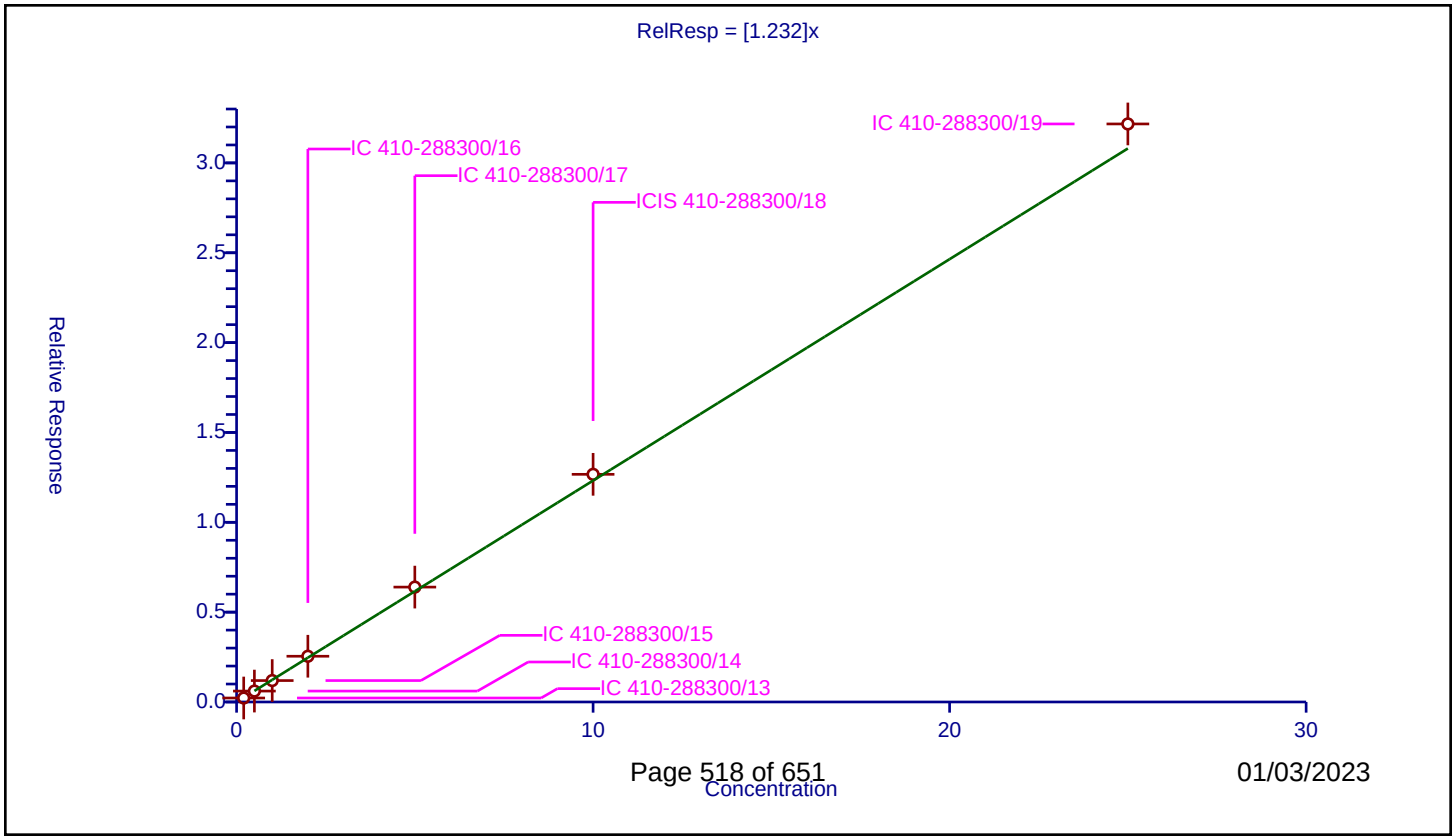
Curve Coefficients

Intercept:	0
Slope:	1.232

Error Coefficients

Standard Error:	2220000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.2	0.222532	10.0	1542113.0	1.112662	Y
2	IC 410-288300/14	0.5	0.607179	10.0	1536465.0	1.214359	Y
3	IC 410-288300/15	1.0	1.192665	10.0	1510198.0	1.192665	Y
4	IC 410-288300/16	2.0	2.54557	10.0	1510978.0	1.272785	Y
5	IC 410-288300/17	5.0	6.393533	10.0	1523078.0	1.278707	Y
6	ICIS 410-288300/18	10.0	12.66962	10.0	1523479.0	1.266962	Y
7	IC 410-288300/19	25.0	32.169483	10.0	1542455.0	1.286779	Y



Calibration / Bromoform

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

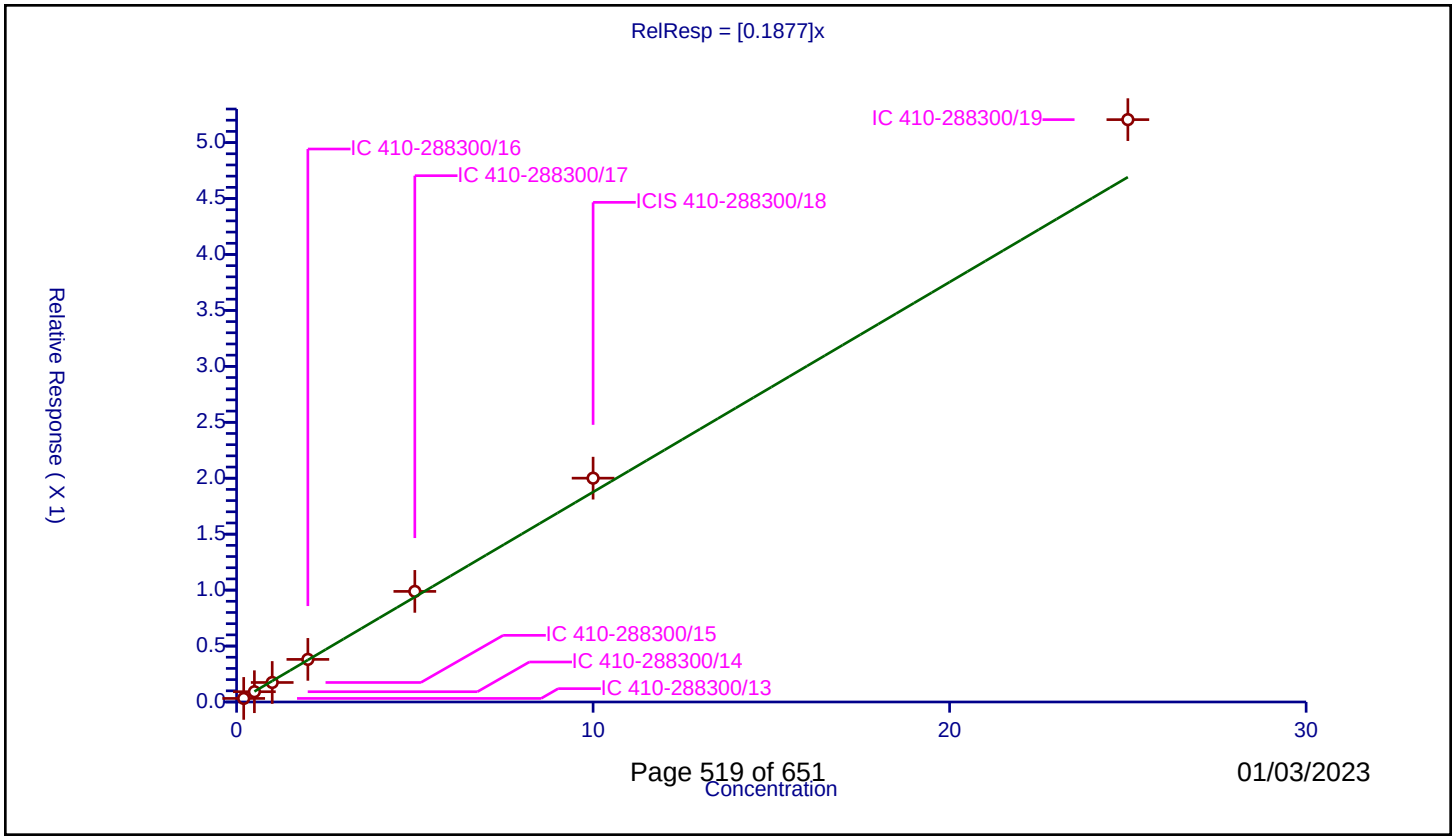
Curve Coefficients

Intercept:	0
Slope:	0.1877

Error Coefficients

Standard Error:	357000
Relative Standard Error:	8.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.2	0.031846	10.0	1542113.0	0.15923	Y
2	IC 410-288300/14	0.5	0.09186	10.0	1536465.0	0.18372	Y
3	IC 410-288300/15	1.0	0.174322	10.0	1510198.0	0.174322	Y
4	IC 410-288300/16	2.0	0.380661	10.0	1510978.0	0.19033	Y
5	IC 410-288300/17	5.0	0.988636	10.0	1523078.0	0.197727	Y
6	ICIS 410-288300/18	10.0	2.0005	10.0	1523479.0	0.20005	Y
7	IC 410-288300/19	25.0	5.205092	10.0	1542455.0	0.208204	Y



Calibration / Isopropylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

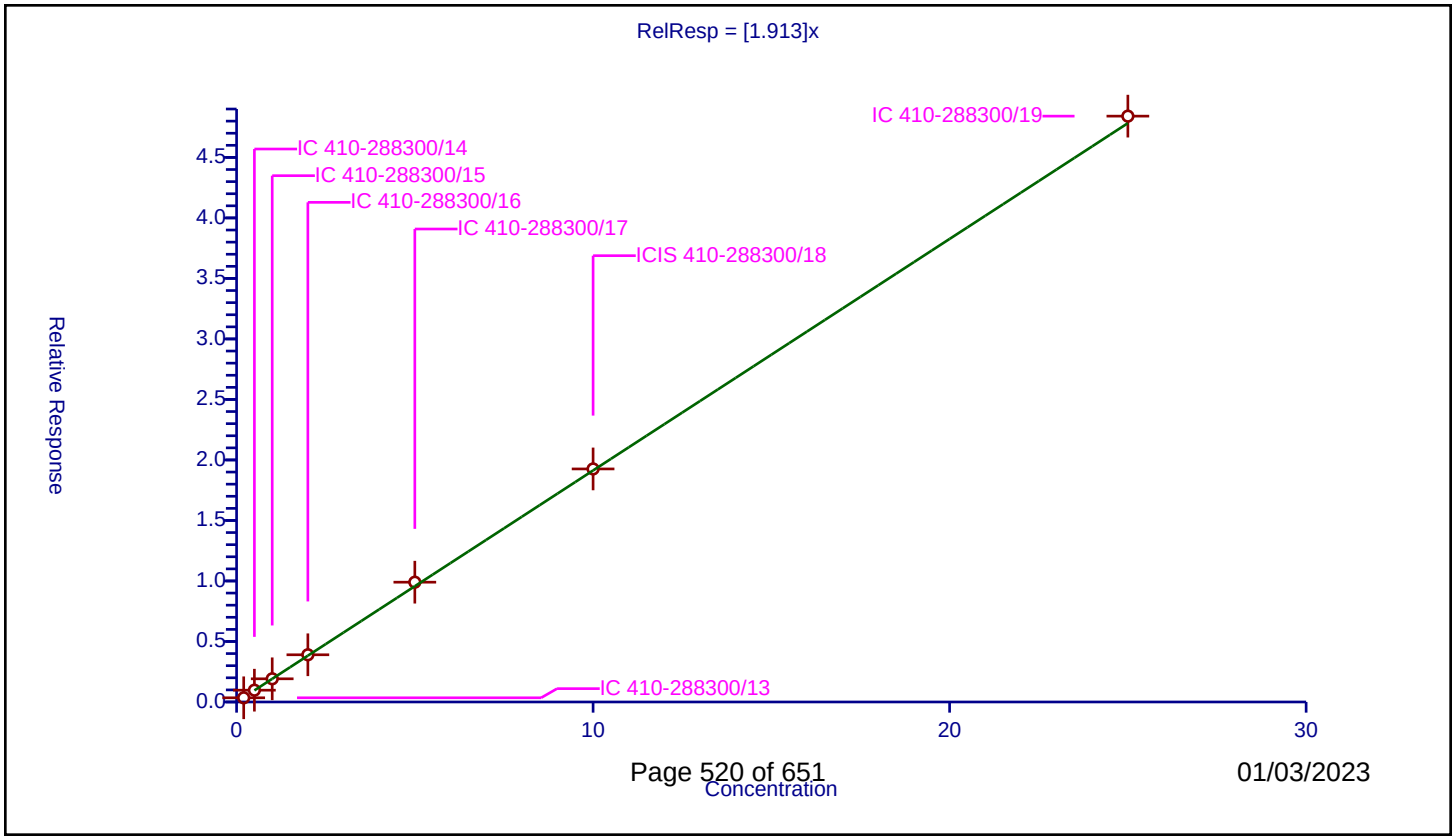
Curve Coefficients

Intercept:	0
Slope:	1.913

Error Coefficients

Standard Error:	3340000
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 410-288300/13	0.2	0.346116	10.0	1542113.0	1.73058	Y
2	IC 410-288300/14	0.5	0.975961	10.0	1536465.0	1.951922	Y
3	IC 410-288300/15	1.0	1.916226	10.0	1510198.0	1.916226	Y
4	IC 410-288300/16	2.0	3.902327	10.0	1510978.0	1.951163	Y
5	IC 410-288300/17	5.0	9.899598	10.0	1523078.0	1.97992	Y
6	ICIS 410-288300/18	10.0	19.258789	10.0	1523479.0	1.925879	Y
7	IC 410-288300/19	25.0	48.411429	10.0	1542455.0	1.936457	Y



Calibration / 4-Bromofluorobenzene (Surr)

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

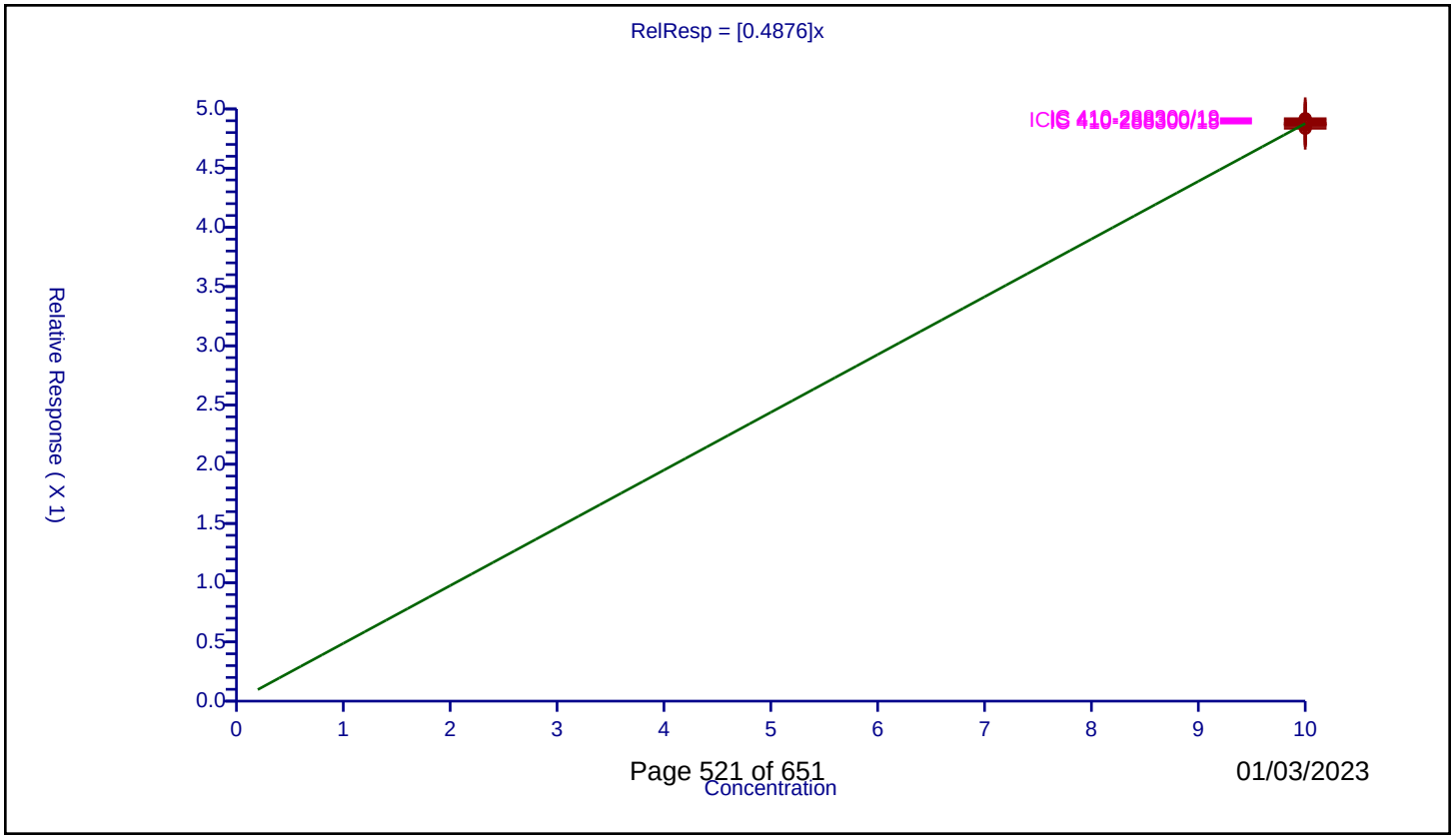
Curve Coefficients

Intercept:	0
Slope:	0.4876

Error Coefficients

Standard Error:	804000
Relative Standard Error:	0.5
Correlation Coefficient:	0.00000000000000000000
Coefficient of Determination (Adjusted):	0

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	10.0	4.860202	10.0	1542113.0	0.48602	Y
2	IC 410-288300/14	10.0	4.836251	10.0	1536465.0	0.483625	Y
3	IC 410-288300/15	10.0	4.880334	10.0	1510198.0	0.488033	Y
4	IC 410-288300/16	10.0	4.864565	10.0	1510978.0	0.486456	Y
5	IC 410-288300/17	10.0	4.876224	10.0	1523078.0	0.487622	Y
6	ICIS 410-288300/18	10.0	4.899017	10.0	1523479.0	0.489902	Y
7	IC 410-288300/19	10.0	4.917187	10.0	1542455.0	0.491719	Y



Calibration / 1,1,2,2-Tetrachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

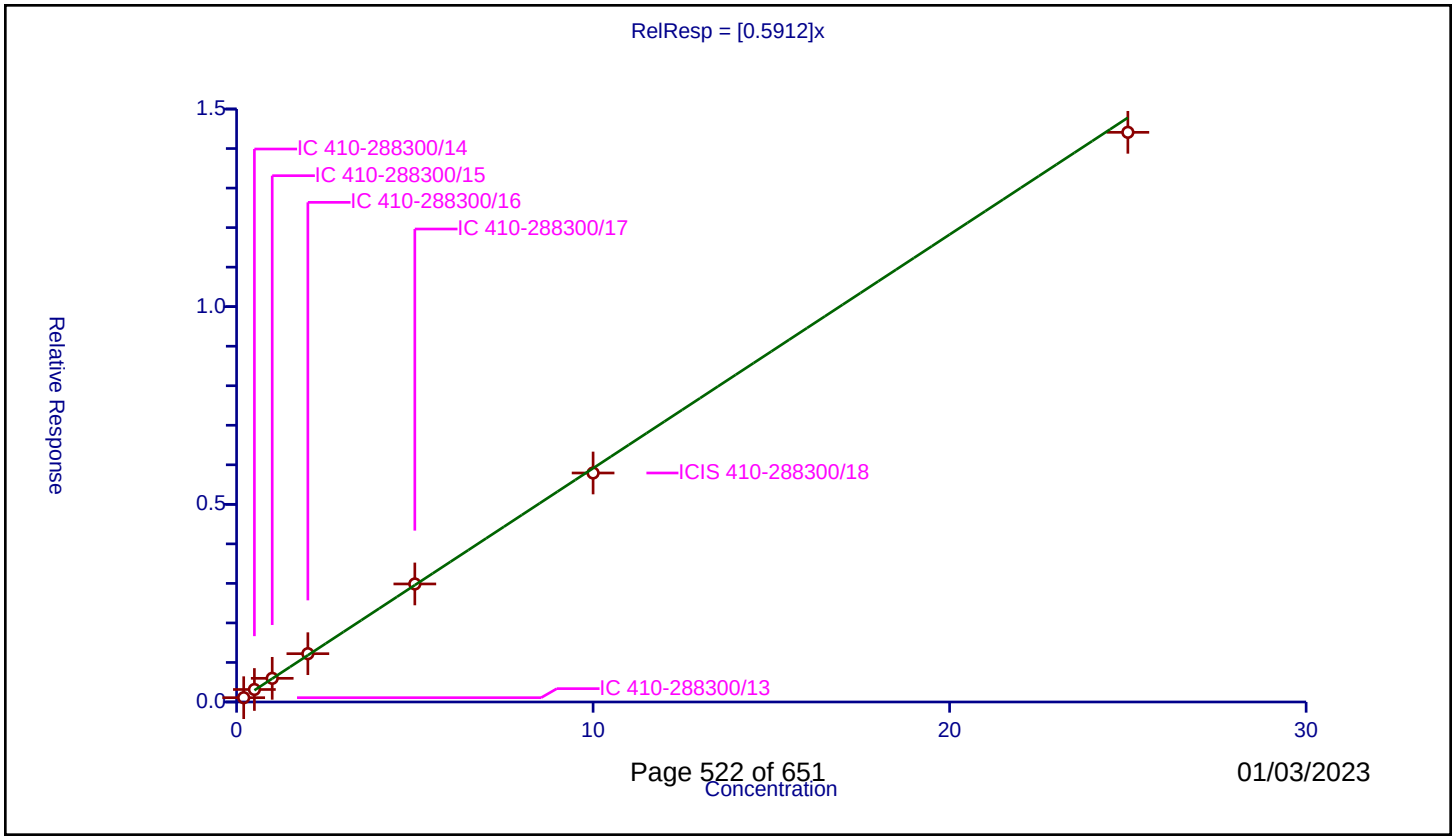
Curve Coefficients

Intercept:	0
Slope:	0.5912

Error Coefficients

Standard Error:	597000
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 410-288300/13	0.2	0.10881	10.0	881628.0	0.54405	Y
2	IC 410-288300/14	0.5	0.315918	10.0	871682.0	0.631836	Y
3	IC 410-288300/15	1.0	0.598962	10.0	860455.0	0.598962	Y
4	IC 410-288300/16	2.0	1.221822	10.0	872795.0	0.610911	Y
5	IC 410-288300/17	5.0	2.985761	10.0	886836.0	0.597152	Y
6	ICIS 410-288300/18	10.0	5.792545	10.0	900908.0	0.579254	Y
7	IC 410-288300/19	25.0	14.410555	10.0	926990.0	0.576422	Y



Calibration / Bromobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

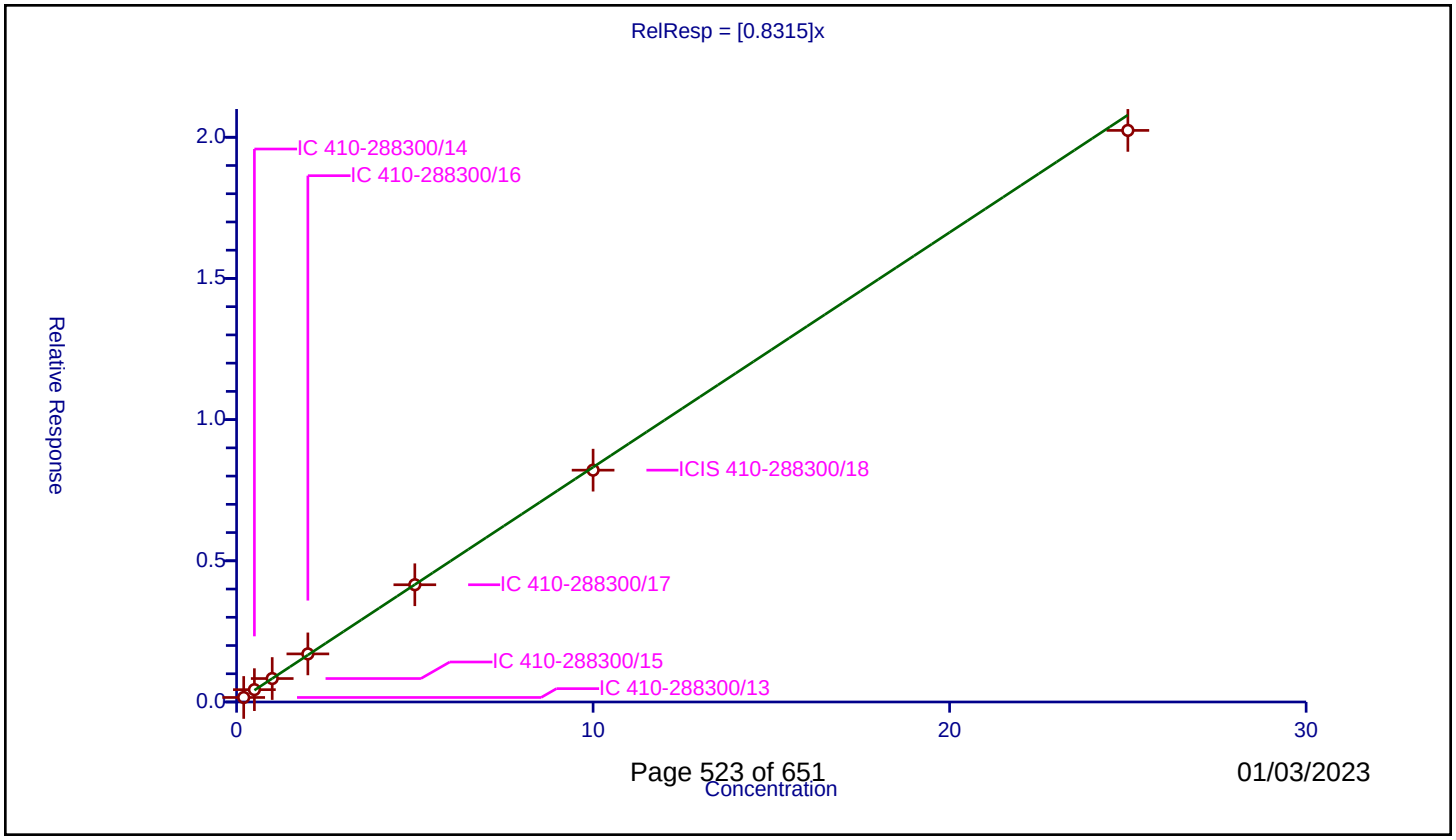
Curve Coefficients

Intercept:	0
Slope:	0.8315

Error Coefficients

Standard Error:	840000
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 410-288300/13	0.2	0.160533	10.0	881628.0	0.802663	Y
2	IC 410-288300/14	0.5	0.437086	10.0	871682.0	0.874172	Y
3	IC 410-288300/15	1.0	0.830874	10.0	860455.0	0.830874	Y
4	IC 410-288300/16	2.0	1.703241	10.0	872795.0	0.85162	Y
5	IC 410-288300/17	5.0	4.152425	10.0	886836.0	0.830485	Y
6	ICIS 410-288300/18	10.0	8.21015	10.0	900908.0	0.821015	Y
7	IC 410-288300/19	25.0	20.242128	10.0	926990.0	0.809685	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

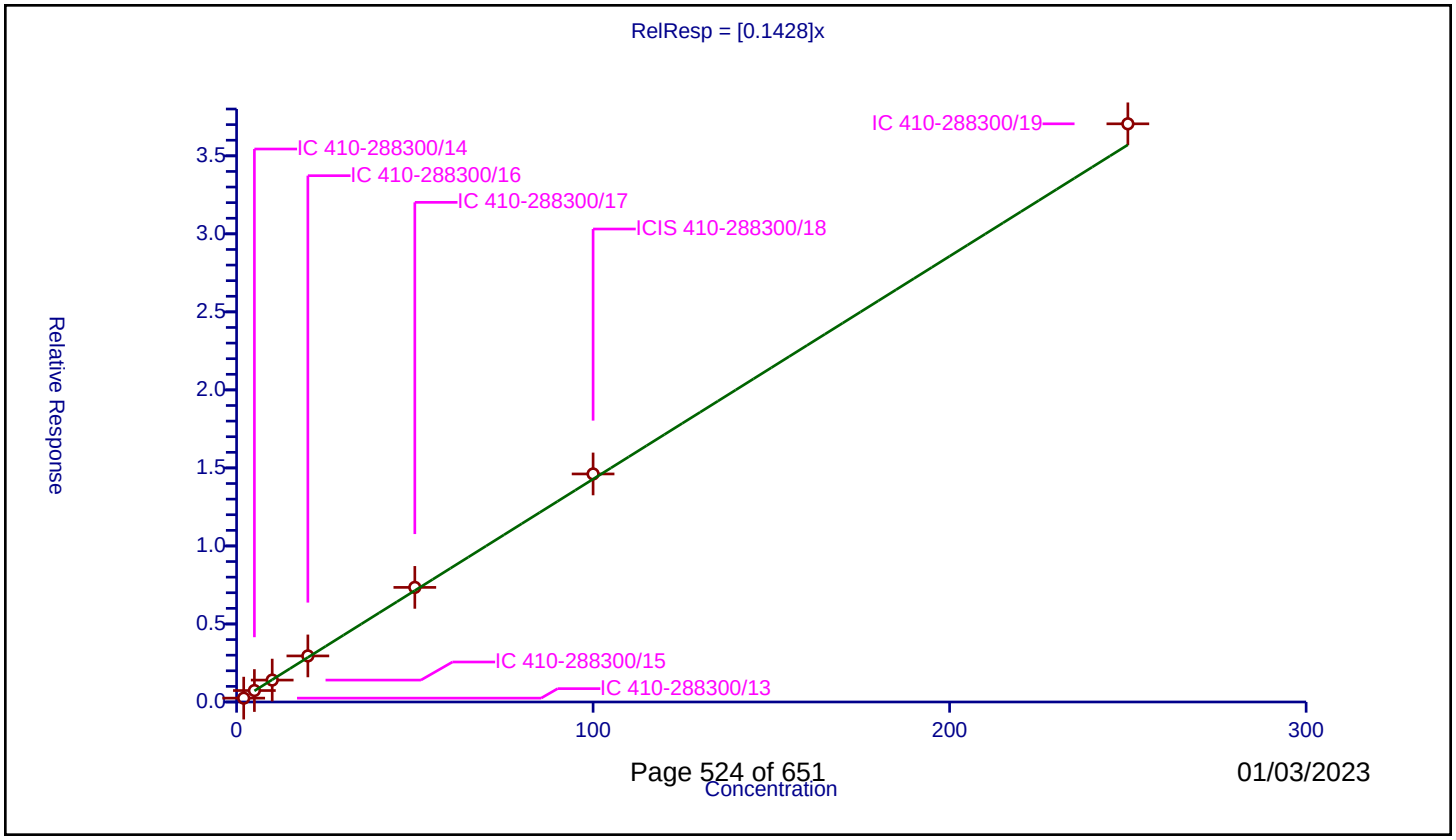
Curve Coefficients

Intercept:	0
Slope:	0.1428

Error Coefficients

Standard Error:	1530000
Relative Standard Error:	6.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	2.0	0.247361	10.0	881628.0	0.12368	Y
2	IC 410-288300/14	5.0	0.733857	10.0	871682.0	0.146771	Y
3	IC 410-288300/15	10.0	1.404292	10.0	860455.0	0.140429	Y
4	IC 410-288300/16	20.0	2.952824	10.0	872795.0	0.147641	Y
5	IC 410-288300/17	50.0	7.344537	10.0	886836.0	0.146891	Y
6	ICIS 410-288300/18	100.0	14.6145	10.0	900908.0	0.146145	Y
7	IC 410-288300/19	250.0	37.051015	10.0	926990.0	0.148204	Y



Calibration / 1,2,3-Trichloropropane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

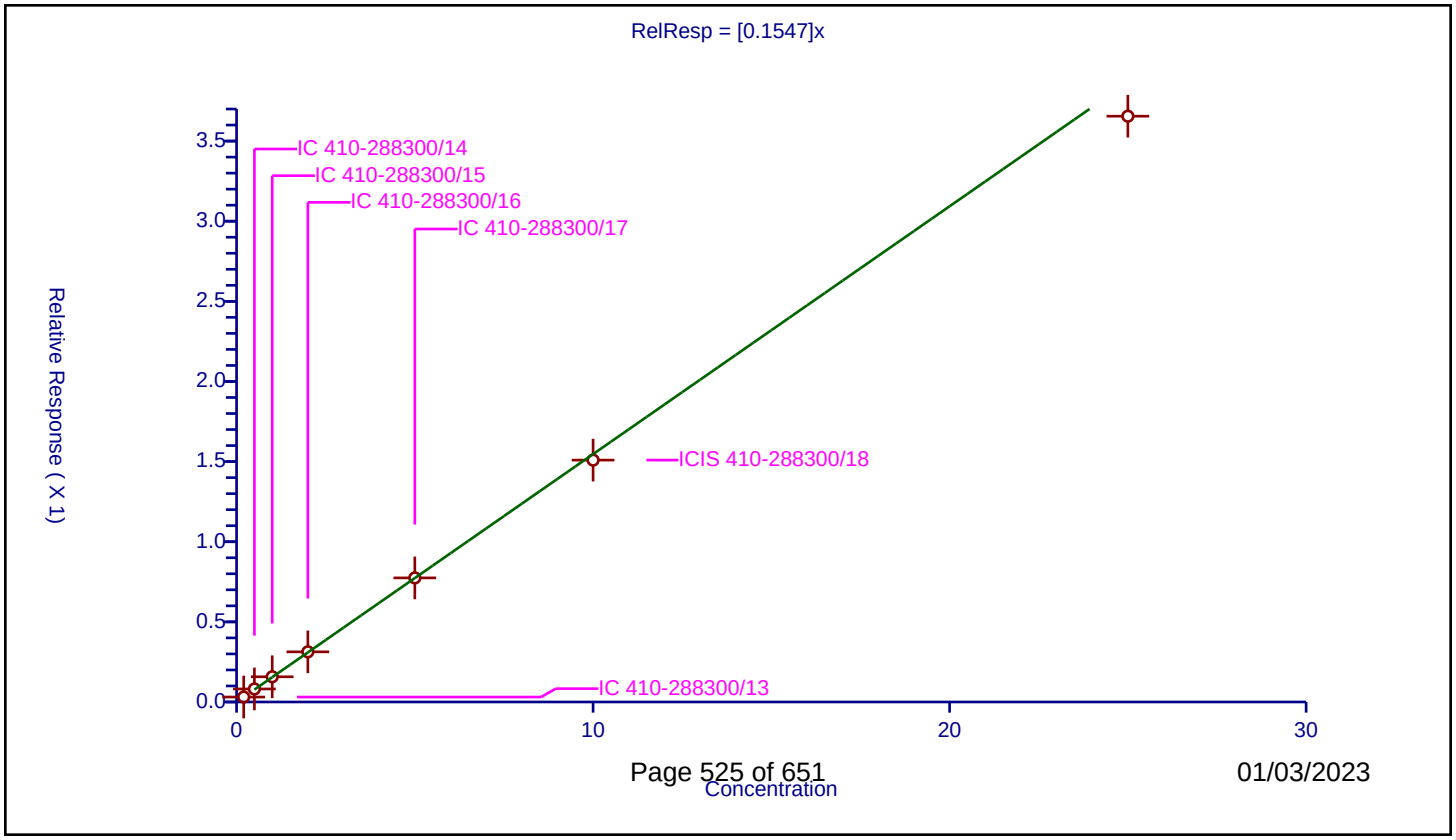
Curve Coefficients

Intercept:	0
Slope:	0.1547

Error Coefficients

Standard Error:	152000
Relative Standard Error:	3.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.998

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.2	0.030852	10.0	881628.0	0.15426	Y
2	IC 410-288300/14	0.5	0.081257	10.0	871682.0	0.162513	Y
3	IC 410-288300/15	1.0	0.157324	10.0	860455.0	0.157324	Y
4	IC 410-288300/16	2.0	0.312983	10.0	872795.0	0.156492	Y
5	IC 410-288300/17	5.0	0.774258	10.0	886836.0	0.154852	Y
6	ICIS 410-288300/18	10.0	1.509344	10.0	900908.0	0.150934	Y
7	IC 410-288300/19	25.0	3.655174	10.0	926990.0	0.146207	Y



Calibration / N-Propylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

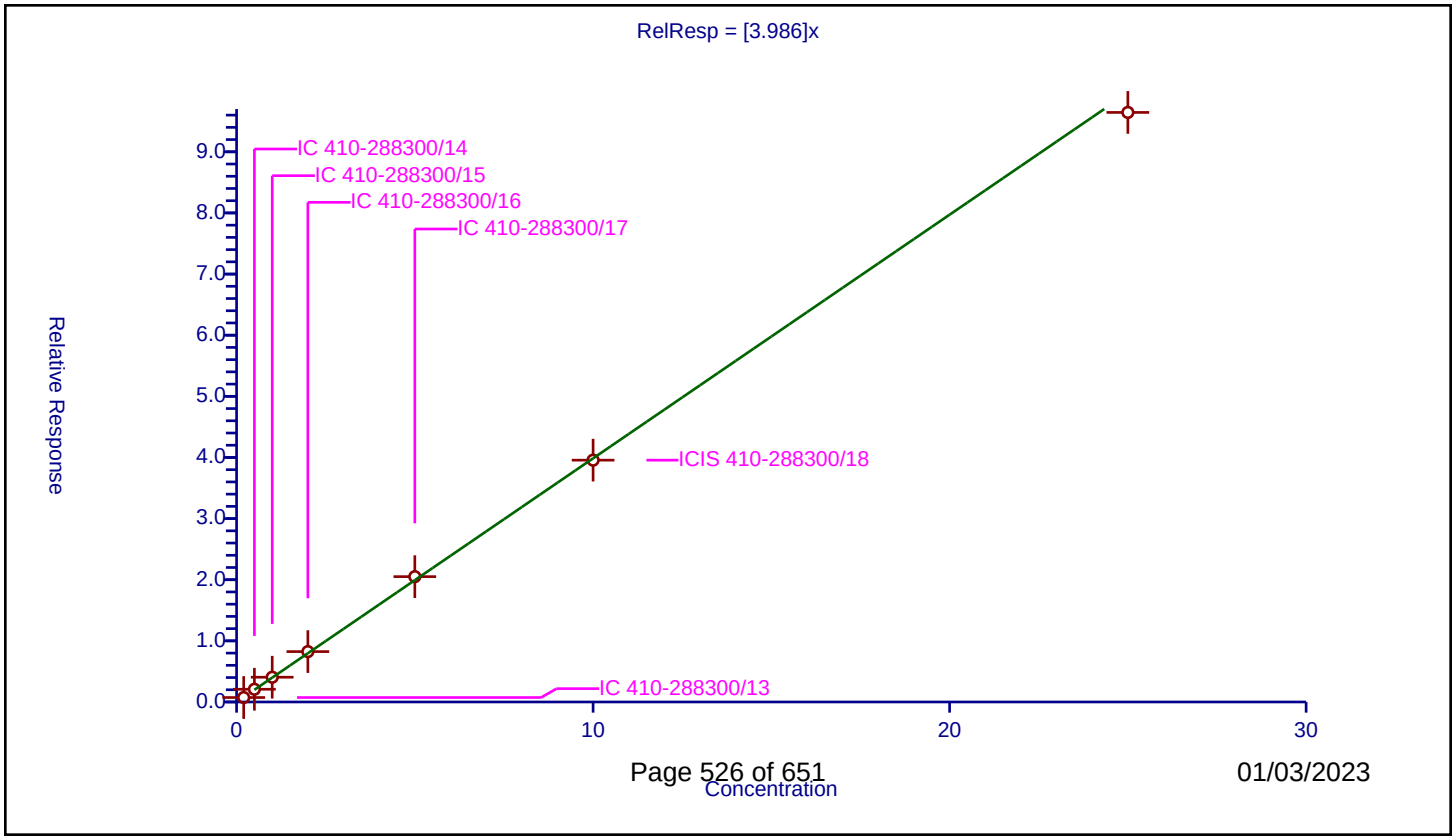
Curve Coefficients

Intercept:	0
Slope:	3.986

Error Coefficients

Standard Error:	4010000
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 410-288300/13	0.2	0.729911	10.0	881628.0	3.649555	Y
2	IC 410-288300/14	0.5	2.081688	10.0	871682.0	4.163376	Y
3	IC 410-288300/15	1.0	4.051566	10.0	860455.0	4.051566	Y
4	IC 410-288300/16	2.0	8.240366	10.0	872795.0	4.120183	Y
5	IC 410-288300/17	5.0	20.502641	10.0	886836.0	4.100528	Y
6	ICIS 410-288300/18	10.0	39.559777	10.0	900908.0	3.955978	Y
7	IC 410-288300/19	25.0	96.443629	10.0	926990.0	3.857745	Y



Calibration / 2-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

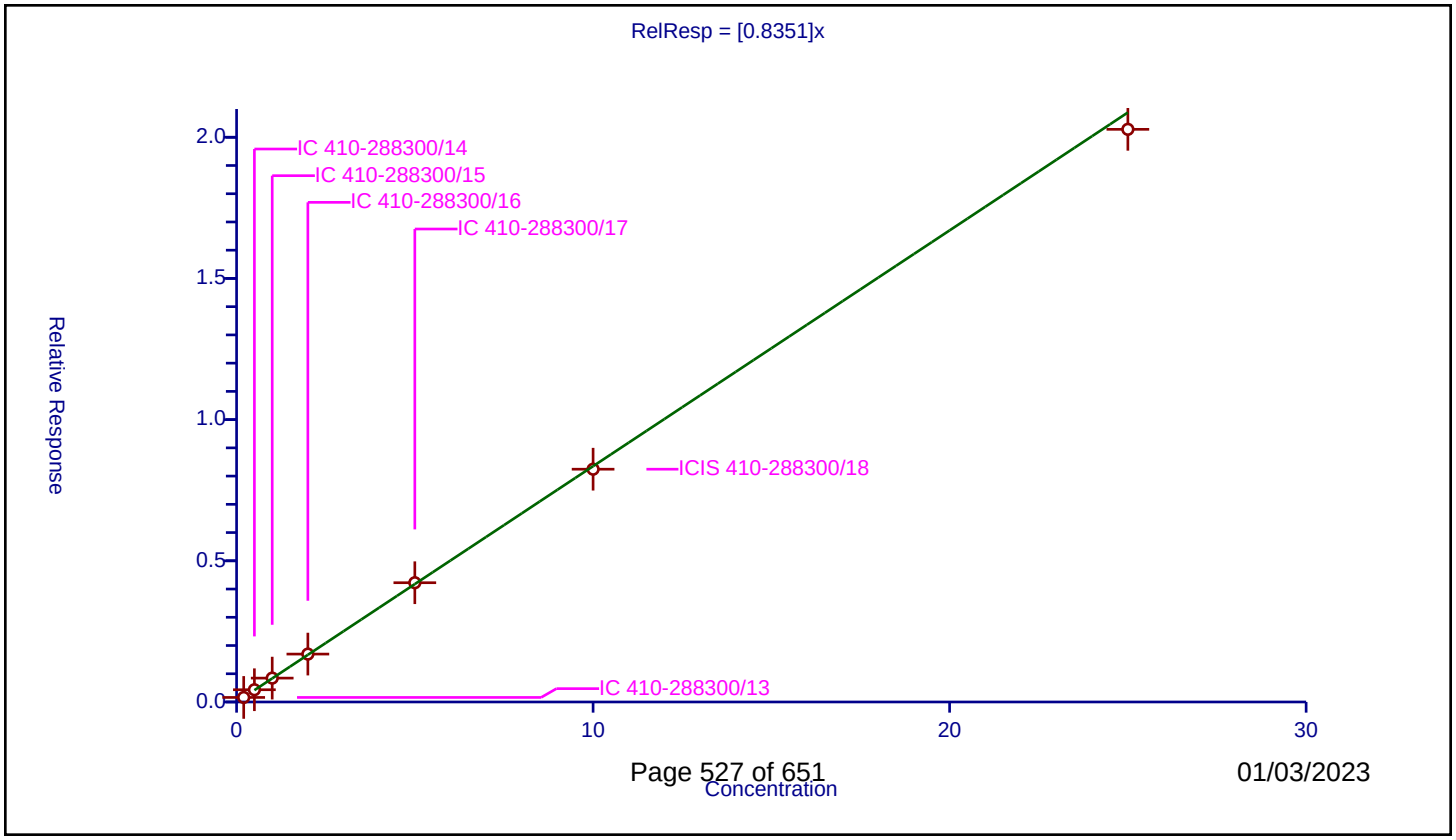
Curve Coefficients

Intercept:	0
Slope:	0.8351

Error Coefficients

Standard Error:	842000
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 410-288300/13	0.2	0.160737	10.0	881628.0	0.803684	Y
2	IC 410-288300/14	0.5	0.433472	10.0	871682.0	0.866945	Y
3	IC 410-288300/15	1.0	0.845994	10.0	860455.0	0.845994	Y
4	IC 410-288300/16	2.0	1.696985	10.0	872795.0	0.848492	Y
5	IC 410-288300/17	5.0	4.223926	10.0	886836.0	0.844785	Y
6	ICIS 410-288300/18	10.0	8.243761	10.0	900908.0	0.824376	Y
7	IC 410-288300/19	25.0	20.28065	10.0	926990.0	0.811226	Y



Calibration / 1,3,5-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

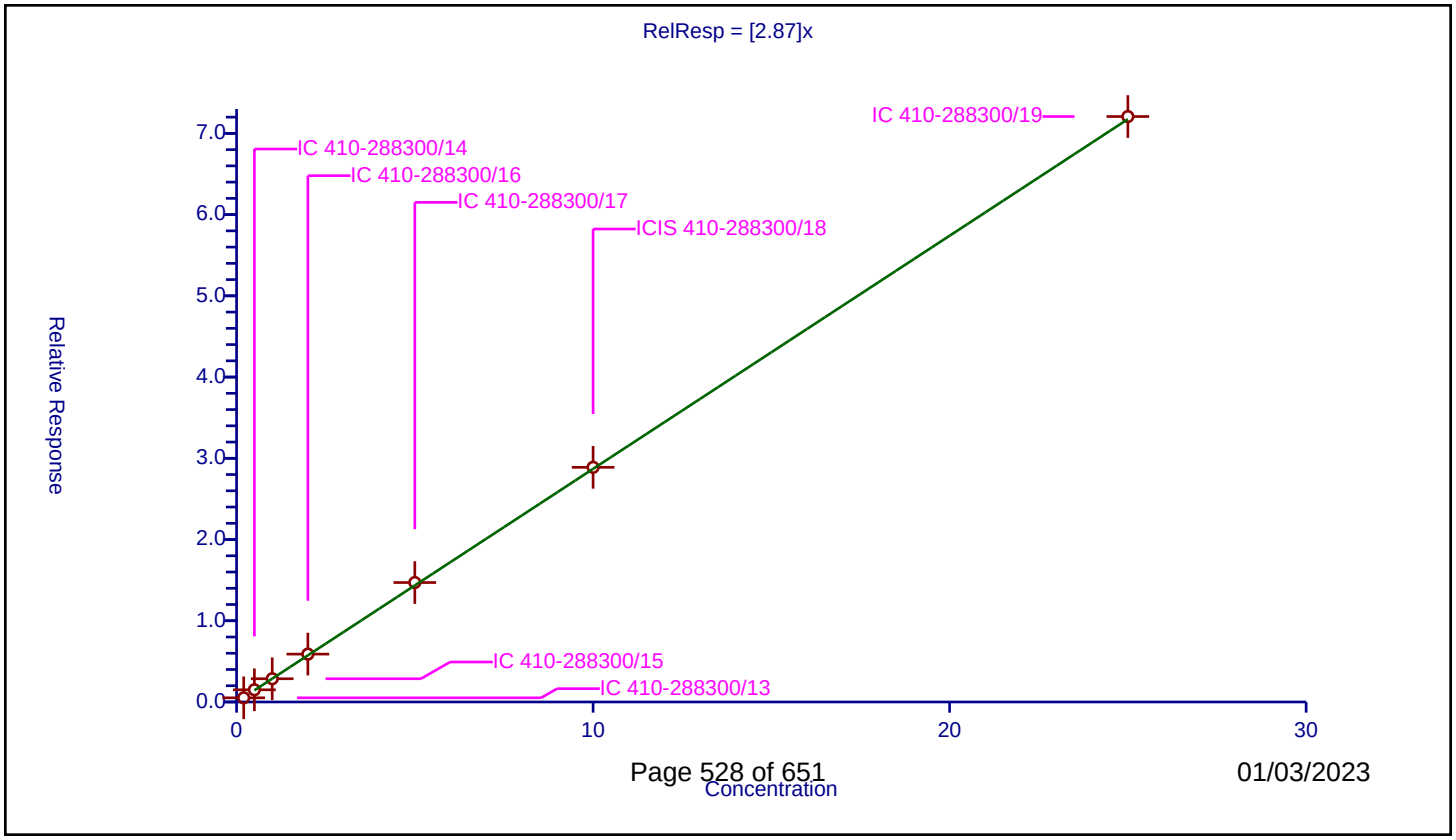
Curve Coefficients

Intercept:	0
Slope:	2.87

Error Coefficients

Standard Error:	2980000
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 410-288300/13	0.2	0.513187	10.0	881628.0	2.565935	Y
2	IC 410-288300/14	0.5	1.501018	10.0	871682.0	3.002035	Y
3	IC 410-288300/15	1.0	2.861928	10.0	860455.0	2.861928	Y
4	IC 410-288300/16	2.0	5.893515	10.0	872795.0	2.946757	Y
5	IC 410-288300/17	5.0	14.705605	10.0	886836.0	2.941121	Y
6	ICIS 410-288300/18	10.0	28.889387	10.0	900908.0	2.888939	Y
7	IC 410-288300/19	25.0	72.073431	10.0	926990.0	2.882937	Y



Calibration / 4-Chlorotoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

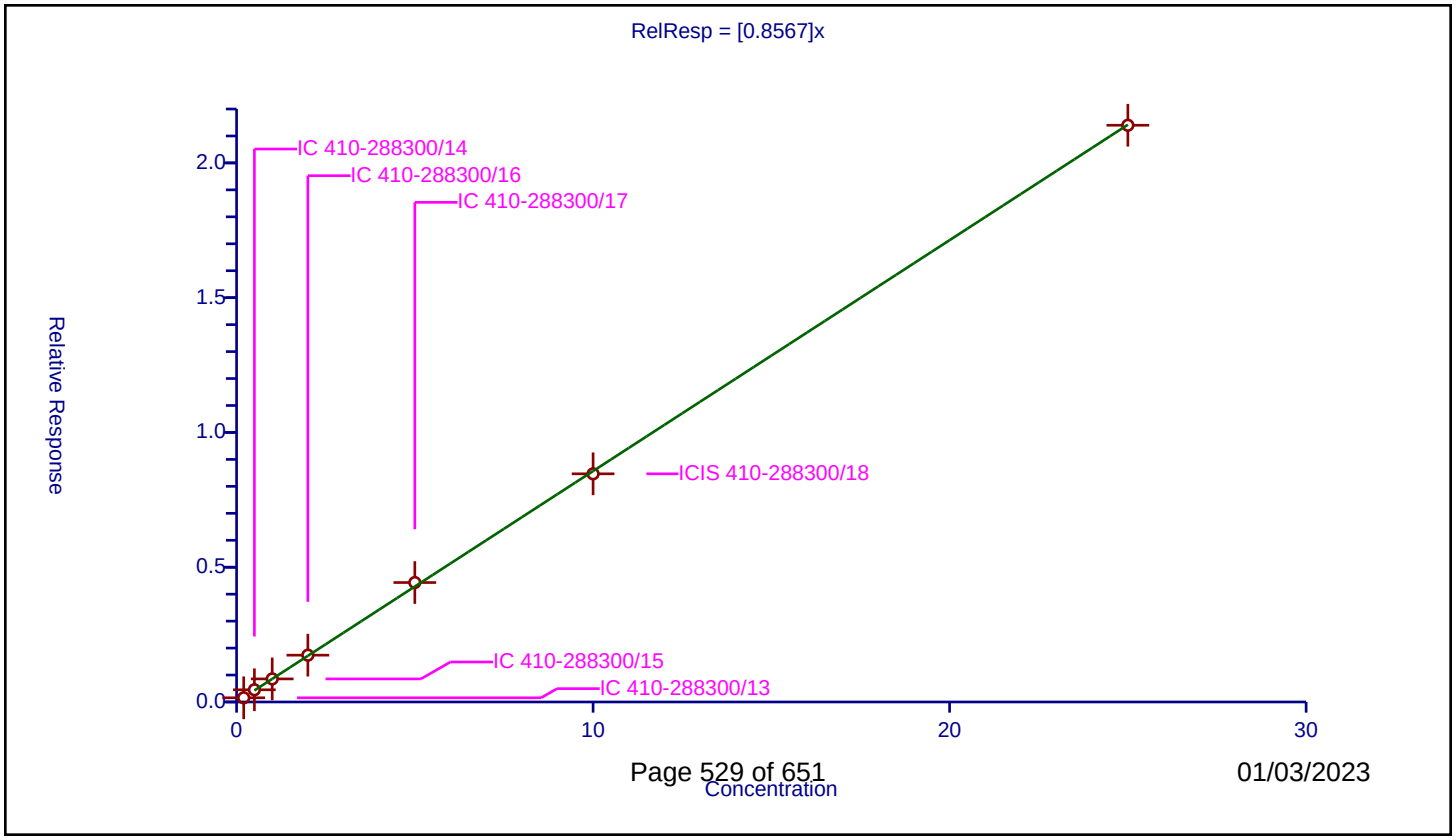
Curve Coefficients

Intercept:	0
Slope:	0.8567

Error Coefficients

Standard Error:	885000
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 410-288300/13	0.2	0.155757	10.0	881628.0	0.778787	Y
2	IC 410-288300/14	0.5	0.452527	10.0	871682.0	0.905055	Y
3	IC 410-288300/15	1.0	0.856256	10.0	860455.0	0.856256	Y
4	IC 410-288300/16	2.0	1.736353	10.0	872795.0	0.868176	Y
5	IC 410-288300/17	5.0	4.431439	10.0	886836.0	0.886288	Y
6	ICIS 410-288300/18	10.0	8.465537	10.0	900908.0	0.846554	Y
7	IC 410-288300/19	25.0	21.397383	10.0	926990.0	0.855895	Y



Calibration / tert-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

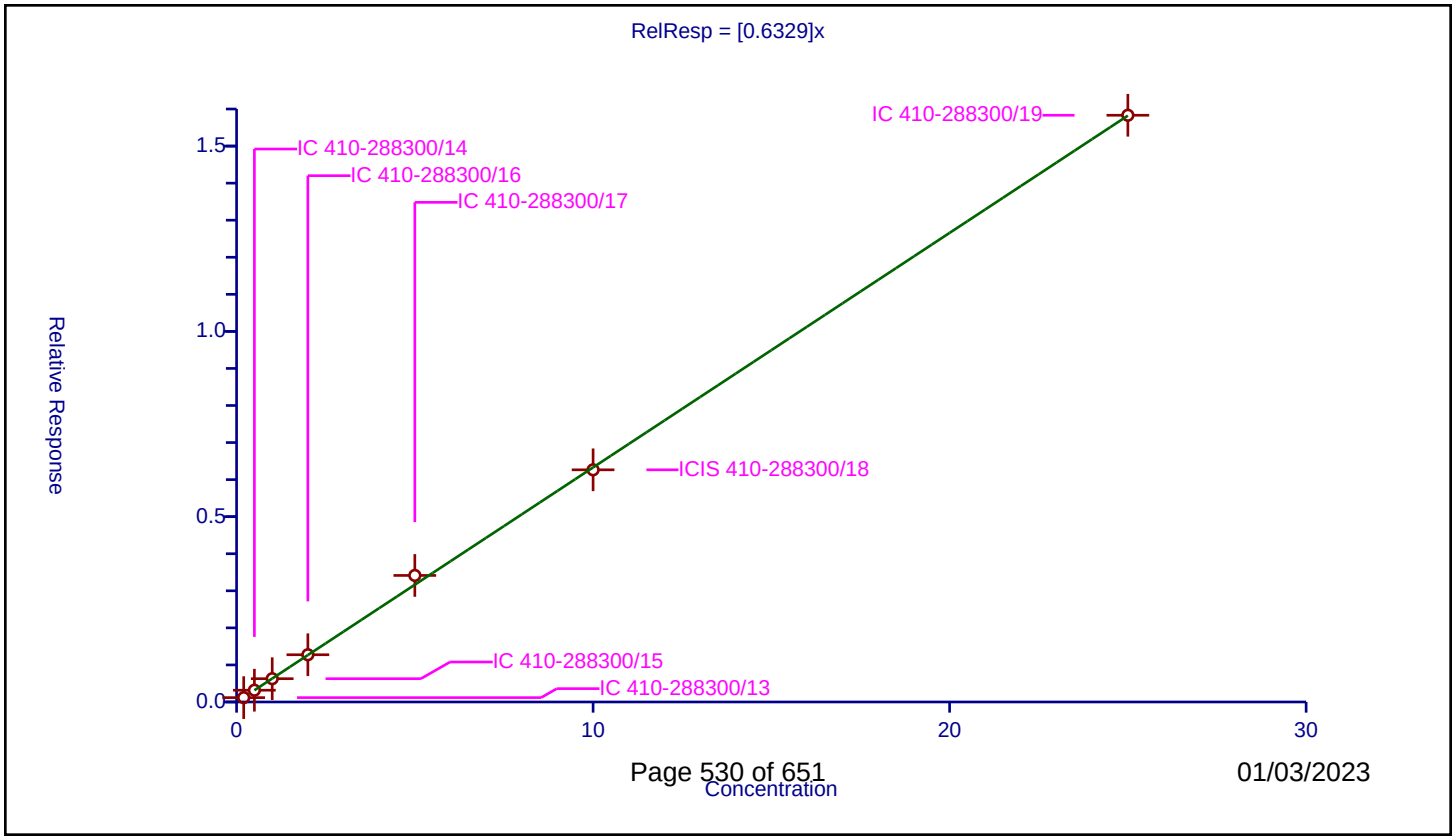
Curve Coefficients

Intercept:	0
Slope:	0.6329

Error Coefficients

Standard Error:	656000
Relative Standard Error:	4.4
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.2	0.117294	10.0	881628.0	0.586472	Y
2	IC 410-288300/14	0.5	0.31749	10.0	871682.0	0.634979	Y
3	IC 410-288300/15	1.0	0.628551	10.0	860455.0	0.628551	Y
4	IC 410-288300/16	2.0	1.274767	10.0	872795.0	0.637383	Y
5	IC 410-288300/17	5.0	3.414904	10.0	886836.0	0.682981	Y
6	ICIS 410-288300/18	10.0	6.264558	10.0	900908.0	0.626456	Y
7	IC 410-288300/19	25.0	15.831649	10.0	926990.0	0.633266	Y



Calibration / Pentachloroethane

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

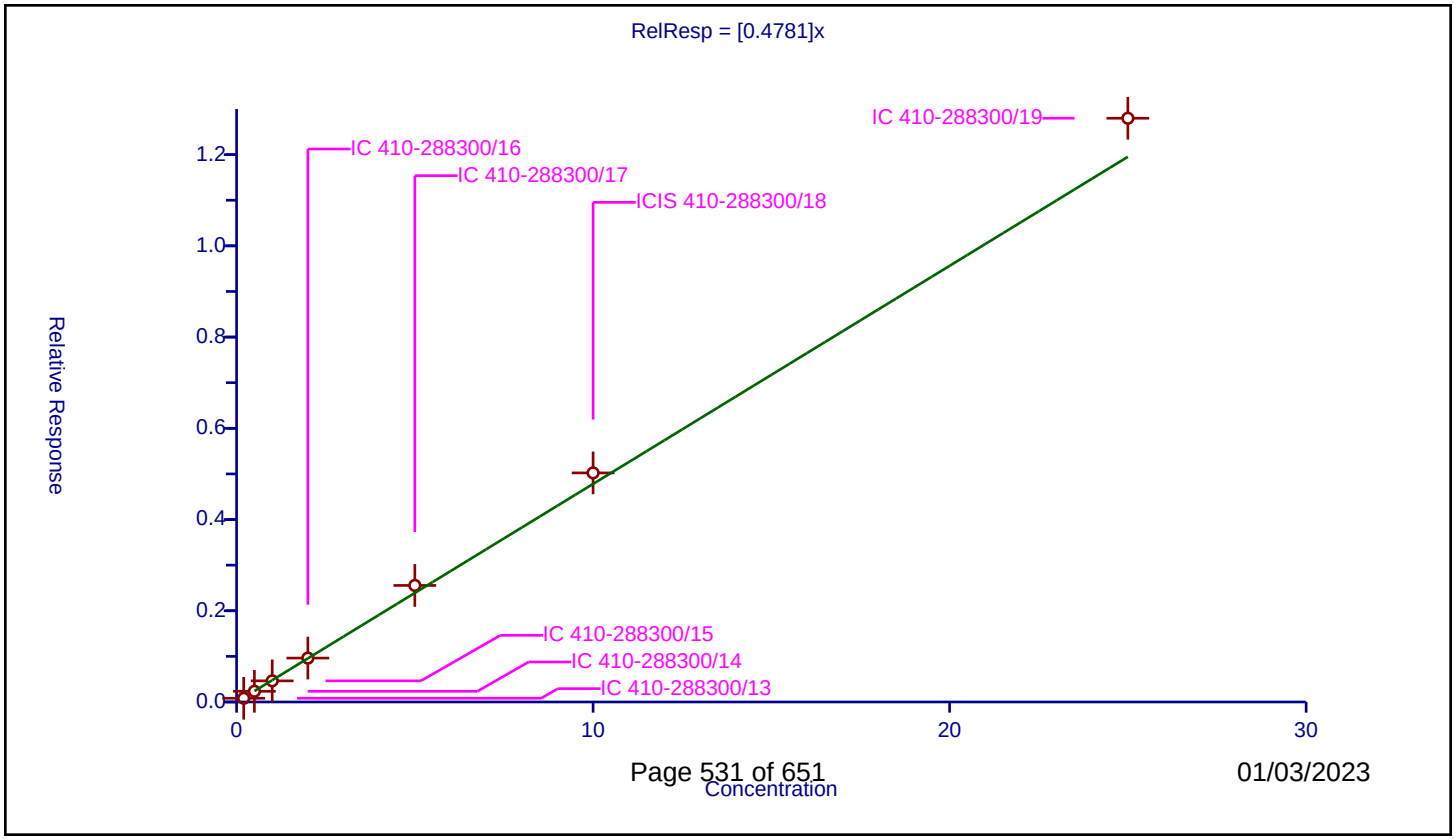
Curve Coefficients

Intercept:	0
Slope:	0.4781

Error Coefficients

Standard Error:	528000
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 410-288300/13	0.2	0.081656	10.0	881628.0	0.408279	Y
2	IC 410-288300/14	0.5	0.234512	10.0	871682.0	0.469024	Y
3	IC 410-288300/15	1.0	0.463139	10.0	860455.0	0.463139	Y
4	IC 410-288300/16	2.0	0.962334	10.0	872795.0	0.481167	Y
5	IC 410-288300/17	5.0	2.555016	10.0	886836.0	0.511003	Y
6	ICIS 410-288300/18	10.0	5.022022	10.0	900908.0	0.502202	Y
7	IC 410-288300/19	25.0	12.797625	10.0	926990.0	0.511905	Y



Calibration / 1,2,4-Trimethylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

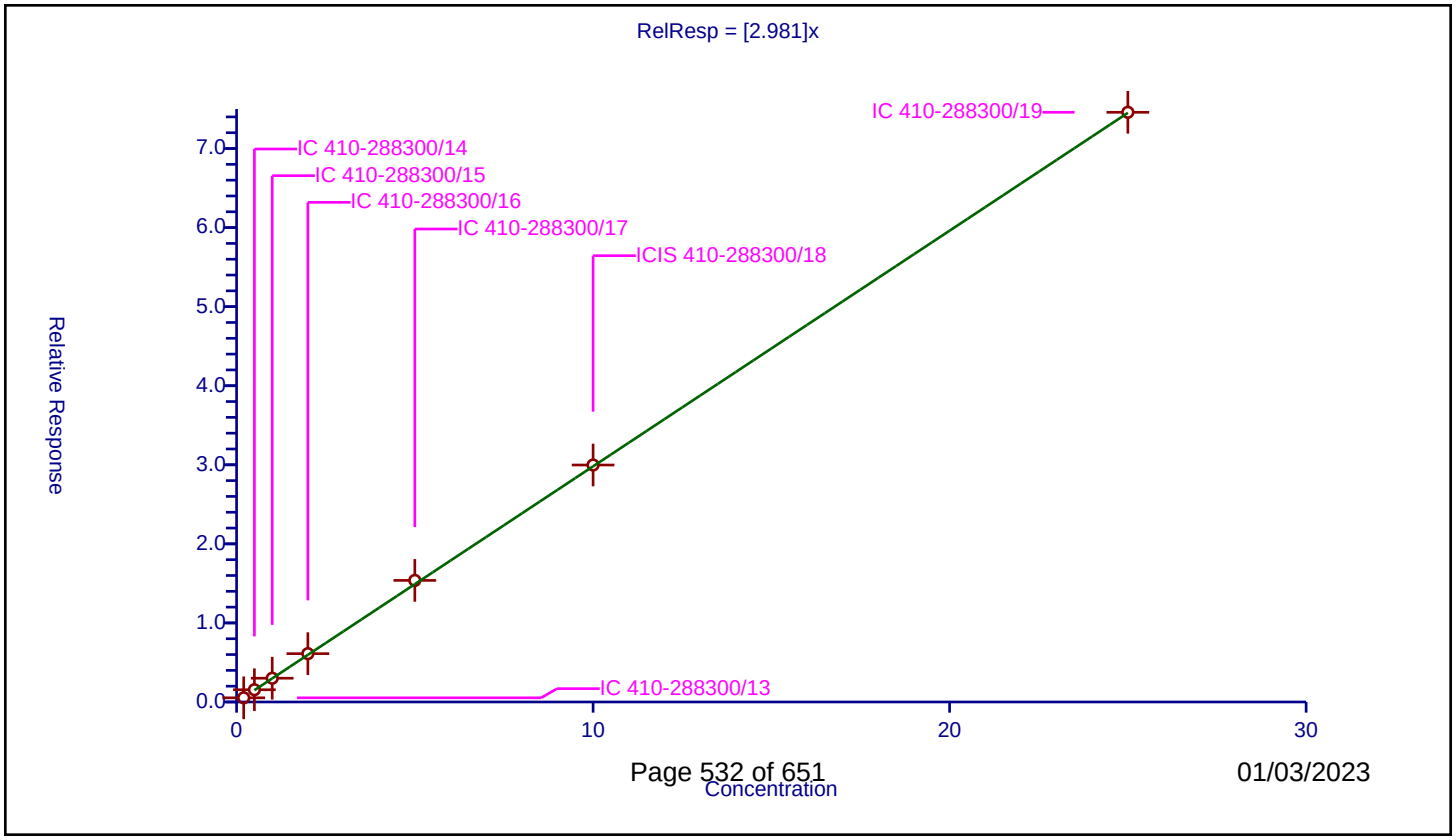
Curve Coefficients

Intercept:	0
Slope:	2.981

Error Coefficients

Standard Error:	3090000
Relative Standard Error:	5.2
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.997

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.2	0.528908	10.0	881628.0	2.644539	Y
2	IC 410-288300/14	0.5	1.54998	10.0	871682.0	3.099961	Y
3	IC 410-288300/15	1.0	3.005329	10.0	860455.0	3.005329	Y
4	IC 410-288300/16	2.0	6.114746	10.0	872795.0	3.057373	Y
5	IC 410-288300/17	5.0	15.37945	10.0	886836.0	3.07589	Y
6	ICIS 410-288300/18	10.0	29.97386	10.0	900908.0	2.997386	Y
7	IC 410-288300/19	25.0	74.585918	10.0	926990.0	2.983437	Y



Calibration / sec-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

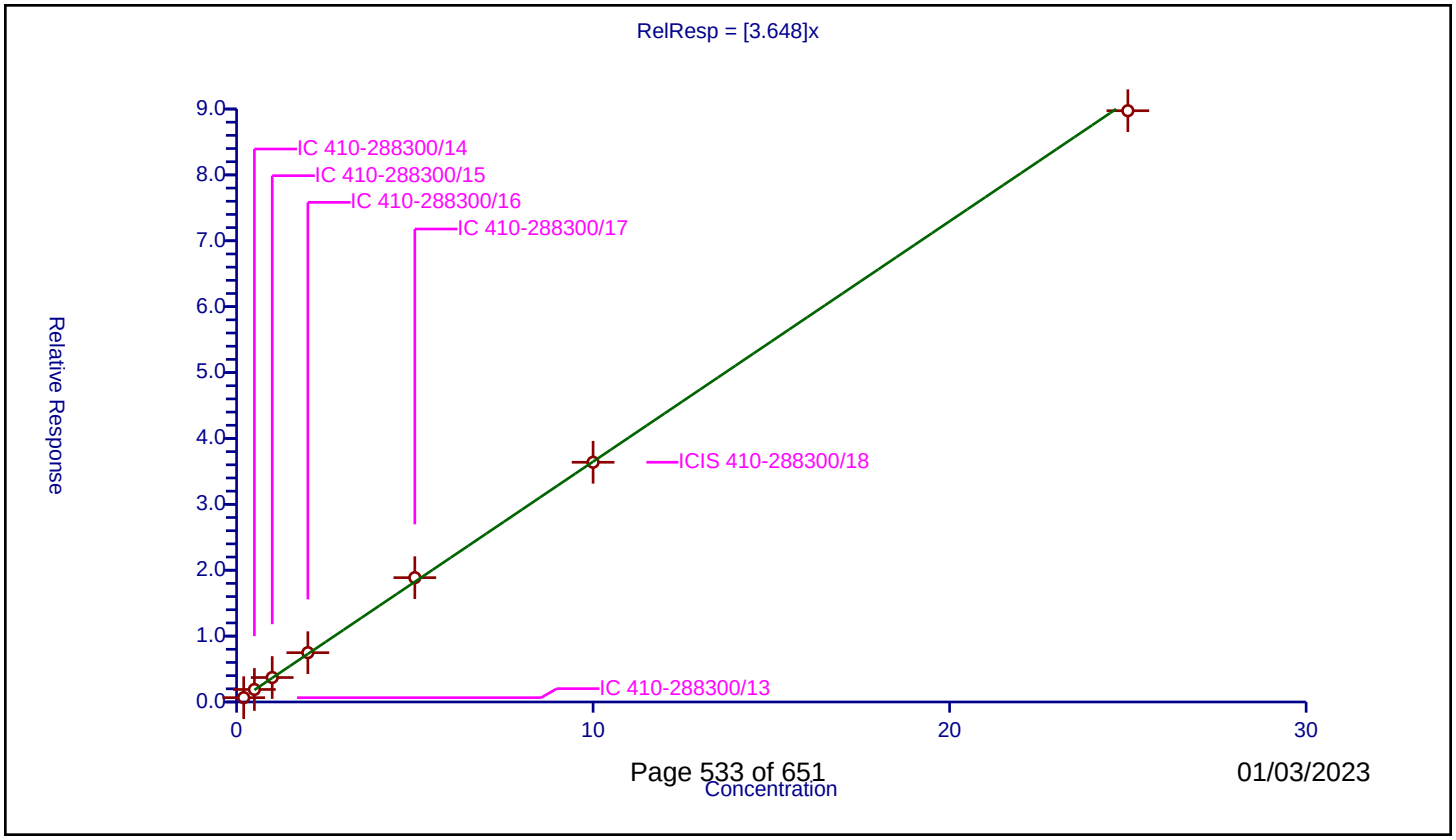
Curve Coefficients

Intercept:	0
Slope:	3.648

Error Coefficients

Standard Error:	3730000
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 410-288300/13	0.2	0.656025	10.0	881628.0	3.280125	Y
2	IC 410-288300/14	0.5	1.899741	10.0	871682.0	3.799482	Y
3	IC 410-288300/15	1.0	3.711722	10.0	860455.0	3.711722	Y
4	IC 410-288300/16	2.0	7.486122	10.0	872795.0	3.743061	Y
5	IC 410-288300/17	5.0	18.869171	10.0	886836.0	3.773834	Y
6	ICIS 410-288300/18	10.0	36.384303	10.0	900908.0	3.63843	Y
7	IC 410-288300/19	25.0	89.740386	10.0	926990.0	3.589615	Y



Calibration / 1,3-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

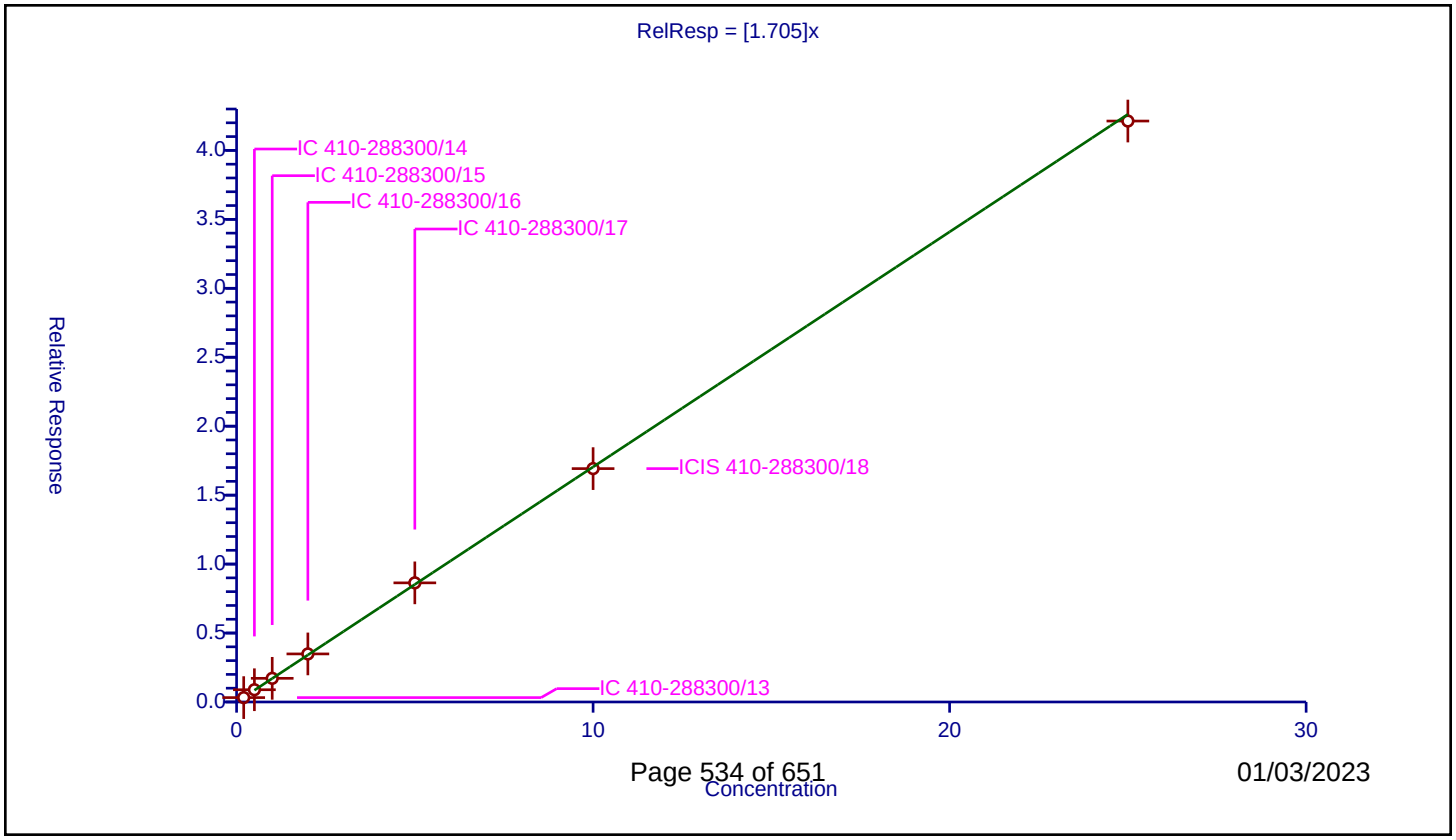
Curve Coefficients

Intercept:	0
Slope:	1.705

Error Coefficients

Standard Error:	1750000
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 410-288300/13	0.2	0.318116	10.0	881628.0	1.59058	Y
2	IC 410-288300/14	0.5	0.888719	10.0	871682.0	1.777437	Y
3	IC 410-288300/15	1.0	1.715941	10.0	860455.0	1.715941	Y
4	IC 410-288300/16	2.0	3.485584	10.0	872795.0	1.742792	Y
5	IC 410-288300/17	5.0	8.63835	10.0	886836.0	1.72767	Y
6	ICIS 410-288300/18	10.0	16.923681	10.0	900908.0	1.692368	Y
7	IC 410-288300/19	25.0	42.12861	10.0	926990.0	1.685144	Y



Calibration / 4-Isopropyltoluene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

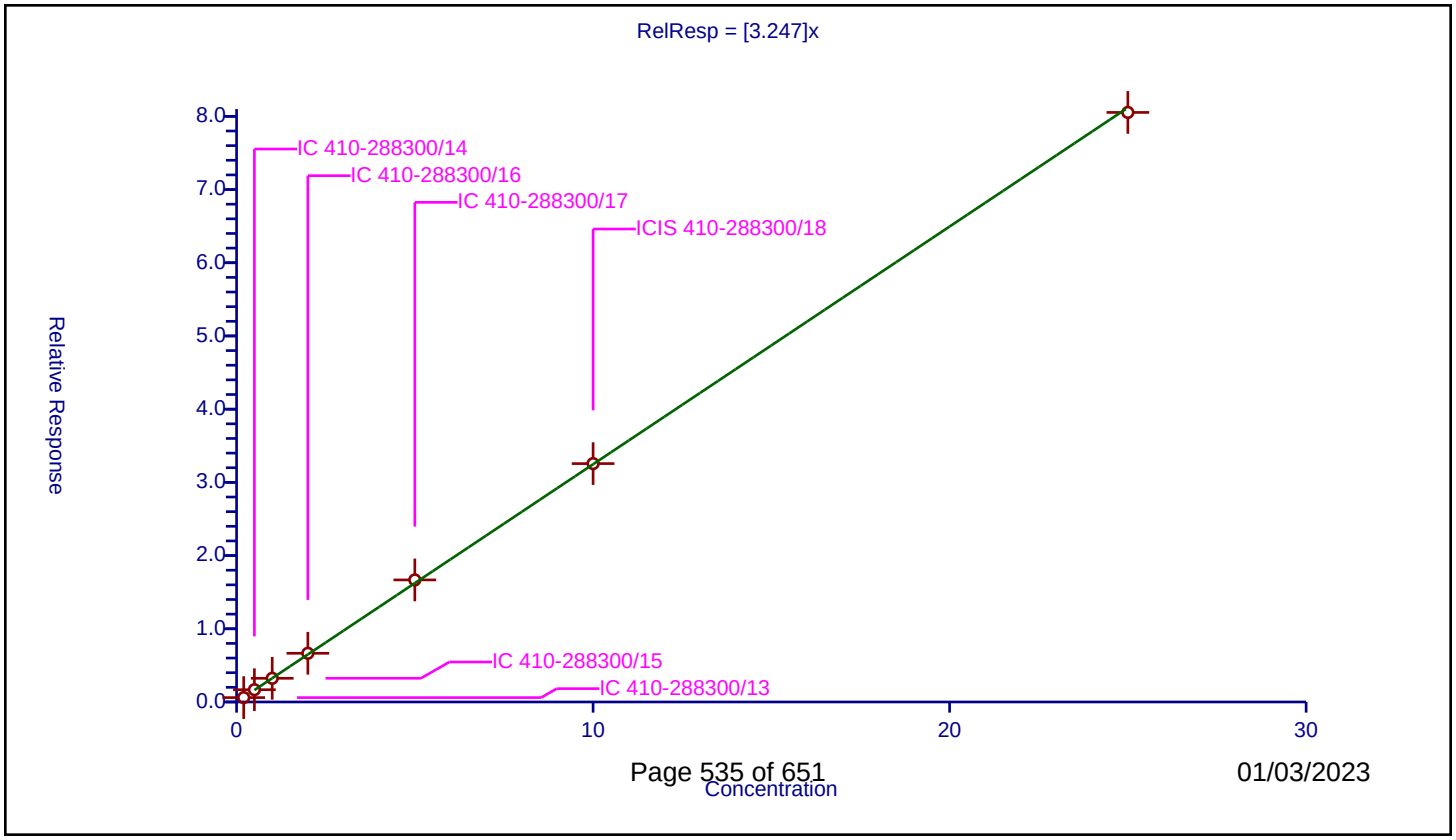
Curve Coefficients

Intercept:	0
Slope:	3.247

Error Coefficients

Standard Error:	3340000
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 410-288300/13	0.2	0.600752	10.0	881628.0	3.003761	Y
2	IC 410-288300/14	0.5	1.677183	10.0	871682.0	3.354365	Y
3	IC 410-288300/15	1.0	3.235056	10.0	860455.0	3.235056	Y
4	IC 410-288300/16	2.0	6.651814	10.0	872795.0	3.325907	Y
5	IC 410-288300/17	5.0	16.672632	10.0	886836.0	3.334526	Y
6	ICIS 410-288300/18	10.0	32.56378	10.0	900908.0	3.256378	Y
7	IC 410-288300/19	25.0	80.532303	10.0	926990.0	3.221292	Y



Calibration / 1,4-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

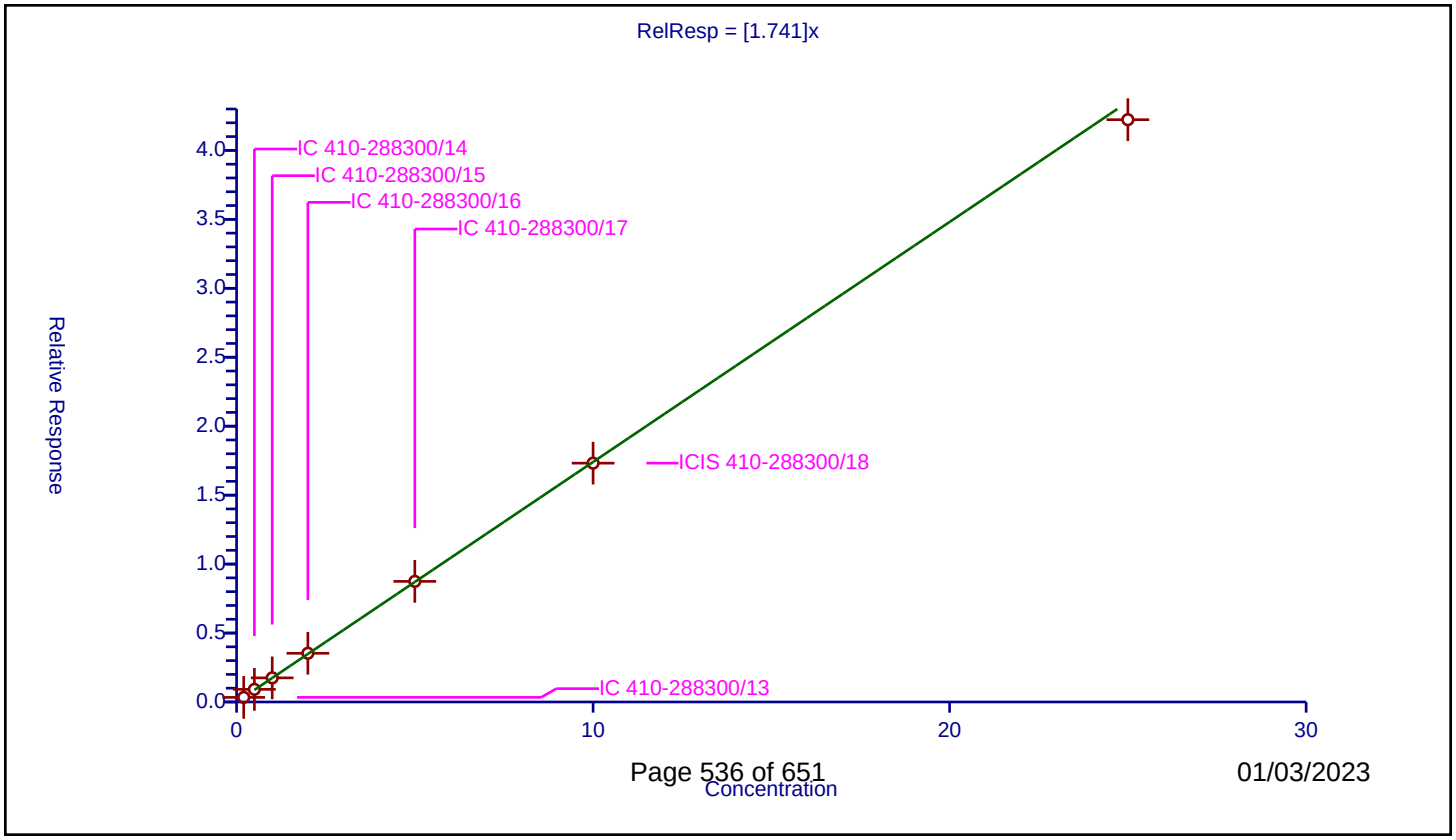
Curve Coefficients

Intercept:	0
Slope:	1.741

Error Coefficients

Standard Error:	1760000
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 410-288300/13	0.2	0.333292	10.0	881628.0	1.666462	Y
2	IC 410-288300/14	0.5	0.915701	10.0	871682.0	1.831402	Y
3	IC 410-288300/15	1.0	1.749818	10.0	860455.0	1.749818	Y
4	IC 410-288300/16	2.0	3.531757	10.0	872795.0	1.765879	Y
5	IC 410-288300/17	5.0	8.7458	10.0	886836.0	1.74916	Y
6	ICIS 410-288300/18	10.0	17.32047	10.0	900908.0	1.732047	Y
7	IC 410-288300/19	25.0	42.225612	10.0	926990.0	1.689024	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

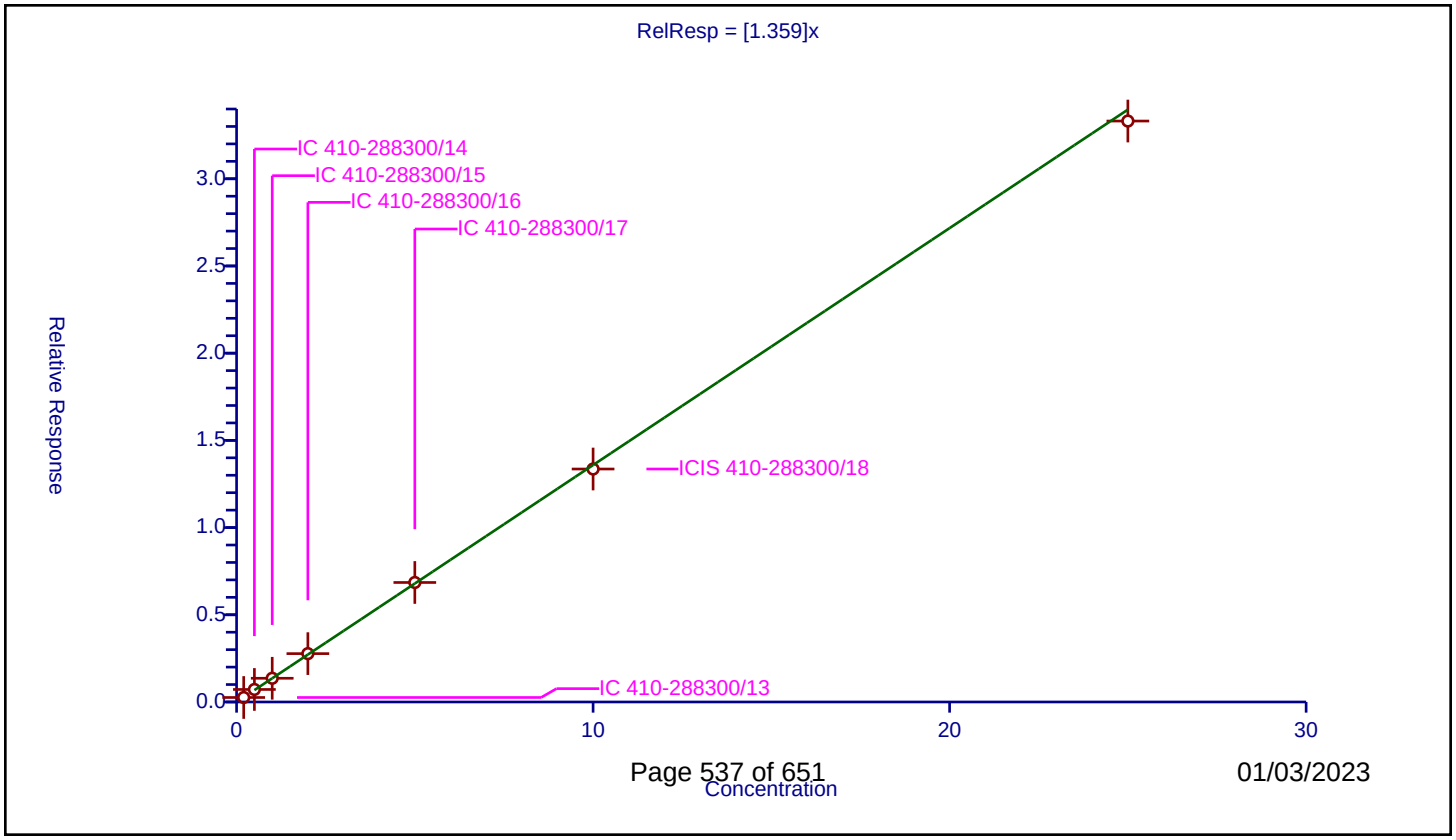
Curve Coefficients

Intercept:	0
Slope:	1.359

Error Coefficients

Standard Error:	1380000
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 410-288300/13	0.2	0.258	10.0	881628.0	1.29	Y
2	IC 410-288300/14	0.5	0.717268	10.0	871682.0	1.434537	Y
3	IC 410-288300/15	1.0	1.360594	10.0	860455.0	1.360594	Y
4	IC 410-288300/16	2.0	2.772644	10.0	872795.0	1.386322	Y
5	IC 410-288300/17	5.0	6.851921	10.0	886836.0	1.370384	Y
6	ICIS 410-288300/18	10.0	13.358057	10.0	900908.0	1.335806	Y
7	IC 410-288300/19	25.0	33.310014	10.0	926990.0	1.332401	Y



Calibration / Benzyl chloride

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

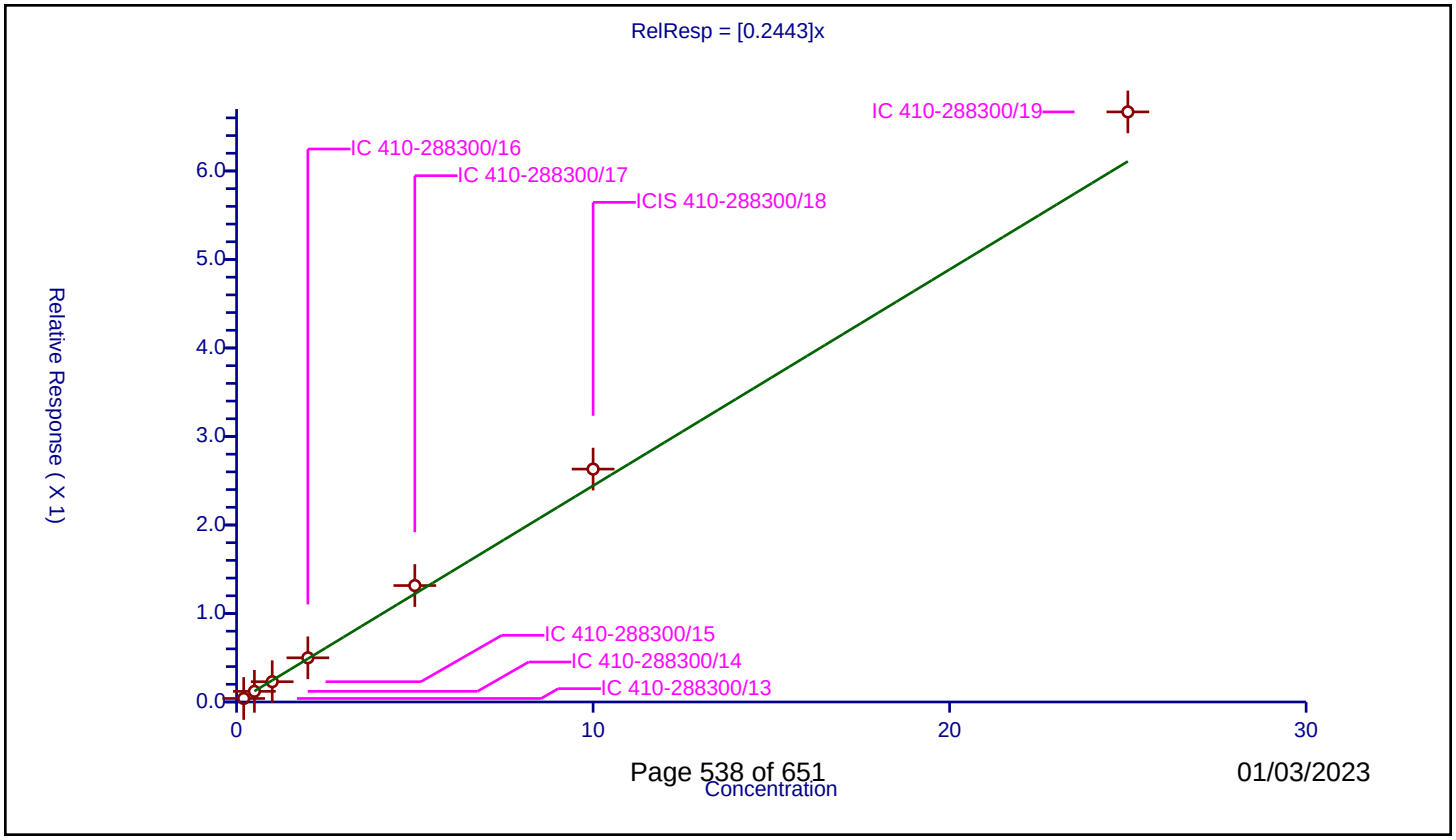
Curve Coefficients

Intercept:	0
Slope:	0.2443

Error Coefficients

Standard Error:	275000
Relative Standard Error:	10.1
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.988

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.2	0.039575	10.0	881628.0	0.197873	Y
2	IC 410-288300/14	0.5	0.120422	10.0	871682.0	0.240845	Y
3	IC 410-288300/15	1.0	0.229228	10.0	860455.0	0.229228	Y
4	IC 410-288300/16	2.0	0.499029	10.0	872795.0	0.249514	Y
5	IC 410-288300/17	5.0	1.31561	10.0	886836.0	0.263122	Y
6	ICIS 410-288300/18	10.0	2.631367	10.0	900908.0	0.263137	Y
7	IC 410-288300/19	25.0	6.667451	10.0	926990.0	0.266698	Y



Calibration / n-Butylbenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

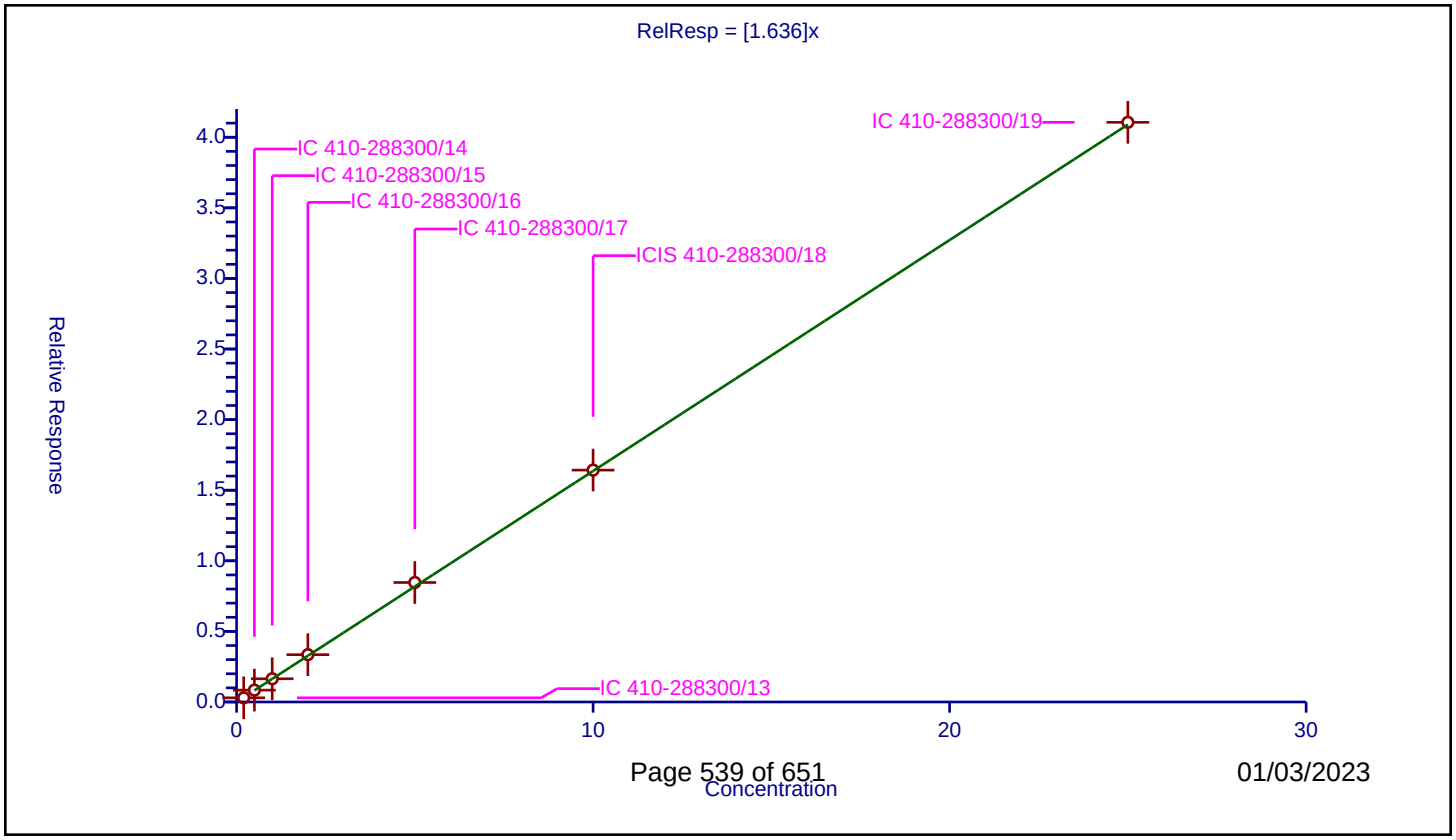
Curve Coefficients

Intercept:	0
Slope:	1.636

Error Coefficients

Standard Error:	1700000
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 410-288300/13	0.2	0.295011	10.0	881628.0	1.475055	Y
2	IC 410-288300/14	0.5	0.840008	10.0	871682.0	1.680016	Y
3	IC 410-288300/15	1.0	1.643503	10.0	860455.0	1.643503	Y
4	IC 410-288300/16	2.0	3.351703	10.0	872795.0	1.675852	Y
5	IC 410-288300/17	5.0	8.462241	10.0	886836.0	1.692448	Y
6	ICIS 410-288300/18	10.0	16.423997	10.0	900908.0	1.6424	Y
7	IC 410-288300/19	25.0	41.056743	10.0	926990.0	1.64227	Y



Calibration / 1,2-Dichlorobenzene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

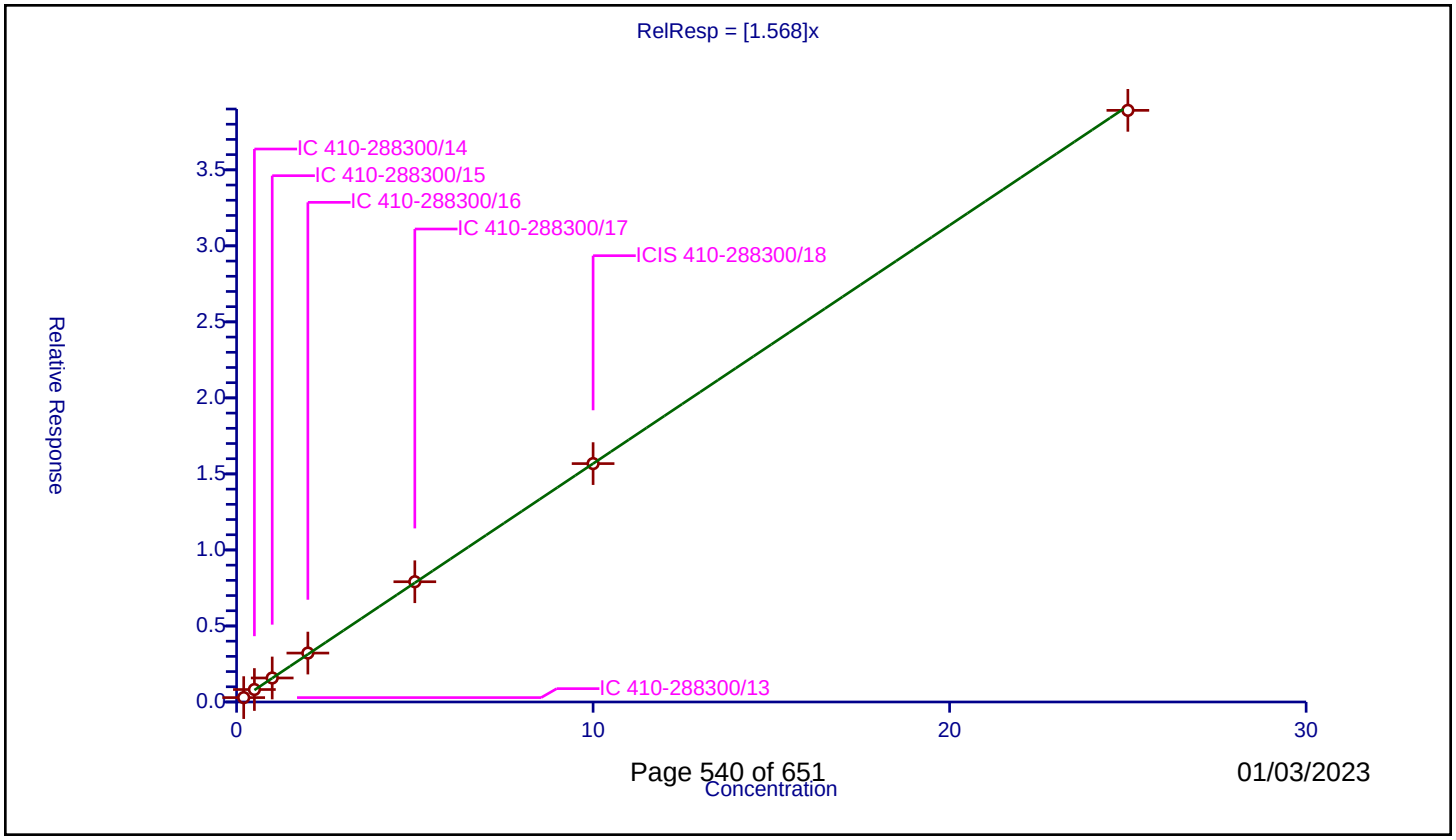
Curve Coefficients

Intercept:	0
Slope:	1.568

Error Coefficients

Standard Error:	1610000
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 410-288300/13	0.2	0.288137	10.0	881628.0	1.440687	Y
2	IC 410-288300/14	0.5	0.819691	10.0	871682.0	1.639382	Y
3	IC 410-288300/15	1.0	1.579618	10.0	860455.0	1.579618	Y
4	IC 410-288300/16	2.0	3.218121	10.0	872795.0	1.609061	Y
5	IC 410-288300/17	5.0	7.908734	10.0	886836.0	1.581747	Y
6	ICIS 410-288300/18	10.0	15.679359	10.0	900908.0	1.567936	Y
7	IC 410-288300/19	25.0	38.913063	10.0	926990.0	1.556523	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

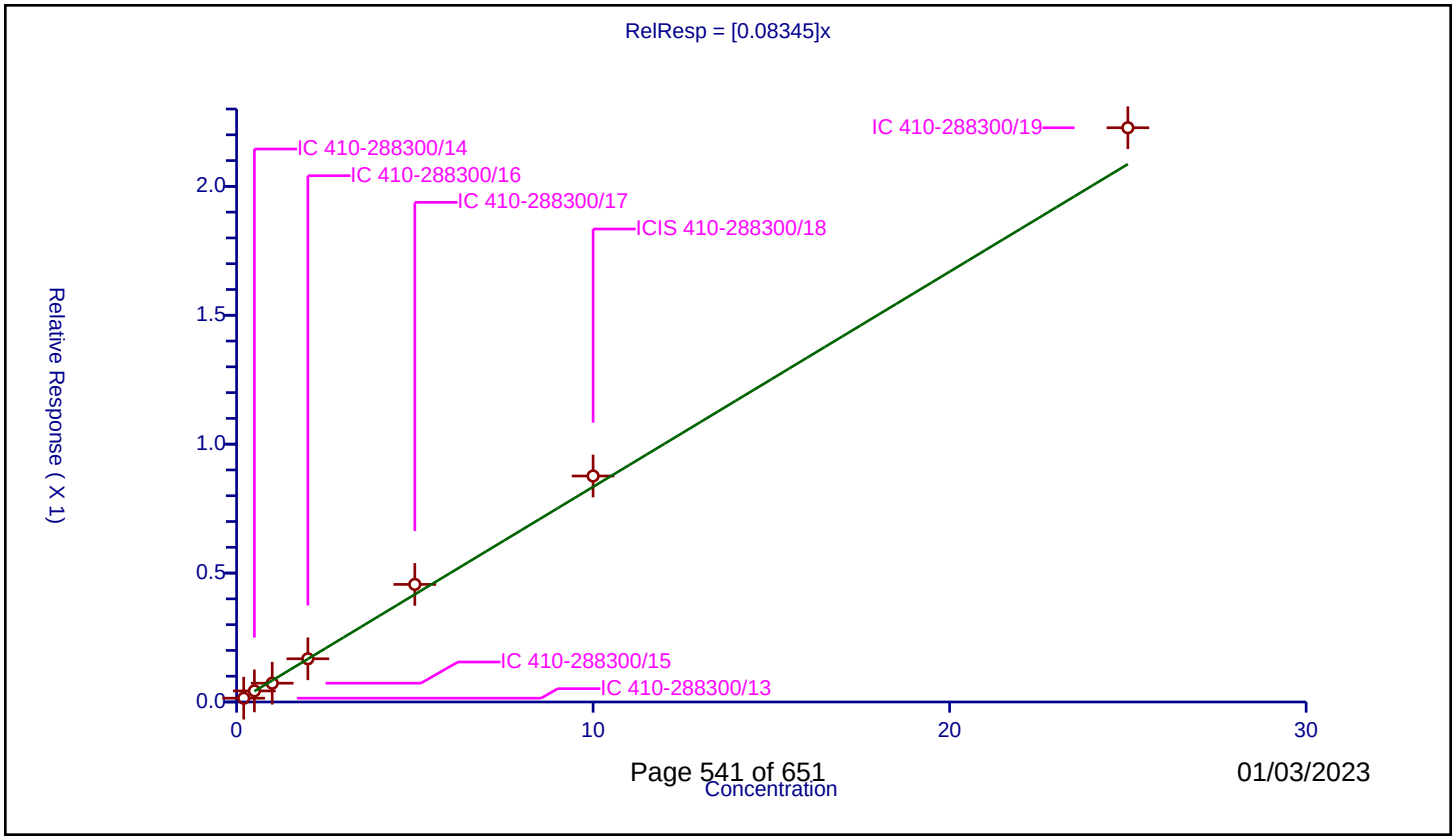
Curve Coefficients

Intercept:	0
Slope:	0.08345

Error Coefficients

Standard Error:	92000
Relative Standard Error:	8.9
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.990

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.2	0.014689	10.0	881628.0	0.073444	Y
2	IC 410-288300/14	0.5	0.04302	10.0	871682.0	0.086041	Y
3	IC 410-288300/15	1.0	0.072915	10.0	860455.0	0.072915	Y
4	IC 410-288300/16	2.0	0.167588	10.0	872795.0	0.083794	Y
5	IC 410-288300/17	5.0	0.456048	10.0	886836.0	0.09121	Y
6	ICIS 410-288300/18	10.0	0.876538	10.0	900908.0	0.087654	Y
7	IC 410-288300/19	25.0	2.227349	10.0	926990.0	0.089094	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

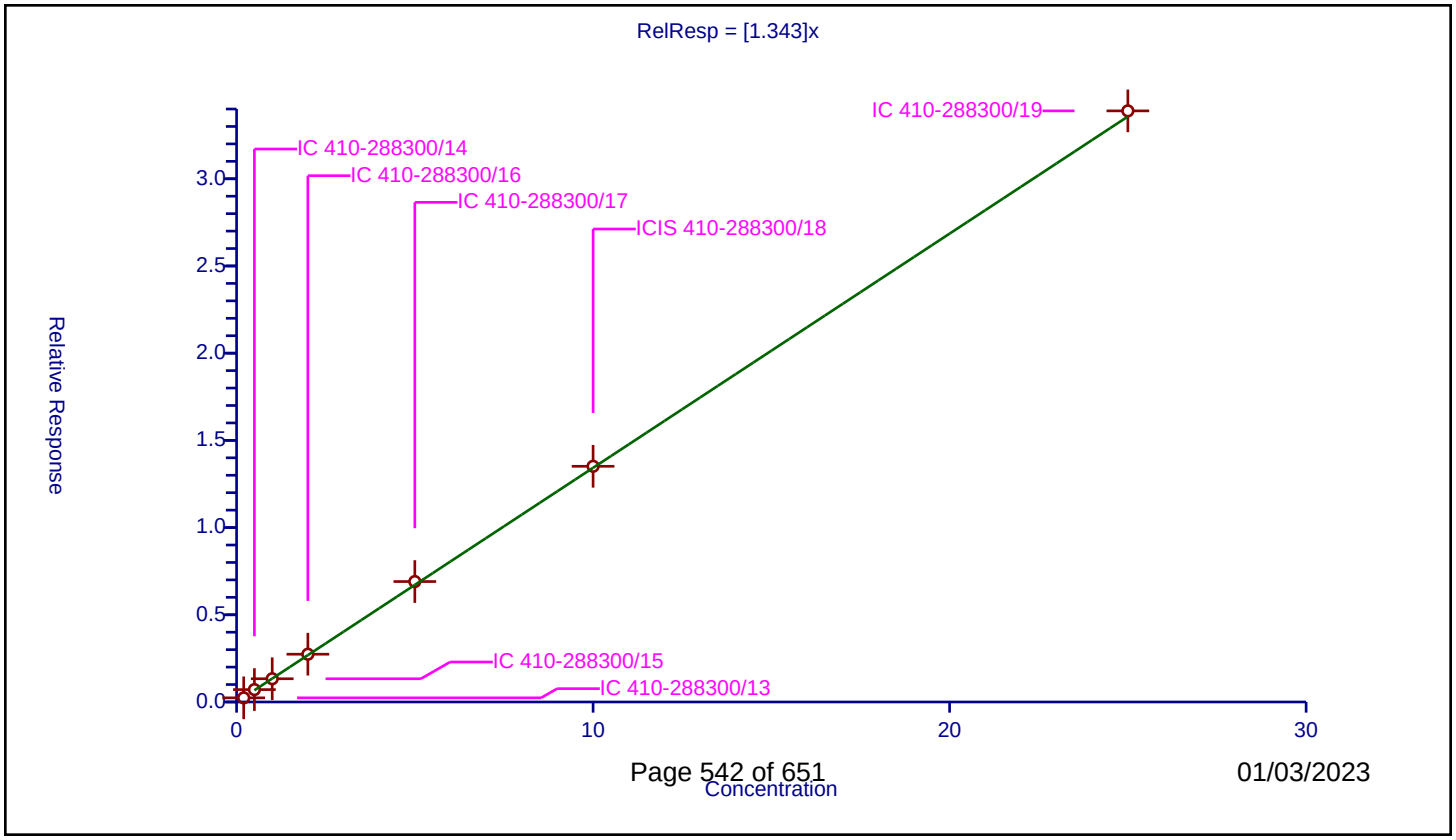
Curve Coefficients

Intercept:	0
Slope:	1.343

Error Coefficients

Standard Error:	1400000
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 410-288300/13	0.2	0.237356	10.0	881628.0	1.186782	Y
2	IC 410-288300/14	0.5	0.710638	10.0	871682.0	1.421275	Y
3	IC 410-288300/15	1.0	1.33319	10.0	860455.0	1.33319	Y
4	IC 410-288300/16	2.0	2.739406	10.0	872795.0	1.369703	Y
5	IC 410-288300/17	5.0	6.905099	10.0	886836.0	1.38102	Y
6	ICIS 410-288300/18	10.0	13.514876	10.0	900908.0	1.351488	Y
7	IC 410-288300/19	25.0	33.89234	10.0	926990.0	1.355694	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

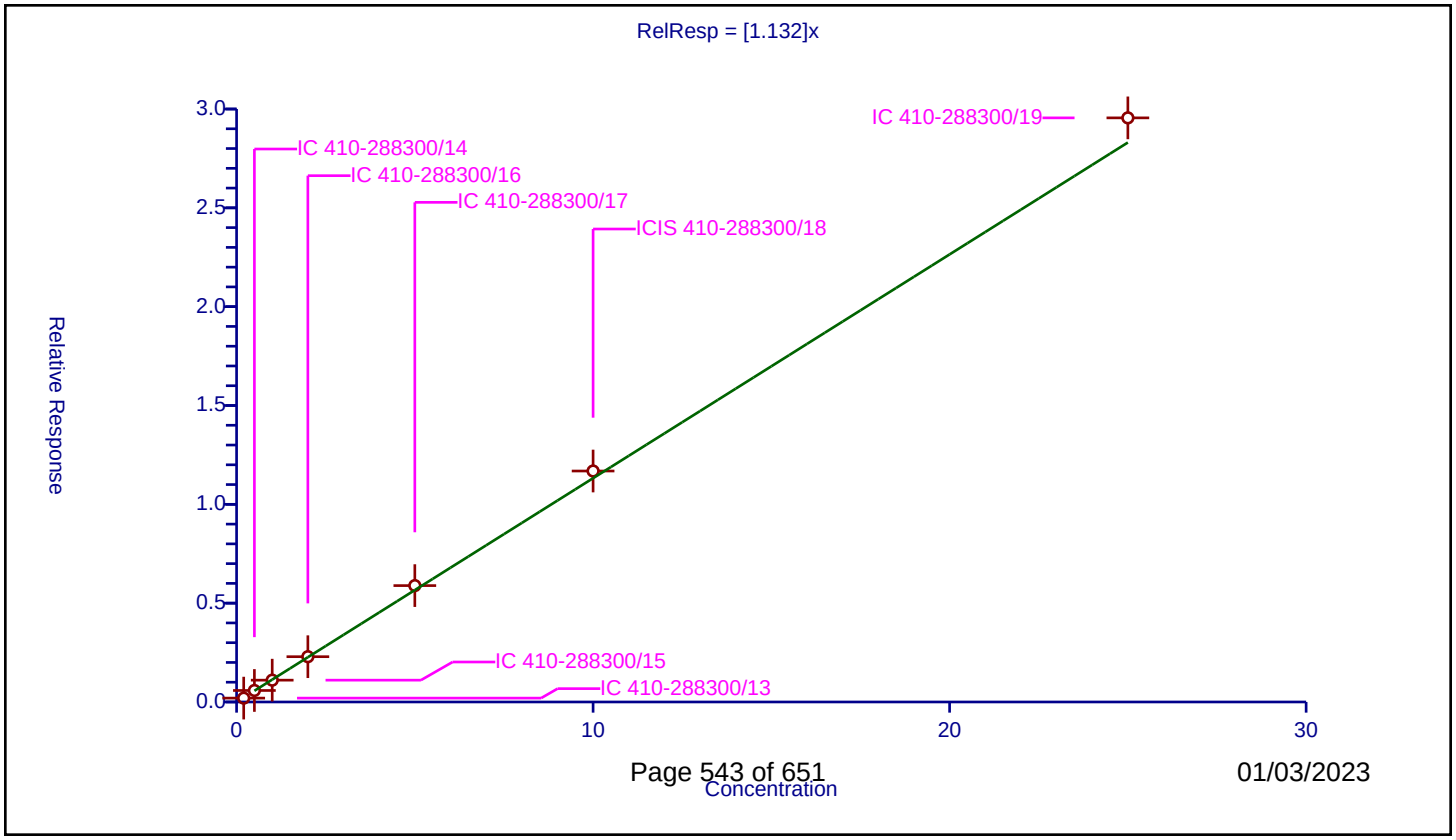
Curve Coefficients

Intercept:	0
Slope:	1.132

Error Coefficients

Standard Error:	1220000
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.2	0.196511	10.0	881628.0	0.982557	Y
2	IC 410-288300/14	0.5	0.58238	10.0	871682.0	1.16476	Y
3	IC 410-288300/15	1.0	1.104032	10.0	860455.0	1.104032	Y
4	IC 410-288300/16	2.0	2.291913	10.0	872795.0	1.145956	Y
5	IC 410-288300/17	5.0	5.88783	10.0	886836.0	1.177566	Y
6	ICIS 410-288300/18	10.0	11.686066	10.0	900908.0	1.168607	Y
7	IC 410-288300/19	25.0	29.552714	10.0	926990.0	1.182109	Y



Calibration / Hexachlorobutadiene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

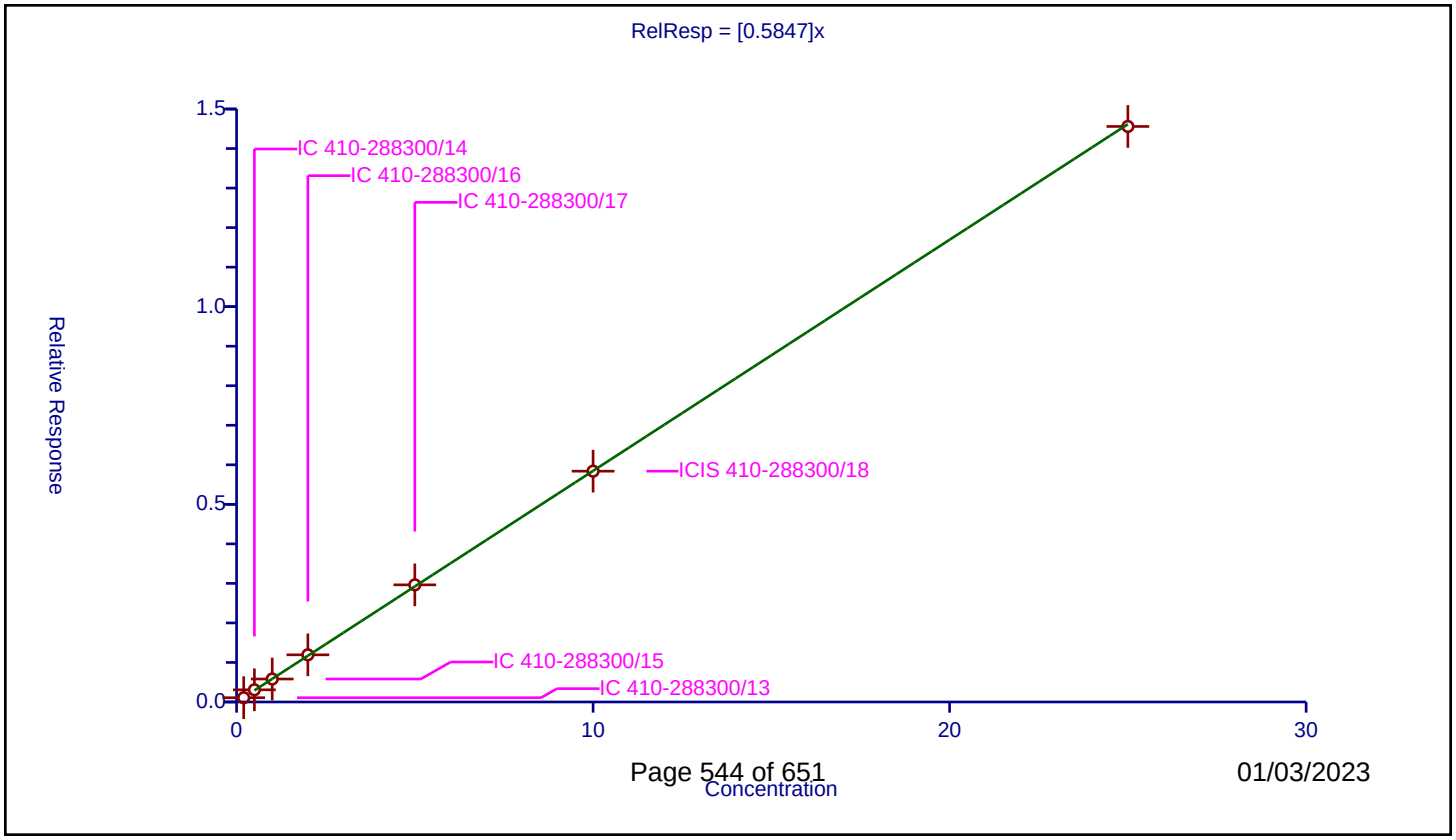
Curve Coefficients

Intercept:	0
Slope:	0.5847

Error Coefficients

Standard Error:	603000
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 410-288300/13	0.2	0.108107	10.0	881628.0	0.540534	Y
2	IC 410-288300/14	0.5	0.307922	10.0	871682.0	0.615844	Y
3	IC 410-288300/15	1.0	0.580972	10.0	860455.0	0.580972	Y
4	IC 410-288300/16	2.0	1.192835	10.0	872795.0	0.596417	Y
5	IC 410-288300/17	5.0	2.963062	10.0	886836.0	0.592612	Y
6	ICIS 410-288300/18	10.0	5.838665	10.0	900908.0	0.583866	Y
7	IC 410-288300/19	25.0	14.55869	10.0	926990.0	0.582348	Y



Calibration / Naphthalene

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ISTD
Response Base:	AREA
RF Rounding:	0

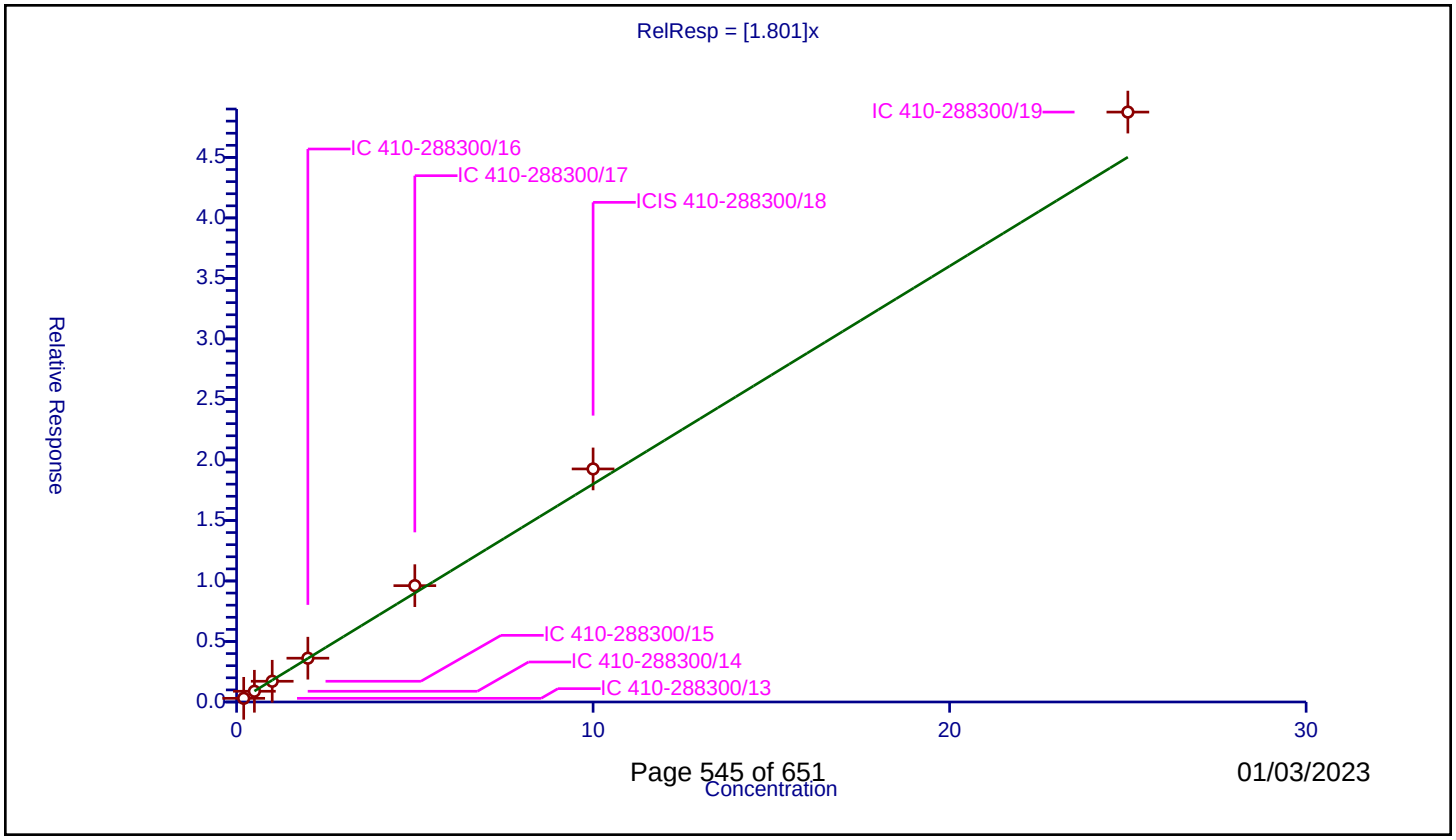
Curve Coefficients

Intercept:	0
Slope:	1.801

Error Coefficients

Standard Error:	2010000
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 410-288300/13	0.2	0.302996	10.0	881628.0	1.514981	Y
2	IC 410-288300/14	0.5	0.885851	10.0	871682.0	1.771701	Y
3	IC 410-288300/15	1.0	1.712315	10.0	860455.0	1.712315	Y
4	IC 410-288300/16	2.0	3.619246	10.0	872795.0	1.809623	Y
5	IC 410-288300/17	5.0	9.613266	10.0	886836.0	1.922653	Y
6	ICIS 410-288300/18	10.0	19.257782	10.0	900908.0	1.925778	Y
7	IC 410-288300/19	25.0	48.745974	10.0	926990.0	1.949839	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

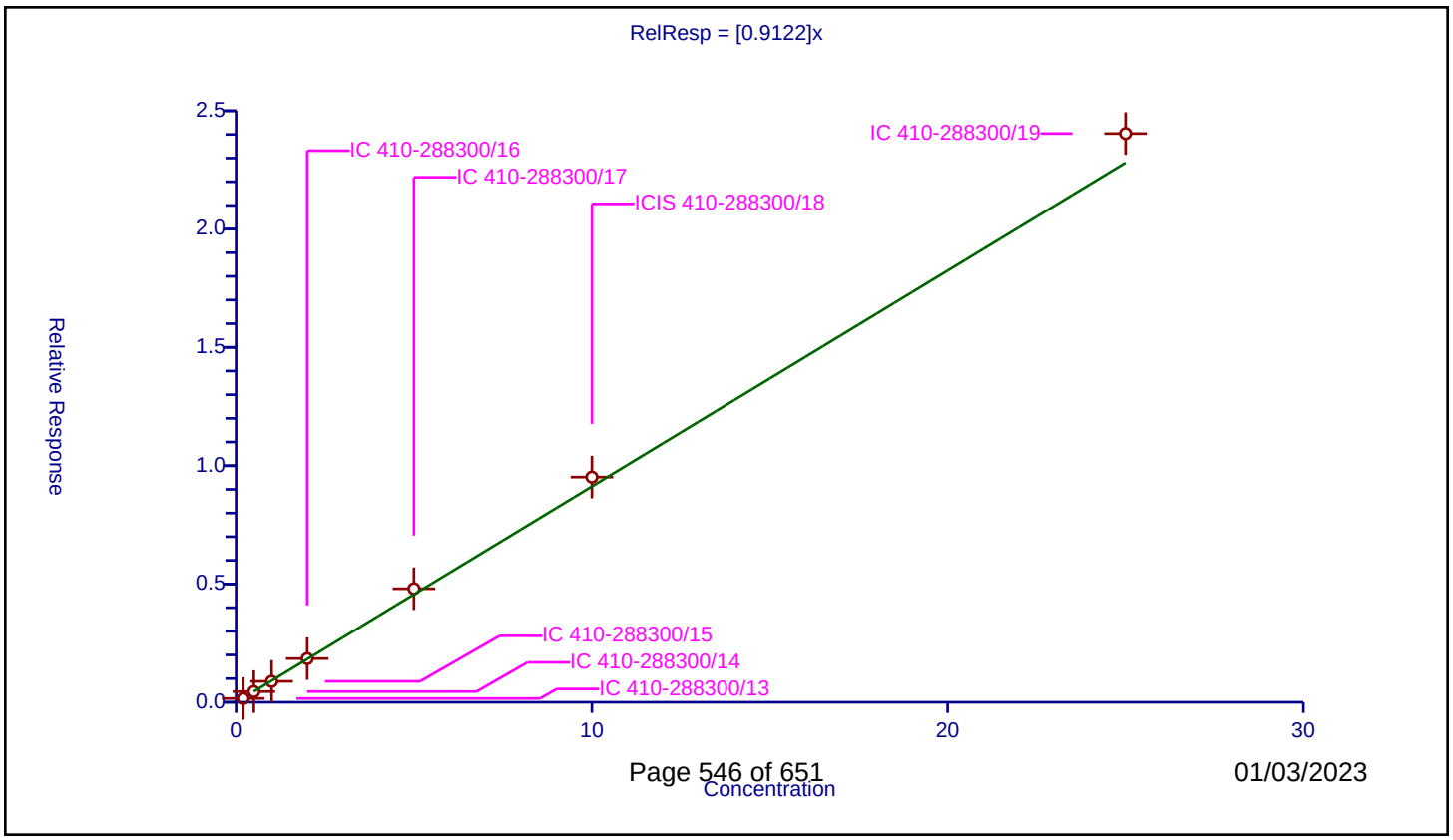
Curve Coefficients

Intercept:	0
Slope:	0.9122

Error Coefficients

Standard Error:	993000
Relative Standard Error:	6.3
Correlation Coefficient:	1.000
Coefficient of Determination (Adjusted):	0.995

ID	Level	Concentration	Rel. Resp.	IS Amount	IS Response	RRF	Used
1	IC 410-288300/13	0.2	0.160204	10.0	881628.0	0.801018	Y
2	IC 410-288300/14	0.5	0.45208	10.0	871682.0	0.90416	Y
3	IC 410-288300/15	1.0	0.883335	10.0	860455.0	0.883335	Y
4	IC 410-288300/16	2.0	1.84631	10.0	872795.0	0.923155	Y
5	IC 410-288300/17	5.0	4.801609	10.0	886836.0	0.960322	Y
6	ICIS 410-288300/18	10.0	9.518641	10.0	900908.0	0.951864	Y
7	IC 410-288300/19	25.0	24.03712	10.0	926990.0	0.961485	Y



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-110288-1

SDG No.:

Lab Sample ID: ICV 410-288300/21 Calibration Date: 08/22/2022 23:10

Instrument ID: 10193 Calib Start Date: 08/22/2022 20:12

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 08/22/2022 22:26

Lab File ID: CG22X20.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	0.2854	0.2842	0.1000	4.98	5.00	-0.4	30.0
Chloromethane	Ave	0.3771	0.3566	0.1000	4.73	5.00	-5.4	30.0
Vinyl chloride	Ave	0.3499	0.3479	0.1000	4.97	5.00	-0.6	30.0
1,3-Butadiene	Ave	0.3741	0.3338		4.46	5.00	-10.8	30.0
Bromomethane	Ave	0.2328	0.2226	0.1000	4.78	5.00	-4.4	30.0
Chloroethane	Ave	0.2034	0.1964	0.1000	4.83	5.00	-3.4	30.0
Dichlorofluoromethane	Ave	0.4698	0.4781		5.09	5.00	1.8	30.0
Trichlorofluoromethane	Ave	0.3969	0.3996	0.1000	5.03	5.00	0.7	30.0
Ethyl ether	Ave	0.2035	0.2095		5.13	4.98	2.9	30.0
Freon 123a	Ave	0.3092	0.3058		4.95	5.00	-1.1	30.0
Acrolein	Ave	2.292	2.196		35.9	37.5	-4.2	30.0
1,1-Dichloroethene	Ave	0.2200	0.2431	0.1000	5.53	5.00	10.5	30.0
Acetone	Ave	2.576	2.212	0.1000	53.7	62.5	-14.1	30.0
Freon 113	Ave	0.2072	0.2389	0.1000	5.77	5.00	15.3	30.0
Methyl iodide	Ave	0.4049	0.4471		5.52	5.00	10.4	30.0
Ethyl bromide	Ave	0.2070	0.1864		4.40	4.89	-10.0	30.0
Carbon disulfide	Ave	0.6804	0.8401	0.1000	6.17	5.00	23.5	30.0
Methyl acetate	Ave	7.592	7.684	0.1000	5.06	5.00	1.2	30.0
Allyl chloride	Ave	0.4056	0.4511		5.56	5.00	11.2	30.0
Methylene Chloride	Ave	0.2608	0.2717	0.1000	5.21	5.00	4.2	30.0
t-Butyl alcohol	Ave	1.042	0.9534		45.7	50.0	-8.5	30.0
Acrylonitrile	Ave	3.878	3.885		25.0	25.0	0.2	30.0
Methyl tert-butyl ether	Ave	0.6681	0.6920	0.1000	5.18	5.00	3.6	30.0
trans-1,2-Dichloroethene	Ave	0.2710	0.2797	0.1000	5.16	5.00	3.2	30.0
n-Hexane	Ave	0.3635	0.3831		5.27	5.00	5.4	30.0
1,1-Dichloroethane	Ave	0.4989	0.5052	0.2000	5.06	5.00	1.3	30.0
di-Isopropyl ether	Ave	0.9172	0.9321		5.08	5.00	1.6	30.0
2-Chloro-1,3-butadiene	Ave	0.3897	0.4239		5.44	5.00	8.8	30.0
Ethyl t-butyl ether	Ave	0.8471	0.8879		5.24	5.00	4.8	30.0
2-Butanone (MEK)	Ave	5.255	5.268	0.1000	62.7	62.5	0.2	30.0
cis-1,2-Dichloroethene	Ave	0.2969	0.3142	0.1000	5.29	5.00	5.8	30.0
2,2-Dichloropropane	Ave	0.3940	0.4132		5.24	5.00	4.9	30.0
Propionitrile	Ave	1.308	1.255		36.0	37.5	-4.0	30.0
Methacrylonitrile	Ave	5.552	5.615		37.9	37.5	1.1	30.0
Bromochloromethane	Ave	0.1315	0.1360		5.17	5.00	3.4	30.0
Tetrahydrofuran	Ave	1.489	1.516		25.5	25.0	1.8	30.0
Chloroform	Ave	0.4701	0.4718	0.2000	5.02	5.00	0.4	30.0
1,1,1-Trichloroethane	Ave	0.4109	0.4176	0.1000	5.08	5.00	1.6	30.0
Cyclohexane	Ave	0.4623	0.4951	0.1000	5.35	5.00	7.1	30.0
Carbon tetrachloride	Ave	0.3450	0.3656	0.1000	5.30	5.00	6.0	30.0
1,1-Dichloropropene	Ave	0.3841	0.3935		5.12	5.00	2.5	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-110288-1

SDG No.:

Lab Sample ID: ICV 410-288300/21 Calibration Date: 08/22/2022 23:10

Instrument ID: 10193 Calib Start Date: 08/22/2022 20:12

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 08/22/2022 22:26

Lab File ID: CG22X20.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	0.3699	0.3322		112	125	-10.2	30.0
Benzene	Ave	1.151	1.169	0.5000	5.08	5.00	1.6	30.0
1,2-Dichloroethane	Ave	0.2916	0.2817	0.1000	4.83	5.00	-3.4	30.0
t-Amyl methyl ether	Ave	0.7640	0.7714		5.05	5.00	1.0	30.0
n-Heptane	Ave	0.4132	0.4172		5.05	5.00	1.0	30.0
n-Butanol	Ave	0.2966	0.2726		230	250	-8.1	30.0
Trichloroethene	Ave	0.2950	0.3015	0.2000	5.11	5.00	2.2	30.0
Methylcyclohexane	Ave	0.4906	0.5135	0.1000	5.23	5.00	4.7	30.0
1,2-Dichloropropane	Ave	0.3058	0.3067	0.1000	5.01	5.00	0.3	30.0
1,4-Dioxane	Qua		0.0627	0.0050	105	125	-15.6	30.0
Dibromomethane	Ave	0.1364	0.1353		4.96	5.00	-0.8	30.0
Methyl methacrylate	Ave	10.12	11.31		5.59	5.00	11.7	30.0
Bromodichloromethane	Ave	0.3358	0.3415	0.2000	5.08	5.00	1.7	30.0
2-Nitropropane	Ave	2.882	2.596		4.50	5.00	-9.9	30.0
1-Bromo-2-chloroethane	Ave	0.3050	0.3061		5.02	5.00	0.4	30.0
cis-1,3-Dichloropropene	Ave	0.4402	0.4513	0.2000	5.13	5.00	2.5	30.0
4-Methyl-2-pentanone (MIBK)	Ave	14.22	14.79	0.1000	65.0	62.5	4.0	30.0
Toluene	Ave	0.9723	0.9862	0.4000	5.07	5.00	1.4	30.0
trans-1,3-Dichloropropene	Ave	0.4678	0.5045	0.1000	5.39	5.00	7.8	30.0
Ethyl methacrylate	Ave	0.3782	0.3944		5.21	5.00	4.3	30.0
1,1,2-Trichloroethane	Ave	0.2693	0.2688	0.1000	4.99	5.00	-0.2	30.0
Tetrachloroethene	Ave	0.4530	0.4623	0.2000	5.10	5.00	2.1	30.0
1,3-Dichloropropane	Ave	0.4650	0.4721		5.08	5.00	1.5	30.0
2-Hexanone	Ave	10.07	10.81	0.1000	67.1	62.5	7.4	30.0
Dibromochloromethane	Ave	0.3217	0.3269		5.08	5.00	1.6	30.0
1,2-Dibromoethane (EDB)	Ave	0.2534	0.2527	0.1000	4.99	5.00	-0.3	30.0
1-Chlorohexane	Ave	0.5542	0.5406		4.88	5.00	-2.5	30.0
Chlorobenzene	Ave	1.147	1.136	0.5000	4.95	5.00	-0.9	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3800	0.3842		5.06	5.00	1.1	30.0
Ethylbenzene	Ave	1.891	1.923	0.1000	5.08	5.00	1.7	30.0
m&p-Xylene	Ave	0.7579	0.7699	0.1000	10.2	10.0	1.6	30.0
o-Xylene	Ave	0.7529	0.7604	0.3000	5.05	5.00	1.0	30.0
Styrene	Ave	1.232	1.264	0.3000	5.13	5.00	2.6	30.0
Bromoform	Ave	0.1877	0.1917	0.1000	5.11	5.00	2.2	30.0
Isopropylbenzene	Ave	1.913	1.973	0.1000	5.16	5.00	3.1	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5912	0.5849	0.3000	4.95	5.00	-1.1	30.0
Bromobenzene	Ave	0.8315	0.8445		5.08	5.00	1.6	30.0
trans-1,4-Dichloro-2-butene	Ave	0.1428	0.1407		24.6	25.0	-1.5	30.0
1,2,3-Trichloropropane	Ave	0.1547	0.1500		4.85	5.00	-3.0	30.0
N-Propylbenzene	Ave	3.986	3.968		4.98	5.00	-0.4	30.0
2-Chlorotoluene	Ave	0.8351	0.8268		4.95	5.00	-1.0	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-110288-1

SDG No.:

Lab Sample ID: ICV 410-288300/21 Calibration Date: 08/22/2022 23:10

Instrument ID: 10193 Calib Start Date: 08/22/2022 20:12

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 08/22/2022 22:26

Lab File ID: CG22X20.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	2.870	2.899		5.05	5.00	1.0	30.0
4-Chlorotoluene	Ave	0.8567	0.8718		5.09	5.00	1.8	30.0
tert-Butylbenzene	Ave	0.6329	0.6271		4.95	5.00	-0.9	30.0
Pentachloroethane	Ave	0.4781	0.5019		5.25	5.00	5.0	30.0
1,2,4-Trimethylbenzene	Ave	2.981	2.989		5.01	5.00	0.3	30.0
sec-Butylbenzene	Ave	3.648	3.771		5.17	5.00	3.4	30.0
1,3-Dichlorobenzene	Ave	1.705	1.684	0.6000	4.94	5.00	-1.2	30.0
p-Isopropyltoluene	Ave	3.247	3.316		5.11	5.00	2.1	30.0
1,4-Dichlorobenzene	Ave	1.741	1.735	0.5000	4.98	5.00	-0.3	30.0
1,2,3-Trimethylbenzene	Ave	1.359	1.335		4.91	5.00	-1.7	30.0
Benzyl chloride	Ave	0.2443	0.2441		4.99	5.00	-0.1	30.0
n-Butylbenzene	Ave	1.636	1.641		5.01	5.00	0.3	30.0
1,2-Dichlorobenzene	Ave	1.568	1.542	0.4000	4.92	5.00	-1.7	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.0835	0.0824	0.0500	4.94	5.00	-1.2	30.0
1,3,5-Trichlorobenzene	Ave	1.343	1.346		5.01	5.00	0.2	30.0
1,2,4-Trichlorobenzene	Ave	1.132	1.144	0.2000	5.05	5.00	1.0	30.0
Hexachlorobutadiene	Ave	0.5847	0.5904		5.05	5.00	1.0	30.0
Naphthalene	Ave	1.801	1.869		5.19	5.00	3.8	30.0
1,2,3-Trichlorobenzene	Ave	0.9122	0.9437		5.17	5.00	3.5	30.0
Dibromofluoromethane (Surr)	Ave	0.2337	0.2337		10.0	10.0	-0.0	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0480	0.0470		9.78	10.0	-2.2	30.0
Toluene-d8 (Surr)	Ave	1.318	1.338		10.2	10.0	1.5	30.0
4-Bromofluorobenzene (Surr)	Ave	0.4876	0.4886		10.0	10.0	0.2	30.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X20.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 22-Aug-2022 23:10:30 ALS Bottle#: 20 Worklist Smp#: 21
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0064657-021
Misc. Info.: ICV LG
Operator ID: knk41612 Instrument ID: 10193
Sublist:

Method: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 31-Aug-2022 08:31:04 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1647

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.757	1.764	-0.007	99	282292	5.00	4.98	
5 Chloromethane	50	1.934	1.940	-0.006	99	354285	5.00	4.73	
6 Vinyl chloride	62	2.038	2.038	0.000	98	345644	5.00	4.97	
7 Butadiene	39	2.044	2.050	-0.006	92	331620	5.00	4.46	
9 Bromomethane	94	2.331	2.331	0.000	90	221169	5.00	4.78	
10 Chloroethane	64	2.392	2.398	-0.006	100	195131	5.00	4.83	
11 Dichlorofluoromethane	67	2.611	2.617	-0.006	97	474895	5.00	5.09	
12 Trichlorofluoromethane	101	2.672	2.672	0.000	94	396941	5.00	5.03	
13 Pentane	43	2.678	2.678	0.000	97	432531	5.00	6.19	
15 Ethyl ether	59	2.861	2.861	0.000	91	207447	4.98	5.13	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.952	2.959	-0.007	93	303765	5.00	4.95	
17 Acrolein	56	3.013	3.013	0.000	99	197886	37.5	35.9	
19 1,1-Dichloroethene	96	3.129	3.135	-0.006	98	241473	5.00	5.53	
20 Acetone	43	3.160	3.166	-0.006	92	332224	62.5	53.7	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.172	3.178	-0.006	91	237340	5.00	5.77	
22 Iodomethane	142	3.300	3.300	0.000	97	444106	5.00	5.52	
23 Isopropyl alcohol	45	3.306	3.318	-0.012	29	47539	37.5	34.8	
24 Ethyl bromide	108	3.324	3.324	0.000	98	180913	4.89	4.40	
25 Carbon disulfide	76	3.391	3.391	0.000	99	834493	5.00	6.17	
27 Methyl acetate	43	3.525	3.532	-0.007	96	92316	5.00	5.06	
28 3-Chloro-1-propene	41	3.544	3.544	0.000	93	448073	5.00	5.56	
29 Methylene Chloride	84	3.708	3.708	0.000	94	269871	5.00	5.21	
* 30 t-Butyl alcohol-d10 (IS)	65	3.739	3.745	-0.006	44	120148	50.0	50.0	
31 2-Methyl-2-propanol	59	3.842	3.849	-0.007	99	114545	50.0	45.7	
32 Acrylonitrile	53	4.013	4.019	-0.006	99	233374	25.0	25.0	
33 Methyl tert-butyl ether	73	4.062	4.068	-0.006	95	687379	5.00	5.18	
34 trans-1,2-Dichloroethene	96	4.068	4.074	-0.006	99	277861	5.00	5.16	
35 Hexane	57	4.470	4.470	0.000	93	380592	5.00	5.27	
36 1,1-Dichloroethane	63	4.720	4.720	0.000	96	501807	5.00	5.06	
38 Isopropyl ether	45	4.781	4.787	-0.006	95	925912	5.00	5.08	
39 2-Chloro-1,3-butadiene	53	4.830	4.830	0.000	90	421079	5.00	5.44	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.330	5.330	0.000	98	882019	5.00	5.24	
41 2-Butanone (MEK)	43	5.543	5.543	0.000	100	791133	62.5	62.7	
42 cis-1,2-Dichloroethene	96	5.574	5.574	0.000	83	312149	5.00	5.29	
43 2,2-Dichloropropane	77	5.586	5.586	0.000	86	410431	5.00	5.24	
45 Propionitrile	54	5.641	5.635	0.006	97	113129	37.5	36.0	
46 Methacrylonitrile	67	5.854	5.860	-0.006	92	505945	37.5	37.9	
47 Chlorobromomethane	128	5.915	5.909	0.006	94	135066	5.00	5.17	
48 Tetrahydrofuran	71	5.915	5.927	-0.012	66	91079	25.0	25.5	
50 Chloroform	83	6.074	6.074	0.000	93	468690	5.00	5.02	
52 1,1,1-Trichloroethane	97	6.281	6.293	-0.012	82	414861	5.00	5.08	
$ 53 Dibromofluoromethane (Surr)	113	6.293	6.293	0.000	94	464280	10.0	10.0	
54 Cyclohexane	56	6.379	6.385	-0.006	91	491809	5.00	5.35	
55 Carbon tetrachloride	117	6.500	6.501	-0.001	95	363172	5.00	5.30	
56 1,1-Dichloropropene	75	6.507	6.513	-0.006	98	390936	5.00	5.12	
57 Isobutyl alcohol	41	6.714	6.708	0.006	93	99780	125.0	112.3	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.750	6.757	-0.007	95	93323	10.0	9.78	
59 Benzene	78	6.775	6.775	0.000	97	1161595	5.00	5.08	
61 1,2-Dichloroethane	62	6.854	6.860	-0.006	97	279852	5.00	4.83	
63 Tert-amyl methyl ether	73	6.982	6.982	0.000	99	766266	5.00	5.05	
* 64 Fluorobenzene (IS)	96	7.189	7.196	-0.007	98	1986750	10.0	10.0	
65 n-Heptane	43	7.208	7.208	0.000	93	414477	5.00	5.05	
66 n-Butanol	56	7.628	7.622	0.006	89	163781	250.0	229.8	
67 Trichloroethene	95	7.683	7.683	0.000	97	299491	5.00	5.11	
68 Methylcyclohexane	83	7.982	7.982	0.000	90	510062	5.00	5.23	
69 1,2-Dichloropropane	63	8.018	8.025	-0.007	98	304632	5.00	5.01	
70 2-ethoxy-2-methyl butane	87	8.043	8.043	0.000	93	456153	5.00	5.15	
71 Methyl methacrylate	69	8.128	8.128	0.000	93	135909	5.00	5.59	
72 1,4-Dioxane	88	8.122	8.134	-0.012	28	18820	125.0	105.5	M
73 Dibromomethane	93	8.128	8.134	-0.006	89	134407	5.00	4.96	
75 Dichlorobromomethane	83	8.378	8.384	-0.006	99	339287	5.00	5.08	
76 2-Nitropropane	41	8.665	8.665	0.000	97	31188	5.00	4.50	
78 1-Bromo-2-chloroethane	63	8.774	8.774	0.000	98	304063	5.00	5.02	
79 cis-1,3-Dichloropropene	75	8.951	8.951	0.000	97	448279	5.00	5.13	
81 4-Methyl-2-pentanone (MIBK)	43	9.152	9.159	-0.007	96	2221203	62.5	65.0	
$ 82 Toluene-d8 (Surr)	98	9.280	9.280	0.000	93	2032411	10.0	10.2	
83 Toluene	92	9.366	9.366	0.000	98	749022	5.00	5.07	
84 trans-1,3-Dichloropropene	75	9.658	9.658	0.000	92	383163	5.00	5.39	
85 Ethyl methacrylate	69	9.738	9.738	0.000	90	299555	5.00	5.21	
86 1,1,2-Trichloroethane	97	9.872	9.872	0.000	90	204141	5.00	4.99	
87 Tetrachloroethene	166	9.951	9.951	0.000	97	351097	5.00	5.10	
102 1,3-Dichloropropane	76	10.042	10.043	0.000	90	358561	5.00	5.08	
104 2-Hexanone	43	10.116	10.116	0.000	96	1624164	62.5	67.1	
106 Chlorodibromomethane	129	10.268	10.268	0.000	90	248296	5.00	5.08	
107 Ethylene Dibromide	107	10.378	10.378	0.000	98	191889	5.00	4.99	
* 108 Chlorobenzene-d5 (IS)	117	10.835	10.835	0.000	84	1518942	10.0	10.0	
109 1-Chlorohexane	91	10.853	10.853	0.000	98	410596	5.00	4.88	
110 Chlorobenzene	112	10.859	10.859	0.000	96	863044	5.00	4.95	
111 1,1,1,2-Tetrachloroethane	131	10.951	10.951	0.000	96	291817	5.00	5.06	
112 Ethylbenzene	91	10.951	10.957	-0.006	98	1460417	5.00	5.08	
113 m-Xylene & p-Xylene	106	11.073	11.079	-0.006	100	1169412	10.0	10.2	
115 o-Xylene	106	11.414	11.414	0.000	97	577534	5.00	5.05	
116 Styrene	104	11.432	11.432	0.000	95	960321	5.00	5.13	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 Bromoform	173	11.591	11.591	0.000	98	145618	5.00	5.11	
118 Isopropylbenzene	105	11.725	11.725	0.000	95	1498286	5.00	5.16	
$ 121 4-Bromofluorobenzene (Surr)	95	11.871	11.871	0.000	92	742222	10.0	10.0	
123 1,1,2,2-Tetrachloroethane	83	11.987	11.987	0.000	69	258034	5.00	4.95	
122 Bromobenzene	156	11.987	11.987	0.000	91	372540	5.00	5.08	
124 trans-1,4-Dichloro-2-butene	53	12.012	12.012	0.000	89	310247	25.0	24.6	
125 1,2,3-Trichloropropane	110	12.030	12.030	0.000	80	66152	5.00	4.85	
126 N-Propylbenzene	91	12.066	12.067	0.000	99	1750582	5.00	4.98	
127 2-Chlorotoluene	126	12.140	12.140	0.000	97	364744	5.00	4.95	
128 1,3,5-Trimethylbenzene	105	12.207	12.207	0.000	94	1278875	5.00	5.05	
129 4-Chlorotoluene	126	12.237	12.237	0.000	97	384610	5.00	5.09	
130 tert-Butylbenzene	134	12.451	12.451	0.000	93	276627	5.00	4.95	
131 Pentachloroethane	167	12.481	12.481	0.000	94	221423	5.00	5.25	
132 1,2,4-Trimethylbenzene	105	12.499	12.493	0.006	97	1318577	5.00	5.01	
133 sec-Butylbenzene	105	12.621	12.621	0.000	94	1663676	5.00	5.17	
134 1,3-Dichlorobenzene	146	12.719	12.719	0.000	98	742740	5.00	4.94	
135 4-Isopropyltoluene	119	12.731	12.731	0.000	97	1462889	5.00	5.11	
* 136 1,4-Dichlorobenzene-d4	152	12.774	12.774	0.000	93	882310	10.0	10.0	
137 1,4-Dichlorobenzene	146	12.792	12.792	0.000	96	765302	5.00	4.98	
138 1,2,3-Trimethylbenzene	120	12.804	12.804	0.000	98	588910	5.00	4.91	
139 Benzyl chloride	126	12.877	12.877	0.000	98	107673	5.00	4.99	
140 n-Butylbenzene	92	13.030	13.030	0.000	98	723776	5.00	5.01	
141 1,2-Dichlorobenzene	146	13.054	13.054	0.000	99	680239	5.00	4.92	
142 p-Diethylbenzene	119	13.085	13.085	0.000	86	727997	5.00	4.98	
145 1,2-Dibromo-3-Chloropropane	155	13.609	13.609	0.000	89	36358	5.00	4.94	
146 1,3,5-Trichlorobenzene	180	13.737	13.737	0.000	98	593651	5.00	5.01	
147 1,2,4-Trichlorobenzene	180	14.164	14.164	0.000	94	504730	5.00	5.05	
148 Hexachlorobutadiene	225	14.249	14.249	0.000	97	260470	5.00	5.05	
149 Naphthalene	128	14.346	14.347	-0.001	96	824478	5.00	5.19	
150 1,2,3-Trichlorobenzene	180	14.493	14.493	0.000	96	416330	5.00	5.17	
151 2-Methylnaphthalene	142	15.096	15.090	0.006	92	420238	5.00	5.60	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_VOC#1_00069	Amount Added:	12.50	Units: uL	
MSV_QC_Gas826_00096	Amount Added:	12.50	Units: uL	
MSV_LCS_EE_00003	Amount Added:	12.50	Units: uL	
LCS_ETBR_00003	Amount Added:	12.50	Units: uL	
MSV_LCS_ACROL_00072	Amount Added:	12.50	Units: uL	
MSV_LCS_Penta_00019	Amount Added:	12.50	Units: uL	
MSV_HP25_ISSS_00058	Amount Added:	1.00	Units: uL	Run Reagent

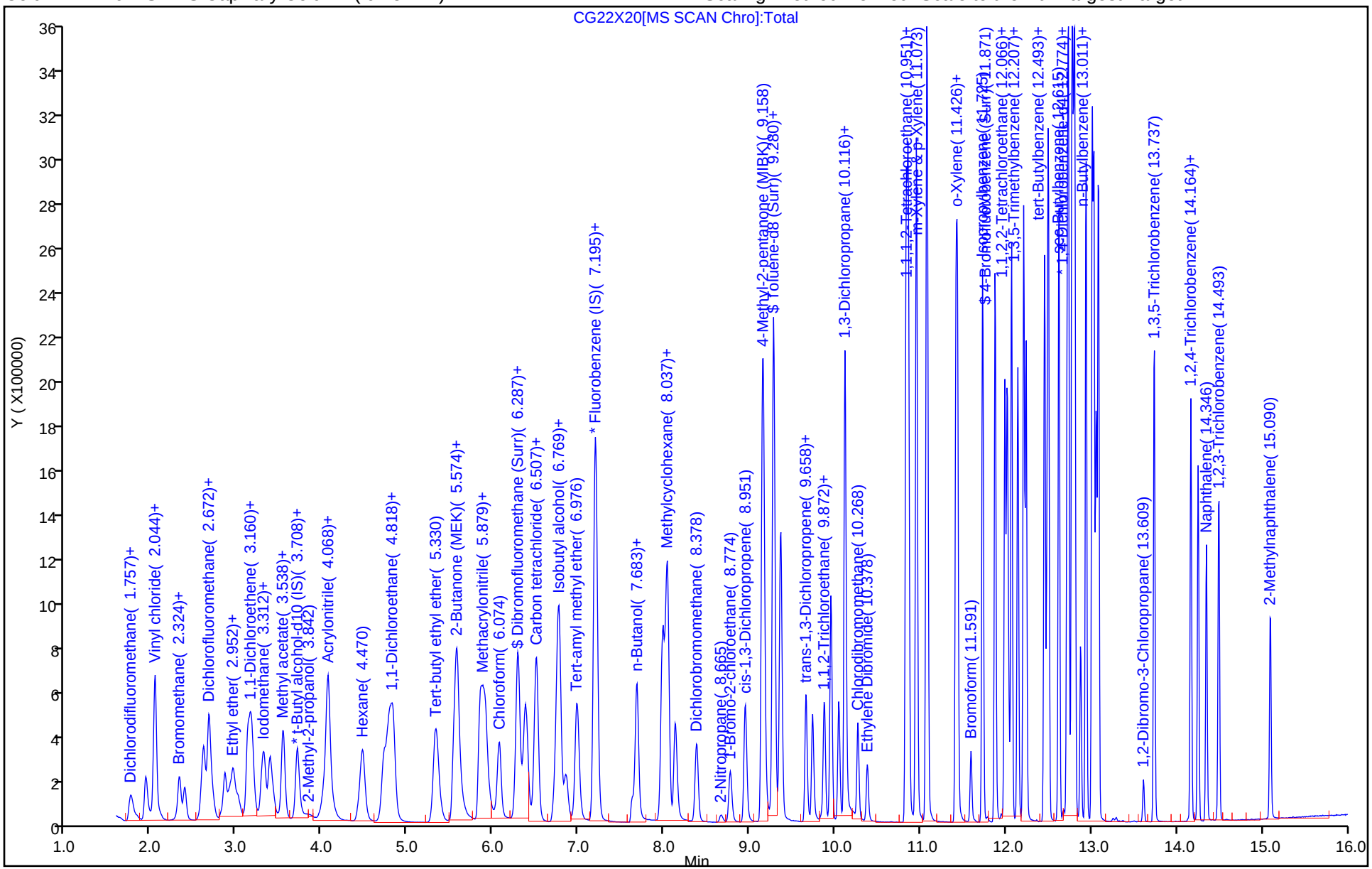
Report Date: 31-Aug-2022 08:31:04 Chrom Revision: 2.3 25-Aug-2022 20:53:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X20.D

Injection Date:	22-Aug-2022 23:10:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	ICV			Worklist Smp#:	21
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

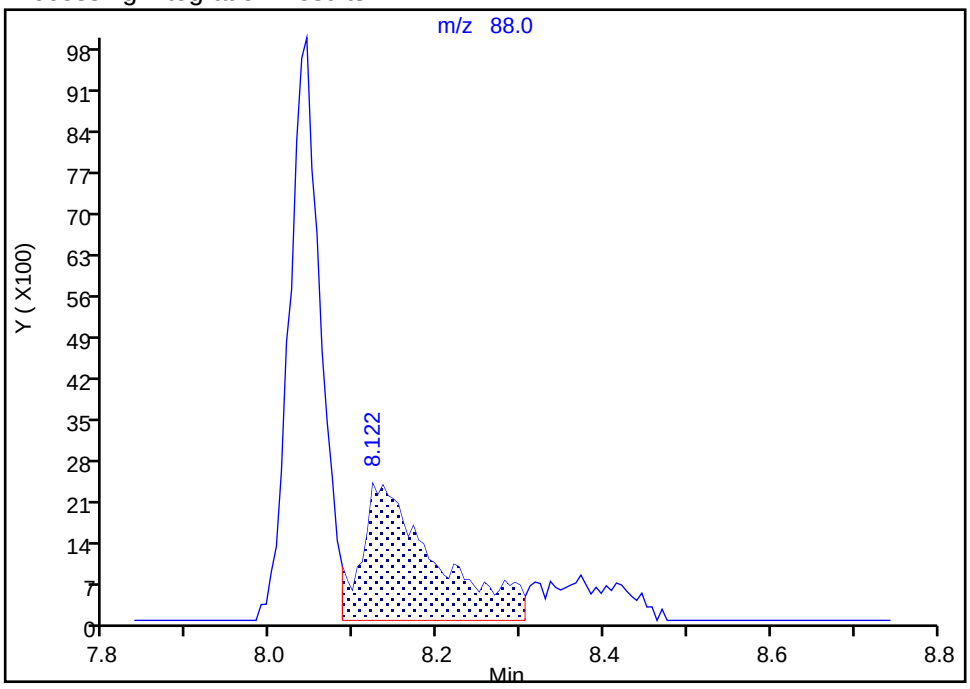
Data File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X20.D				
Injection Date:	22-Aug-2022 23:10:30	Instrument ID:	10193		
Lims ID:	ICV				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	20	Worklist Smp#:	21
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

72 1,4-Dioxane, CAS: 123-91-1

Signal: 1

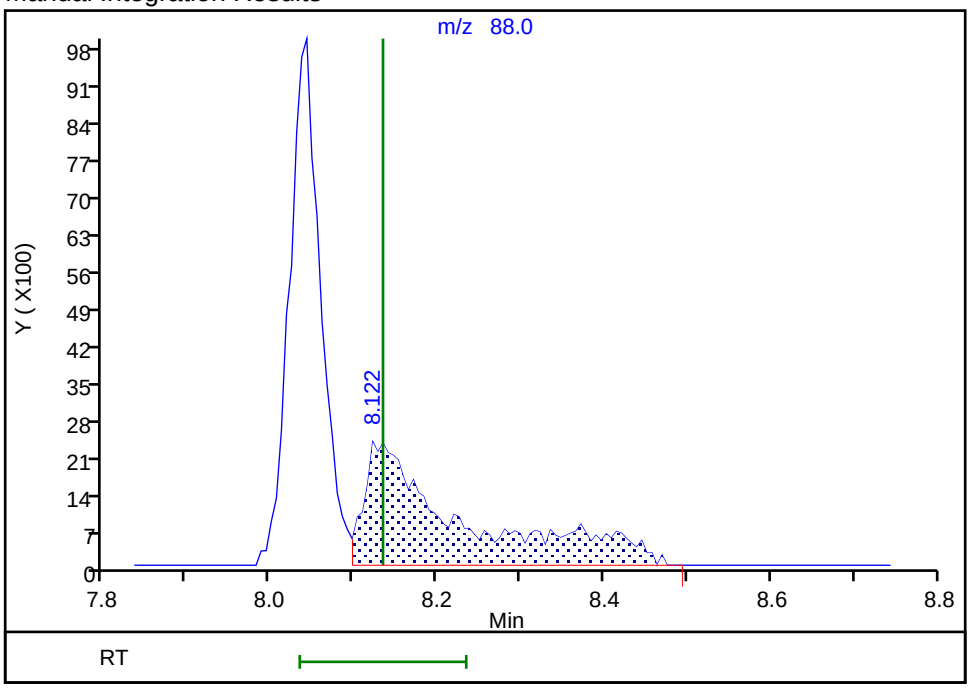
Processing Integration Results

RT: 8.12
Area: 14511
Amount: 81.928582
Amount Units: ug/l



Manual Integration Results

RT: 8.12
Area: 18820
Amount: 105.4887
Amount Units: ug/l



Reviewer: DVW2, 23-Aug-2022 09:33:51
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-110288-1

SDG No.:

Lab Sample ID: CCVIS 410-330696/3 Calibration Date: 12/28/2022 09:48

Instrument ID: 10193 Calib Start Date: 08/22/2022 20:12

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 08/22/2022 22:26

Lab File ID: CD28X02.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	0.2854	0.3506	0.1000	12.3	10.0	22.9*	20.0
Chloromethane	Ave	0.3771	0.4468	0.1000	11.8	10.0	18.5	20.0
Vinyl chloride	Ave	0.3499	0.3761	0.1000	10.8	10.0	7.5	20.0
1,3-Butadiene	Ave	0.3741	0.5478		14.6	10.0	46.4*	20.0
Bromomethane	Ave	0.2328	0.2217	0.1000	9.53	10.0	-4.7	20.0
Chloroethane	Ave	0.2034	0.2010	0.1000	9.88	10.0	-1.2	20.0
Dichlorofluoromethane	Ave	0.4698	0.4592		9.77	10.0	-2.3	20.0
Trichlorofluoromethane	Ave	0.3969	0.4113	0.1000	10.4	10.0	3.6	20.0
Ethyl ether	Ave	0.2035	0.2016		9.90	10.0	-1.0	20.0
Freon 123a	Ave	0.3092	0.2870		9.28	10.0	-7.2	20.0
Acrolein	Ave	2.292	1.948		425	500	-15.0	20.0
1,1-Dichloroethene	Ave	0.2200	0.1749	0.1000	7.95	10.0	-20.5*	20.0
Acetone	Ave	2.576	2.326	0.1000	90.3	100	-9.7	20.0
Freon 113	Ave	0.2072	0.1630	0.1000	7.87	10.0	-21.3*	20.0
Methyl iodide	Ave	0.4049	0.3324		8.21	10.0	-17.9	20.0
Ethyl bromide	Ave	0.2070	0.1970		9.53	10.0	-4.9	20.0
Carbon disulfide	Ave	0.6804	0.5820	0.1000	8.55	10.0	-14.5	20.0
Methyl acetate	Ave	7.592	8.135	0.1000	10.7	10.0	7.1	20.0
Allyl chloride	Ave	0.4056	0.3747		9.24	10.0	-7.6	20.0
Methylene Chloride	Ave	0.2608	0.2227	0.1000	8.54	10.0	-14.6	20.0
t-Butyl alcohol	Ave	1.042	0.8445		162	200	-19.0	20.0
Acrylonitrile	Ave	3.878	3.537		22.8	25.0	-8.8	20.0
Methyl tert-butyl ether	Ave	0.6681	0.5878	0.1000	8.80	10.0	-12.0	20.0
trans-1,2-Dichloroethene	Ave	0.2710	0.2243	0.1000	8.28	10.0	-17.2	20.0
n-Hexane	Ave	0.3635	0.3074		8.45	10.0	-15.5	20.0
1,1-Dichloroethane	Ave	0.4989	0.4395	0.2000	8.81	10.0	-11.9	20.0
di-Isopropyl ether	Ave	0.9172	0.8515		9.28	10.0	-7.2	20.0
2-Chloro-1,3-butadiene	Ave	0.3897	0.3332		8.55	10.0	-14.5	20.0
Ethyl t-butyl ether	Ave	0.8471	0.7430		8.77	10.0	-12.3	20.0
2-Butanone (MEK)	Ave	5.255	5.210	0.1000	99.1	100	-0.9	20.0
cis-1,2-Dichloroethene	Ave	0.2969	0.2556	0.1000	8.61	10.0	-13.9	20.0
2,2-Dichloropropane	Ave	0.3940	0.3446		8.75	10.0	-12.5	20.0
Propionitrile	Ave	1.308	1.276		195	200	-2.5	20.0
Methacrylonitrile	Ave	5.552	5.325		95.9	100	-4.1	20.0
Bromochloromethane	Ave	0.1315	0.1172		8.91	10.0	-10.9	20.0
Tetrahydrofuran	Ave	1.489	1.322		44.4	50.0	-11.2	20.0
Chloroform	Ave	0.4701	0.4109	0.2000	8.74	10.0	-12.6	20.0
1,1,1-Trichloroethane	Ave	0.4109	0.3434	0.1000	8.36	10.0	-16.4	20.0
Cyclohexane	Ave	0.4623	0.4055	0.1000	8.77	10.0	-12.3	20.0
Carbon tetrachloride	Ave	0.3450	0.3041	0.1000	8.81	10.0	-11.9	20.0
1,1-Dichloropropene	Ave	0.3841	0.3221		8.39	10.0	-16.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-110288-1

SDG No.:

Lab Sample ID: CCVIS 410-330696/3 Calibration Date: 12/28/2022 09:48

Instrument ID: 10193 Calib Start Date: 08/22/2022 20:12

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 08/22/2022 22:26

Lab File ID: CD28X02.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	0.3699	0.3369		455	500	-8.9	20.0
Benzene	Ave	1.151	0.997	0.5000	8.66	10.0	-13.4	20.0
1,2-Dichloroethane	Ave	0.2916	0.2671	0.1000	9.16	10.0	-8.4	20.0
t-Amyl methyl ether	Ave	0.7640	0.6746		8.83	10.0	-11.7	20.0
n-Heptane	Ave	0.4132	0.3902		9.44	10.0	-5.6	20.0
n-Butanol	Ave	0.2966	0.3018		890	875	1.7	20.0
Trichloroethene	Ave	0.2950	0.2560	0.2000	8.68	10.0	-13.2	20.0
Methylcyclohexane	Ave	0.4906	0.4104	0.1000	8.36	10.0	-16.4	20.0
1,2-Dichloropropane	Ave	0.3058	0.2827	0.1000	9.25	10.0	-7.5	20.0
Dibromomethane	Ave	0.1364	0.1222		8.96	10.0	-10.4	20.0
Methyl methacrylate	Ave	10.12	9.95		9.83	10.0	-1.7	20.0
1,4-Dioxane	Qua		0.0710	0.0050	499	500	-0.3	20.0
Bromodichloromethane	Ave	0.3358	0.3100	0.2000	9.23	10.0	-7.7	20.0
2-Nitropropane	Ave	2.882	2.889		50.1	50.0	0.2	20.0
1-Bromo-2-chloroethane	Ave	0.3050	0.3219		10.6	10.0	5.5	20.0
cis-1,3-Dichloropropene	Ave	0.4402	0.4136	0.2000	9.39	10.0	-6.1	20.0
4-Methyl-2-pentanone (MIBK)	Ave	14.22	14.80	0.1000	104	100	4.1	20.0
Toluene	Ave	0.9723	0.8292	0.4000	8.53	10.0	-14.7	20.0
trans-1,3-Dichloropropene	Ave	0.4678	0.4381	0.1000	9.36	10.0	-6.4	20.0
Ethyl methacrylate	Ave	0.3782	0.3403		9.00	10.0	-10.0	20.0
1,1,2-Trichloroethane	Ave	0.2693	0.2406	0.1000	8.93	10.0	-10.7	20.0
Tetrachloroethene	Ave	0.4530	0.3859	0.2000	8.52	10.0	-14.8	20.0
1,3-Dichloropropane	Ave	0.4650	0.4240		9.12	10.0	-8.8	20.0
2-Hexanone	Ave	10.07	10.68	0.1000	106	100	6.1	20.0
Dibromochloromethane	Ave	0.3217	0.2988		9.29	10.0	-7.1	20.0
1,2-Dibromoethane (EDB)	Ave	0.2534	0.2332	0.1000	9.21	10.0	-7.9	20.0
1-Chlorohexane	Ave	0.5542	0.4707		8.49	10.0	-15.1	20.0
Chlorobenzene	Ave	1.147	1.003	0.5000	8.75	10.0	-12.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3800	0.3352		8.82	10.0	-11.8	20.0
Ethylbenzene	Ave	1.891	1.653	0.1000	8.74	10.0	-12.6	20.0
m&p-Xylene	Ave	0.7579	0.6549	0.1000	17.3	20.0	-13.6	20.0
o-Xylene	Ave	0.7529	0.6453	0.3000	8.57	10.0	-14.3	20.0
Styrene	Ave	1.232	1.061	0.3000	8.61	10.0	-13.9	20.0
Bromoform	Ave	0.1877	0.1847	0.1000	9.84	10.0	-1.6	20.0
Isopropylbenzene	Ave	1.913	1.640	0.1000	8.57	10.0	-14.3	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5912	0.5310	0.3000	8.98	10.0	-10.2	20.0
Bromobenzene	Ave	0.8315	0.7111		8.55	10.0	-14.5	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1428	0.1113		77.9	100	-22.1*	20.0
1,2,3-Trichloropropane	Ave	0.1547	0.1311		8.48	10.0	-15.2	20.0
N-Propylbenzene	Ave	3.986	3.293		8.26	10.0	-17.4	20.0
2-Chlorotoluene	Ave	0.8351	0.6925		8.29	10.0	-17.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-110288-1

SDG No.:

Lab Sample ID: CCVIS 410-330696/3 Calibration Date: 12/28/2022 09:48

Instrument ID: 10193 Calib Start Date: 08/22/2022 20:12

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 08/22/2022 22:26

Lab File ID: CD28X02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	2.870	2.363		8.23	10.0	-17.7	20.0
4-Chlorotoluene	Ave	0.8567	0.7231		8.44	10.0	-15.6	20.0
tert-Butylbenzene	Ave	0.6329	0.5597		8.84	10.0	-11.6	20.0
Pentachloroethane	Ave	0.4781	0.4806		10.1	10.0	0.5	20.0
1,2,4-Trimethylbenzene	Ave	2.981	2.490		8.36	10.0	-16.4	20.0
sec-Butylbenzene	Ave	3.648	3.105		8.51	10.0	-14.9	20.0
1,3-Dichlorobenzene	Ave	1.705	1.446	0.6000	8.48	10.0	-15.2	20.0
p-Isopropyltoluene	Ave	3.247	2.704		8.33	10.0	-16.7	20.0
1,4-Dichlorobenzene	Ave	1.741	1.421	0.5000	8.16	10.0	-18.4	20.0
1,2,3-Trimethylbenzene	Ave	1.359	1.132		8.33	10.0	-16.7	20.0
Benzyl chloride	Ave	0.2443	0.2372		9.71	10.0	-2.9	20.0
n-Butylbenzene	Ave	1.636	1.369		8.37	10.0	-16.3	20.0
1,2-Dichlorobenzene	Ave	1.568	1.350	0.4000	8.61	10.0	-13.9	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0835	0.0686	0.0500	8.22	10.0	-17.8	20.0
1,3,5-Trichlorobenzene	Ave	1.343	1.118		8.33	10.0	-16.7	20.0
1,2,4-Trichlorobenzene	Ave	1.132	0.9056	0.2000	8.00	10.0	-20.0	20.0
Hexachlorobutadiene	Ave	0.5847	0.4699		8.04	10.0	-19.6	20.0
Naphthalene	Ave	1.801	1.405		7.80	10.0	-22.0*	20.0
1,2,3-Trichlorobenzene	Ave	0.9122	0.7109		7.79	10.0	-22.1*	20.0
Dibromofluoromethane (Surr)	Ave	0.2337	0.2334		9.99	10.0	-0.1	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0480	0.0480		9.98	10.0	-0.2	20.0
Toluene-d8 (Surr)	Ave	1.318	1.299		9.86	10.0	-1.4	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4876	0.4901		10.1	10.0	0.5	20.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X02.D
Lims ID: CCVIS VSTD10
Client ID:
Sample Type: CCVIS
Inject. Date: 28-Dec-2022 09:48:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074091-003
Misc. Info.: CCVIS VSTD10
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 28-Dec-2022 10:33:58 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1651

First Level Reviewer: DVW2 Date: 28-Dec-2022 10:29:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.745	1.745	0.000	99	738193	10.0	12.3	
5 Chloromethane	50	1.922	1.922	0.000	99	940674	10.0	11.8	
6 Vinyl chloride	62	2.020	2.020	0.000	98	791925	10.0	10.8	
7 Butadiene	39	2.032	2.032	0.000	94	1153276	10.0	14.6	
9 Bromomethane	94	2.306	2.306	0.000	90	466843	10.0	9.53	
10 Chloroethane	64	2.367	2.367	0.000	100	423136	10.0	9.88	
11 Dichlorofluoromethane	67	2.587	2.587	0.000	97	966803	10.0	9.77	
12 Trichlorofluoromethane	101	2.642	2.642	0.000	96	865924	10.0	10.4	
13 Pentane	43	2.642	2.642	0.000	97	659200	10.0	8.90	
15 Ethyl ether	59	2.825	2.825	0.000	96	424438	10.0	9.90	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.910	2.910	0.000	94	604320	10.0	9.28	
17 Acrolein	56	2.971	2.971	0.000	99	2669040	500.0	425.0	
19 1,1-Dichloroethene	96	3.087	3.087	0.000	97	368163	10.0	7.95	
20 Acetone	43	3.123	3.123	0.000	100	637232	100.0	90.3	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.129	3.129	0.000	91	343154	10.0	7.87	
22 Iodomethane	142	3.251	3.251	0.000	97	699800	10.0	8.21	
23 Isopropyl alcohol	45	3.276	3.276	0.000	44	320342	200.0	205.6	
24 Ethyl bromide	108	3.282	3.282	0.000	98	415558	10.0	9.53	
25 Carbon disulfide	76	3.343	3.343	0.000	99	1225406	10.0	8.55	
27 Methyl acetate	43	3.477	3.477	0.000	97	222885	10.0	10.7	
28 3-Chloro-1-propene	41	3.495	3.495	0.000	93	788930	10.0	9.24	
29 Methylene Chloride	84	3.654	3.654	0.000	96	468803	10.0	8.54	
* 30 t-Butyl alcohol-d10 (IS)	65	3.684	3.684	0.000	99	136997	50.0	50.0	M
31 2-Methyl-2-propanol	59	3.794	3.794	0.000	99	462796	200.0	162.1	
32 Acrylonitrile	53	3.965	3.965	0.000	97	242290	25.0	22.8	
33 Methyl tert-butyl ether	73	4.001	4.001	0.000	94	1237634	10.0	8.80	
34 trans-1,2-Dichloroethene	96	4.007	4.007	0.000	97	472251	10.0	8.28	
35 Hexane	57	4.403	4.403	0.000	94	647124	10.0	8.45	
36 1,1-Dichloroethane	63	4.647	4.647	0.000	96	925327	10.0	8.81	
38 Isopropyl ether	45	4.708	4.708	0.000	95	1792847	10.0	9.28	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 2-Chloro-1,3-butadiene	53	4.757	4.757	0.000	90	701491	10.0	8.55	
40 Tert-butyl ethyl ether	59	5.263	5.263	0.000	98	1564229	10.0	8.77	
41 2-Butanone (MEK)	43	5.483	5.483	0.000	100	1427553	100.0	99.1	
42 cis-1,2-Dichloroethene	96	5.501	5.501	0.000	83	538236	10.0	8.61	
43 2,2-Dichloropropane	77	5.513	5.513	0.000	87	725492	10.0	8.75	
45 Propionitrile	54	5.574	5.574	0.000	98	698967	200.0	195.1	
46 Methacrylonitrile	67	5.787	5.787	0.000	94	1459055	100.0	95.9	
47 Chlorobromomethane	128	5.836	5.836	0.000	97	246682	10.0	8.91	
48 Tetrahydrofuran	71	5.860	5.860	0.000	81	181153	50.0	44.4	
50 Chloroform	83	5.995	5.995	0.000	94	865205	10.0	8.74	
52 1,1,1-Trichloroethane	97	6.214	6.214	0.000	99	722926	10.0	8.36	
$ 53 Dibromofluoromethane (Surr)	113	6.214	6.214	0.000	85	491426	10.0	9.99	
54 Cyclohexane	56	6.312	6.312	0.000	93	853689	10.0	8.77	
55 Carbon tetrachloride	117	6.427	6.427	0.000	98	640229	10.0	8.81	
56 1,1-Dichloropropene	75	6.434	6.434	0.000	97	678184	10.0	8.39	
57 Isobutyl alcohol	41	6.659	6.659	0.000	95	461526	500.0	455.4	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.677	6.677	0.000	96	100985	10.0	9.98	
59 Benzene	78	6.702	6.702	0.000	98	2099236	10.0	8.66	
61 1,2-Dichloroethane	62	6.781	6.781	0.000	97	562401	10.0	9.16	
63 Tert-amyl methyl ether	73	6.915	6.915	0.000	98	1420397	10.0	8.83	
* 64 Fluorobenzene (IS)	96	7.122	7.122	0.000	99	2105428	10.0	10.0	
65 n-Heptane	43	7.135	7.135	0.000	94	821554	10.0	9.44	
66 n-Butanol	56	7.580	7.580	0.000	91	723432	875.0	890.2	
67 Trichloroethene	95	7.610	7.610	0.000	98	539018	10.0	8.68	
68 Methylcyclohexane	83	7.909	7.909	0.000	93	864043	10.0	8.36	
69 1,2-Dichloropropane	63	7.952	7.952	0.000	96	595266	10.0	9.25	
70 2-ethoxy-2-methyl butane	87	7.970	7.970	0.000	91	831149	10.0	8.86	
71 Methyl methacrylate	69	8.061	8.061	0.000	94	272685	10.0	9.83	
73 Dibromomethane	93	8.061	8.061	0.000	95	257380	10.0	8.96	
72 1,4-Dioxane	88	8.067	8.067	0.000	33	97274	500.0	498.5	
75 Dichlorobromomethane	83	8.311	8.311	0.000	99	652687	10.0	9.23	
76 2-Nitropropane	41	8.592	8.592	0.000	98	395731	50.0	50.1	
78 1-Bromo-2-chloroethane	63	8.701	8.701	0.000	99	677690	10.0	10.6	
79 cis-1,3-Dichloropropene	75	8.878	8.878	0.000	96	870742	10.0	9.39	
81 4-Methyl-2-pentanone (MIBK)	43	9.085	9.085	0.000	98	4054844	100.0	104.1	
$ 82 Toluene-d8 (Surr)	98	9.214	9.214	0.000	93	2150263	10.0	9.86	
83 Toluene	92	9.299	9.299	0.000	98	1372758	10.0	8.53	
84 trans-1,3-Dichloropropene	75	9.598	9.598	0.000	93	725240	10.0	9.36	
85 Ethyl methacrylate	69	9.677	9.677	0.000	91	563324	10.0	9.00	
86 1,1,2-Trichloroethane	97	9.811	9.811	0.000	90	398306	10.0	8.93	
87 Tetrachloroethene	166	9.896	9.896	0.000	98	638963	10.0	8.52	
102 1,3-Dichloropropane	76	9.982	9.982	0.000	92	701999	10.0	9.12	
104 2-Hexanone	43	10.061	10.061	0.000	98	2926679	100.0	106.1	
106 Chlorodibromomethane	129	10.213	10.213	0.000	90	494637	10.0	9.29	
107 Ethylene Dibromide	107	10.323	10.323	0.000	99	386152	10.0	9.21	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	84	1655566	10.0	10.0	
109 1-Chlorohexane	91	10.805	10.805	0.000	96	779252	10.0	8.49	
110 Chlorobenzene	112	10.811	10.811	0.000	97	1660546	10.0	8.75	
111 1,1,1,2-Tetrachloroethane	131	10.896	10.896	0.000	96	554917	10.0	8.82	
112 Ethylbenzene	91	10.902	10.902	0.000	98	2736934	10.0	8.74	
113 m-Xylene & p-Xylene	106	11.024	11.024	0.000	99	2168495	20.0	17.3	
115 o-Xylene	106	11.366	11.366	0.000	97	1068409	10.0	8.57	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
116 Styrene	104	11.384	11.384	0.000	95	1756950	10.0	8.61	
117 Bromoform	173	11.542	11.542	0.000	98	305803	10.0	9.84	
118 Isopropylbenzene	105	11.683	11.683	0.000	95	2715467	10.0	8.57	
$ 121 4-Bromofluorobenzene (Surr)	95	11.823	11.823	0.000	93	811463	10.0	10.1	
122 Bromobenzene	156	11.939	11.939	0.000	92	716758	10.0	8.55	
123 1,1,2,2-Tetrachloroethane	83	11.939	11.939	0.000	92	535221	10.0	8.98	
124 trans-1,4-Dichloro-2-butene	53	11.969	11.969	0.000	91	1121497	100.0	77.9	
125 1,2,3-Trichloropropane	110	11.981	11.981	0.000	82	132124	10.0	8.48	
126 N-Propylbenzene	91	12.018	12.018	0.000	99	3318775	10.0	8.26	
127 2-Chlorotoluene	126	12.091	12.091	0.000	97	698024	10.0	8.29	
128 1,3,5-Trimethylbenzene	105	12.164	12.164	0.000	94	2381768	10.0	8.23	
129 4-Chlorotoluene	126	12.189	12.189	0.000	97	728832	10.0	8.44	
130 tert-Butylbenzene	134	12.408	12.408	0.000	94	564160	10.0	8.84	
131 Pentachloroethane	167	12.438	12.438	0.000	93	484482	10.0	10.1	
132 1,2,4-Trimethylbenzene	105	12.451	12.451	0.000	97	2510133	10.0	8.36	
133 sec-Butylbenzene	105	12.573	12.573	0.000	94	3129502	10.0	8.51	
134 1,3-Dichlorobenzene	146	12.670	12.670	0.000	98	1457213	10.0	8.48	
135 4-Isopropyltoluene	119	12.688	12.688	0.000	97	2725707	10.0	8.33	
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	93	1007973	10.0	10.0	
137 1,4-Dichlorobenzene	146	12.749	12.749	0.000	95	1432348	10.0	8.16	
138 1,2,3-Trimethylbenzene	120	12.762	12.762	0.000	98	1140572	10.0	8.33	
139 Benzyl chloride	126	12.829	12.829	0.000	98	239067	10.0	9.71	
140 n-Butylbenzene	92	12.987	12.987	0.000	97	1379808	10.0	8.37	
141 1,2-Dichlorobenzene	146	13.012	13.012	0.000	99	1361201	10.0	8.61	
142 p-Diethylbenzene	119	13.036	13.036	0.000	86	1399899	10.0	8.39	
145 1,2-Dibromo-3-Chloropropane	155	13.572	13.572	0.000	94	69182	10.0	8.22	
146 1,3,5-Trichlorobenzene	180	13.694	13.694	0.000	98	1127349	10.0	8.33	
147 1,2,4-Trichlorobenzene	180	14.121	14.121	0.000	94	912786	10.0	8.00	
148 Hexachlorobutadiene	225	14.206	14.206	0.000	97	473657	10.0	8.04	
149 Naphthalene	128	14.304	14.304	0.000	97	1416686	10.0	7.80	
150 1,2,3-Trichlorobenzene	180	14.450	14.450	0.000	96	716533	10.0	7.79	
151 2-Methylnaphthalene	142	15.054	15.054	0.000	92	558091	10.0	6.51	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#2_826_00067	Amount Added: 20.00	Units: uL	
MSV_LL_GAS826_00129	Amount Added: 20.00	Units: uL	
MSV_LL_#1_826_00062	Amount Added: 20.00	Units: uL	
MSV_HP25_ISSS_00063	Amount Added: 1.00	Units: uL	Run Reagent

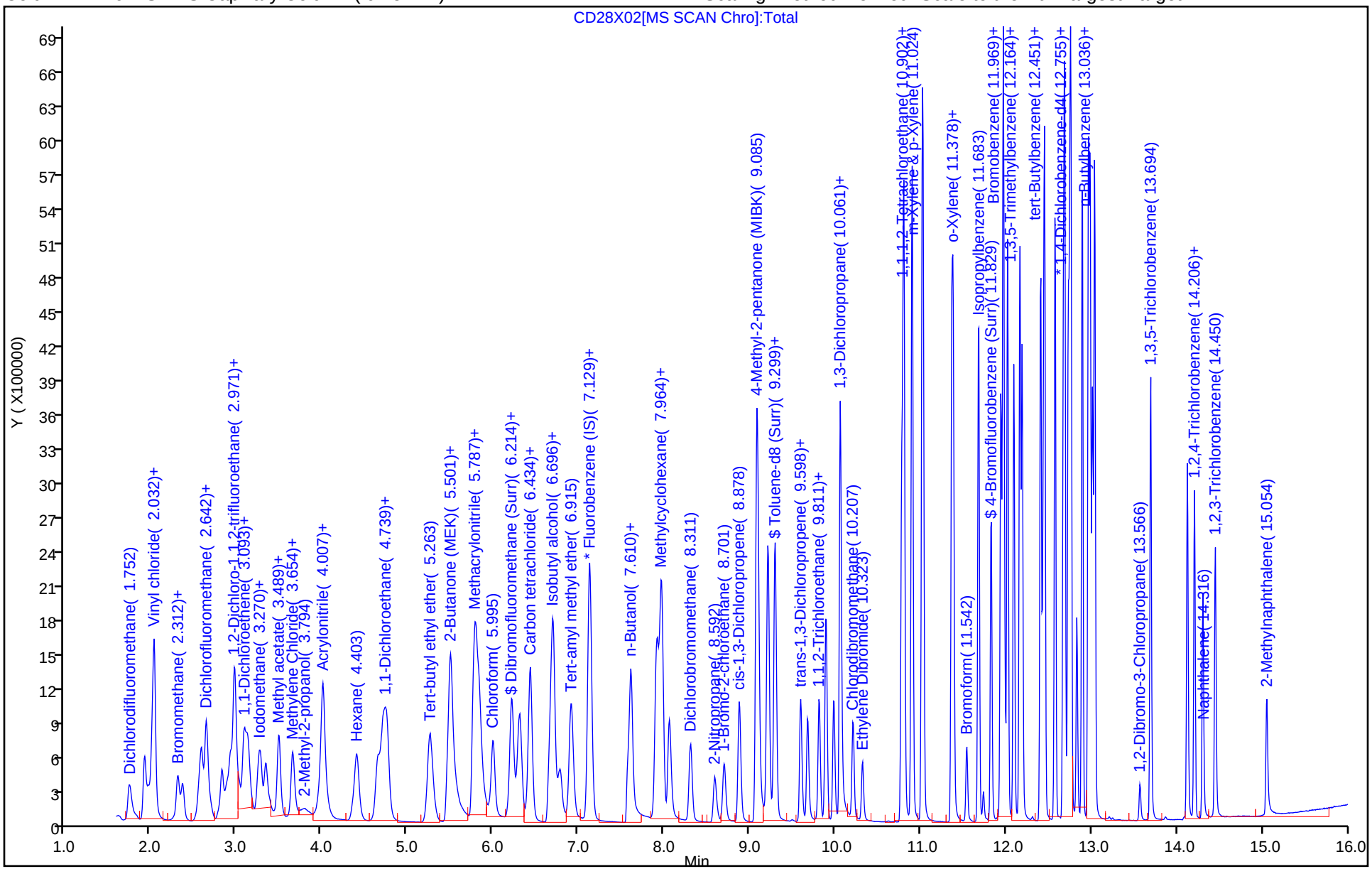
Report Date: 28-Dec-2022 10:33:59 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X02.D

Injection Date:	28-Dec-2022 09:48:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	CCVIS VSTD10			Worklist Smp#:	3
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

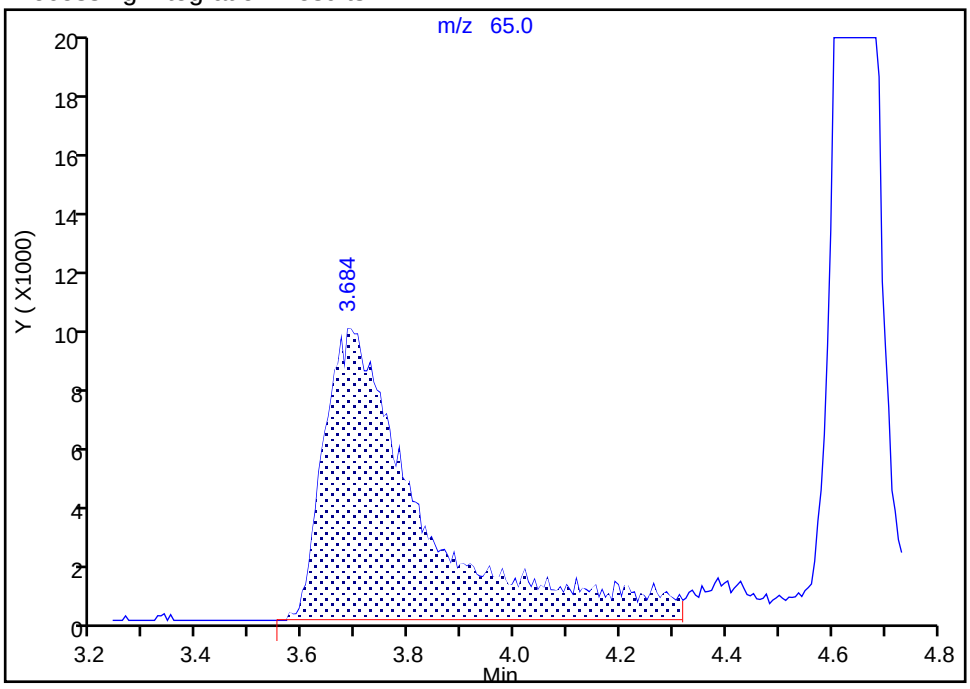
Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X02.D				
Injection Date:	28-Dec-2022 09:48:30	Instrument ID:	10193		
Lims ID:	CCVIS VSTD10				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

* 30 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

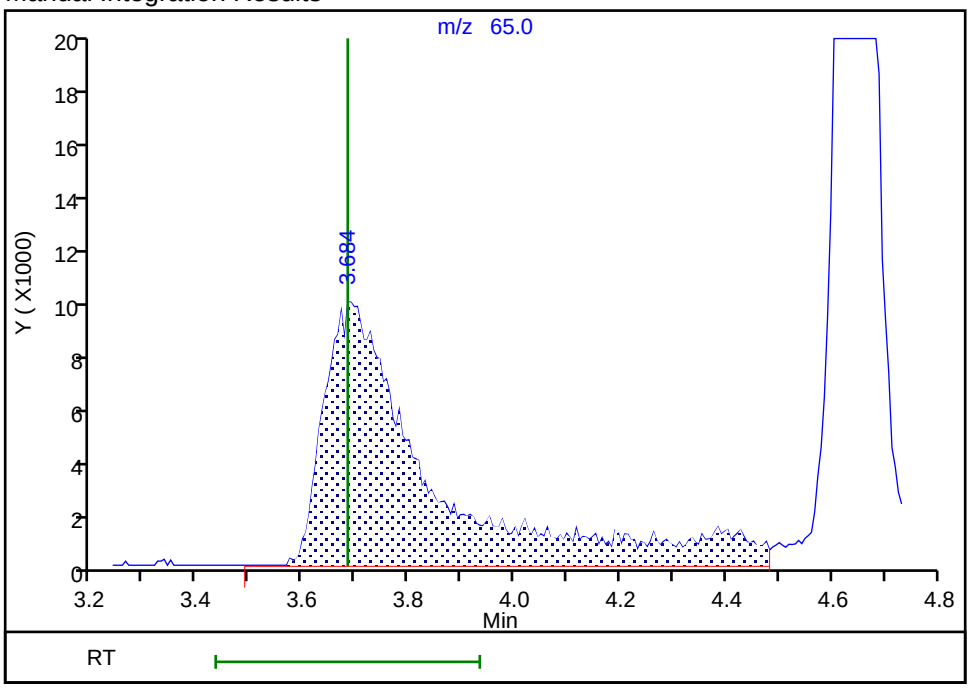
Processing Integration Results

RT: 3.68
Area: 127285
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 3.68
Area: 136997
Amount: 50.000000
Amount Units: ug/l



Reviewer: DVW2, 28-Dec-2022 10:28:29
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-110288-1

SDG No.:

Lab Sample ID: CCVIS 410-331173/3 Calibration Date: 12/29/2022 12:20

Instrument ID: 10193 Calib Start Date: 08/22/2022 20:12

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 08/22/2022 22:26

Lab File ID: CD29X02.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	0.2854	0.3207	0.1000	11.2	10.0	12.4	20.0
Chloromethane	Ave	0.3771	0.4174	0.1000	11.1	10.0	10.7	20.0
Vinyl chloride	Ave	0.3499	0.3597	0.1000	10.3	10.0	2.8	20.0
1,3-Butadiene	Ave	0.3741	0.4756		12.7	10.0	27.1*	20.0
Bromomethane	Ave	0.2328	0.2158	0.1000	9.27	10.0	-7.3	20.0
Chloroethane	Ave	0.2034	0.1926	0.1000	9.47	10.0	-5.3	20.0
Dichlorofluoromethane	Ave	0.4698	0.4443		9.46	10.0	-5.4	20.0
Trichlorofluoromethane	Ave	0.3969	0.3895	0.1000	9.81	10.0	-1.9	20.0
Ethyl ether	Ave	0.2035	0.2048		10.1	10.0	0.6	20.0
Freon 123a	Ave	0.3092	0.2794		9.04	10.0	-9.6	20.0
Acrolein	Ave	2.292	2.134		466	500	-6.9	20.0
1,1-Dichloroethene	Ave	0.2200	0.1718	0.1000	7.81	10.0	-21.9*	20.0
Acetone	Ave	2.576	2.425	0.1000	94.1	100	-5.9	20.0
Freon 113	Ave	0.2072	0.1589	0.1000	7.67	10.0	-23.3*	20.0
Methyl iodide	Ave	0.4049	0.3247		8.02	10.0	-19.8	20.0
Ethyl bromide	Ave	0.2070	0.1980		9.58	10.0	-4.4	20.0
Carbon disulfide	Ave	0.6804	0.5751	0.1000	8.45	10.0	-15.5	20.0
Methyl acetate	Ave	7.592	7.923	0.1000	10.4	10.0	4.4	20.0
Allyl chloride	Ave	0.4056	0.3732		9.20	10.0	-8.0	20.0
Methylene Chloride	Ave	0.2608	0.2246	0.1000	8.61	10.0	-13.9	20.0
t-Butyl alcohol	Ave	1.042	0.8834		170	200	-15.2	20.0
Acrylonitrile	Ave	3.878	3.787		24.4	25.0	-2.4	20.0
trans-1,2-Dichloroethene	Ave	0.2710	0.2227	0.1000	8.22	10.0	-17.8	20.0
Methyl tert-butyl ether	Ave	0.6681	0.5877	0.1000	8.80	10.0	-12.0	20.0
n-Hexane	Ave	0.3635	0.2934		8.07	10.0	-19.3	20.0
1,1-Dichloroethane	Ave	0.4989	0.4399	0.2000	8.82	10.0	-11.8	20.0
di-Isopropyl ether	Ave	0.9172	0.8599		9.38	10.0	-6.2	20.0
2-Chloro-1,3-butadiene	Ave	0.3897	0.3323		8.53	10.0	-14.7	20.0
Ethyl t-butyl ether	Ave	0.8471	0.7514		8.87	10.0	-11.3	20.0
2-Butanone (MEK)	Ave	5.255	5.552	0.1000	106	100	5.7	20.0
cis-1,2-Dichloroethene	Ave	0.2969	0.2568	0.1000	8.65	10.0	-13.5	20.0
2,2-Dichloropropane	Ave	0.3940	0.3478		8.83	10.0	-11.7	20.0
Propionitrile	Ave	1.308	1.358		208	200	3.8	20.0
Methacrylonitrile	Ave	5.552	5.650		102	100	1.8	20.0
Bromochloromethane	Ave	0.1315	0.1174		8.93	10.0	-10.7	20.0
Tetrahydrofuran	Ave	1.489	1.377		46.2	50.0	-7.6	20.0
Chloroform	Ave	0.4701	0.4126	0.2000	8.78	10.0	-12.2	20.0
1,1,1-Trichloroethane	Ave	0.4109	0.3434	0.1000	8.36	10.0	-16.4	20.0
Cyclohexane	Ave	0.4623	0.3931	0.1000	8.50	10.0	-15.0	20.0
Carbon tetrachloride	Ave	0.3450	0.3028	0.1000	8.78	10.0	-12.2	20.0
1,1-Dichloropropene	Ave	0.3841	0.3212		8.36	10.0	-16.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-110288-1

SDG No.:

Lab Sample ID: CCVIS 410-331173/3 Calibration Date: 12/29/2022 12:20

Instrument ID: 10193 Calib Start Date: 08/22/2022 20:12

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 08/22/2022 22:26

Lab File ID: CD29X02.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	0.3699	0.3446		466	500	-6.8	20.0
Benzene	Ave	1.151	0.997	0.5000	8.66	10.0	-13.4	20.0
1,2-Dichloroethane	Ave	0.2916	0.2600	0.1000	8.92	10.0	-10.8	20.0
t-Amyl methyl ether	Ave	0.7640	0.6834		8.94	10.0	-10.6	20.0
n-Heptane	Ave	0.4132	0.3795		9.18	10.0	-8.2	20.0
n-Butanol	Ave	0.2966	0.3081		909	875	3.9	20.0
Trichloroethene	Ave	0.2950	0.2569	0.2000	8.71	10.0	-12.9	20.0
Methylcyclohexane	Ave	0.4906	0.4034	0.1000	8.22	10.0	-17.8	20.0
1,2-Dichloropropane	Ave	0.3058	0.2855	0.1000	9.34	10.0	-6.6	20.0
Dibromomethane	Ave	0.1364	0.1220		8.94	10.0	-10.6	20.0
Methyl methacrylate	Ave	10.12	10.26		10.1	10.0	1.3	20.0
1,4-Dioxane	Qua		0.0722	0.0050	508	500	1.6	20.0
Bromodichloromethane	Ave	0.3358	0.3155	0.2000	9.40	10.0	-6.0	20.0
2-Nitropropane	Ave	2.882	3.075		53.3	50.0	6.7	20.0
1-Bromo-2-chloroethane	Ave	0.3050	0.3271		10.7	10.0	7.3	20.0
cis-1,3-Dichloropropene	Ave	0.4402	0.4133	0.2000	9.39	10.0	-6.1	20.0
4-Methyl-2-pentanone (MIBK)	Ave	14.22	15.96	0.1000	112	100	12.3	20.0
Toluene	Ave	0.9723	0.8444	0.4000	8.68	10.0	-13.2	20.0
trans-1,3-Dichloropropene	Ave	0.4678	0.4551	0.1000	9.73	10.0	-2.7	20.0
Ethyl methacrylate	Ave	0.3782	0.3447		9.12	10.0	-8.8	20.0
1,1,2-Trichloroethane	Ave	0.2693	0.2442	0.1000	9.07	10.0	-9.3	20.0
Tetrachloroethene	Ave	0.4530	0.3935	0.2000	8.69	10.0	-13.1	20.0
1,3-Dichloropropane	Ave	0.4650	0.4254		9.15	10.0	-8.5	20.0
2-Hexanone	Ave	10.07	11.34	0.1000	113	100	12.6	20.0
Dibromochloromethane	Ave	0.3217	0.3072		9.55	10.0	-4.5	20.0
1,2-Dibromoethane (EDB)	Ave	0.2534	0.2361	0.1000	9.32	10.0	-6.8	20.0
1-Chlorohexane	Ave	0.5542	0.4767		8.60	10.0	-14.0	20.0
Chlorobenzene	Ave	1.147	1.009	0.5000	8.80	10.0	-12.0	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3800	0.3398		8.94	10.0	-10.6	20.0
Ethylbenzene	Ave	1.891	1.666	0.1000	8.81	10.0	-11.9	20.0
m&p-Xylene	Ave	0.7579	0.6648	0.1000	17.5	20.0	-12.3	20.0
o-Xylene	Ave	0.7529	0.6582	0.3000	8.74	10.0	-12.6	20.0
Styrene	Ave	1.232	1.083	0.3000	8.79	10.0	-12.1	20.0
Bromoform	Ave	0.1877	0.1940	0.1000	10.3	10.0	3.4	20.0
Isopropylbenzene	Ave	1.913	1.666	0.1000	8.71	10.0	-12.9	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5912	0.5328	0.3000	9.01	10.0	-9.9	20.0
Bromobenzene	Ave	0.8315	0.7174		8.63	10.0	-13.7	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1428	0.1281		89.7	100	-10.3	20.0
1,2,3-Trichloropropane	Ave	0.1547	0.1343		8.68	10.0	-13.2	20.0
N-Propylbenzene	Ave	3.986	3.361		8.43	10.0	-15.7	20.0
2-Chlorotoluene	Ave	0.8351	0.7022		8.41	10.0	-15.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-110288-1

SDG No.:

Lab Sample ID: CCVIS 410-331173/3 Calibration Date: 12/29/2022 12:20

Instrument ID: 10193 Calib Start Date: 08/22/2022 20:12

GC Column: R-624SilMS 30m ID: 0.25(mm) Calib End Date: 08/22/2022 22:26

Lab File ID: CD29X02.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,3,5-Trimethylbenzene	Ave	2.870	2.389		8.32	10.0	-16.8	20.0
4-Chlorotoluene	Ave	0.8567	0.7419		8.66	10.0	-13.4	20.0
tert-Butylbenzene	Ave	0.6329	0.5300		8.37	10.0	-16.3	20.0
Pentachloroethane	Ave	0.4781	0.4863		10.2	10.0	1.7	20.0
1,2,4-Trimethylbenzene	Ave	2.981	2.516		8.44	10.0	-15.6	20.0
sec-Butylbenzene	Ave	3.648	3.172		8.70	10.0	-13.0	20.0
1,3-Dichlorobenzene	Ave	1.705	1.471	0.6000	8.63	10.0	-13.7	20.0
p-Isopropyltoluene	Ave	3.247	2.763		8.51	10.0	-14.9	20.0
1,4-Dichlorobenzene	Ave	1.741	1.468	0.5000	8.43	10.0	-15.7	20.0
1,2,3-Trimethylbenzene	Ave	1.359	1.164		8.57	10.0	-14.3	20.0
Benzyl chloride	Ave	0.2443	0.2430		9.94	10.0	-0.6	20.0
n-Butylbenzene	Ave	1.636	1.405		8.59	10.0	-14.1	20.0
1,2-Dichlorobenzene	Ave	1.568	1.398	0.4000	8.91	10.0	-10.9	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0835	0.0717	0.0500	8.59	10.0	-14.1	20.0
1,3,5-Trichlorobenzene	Ave	1.343	1.157		8.62	10.0	-13.8	20.0
1,2,4-Trichlorobenzene	Ave	1.132	0.9486	0.2000	8.38	10.0	-16.2	20.0
Hexachlorobutadiene	Ave	0.5847	0.4858		8.31	10.0	-16.9	20.0
Naphthalene	Ave	1.801	1.464		8.13	10.0	-18.7	20.0
1,2,3-Trichlorobenzene	Ave	0.9122	0.7430		8.15	10.0	-18.5	20.0
Dibromofluoromethane (Surr)	Ave	0.2337	0.2345		10.0	10.0	0.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.0480	0.0473		9.85	10.0	-1.5	20.0
Toluene-d8 (Surr)	Ave	1.318	1.303		9.89	10.0	-1.1	20.0
4-Bromofluorobenzene (Surr)	Ave	0.4876	0.4864		9.97	10.0	-0.3	20.0

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29X02.D
Lims ID: CCVIS VSTD10
Client ID:
Sample Type: CCVIS
Inject. Date: 29-Dec-2022 12:20:30 ALS Bottle#: 2 Worklist Smp#: 3
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074209-003
Misc. Info.: CCVIS VSTD10
Operator ID: knk41612 Instrument ID: 10193
Sublist: chrom-MSV_10193_25mL*sub1

Method: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 15:49:03 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1662

First Level Reviewer: DVW2 Date: 29-Dec-2022 12:59:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.733	1.733	0.000	100	644924	10.0	11.2	
5 Chloromethane	50	1.910	1.910	0.000	99	839546	10.0	11.1	
6 Vinyl chloride	62	2.007	2.007	0.000	98	723496	10.0	10.3	
7 Butadiene	39	2.020	2.020	0.000	95	956497	10.0	12.7	
9 Bromomethane	94	2.294	2.294	0.000	90	433938	10.0	9.27	
10 Chloroethane	64	2.355	2.355	0.000	100	387338	10.0	9.47	
11 Dichlorofluoromethane	67	2.574	2.574	0.000	97	893622	10.0	9.46	
12 Trichlorofluoromethane	101	2.629	2.629	0.000	98	783496	10.0	9.81	
13 Pentane	43	2.635	2.635	0.000	97	591255	10.0	8.35	
15 Ethyl ether	59	2.812	2.812	0.000	95	411853	10.0	10.1	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.904	2.904	0.000	94	562009	10.0	9.04	
17 Acrolein	56	2.965	2.965	0.000	99	2640021	500.0	465.6	
19 1,1-Dichloroethene	96	3.074	3.074	0.000	96	345634	10.0	7.81	
20 Acetone	43	3.111	3.111	0.000	100	599900	100.0	94.1	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.117	3.117	0.000	91	319683	10.0	7.67	
22 Iodomethane	142	3.239	3.239	0.000	97	653130	10.0	8.02	
23 Isopropyl alcohol	45	3.269	3.269	0.000	44	285812	200.0	203.2	
24 Ethyl bromide	108	3.269	3.269	0.000	98	398942	10.0	9.58	
25 Carbon disulfide	76	3.330	3.330	0.000	100	1156627	10.0	8.45	
27 Methyl acetate	43	3.464	3.464	0.000	27	195993	10.0	10.4	M
28 3-Chloro-1-propene	41	3.483	3.483	0.000	93	750562	10.0	9.20	
29 Methylene Chloride	84	3.641	3.641	0.000	96	451807	10.0	8.61	
* 30 t-Butyl alcohol-d10 (IS)	65	3.672	3.672	0.000	96	123691	50.0	50.0	M
31 2-Methyl-2-propanol	59	3.781	3.781	0.000	99	437098	200.0	169.6	
32 Acrylonitrile	53	3.952	3.952	0.000	99	234179	25.0	24.4	
34 trans-1,2-Dichloroethene	96	3.995	3.995	0.000	97	447900	10.0	8.22	
33 Methyl tert-butyl ether	73	4.001	4.001	0.000	97	1182050	10.0	8.80	
35 Hexane	57	4.391	4.391	0.000	95	590024	10.0	8.07	
36 1,1-Dichloroethane	63	4.641	4.641	0.000	96	884843	10.0	8.82	
38 Isopropyl ether	45	4.702	4.702	0.000	95	1729416	10.0	9.38	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
39 2-Chloro-1,3-butadiene	53	4.751	4.751	0.000	90	668415	10.0	8.53	
40 Tert-butyl ethyl ether	59	5.257	5.257	0.000	98	1511354	10.0	8.87	
41 2-Butanone (MEK)	43	5.470	5.470	0.000	100	1373542	100.0	105.7	
42 cis-1,2-Dichloroethene	96	5.494	5.494	0.000	84	516484	10.0	8.65	
43 2,2-Dichloropropane	77	5.501	5.501	0.000	87	699434	10.0	8.83	
45 Propionitrile	54	5.574	5.574	0.000	99	671710	200.0	207.6	
46 Methacrylonitrile	67	5.781	5.781	0.000	94	1397813	100.0	101.8	
47 Chlorobromomethane	128	5.830	5.830	0.000	96	236194	10.0	8.93	
48 Tetrahydrofuran	71	5.848	5.848	0.000	81	170290	50.0	46.2	
50 Chloroform	83	5.994	5.994	0.000	94	829895	10.0	8.78	
52 1,1,1-Trichloroethane	97	6.214	6.214	0.000	99	690740	10.0	8.36	
$ 53 Dibromofluoromethane (Surr)	113	6.214	6.214	0.000	94	471648	10.0	10.0	
54 Cyclohexane	56	6.305	6.305	0.000	93	790572	10.0	8.50	
55 Carbon tetrachloride	117	6.421	6.421	0.000	97	608953	10.0	8.78	
56 1,1-Dichloropropene	75	6.433	6.433	0.000	96	646059	10.0	8.36	
57 Isobutyl alcohol	41	6.653	6.653	0.000	95	426227	500.0	465.8	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.671	6.671	0.000	94	95189	10.0	9.85	
59 Benzene	78	6.695	6.695	0.000	97	2004726	10.0	8.66	
61 1,2-Dichloroethane	62	6.781	6.781	0.000	96	522945	10.0	8.92	
63 Tert-amyl methyl ether	73	6.909	6.909	0.000	98	1374521	10.0	8.94	
* 64 Fluorobenzene (IS)	96	7.116	7.116	0.000	97	2011295	10.0	10.0	
65 n-Heptane	43	7.134	7.134	0.000	95	763186	10.0	9.18	
66 n-Butanol	56	7.573	7.573	0.000	92	666917	875.0	908.9	
67 Trichloroethene	95	7.604	7.604	0.000	98	516760	10.0	8.71	
68 Methylcyclohexane	83	7.909	7.909	0.000	94	811325	10.0	8.22	
69 1,2-Dichloropropane	63	7.945	7.945	0.000	98	574238	10.0	9.34	
70 2-ethoxy-2-methyl butane	87	7.970	7.970	0.000	91	791196	10.0	8.83	
71 Methyl methacrylate	69	8.055	8.055	0.000	95	253821	10.0	10.1	
73 Dibromomethane	93	8.055	8.055	0.000	91	245386	10.0	8.94	
72 1,4-Dioxane	88	8.061	8.061	0.000	33	89312	500.0	507.8	
75 Dichlorobromomethane	83	8.305	8.305	0.000	99	634641	10.0	9.40	
76 2-Nitropropane	41	8.591	8.591	0.000	98	380296	50.0	53.3	
78 1-Bromo-2-chloroethane	63	8.701	8.701	0.000	99	657914	10.0	10.7	
79 cis-1,3-Dichloropropene	75	8.878	8.878	0.000	96	831185	10.0	9.39	
81 4-Methyl-2-pentanone (MIBK)	43	9.085	9.085	0.000	98	3947831	100.0	112.3	
$ 82 Toluene-d8 (Surr)	98	9.213	9.213	0.000	94	2042322	10.0	9.89	
83 Toluene	92	9.299	9.299	0.000	98	1323281	10.0	8.68	
84 trans-1,3-Dichloropropene	75	9.597	9.597	0.000	93	713236	10.0	9.73	
85 Ethyl methacrylate	69	9.677	9.677	0.000	92	540234	10.0	9.12	
86 1,1,2-Trichloroethane	97	9.811	9.811	0.000	90	382745	10.0	9.07	
87 Tetrachloroethene	166	9.890	9.890	0.000	98	616668	10.0	8.69	
102 1,3-Dichloropropane	76	9.981	9.981	0.000	93	666602	10.0	9.15	
104 2-Hexanone	43	10.061	10.061	0.000	98	2804738	100.0	112.6	
106 Chlorodibromomethane	129	10.207	10.207	0.000	90	481479	10.0	9.55	
107 Ethylene Dibromide	107	10.323	10.323	0.000	98	370007	10.0	9.32	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	86	1567068	10.0	10.0	
109 1-Chlorohexane	91	10.804	10.804	0.000	95	747050	10.0	8.60	
110 Chlorobenzene	112	10.811	10.811	0.000	96	1580958	10.0	8.80	
111 1,1,1,2-Tetrachloroethane	131	10.896	10.896	0.000	97	532427	10.0	8.94	
112 Ethylbenzene	91	10.902	10.902	0.000	98	2610062	10.0	8.81	
113 m-Xylene & p-Xylene	106	11.024	11.024	0.000	100	2083555	20.0	17.5	
115 o-Xylene	106	11.365	11.365	0.000	97	1031464	10.0	8.74	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
116 Styrene	104	11.384	11.384	0.000	95	1696783	10.0	8.79	
117 Bromoform	173	11.542	11.542	0.000	98	304064	10.0	10.3	
118 Isopropylbenzene	105	11.676	11.676	0.000	96	2610482	10.0	8.71	
$ 121 4-Bromofluorobenzene (Surr)	95	11.823	11.823	0.000	94	762152	10.0	9.97	
122 Bromobenzene	156	11.938	11.938	0.000	93	690090	10.0	8.63	
123 1,1,2,2-Tetrachloroethane	83	11.938	11.938	0.000	91	512508	10.0	9.01	
124 trans-1,4-Dichloro-2-butene	53	11.969	11.969	0.000	91	1232550	100.0	89.7	
125 1,2,3-Trichloropropane	110	11.981	11.981	0.000	82	129147	10.0	8.68	
126 N-Propylbenzene	91	12.018	12.018	0.000	99	3233061	10.0	8.43	
127 2-Chlorotoluene	126	12.091	12.091	0.000	97	675490	10.0	8.41	
128 1,3,5-Trimethylbenzene	105	12.164	12.164	0.000	94	2297811	10.0	8.32	
129 4-Chlorotoluene	126	12.188	12.188	0.000	97	713658	10.0	8.66	
130 tert-Butylbenzene	134	12.408	12.408	0.000	94	509804	10.0	8.37	
131 Pentachloroethane	167	12.438	12.438	0.000	94	467759	10.0	10.2	
132 1,2,4-Trimethylbenzene	105	12.450	12.450	0.000	97	2420063	10.0	8.44	
133 sec-Butylbenzene	105	12.572	12.572	0.000	94	3051277	10.0	8.70	
134 1,3-Dichlorobenzene	146	12.670	12.670	0.000	98	1414562	10.0	8.63	
135 4-Isopropyltoluene	119	12.688	12.688	0.000	97	2657844	10.0	8.51	
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	93	961947	10.0	10.0	
137 1,4-Dichlorobenzene	146	12.749	12.749	0.000	96	1411817	10.0	8.43	
138 1,2,3-Trimethylbenzene	120	12.761	12.761	0.000	98	1119848	10.0	8.57	
139 Benzyl chloride	126	12.828	12.828	0.000	98	233712	10.0	9.94	
140 n-Butylbenzene	92	12.987	12.987	0.000	97	1351161	10.0	8.59	
141 1,2-Dichlorobenzene	146	13.011	13.011	0.000	99	1344423	10.0	8.91	
142 p-Diethylbenzene	119	13.036	13.036	0.000	86	1366993	10.0	8.58	
145 1,2-Dibromo-3-Chloropropane	155	13.566	13.566	0.000	88	68941	10.0	8.59	
146 1,3,5-Trichlorobenzene	180	13.694	13.694	0.000	98	1113247	10.0	8.62	
147 1,2,4-Trichlorobenzene	180	14.121	14.121	0.000	94	912523	10.0	8.38	
148 Hexachlorobutadiene	225	14.206	14.206	0.000	96	467279	10.0	8.31	
149 Naphthalene	128	14.304	14.304	0.000	97	1408683	10.0	8.13	
150 1,2,3-Trichlorobenzene	180	14.450	14.450	0.000	96	714719	10.0	8.15	
151 2-Methylnaphthalene	142	15.054	15.054	0.000	93	533128	10.0	6.52	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LL_#2_826_00069	Amount Added: 20.00	Units: uL	
MSV_LL_GAS826_00129	Amount Added: 20.00	Units: uL	
MSV_LL_#1_826_00062	Amount Added: 20.00	Units: uL	
MSV_HP25_ISSS_00063	Amount Added: 1.00	Units: uL	Run Reagent

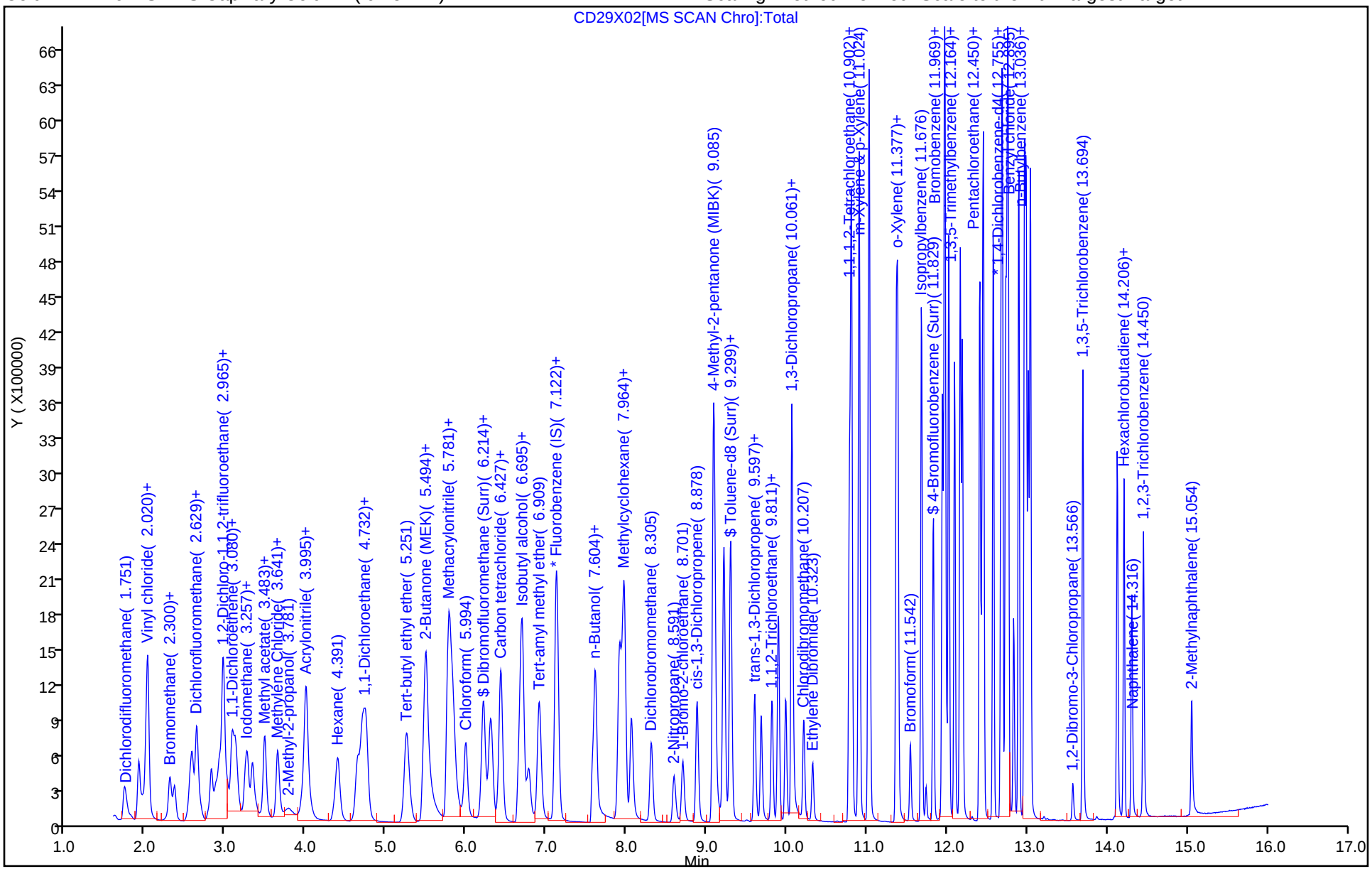
Report Date: 29-Dec-2022 15:49:04 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29X02.D

Injection Date:	29-Dec-2022 12:20:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	CCVIS VSTD10			Worklist Smp#:	3
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

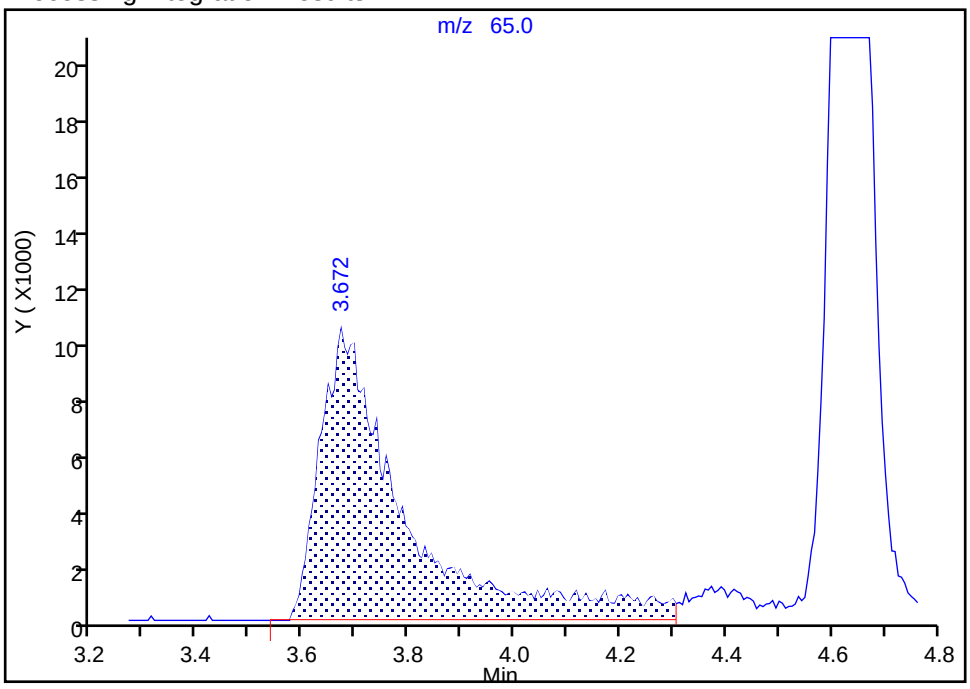
Data File:	\\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29X02.D				
Injection Date:	29-Dec-2022 12:20:30	Instrument ID:	10193		
Lims ID:	CCVIS VSTD10				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

* 30 t-Butyl alcohol-d10 (IS), CAS: 53001-22-2

Signal: 1

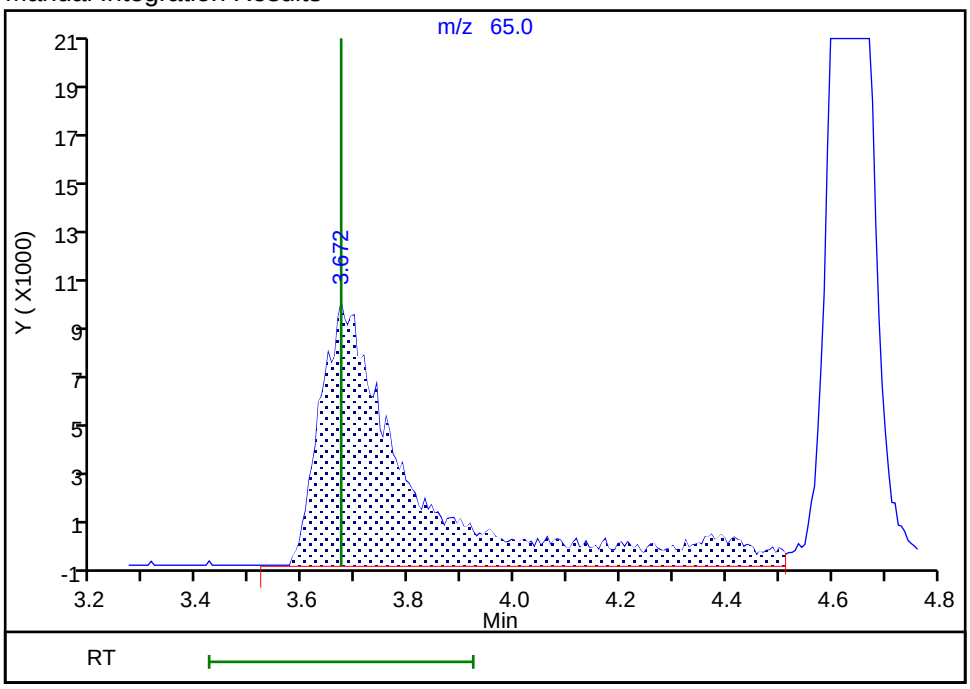
Processing Integration Results

RT: 3.67
Area: 113677
Amount: 50.000000
Amount Units: ug/l



Manual Integration Results

RT: 3.67
Area: 123691
Amount: 50.000000
Amount Units: ug/l



Reviewer: DVW2, 29-Dec-2022 12:57:38
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

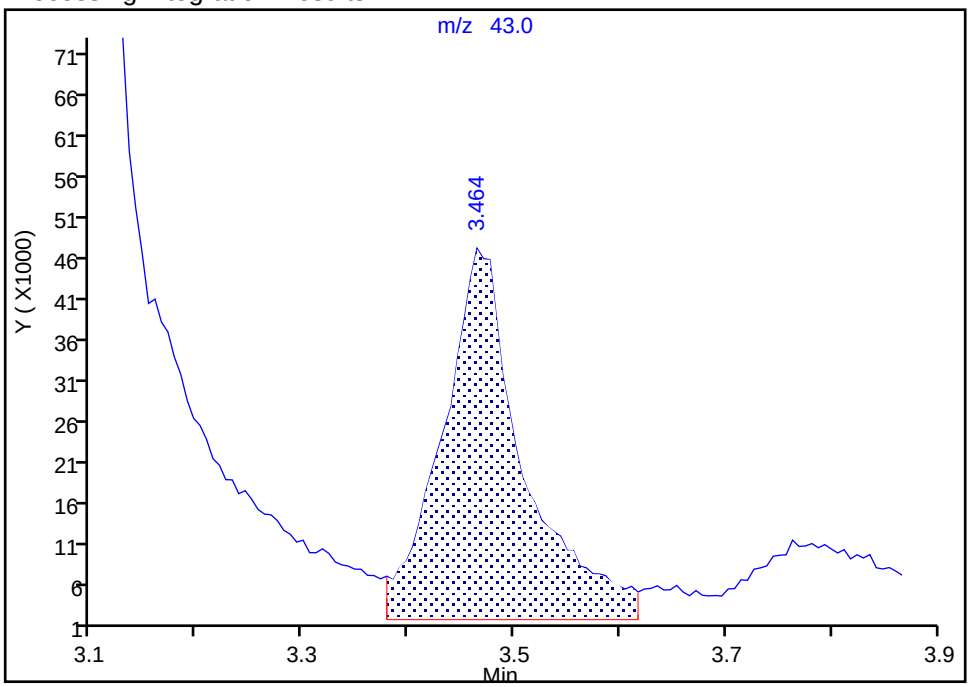
Data File:	\\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29X02.D				
Injection Date:	29-Dec-2022 12:20:30	Instrument ID:	10193		
Lims ID:	CCVIS VSTD10				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	2	Worklist Smp#:	3
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Column:	Rxi-624Sil MS Capillary Column (0.25mm)	Detector	MS Quad		

27 Methyl acetate, CAS: 79-20-9

Signal: 1

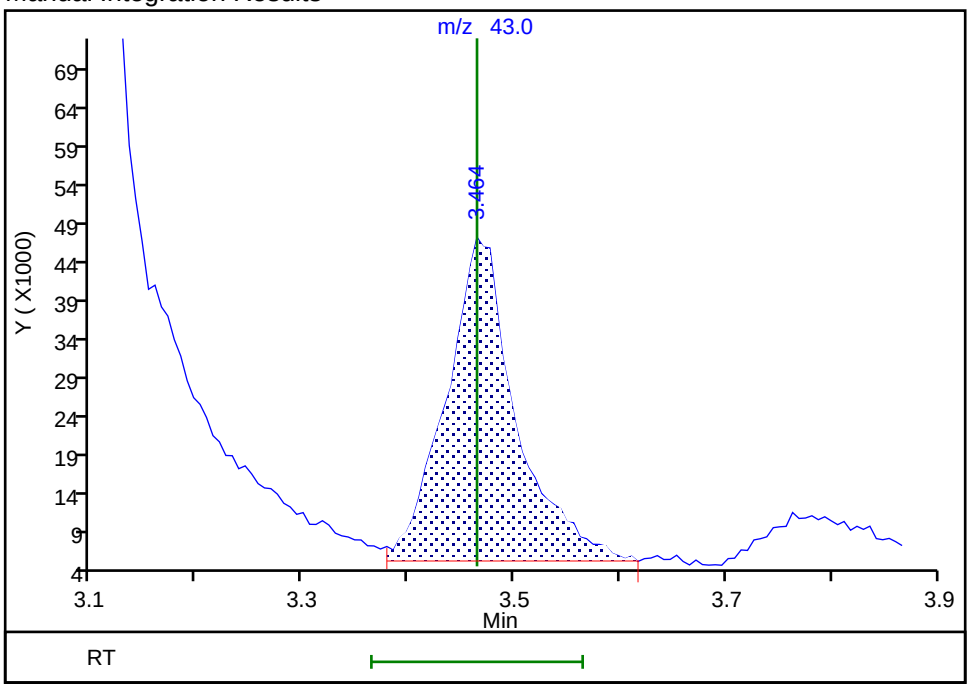
Processing Integration Results

RT: 3.46
Area: 244779
Amount: 13.032849
Amount Units: ug/l



Manual Integration Results

RT: 3.46
Area: 195993
Amount: 10.435320
Amount Units: ug/l



Reviewer: DVW2, 29-Dec-2022 12:58:50

Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22T04.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	22-Aug-2022 15:51:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	410-0064657-001				
Misc. Info.:	BFB				
Operator ID:	knk41612	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	30-Aug-2022 13:30:27	Calib Date:	22-Aug-2022 22:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1639				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 165 BFB	95	4.946	4.946	0.000	0	89754	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

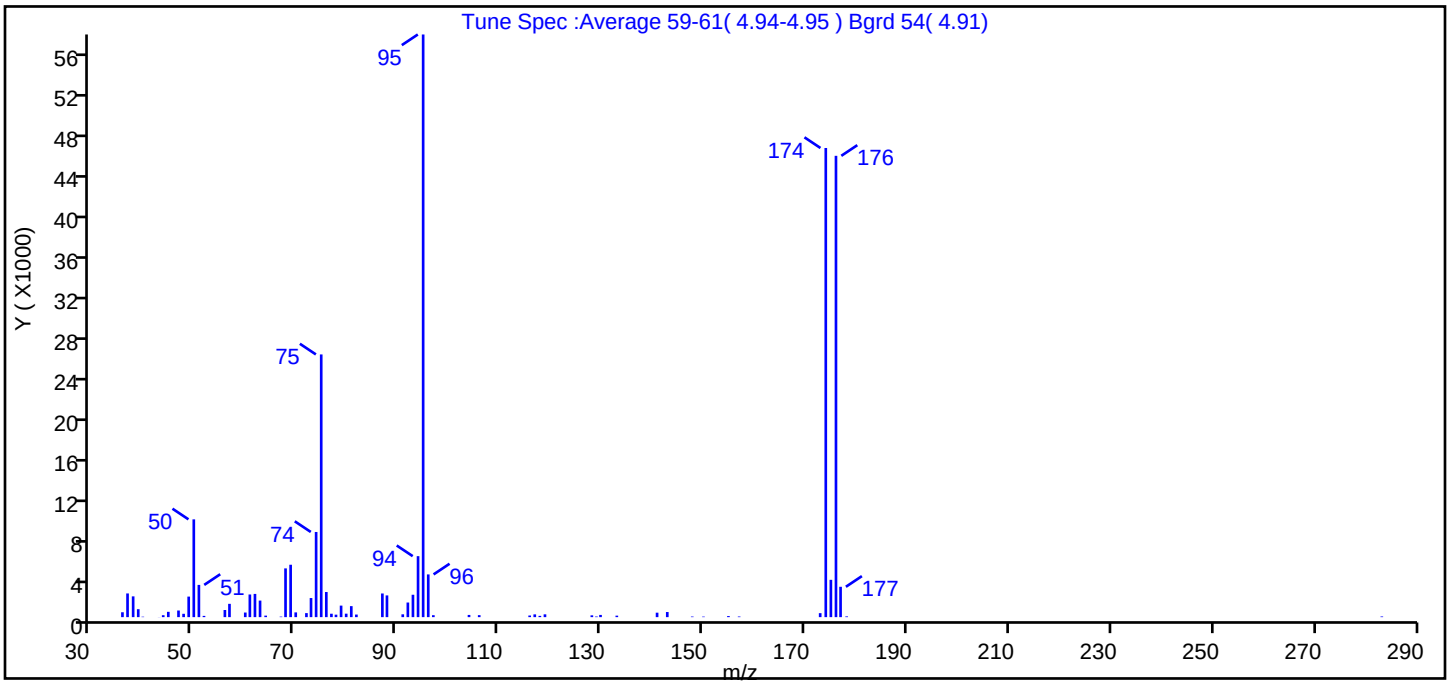
MSV_V_BFB_00008 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22T04.D				
Injection Date:	22-Aug-2022 15:51:30	Instrument ID:	10193		
Lims ID:	BFB				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Tune Method:	BFB Method 8260				

$ 165 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	16.8
75	30 to 60% of m/z 95	45.1
96	5 to 9% of m/z 95	7.3
173	Less than 2% of m/z 174	0.7 (0.9)
174	50 to 120% of m/z 95	80.5
175	5 to 9% of m/z 174	6.4 (8.0)
176	Greater than 95% but less than 101% of m/z 174	79.2 (98.3)
177	5 to 9% of m/z 176	5.2 (6.6)

Data File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22T04.D\MSV_10193_25mL.rslt\spectra.d
Injection Date: 22-Aug-2022 15:51:30
Spectrum: Tune Spec :Average 59-61(4.94-4.95) Bgrd 54(4.91)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 68

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	484	61.00	2245	81.00	1091	128.00	179
37.00	2348	62.00	2302	82.00	257	129.00	61
38.00	2059	63.00	1641	87.00	2345	130.00	220
39.00	788	64.00	151	88.00	2153	133.00	148
40.00	44	67.00	53	91.00	281	141.00	442
43.00	10	68.00	4831	92.00	1449	143.00	507
44.00	192	69.00	5193	93.00	2219	148.00	59
45.00	527	70.00	471	94.00	6043	150.00	53
47.00	657	72.00	400	95.00	57736	155.00	105
48.00	332	73.00	1893	96.00	4234	157.00	63
49.00	2036	74.00	8439	97.00	193	173.00	396
50.00	9690	75.00	26032	104.00	219	174.00	46488
51.00	3195	76.00	2490	106.00	197	175.00	3698
52.00	124	77.00	339	116.00	161	176.00	45712
56.00	707	78.00	246	117.00	275	177.00	3008
57.00	1319	79.00	1143	118.00	127	178.00	73
60.00	457	80.00	344	119.00	279	283.00	66

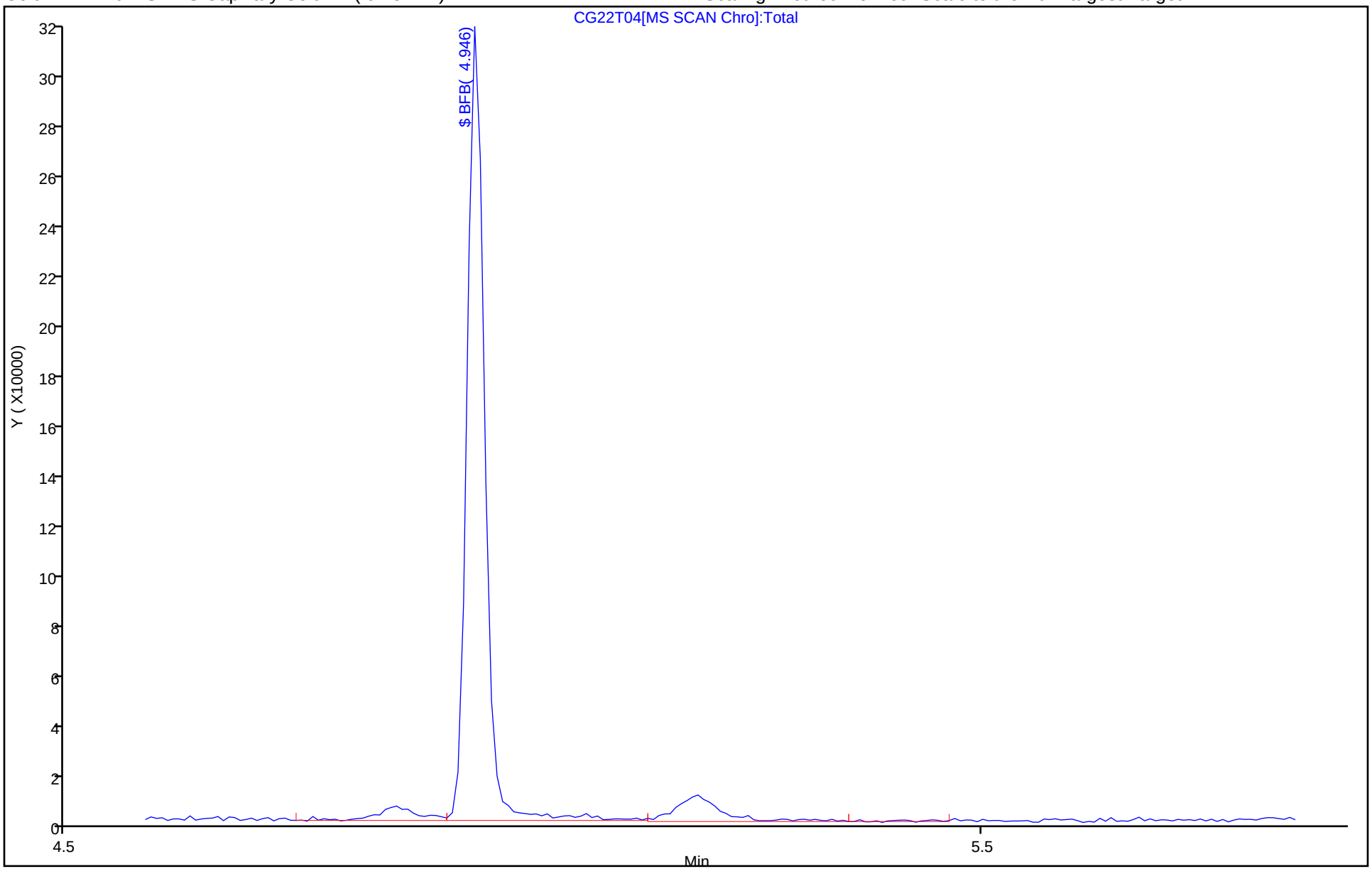
Report Date: 30-Aug-2022 13:30:27 Chrom Revision: 2.3 25-Aug-2022 20:53:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22T04.D

Injection Date:	22-Aug-2022 15:51:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28T01.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	28-Dec-2022 09:13:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	410-0074091-001				
Misc. Info.:	BFB				
Operator ID:	knk41612	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	28-Dec-2022 10:34:08	Calib Date:	22-Aug-2022 22:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1651				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 170 BFB	95	4.910	4.910	0.000	90	167595	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

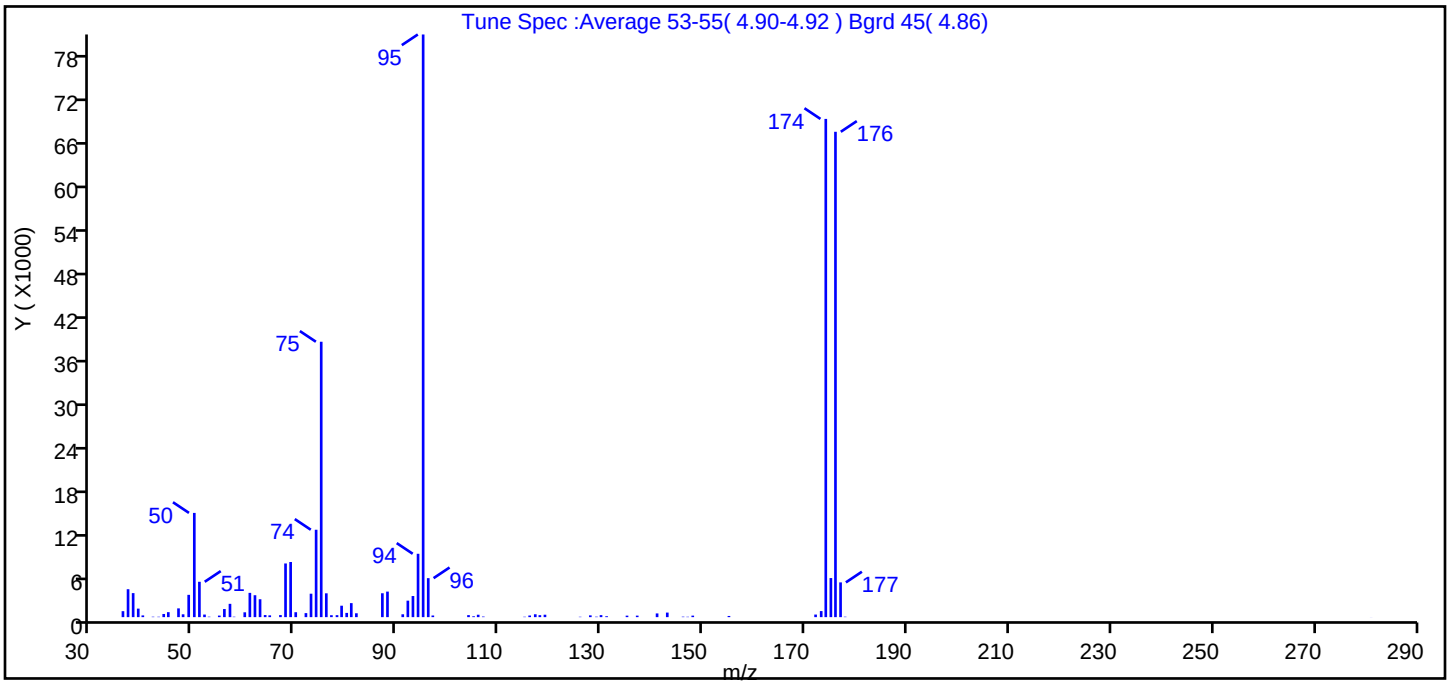
MSV_V_BFB_00011 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28T01.D				
Injection Date:	28-Dec-2022 09:13:30	Instrument ID:	10193		
Lims ID:	BFB				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Tune Method:	BFB Method 8260				

$ 170 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	17.9
75	30 to 60% of m/z 95	47.3
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	1.0 (1.2)
174	50 to 120% of m/z 95	85.5
175	5 to 9% of m/z 174	6.7 (7.8)
176	Greater than 95% but less than 101% of m/z 174	83.3 (97.4)
177	5 to 9% of m/z 176	6.0 (7.2)

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28T01.D\MSV_10193_25mL.rslt\spectra.d
Injection Date: 28-Dec-2022 09:13:30
Spectrum: Tune Spec :Average 53-55(4.90-4.92) Bgrd 45(4.86)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 80

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	828	60.00	671	82.00	537	128.00	246
37.00	3871	61.00	3365	87.00	3312	129.00	63
38.00	3331	62.00	3039	88.00	3540	130.00	280
39.00	1181	63.00	2481	91.00	397	131.00	124
40.00	240	64.00	290	92.00	2285	135.00	207
42.00	59	65.00	248	93.00	2927	137.00	210
43.00	55	67.00	285	94.00	8784	141.00	515
44.00	438	68.00	7441	95.00	80768	143.00	632
45.00	689	69.00	7643	96.00	5405	146.00	65
47.00	1216	70.00	683	97.00	227	147.00	52
48.00	394	72.00	559	104.00	280	148.00	210
49.00	3092	73.00	3249	105.00	118	155.00	163
50.00	14449	74.00	12115	106.00	335	172.00	359
51.00	4902	75.00	38176	107.00	80	173.00	841
52.00	358	76.00	3303	115.00	55	174.00	69064
53.00	62	77.00	267	116.00	226	175.00	5418
55.00	216	78.00	276	117.00	399	176.00	67280
56.00	1124	79.00	1585	118.00	273	177.00	4818
57.00	1845	80.00	587	119.00	336	178.00	58
58.00	60	81.00	1943	126.00	52	281.00	8

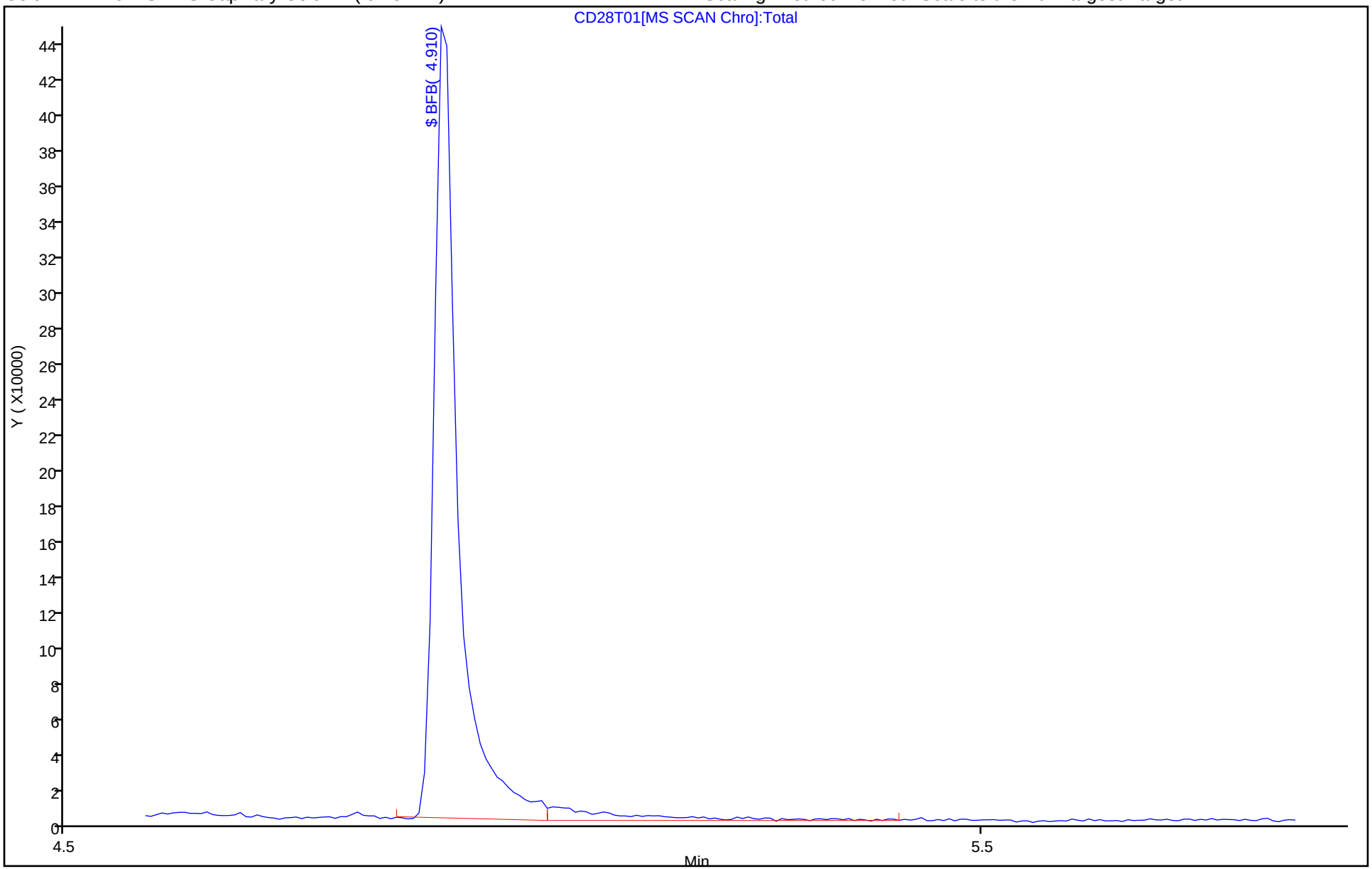
Report Date: 28-Dec-2022 10:34:08 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28T01.D

Injection Date:	28-Dec-2022 09:13:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29T01.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	29-Dec-2022 11:31:30	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	410-0074209-001				
Misc. Info.:	BFB				
Operator ID:	knk41612	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20221229-74209.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	29-Dec-2022 15:49:01	Calib Date:	22-Aug-2022 22:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1662				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 170 BFB	95	4.910	4.910	0.000	89	166023	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

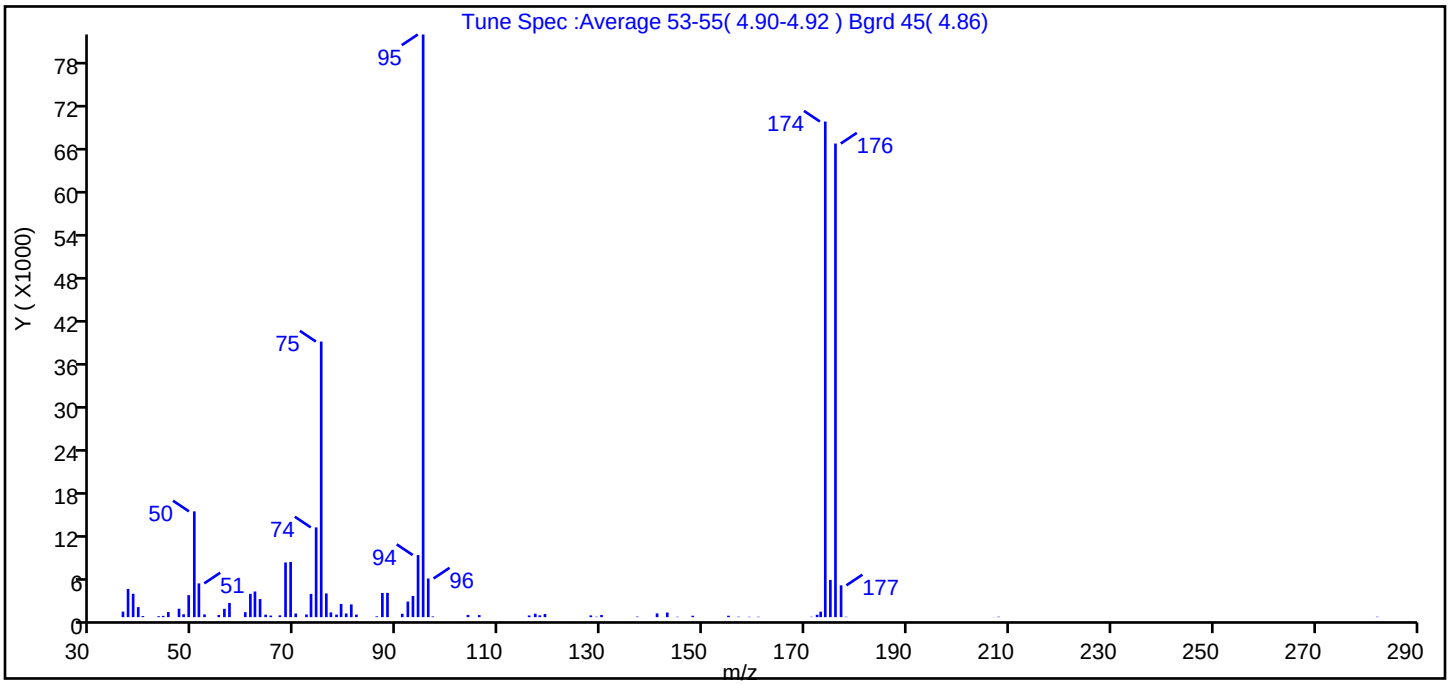
MSV_V_BFB_00011 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29T01.D				
Injection Date:	29-Dec-2022 11:31:30	Instrument ID:	10193		
Lims ID:	BFB				
Client ID:					
Operator ID:	knk41612	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		
Tune Method:	BFB Method 8260				

$ 170 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	18.2
75	30 to 60% of m/z 95	47.3
96	5 to 9% of m/z 95	6.6
173	Less than 2% of m/z 174	0.9 (1.1)
174	50 to 120% of m/z 95	85.1
175	5 to 9% of m/z 174	6.4 (7.5)
176	Greater than 95% but less than 101% of m/z 174	81.3 (95.6)
177	5 to 9% of m/z 176	5.5 (6.7)

Data File: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29T01.D\MSV_10193_25mL.rslt\spectra.d
Injection Date: 29-Dec-2022 11:31:30
Spectrum: Tune Spec :Average 53-55(4.90-4.92) Bgrd 45(4.86)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 77

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	776	63.00	2529	88.00	3394	145.00	54
37.00	3945	64.00	348	91.00	469	148.00	199
38.00	3275	65.00	218	92.00	2179	155.00	199
39.00	1407	67.00	253	93.00	2962	157.00	62
40.00	152	68.00	7643	94.00	8678	159.00	50
43.00	122	69.00	7712	95.00	81424	161.00	55
44.00	178	70.00	506	96.00	5402	171.00	52
45.00	710	72.00	373	97.00	99	172.00	334
47.00	1178	73.00	3245	104.00	315	173.00	768
48.00	400	74.00	12544	106.00	288	174.00	69256
49.00	3072	75.00	38512	116.00	232	175.00	5203
50.00	14780	76.00	3312	117.00	477	176.00	66184
51.00	4716	77.00	660	118.00	252	177.00	4445
52.00	381	78.00	361	119.00	436	178.00	53
55.00	296	79.00	1845	128.00	245	207.00	19
56.00	1162	80.00	516	129.00	60	208.00	61
57.00	1987	81.00	1777	130.00	309	282.00	54
60.00	695	82.00	361	137.00	76		
61.00	3257	86.00	113	141.00	524		
62.00	3587	87.00	3382	143.00	646		

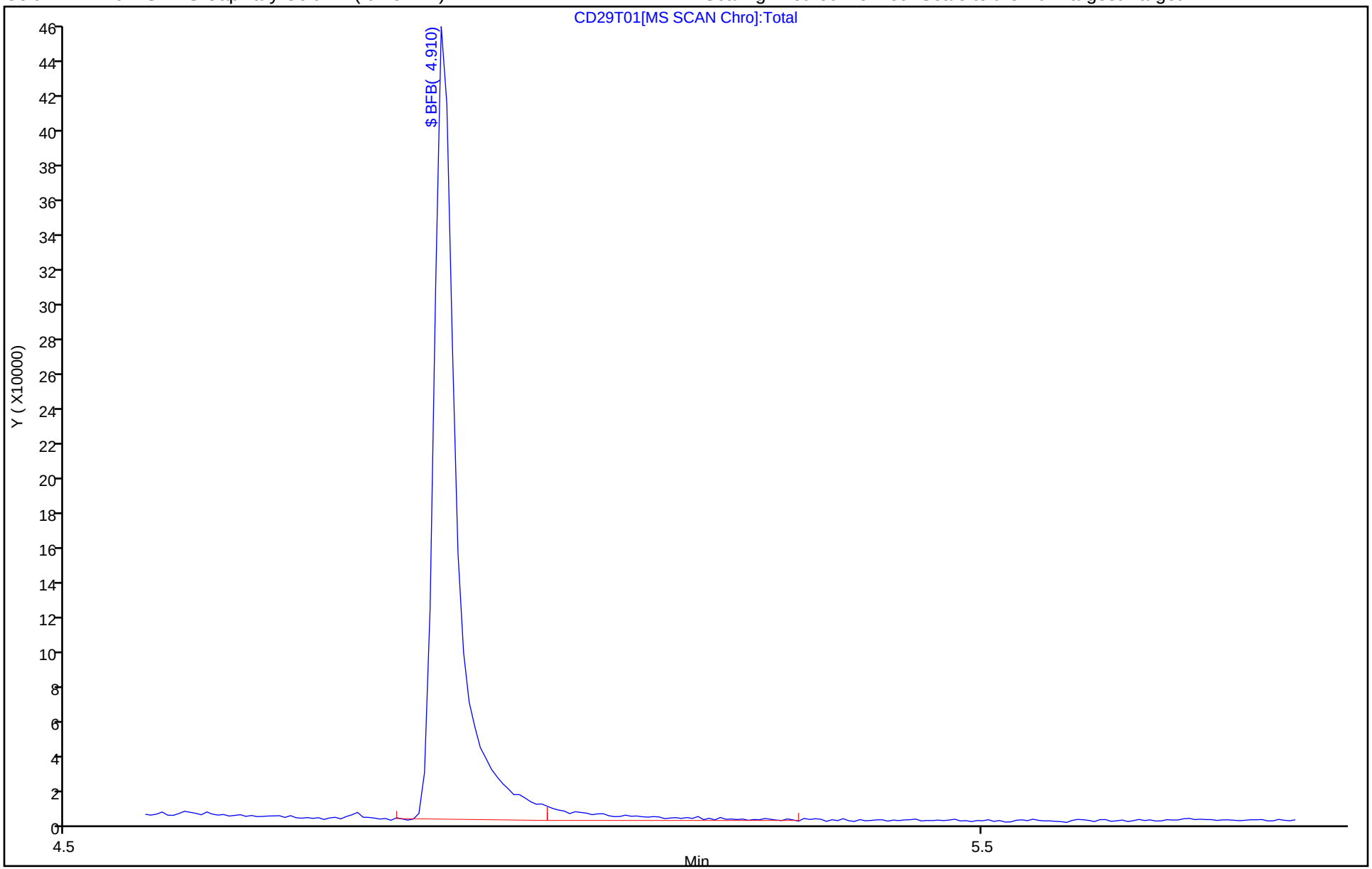
Report Date: 29-Dec-2022 15:49:02 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29T01.D

Injection Date:	29-Dec-2022 11:31:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID:
Lab Sample ID: MB 410-330696/6

Matrix: Water
Lab File ID: CD28X05.D

Analysis Method: 8260D
Date Collected:

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 10:55

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID:
Lab Sample ID: MB 410-330696/6

Matrix: Water
Lab File ID: CD28X05.D

Analysis Method: 8260D
Date Collected:

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 10:55

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X05.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 28-Dec-2022 10:55:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074091-006
Misc. Info.: MB
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 28-Dec-2022 11:28:04 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1651

First Level Reviewer: DVW2 Date: 28-Dec-2022 11:28:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.715					ND	
2 Dichlorodifluoromethane	85		1.745					ND	
3 Chlorodifluoromethane	51		1.764					ND	7
4 Dimethyl ether	45		1.806					ND	7
5 Chloromethane	50		1.922					ND	7
6 Vinyl chloride	62		2.020					ND	
7 Butadiene	39		2.032					ND	7
8 2-Chloro-1,1,1-Trifluoroethane	118		2.099					ND	
9 Bromomethane	94		2.306					ND	7
10 Chloroethane	64		2.367					ND	
11 Dichlorofluoromethane	67		2.587					ND	7
12 Trichlorofluoromethane	101		2.642					ND	
13 Pentane	43		2.642					ND	U
15 Ethyl ether	59		2.825					ND	
16 1,2-Dichloro-1,1,2-trifluoroetha	67		2.910					ND	7
17 Acrolein	56		2.971					ND	7
19 1,1-Dichloroethene	96		3.087					ND	7
20 Acetone	43	3.105	3.123	-0.018	29	5734		0.7887	M
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.129					ND	
22 Iodomethane	142		3.251					ND	
23 Isopropyl alcohol	45		3.276					ND	U
24 Ethyl bromide	108		3.282					ND	
25 Carbon disulfide	76		3.343					ND	7
26 Acetonitrile	41		3.477					ND	
27 Methyl acetate	43		3.477					ND	7
28 3-Chloro-1-propene	41		3.495					ND	
29 Methylene Chloride	84		3.654					ND	
* 30 t-Butyl alcohol-d10 (IS)	65	3.672	3.684	-0.012	97	141118	50.0	50.0	
31 2-Methyl-2-propanol	59	3.769	3.794	-0.025	28	6158		2.09	
32 Acrylonitrile	53		3.965					ND	
33 Methyl tert-butyl ether	73		4.001					ND	7

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
	34 trans-1,2-Dichloroethene	96		4.007					ND	
	35 Hexane	57		4.403					ND	
	36 1,1-Dichloroethane	63		4.647					ND	
	37 Vinyl acetate	43		4.696					ND	
	38 Isopropyl ether	45		4.708					ND	
	39 2-Chloro-1,3-butadiene	53		4.757					ND	
	40 Tert-butyl ethyl ether	59		5.263					ND	7
	41 2-Butanone (MEK)	43		5.483					ND	7
	42 cis-1,2-Dichloroethene	96		5.501					ND	
	43 2,2-Dichloropropane	77		5.513					ND	7
	45 Propionitrile	54		5.574					ND	
	44 Ethyl acetate	43		5.586					ND	7
	46 Methacrylonitrile	67		5.787					ND	
	47 Chlorobromomethane	128		5.836					ND	
	48 Tetrahydrofuran	71		5.860					ND	
	50 Chloroform	83		5.995					ND	
	49 Methyl acrylate	55		6.013					ND	
S	51 1,2-Dichloroethene, Total	100		6.155					ND	7
	52 1,1,1-Trichloroethane	97		6.214					ND	
$	53 Dibromofluoromethane (Surr)	113	6.208	6.214	-0.006	94	467455	10.0	9.87	
	54 Cyclohexane	56		6.312					ND	
	55 Carbon tetrachloride	117		6.427					ND	
	56 1,1-Dichloropropene	75		6.434					ND	7
	57 Isobutyl alcohol	41		6.659					ND	
$	58 1,2-Dichloroethane-d4 (Surr)	102	6.671	6.677	-0.006	42	98055	10.0	10.1	
	59 Benzene	78		6.702					ND	
	60 1-Chlorobutane	56		6.781					ND	
	61 1,2-Dichloroethane	62		6.781					ND	
	62 Isopropyl acetate	43		6.860					ND	U
	63 Tert-amyl methyl ether	73		6.915					ND	
*	64 Fluorobenzene (IS)	96	7.116	7.122	-0.006	99	2027173	10.0	10.0	
	65 n-Heptane	43		7.135					ND	7
	66 n-Butanol	56		7.580					ND	
	67 Trichloroethene	95		7.610					ND	
	68 Methylcyclohexane	83		7.909					ND	
	69 1,2-Dichloropropane	63		7.952					ND	
	70 2-ethoxy-2-methyl butane	87		7.970					ND	
	71 Methyl methacrylate	69		8.061					ND	
	73 Dibromomethane	93		8.061					ND	
	72 1,4-Dioxane	88		8.067					ND	
	74 n-Propyl acetate	61		8.189					ND	
	75 Dichlorobromomethane	83		8.311					ND	
	76 2-Nitropropane	41		8.592					ND	7
	78 1-Bromo-2-chloroethane	63		8.701					ND	
	77 2-Chloroethyl vinyl ether	63		8.707					ND	
	79 cis-1,3-Dichloropropene	75		8.878					ND	
	80 Chloroacetonitrile	75		9.067					ND	
	81 4-Methyl-2-pentanone (MIBK)	43		9.085					ND	7
$	82 Toluene-d8 (Surr)	98	9.207	9.214	-0.007	94	2036951	10.0	9.91	
	83 Toluene	92		9.299					ND	7
	84 trans-1,3-Dichloropropene	75		9.598					ND	
	85 Ethyl methacrylate	69		9.677					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 1,1,2-Trichloroethane	97		9.811					ND	
87 Tetrachloroethene	166		9.896					ND	
102 1,3-Dichloropropane	76		9.982					ND	
S 103 1,3-Dichloropropene, Total	100		10.060					ND	7
104 2-Hexanone	43		10.061					ND	
106 Chlorodibromomethane	129		10.213					ND	
105 n-Butyl acetate	43		10.231					ND	
107 Ethylene Dibromide	107		10.323					ND	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	85	1559849	10.0	10.0	
109 1-Chlorohexane	91		10.805					ND	7
110 Chlorobenzene	112		10.811					ND	
111 1,1,1,2-Tetrachloroethane	131		10.896					ND	
112 Ethylbenzene	91		10.902					ND	
113 m-Xylene & p-Xylene	106		11.024					ND	
S 114 Xylenes, Total	106		11.245					ND	7
115 o-Xylene	106		11.366					ND	
116 Styrene	104		11.384					ND	
117 Bromoform	173		11.542					ND	
118 Isopropylbenzene	105		11.683					ND	
119 cis-1,4-Dichloro-2-butene	88		11.743					ND	
120 Cyclohexanone	55		11.792					ND	
$ 121 4-Bromofluorobenzene (Surr)	95	11.823	11.823	0.000	93	724408	10.0	9.52	
122 Bromobenzene	156		11.939					ND	
123 1,1,2,2-Tetrachloroethane	83		11.939					ND	
124 trans-1,4-Dichloro-2-butene	53		11.969					ND	
125 1,2,3-Trichloropropane	110		11.981					ND	
126 N-Propylbenzene	91		12.018					ND	
127 2-Chlorotoluene	126		12.091					ND	
128 1,3,5-Trimethylbenzene	105		12.164					ND	
129 4-Chlorotoluene	126		12.189					ND	
130 tert-Butylbenzene	134		12.408					ND	
131 Pentachloroethane	167		12.438					ND	
132 1,2,4-Trimethylbenzene	105		12.451					ND	
133 sec-Butylbenzene	105		12.573					ND	
134 1,3-Dichlorobenzene	146		12.670					ND	7
135 4-Isopropyltoluene	119		12.688					ND	7
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	94	882938	10.0	10.0	
137 1,4-Dichlorobenzene	146		12.749					ND	7
138 1,2,3-Trimethylbenzene	120		12.762					ND	7
139 Benzyl chloride	126		12.829					ND	
140 n-Butylbenzene	92		12.987					ND	7
141 1,2-Dichlorobenzene	146		13.012					ND	
142 p-Diethylbenzene	119	13.036	13.036	0.000	1	767		0.005247	
144 Hexachloroethane	117		13.444					ND	
145 1,2-Dibromo-3-Chloropropane	155		13.572					ND	
146 1,3,5-Trichlorobenzene	180		13.694					ND	7
147 1,2,4-Trichlorobenzene	180		14.121					ND	
148 Hexachlorobutadiene	225		14.206					ND	7
149 Naphthalene	128		14.304					ND	7
150 1,2,3-Trichlorobenzene	180		14.450					ND	7
151 2-Methylnaphthalene	142		15.054					ND	U
152 Dodecane	57		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
156 1,1-Dichloro-1-fluoroethane	1		0.000					ND	
168 Propargyl alcohol TIC	1		0.000					ND	
167 1,3-Dichloro-2-propanol TIC	1		0.000					ND	
166 Vinyl acetate (TIC)	1		0.000					ND	
165 tert-Butyl Formate	1		0.000					ND	
164 2-Bromo-1-chloropropane	1		0.000					ND	
163 1-Chloropropane	1		0.000					ND	
162 1,1-Dichloroacetone	1		0.000					ND	
169 Pentachloroethane TIC	1		0.000					ND	
161 Methylal	1		0.000					ND	
159 Isopropyl alcohol TIC	1		0.000					ND	
158 Propene oxide	1		0.000					ND	
157 t-Amyl alcohol	1		0.000					ND	
155 Ethanol	45		0.000					ND	
241 Vinyl Fluoride TIC	1		0.000					ND	
154 Acetonitrile TIC	1		0.000					ND	
153 n-Decane	57		0.000					ND	
160 1-Bromo-3-Chloropropane	1		0.000					ND	
232 Chlorofluoromethane TIC	1		0.000					ND	
233 Dichloro-1,1,2,2-tetrafluoretha	1		0.000					ND	
234 1-Chloro-1,1-difluoroethane TIC	1		0.000					ND	
235 Ethyl ether TIC	1		0.000					ND	
236 Freon 115 TIC	1		0.000					ND	
237 Fluoromethane TIC	1		0.000					ND	
238 1,1,1-Trifluoro-2,2-dichloroetha	1		0.000					ND	
239 1,2-Dichlorofluoroethane TIC	1		0.000					ND	
240 1,1,1-Trichloro-2,2,2-trifluoroe	1		0.000					ND	
242 1,1,2-Trifluoroethane TIC	1		0.000					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

MSV_HP25_ISSS_00063 Amount Added: 1.00 Units: uL Run Reagent

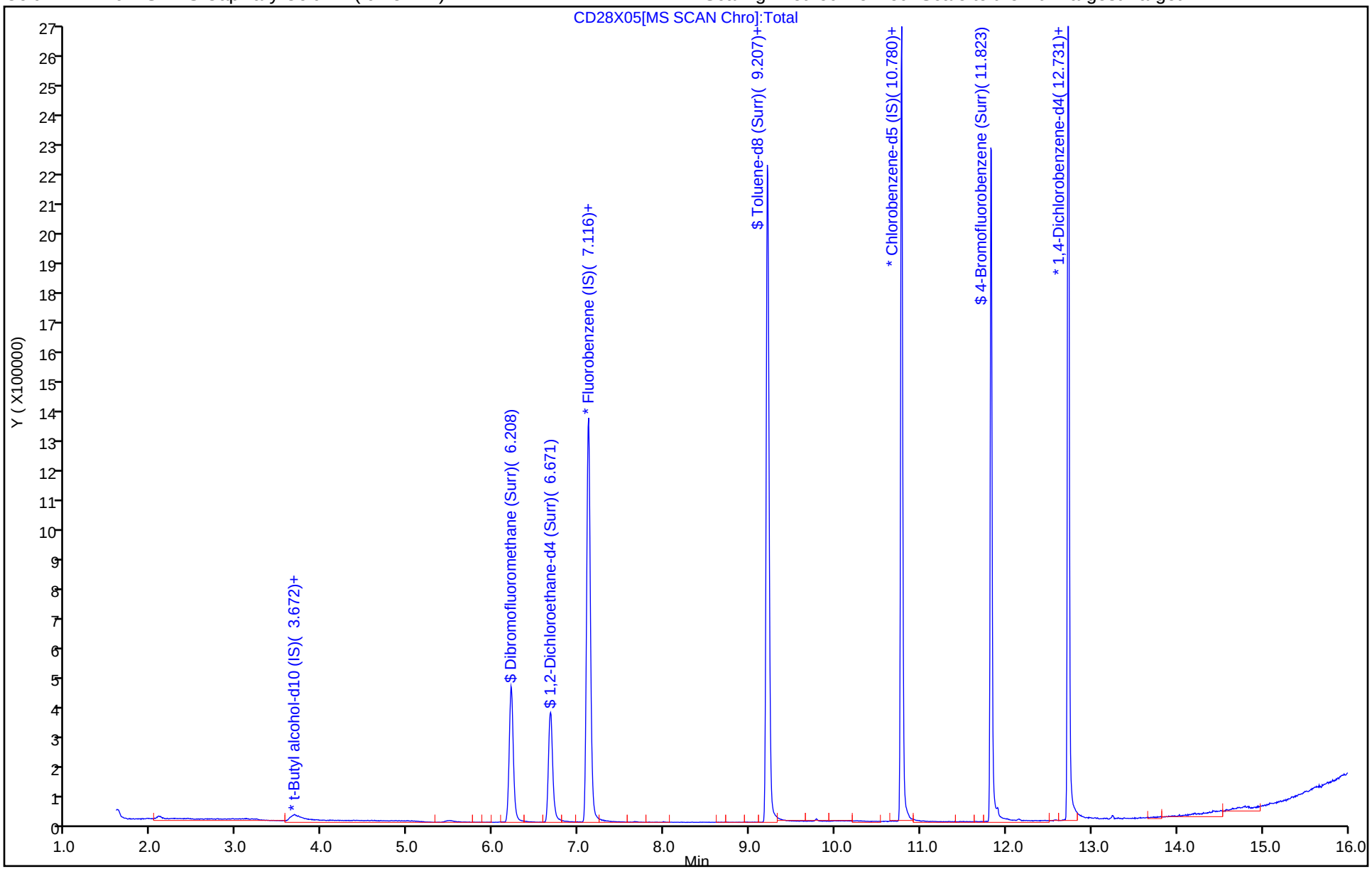
Report Date: 28-Dec-2022 11:28:25 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X05.D

Injection Date:	28-Dec-2022 10:55:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	MB			Worklist Smp#:	6
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X05.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 28-Dec-2022 10:55:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074091-006
Misc. Info.: MB
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 28-Dec-2022 11:28:04 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1651

First Level Reviewer: DVW2 Date: 28-Dec-2022 11:28:04

Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	9.87	98.67
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.1	100.67
$ 82 Toluene-d8 (Surr)	10.0	9.91	99.10
$ 121 4-Bromofluorobenzene (Surr)	10.0	9.52	95.24

Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

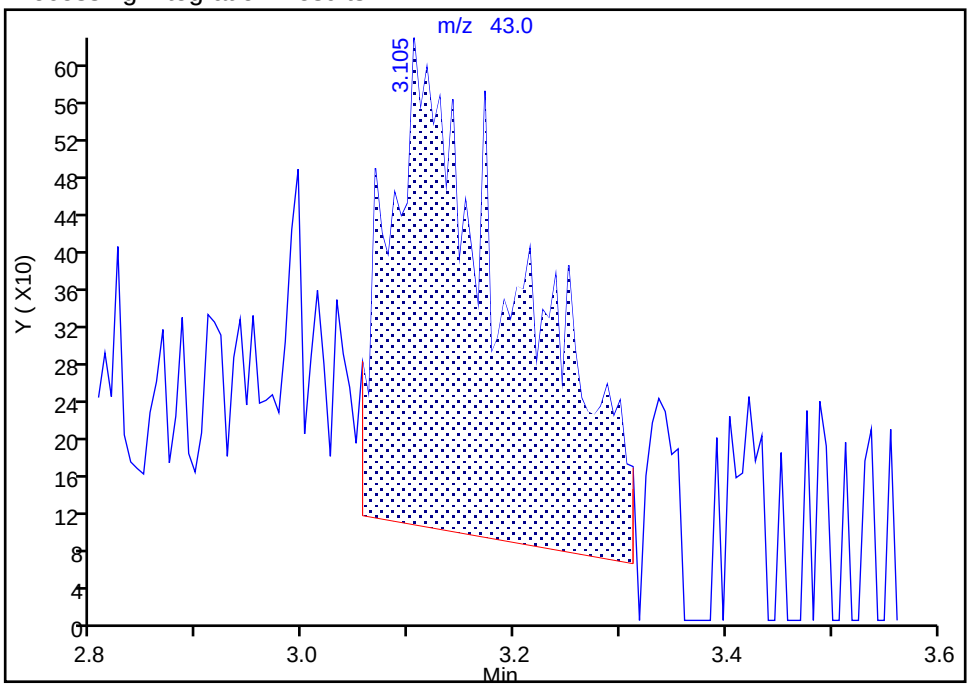
Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X05.D
Injection Date: 28-Dec-2022 10:55:30 Instrument ID: 10193
Lims ID: MB
Client ID:
Operator ID: knk41612 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Method: MSV_10193_25mL Limit Group: MSV - 8260C_D
Column: Rxi-624Sil MS Capillary Column (0.25mm) Detector MS Quad

20 Acetone, CAS: 67-64-1

Signal: 1

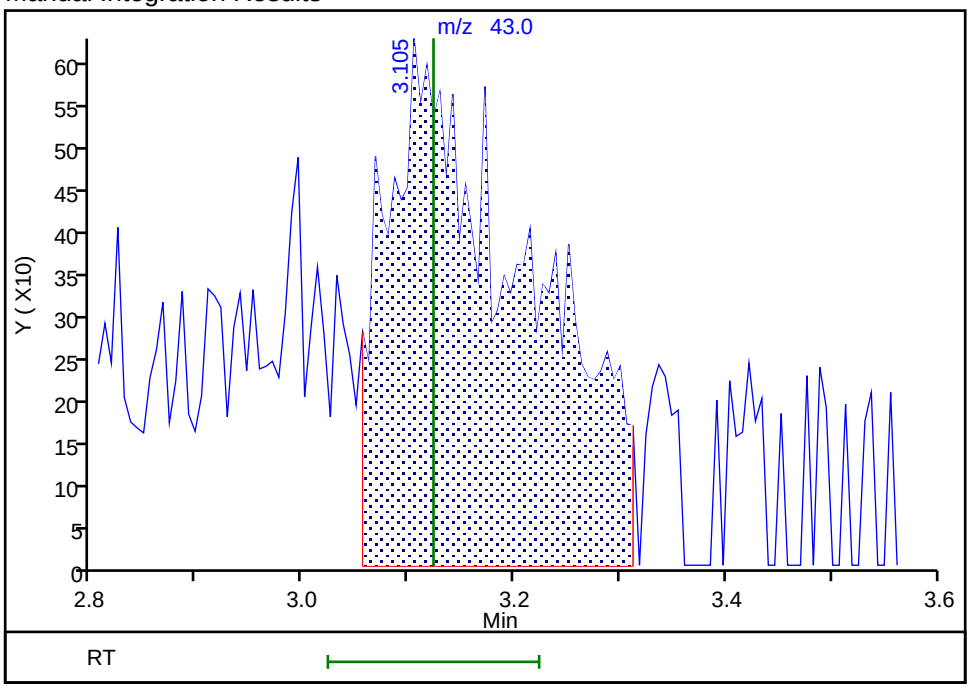
Processing Integration Results

RT: 3.10
Area: 4358
Amount: 0.599455
Amount Units: ug/l



Manual Integration Results

RT: 3.10
Area: 5734
Amount: 0.788728
Amount Units: ug/l



Reviewer: DVW2, 28-Dec-2022 11:26:16
Audit Action: Assigned New Baseline Audit Reason: Incomplete Integration

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID:
Lab Sample ID: MB 410-331173/10

Matrix: Water
Lab File ID: CD29X09.D

Analysis Method: 8260D
Date Collected:

Sample wt/vol: 25(mL)
Date Analyzed: 12/29/2022 14:56

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 331173
Units: ug/L

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

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID:
Lab Sample ID: MB 410-331173/10

Matrix: Water
Lab File ID: CD29X09.D

Analysis Method: 8260D
Date Collected:

Sample wt/vol: 25(mL)
Date Analyzed: 12/29/2022 14:56

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 331173
Units: ug/L

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

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		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 Environment Testing, LLC

Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29X09.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 29-Dec-2022 14:56:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074209-010
Misc. Info.: MB
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 15:48:26 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1662

First Level Reviewer: DVW2 Date: 29-Dec-2022 15:47:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Chlorotrifluoroethene	116		1.715					ND	
2 Dichlorodifluoromethane	85		1.733					ND	
3 Chlorodifluoromethane	51		1.764					ND	7
4 Dimethyl ether	45		1.806					ND	7
5 Chloromethane	50		1.910					ND	7
6 Vinyl chloride	62		2.007					ND	
7 Butadiene	39		2.020					ND	7
8 2-Chloro-1,1,1-Trifluoroethane	118		2.099					ND	
9 Bromomethane	94		2.294					ND	7
10 Chloroethane	64		2.355					ND	
11 Dichlorofluoromethane	67		2.574					ND	7
12 Trichlorofluoromethane	101		2.629					ND	
13 Pentane	43		2.635					ND	U
15 Ethyl ether	59		2.812					ND	
16 1,2-Dichloro-1,1,2-trifluoroetha	67		2.904					ND	7
17 Acrolein	56		2.965					ND	7
19 1,1-Dichloroethene	96		3.074					ND	7
20 Acetone	43	3.111	3.111	0.000	35	7206		0.7812	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101		3.117					ND	
22 Iodomethane	142		3.239					ND	
23 Isopropyl alcohol	45		3.269					ND	U
24 Ethyl bromide	108		3.269					ND	
25 Carbon disulfide	76		3.330					ND	7
27 Methyl acetate	43		3.464					ND	7
26 Acetonitrile	41		3.477					ND	
28 3-Chloro-1-propene	41		3.483					ND	
29 Methylene Chloride	84		3.641					ND	
* 30 t-Butyl alcohol-d10 (IS)	65	3.690	3.672	0.018	98	179052	50.0	50.0	
31 2-Methyl-2-propanol	59	3.830	3.781	0.049	28	9892		2.65	M
32 Acrylonitrile	53		3.952					ND	
34 trans-1,2-Dichloroethene	96		3.995					ND	

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
	33 Methyl tert-butyl ether	73		4.001					ND	
	35 Hexane	57		4.391					ND	
	36 1,1-Dichloroethane	63		4.641					ND	
	37 Vinyl acetate	43		4.696					ND	
	38 Isopropyl ether	45		4.702					ND	
	39 2-Chloro-1,3-butadiene	53		4.751					ND	
	40 Tert-butyl ethyl ether	59		5.257					ND	
	41 2-Butanone (MEK)	43		5.470					ND	7
	42 cis-1,2-Dichloroethene	96		5.494					ND	
	43 2,2-Dichloropropane	77		5.501					ND	7
	45 Propionitrile	54		5.574					ND	
	44 Ethyl acetate	43		5.586					ND	7
	46 Methacrylonitrile	67		5.781					ND	
	47 Chlorobromomethane	128		5.830					ND	
	48 Tetrahydrofuran	71		5.848					ND	
	50 Chloroform	83		5.994					ND	
	49 Methyl acrylate	55		6.013					ND	
S	51 1,2-Dichloroethene, Total	100		6.155					ND	7
	52 1,1,1-Trichloroethane	97		6.214					ND	
$	53 Dibromofluoromethane (Surr)	113	6.214	6.214	0.000	94	461798	10.0	9.89	
	54 Cyclohexane	56		6.305					ND	
	55 Carbon tetrachloride	117		6.421					ND	
	56 1,1-Dichloropropene	75		6.433					ND	7
	57 Isobutyl alcohol	41		6.653					ND	
$	58 1,2-Dichloroethane-d4 (Surr)	102	6.671	6.671	0.000	40	97653	10.0	10.2	
	59 Benzene	78		6.695					ND	
	61 1,2-Dichloroethane	62		6.781					ND	
	60 1-Chlorobutane	56		6.781					ND	
	62 Isopropyl acetate	43		6.860					ND	
	63 Tert-amyl methyl ether	73		6.909					ND	
*	64 Fluorobenzene (IS)	96	7.116	7.116	0.000	99	1998987	10.0	10.0	
	65 n-Heptane	43		7.134					ND	7
	66 n-Butanol	56		7.573					ND	
	67 Trichloroethene	95		7.604					ND	
	68 Methylcyclohexane	83		7.909					ND	
	69 1,2-Dichloropropane	63		7.945					ND	
	70 2-ethoxy-2-methyl butane	87		7.970					ND	
	71 Methyl methacrylate	69		8.055					ND	
	73 Dibromomethane	93		8.055					ND	
	72 1,4-Dioxane	88		8.061					ND	
	74 n-Propyl acetate	61		8.189					ND	
	75 Dichlorobromomethane	83		8.305					ND	
	76 2-Nitropropane	41		8.591					ND	7
	78 1-Bromo-2-chloroethane	63		8.701					ND	
	77 2-Chloroethyl vinyl ether	63		8.707					ND	
	79 cis-1,3-Dichloropropene	75		8.878					ND	
	80 Chloroacetonitrile	75		9.067					ND	
	81 4-Methyl-2-pentanone (MIBK)	43		9.085					ND	
$	82 Toluene-d8 (Surr)	98	9.213	9.213	0.000	94	1994481	10.0	9.79	
	83 Toluene	92		9.299					ND	7
	84 trans-1,3-Dichloropropene	75		9.597					ND	
	85 Ethyl methacrylate	69		9.677					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
86 1,1,2-Trichloroethane	97		9.811					ND	
87 Tetrachloroethene	166		9.890					ND	
102 1,3-Dichloropropane	76		9.981					ND	
S 103 1,3-Dichloropropene, Total	100		10.060					ND	7
104 2-Hexanone	43		10.061					ND	
106 Chlorodibromomethane	129		10.207					ND	
105 n-Butyl acetate	43		10.231					ND	
107 Ethylene Dibromide	107		10.323					ND	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	85	1546721	10.0	10.0	
109 1-Chlorohexane	91		10.804					ND	7
110 Chlorobenzene	112		10.811					ND	
111 1,1,1,2-Tetrachloroethane	131		10.896					ND	
112 Ethylbenzene	91		10.902					ND	
113 m-Xylene & p-Xylene	106		11.024					ND	
S 114 Xylenes, Total	106		11.245					ND	7
115 o-Xylene	106		11.365					ND	
116 Styrene	104		11.384					ND	
117 Bromoform	173		11.542					ND	
118 Isopropylbenzene	105		11.676					ND	
119 cis-1,4-Dichloro-2-butene	88		11.743					ND	
120 Cyclohexanone	55		11.792					ND	
$ 121 4-Bromofluorobenzene (Surr)	95	11.823	11.823	0.000	93	715271	10.0	9.48	
122 Bromobenzene	156		11.938					ND	
123 1,1,2,2-Tetrachloroethane	83		11.938					ND	
124 trans-1,4-Dichloro-2-butene	53		11.969					ND	
125 1,2,3-Trichloropropane	110		11.981					ND	
126 N-Propylbenzene	91		12.018					ND	
127 2-Chlorotoluene	126		12.091					ND	
128 1,3,5-Trimethylbenzene	105		12.164					ND	
129 4-Chlorotoluene	126		12.188					ND	
130 tert-Butylbenzene	134		12.408					ND	
131 Pentachloroethane	167		12.438					ND	
132 1,2,4-Trimethylbenzene	105		12.450					ND	
133 sec-Butylbenzene	105		12.572					ND	
134 1,3-Dichlorobenzene	146		12.670					ND	7
135 4-Isopropyltoluene	119		12.688					ND	7
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	94	869132	10.0	10.0	
137 1,4-Dichlorobenzene	146		12.749					ND	7
138 1,2,3-Trimethylbenzene	120		12.761					ND	7
139 Benzyl chloride	126		12.828					ND	7
140 n-Butylbenzene	92		12.987					ND	
141 1,2-Dichlorobenzene	146		13.011					ND	
142 p-Diethylbenzene	119		13.036					ND	
144 Hexachloroethane	117		13.444					ND	
145 1,2-Dibromo-3-Chloropropane	155		13.566					ND	
146 1,3,5-Trichlorobenzene	180		13.694					ND	
147 1,2,4-Trichlorobenzene	180		14.121					ND	
148 Hexachlorobutadiene	225		14.206					ND	7
149 Naphthalene	128		14.304					ND	7
150 1,2,3-Trichlorobenzene	180		14.450					ND	
151 2-Methylnaphthalene	142		15.054					ND	U
152 Dodecane	57		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
156 1,1-Dichloro-1-fluoroethane	1		0.000					ND	
168 Propargyl alcohol TIC	1		0.000					ND	
167 1,3-Dichloro-2-propanol TIC	1		0.000					ND	
166 Vinyl acetate (TIC)	1		0.000					ND	
165 tert-Butyl Formate	1		0.000					ND	
164 2-Bromo-1-chloropropane	1		0.000					ND	
163 1-Chloropropane	1		0.000					ND	
162 1,1-Dichloroacetone	1		0.000					ND	
169 Pentachloroethane TIC	1		0.000					ND	
161 Methylal	1		0.000					ND	
159 Isopropyl alcohol TIC	1		0.000					ND	
158 Propene oxide	1		0.000					ND	
157 t-Amyl alcohol	1		0.000					ND	
155 Ethanol	45		0.000					ND	
241 Vinyl Fluoride TIC	1		0.000					ND	
154 Acetonitrile TIC	1		0.000					ND	
153 n-Decane	57		0.000					ND	
160 1-Bromo-3-Chloropropane	1		0.000					ND	
232 Chlorofluoromethane TIC	1		0.000					ND	
233 Dichloro-1,1,2,2-tetrafluoretha	1		0.000					ND	
234 1-Chloro-1,1-difluoroethane TIC	1		0.000					ND	
235 Ethyl ether TIC	1		0.000					ND	
236 Freon 115 TIC	1		0.000					ND	
237 Fluoromethane TIC	1		0.000					ND	
238 1,1,1-Trifluoro-2,2-dichloroetha	1		0.000					ND	
239 1,2-Dichlorofluoroethane TIC	1		0.000					ND	
240 1,1,1-Trichloro-2,2,2-trifluoroe	1		0.000					ND	
242 1,1,2-Trifluoroethane TIC	1		0.000					ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

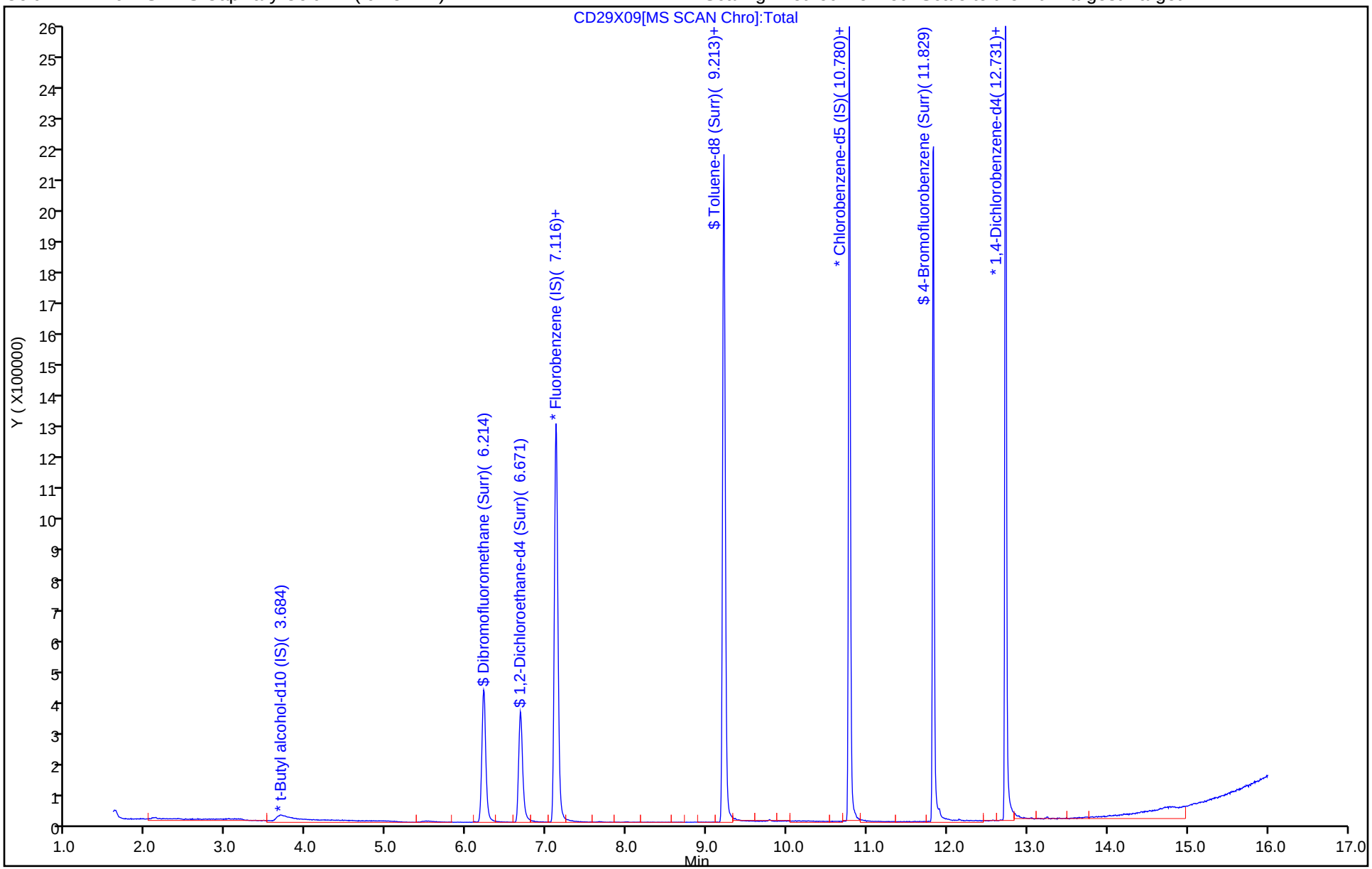
MSV_HP25_ISSS_00063 Amount Added: 1.00 Units: uL Run Reagent

Report Date: 29-Dec-2022 15:48:48 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29X09.D				
Injection Date:	29-Dec-2022 14:56:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	MB			Worklist Smp#:	10
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29X09.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 29-Dec-2022 14:56:30 ALS Bottle#: 9 Worklist Smp#: 10
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074209-010
Misc. Info.: MB
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 15:48:26 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1662

First Level Reviewer: DVW2 Date: 29-Dec-2022 15:47:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	9.89	98.85
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.67
$ 82 Toluene-d8 (Surr)	10.0	9.79	97.86
$ 121 4-Bromofluorobenzene (Surr)	10.0	9.48	94.84

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID:
Lab Sample ID: LCS 410-330696/4

Matrix: Water
Lab File ID: CD28X03.D

Analysis Method: 8260D
Date Collected:

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 10:11

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
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	4.88		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	5.03		0.50	0.10
79-00-5	1,1,2-Trichloroethane	5.00		0.50	0.080
75-34-3	1,1-Dichloroethane	5.04		0.50	0.10
75-35-4	1,1-Dichloroethene	4.97		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	5.06		0.50	0.080
107-06-2	1,2-Dichloroethane	4.83		0.50	0.070
78-87-5	1,2-Dichloropropane	5.27		0.50	0.10
78-93-3	2-Butanone (MEK)	71.1		5.0	1.0
591-78-6	2-Hexanone	73.7		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	72.5		5.0	1.0
67-64-1	Acetone	63.4		5.0	1.0
71-43-2	Benzene	5.09		0.50	0.10
74-97-5	Bromochloromethane	5.19		0.50	0.080
75-27-4	Bromodichloromethane	5.04		0.50	0.080
75-25-2	Bromoform	5.03		1.0	0.30
74-83-9	Bromomethane	4.44		0.50	0.10
75-15-0	Carbon disulfide	5.93		1.0	0.10
56-23-5	Carbon tetrachloride	5.05		0.50	0.10
108-90-7	Chlorobenzene	4.86		0.50	0.070
75-00-3	Chloroethane	4.69		0.50	0.10
67-66-3	Chloroform	4.95		0.50	0.090
74-87-3	Chloromethane	4.92		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	5.09		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	4.99		0.50	0.10
124-48-1	Dibromochloromethane	4.97		0.50	0.080
100-41-4	Ethylbenzene	4.93		0.50	0.080
1634-04-4	Methyl tert-butyl ether	5.11		0.50	0.080
75-09-2	Methylene Chloride	5.01		0.50	0.10
100-42-5	Styrene	4.76		0.50	0.070
127-18-4	Tetrachloroethene	4.82		0.50	0.20
108-88-3	Toluene	4.90		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID:
Lab Sample ID: LCS 410-330696/4

Matrix: Water
Lab File ID: CD28X03.D

Analysis Method: 8260D
Date Collected:

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 10:11

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	4.85		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	5.10		0.50	0.080
79-01-6	Trichloroethene	4.94		0.50	0.080
75-01-4	Vinyl chloride	4.61		0.50	0.10
1330-20-7	Xylenes, Total	14.8		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X03.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 28-Dec-2022 10:11:30 ALS Bottle#: 3 Worklist Smp#: 4
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074091-004
Misc. Info.: LCS
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 28-Dec-2022 10:33:58 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1651

First Level Reviewer: DVW2 Date: 28-Dec-2022 10:33:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.739	1.745	-0.006	99	262413	5.00	4.40	
5 Chloromethane	50	1.916	1.922	-0.006	99	388254	5.00	4.92	
6 Vinyl chloride	62	2.014	2.020	-0.006	98	337124	5.00	4.61	
7 Butadiene	39	2.026	2.032	-0.006	94	461381	5.00	5.90	
9 Bromomethane	94	2.306	2.306	0.000	89	216009	5.00	4.44	
10 Chloroethane	64	2.361	2.367	-0.006	100	199685	5.00	4.69	
11 Dichlorofluoromethane	67	2.581	2.587	-0.007	97	473243	5.00	4.82	
12 Trichlorofluoromethane	101	2.635	2.642	-0.007	96	350240	5.00	4.22	
13 Pentane	43	2.641	2.642	-0.001	97	481393	5.00	6.54	
15 Ethyl ether	59	2.824	2.825	0.000	95	211488	4.99	4.97	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.910	2.910	0.000	94	295923	5.00	4.58	
17 Acrolein	56	2.971	2.971	0.000	99	225810	37.5	37.9	
19 1,1-Dichloroethene	96	3.080	3.087	-0.007	97	228477	5.00	4.97	
20 Acetone	43	3.117	3.123	-0.006	99	425114	62.5	63.4	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.123	3.129	-0.006	91	231245	5.00	5.34	
22 Iodomethane	142	3.251	3.251	0.000	97	447792	5.00	5.29	
23 Isopropyl alcohol	45	3.288	3.276	0.012	37	57436	37.5	38.8	
24 Ethyl bromide	108	3.269	3.282	-0.013	98	182051	4.93	4.20	
25 Carbon disulfide	76	3.336	3.343	-0.007	100	844010	5.00	5.93	
27 Methyl acetate	43	3.477	3.477	0.000	37	122654	5.00	6.21	
28 3-Chloro-1-propene	41	3.489	3.495	-0.006	93	489741	5.00	5.77	
29 Methylene Chloride	84	3.647	3.654	-0.007	96	273061	5.00	5.01	
* 30 t-Butyl alcohol-d10 (IS)	65	3.690	3.684	0.006	96	130086	50.0	50.0	
31 2-Methyl-2-propanol	59	3.806	3.794	0.012	99	128781	50.0	47.5	
32 Acrylonitrile	53	3.958	3.965	-0.007	98	272611	25.0	27.0	
33 Methyl tert-butyl ether	73	3.995	4.001	-0.006	97	714510	5.00	5.11	
34 trans-1,2-Dichloroethene	96	4.001	4.007	-0.006	98	274744	5.00	4.85	
35 Hexane	57	4.397	4.403	-0.006	94	425926	5.00	5.60	
36 1,1-Dichloroethane	63	4.641	4.647	-0.006	96	525971	5.00	5.04	
38 Isopropyl ether	45	4.714	4.708	0.006	95	1035512	5.00	5.40	
39 2-Chloro-1,3-butadiene	53	4.757	4.757	0.000	90	422561	5.00	5.18	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.257	5.263	-0.006	98	913697	5.00	5.16	
41 2-Butanone (MEK)	43	5.476	5.483	-0.007	100	972177	62.5	71.1	
42 cis-1,2-Dichloroethene	96	5.495	5.501	-0.006	83	316196	5.00	5.09	
43 2,2-Dichloropropane	77	5.507	5.513	-0.006	88	433846	5.00	5.26	
45 Propionitrile	54	5.592	5.574	0.018	97	124243	37.5	36.5	
46 Methacrylonitrile	67	5.787	5.787	0.000	94	564480	37.5	39.1	
47 Chlorobromomethane	128	5.830	5.836	-0.006	97	142782	5.00	5.19	
48 Tetrahydrofuran	71	5.860	5.860	0.000	89	98215	25.0	25.3	
50 Chloroform	83	5.994	5.995	-0.001	94	487083	5.00	4.95	
52 1,1,1-Trichloroethane	97	6.208	6.214	-0.006	80	419495	5.00	4.88	
$ 53 Dibromofluoromethane (Surr)	113	6.214	6.214	0.000	94	487473	10.0	9.97	
54 Cyclohexane	56	6.305	6.312	-0.007	92	527698	5.00	5.46	
55 Carbon tetrachloride	117	6.427	6.427	0.000	97	364468	5.00	5.05	
56 1,1-Dichloropropene	75	6.433	6.434	-0.001	97	404279	5.00	5.03	
57 Isobutyl alcohol	41	6.677	6.659	0.018	42	102659	125.0	106.7	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.671	6.677	-0.006	96	103709	10.0	10.3	
59 Benzene	78	6.696	6.702	-0.006	97	1226094	5.00	5.09	
61 1,2-Dichloroethane	62	6.781	6.781	0.000	96	294672	5.00	4.83	
63 Tert-amyl methyl ether	73	6.909	6.915	-0.006	99	822860	5.00	5.15	
* 64 Fluorobenzene (IS)	96	7.122	7.122	0.000	99	2091557	10.0	10.0	
65 n-Heptane	43	7.134	7.135	-0.001	95	509995	5.00	5.90	
66 n-Butanol	56	7.592	7.580	0.012	90	172781	250.0	223.9	
67 Trichloroethene	95	7.610	7.610	0.000	98	305032	5.00	4.94	
68 Methylcyclohexane	83	7.909	7.909	0.000	93	520605	5.00	5.07	
69 1,2-Dichloropropane	63	7.945	7.952	-0.007	98	336800	5.00	5.27	
70 2-ethoxy-2-methyl butane	87	7.970	7.970	0.000	92	457963	5.00	4.91	
71 Methyl methacrylate	69	8.061	8.061	0.000	94	144102	5.00	5.47	
73 Dibromomethane	93	8.061	8.061	0.000	86	144440	5.00	5.06	
72 1,4-Dioxane	88	8.061	8.067	-0.006	30	25711	125.0	132.7	
75 Dichlorobromomethane	83	8.305	8.311	-0.006	99	354065	5.00	5.04	
76 2-Nitropropane	41	8.592	8.592	0.000	97	38856	5.00	5.18	
78 1-Bromo-2-chloroethane	63	8.701	8.701	0.000	99	335387	5.00	5.26	
79 cis-1,3-Dichloropropene	75	8.878	8.878	0.000	96	459135	5.00	4.99	
81 4-Methyl-2-pentanone (MIBK)	43	9.085	9.085	0.000	97	2682538	62.5	72.5	
$ 82 Toluene-d8 (Surr)	98	9.213	9.214	-0.001	94	2137144	10.0	9.90	
83 Toluene	92	9.299	9.299	0.000	98	781481	5.00	4.90	
84 trans-1,3-Dichloropropene	75	9.597	9.598	-0.001	93	391041	5.00	5.10	
85 Ethyl methacrylate	69	9.677	9.677	0.000	91	304250	5.00	4.91	
86 1,1,2-Trichloroethane	97	9.811	9.811	0.000	90	220468	5.00	5.00	
87 Tetrachloroethene	166	9.896	9.896	0.000	98	357875	5.00	4.82	
102 1,3-Dichloropropane	76	9.988	9.982	0.006	92	385864	5.00	5.06	
104 2-Hexanone	43	10.061	10.061	0.000	98	1931172	62.5	73.7	
106 Chlorodibromomethane	129	10.207	10.213	-0.006	90	262101	5.00	4.97	
107 Ethylene Dibromide	107	10.323	10.323	0.000	98	210275	5.00	5.06	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	85	1638726	10.0	10.0	
109 1-Chlorohexane	91	10.798	10.805	-0.007	95	426524	5.00	4.70	
110 Chlorobenzene	112	10.811	10.811	0.000	97	913812	5.00	4.86	
111 1,1,1,2-Tetrachloroethane	131	10.896	10.896	0.000	97	314464	5.00	5.05	
112 Ethylbenzene	91	10.902	10.902	0.000	98	1528388	5.00	4.93	
113 m-Xylene & p-Xylene	106	11.024	11.024	0.000	99	1225615	10.0	9.87	
115 o-Xylene	106	11.365	11.366	-0.001	97	602714	5.00	4.89	
116 Styrene	104	11.384	11.384	0.000	95	960856	5.00	4.76	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 Bromoform	173	11.542	11.542	0.000	97	154798	5.00	5.03	
118 Isopropylbenzene	105	11.676	11.683	-0.007	96	1543539	5.00	4.92	
$ 121 4-Bromofluorobenzene (Surr)	95	11.823	11.823	0.000	93	790718	10.0	9.90	
122 Bromobenzene	156	11.938	11.939	-0.001	91	403143	5.00	5.03	
123 1,1,2,2-Tetrachloroethane	83	11.938	11.939	-0.001	89	286946	5.00	5.03	
124 trans-1,4-Dichloro-2-butene	53	11.969	11.969	0.000	86	261877	25.0	19.0	
125 1,2,3-Trichloropropane	110	11.981	11.981	0.000	80	71980	5.00	4.82	
126 N-Propylbenzene	91	12.018	12.018	0.000	99	1850943	5.00	4.81	
127 2-Chlorotoluene	126	12.091	12.091	0.000	97	386333	5.00	4.80	
128 1,3,5-Trimethylbenzene	105	12.164	12.164	0.000	94	1318281	5.00	4.76	
129 4-Chlorotoluene	126	12.188	12.189	-0.001	97	407787	5.00	4.93	
130 tert-Butylbenzene	134	12.408	12.408	0.000	94	309467	5.00	5.07	
131 Pentachloroethane	167	12.438	12.438	0.000	93	228282	5.00	4.95	
132 1,2,4-Trimethylbenzene	105	12.451	12.451	0.000	97	1376386	5.00	4.79	
133 sec-Butylbenzene	105	12.572	12.573	-0.001	94	1752587	5.00	4.98	
134 1,3-Dichlorobenzene	146	12.670	12.670	0.000	98	786901	5.00	4.79	
135 4-Isopropyltoluene	119	12.688	12.688	0.000	97	1508393	5.00	4.81	
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	93	964715	10.0	10.0	
137 1,4-Dichlorobenzene	146	12.749	12.749	0.000	95	810550	5.00	4.83	
138 1,2,3-Trimethylbenzene	120	12.761	12.762	-0.001	98	619039	5.00	4.72	
139 Benzyl chloride	126	12.829	12.829	-0.001	98	121999	5.00	5.18	
140 n-Butylbenzene	92	12.987	12.987	0.000	98	764227	5.00	4.84	
141 1,2-Dichlorobenzene	146	13.011	13.012	-0.001	99	726336	5.00	4.80	
142 p-Diethylbenzene	119	13.036	13.036	0.000	86	741305	5.00	4.64	
145 1,2-Dibromo-3-Chloropropane	155	13.566	13.572	-0.006	88	34699	5.00	4.31	
146 1,3,5-Trichlorobenzene	180	13.694	13.694	0.000	98	626576	5.00	4.84	
147 1,2,4-Trichlorobenzene	180	14.121	14.121	0.000	94	505293	5.00	4.63	
148 Hexachlorobutadiene	225	14.206	14.206	0.000	96	276796	5.00	4.91	
149 Naphthalene	128	14.304	14.304	0.000	97	764401	5.00	4.40	
150 1,2,3-Trichlorobenzene	180	14.450	14.450	0.000	96	393604	5.00	4.47	
151 2-Methylnaphthalene	142	15.054	15.054	0.000	93	317324	5.00	3.87	

QC Flag Legend

Processing Flags

Reagents:

MSV_LCS_VOC#1_00087	Amount Added: 12.50	Units: uL	
MSV_QC_Gas826_00117	Amount Added: 12.50	Units: uL	
LCS_ETBR_00005	Amount Added: 12.50	Units: uL	
MSV_LCS_EE_00004	Amount Added: 12.50	Units: uL	
MSV_LCS_ACROL_00089	Amount Added: 12.50	Units: uL	
MSV_LCS_Penta_00024	Amount Added: 12.50	Units: uL	
MSV_HP25_ISSS_00063	Amount Added: 1.00	Units: uL	Run Reagent

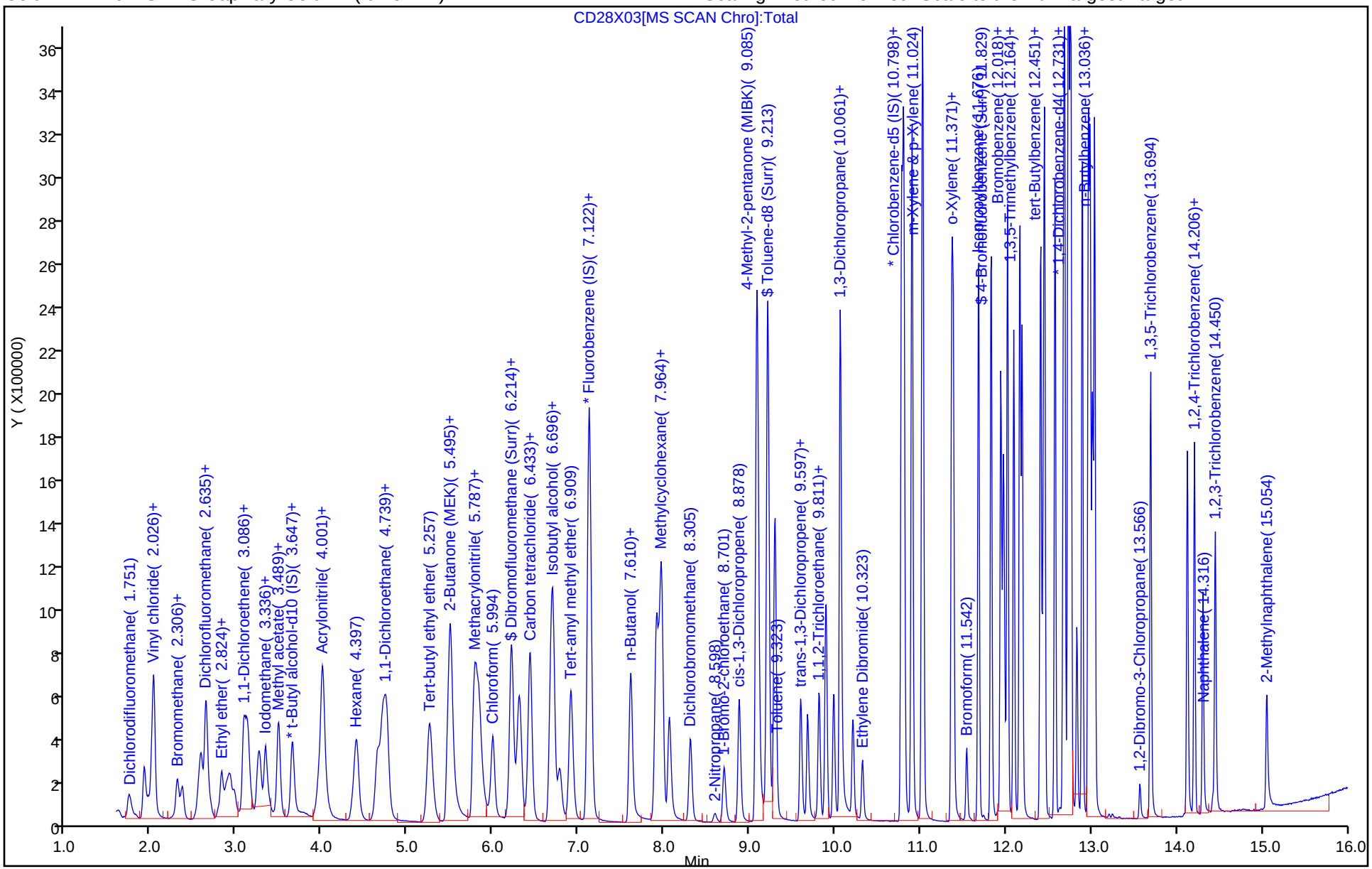
Report Date: 28-Dec-2022 10:34:04 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X03.D

Injection Date:	28-Dec-2022 10:11:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X03.D				
Lims ID:	LCS				
Client ID:					
Sample Type:	LCS				
Inject. Date:	28-Dec-2022 10:11:30	ALS Bottle#:	3	Worklist Smp#:	4
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0074091-004				
Misc. Info.:	LCS				
Operator ID:	knk41612	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	28-Dec-2022 10:33:58	Calib Date:	22-Aug-2022 22:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1651				

First Level Reviewer: DVW2 Date: 28-Dec-2022 10:33:20

Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	9.97	99.73
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.3	103.20
$ 82 Toluene-d8 (Surr)	10.0	9.90	98.97
$ 121 4-Bromofluorobenzene (Surr)	10.0	9.90	98.95

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID:
Lab Sample ID: LCS 410-331173/5

Matrix: Water
Lab File ID: CD29X04.D

Analysis Method: 8260D
Date Collected:

Sample wt/vol: 25(mL)
Date Analyzed: 12/29/2022 13:05

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 331173
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.07		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.77		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	5.21		0.50	0.10
79-00-5	1,1,2-Trichloroethane	5.10		0.50	0.080
75-34-3	1,1-Dichloroethane	4.88		0.50	0.10
75-35-4	1,1-Dichloroethene	4.66		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	5.20		0.50	0.080
107-06-2	1,2-Dichloroethane	5.15		0.50	0.070
78-87-5	1,2-Dichloropropane	5.22		0.50	0.10
78-93-3	2-Butanone (MEK)	61.9		5.0	1.0
591-78-6	2-Hexanone	59.9		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	61.7		5.0	1.0
67-64-1	Acetone	60.1		5.0	1.0
71-43-2	Benzene	5.00		0.50	0.10
74-97-5	Bromochloromethane	5.14		0.50	0.080
75-27-4	Bromodichloromethane	5.11		0.50	0.080
75-25-2	Bromoform	5.22		1.0	0.30
74-83-9	Bromomethane	4.24		0.50	0.10
75-15-0	Carbon disulfide	5.72		1.0	0.10
56-23-5	Carbon tetrachloride	4.92		0.50	0.10
108-90-7	Chlorobenzene	4.89		0.50	0.070
75-00-3	Chloroethane	4.62		0.50	0.10
67-66-3	Chloroform	4.87		0.50	0.090
74-87-3	Chloromethane	4.69		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	5.00		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	4.99		0.50	0.10
124-48-1	Dibromochloromethane	5.07		0.50	0.080
100-41-4	Ethylbenzene	4.94		0.50	0.080
1634-04-4	Methyl tert-butyl ether	5.15		0.50	0.080
75-09-2	Methylene Chloride	5.02		0.50	0.10
100-42-5	Styrene	4.81		0.50	0.070
127-18-4	Tetrachloroethene	4.87		0.50	0.20
108-88-3	Toluene	4.90		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID:
Lab Sample ID: LCS 410-331173/5

Matrix: Water
Lab File ID: CD29X04.D

Analysis Method: 8260D
Date Collected:

Sample wt/vol: 25(mL)
Date Analyzed: 12/29/2022 13:05

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 331173
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	4.66		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	5.18		0.50	0.080
79-01-6	Trichloroethene	4.79		0.50	0.080
75-01-4	Vinyl chloride	4.41		0.50	0.10
1330-20-7	Xylenes, Total	14.9		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29X04.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 29-Dec-2022 13:05:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074209-005
Misc. Info.: LCS
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 15:48:26 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1662

First Level Reviewer: DVW2 Date: 29-Dec-2022 13:54:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.733	1.733	0.000	99	244385	5.00	4.16	
5 Chloromethane	50	1.916	1.910	0.006	99	363424	5.00	4.69	
6 Vinyl chloride	62	2.007	2.007	0.000	98	317519	5.00	4.41	
7 Butadiene	39	2.026	2.020	0.006	95	412327	5.00	5.36	
9 Bromomethane	94	2.300	2.294	0.006	90	202856	5.00	4.24	
10 Chloroethane	64	2.361	2.355	0.006	99	193137	5.00	4.62	
11 Dichlorofluoromethane	67	2.581	2.574	0.007	97	461978	5.00	4.78	
12 Trichlorofluoromethane	101	2.629	2.629	0.000	97	341874	5.00	4.19	
13 Pentane	43	2.635	2.635	0.000	97	432319	5.00	5.97	
15 Ethyl ether	59	2.818	2.812	0.006	95	191930	4.99	4.58	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.910	2.904	0.006	94	289851	5.00	4.56	
17 Acrolein	56	2.971	2.965	0.007	99	246948	37.5	31.8	
19 1,1-Dichloroethene	96	3.080	3.074	0.006	96	210814	5.00	4.66	
20 Acetone	43	3.117	3.111	0.006	100	524184	62.5	60.1	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.123	3.117	0.006	91	205323	5.00	4.82	
22 Iodomethane	142	3.245	3.239	0.006	97	415439	5.00	4.99	
23 Isopropyl alcohol	45	3.288	3.269	0.019	36	55575	37.5	28.9	
24 Ethyl bromide	108	3.269	3.269	0.000	98	176846	4.93	4.15	
25 Carbon disulfide	76	3.330	3.330	0.000	99	800872	5.00	5.72	
27 Methyl acetate	43	3.477	3.464	0.013	37	134149	5.00	5.22	
28 3-Chloro-1-propene	41	3.483	3.483	0.000	93	475509	5.00	5.70	
29 Methylene Chloride	84	3.647	3.641	0.006	96	269135	5.00	5.02	
* 30 t-Butyl alcohol-d10 (IS)	65	3.696	3.672	0.024	95	169320	50.0	50.0	
31 2-Methyl-2-propanol	59	3.806	3.781	0.025	94	156120	50.0	44.2	
32 Acrylonitrile	53	3.952	3.952	0.000	100	321470	25.0	24.5	
34 trans-1,2-Dichloroethene	96	4.007	3.995	0.012	97	259675	5.00	4.66	
33 Methyl tert-butyl ether	73	3.995	4.001	-0.006	98	707140	5.00	5.15	
35 Hexane	57	4.391	4.391	0.000	95	378166	5.00	5.06	
36 1,1-Dichloroethane	63	4.641	4.641	0.000	96	501097	5.00	4.88	
38 Isopropyl ether	45	4.708	4.702	0.006	95	1008987	5.00	5.35	
39 2-Chloro-1,3-butadiene	53	4.751	4.751	0.000	92	401045	5.00	5.00	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.257	5.257	0.000	98	892662	5.00	5.12	
41 2-Butanone (MEK)	43	5.470	5.470	0.000	100	1101140	62.5	61.9	
42 cis-1,2-Dichloroethene	96	5.495	5.494	0.001	83	305531	5.00	5.00	
43 2,2-Dichloropropane	77	5.507	5.501	0.006	85	419027	5.00	5.17	
45 Propionitrile	54	5.586	5.574	0.012	96	176257	37.5	39.8	
46 Methacrylonitrile	67	5.787	5.781	0.006	94	601032	37.5	32.0	
47 Chlorobromomethane	128	5.836	5.830	0.006	96	139140	5.00	5.14	
48 Tetrahydrofuran	71	5.860	5.848	0.012	93	112788	25.0	22.4	
50 Chloroform	83	5.995	5.994	0.001	94	471039	5.00	4.87	
52 1,1,1-Trichloroethane	97	6.208	6.214	-0.006	96	402875	5.00	4.77	
$ 53 Dibromofluoromethane (Surr)	113	6.214	6.214	0.000	94	477365	10.0	9.93	
54 Cyclohexane	56	6.299	6.305	-0.006	93	482025	5.00	5.07	
55 Carbon tetrachloride	117	6.427	6.421	0.006	96	348802	5.00	4.92	
56 1,1-Dichloropropene	75	6.433	6.433	0.000	97	384774	5.00	4.87	
57 Isobutyl alcohol	41	6.665	6.653	0.012	46	115846	125.0	92.5	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.677	6.671	0.006	96	103325	10.0	10.5	
59 Benzene	78	6.696	6.695	0.001	97	1182619	5.00	5.00	
61 1,2-Dichloroethane	62	6.775	6.781	-0.006	97	308919	5.00	5.15	
63 Tert-amyl methyl ether	73	6.909	6.909	0.000	98	814566	5.00	5.18	
* 64 Fluorobenzene (IS)	96	7.116	7.116	0.000	97	2056689	10.0	10.0	
65 n-Heptane	43	7.135	7.134	0.001	95	457780	5.00	5.39	
66 n-Butanol	56	7.592	7.573	0.019	92	194182	250.0	193.3	
67 Trichloroethene	95	7.610	7.604	0.006	97	290699	5.00	4.79	
68 Methylcyclohexane	83	7.909	7.909	0.000	93	475010	5.00	4.71	
69 1,2-Dichloropropane	63	7.945	7.945	0.000	95	328265	5.00	5.22	
70 2-ethoxy-2-methyl butane	87	7.970	7.970	0.000	91	458534	5.00	5.00	
71 Methyl methacrylate	69	8.061	8.055	0.006	92	137899	5.00	4.02	
73 Dibromomethane	93	8.061	8.055	0.006	95	143756	5.00	5.12	
72 1,4-Dioxane	88	8.055	8.061	-0.006	30	29111	125.0	115.6	M
75 Dichlorobromomethane	83	8.305	8.305	0.000	99	353146	5.00	5.11	
76 2-Nitropropane	41	8.598	8.591	0.007	99	42733	5.00	4.38	
78 1-Bromo-2-chloroethane	63	8.701	8.701	0.000	98	336091	5.00	5.36	
79 cis-1,3-Dichloropropene	75	8.878	8.878	0.000	96	452001	5.00	4.99	
81 4-Methyl-2-pentanone (MIBK)	43	9.085	9.085	0.000	98	2972648	62.5	61.7	
$ 82 Toluene-d8 (Surr)	98	9.213	9.213	0.000	93	2083349	10.0	9.95	
83 Toluene	92	9.299	9.299	0.000	98	756870	5.00	4.90	
84 trans-1,3-Dichloropropene	75	9.597	9.597	0.000	94	384931	5.00	5.18	
85 Ethyl methacrylate	69	9.677	9.677	0.000	92	306895	5.00	5.11	
86 1,1,2-Trichloroethane	97	9.811	9.811	0.000	90	218253	5.00	5.10	
87 Tetrachloroethene	166	9.896	9.890	0.006	98	350669	5.00	4.87	
102 1,3-Dichloropropane	76	9.982	9.981	0.001	92	383525	5.00	5.19	
104 2-Hexanone	43	10.061	10.061	0.000	98	2044001	62.5	59.9	
106 Chlorodibromomethane	129	10.207	10.207	0.000	90	259244	5.00	5.07	
107 Ethylene Dibromide	107	10.323	10.323	0.000	99	209492	5.00	5.20	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	85	1588983	10.0	10.0	
109 1-Chlorohexane	91	10.798	10.804	-0.006	93	414238	5.00	4.70	
110 Chlorobenzene	112	10.805	10.811	-0.006	96	890190	5.00	4.89	
111 1,1,1,2-Tetrachloroethane	131	10.896	10.896	0.000	97	305955	5.00	5.07	
112 Ethylbenzene	91	10.902	10.902	0.000	98	1483296	5.00	4.94	
113 m-Xylene & p-Xylene	106	11.024	11.024	0.000	99	1204771	10.0	10.0	
115 o-Xylene	106	11.365	11.365	0.000	97	586975	5.00	4.91	
116 Styrene	104	11.384	11.384	0.000	96	941837	5.00	4.81	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 Bromoform	173	11.542	11.542	0.000	98	155677	5.00	5.22	
118 Isopropylbenzene	105	11.676	11.676	0.000	96	1501111	5.00	4.94	
$ 121 4-Bromofluorobenzene (Surr)	95	11.823	11.823	0.000	93	768409	10.0	9.92	
122 Bromobenzene	156	11.938	11.938	0.000	91	394685	5.00	4.99	
123 1,1,2,2-Tetrachloroethane	83	11.938	11.938	0.000	95	292837	5.00	5.21	
124 trans-1,4-Dichloro-2-butene	53	11.969	11.969	0.000	87	289670	25.0	21.3	
125 1,2,3-Trichloropropane	110	11.981	11.981	0.000	80	75437	5.00	5.13	
126 N-Propylbenzene	91	12.018	12.018	0.000	99	1803532	5.00	4.76	
127 2-Chlorotoluene	126	12.091	12.091	0.000	97	384458	5.00	4.84	
128 1,3,5-Trimethylbenzene	105	12.164	12.164	0.000	94	1291057	5.00	4.73	
129 4-Chlorotoluene	126	12.188	12.188	0.000	97	398838	5.00	4.89	
130 tert-Butylbenzene	134	12.408	12.408	0.000	94	286593	5.00	4.76	
131 Pentachloroethane	167	12.438	12.438	0.000	93	230456	5.00	5.07	
132 1,2,4-Trimethylbenzene	105	12.451	12.450	0.001	97	1338727	5.00	4.72	
133 sec-Butylbenzene	105	12.573	12.572	0.000	94	1689817	5.00	4.87	
134 1,3-Dichlorobenzene	146	12.670	12.670	0.000	99	777068	5.00	4.79	
135 4-Isopropyltoluene	119	12.688	12.688	0.000	97	1478191	5.00	4.78	
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	93	951331	10.0	10.0	
137 1,4-Dichlorobenzene	146	12.749	12.749	0.000	96	807918	5.00	4.88	
138 1,2,3-Trimethylbenzene	120	12.761	12.761	0.000	98	610752	5.00	4.73	
139 Benzyl chloride	126	12.829	12.828	0.001	98	127439	5.00	5.48	
140 n-Butylbenzene	92	12.981	12.987	-0.006	96	755364	5.00	4.85	
141 1,2-Dichlorobenzene	146	13.011	13.011	0.000	99	725028	5.00	4.86	
142 p-Diethylbenzene	119	13.036	13.036	0.000	86	747006	5.00	4.74	
145 1,2-Dibromo-3-Chloropropane	155	13.566	13.566	0.000	87	38355	5.00	4.83	
146 1,3,5-Trichlorobenzene	180	13.694	13.694	0.000	98	624273	5.00	4.89	
147 1,2,4-Trichlorobenzene	180	14.121	14.121	0.000	94	518257	5.00	4.81	
148 Hexachlorobutadiene	225	14.206	14.206	0.000	96	270286	5.00	4.86	
149 Naphthalene	128	14.304	14.304	0.000	97	818448	5.00	4.78	
150 1,2,3-Trichlorobenzene	180	14.450	14.450	0.000	96	410110	5.00	4.73	
151 2-Methylnaphthalene	142	15.054	15.054	0.000	93	292263	5.00	3.61	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_VOC#1_00088	Amount Added:	12.50	Units: uL	
MSV_QC_Gas826_00117	Amount Added:	12.50	Units: uL	
LCS_ETBR_00005	Amount Added:	12.50	Units: uL	
MSV_LCS_EE_00004	Amount Added:	12.50	Units: uL	
MSV_LCS_ACROL_00090	Amount Added:	12.50	Units: uL	
MSV_LCS_Penta_00024	Amount Added:	12.50	Units: uL	
MSV_HP25_ISSS_00063	Amount Added:	1.00	Units: uL	Run Reagent

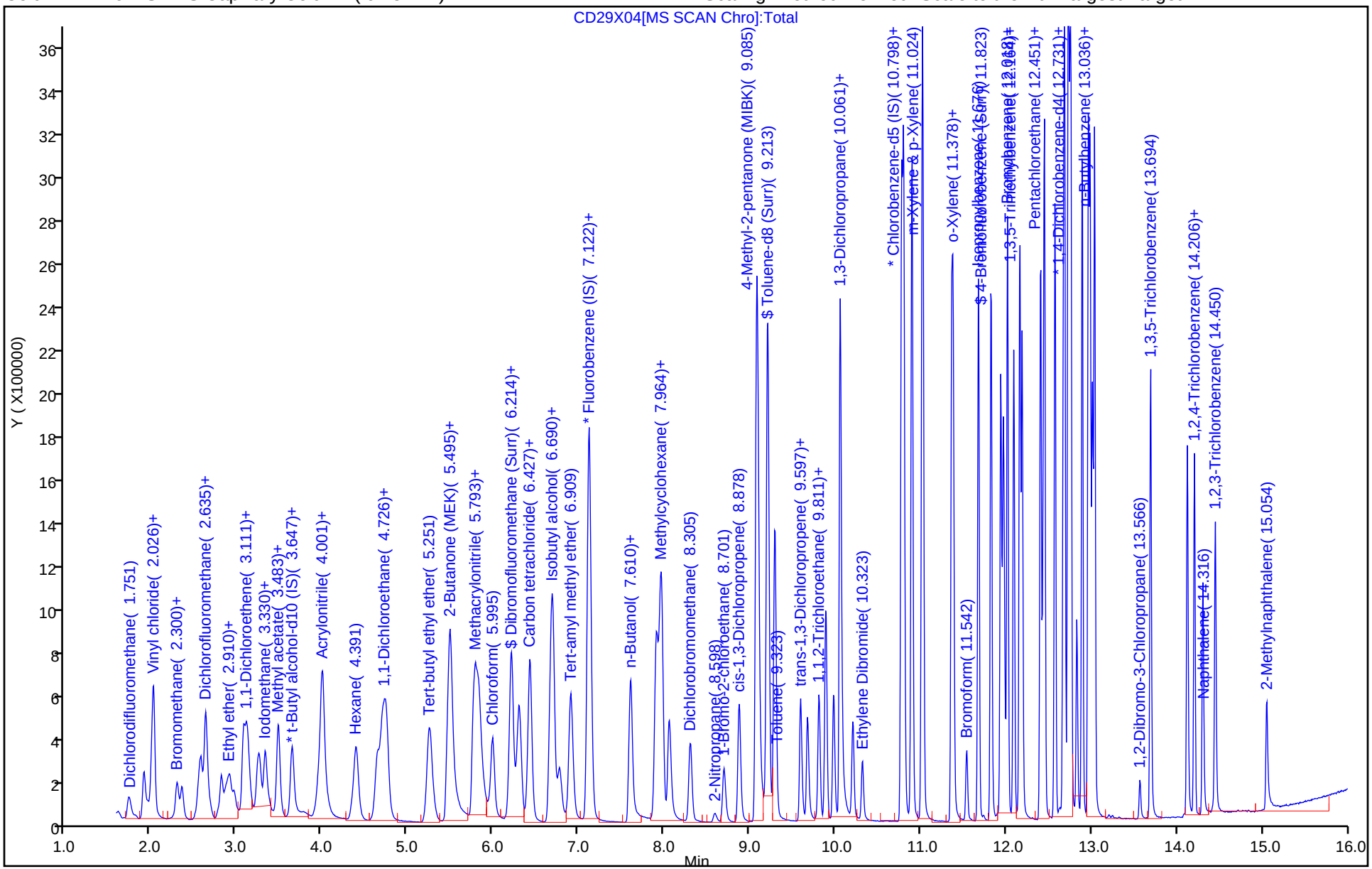
Report Date: 29-Dec-2022 15:48:52 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29X04.D

Injection Date:	29-Dec-2022 13:05:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	LCS			Worklist Smp#:	5
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29X04.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 29-Dec-2022 13:05:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074209-005
Misc. Info.: LCS
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 15:48:26 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1662

First Level Reviewer: DVW2 Date: 29-Dec-2022 13:54:48

Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	9.93	99.32
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	104.56
$ 82 Toluene-d8 (Surr)	10.0	9.95	99.50
$ 121 4-Bromofluorobenzene (Surr)	10.0	9.92	99.17

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID:
Lab Sample ID: LCSD 410-331173/6

Matrix: Water
Lab File ID: CD29X05.D

Analysis Method: 8260D
Date Collected:

Sample wt/vol: 25(mL)
Date Analyzed: 12/29/2022 13:27

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 331173
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.25		0.50	0.070
71-55-6	1,1,1-Trichloroethane	4.89		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	5.42		0.50	0.10
79-00-5	1,1,2-Trichloroethane	5.23		0.50	0.080
75-34-3	1,1-Dichloroethane	5.06		0.50	0.10
75-35-4	1,1-Dichloroethene	4.80		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	5.27		0.50	0.080
107-06-2	1,2-Dichloroethane	5.31		0.50	0.070
78-87-5	1,2-Dichloropropane	5.35		0.50	0.10
78-93-3	2-Butanone (MEK)	61.6		5.0	1.0
591-78-6	2-Hexanone	60.1		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	61.4		5.0	1.0
67-64-1	Acetone	59.6		5.0	1.0
71-43-2	Benzene	5.10		0.50	0.10
74-97-5	Bromochloromethane	5.29		0.50	0.080
75-27-4	Bromodichloromethane	5.20		0.50	0.080
75-25-2	Bromoform	5.41		1.0	0.30
74-83-9	Bromomethane	4.53		0.50	0.10
75-15-0	Carbon disulfide	5.83		1.0	0.10
56-23-5	Carbon tetrachloride	5.01		0.50	0.10
108-90-7	Chlorobenzene	4.96		0.50	0.070
75-00-3	Chloroethane	4.77		0.50	0.10
67-66-3	Chloroform	5.05		0.50	0.090
74-87-3	Chloromethane	4.74		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	5.18		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	5.09		0.50	0.10
124-48-1	Dibromochloromethane	5.16		0.50	0.080
100-41-4	Ethylbenzene	5.07		0.50	0.080
1634-04-4	Methyl tert-butyl ether	5.33		0.50	0.080
75-09-2	Methylene Chloride	5.14		0.50	0.10
100-42-5	Styrene	4.98		0.50	0.070
127-18-4	Tetrachloroethene	4.90		0.50	0.20
108-88-3	Toluene	4.99		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID:
Lab Sample ID: LCSD 410-331173/6

Matrix: Water
Lab File ID: CD29X05.D

Analysis Method: 8260D
Date Collected:

Sample wt/vol: 25(mL)
Date Analyzed: 12/29/2022 13:27

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 331173
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	4.83		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	5.28		0.50	0.080
79-01-6	Trichloroethene	4.95		0.50	0.080
75-01-4	Vinyl chloride	4.67		0.50	0.10
1330-20-7	Xylenes, Total	15.1		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29X05.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 29-Dec-2022 13:27:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074209-006
Misc. Info.: LCSD
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 15:48:26 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1662

First Level Reviewer: DVW2 Date: 29-Dec-2022 13:55:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.739	1.733	0.006	99	248626	5.00	4.27	
5 Chloromethane	50	1.916	1.910	0.006	99	364505	5.00	4.74	
6 Vinyl chloride	62	2.014	2.007	0.007	98	333160	5.00	4.67	
7 Butadiene	39	2.026	2.020	0.006	94	430110	5.00	5.64	
9 Bromomethane	94	2.300	2.294	0.006	90	214904	5.00	4.53	
10 Chloroethane	64	2.361	2.355	0.006	100	197941	5.00	4.77	
11 Dichlorofluoromethane	67	2.574	2.574	0.000	97	471101	5.00	4.92	
12 Trichlorofluoromethane	101	2.635	2.629	0.006	98	336785	5.00	4.16	
13 Pentane	43	2.635	2.635	0.000	97	439131	5.00	6.12	
15 Ethyl ether	59	2.818	2.812	0.006	95	199213	4.99	4.80	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.904	2.904	0.000	94	292659	5.00	4.64	
17 Acrolein	56	2.977	2.965	0.013	98	249945	37.5	31.5	
19 1,1-Dichloroethene	96	3.080	3.074	0.006	96	215569	5.00	4.80	
20 Acetone	43	3.117	3.111	0.006	99	532049	62.5	59.6	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.123	3.117	0.006	91	208405	5.00	4.93	
22 Iodomethane	142	3.245	3.239	0.006	98	427064	5.00	5.17	
23 Isopropyl alcohol	45	3.269	3.269	0.000	31	55447	37.5	28.1	
24 Ethyl bromide	108	3.269	3.269	0.000	98	179272	4.93	4.24	
25 Carbon disulfide	76	3.337	3.330	0.006	99	808686	5.00	5.83	
27 Methyl acetate	43	3.471	3.464	0.007	97	162279	5.00	6.17	
28 3-Chloro-1-propene	41	3.489	3.483	0.006	93	483115	5.00	5.84	
29 Methylene Chloride	84	3.647	3.641	0.006	96	273416	5.00	5.14	
* 30 t-Butyl alcohol-d10 (IS)	65	3.721	3.672	0.049	95	173347	50.0	50.0	
31 2-Methyl-2-propanol	59	3.794	3.781	0.013	99	138768	50.0	38.4	
32 Acrylonitrile	53	3.952	3.952	0.000	99	318366	25.0	23.7	
34 trans-1,2-Dichloroethene	96	4.001	3.995	0.006	98	266904	5.00	4.83	
33 Methyl tert-butyl ether	73	4.001	4.001	0.000	93	726599	5.00	5.33	
35 Hexane	57	4.397	4.391	0.006	94	386228	5.00	5.21	
36 1,1-Dichloroethane	63	4.641	4.641	0.000	96	515047	5.00	5.06	
38 Isopropyl ether	45	4.702	4.702	0.000	95	1038431	5.00	5.55	
39 2-Chloro-1,3-butadiene	53	4.751	4.751	0.000	91	404886	5.00	5.09	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
40 Tert-butyl ethyl ether	59	5.251	5.257	-0.006	98	912452	5.00	5.28	
41 2-Butanone (MEK)	43	5.476	5.470	0.006	100	1121353	62.5	61.6	
42 cis-1,2-Dichloroethene	96	5.495	5.494	0.001	83	313825	5.00	5.18	
43 2,2-Dichloropropane	77	5.501	5.501	0.000	66	422226	5.00	5.25	
45 Propionitrile	54	5.592	5.574	0.018	98	176207	37.5	38.9	
46 Methacrylonitrile	67	5.781	5.781	0.000	93	616807	37.5	32.0	
47 Chlorobromomethane	128	5.830	5.830	0.000	96	141927	5.00	5.29	
48 Tetrahydrofuran	71	5.848	5.848	0.000	63	115995	25.0	22.5	M
50 Chloroform	83	5.995	5.994	0.001	94	484077	5.00	5.05	
52 1,1,1-Trichloroethane	97	6.208	6.214	-0.006	99	410100	5.00	4.89	
$ 53 Dibromofluoromethane (Surr)	113	6.214	6.214	0.000	94	472987	10.0	9.92	
54 Cyclohexane	56	6.305	6.305	0.000	93	490260	5.00	5.20	
55 Carbon tetrachloride	117	6.427	6.421	0.006	96	352472	5.00	5.01	
56 1,1-Dichloropropene	75	6.433	6.433	0.000	96	390653	5.00	4.99	
57 Isobutyl alcohol	41	6.665	6.653	0.012	45	123654	125.0	96.4	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.677	6.671	0.006	96	103143	10.0	10.5	
59 Benzene	78	6.696	6.695	0.001	97	1198188	5.00	5.10	
61 1,2-Dichloroethane	62	6.775	6.781	-0.006	96	315526	5.00	5.31	
63 Tert-amyl methyl ether	73	6.909	6.909	0.000	98	835692	5.00	5.36	
* 64 Fluorobenzene (IS)	96	7.116	7.116	0.000	97	2039929	10.0	10.0	
65 n-Heptane	43	7.135	7.134	0.001	95	463869	5.00	5.50	
66 n-Butanol	56	7.592	7.573	0.019	94	179583	250.0	174.6	
67 Trichloroethene	95	7.610	7.604	0.006	98	298213	5.00	4.95	
68 Methylcyclohexane	83	7.909	7.909	0.000	92	484178	5.00	4.84	
69 1,2-Dichloropropane	63	7.945	7.945	0.000	98	333554	5.00	5.35	
70 2-ethoxy-2-methyl butane	87	7.970	7.970	0.000	91	458058	5.00	5.04	
71 Methyl methacrylate	69	8.061	8.055	0.006	93	138923	5.00	3.96	
73 Dibromomethane	93	8.055	8.055	0.000	84	147169	5.00	5.29	
72 1,4-Dioxane	88	8.079	8.061	0.018	32	31737	125.0	123.0	
75 Dichlorobromomethane	83	8.305	8.305	0.000	99	355912	5.00	5.20	
76 2-Nitropropane	41	8.592	8.591	0.001	99	42303	5.00	4.23	
78 1-Bromo-2-chloroethane	63	8.701	8.701	0.000	99	342754	5.00	5.51	
79 cis-1,3-Dichloropropene	75	8.878	8.878	0.000	96	457085	5.00	5.09	
81 4-Methyl-2-pentanone (MIBK)	43	9.085	9.085	0.000	98	3025598	62.5	61.4	
$ 82 Toluene-d8 (Surr)	98	9.213	9.213	0.000	94	2064068	10.0	9.89	
83 Toluene	92	9.299	9.299	0.000	98	767911	5.00	4.99	
84 trans-1,3-Dichloropropene	75	9.597	9.597	0.000	93	391381	5.00	5.28	
85 Ethyl methacrylate	69	9.677	9.677	0.000	92	308402	5.00	5.15	
86 1,1,2-Trichloroethane	97	9.811	9.811	0.000	90	222849	5.00	5.23	
87 Tetrachloroethene	166	9.890	9.890	0.000	98	351694	5.00	4.90	
102 1,3-Dichloropropane	76	9.982	9.981	0.001	93	387700	5.00	5.27	
104 2-Hexanone	43	10.061	10.061	0.000	98	2098020	62.5	60.1	
106 Chlorodibromomethane	129	10.207	10.207	0.000	90	262887	5.00	5.16	
107 Ethylene Dibromide	107	10.317	10.323	-0.006	99	211470	5.00	5.27	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	85	1583432	10.0	10.0	
109 1-Chlorohexane	91	10.798	10.804	-0.006	94	422154	5.00	4.81	
110 Chlorobenzene	112	10.805	10.811	-0.006	96	900788	5.00	4.96	
111 1,1,1,2-Tetrachloroethane	131	10.896	10.896	0.000	97	315822	5.00	5.25	
112 Ethylbenzene	91	10.902	10.902	0.000	98	1517618	5.00	5.07	
113 m-Xylene & p-Xylene	106	11.024	11.024	0.000	100	1215516	10.0	10.1	
115 o-Xylene	106	11.365	11.365	0.000	97	596758	5.00	5.01	
116 Styrene	104	11.384	11.384	0.000	96	971198	5.00	4.98	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
117 Bromoform	173	11.542	11.542	0.000	98	160666	5.00	5.41	
118 Isopropylbenzene	105	11.676	11.676	0.000	95	1532011	5.00	5.06	
$ 121 4-Bromofluorobenzene (Surr)	95	11.823	11.823	0.000	93	766124	10.0	9.92	
122 Bromobenzene	156	11.938	11.938	0.000	92	400096	5.00	5.12	
123 1,1,2,2-Tetrachloroethane	83	11.938	11.938	0.000	92	300972	5.00	5.42	
124 trans-1,4-Dichloro-2-butene	53	11.969	11.969	0.000	88	293139	25.0	21.9	
125 1,2,3-Trichloropropane	110	11.981	11.981	0.000	80	76547	5.00	5.27	
126 N-Propylbenzene	91	12.018	12.018	0.000	99	1842584	5.00	4.92	
127 2-Chlorotoluene	126	12.091	12.091	0.000	97	386793	5.00	4.93	
128 1,3,5-Trimethylbenzene	105	12.164	12.164	0.000	94	1311191	5.00	4.87	
129 4-Chlorotoluene	126	12.188	12.188	0.000	97	405010	5.00	5.03	
130 tert-Butylbenzene	134	12.408	12.408	0.000	94	291606	5.00	4.91	
131 Pentachloroethane	167	12.438	12.438	0.000	94	235971	5.00	5.26	
132 1,2,4-Trimethylbenzene	105	12.451	12.450	0.001	97	1371348	5.00	4.90	
133 sec-Butylbenzene	105	12.573	12.572	0.000	94	1735013	5.00	5.06	
134 1,3-Dichlorobenzene	146	12.670	12.670	0.000	99	789564	5.00	4.93	
135 4-Isopropyltoluene	119	12.688	12.688	0.000	97	1505771	5.00	4.94	
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	93	939013	10.0	10.0	
137 1,4-Dichlorobenzene	146	12.749	12.749	0.000	95	828209	5.00	5.07	
138 1,2,3-Trimethylbenzene	120	12.761	12.761	0.000	98	621779	5.00	4.87	
139 Benzyl chloride	126	12.829	12.828	0.001	98	129115	5.00	5.63	
140 n-Butylbenzene	92	12.987	12.987	0.000	97	758749	5.00	4.94	
141 1,2-Dichlorobenzene	146	13.011	13.011	0.000	99	737519	5.00	5.01	
142 p-Diethylbenzene	119	13.036	13.036	0.000	87	762939	5.00	4.91	
145 1,2-Dibromo-3-Chloropropane	155	13.566	13.566	0.000	87	39516	5.00	5.04	
146 1,3,5-Trichlorobenzene	180	13.694	13.694	0.000	98	640236	5.00	5.08	
147 1,2,4-Trichlorobenzene	180	14.121	14.121	0.000	94	532952	5.00	5.01	
148 Hexachlorobutadiene	225	14.206	14.206	0.000	96	276209	5.00	5.03	
149 Naphthalene	128	14.304	14.304	0.000	97	845081	5.00	5.00	
150 1,2,3-Trichlorobenzene	180	14.450	14.450	0.000	96	427080	5.00	4.99	
151 2-Methylnaphthalene	142	15.054	15.054	0.000	93	334836	5.00	4.19	

QC Flag Legend

Processing Flags

Review Flags

M - Manually Integrated

Reagents:

MSV_LCS_VOC#1_00088	Amount Added:	12.50	Units: uL	
MSV_QC_Gas826_00117	Amount Added:	12.50	Units: uL	
LCS_ETBR_00005	Amount Added:	12.50	Units: uL	
MSV_LCS_EE_00004	Amount Added:	12.50	Units: uL	
MSV_LCS_ACROL_00090	Amount Added:	12.50	Units: uL	
MSV_LCS_Penta_00024	Amount Added:	12.50	Units: uL	
MSV_HP25_ISSS_00063	Amount Added:	1.00	Units: uL	Run Reagent

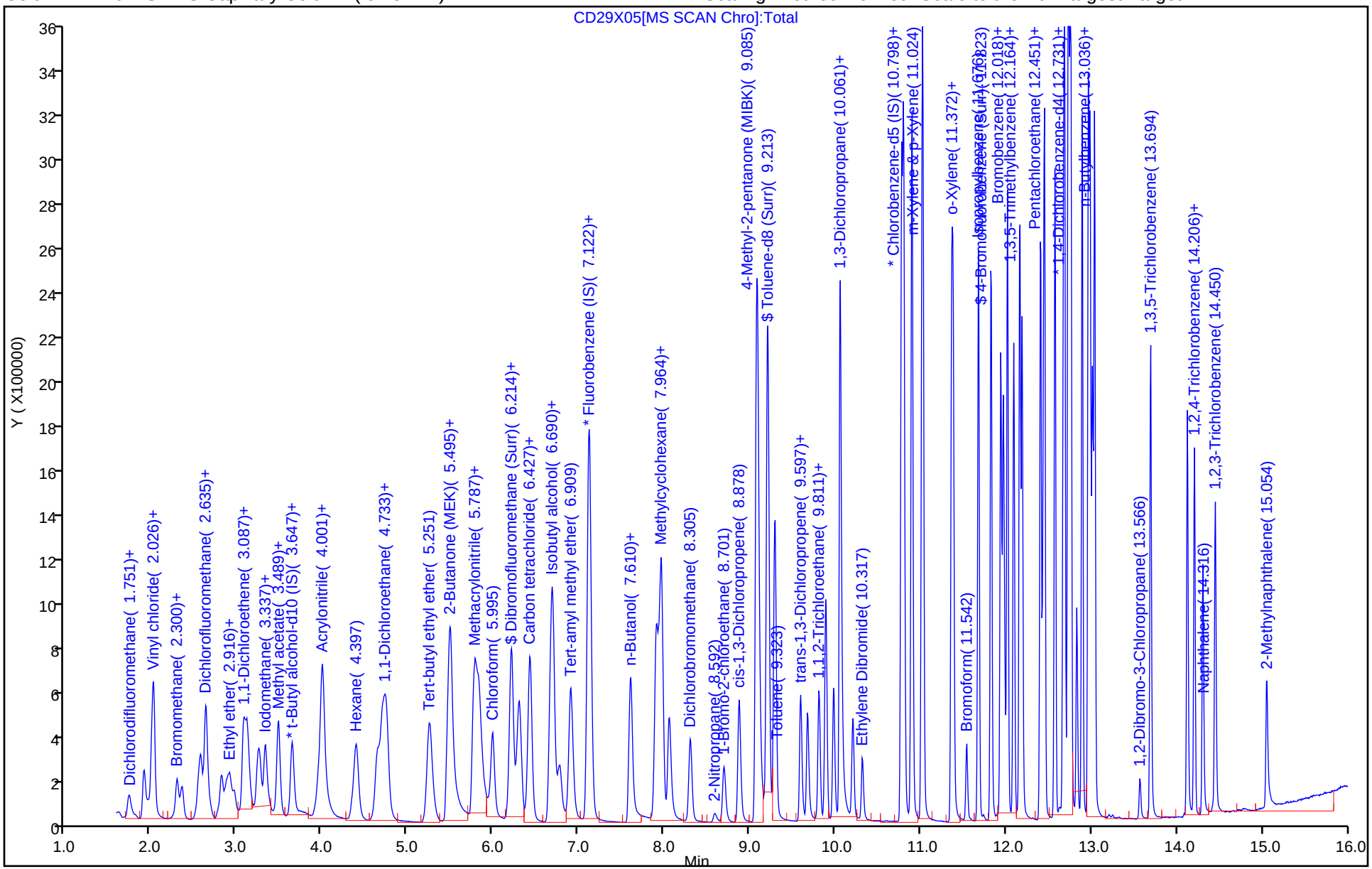
Report Date: 29-Dec-2022 15:48:57 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29X05.D

Injection Date:	29-Dec-2022 13:27:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	LCSD			Worklist Smp#:	6
Client ID:					
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\CD29X05.D
Lims ID: LCSD
Client ID:
Sample Type: LCSD
Inject. Date: 29-Dec-2022 13:27:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074209-006
Misc. Info.: LCSD
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221229-74209.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 15:48:26 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1662

First Level Reviewer: DVW2 Date: 29-Dec-2022 13:55:43

Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	9.92	99.21
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.5	105.23
$ 82 Toluene-d8 (Surr)	10.0	9.89	98.93
$ 121 4-Bromofluorobenzene (Surr)	10.0	9.92	99.22

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MS MS Lab Sample ID: 410-110288-6 MS

Matrix: Water Lab File ID: CD28X18.D

Analysis Method: 8260D Date Collected: 12/21/2022 11:30

Sample wt/vol: 25(mL) Date Analyzed: 12/28/2022 15:45

Soil Aliquot Vol: Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.38		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.78		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	5.33		0.50	0.10
79-00-5	1,1,2-Trichloroethane	5.12		0.50	0.080
75-34-3	1,1-Dichloroethane	5.54		0.50	0.10
75-35-4	1,1-Dichloroethene	5.65		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	5.33		0.50	0.080
107-06-2	1,2-Dichloroethane	5.04		0.50	0.070
78-87-5	1,2-Dichloropropane	5.43		0.50	0.10
78-93-3	2-Butanone (MEK)	55.5		5.0	1.0
591-78-6	2-Hexanone	66.2		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	59.5		5.0	1.0
67-64-1	Acetone	53.7		5.0	1.0
71-43-2	Benzene	5.39		0.50	0.10
74-97-5	Bromochloromethane	5.25		0.50	0.080
75-27-4	Bromodichloromethane	5.29		0.50	0.080
75-25-2	Bromoform	5.35		1.0	0.30
74-83-9	Bromomethane	4.93		0.50	0.10
75-15-0	Carbon disulfide	6.46		1.0	0.10
56-23-5	Carbon tetrachloride	5.69		0.50	0.10
108-90-7	Chlorobenzene	5.22		0.50	0.070
75-00-3	Chloroethane	5.21		0.50	0.10
67-66-3	Chloroform	5.52		0.50	0.090
74-87-3	Chloromethane	5.39		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	7.92		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	5.07		0.50	0.10
124-48-1	Dibromochloromethane	5.21		0.50	0.080
100-41-4	Ethylbenzene	5.35		0.50	0.080
1634-04-4	Methyl tert-butyl ether	5.17		0.50	0.080
75-09-2	Methylene Chloride	5.29		0.50	0.10
100-42-5	Styrene	5.09		0.50	0.070
127-18-4	Tetrachloroethene	11.8		0.50	0.20
108-88-3	Toluene	5.35		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MS MS
Lab Sample ID: 410-110288-6 MS

Matrix: Water
Lab File ID: CD28X18.D

Analysis Method: 8260D
Date Collected: 12/21/2022 11:30

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 15:45

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	5.35		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	5.19		0.50	0.080
79-01-6	Trichloroethene	7.18		0.50	0.080
75-01-4	Vinyl chloride	5.29		0.50	0.10
1330-20-7	Xylenes, Total	15.8		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		80-120
460-00-4	4-Bromofluorobenzene (Surr)	99		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X18.D
Lims ID: 410-110288-A-6 MS
Client ID: HD-COD-SW-15-0/1-0 MS
Sample Type: MS
Inject. Date: 28-Dec-2022 15:45:30 ALS Bottle#: 18 Worklist Smp#: 19
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074091-019
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 10:39:09 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1603

First Level Reviewer: innoonk Date: 29-Dec-2022 10:40:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.745	1.745	0.000	99	305382	5.00	5.32	
5 Chloromethane	50	1.916	1.922	-0.006	99	408728	5.00	5.39	
6 Vinyl chloride	62	2.014	2.020	-0.006	98	372343	5.00	5.29	
7 Butadiene	39	2.032	2.032	0.000	95	515782	5.00	6.85	
9 Bromomethane	94	2.306	2.306	0.000	90	231077	5.00	4.93	
10 Chloroethane	64	2.361	2.367	-0.006	100	213335	5.00	5.21	
11 Dichlorofluoromethane	67	2.581	2.587	-0.006	97	517925	5.00	5.48	
12 Trichlorofluoromethane	101	2.635	2.642	-0.007	98	402001	5.00	5.03	
13 Pentane	43	2.635	2.642	-0.007	97	540767	5.00	7.64	
15 Ethyl ether	59	2.824	2.825	0.000	95	212258	4.99	5.18	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.910	2.910	0.000	94	338734	5.00	5.44	
17 Acrolein	56	2.971	2.971	0.000	99	206776	37.5	30.5	
19 1,1-Dichloroethene	96	3.081	3.087	-0.007	96	250037	5.00	5.65	
20 Acetone	43	3.117	3.123	-0.006	99	408990	62.6	53.7	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.129	3.129	0.000	91	254382	5.00	6.10	
22 Iodomethane	142	3.245	3.251	-0.006	97	448496	5.00	5.50	
23 Isopropyl alcohol	45	3.257	3.276	-0.019	30	45497	37.5	27.1	
24 Ethyl bromide	108	3.276	3.282	-0.006	98	192965	4.93	4.63	
25 Carbon disulfide	76	3.337	3.343	-0.006	100	885070	5.00	6.46	
27 Methyl acetate	43	3.477	3.477	0.000	37	183178	5.00	8.17	
28 3-Chloro-1-propene	41	3.489	3.495	-0.006	93	509284	5.00	6.24	
29 Methylene Chloride	84	3.654	3.654	0.000	97	277761	5.00	5.29	
* 30 t-Butyl alcohol-d10 (IS)	65	3.690	3.684	0.006	97	147715	50.0	50.0	
31 2-Methyl-2-propanol	59	3.794	3.794	0.000	98	113144	50.0	36.8	
32 Acrylonitrile	53	3.958	3.965	-0.007	100	262477	25.0	22.9	
33 Methyl tert-butyl ether	73	4.001	4.001	0.000	93	695650	5.00	5.17	
34 trans-1,2-Dichloroethene	96	4.001	4.007	-0.006	97	291634	5.00	5.35	
35 Hexane	57	4.397	4.403	-0.006	95	488336	5.00	6.67	
36 1,1-Dichloroethane	63	4.641	4.647	-0.006	96	556191	5.00	5.54	
38 Isopropyl ether	45	4.708	4.708	0.000	96	1031769	5.00	5.59	
39 2-Chloro-1,3-butadiene	53	4.751	4.757	-0.006	91	443262	5.00	5.65	
40 Tert-butyl ethyl ether	59	5.257	5.263	-0.006	98	898663	5.00	5.27	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	5.476	5.483	-0.007	100	861828	62.6	55.5	
42 cis-1,2-Dichloroethene	96	5.495	5.501	-0.006	82	473470	5.00	7.92	
43 2,2-Dichloropropane	77	5.501	5.513	-0.012	54	454892	5.00	5.74	
45 Propionitrile	54	5.586	5.574	0.012	96	114111	37.5	29.5	
46 Methacrylonitrile	67	5.787	5.787	0.000	93	537098	37.5	32.7	
47 Chlorobromomethane	128	5.836	5.836	0.000	96	138992	5.00	5.25	
48 Tetrahydrofuran	71	5.854	5.860	-0.006	92	93840	25.0	21.3	
50 Chloroform	83	5.995	5.995	0.000	94	522354	5.00	5.52	
52 1,1,1-Trichloroethane	97	6.214	6.214	0.000	99	478014	5.00	5.78	
$ 53 Dibromofluoromethane (Surr)	113	6.214	6.214	0.000	94	472307	10.0	10.0	
54 Cyclohexane	56	6.299	6.312	-0.013	93	592272	5.00	6.37	
55 Carbon tetrachloride	117	6.427	6.427	0.000	96	395113	5.00	5.69	
56 1,1-Dichloropropene	75	6.434	6.434	0.000	97	432434	5.00	5.59	
57 Isobutyl alcohol	41	6.671	6.659	0.012	40	92813	125.1	84.9	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.677	6.677	0.000	94	102120	10.0	10.6	
59 Benzene	78	6.702	6.702	0.000	97	1247166	5.00	5.39	
61 1,2-Dichloroethane	62	6.781	6.781	0.000	97	295823	5.00	5.04	
63 Tert-amyl methyl ether	73	6.909	6.915	-0.006	98	805192	5.00	5.24	
* 64 Fluorobenzene (IS)	96	7.116	7.122	-0.006	99	2012499	10.0	10.0	
65 n-Heptane	43	7.141	7.135	0.006	95	575087	5.00	6.92	
66 n-Butanol	56	7.598	7.580	0.018	33	111653	250.2	127.4	
67 Trichloroethene	95	7.610	7.610	0.000	98	426064	5.00	7.18	
68 Methylcyclohexane	83	7.909	7.909	0.000	93	590597	5.00	5.98	
69 1,2-Dichloropropane	63	7.945	7.952	-0.007	98	334426	5.00	5.43	
70 2-ethoxy-2-methyl butane	87	7.970	7.970	0.000	91	457145	5.00	5.10	
71 Methyl methacrylate	69	8.055	8.061	-0.006	93	126113	5.00	4.22	
73 Dibromomethane	93	8.061	8.061	0.000	86	140990	5.00	5.14	
72 1,4-Dioxane	88	8.067	8.067	0.000	30	24091	125.1	109.7	
75 Dichlorobromomethane	83	8.305	8.311	-0.006	99	357438	5.00	5.29	
76 2-Nitropropane	41	8.592	8.592	0.000	99	35529	5.00	4.17	
78 1-Bromo-2-chloroethane	63	8.701	8.701	0.000	99	345042	5.00	5.62	
79 cis-1,3-Dichloropropene	75	8.878	8.878	0.000	96	449351	5.00	5.07	
81 4-Methyl-2-pentanone (MIBK)	43	9.085	9.085	0.000	98	2498030	62.6	59.5	
$ 82 Toluene-d8 (Surr)	98	9.213	9.214	-0.001	93	2043466	10.0	9.92	
83 Toluene	92	9.299	9.299	0.000	98	812704	5.00	5.35	
84 trans-1,3-Dichloropropene	75	9.598	9.598	0.000	94	379586	5.00	5.19	
85 Ethyl methacrylate	69	9.677	9.677	0.000	91	305745	5.00	5.17	
86 1,1,2-Trichloroethane	97	9.811	9.811	0.000	90	215723	5.00	5.12	
87 Tetrachloroethene	166	9.896	9.896	0.000	98	837117	5.00	11.8	
102 1,3-Dichloropropane	76	9.982	9.982	0.000	92	387404	5.00	5.33	
104 2-Hexanone	43	10.061	10.061	0.000	98	1969021	62.6	66.2	
106 Chlorodibromomethane	129	10.207	10.213	-0.006	90	261955	5.00	5.21	
107 Ethylene Dibromide	107	10.323	10.323	0.000	99	211103	5.00	5.33	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	84	1563629	10.0	10.0	
109 1-Chlorohexane	91	10.799	10.805	-0.006	95	459179	5.00	5.30	
110 Chlorobenzene	112	10.805	10.811	-0.006	97	935694	5.00	5.22	
111 1,1,1,2-Tetrachloroethane	131	10.896	10.896	0.000	97	319353	5.00	5.38	
112 Ethylbenzene	91	10.902	10.902	0.000	98	1580318	5.00	5.35	
113 m-Xylene & p-Xylene	106	11.024	11.024	0.000	100	1253580	10.0	10.6	
115 o-Xylene	106	11.365	11.366	-0.001	97	610964	5.00	5.19	
116 Styrene	104	11.384	11.384	0.000	96	981240	5.00	5.09	
117 Bromoform	173	11.542	11.542	0.000	98	156988	5.00	5.35	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
118 Isopropylbenzene	105	11.676	11.683	-0.007	96	1599032	5.00	5.35	
$ 121 4-Bromofluorobenzene (Surr)	95	11.823	11.823	0.000	94	752867	10.0	9.87	
122 Bromobenzene	156	11.939	11.939	0.000	94	405951	5.00	5.27	
123 1,1,2,2-Tetrachloroethane	83	11.939	11.939	0.000	92	292223	5.00	5.33	
124 trans-1,4-Dichloro-2-butene	53	11.969	11.969	0.000	86	237865	25.0	18.0	
125 1,2,3-Trichloropropane	110	11.981	11.981	0.000	80	72734	5.00	5.07	
126 N-Propylbenzene	91	12.018	12.018	0.000	99	1920552	5.00	5.20	
127 2-Chlorotoluene	126	12.091	12.091	0.000	97	397726	5.00	5.14	
128 1,3,5-Trimethylbenzene	105	12.164	12.164	0.000	94	1365479	5.00	5.13	
129 4-Chlorotoluene	126	12.188	12.189	-0.001	97	422801	5.00	5.32	
130 tert-Butylbenzene	134	12.408	12.408	0.000	94	305248	5.00	5.20	
131 Pentachloroethane	167	12.438	12.438	0.000	93	240643	5.00	5.43	
132 1,2,4-Trimethylbenzene	105	12.451	12.451	0.000	97	1410346	5.00	5.10	
133 sec-Butylbenzene	105	12.573	12.573	0.000	94	1833363	5.00	5.42	
134 1,3-Dichlorobenzene	146	12.670	12.670	0.000	98	803345	5.00	5.08	
135 4-Isopropyltoluene	119	12.688	12.688	0.000	97	1579960	5.00	5.25	
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	93	927225	10.0	10.0	
137 1,4-Dichlorobenzene	146	12.743	12.749	-0.006	96	823763	5.00	5.10	
138 1,2,3-Trimethylbenzene	120	12.762	12.762	0.000	98	634638	5.00	5.04	
139 Benzyl chloride	126	12.829	12.829	0.000	98	125825	5.00	5.55	
140 n-Butylbenzene	92	12.981	12.987	-0.006	97	807009	5.00	5.32	
141 1,2-Dichlorobenzene	146	13.012	13.012	0.000	99	749963	5.00	5.16	
142 p-Diethylbenzene	119	13.036	13.036	0.000	87	784289	5.00	5.11	
145 1,2-Dibromo-3-Chloropropane	155	13.566	13.572	-0.006	87	37535	5.00	4.85	
146 1,3,5-Trichlorobenzene	180	13.694	13.694	0.000	98	650434	5.00	5.22	
147 1,2,4-Trichlorobenzene	180	14.121	14.121	0.000	94	520229	5.00	4.96	
148 Hexachlorobutadiene	225	14.206	14.206	0.000	96	298453	5.00	5.51	
149 Naphthalene	128	14.304	14.304	0.000	97	792513	5.00	4.75	
150 1,2,3-Trichlorobenzene	180	14.450	14.450	0.000	95	406014	5.00	4.80	
151 2-Methylnaphthalene	142	15.054	15.054	0.000	93	288786	5.00	3.66	

QC Flag Legend

Processing Flags

Reagents:

MSV_LCS_VOC#1_00087	Amount Added:	5.38	Units: uL	
MSV_QC_Gas826_00117	Amount Added:	5.38	Units: uL	
LCS_ETBR_00005	Amount Added:	5.38	Units: uL	
MSV_LCS_EE_00004	Amount Added:	5.38	Units: uL	
MSV_LCS_ACROL_00089	Amount Added:	5.38	Units: uL	
MSV_LCS_Penta_00024	Amount Added:	5.38	Units: uL	
MSV_HP25_ISSS_00063	Amount Added:	1.00	Units: uL	Run Reagent

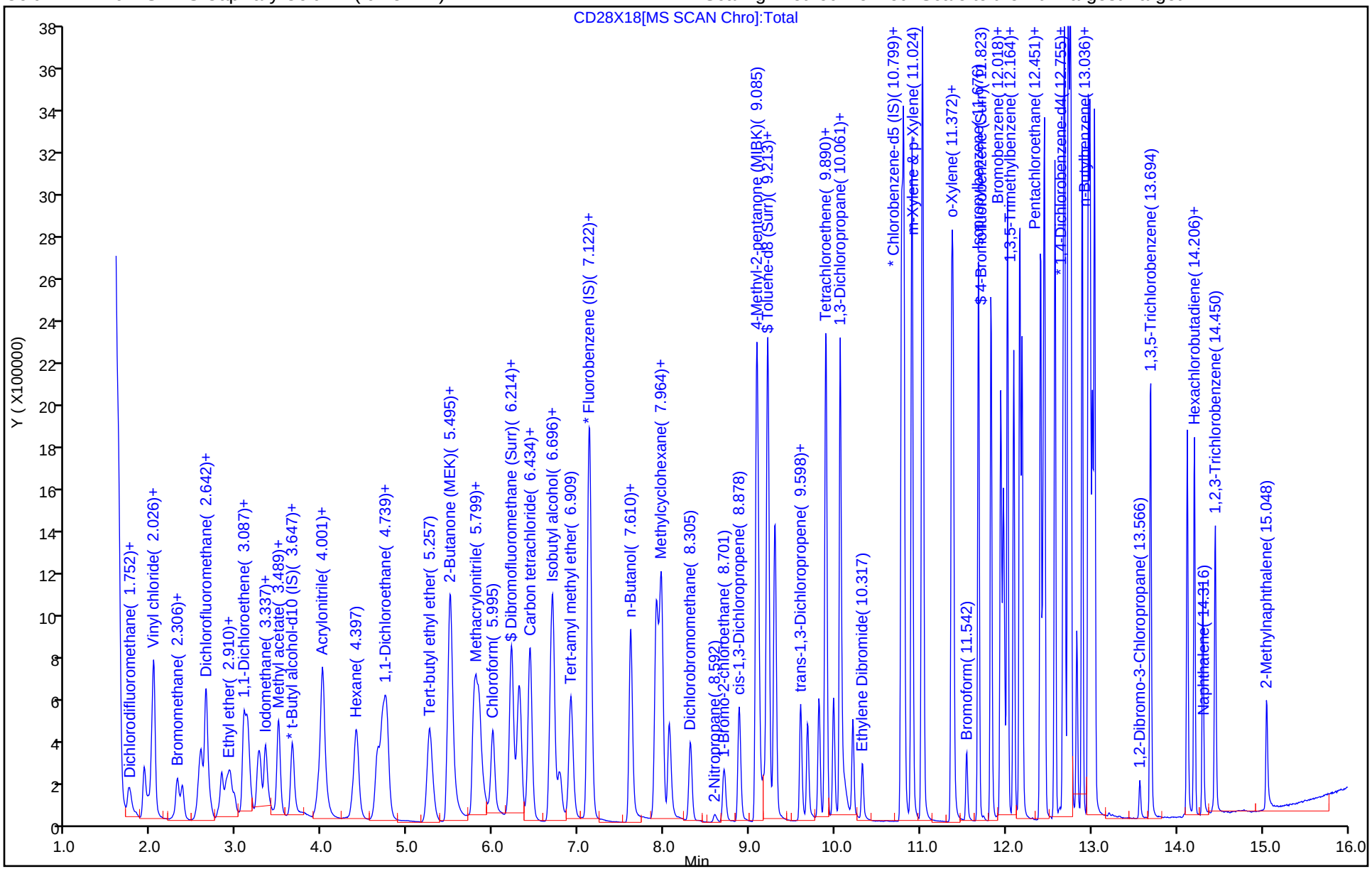
Report Date: 29-Dec-2022 10:40:05 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X18.D

Injection Date:	28-Dec-2022 15:45:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	410-110288-A-6 MS			Worklist Smp#:	19
Client ID:	HD-COD-SW-15-0/1-0 MS				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X18.D				
Lims ID:	410-110288-A-6 MS				
Client ID:	HD-COD-SW-15-0/1-0 MS				
Sample Type:	MS				
Inject. Date:	28-Dec-2022 15:45:30	ALS Bottle#:	18	Worklist Smp#:	19
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0074091-019				
Operator ID:	knk41612	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	29-Dec-2022 10:39:09	Calib Date:	22-Aug-2022 22:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1603				

First Level Reviewer: innoonk Date: 29-Dec-2022 10:40:05

Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	10.0	100.42
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.6	105.61
$ 82 Toluene-d8 (Surr)	10.0	9.92	99.18
$ 121 4-Bromofluorobenzene (Surr)	10.0	9.87	98.74

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MSD MSD
Lab Sample ID: 410-110288-6 MSD

Matrix: Water
Lab File ID: CD28X19.D

Analysis Method: 8260D
Date Collected: 12/21/2022 11:30

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 16:07

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	5.34		0.50	0.070
71-55-6	1,1,1-Trichloroethane	5.72		0.50	0.080
79-34-5	1,1,2,2-Tetrachloroethane	5.23		0.50	0.10
79-00-5	1,1,2-Trichloroethane	5.19		0.50	0.080
75-34-3	1,1-Dichloroethane	5.51		0.50	0.10
75-35-4	1,1-Dichloroethene	5.60		0.50	0.10
106-93-4	1,2-Dibromoethane (EDB)	5.20		0.50	0.080
107-06-2	1,2-Dichloroethane	5.06		0.50	0.070
78-87-5	1,2-Dichloropropane	5.43		0.50	0.10
78-93-3	2-Butanone (MEK)	71.4		5.0	1.0
591-78-6	2-Hexanone	71.9		5.0	0.10
108-10-1	4-Methyl-2-pentanone (MIBK)	71.9		5.0	1.0
67-64-1	Acetone	65.4		5.0	1.0
71-43-2	Benzene	5.39		0.50	0.10
74-97-5	Bromochloromethane	5.32		0.50	0.080
75-27-4	Bromodichloromethane	5.25		0.50	0.080
75-25-2	Bromoform	5.28		1.0	0.30
74-83-9	Bromomethane	4.97		0.50	0.10
75-15-0	Carbon disulfide	6.44		1.0	0.10
56-23-5	Carbon tetrachloride	5.68		0.50	0.10
108-90-7	Chlorobenzene	5.19		0.50	0.070
75-00-3	Chloroethane	5.30		0.50	0.10
67-66-3	Chloroform	5.48		0.50	0.090
74-87-3	Chloromethane	5.63		0.50	0.10
156-59-2	cis-1,2-Dichloroethene	7.93		0.50	0.080
10061-01-5	cis-1,3-Dichloropropene	5.09		0.50	0.10
124-48-1	Dibromochloromethane	5.15		0.50	0.080
100-41-4	Ethylbenzene	5.34		0.50	0.080
1634-04-4	Methyl tert-butyl ether	5.26		0.50	0.080
75-09-2	Methylene Chloride	5.30		0.50	0.10
100-42-5	Styrene	5.04		0.50	0.070
127-18-4	Tetrachloroethene	11.8		0.50	0.20
108-88-3	Toluene	5.31		0.50	0.080

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-110288-1

SDG No.:

Client Sample ID: HD-COD-SW-15-0/1-0 MSD MSD
Lab Sample ID: 410-110288-6 MSD

Matrix: Water
Lab File ID: CD28X19.D

Analysis Method: 8260D
Date Collected: 12/21/2022 11:30

Sample wt/vol: 25(mL)
Date Analyzed: 12/28/2022 16:07

Soil Aliquot Vol:
Dilution Factor: 1

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

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

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

Analysis Batch No.: 330696
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
156-60-5	trans-1,2-Dichloroethene	5.22		0.50	0.10
10061-02-6	trans-1,3-Dichloropropene	5.41		0.50	0.080
79-01-6	Trichloroethene	7.10		0.50	0.080
75-01-4	Vinyl chloride	5.42		0.50	0.10
1330-20-7	Xylenes, Total	15.8		1.0	0.070

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		80-120
460-00-4	4-Bromofluorobenzene (Surr)	100		80-120
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins Lancaster Laboratories Environment Testing, LLC
Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X19.D
Lims ID: 410-110288-A-6 MSD
Client ID: HD-COD-SW-15-0/1-0 MSD
Sample Type: MSD
Inject. Date: 28-Dec-2022 16:07:30 ALS Bottle#: 19 Worklist Smp#: 20
Purge Vol: 25.000 mL Dil. Factor: 1.0000
Sample Info: 410-0074091-020
Operator ID: knk41612 Instrument ID: 10193

Method: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m
Limit Group: MSV - 8260C_D
Last Update: 29-Dec-2022 10:39:09 Calib Date: 22-Aug-2022 22:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D

Column 1 : Rxi-624Sil MS Capillary Column (0.25 mm) Det: MS Quad
Process Host: CTX1603

First Level Reviewer: innoonk Date: 29-Dec-2022 10:40:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
2 Dichlorodifluoromethane	85	1.733	1.745	-0.012	99	308421	5.00	5.27	
5 Chloromethane	50	1.910	1.922	-0.012	99	435739	5.00	5.63	
6 Vinyl chloride	62	2.008	2.020	-0.013	98	388768	5.00	5.42	
7 Butadiene	39	2.020	2.032	-0.012	94	525539	5.00	6.85	
9 Bromomethane	94	2.294	2.306	-0.012	90	237323	5.00	4.97	
10 Chloroethane	64	2.355	2.367	-0.012	99	221161	5.00	5.30	
11 Dichlorofluoromethane	67	2.568	2.587	-0.019	97	532573	5.00	5.53	
12 Trichlorofluoromethane	101	2.629	2.642	-0.013	96	414494	5.00	5.09	
13 Pentane	43	2.629	2.642	-0.013	97	551166	5.00	7.64	
15 Ethyl ether	59	2.812	2.825	-0.012	95	221924	4.99	5.32	
16 1,2-Dichloro-1,1,2-trifluoroetha	67	2.910	2.910	0.000	95	345381	5.00	5.45	
17 Acrolein	56	2.965	2.971	-0.006	99	232470	37.5	39.2	
19 1,1-Dichloroethene	96	3.074	3.087	-0.013	96	252421	5.00	5.60	
20 Acetone	43	3.111	3.123	-0.012	99	435221	62.6	65.4	
21 1,1,2-Trichloro-1,2,2-trifluoroe	101	3.123	3.129	-0.006	91	255997	5.00	6.03	
22 Iodomethane	142	3.239	3.251	-0.012	97	458740	5.00	5.53	
23 Isopropyl alcohol	45	3.257	3.276	-0.019	31	54604	37.5	37.2	
24 Ethyl bromide	108	3.263	3.282	-0.019	98	201380	4.93	4.74	
25 Carbon disulfide	76	3.324	3.343	-0.019	100	899032	5.00	6.44	
27 Methyl acetate	43	3.471	3.477	-0.006	34	119428	5.00	6.09	
28 3-Chloro-1-propene	41	3.477	3.495	-0.018	93	513173	5.00	6.17	
29 Methylene Chloride	84	3.641	3.654	-0.013	97	283390	5.00	5.30	
* 30 t-Butyl alcohol-d10 (IS)	65	3.660	3.684	-0.024	96	129217	50.0	50.0	
31 2-Methyl-2-propanol	59	3.782	3.794	-0.012	99	124497	50.0	46.2	
32 Acrylonitrile	53	3.952	3.965	-0.013	99	277829	25.0	27.7	
33 Methyl tert-butyl ether	73	3.995	4.001	-0.006	91	720667	5.00	5.26	
34 trans-1,2-Dichloroethene	96	3.995	4.007	-0.012	97	289803	5.00	5.22	
35 Hexane	57	4.391	4.403	-0.012	94	480600	5.00	6.45	
36 1,1-Dichloroethane	63	4.635	4.647	-0.012	96	563828	5.00	5.51	
38 Isopropyl ether	45	4.702	4.708	-0.006	95	1051503	5.00	5.59	
39 2-Chloro-1,3-butadiene	53	4.745	4.757	-0.012	91	455935	5.00	5.71	
40 Tert-butyl ethyl ether	59	5.251	5.263	-0.012	98	911746	5.00	5.25	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
41 2-Butanone (MEK)	43	5.470	5.483	-0.013	100	969725	62.6	71.4	
42 cis-1,2-Dichloroethene	96	5.489	5.501	-0.012	83	482735	5.00	7.93	
43 2,2-Dichloropropane	77	5.501	5.513	-0.012	88	460429	5.00	5.70	
45 Propionitrile	54	5.592	5.574	0.018	97	120589	37.5	35.7	
46 Methacrylonitrile	67	5.781	5.787	-0.006	94	553842	37.5	38.6	
47 Chlorobromomethane	128	5.824	5.836	-0.012	97	143361	5.00	5.32	
48 Tetrahydrofuran	71	5.848	5.860	-0.012	89	100606	25.0	26.1	
50 Chloroform	83	5.988	5.995	-0.007	94	527955	5.00	5.48	
52 1,1,1-Trichloroethane	97	6.208	6.214	-0.006	98	482285	5.00	5.72	
$ 53 Dibromofluoromethane (Surr)	113	6.208	6.214	-0.006	94	477347	10.0	9.96	
54 Cyclohexane	56	6.299	6.312	-0.013	93	596644	5.00	6.29	
55 Carbon tetrachloride	117	6.421	6.427	-0.006	96	401680	5.00	5.68	
56 1,1-Dichloropropene	75	6.427	6.434	-0.007	97	430623	5.00	5.47	
57 Isobutyl alcohol	41	6.665	6.659	0.006	42	100743	125.1	105.4	
$ 58 1,2-Dichloroethane-d4 (Surr)	102	6.671	6.677	-0.006	95	102447	10.0	10.4	
59 Benzene	78	6.696	6.702	-0.006	97	1272138	5.00	5.39	
61 1,2-Dichloroethane	62	6.775	6.781	-0.006	96	302256	5.00	5.06	
63 Tert-amyl methyl ether	73	6.903	6.915	-0.012	98	814854	5.00	5.20	
* 64 Fluorobenzene (IS)	96	7.116	7.122	-0.006	98	2050540	10.0	10.0	
65 n-Heptane	43	7.135	7.135	0.000	95	552418	5.00	6.52	
66 n-Butanol	56	7.592	7.580	0.012	37	155104	250.2	202.3	
67 Trichloroethene	95	7.604	7.610	-0.006	97	429668	5.00	7.10	
68 Methylcyclohexane	83	7.909	7.909	0.000	93	587938	5.00	5.84	
69 1,2-Dichloropropane	63	7.945	7.952	-0.007	98	340225	5.00	5.43	
70 2-ethoxy-2-methyl butane	87	7.970	7.970	0.000	92	466377	5.00	5.10	
71 Methyl methacrylate	69	8.055	8.061	-0.006	95	134958	5.00	5.16	
73 Dibromomethane	93	8.061	8.061	0.000	95	143994	5.00	5.15	
72 1,4-Dioxane	88	8.061	8.067	-0.006	31	25043	125.1	130.1	
75 Dichlorobromomethane	83	8.305	8.311	-0.006	99	361654	5.00	5.25	
76 2-Nitropropane	41	8.592	8.592	0.000	98	38632	5.00	5.19	
78 1-Bromo-2-chloroethane	63	8.695	8.701	-0.006	98	357132	5.00	5.71	
79 cis-1,3-Dichloropropene	75	8.878	8.878	0.000	96	459390	5.00	5.09	
81 4-Methyl-2-pentanone (MIBK)	43	9.085	9.085	0.000	98	2641286	62.6	71.9	
$ 82 Toluene-d8 (Surr)	98	9.213	9.214	-0.001	93	2067570	10.0	10.0	
83 Toluene	92	9.293	9.299	-0.006	98	808899	5.00	5.31	
84 trans-1,3-Dichloropropene	75	9.597	9.598	-0.001	93	396532	5.00	5.41	
85 Ethyl methacrylate	69	9.677	9.677	0.000	91	296929	5.00	5.01	
86 1,1,2-Trichloroethane	97	9.811	9.811	0.000	90	219032	5.00	5.19	
87 Tetrachloroethene	166	9.890	9.896	-0.006	98	835499	5.00	11.8	
102 1,3-Dichloropropane	76	9.982	9.982	0.000	93	384724	5.00	5.28	
104 2-Hexanone	43	10.061	10.061	0.000	98	1872149	62.6	71.9	
106 Chlorodibromomethane	129	10.207	10.213	-0.006	90	259664	5.00	5.15	
107 Ethylene Dibromide	107	10.317	10.323	-0.006	99	206741	5.00	5.20	
* 108 Chlorobenzene-d5 (IS)	117	10.780	10.780	0.000	85	1568102	10.0	10.0	
109 1-Chlorohexane	91	10.798	10.805	-0.007	95	459945	5.00	5.29	
110 Chlorobenzene	112	10.805	10.811	-0.006	96	933591	5.00	5.19	
111 1,1,1,2-Tetrachloroethane	131	10.896	10.896	0.000	97	318153	5.00	5.34	
112 Ethylbenzene	91	10.902	10.902	0.000	98	1583002	5.00	5.34	
113 m-Xylene & p-Xylene	106	11.024	11.024	0.000	99	1263341	10.0	10.6	
115 o-Xylene	106	11.365	11.366	-0.001	96	610048	5.00	5.17	
116 Styrene	104	11.384	11.384	0.000	96	973899	5.00	5.04	
117 Bromoform	173	11.542	11.542	0.000	98	155266	5.00	5.28	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
118 Isopropylbenzene	105	11.676	11.683	-0.007	96	1613209	5.00	5.38	
$ 121 4-Bromofluorobenzene (Surr)	95	11.823	11.823	0.000	93	764666	10.0	10.0	
122 Bromobenzene	156	11.938	11.939	-0.001	92	401379	5.00	5.21	
123 1,1,2,2-Tetrachloroethane	83	11.938	11.939	-0.001	69	286688	5.00	5.23	
124 trans-1,4-Dichloro-2-butene	53	11.969	11.969	0.000	87	245967	25.0	18.6	
125 1,2,3-Trichloropropane	110	11.981	11.981	0.000	80	70083	5.00	4.89	
126 N-Propylbenzene	91	12.018	12.018	0.000	99	1921616	5.00	5.20	
127 2-Chlorotoluene	126	12.091	12.091	0.000	97	398410	5.00	5.15	
128 1,3,5-Trimethylbenzene	105	12.164	12.164	0.000	94	1347849	5.00	5.07	
129 4-Chlorotoluene	126	12.188	12.189	-0.001	97	419906	5.00	5.29	
130 tert-Butylbenzene	134	12.408	12.408	0.000	94	306667	5.00	5.23	
131 Pentachloroethane	167	12.438	12.438	0.000	81	254206	5.00	5.74	
132 1,2,4-Trimethylbenzene	105	12.451	12.451	0.000	97	1394988	5.00	5.05	
133 sec-Butylbenzene	105	12.573	12.573	0.000	94	1829313	5.00	5.41	
134 1,3-Dichlorobenzene	146	12.670	12.670	0.000	98	793263	5.00	5.02	
135 4-Isopropyltoluene	119	12.688	12.688	0.000	97	1589091	5.00	5.28	
* 136 1,4-Dichlorobenzene-d4	152	12.731	12.731	0.000	93	927037	10.0	10.0	
137 1,4-Dichlorobenzene	146	12.749	12.749	0.000	95	836601	5.00	5.18	
138 1,2,3-Trimethylbenzene	120	12.762	12.762	0.000	98	634290	5.00	5.04	
139 Benzyl chloride	126	12.829	12.829	0.000	98	118156	5.00	5.22	
140 n-Butylbenzene	92	12.981	12.987	-0.006	97	796393	5.00	5.25	
141 1,2-Dichlorobenzene	146	13.011	13.012	-0.001	99	745817	5.00	5.13	
142 p-Diethylbenzene	119	13.036	13.036	0.000	86	779208	5.00	5.08	
145 1,2-Dibromo-3-Chloropropane	155	13.566	13.572	-0.006	87	34535	5.00	4.46	
146 1,3,5-Trichlorobenzene	180	13.694	13.694	0.000	98	640948	5.00	5.15	
147 1,2,4-Trichlorobenzene	180	14.121	14.121	0.000	94	523365	5.00	4.99	
148 Hexachlorobutadiene	225	14.206	14.206	0.000	96	293695	5.00	5.42	
149 Naphthalene	128	14.304	14.304	0.000	97	756524	5.00	4.53	
150 1,2,3-Trichlorobenzene	180	14.450	14.450	0.000	96	402607	5.00	4.76	
151 2-Methylnaphthalene	142	15.054	15.054	0.000	92	292188	5.00	3.71	

QC Flag Legend

Processing Flags

Reagents:

MSV_LCS_VOC#1_00087	Amount Added:	5.38	Units: uL	
MSV_QC_Gas826_00117	Amount Added:	5.38	Units: uL	
LCS_ETBR_00005	Amount Added:	5.38	Units: uL	
MSV_LCS_EE_00004	Amount Added:	5.38	Units: uL	
MSV_LCS_ACROL_00089	Amount Added:	5.38	Units: uL	
MSV_LCS_Penta_00024	Amount Added:	5.38	Units: uL	
MSV_HP25_ISSS_00063	Amount Added:	1.00	Units: uL	Run Reagent

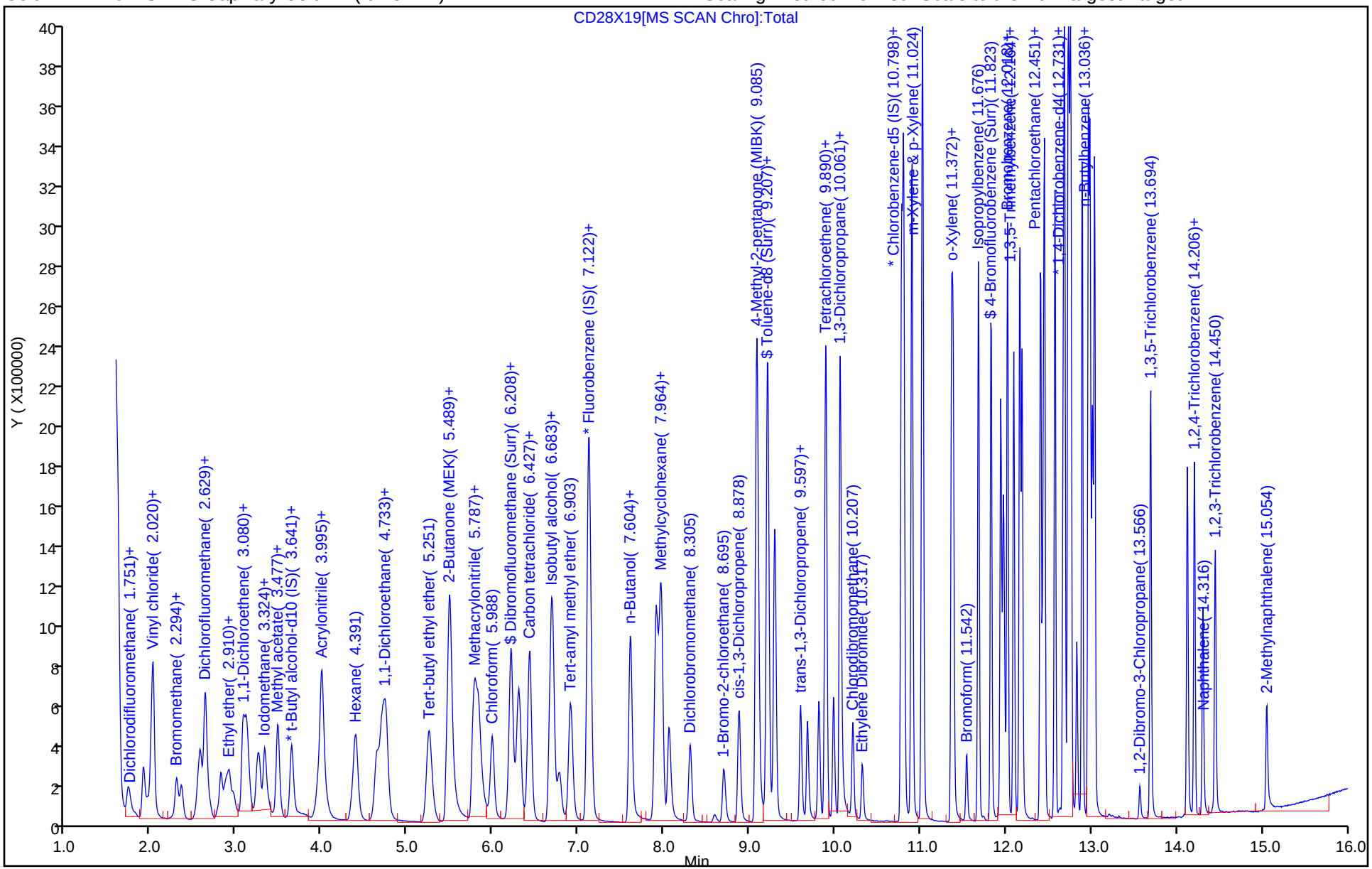
Report Date: 29-Dec-2022 10:40:53 Chrom Revision: 2.3 20-Dec-2022 14:14:06

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X19.D

Injection Date:	28-Dec-2022 16:07:30	Instrument ID:	10193	Operator ID:	knk41612
Lims ID:	410-110288-A-6 MSD			Worklist Smp#:	20
Client ID:	HD-COD-SW-15-0/1-0 MSD				
Purge Vol:	25.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	MSV_10193_25mL	Limit Group:	MSV - 8260C_D		

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



Eurofins Lancaster Laboratories Environment Testing, LLC

Recovery Report

Data File:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\CD28X19.D				
Lims ID:	410-110288-A-6 MSD				
Client ID:	HD-COD-SW-15-0/1-0 MSD				
Sample Type:	MSD				
Inject. Date:	28-Dec-2022 16:07:30	ALS Bottle#:	19	Worklist Smp#:	20
Purge Vol:	25.000 mL	Dil. Factor:	1.0000		
Sample Info:	410-0074091-020				
Operator ID:	knk41612	Instrument ID:	10193		
Method:	\\chromfs\Lancaster\ChromData\10193\20221228-74091.b\MSV_10193_25mL.m				
Limit Group:	MSV - 8260C_D				
Last Update:	29-Dec-2022 10:39:09	Calib Date:	22-Aug-2022 22:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\10193\20220822-64657.b\CG22X18.D				
Column 1 :	Rxi-624Sil MS Capillary Column (0.25 mm)		Det: MS Quad		
Process Host:	CTX1603				

First Level Reviewer: innoonk Date: 29-Dec-2022 10:40:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 53 Dibromofluoromethane (Surr)	10.0	9.96	99.61
$ 58 1,2-Dichloroethane-d4 (Surr)	10.0	10.4	103.98
$ 82 Toluene-d8 (Surr)	10.0	10.0	100.06
$ 121 4-Bromofluorobenzene (Surr)	10.0	10.0	100.00

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-110288-1

SDG No.:

Instrument ID: 10193 Start Date: 08/22/2022 15:51

Analysis Batch Number: 288300 End Date: 08/22/2022 23:10

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-288300/1		08/22/2022 15:51	1	CG22T04.D	R-624SilMS 30m 0.25(mm)
IC 410-288300/3		08/22/2022 16:29	1		R-624SilMS 30m 0.25(mm)
IC 410-288300/4		08/22/2022 16:52	1		R-624SilMS 30m 0.25(mm)
IC 410-288300/5		08/22/2022 17:14	1		R-624SilMS 30m 0.25(mm)
IC 410-288300/6		08/22/2022 17:36	1		R-624SilMS 30m 0.25(mm)
IC 410-288300/7		08/22/2022 17:58	1		R-624SilMS 30m 0.25(mm)
IC 410-288300/8		08/22/2022 18:21	1		R-624SilMS 30m 0.25(mm)
IC 410-288300/9		08/22/2022 18:43	1		R-624SilMS 30m 0.25(mm)
IC 410-288300/13		08/22/2022 20:12	1	CG22X12.D	R-624SilMS 30m 0.25(mm)
IC 410-288300/14		08/22/2022 20:34	1	CG22X13.D	R-624SilMS 30m 0.25(mm)
IC 410-288300/15		08/22/2022 20:57	1	CG22X14.D	R-624SilMS 30m 0.25(mm)
IC 410-288300/16		08/22/2022 21:19	1	CG22X15.D	R-624SilMS 30m 0.25(mm)
IC 410-288300/17		08/22/2022 21:41	1	CG22X16.D	R-624SilMS 30m 0.25(mm)
ICIS 410-288300/18		08/22/2022 22:04	1	CG22X17.D	R-624SilMS 30m 0.25(mm)
IC 410-288300/19		08/22/2022 22:26	1	CG22X18.D	R-624SilMS 30m 0.25(mm)
ICV 410-288300/21		08/22/2022 23:10	1	CG22X20.D	R-624SilMS 30m 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-110288-1

SDG No.:

Instrument ID: 10193 Start Date: 12/28/2022 09:13

Analysis Batch Number: 330696 End Date: 12/28/2022 20:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-330696/1		12/28/2022 09:13	1	CD28T01.D	R-624SilMS 30m 0.25(mm)
CCVIS 410-330696/3		12/28/2022 09:48	1	CD28X02.D	R-624SilMS 30m 0.25(mm)
LCS 410-330696/4		12/28/2022 10:11	1	CD28X03.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		12/28/2022 10:33	1		R-624SilMS 30m 0.25(mm)
MB 410-330696/6		12/28/2022 10:55	1	CD28X05.D	R-624SilMS 30m 0.25(mm)
LODV 410-330696/7		12/28/2022 11:17	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/28/2022 11:40	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/28/2022 12:02	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/28/2022 12:24	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/28/2022 12:47	1		R-624SilMS 30m 0.25(mm)
410-110288-14	HD-QC1-0/1-2	12/28/2022 13:09	1	CD28X11.D	R-624SilMS 30m 0.25(mm)
410-110288-1	HD-COD-SW-6-0/1-0	12/28/2022 13:31	1	CD28X12.D	R-624SilMS 30m 0.25(mm)
410-110288-2	HD-COD-SW-7-0/1-0	12/28/2022 13:53	1	CD28X13.D	R-624SilMS 30m 0.25(mm)
410-110288-3	HD-COD-SW-8-0/1-0	12/28/2022 14:16	1	CD28X14.D	R-624SilMS 30m 0.25(mm)
410-110288-4	HD-COD-SW-9-0/1-0	12/28/2022 14:38	1	CD28X15.D	R-624SilMS 30m 0.25(mm)
410-110288-5	HD-COD-SW-13-0/1-0	12/28/2022 15:00	1	CD28X16.D	R-624SilMS 30m 0.25(mm)
410-110288-6	HD-COD-SW-15-0/1-0	12/28/2022 15:23	1	CD28X17.D	R-624SilMS 30m 0.25(mm)
410-110288-6 MS	HD-COD-SW-15-0/1-0 MS MS	12/28/2022 15:45	1	CD28X18.D	R-624SilMS 30m 0.25(mm)
410-110288-6 MSD	HD-COD-SW-15-0/1-0 MSD MSD	12/28/2022 16:07	1	CD28X19.D	R-624SilMS 30m 0.25(mm)
410-110288-7	HD-COD-SW-16-0/1-0	12/28/2022 16:29	1	CD28X20.D	R-624SilMS 30m 0.25(mm)
410-110288-8	HD-COD-SW-17-0/1-0	12/28/2022 16:52	1	CD28X21.D	R-624SilMS 30m 0.25(mm)
410-110288-9	HD-COD-SW-26-0/1-0	12/28/2022 17:14	1	CD28X22.D	R-624SilMS 30m 0.25(mm)
410-110288-10	HD-COD-SW-27-0/1-0	12/28/2022 17:36	1	CD28X23.D	R-624SilMS 30m 0.25(mm)
410-110288-11	HD-COD-SW-28-0/1-0	12/28/2022 17:58	1	CD28X24.D	R-624SilMS 30m 0.25(mm)
410-110288-12	HD-COD-SW-29-0/1-0	12/28/2022 18:21	1	CD28X25.D	R-624SilMS 30m 0.25(mm)
410-110288-13	HD-QC1-0/1-1	12/28/2022 18:43	1	CD28X26.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		12/28/2022 19:05	10		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/28/2022 19:27	10000		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/28/2022 19:50	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/28/2022 20:12	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/28/2022 20:34	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/28/2022 20:56	50		R-624SilMS 30m 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Enviror Job No.: 410-110288-1

SDG No.:

Instrument ID: 10193 Start Date: 12/29/2022 11:31

Analysis Batch Number: 331173 End Date: 12/29/2022 20:53

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 410-331173/1		12/29/2022 11:31	1	CD29T01.D	R-624SilMS 30m 0.25(mm)
CCVIS 410-331173/3		12/29/2022 12:20	1	CD29X02.D	R-624SilMS 30m 0.25(mm)
LCS 410-331173/5		12/29/2022 13:05	1	CD29X04.D	R-624SilMS 30m 0.25(mm)
LCSD 410-331173/6		12/29/2022 13:27	1	CD29X05.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		12/29/2022 14:34	1		R-624SilMS 30m 0.25(mm)
MB 410-331173/10		12/29/2022 14:56	1	CD29X09.D	R-624SilMS 30m 0.25(mm)
ZZZZZ		12/29/2022 15:19	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/29/2022 15:41	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/29/2022 16:03	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/29/2022 16:25	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/29/2022 16:48	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/29/2022 17:10	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/29/2022 17:32	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/29/2022 17:54	20		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/29/2022 18:17	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/29/2022 18:39	20		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/29/2022 19:01	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/29/2022 19:24	20		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/29/2022 19:46	1		R-624SilMS 30m 0.25(mm)
ZZZZZ		12/29/2022 20:08	10		R-624SilMS 30m 0.25(mm)
410-110288-8 DL	HD-COD-SW-17-0/1-0 DL	12/29/2022 20:30	10	CD29X24.D	R-624SilMS 30m 0.25(mm)
410-110288-13 DL	HD-QC1-0/1-1 DL	12/29/2022 20:53	10	CD29X25.D	R-624SilMS 30m 0.25(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories | Job No.: 410-110288-1

SDG No.:

Batch Number: 288300 | Batch Start Date: 08/22/22 15:51 | Batch Analyst: Kephart, Kayla

Batch Method: 8260D | Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Lot#Vial	LCS_ETBR 00003	MSV_HP25_ISSS 00058	MSV_LCS_ACROL 00072
BFB 410-288300/1		8260D		1 uL	1 uL				
IC 410-288300/13		8260D		25 mL	25 mL	2656		1 uL	
IC 410-288300/14		8260D		25 mL	25 mL	2656		1 uL	
IC 410-288300/15		8260D		25 mL	25 mL	2656		1 uL	
IC 410-288300/16		8260D		25 mL	25 mL	2656		1 uL	
IC 410-288300/17		8260D		25 mL	25 mL	2656		1 uL	
ICIS 410-288300/18		8260D		25 mL	25 mL	2656		1 uL	
IC 410-288300/19		8260D		25 mL	25 mL	2656		1 uL	
ICV 410-288300/21		8260D		25 mL	25 mL	2656	12.5 uL	1 uL	12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LCS_EE 00003	MSV_LCS_Penta 00019	MSV_LCS_VOC#1 00069	MSV_LL_#1_826 00053	MSV_LL_#2_826 00057	MSV_LL_GAS826 00109
BFB 410-288300/1		8260D							
IC 410-288300/13		8260D					2 uL	2 uL	2 uL
IC 410-288300/14		8260D					2 uL	2 uL	2 uL
IC 410-288300/15		8260D					2 uL	2 uL	2 uL
IC 410-288300/16		8260D					2 uL	2 uL	2 uL
IC 410-288300/17		8260D					5 uL	5 uL	5 uL
ICIS 410-288300/18		8260D					10 uL	10 uL	10 uL
IC 410-288300/19		8260D					25 uL	25 uL	25 uL
ICV 410-288300/21		8260D		12.5 uL	12.5 uL	12.5 uL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 410-110288-1

SDG No.:

Batch Number: 288300 Batch Start Date: 08/22/22 15:51 Batch Analyst: Kephart, Kayla

Batch Method: 8260D Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_QC_Gas826 00096	MSV_V_BFB 00008				
BFB 410-288300/1		8260D			1 uL				
IC 410-288300/13		8260D							
IC 410-288300/14		8260D							
IC 410-288300/15		8260D							
IC 410-288300/16		8260D							
IC 410-288300/17		8260D							
ICIS 410-288300/18		8260D							
IC 410-288300/19		8260D							
ICV 410-288300/21		8260D		12.5 uL					

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories | Job No.: 410-110288-1

SDG No.:

Batch Number: 330696 | Batch Start Date: 12/28/22 09:13 | Batch Analyst: Kephart, Kayla

Batch Method: 8260D | Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloCheck	Headspace	Lot#Vial
BFB 410-330696/1		8260D		1 uL	1 uL				
CCVIS 410-330696/3		8260D		25 mL	25 mL				2672
LCS 410-330696/4		8260D		25 mL	25 mL				2672
MB 410-330696/6		8260D		25 mL	25 mL				2672
410-110288-A-14	HD-QC1-0/1-2	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-110288-A-1	HD-COD-SW-6-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-110288-A-2	HD-COD-SW-7-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-110288-A-3	HD-COD-SW-8-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-110288-A-4	HD-COD-SW-9-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-110288-A-5	HD-COD-SW-13-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-110288-A-6	HD-COD-SW-15-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-110288-A-6 MS	HD-COD-SW-15-0/1-0 MS	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-110288-A-6 MSD	HD-COD-SW-15-0/1-0 MSD	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-110288-A-7	HD-COD-SW-16-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-110288-A-8	HD-COD-SW-17-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-110288-A-9	HD-COD-SW-26-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-110288-A-10	HD-COD-SW-27-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-110288-A-11	HD-COD-SW-28-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-110288-A-12	HD-COD-SW-29-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	
410-110288-A-13	HD-QC1-0/1-1	8260D	T	25 mL	25 mL	<2 SU	N	N	

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCS_ETBR 00005	MSV_HP25_ISSS 00063	MSV_LCS_ACROL 00089	MSV_LCS_EE 00004	MSV_LCS_Penta 00024	MSV_LCS_VOC#1 00087

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories | Job No.: 410-110288-1

SDG No.:

Batch Number: 330696 | Batch Start Date: 12/28/22 09:13 | Batch Analyst: Kephart, Kayla

Batch Method: 8260D | Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCS_ETBR 00005	MSV_HP25_ISSS 00063	MSV_LCS_ACROL 00089	MSV_LCS_EE 00004	MSV_LCS_Penta 00024	MSV_LCS_VOC#1 00087
BFB 410-330696/1		8260D							
CCVIS 410-330696/3		8260D			1 uL				
LCS 410-330696/4		8260D		12.5 uL	1 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL
MB 410-330696/6		8260D			1 uL				
410-110288-A-14	HD-QC1-0/1-2	8260D	T		1 uL				
410-110288-A-1	HD-COD-SW-6-0/1-0	8260D	T		1 uL				
410-110288-A-2	HD-COD-SW-7-0/1-0	8260D	T		1 uL				
410-110288-A-3	HD-COD-SW-8-0/1-0	8260D	T		1 uL				
410-110288-A-4	HD-COD-SW-9-0/1-0	8260D	T		1 uL				
410-110288-A-5	HD-COD-SW-13-0/1-0	8260D	T		1 uL				
410-110288-A-6	HD-COD-SW-15-0/1-0	8260D	T		1 uL				
410-110288-A-6 MS	HD-COD-SW-15-0/1-0 MS	8260D	T	5.38 uL	1 uL	5.38 uL	5.38 uL	5.38 uL	5.38 uL
410-110288-A-6 MSD	HD-COD-SW-15-0/1-0 MSD	8260D	T	5.38 uL	1 uL	5.38 uL	5.38 uL	5.38 uL	5.38 uL
410-110288-A-7	HD-COD-SW-16-0/1-0	8260D	T		1 uL				
410-110288-A-8	HD-COD-SW-17-0/1-0	8260D	T		1 uL				
410-110288-A-9	HD-COD-SW-26-0/1-0	8260D	T		1 uL				
410-110288-A-10	HD-COD-SW-27-0/1-0	8260D	T		1 uL				
410-110288-A-11	HD-COD-SW-28-0/1-0	8260D	T		1 uL				
410-110288-A-12	HD-COD-SW-29-0/1-0	8260D	T		1 uL				
410-110288-A-13	HD-QC1-0/1-1	8260D	T		1 uL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LL_#1_826 00062	MSV_LL_#2_826 00067	MSV_LL_GAS826 00129	MSV_QC_Gas826 00117	MSV_V_BFB 00011	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories | Job No.: 410-110288-1

SDG No.:

Batch Number: 330696 | Batch Start Date: 12/28/22 09:13 | Batch Analyst: Kephart, Kayla

Batch Method: 8260D | Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LL_#1_826 00062	MSV_LL_#2_826 00067	MSV_LL_GAS826 00129	MSV_QC_Gas826 00117	MSV_V_BFB 00011	
BFB 410-330696/1		8260D						1 uL	
CCVIS 410-330696/3		8260D		20 uL	20 uL	20 uL			
LCS 410-330696/4		8260D					12.5 uL		
MB 410-330696/6		8260D							
410-110288-A-14	HD-QC1-0/1-2	8260D	T						
410-110288-A-1	HD-COD-SW-6-0/1-0	8260D	T						
410-110288-A-2	HD-COD-SW-7-0/1-0	8260D	T						
410-110288-A-3	HD-COD-SW-8-0/1-0	8260D	T						
410-110288-A-4	HD-COD-SW-9-0/1-0	8260D	T						
410-110288-A-5	HD-COD-SW-13-0/1-0	8260D	T						
410-110288-A-6	HD-COD-SW-15-0/1-0	8260D	T						
410-110288-A-6 MS	HD-COD-SW-15-0/1-0 MS	8260D	T				5.38 uL		
410-110288-A-6 MSD	HD-COD-SW-15-0/1-0 MSD	8260D	T				5.38 uL		
410-110288-A-7	HD-COD-SW-16-0/1-0	8260D	T						
410-110288-A-8	HD-COD-SW-17-0/1-0	8260D	T						
410-110288-A-9	HD-COD-SW-26-0/1-0	8260D	T						
410-110288-A-10	HD-COD-SW-27-0/1-0	8260D	T						
410-110288-A-11	HD-COD-SW-28-0/1-0	8260D	T						
410-110288-A-12	HD-COD-SW-29-0/1-0	8260D	T						
410-110288-A-13	HD-QC1-0/1-1	8260D	T						

Batch Notes	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories | Job No.: 410-110288-1

SDG No.:

Batch Number: 330696 | Batch Start Date: 12/28/22 09:13 | Batch Analyst: Kephart, Kayla

Batch Method: 8260D | Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories | Job No.: 410-110288-1

SDG No.:

Batch Number: 331173 | Batch Start Date: 12/29/22 11:31 | Batch Analyst: Kephart, Kayla

Batch Method: 8260D | Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloCheck	Headspace	Lot#Vial
BFB 410-331173/1		8260D		1 uL	1 uL				
CCVIS 410-331173/3		8260D		25 mL	25 mL				2672
LCS 410-331173/5		8260D		25 mL	25 mL				2672
LCSD 410-331173/6		8260D		25 mL	25 mL				2672
MB 410-331173/10		8260D		25 mL	25 mL				2672
410-110288-B-8	HD-COD-SW-17-0/1-0	8260D	T	25 mL	25 mL	<2 SU	N	N	2672
410-110288-B-13	HD-QC1-0/1-1	8260D	T	25 mL	25 mL	<2 SU	N	N	2672

Lab Sample ID	Client Sample ID	Method Chain	Basis	LCS_ETBR 00005	MSV_HP25_ISSS 00063	MSV_LCS_ACROL 00090	MSV_LCS_EE 00004	MSV_LCS_Penta 00024	MSV_LCS_VOC#1 00088
BFB 410-331173/1		8260D							
CCVIS 410-331173/3		8260D			1 uL				
LCS 410-331173/5		8260D		12.5 uL	1 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL
LCSD 410-331173/6		8260D		12.5 uL	1 uL	12.5 uL	12.5 uL	12.5 uL	12.5 uL
MB 410-331173/10		8260D			1 uL				
410-110288-B-8	HD-COD-SW-17-0/1-0	8260D	T		1 uL				
410-110288-B-13	HD-QC1-0/1-1	8260D	T		1 uL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LL_#1_826 00062	MSV_LL_#2_826 00069	MSV_LL_GAS826 00129	MSV_QC_Gas826 00117	MSV_V_BFB 00011	
BFB 410-331173/1		8260D						1 uL	
CCVIS 410-331173/3		8260D		20 uL	20 uL	20 uL			
LCS 410-331173/5		8260D					12.5 uL		
LCSD 410-331173/6		8260D					12.5 uL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories | Job No.: 410-110288-1

SDG No.:

Batch Number: 331173 | Batch Start Date: 12/29/22 11:31 | Batch Analyst: Kephart, Kayla

Batch Method: 8260D | Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_LL_#1_826 00062	MSV_LL_#2_826 00069	MSV_LL_GAS826 00129	MSV_QC_Gas826 00117	MSV_V_BFB 00011	
MB 410-331173/10		8260D							
410-110288-B-8	HD-COD-SW-17-0/1 -0	8260D	T						
410-110288-B-13	HD-QC1-0/1-1	8260D	T						

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

370472
HARRISBURG PA

Environmental Analysis Custody

410-110288 Chain of Custody

pg 1 of 2

eurofins | Lancaster Laboratories Environmental

Acct. # _____ Group # _____ Sample # _____

Client:	Groundwater Sciences Corporation		
Project Name/#:	fYNOP Monthly Surface Water	Site ID #:	fYNOP, York PA
Project Manager:	Chris O'Neil	P.O. #:	10012.49
Sampler:	Casey Littlefield / Lucas Grimm	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 ☐	Matrix: Water ☐ Potable ☐ Ground ☑ Surface ☐ NPDES ☐	Matrix: 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	12/21/22	1025	X			X		3	X	
HD-COD-SW-7-0/1-0	12/21/22	1105	X			X		3	X	
HD-COD-SW-8-0/1-0	12/21/22	0900	X			X		3	X	
HD-COD-SW-9-0/1-0	12/21/22	1245	X			X		3	X	
HD-COD-SW-13-0/1-0	12/21/22	0922	X			X		3	X	
HD-COD-SW-15-0/1-0	12/21/22	1130	X			X		3	X	
HD-COD-SW-15-0/1-0 MS	12/21/22	1130	X			X		3	X	
HD-COD-SW-15-0/1-0 MSD	12/21/22	1130	X			X		3	X	
HD-COD-SW-16-0/1-0	12/21/22	0945	X			X		3	X	
HD-COD-SW-17-0/1-0	12/21/22	0952	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

	Date	Time		Date	Time
Relinquished by:	12/21/22	1400	Received by:	12/21/22	1400
Relinquished by:	12/22/22	1306	Received by:	12/22/22	1306
Relinquished by:	12/22/22	1750	Received by:		
Relinquished by:			Received by:		
Relinquished by:			Received by:	12-22-22	1758

Relinquished by Commercial Carrier:
UPS _____ FedEx _____ Other _____

Temperature upon receipt 3.2 °C

370472
HARRISBURG PA

Environmental Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # _____ Group # _____ Sample # _____

Client:	Groundwater Sciences Corporation		
Project Name/#:	fYNOP Monthly Surface Water	Site ID #:	fYNOP, York PA
Project Manager:	Chris O'Neil	P.O. #:	10012.49
Sampler:	Casey Littlefield / Lucas Grimm	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: Preservation Codes H: Aqueous VOCs via 8260D (low level - 25 ml purge)	Remarks
HD-COD-SW-26-0/1-0	12/21/22	1055	X			X		3	X	
HD-COD-SW-27-0/1-0	12/21/22	1120	X			X		3	X	
HD-COD-SW-28-0/1-0	12/21/22	1300	X			X		3	X	
HD-COD-SW-29-0/1-0	12/21/22	0850	X			X		3	X	
HD-QC1-0/1-1	12/21/22	0800	X			X		3	X	
HD-QC1-0/1-2	12/21/22	—	X				X	2	X	Trip Blank

For Lab Use Only
SF #: _____
SCR #: _____

Preservation Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 P = H_3PO_4
O = Other

Turnaround Time Requested (TAT) (please check): Standard ☑ Rush ☐
(Rush TAT is subject to laboratory approval and surcharges.)

Date results are needed:

Rush results requested by (please check): E-Mail ☒ Phone ☐

E-mail Address: ON-FILE

Phone:

Data Package Options (please check if required)

Type I (Validation/non-CLP)	☐	MA MCP	☐
Type III (Reduced non-CLP)	☐	CT RCP	☐
Type VI (Raw Data Only)	☐	TX TRRP-13	☐
NJ DKQP	☐	NYSDEC Category	☐ A or ☐ B

EDD Required? Yes ☑ No ☐ If yes, format: _ CLP Like Deliverables, Project Specific Analyte List

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12/21/22	1400	[signature]	12/21/22	1400
[signature]	12/22/22	1306	[signature]	12/22/22	1306
[signature]	12/22/22	1758			
			[signature]	12-22-22	1758

Relinquished by Commercial Carrier:

UPS _____ FedEx _____ Other _____

Temperature upon receipt 3.2 °C

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 410-110288-1

Login Number: 110288

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 1

Creator: Kanagy, Nicholas

Question	Answer	Comment
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	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	

Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 410-110288-1

Login Number: 110288

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

Creator: Hastings, Greg

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.		